SUNSHINE CANYON
Landfill

14747 San Fernando Road
Sylmar, CA 91342

July 15, 2019

Ms. Tiffany Butler
Senior Management Analyst II
Department of City Planning
200 N. Spring St., Room 525
Los Angeles, CA 90012

Subject: Report to the Joint Sunshine Canyon Landfill Technical Advisory Committee

Dear Ms. Butler,

Attached please find an electronic copy of the Report to the Joint Sunshine Canyon Landfill Technical Advisory Committee for the July 31, 2019 TAC meeting.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Josh Mills
Environmental Manager
Sunshine Canyon Landfill

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Sylmar, CA 91342

July 15, 2019

Ms. Lisa Webber
SCL TAC Co-Chair
City of Los Angeles
Department of City Planning
200 N. Spring Street
Los Angeles, CA 90012

Mr. Jon Sanabria
SCL TAC Co-Chair
Los Angeles County
Department of Regional Planning
320 W. Temple St, 13th Floor
Los Angeles, CA 90012

Subject: Report to the Joint Sunshine Canyon Landfill Technical Advisory Committee
SCL TAC Meeting Date - July 31, 2019

Dear Ms. Webber and Mr. Sanabria:

This report provides an update of items requested to be included in the report to the Joint Sunshine Canyon Landfill Technical Advisory Committee (TAC) for the meeting to be held on July 31, 2019.

1.0 Cell Development

1.1 Cell CC-4, Part 2

The Design Report for Cell CC-4, Parts 1 – 5 was submitted to the LARWQCB on December 16, 2015. By letter dated April 26, 2016, approval for the construction of Cell CC-4 was received (Attachment A). Approval for disposal operations in Cell CC-4 Part 2 was received from the Los Angeles Regional Water Quality Control Board (LARWQCB) on October 23, 2017 (Attachment A), and disposal operations in this cell commenced on October 25, 2017. CC-4, Part 1, is a 6.2-acre cell that will provide 10.76 million cubic yards of disposal capacity.

1.2 Future Cell CC-4, Part 3

CC-4 Part 3 is currently under development. The cell is 16.1 acres and the anticipated completion date is third quarter 2019.

2.0 Fill Sequence, Soil Usage, Stockpile/Borrow Areas and Disposal on County Top Deck

2.1 Fill Sequence

Disposal operations were only conducted in CC-4 Parts 1 and 2 from December of 2018 (the date of the last TAC Report) to the end of June 2019.

2.2 Soil Usage

Based on soil usage logs, approximately 13.4% of airspace volume consumed is site soil used for daily cover.

2.3 Stockpile/Borrow Areas

Placement and subsequent removal of stockpile material is an operational activity that occurs over the life of the landfill. There are four stockpile areas on site that have been designated for such purpose. These stockpile areas are shown on the figure included in Attachment B.

3.0 Landfill Gas Collection and Control System

Improvements to the site's landfill gas collection and control system (GCCS) are conducted on an annual basis. This year's improvements to date include the installation of vertical and horizontal gas collection wells and the continuation of improvements as a component of our robust monitoring, maintenance, and operations program. Summaries of these activities have been provided in prior TAC reports.

The following is a summary of the GCCS activities that have been completed thus far in 2019:

- Installation and activation of 134 new and replacement vertical wells
- Installation and activation of 106 horizontal collectors in new waste placement areas
- Installation and activation of three liner collectors in new cell construction
- Installation of two trench collectors along the access to the active area
- Installation of dewatering pumps in gas wells impacted by liquids;
    - Installation of 61 dewatering pumps in vertical gas extraction wells
    - Installation of over 3,000 feet of air and force main lines for the operation of pumps and transport of liquids removed from the wells
    - Installation of seven de-scalers on the force main lines to prevent the build-up of solids that can create blockage in the force main lines.

- Installation of a grinder pump in a transfer sump to accommodate the solids in the liquid being transported by the force main lines
- Installation of an additional pump in the main sump (total of 3) to accommodate the increased flow from the additional pumps
- Installation of approx. 1,800 feet of 18 inch header pipe around the perimeter of the active area

A robust operations and maintenance program continues to ensure all components of the GCCS are working effectively and efficiently. A force main line maintenance program has been implemented. Gauges installed on wells with pumps to monitor the force main back pressure. This information is plotted and reviewed on a weekly basis to identify the location of blockages or restrictions in the force main piping. Once identified the blockages can be then be remediated. A blockage prevention program includes the installed de-scalers and monthly jetting of the over 3,000 feet of main force main lines to prevent the accumulation of scaling.

Republic Services continues to conduct gas well monitoring and tuning of the wellfield on a semi-monthly basis.

3.1 Surface Emissions Monitoring

The number of initial surface monitoring exceedances continues to decrease as the wellfield improvements described above and in prior TAC reports are impacting the GCCS performance

<u>Fourth Quarter 2018 SEM Results</u>

- Instantaneous SEM monthly monitoring: During the three initial monitoring events, the City side of the landfill had 14 locations over 655 grids monitored indicating surface emissions over 500 ppm Total Organic Carbon, measured as methane (TOC); the County side of the landfill had 43 locations over 408 grids that indicated surface emissions over 500 ppm TOC. These locations were repaired and re-monitored in accordance with SCAQMD Rule 1150.1. Each of the locations originally identified as being in excess of the 500 ppm threshold passed on either the first or second 10-day re-check as allowed by Rule 1150.1.

- Integrated SEM monitoring: During the initial monthly monitoring events, the City side of the landfill had 13 grids out of a total of 655 grids monitored that showed results over 25 ppm TOC. The County side of the landfill had 6 grids out of a total of 408 grids that showed results over 25 ppm TOC. The exceedances were addressed and re-monitored in accordance with Rule 1150.1. Each of the locations originally identified as being in excess of the 25

ppm threshold passed on either the first or second 10-day re-check as allowed by Rule 1150.1.

First Quarter 2019 SEM Results

- Instantaneous SEM monitoring: During the initial monthly monitoring events, the City side of the landfill had 16 locations over a total of 655 grids monitored showing surface emissions over 500 ppm TOC; the County side of the landfill had 13 locations over a total of 408 grids that had surface emissions over 500 ppm TOC. These locations were repaired and re-monitored in accordance with SCAQMD Rule 1150.1. Each of the locations originally identified as being in excess of the 500 ppm threshold passed on either the first or second 10-day re-check as allowed by Rule 1150.1.

- Integrated SEM monitoring: During the initial monthly monitoring events, the City side of the landfill had 10 grids out of a total of 655 grids monitored that showed results over 25 ppm TOC. The County side of the landfill had 6 grids out of a total of 408 grids that showed results over 25 ppm TOC. The grids were repaired and re-monitored in accordance with Rule 1150.1. Each of the locations originally identified as being in excess of the 25 ppm threshold passed on either the first or second 10-day re-check as allowed by Rule 1150.1.

3.2 Perimeter Probe Monitoring

Rule 1150.1 monitoring requires monthly monitoring of the site's perimeter probes. There were no exceedances during the probe monitoring in the fourth quarter 2018 and first quarter 2019. A letter dated October 24, 2018 was prepared by SCS Engineers on behalf of SCL for P-205R which has shown methane levels slightly exceeding the AOC value of 2.5% by volume, but has not exceeded the regulatory threshold of 5% by volume. Conclusions to the study indicated the low-level methane detected in P-205R did not originate from landfill but rather are observed to be from petrogenic VOC sources such as an abandon oil well. The recommendations are to request removal of the AOC threshold of 2.5% by volume for P-205R and should P-205R ever exceed the regulatory threshold SCL have a chance to evaluate the origin of methane prior to an issuance of any regulatory violation (Attachment C).

4.0 Gas-to-Energy Facility (City/County**)**

Sunshine Gas Producers, L.L.C. (SGP) is the owner and operator of the turbine power plant. The power plant began commercial power generation on September 1, 2014 and currently places approximately 18.5 MW per hour or 445 MW per day of renewable energy onto the grid. The plant consists of five (5) Solar Mercury turbines rated at 4.6 MW per hour each.

5.0 Groundwater Monitoring (City/County)

The groundwater monitoring program approved by the LA RWQCB for Sunshine Canyon Landfill is based on quarterly and semi-annual monitoring of 18 groundwater monitoring wells. Samples are analyzed by an EPA-approved analytical laboratory for more than 100 individual potential contaminants as specified by the approved monitoring program. Statistical analyses are used to identify any trends or changes in concentrations of constituents that could indicate a potential release from the site. In addition to the groundwater wells, samples are collected from sub-drains and lysimeters. Reports of sampling and monitoring activities, including all analytical results, are submitted to the LARWQCB on a semiannual and annual basis.

5.1 Summary of Results of Second Semi-Annual and Annual Groundwater Monitoring Period of 2018

During the second semiannual 2018 monitoring period, environmental monitoring was conducted on a quarterly basis during September (third quarter) and December (fourth quarter). The results were generally similar to past monitoring event results, as most analyte/well pairs were previously in tracking mode.

During the second semiannual 2018 monitoring period, a few volatile organics compounds (VOCs) were detected in the third and fourth quarter samples collected from Subdrain N and Combined Subdrains. These findings are consistent with historical results, and as a result, the liquids collected at the subdrains are conveyed to the nearby sewer system under a City of Los Angeles Bureau of Sanitation permit. Currently, none of the collected liquid is being reused onsite and all of the subdrain liquids are discharged to the sewer.

Lysimeters LY-6 and LY-7 are sampled on a quarterly basis; lysimeter LY-6 and LY-7 could not be sampled during the third quarter 2018. During the fourth quarter 2018 the pumps were pulled from each lysimeter, LY-7 was re-developed and outfitted with a new pump and a sample was collected from LY-7 (LY-6 was dry) Results from LY-7 include a couple of VOCs detected historically, though fourth quarter 2018 results were at significantly lower concentrations compared to results from the most recent sample collected from LY-7. In Janary 2019, vibrating wireline piezometers were installed in each of the lysimeters to track the presence or absence of water in the lysimeters.

6.0 Leachate Collection and Treatment System (City/County)

By letter dated October 18, 2017, a new industrial wastewater permit was issued by the City of Los Angeles Bureau of Sanitation (Attachment D). Permit W-535428 is in effect until August 31, 2020.

A Revised Fact Sheet was prepared and submitted to the City to support the industrial wastewater application; this Fact Sheet is also included in Attachment D. The fact sheet provides a description of the liquids generated at the facility as well as the site liquids management plan (provided as Figure 2 in the Fact Sheet) and other supporting documentation. As shown on Figure 2, liquids generated at the facility include, leachate, gas well liquids, condensate, seep water, subdrain and cut-off wall water. The major components of the site's liquid management plan include:

- Direct discharge of all site liquids including leachate, gas well liquids and condensate to the sewer with chlorination as needed;
- Optional on-site treatment of seep, subdrain and cut-off wall water after which the effluent can be used on-site for dust control

Figure 3 in the Fact Sheet provides the process flow schematic for the optional on-site water reuse treatment system. This treatment system (formerly call the LTF treatment system in prior TAC reports) has not changed operationally. As shown on Figure 3, the treatment system consists of filters and granular activated carbon (GAC) vessels configured in series. The second and third GAC vessels serve as polishing units, ensuring effective removal of low level VOCs. The effluent routinely meets the WDR limits for VOCs.

On samples collected on June 22, 2018 for the first semi-annual self-monitoring report 2018 an NOV was issued for dissolved sulfides from a local/grab limit of 0.6 mg/L, the current threshold is 0.1 mg/L. Currently, evaluation of the treatment system is underway to resolve the dissolved sulfides issue, with a change in our dosing chemical from sodium hypochlorite to hydrogen peroxide and will be implement once approved by the Bureau of Sanitation.

6.1 Upgrades to Aboveground Collection System

A comprehensive upgrade to the aboveground liquid collection/discharge system for the removal of liquids from vertical gas collection wells affected by liquids began in December 2016 and was completed in the third quarter of 2017. This project was necessitated by the increased liquids being generated as a result of the increased number of pumps installed in gas wells to extract liquids. As required by the Action Plan presented to, and approved by the South Coast Air Quality Management District (please refer to Section 8.2), 250 pumps were installed in gas wells impacted by liquids. The installation of these pumps was completed by August 31, 2017. This upgrade includes the purchase and installation of a new air compressor and the design and installation of the piping system to connect the liquid extraction pumps to the discharge system.

As part of these upgrades, 16 liquid storage tanks have been staged on site to ensure sufficient storage capacity for site liquids before they are either discharged to the sewer, or taken off-site for disposal. The storage tanks are staged on an area on City North in

an area constructed with a berm and an all-weather road to ensure site trucks and off-site trucks have access during all conditions.

In addition to the improvements made to extract liquids from the various points on the landfill and conveyance to the storage tanks, improvements were also made to the piping network that carries liquids from the storage tanks to the sewer connection point. These improvements included the installation of additional, dual-wall piping, installation of a dedicated composite sampling system with associated pH and flow meters for sewer discharges, installation of booster pumps, installation of a chlorine injection system, additional cleanouts and manholes. The liquids storage tanks and ancillary piping infrastructure is a completely sealed system outfitted with a vapor collection system used to collect and abate any potential gases emanating from the liquids in the tanks. This improvement project was completed in March of 2018.

7.0 Surface Water Management System, Including Drainage and Erosion Control (City/County)

Management of surface water from the site and the substantial upland non-landfill area that drains to it is a major part of the site's environmental compliance and operational programs.

Functions of the surface water management system include the following:

- Prevent or minimize erosion from the landfill surface;
- Prevent discharge of sediments from the site in excess of regulatory standards;
- Maintain peak stormwater discharges at levels no greater than the pre-landfill condition of the site; and,
- Manage the 100-year, 24 hour storm as required by Title 27 of the California Code of Regulations (CCR).

The surface water management system at Sunshine Canyon has been designed according to requirements of CCR Title 27 and the County of Los Angeles. Its major components were evaluated in the Joint Technical Document for the City/County Landfill, and determined to be in conformance with all requirements.

7.1 Existing Stormwater Management System

The existing surface water management system at Sunshine Canyon consists of three subsystems of drainage controls:

- Permanent Perimeter Drainage System;
- Interim Interior Drainage System; and
- Temporary Erosion and Sediment Control Measures

Elements of each system are described below. Elements of permanent drainage facilities at the site as well as some interim facilities such as concrete drainage channels, are shown on the figure included in Attachment E.

7.1.1 Permanent Perimeter Drainage System

The perimeter drainage systems are the major permanent control systems for the landfill. It intercepts all run-on of surface water from non-landfill areas and diverts it away from the landfill area, and manages runoff from landfill areas where refuse elevations are above the site perimeter drainage elevations. Existing elements of the perimeter system include the following, all of which have been designed to handle the peak discharge from a 100-year, 24-hour storm:

- Sedimentation Basin D, located at the far north end of the County area, which receives run-on from the native canyons north of the landfill area;

- Sedimentation Basin B, located on the east side of the County area, which receives runoff from the native East Canyon area and from portions of the landfill area. Basin B is concrete-lined and has a discharge structure designed to level out peak discharges of stormwater;

- Sedimentation Basin A, located on the west side of the County area, which receives run-on from slope and canyon areas west of the landfill area, and runoff from portions of the landfill area on the County side. Basin A is lined with concrete;

- East Perimeter Drainage Channel is currently completed from Basin D to the Terminal Basin. The final phase of this channel improvement was completed in September 2012;

- Terminal Sedimentation Basin, located near the site entrance at San Fernando Road. All surface water discharge from the site passes through this concrete-lined basin, which is designed to manage the peak flow from the 100-year storm and discharge no greater flow than the pre-landfill condition of the site. Upgrades in the form of water discharge skimmers and new outfall structures have been installed in early 2018 to extend the retention time and optimize the capacity of this basin.

- The West Perimeter Drainage Channel is currently completed from Basin D to Basin A. It presently discharges to the interim interior drainage system, as described in the following section. When completed, the West Perimeter Drainage Channel will collect all drainage from the west side of the Closed City Landfill and discharge directly to the Terminal Basin. Approval of the Revised West Drainage Channel Master Plan was

received from the LARWQB by letter dated October 24, 2016 (Attachment F). Comments on the West Drainage Channel Master Plan were received from DPW on June 15, 2016 (Attachment F). Since the construction of the West Perimeter Drainage Channel cannot be implemented until the CC4 Stability Buttress is in place, no action has been taken to date to address the comments from DPW.

7.1.2 Interim Interior Drainage System

Until all areas of the City/County Landfill have been developed and filled to elevations above the site perimeter, run-off from areas of the site interior must be managed in a system of basins and channels discharging through the center of the site to the Terminal Basin. At present, this includes the entire west side of the Closed City Landfill, currently areas of Cells CC-1, CC-2, CC-3,CC-4 Parts 1 and 2 and most of Cell A. The interim interior system is modified to accommodate ongoing construction activity. Construction includes drainage elements to ensure stormwater is directed to existing stormwater conveyance systems which ultimately discharge to the Terminal Basin.

The interim interior drainage system consists of an asphalt and concrete-lined trapezoidal channel which runs along the western side of the main haul road. This channel discharges to a box culvert which directs discharge from the trapezoidal channel along the temporary Phase 1 By-Pass Road that discharges to the Terminal Basin.

The drainage system for the Closed City Landfill features one large shallow sedimentation basin and a series of semi-permanent and temporary channels that collect runoff and convey it to the primary interior drainage channel described above. In the future, this system will discharge to the West Perimeter Drainage Channel.

7.1.3 Temporary Erosion and Sediment Control Measures

Temporary erosion control systems are installed on an annual basis in advance of the rainy season. A drainage plan is prepared annually which includes a variety of measures that not only reduce soil erosion but also reduce peak flows by slowing down and leveling discharges from the site. These measures include the following:

- Removal of deposited silt in site basins and drainage channels;
- Removal of deposited silt in Terminal Basin;
- Removal of rock filter around risers in Terminal Basin and replacement with new rock filter;
- Removal of old filter material around risers in Terminal Basin and replacement with new filter material;

- Grading benches to promote positive drainage;
- Removal of vegetation from pipes and inlets;
- Installation of temporary geosynthetic downdrain channels and chutes where required on the active fill area slopes;
- Installation of a geosynthetic-lined stormwater retention basin;
- Installation of a grated road crossing on paved entry road to separate runoff flows from vehicle traffic;
- Removal of sediment that accumulated around the gabion check dam in the Terminal Basin;
- Installation of Filtrexx compost rolls along the toe of the slopes of City South and toe of the slope of Cell CC-3B adjacent to the haul road;
- Installation of approx. 12 acres of erosion matting;
- Installation of an additional 5.2 acres of Closure Turf; and
- Regrading and reseeding of vegetative cover areas.

Temporary erosion and sediment control measures are documented and reported to the LEA, the Los Angeles Regional Water Quality Control Board and the County of Los Angeles, Department of Public Works. The Wet Weather Preparedness Plan submitted to these agencies is included in Attachment G. After each rain event, erosion and sediment control measures are inspected and evaluated, and repairs made as needed prior to the next rain event.

8.0 Current Odor Control Mitigation Measures (City/County)

This section provides an overview of the odor control mitigation measures that have been on-going as well as providing the current status of items related to the following regulatory actions:

- SCAQMD Order to Abate, Case 3448-14, signed on December 15, 2016;
- Los Angeles County Department of Regional Planning, Notice of Violation
- Los Angeles County Department of Public Health.

8.1 On-Going Odor Control Measures

Aggressive odor control measures are being implemented at the site. By letter dated November 29, 2017, a response to DPW was submitted which included a Revised Odor Mitigation Measures and Interim Milestones table providing the status of the odor mitigation measures being conducted at the site. This table is included in Attachment H and includes all of the work that has been completed through December 2018, the on-going operations and maintenance management (OM&M) activities being conducted for the gas collection and control system (GCCS), and other activities being conducted solely for the purpose of identifying odorous sources, potential odorous sources and remediating those sources.

The combined benefit of all of the odor mitigation measures completed at Sunshine Canyon Landfill as well as the on-going processes and procedures to address and mitigate odors and potential odor sources has resulted in the following quantifiable benefits:

(1) *Reduction of Odor Complaints Called in to SCAQMD: Please refer to Figure 1 included in Attachment I which presents a graph showing the Annual number of odor complaints called in to SCAQMD compared to the most recent rolling 12-month total of odor complaints called in to SCAQMD. This graph illustrates the significant reduction in the number of odor complaints.*

(2) *Reduction in Notices of Violation for Odor Nuisance: A Notice of Violation (NOV) for odor nuisance was issued by SCAQMD to Sunshine Canyon Landfill on April 5, 2017 and one on December 14, 2018.*

(3) *Increased Gas Collection: Please refer to Figure 2 included in Attachment I which illustrates the increase in gas flow in correlation with the implementation and completion of the Action Plan components. This figure also illustrates the number of odor complaints called in to SCAQMD. This figure also demonstrates, the significant positive impact of the implementation and completion of the Action Plan components.*

8.2 SCAQMD Stipulated Order for Abatement

On December 15, 2016, 2016, a Stipulated Order for Abatement (Order) (Case 3448-14) was approved by the SCAQMD Hearing Board and subsequently signed on January 10, 2017. The Order requires Republic Services to implement programs and processes for the purpose of mitigating conditions contributing to the alleged odor nuisance. The following presents a brief summary of each of the conditions contained in the Order and the status of each condition.

Condition 1: Requires the submittal of a Traffic Mitigation Program that establishes a program to address unnecessary truck trips and reduce queuing of trucks outside the Facility potentially resulting from the change in operational hours.

Status: The Traffic Mitigation Program was submitted to the Los Angeles City Department of Transportation, SCAQMD, LEA and DPW on December 30, 2016. Comments were received from DPW on February 2, 2017; responses to these comments were submitted to DPW on February 20, 2017.

By letter dated May 1, 2017, the City of Los Angeles Department of Transportation stated they are in agreement with the conclusions presented in the Traffic Mitigation Program report and that the shift in operation will not result in any increased significant impacts during the morning peak hours.

Condition 2: Prohibits the unloading/dumping of transfer trailer loads from all Republic transfer stations and from all third parties, including the City of Los Angeles Bureau of Sanitation, from occurring any earlier than 9:00 AM during weekdays and Saturdays.

Status: Effective December 19, 2016, all Republic Services, City of Los Angeles and other third-party transfer trailers were prohibited from coming to the landfill before 9:00 AM weekdays and Saturdays. This condition has been adhered to since December 19, 2016.

Condition 2.a: Requires Republic Services to provide funding for an independent third party odor monitor at and near Van Gogh Charter School during the hours of 6:00 AM to 9:00 AM. This third party monitor reports directly to the District.

Status: SCAQMD made the decision to solicit a contractor directly to provide the services for this condition. A contractor was hired by SCAQMD and the independent third party monitored for odor near Van Gogh Charter School. Republic Services personnel did not have any interaction with the independent third party monitors.

Condition 3: Requires the implementation of the Food Waste Diversion Program proposed by Republic Services for the purposes of increasing the diversion of Food Waste and organic materials from disposal at Sunshine Canyon Landfill. In addition, the Food Recovery Program proposed by Republic Services will be implemented.

Status: Status reports for the Food Waste and Organics Diversion Program for the fourth quarter of 2018 and first quarter of 2019 were submitted to SCAQMD on January 15, 2019 and April 15, 2019, respectively. Key components of the reports include:

(1) Food Recovery – Food Finders

In Q4 2018, the following activities were conducted:

- Republic's food recovery coordinator continued customer re-training, working diligently with buisnesses to fine-tune and expand pilot programs. Field sales teams and zero-waste account managers similarly engaged with new and current prospects on food diversion;

- Republic continues its market outreach efforts in the form of billing messages, meetings at local community working groups, and working with local municipalities to assist with enforcing AB 1826 compliance;

- Through the partnerships between Republic Services, The St. Francis Center, Food Finders, and World Harvest, 94 tons of edible surplus food was recovered and diverted from Sunshine Canyon Landfill. Which translates to 157,001 meals utilizing the USDA pounds-to-meals conversion;

In Q1 2019, the following activities were conducted:

- Republic's food recovery coordinator continued customer re-training, working diligently with buisnesses to fine-tune and expand pilot programs;

- Through the partnerships between Republic Services, The St. Francis Center, Food Finders, World Harvest, and MEND, 94 tons of edible surplus food was recovered and diverted from Sunshine Canyon Landfill. Which translates to 156,462 meals utilizing the USDA pounds-to-meals conversion.

(2) Transfer Station Transload

- During 4Q2018, 388 tons of organic waste was diverted from Sunshine Canyon Landfill through the program implemented at the Falcon and Innovation Transfer Stations (Innovative);
- During 1Q2019, 289 tons of organic waste was

diverted from Sunshine Canyon Landfill through the program at Innovation.

- Over 4,300 tons of organic waste has been diverted since the program implementation.

(3) Agromin OC Chino Organics Recycling

This condition required a Covered Aerated Static Pile (CASP) system to compost up to 75 tons per week of food waste be permitted, constructed and begin operating by March 30, 2019.

- The permit application was submitted to SCAQMD on February, 7, 2017;
- Permit approval was received on July 7, 2017;
- The CASP equipment was ordered on July 12, 2017. Equipment was received starting in mid August;
- The CASP system is online.
- In 4Q2018 745 tons of organic material was delivered to the CASP system.
- In 1Q2019 573 tons of organic material was delivered to the CASP system.

(4) American Waste Transfer Station Organics Pre-Processing

This condition required an organics pre-processing system capable of pre-processing up to 250 tons per day of food waste be installed at the American Waste Transfer Station.

- During the 3rd and 4th quarters of 2017, scoping and design for the enclosure of the American Waste Transfer Station in accordance with Rule 410 commenced;
- Applications and requests for approval were submitted to the City of Gardena for the building permit on November 30, 2017, and to the SCAQMD on December 1 2017 for the organics processing system and air control systems.
- During the 2nd quarter of 2018, Republic has continued to address questions related to the permitting applications.

- During the 3rd quarter of 2018, Republic received notification from the City of Gardena placing the approval of the organics pre-processing system on hold and outlining multiple conditions to be met prior to approval from the City. Republic has been in discussions with the City in regards to these conditions.
- As a result of the municipal permitting constraints for this facility, Republic is utilizing alternative facilities to meet the capacity. These facilities include Republic CVT , Puente Hills MRF, Ontario Agricultural Commodities, and Waste Management CORe.

Condition 4: Requires the continued use of the Alternative Daily Cover (ADC) in lieu of using nine inches of daily compacted soil cover.

Status: Approval to continue the pilot study to October 12, 2017 was obtained from the LEA by letter dated November 2, 2016 (Attachment J). The Los Angeles County Department of Public Works (DPW) initially approved the continuation of the pilot study to March 27, 2017 (Attachment J). By letter dated April 28, 2017, Republic Services requested DPW to extend their approval to October 12, 2017 based on evidence that strongly indicates the continued use of the ADC will ultimately result in the overall benefit of increased efficiencies to the site's gas collection and control system as well as the leachate collection system that will also contribute to the reduction of the potential for off-site odors (Attachment J). By letter dated May 11, 2017, DPW approved the continuation of the pilot study to October 12, 2017 to match the LEA's approval date (Attachment J).

The second year of the ADC pilot project concluding in mid-October 2017. A report summarizing the results of the project was submitted to the LEA and DPW on October 11, 2017, and October 25, 2017, respectively. Based on the observations and findings presented in report, it was concluded that the ADC is more effective than the nine inches of compacted soil cover and recommends the continued use of the ADC at Sunshine Canyon Landfill.

By letter dated October 16, 2017, the LEA acknowledged the receipt of the ADC report presenting the findings of the second year of the pilot project (Attachment J). The LEA further stated they were conducting an independent evaluation of the ADC pilot project based on SCL LEA observations, landfill gas monitoring results as well as the information presented in the Republic Services report. The LEA approved the continued use of the ADC during their evaluation.

By letter dated December 20, 2017, the LEA, provided their review of the ADC Pilot Project Report as well as presented the findings of their independent review of the ADC pilot project. The LEA concluded they concur with Republic Services' conclusion that the ADC should continue to be used as an ADC at Sunshine Canyon Landfill (Attachment J).

By letter dated April 10, 2018, the LA County Department of Public Works granted SCL an extension to continue to conduct the ADC Pilot Project until October 25, 2018 (Attachment J).

By letter dated November 15, 2018, SCL has requested a timeline from the LA County Department of Public works as to when they anticipate granting approval of the ADC (Attachment J).

Condition 5: Requires the implementation of the intermediate cover enhancement pilot program as directed by the SCL LEA.

Status: Approval for the implementation of the intermediate cover enhancement pilot program (ICE) was received from the LEA on May 16, 2016. Approval from DPW was received on December 20, 2016. These approval letters are included in Attachment K.

Completion of the ICE pilot project was delayed due to the wet weather from mid-December 2016 through early March 2017. The application of Posi-Shell in accordance with the ICE pilot project procedures was completed on March 2, 2017.

The ICE project was completed in September 2017. A report summarizing the results of the project was submitted to the LEA and DPW on December 8, 2017. Although it was difficult

to provide a specific, supported conclusion based on the results of the ICE project, the following conclusions were presented:

- The placement of an additional 6" of soil was effective in controlling both instantaneous and integrated surface emissions during the study period;
- Posi-Shell® applied at twice the normal application rate was more effective than the Posi-Shell® applied at the normal rate;
- The use of the Posi-Shell® as intermediate cover is effective when used as part of the site's overall odor management plan as the application of this product has the following overall benefits:
    - Minimization of air-borne dust in areas where the Posi-Shell® was applied particularly to slope areas;
    - Provides an improved barrier to ambient air allowing an increase in applied vacuum without increasing oxygen thus increasing vacuum for additional gas collection;
    - Posi-Shell® provided an easier walking surface increasing site safety for those walking on this surface;
    - Posi-Shell® provides an interim cover that can be integrated into vegetative cover or can be easily removed to promote waste-to-waste contact providing for effective liquid and gas movement.

Condition 6: Requires conducting the intermediate cover program in a manner "to be harmonized and consistent" with all local land use requirements including the requirements of Condition 44A of the County's CUP, the IMP and the City of Los Angeles "Q" conditions.

<u>Status:</u> DPW's approval includes a condition that as part of the ICE project, the impact to the growth of vegetation must be studied and evaluated. This evaluation was conducted throughout the ICE project period; no vegetation was observed growing within the grids that were the subject of the pilot project.

Condition 7: Requires the submittal of monthly Rule 1150.1 surface emission monitoring results for the grids that are included in the intermediate cover enhancement pilot program.

Status: Monthly Rule 1150.1 surface emission monitoring results were submitted to SCAQMD for the grids included in the ICE project. The final report for the month of August 2017 was submitted on September 15, 2017.

Condition 8: Requires the placement of additional soil cover on a minimum of at least twenty (20) intermediate cover areas (grids) that have exceeded 25 ppm (methane) for integrated surface emission monitoring at least once during the last three (3) quarters.

Status: This work was completed in early March 2017.

Condition 9: Requires a proposal to be submitted for additional methods/procedures for upgrading and improving the additional areas of the landfill that have intermediate cover.

Status: A report entitled "Evaluation of Potential Enhanced Intermediate Cover Alternatives" was submitted to SCAQMD on March 15, 2017. Recommendations provided included enhancements to 115 acres of intermediate cover area at the site including:

- Application of Posi-Shell® – 37.3 acres
- Installation of Closure Turf – 20.7 acres in 2017
- Additional Closure Turf Installation – 5.2 acres in 2018
- Vegetative Cover Preparation and Seeding – 57 acres

At the March 29, 2017 Abatement Order Status Hearing, an expedited schedule for enhancement of the intermediate cover at the landfill was presented and incorporated into the Abatement Order (Action Plan).

The following presents a summary of the status of each of the intermediate cover enhancements included in the Action Plan:

ACTION	Target Completion	Current Progress
Install 21 acres of Closure Turf, an impermeable synthetic liner overlain by artificial turf	August 31, 2017	**Deadline Met**: 21 acres of Closure Turf was installed by the target completion date.
Apply 37 acres of a thick, flexible spray-on cover that serves as a temporary cover in new waste fill areas	August 31, 2017	**Deadline Met**: 38.5 acres of Posi-Shell was applied by the target completion date.
Establish vegetative cover over 57 acres to prevent erosion and soil thinning and to act as a natural bio-filter	December 31, 2017	**Deadline Met**: 58 acres of vegetative cover was installed to establish vegetation.

Condition 10: Requires expanding the application of the intermediate cover upgrades to additional surface emission monitoring grids if data or other performance metrics demonstrate cover performance improvements.

Status: The status of each of the recommended enhancements to intermediate cover areas is presented above. Based on aesthetics and GCCS performance metrics, SCL expanded the Closure Turf cover enhancement by 5.2 acres in 2018. No other expansion of the application of the intermediate cover upgrades to additional surface emission monitoring grids has been proposed or required as of the date of this report.

Condition 11: Requires dewatering of wells impacted by liquids, submittal of monthly reports, submittal of a methodology and monitoring procedure to determine the level of dewatering within each impacted well.

Status: Dewatering of gas wells impacted by liquids has been on-going and monthly reports have been submitted to SCAQMD since January 2017. The methodology and monitoring procedure to determine the level of dewatering within each impacted well has been submitted to SCAQMD.

Condition 12: Requires camera integrity testing of all vertical gas wells to evaluate the performance of each gas well.

Status: Integrity testing of all vertical gas wells using a downhole camera began in early December 2016 and was completed in early March 2017. Based on the results of this testing, a program to install new and replacement gas wells was implemented and 153 new and/or replacement gas wells have been installed.

This year, the integrity testing was completed in first quarter 2018 and has resulted in the installation of 89 new and/or replacement gas wells, year to date.

Condition 13: Requires maintaining records related to compliance with Condition 12.

Status: Records related to the well integrity testing have been maintained on-site.

Condition 14: Requires submittal of a proposal for additional best management practices to supplement existing best management practices intended to control and treat fresh trash odors. The proposal is to be submitted to the District within sixty (60) days of the issuance of the Order.

Status: This proposal was submitted to SCAQMD on February 13, 2017. By letter dated May 3, 2017 SCAQMD approved the proposal as final and directed Republic Services to implement the recommended actions (Attachment L).

Condition 15: Requires submittal of an updated Odorous Load Management Plan within thirty (30) days of the receipt of the SCL-LEA's finding and recommendations of programs for best management practices for odor mitigation at transfer stations.

Status: The LEA's findings and recommendations for best management practices for odor mitigation at transfer stations was received on February 15, 2017. In accordance with Condition 15, a revised Odorous Load Management Plan was submitted to SCAQMD on March 16, 2017. By letter dated May 3, 2017, SCAQMD approved the revised plan as final and directed Republic Services to implement the recommended actions (Attachment M).

By letter dated October 31, 2017, SCAQMD was notified that the Revised Best Management Plan and Revised Odorous Load Management Plan had been implemented (Attachment M).

Condition 16: Requires an assessment of the feasibility of installing physical barriers and or dust/odor containment structures within ninety (90) days of the issuance of the Order.

Status: The Assessment of Physical Barriers and Dust-Odor Containment Structures report was submitted to SCAQMD on March 15, 2017. By letter dated May 3, 2017, SCAQMD issued an interim approval to "facilitate further discussion with the SCAQMD and SCL LEA regarding integration of such additional measures to achieve maximum effect." The additional measures refer to other mitigation measures that would be implemented as "an integral part of the design for proposed physical barriers." SCAQMD further directed Republic Services to implement the proposed plan while further review is being conducted (Attachment N).

Implementation of the proposed actions in the Physical Barriers and Dust-Odor Containment Structures report in part require the construction of the front entry berm improvements including the terminal stability berm. This project requires multiple approvals and is currently in the design stage.

8.3 Los Angeles County Department of Regional Planning NOV issued October 25, 2016

On October 25, 2016, the Los Angeles County Department of Regional Planning (DRP) issued a violation to Browning Ferris Industries of California (BFIC) for alleged non-compliance with required requests by DPW under Condition 45N of Conditional Use Permit (CUP) 00-194 (Code Case RPZPE2016002500) (Attachment O). This violation was issued based on a referral from DPW based on DPW's assessment of multiple submittals from Republic Services that DPW deemed "non-responsive".

By letter dated November 1, 2016, Republic Services responded to the NOV and detailed the responses provided to DPW and reiterated Republic's commitment to work with DPW to resolve the discrepancies. At a meeting held on November 28, 2016 with DPW and Republic personnel as well as Republic consultants, each item

requested by DPW was discussed as well as the status of each submittal.

An appeal to the NOV issued by Regional Planning was submitted on January 25, 2017 maintaining BFIC had complied with the information requests from the Department of Public Works. An appeal hearing was held on March 7, 2017 which was continued until May 2, 2017 because Regional Planning failed to provide documents related to the Public Records request submitted by BFIC on February 2, 2017. At the May 2nd appeal hearing, the Hearing Officer sustained the issuance of the NOV, but noted that BFIC had provided a substantial amount of information, and several of DPW's information requests were "unclear". The Hearing Officer left it to the discretion of the Director of Regional Planning whether to issue a civil penalty

By letter dated May 4, 2017, Regional Planning notified BFIC that a penalty in the amount of $174,000 had been assessed (Attachment O). This payment was made to Regional Planning on May 11, 2017 under protest and with the expectation that a further appeal would be made (Attachment O).

By letter dated September 14, 2017, DPW provided additional comments on submittals made to them that were the subject of this NOV. A meeting was held on October 3, 2017 with DPW and Republic Services personnel to discuss the comments. Responses to the comments were submitted to DPW on November 29, 2017.

BFIC filed a petition in the Los Angeles County Superior Court, challenging the County's 2016 Notice of Violation alleging that BFIC failed to respond to information requests from the Los Angeles County Department of Public Works (DPW) concerning information related to odor mitigation, and, specifically, concerning the landfill's GCCS. BFIC maintains it has fully responded to DPW's information requests. BFIC also seeks the return of the $174,000 penalty imposed by the Director of Regional Planning based on the NOV. At a hearing held on December 20, 2017, a trial date of BFIC's petition was set by this Court for June 13, 2017.

On June 13, 2018, the Judge granted BFIC's petition due to the Hearing Officer's failure to make legally adequate findings in support of the decision. The Judge asked BFIC's Legal Counsel to prepare a judgement in favor of BFIC's petition.

8.4 Los Angeles County Department of Public Health Order to Abate dated November 9, 2016

On November 9, 2016, the Los Angeles County Department of Public Health issued an Order to Abate pursuant to Condition 45N of CUP No. 00-194-(5) and required the submittal of a corrective action plan with a compliance schedule and interim milestones for implementing mitigation measures related to the abatement of alleged

odors. Public Health required the alleged nuisance to be abated by March 30, 2017 (Attachment P).

On January 13, 2017, BFIC submitted the Corrective Action Plan and Interim Milestones to Public Health. An update to the Corrective Action Plan was sent to Public Health on April 6, 2017. On May 9, 2017, Public Health notified BFIC that "DPH has determined the landfill is not in compliance with the Order to Abate". DPH subsequently sent a request to the Department of Regional Planning (DRP) to issue an NOV "based on odor violations". Although a response was sent to DPH on May 17, 2017, no further information is known regarding this item as of the date of this report.

9.0 Revegetation Plans and Recent Hydroseeding Efforts on Temporary Slopes and Stockpiles (City/County)

A quarterly vegetation report is submitted which provides discussions on the vegetation efforts and any hydroseeding activities conducted during the quarter. The vegetation reports for the fourth quarter of 2018 and first quarter of 2019 were submitted on January 31, 2019 and April 30, 2019, respectively.

10.0 Venturan Coastal Sage Mitigation Plan (City's M.4.4.1 (60) &(61))

As reported in previous TAC reports, a landscape architecture and planning contractor, Architerra Design Group (Architerra), was hired to design and develop a habitat restoration and landscape improvement plan for the City South C Trial Plot. This project is intended to be a pilot or demonstration project to determine the most effective course of action for re-vegetation of the closed deck and slopes area on the City South area of the site. Work on this project began in the first quarter of 2013 with construction/planting activities completed in May of 2013. Weekly activities have been conducted in the pilot project area since that time consisting of maintenance, selective pruning and repairs to the irrigation system when needed.

An assessment of the site's sage mitigation areas, including the pilot project area, is conducted by a qualified biologist on a quarterly basis and is included in the quarterly vegetation reports. The quarterly monitoring consists of an overall assessment of the site's sage mitigation areas (City and County mitigation areas) as well as a sampling and assessment of the pilot project area in accordance with the procedure presented in the First Quarter Vegetation Report entitled *"Methodology for Monitoring Percent Cover and Species Richness within Each Seeded Application Method on the Coastal Sage Scrub Pilot Project at the Sunshine Canyon Landfill"*.

The most recent observations of the Deck C sage mitigation area noted that overall the area looks healthy. The area will continue to be monitored on a quarterly basis and those observations will be included in the quarterly vegetation reports.

10.1 Phase 2 Coastal Sage Scrub Pilot Mitigation Project

On August 15, 2016, a proposal for a second phase of the Venturan Coastal Sage Scrub (CSS) mitigation was submitted to the TAC. This proposal presented two options to be considered for the Phase 2 CSS mitigation; the option to implement the second phase on Deck B was selected. This includes approximately 9.5 acres with the majority of the area being relatively flat although there are some shallow slopes along the edges. The area contains established CSS which would be protected during the construction of the area.

The construction of the Phase 2 CSS mitigation area on Deck B was initiated in October 2017. Grading of the area was completed in early November 2017 and the project has been completed in December 2018. Ongoing maintenance for the first year's establishment is underway for 2019 and monitoring and reporting for Deck B has been implemented during the CSS quarterly vegetation program.

11.0 Chatsworth Mitigation (City Q.C.9)

The following presents a summary of the work conducted in 2017 related to the Chatsworth Mitigation project.

11.1 Ordinance Amending Section 12.04 of the Los Angeles Municipal Code

The ordinance amending Section 12.04 of the Los Angeles Municipal Code has not been finalized as of the date of this report. Comments on the draft Ordinance were received from the Army Corps of Engineers (ACOE) on April 17, 2015 and forwarded to the City the same day. A conference call was held on July 7, 2016 to discuss the status of the draft Ordinance. Based on that call, Republic Services proceeded with work to develop an Addendum to the Mitigated Negative Declaration (MND) as a supporting document to the Ordinance (Section 11.2).

A conference call was held with representatives from the California Department of Fish and Wildlife (CDFW) in June 2017 to discuss their comments on the draft Ordinance. Fish and Wildlife personnel stated they could not agree with the Ordinance since the site permit required a Conservation Agreement. In addition, Republic Services was informed that the original Streambed Alteration Agreement (SAA) R5-2002-0163 had expired and could not be amended to include a reference to the City Ordinance. In response to this, Republic Services submitted a Notification of Lake or Streambed Alteration Notification to the CDFW on October 26, 2017. By letter dated November 27, 2017, the CDFW notified Republic Services the submitted Notification was deemed complete (Attachment Q). CDFW also stated that if it is determined an Agreement is required for the project, a draft Agreement will be issued no later than January 26, 2018.

By letter dated January 26, 2018, CDFW notified Republic Services that because the CDFW did not submit a draft Lake or Streambed Alteration Agreement by January 26, 2018, Republic Services does not need an agreement to proceed with the proposed work given that all federal, state and local laws are observed. Currently, Republic Services is awaiting the approval of the City Ordinance (Attachment Q).

11.2 Addendum to the Mitigated Negative Declaration (MND)

The following contractors have been retained to develop the Addendum to the MND:

- Mike Zander and Associates (Zander) - Biological Resources
- John Minch and Associates (JMA) - Cultural Resources
- Tetra Tech - Air Quality

Field surveys for biological and cultural resources were conducted on November 17 and 18, 2016. Based on the findings of their field survey, JMA recommended a Native American consultation for the project based on the results of the Sacred Lands File check which indicated a change in status of Sacred Lands within the Chatsworth Reservoir Mitigation Project Area (Attachment R). Based on this information, a Native American consultation was conducted. In cooperation with the Los Angeles Department of Water and Power (LADWP), consultation letters were sent out March 26, 2017 and responses requested by April 28, 2017. Responses received are included in Attachment R.

A conference call with Ms. Julie Wagner (LADWP) was held on May 8, 2017 to discuss the responses. Based on the discussion, Ms. Wagner indicated LADWP, as the lead agency for the project, would be requesting additional archaeological studies of some the sites in the project area. By letter dated June 13, 2017, the LADWP requested Republic Services to authorize JMA to conduct additional studies as requested by the Native American Consultation survey findings (Attachment R).

The additional field surveys were performed by JMA during the week of August 21, 2017 and also on September 13 - 14, 2017. The survey could not be completed during the week of August 21st due to excessive temperatures. Organic material was discovered at one location which was submitted for radiocarbon dating in accordance with JMA's procedures. As of the date of this report, JMA has completed the cultural resources portion of the Addendum to the MND and has submitted the Phase II Investigation document to LADWP, the California Historical Resource Information System, and Republic Services. Accordingly, in a letter dated February 27, 2018 from Sam Dunlap the Cultural Resource Director of the Gabrielino Tongva Nation commended JMA's archaeological field work and report. In a memo to Republic Services and LADWP

dated March 17, 2018 from Dr. Ray Corbett has stated the completion of the Phase II Investigation report (Attachment R).

12.0 Status of Alternative Fuels Vehicles (City/County)

The filling station located at 12881 Encinitas Avenue, Sylmar intermittently has E-85 fuel available. When available, pickup trucks used onsite fuel with E-85. When E-85 is not available, unleaded fuel is used. There is no other E-85 filling station viable for this purpose.

In 2009, six Tier 3 engines were fitted with additional Diesel Particulate Filters (DPFs) to help reduce emissions. In 2014, one (1) unit was retrofitted with an LPG engine to reduce emissions; one (1) unit was retrofitted with an LPG engine in 2015; in 2017, one (1) unit had the engine replaced with a Tier 4 final engine and one (1) new unit was added to the fleet with a Tier 4 final engine that currently uses ultra-low sulfur diesel fuel. All other DPFs have been eliminated due to fire hazards or problems associated with the Electronic Control Module (ECM). According to SCL's research, there have been no advancements in technology for alternative fuel for heavy machinery.

13.0 Backup Generator (City/County)

As reported in previous TAC reports, SCL is in compliance with CUP Condition 83. Generators needed to provide power to the landfill gas flaring system have been identified and secured by a contractual arrangement with Quinn Power Systems.

The transfer switches for Flares 1, 3, 9, 10 and 11 have been installed. One generator has been purchased and is staged on-site. The permit to operate this generator was received from SCAQMD in April 2017 (Permit No. G46227).

14.0 Soil Importation

On July 28, 2015, Republic Services submitted a request to LA County DPW for approval to import clean soil that will be made available from the Los Angeles County's Devil's Gate Reservoir Sediment Removal and Management Project located in Pasadena, California. By letter dated May 4, 2016, DPW approved the importation of this material to Sunshine Canyon Landfill (Attachment S).

By email dated September 12, 2016, Mr. Ken Zimmer (Senior Civil Engineer, Water Conservation Planning, LA County Department of Public Works) informed Republic Services personnel there would be a delay in the Devil's Gate Reservoir Sediment Removal Project and stated the LA County Flood Control District would plan on sending a portion or all of the material from the Pacoima Spreading Grounds to Sunshine Canyon Landfill.

Sunshine Canyon Landfill met with representatives from Sunshine Canyon Landfill Local Enforcement Agency and the LA County Flood Control District on June 14, 2018. Accordingly, the Pacoima Spreading Grounds project is scheduled to commence in the Fall of 2018. As of the date of this report, this is the latest information regarding the start of this project.

15.0 Current and Planned Projects Outside the Disposal Area

Two projects involve work to be conducted outside the site's current grading limit:

- SCE Power Pole Relocation Project;
- Future Cell CC-4 Stability Buttress

Grading for a portion of the SCE Power Pole Relocation Project started in March 2016 and was completed in early July 2016. Grading for the CC-4 stability buttress commenced in the second quarter of 2018. As part of the approvals for these projects, a Revised Exhibit "A" ("A-2") is required to be submitted and the revised grading limits approved by the Los Angeles County Department of Public Works (DPW) and the Los Angeles County Department of Regional Planning. The Revised Exhibit A application was submitted to DPW and Regional Planning on November 16 and November 21, 2016, respectively. Comments11a on the Survey Monument Plan were received from DPW on April 11, 2017. These comments have been addressed and the Revised Exhibit A application ("A-2") has been submitted to DPW and Regional Planning on May 30 and 31, 2017, respectively.

Additional comments on the Survey Monument Plan were received from DPW on July 6, 2017. Republic Services personnel met with DPW staff to discuss the comments on July 19, 2017. A revised Survey Monument Plan was submitted to DPW on August 23, 2017. In addition, comments were received on the Tree Survey Report that is required to accompany the Revised Exhibit A application. Republic Services met with personnel from the Department of Regional Planning to resolve these comments. The Tree Survey Report was approved by Regional Planning on November 29, 2017.

Pursuant to the LA County DPW Letter dated February 7, 2018, approval was granted for the revised grading limit request (Attachment U).

As of the letter issued by LA County DPW, dated March 13, 2018, the conditional approval was granted for the grading and drainage features associated with the CC4 Stability Buttress Project (Attachment U).

Based on the geology mapped during the excavation and field investigation portion of the project, a redesign of the stability buttress was completed and submitted to the LA County Department of Public Works on October 30, 2018. The redesign included hydrology calculations, slope stability analyses and revised drawings.

The following sections present summaries of the two projects.

15.1 SCE Power Pole Relocation Project

This project started in March 2016 and was completed in July 2016. Approximately 4,200 feet of the 66kV subtransmission line running through the center of the landfill was removed and relocated around the perimeter of the County portion of the site. The completion of this project ensured that this high voltage subtransmission line will not interfere with landfill operations and also ensures compliance with the subtransmission line clearance requirements found in Commission General Order (GO) 95. The decision granting SCE a permit to construct the project was issued by the California Public Utilities Commission (CPUC) on April 2, 2014.

15.2 CC-4 Stability Buttress

CC-4 will be constructed in the southwest portion of the site along the southwestern boundary of Phases I and II-B and west of CC-2 and CC-3A Part 1. An earthen stability buttress is being proposed in order to construct the west slope of the CC-4 liner unit (Future Cell CC-4, Part 3). The rationale for the design of the proposed stability buttress is included in the Design Report for CC-4 which has been submitted to the LARWQB. By letter dated April 26, 2016, the LARWQCB approved the design report for Cell CC-4, Parts 1-5 (Attachment A).

Comments on the CC-4 stability buttress were received from DPW in letters dated October 19, 2015 and January 13, 2016 and also discussed during meetings held with DPW personnel on December 13, 2015 and March 1, 2016. DPW comments pertain to the proposed analysis that indicated the slope stability factors of safety (FS) for temporary construction slopes could be less than the County's minimum standard of 1.25. Based on these comments, an addendum report was submitted to DPW on April 6, 2016 detailing the mitigation recommendations and supporting analysis to substantiate that the proposed Cell CC-4 development grading will meet or exceed DPW's minimum slope stability FS criteria for temporary slopes (e.g. 1.25). Additional comments were received from DPW on June 15, 2016; an additional geotechnical report was submitted to DPW on July 11, 2016 and responses to comments from DPW's Building and Safety and Water Resources Divisions were submitted on August 11, 2016.

Additional comments were received from DPW on October 25, 2016. Responses to these comments were submitted to DPW on November 17, 2016. More comments were received from DPW on March 9, 2017; responses to these comments and revised drawings were submitted to DPW on April 24, 2017. By email dated October 10, 2017, one comment from the County's Design Division was received; the response to this comment was submitted to the County on November 8, 2017. Another comment from the County's Design Division was received via email dated November 30, 2017; the

response to this comment including revised Grading and Drainage design plans was submitted to DPW on December 13, 2017.

By email dated December 20, 2017, DPW personnel informed Republic Services that a complete submittal including a soils report is required before DPW can review and issue an approval for the project.

All DPW requests were satisfied and as of the letter issued by LA County DPW, dated March 13, 2018, the conditional approval was granted for the grading and drainage features associated with the CC4 Stability Buttress Project (Attachment U).

16.0 Current Monitoring Activities

The following monitoring activities have been conducted since January 2017:

- Construction Monitoring - Grading for CC-4 Part 2 Subgrade Excavation:

  Scope: Archaeological and paleontological monitoring
  Consultant: John Minch and Associates (JMA)

- Third Party Mitigation Monitoring

  Scope: Third-party Mitigation Monitoring
  Consultant: UltraSystems

- Surface Emission Monitoring

  Scope: Monitoring required by SCAQMD Rule 1150.1 (Surface Emission Monitoring, etc.)
  Consultant: RES Environmental

- Biological Monitoring

  Scope: Coastal Sage, Oak Tree and Big Cone Fir Mitigation Monitoring
  Consultant: John Minch and Associates (JMA)

- Ambient Air Monitoring

  Scope: Third-party Ambient Air Monitoring
  Consultant: Sonoma Technology, Inc. (STI)

- Gas Well & Perimeter Probe Monitoring

  Scope: NSPS Monitoring
  Consultant: SCS Engineering

Please note that off-site odor monitoring conducted in nearby neighborhoods is conducted by Republic Services' employees.

17.0 Response to Third Party Mitigation Monitor Observations

UltraSystems provides the third party mitigation monitoring as required by Q Condition C.12.c. UltraSystems personnel perform monitoring visits in order to observe operational site activities and determine compliance status with conditions and/or mitigation measures. After each site visit, UltraSystems and Republic personnel meet to discuss the findings and observations.

This section provides an update on the status of the block retaining wall on San Fernando Road. The following activities have been conducted related to this item:

- A geotechnical investigation of the slope above the retaining wall has been conducted;
- A structural investigation of the current condition of the block retaining has been conducted;

These two investigations were finalized the last week of May 2017. Based on the results of these investigations, a scope of work including the following items was developed:

- Removal of the loose material on the slope behind the block retaining wall;
- Grading of the slope as needed under the direction of a geologist;
- Removal of loose material behind the block wall to expose the v-ditch and promote drainage;
- General clean-up of the sidewalk area to re-establish the walkway.

This task has been adopted as a part of the routine winterization process for the site and is also conducted on an as-needed basis. A picture of the project area is provided in Attachment T.

18.0 Recent Landfill Activities and Planned Activities for Next Six Months

Recent activities conducted at the landfill are discussed in previous sections and include the following:

- Installation of new vertical gas wells and associated piping (134 wells installed year to date);
- Installation of additional dewatering pumps in gas wells impacted by liquids (61 pumps installed along with associated piping, year to date);
- Completion of the installation of 26 acres of Closure Turf;
- Completion of the application of 38.5 acres of Posi-Shell®;
- Completion of the 58-acre vegetative cover project;
- Continued maintenance of City South Coastal Sage Mitigation Area;

Planned activities for the first and second quarters of 2019 include:

- Continued activities to respond to SCAQMD Abatement Order conditions – please refer to Section 8.1;
- CC4 Stability Buttress project;
- Additional upgrades to the liquids management system;
- Landfill gas wellfield expansion activities;
- Phase 2 Coastal Sage Scrub Pilot Mitigation Project;
- Continued maintenance of City South Coastal Sage Mitigation Project area;

Please do not hesitate to contact me at (818) 362-2141 if you have any questions.

Sincerely,

Chris Coyle
General Manager Manager
Sunshine Canyon Landfill

Cc: Tiffany Butler, City Planning
Ly Lam, City Planning
Nick Hendricks, City Planning
Maria Masis, LA County Regional Planning
Martins Aiyetiwa, County of Los Angeles, Department of Public Works
David Thompson, SCL-LEA
Shikari Nakagawa-Ota, SCL-LEA

ATTACHMENT A

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

April 26, 2016

Ms. Patti Costa, Environmental Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342

APPROVAL OF PHASE CC-4, PARTS 1 – 5, DESIGN REPORT, SUNSHINE CANYON CITY/COUNTY LANDFILL, SYLMAR, CALIFORNIA (ORDER NO. R4-2008-0088, FILE NO. 58-076)

Dear Ms. Costa:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), has received from you a document titled *Design Report, Phase CC-4, Parts 1 – 5, Sunshine Canyon Landfill* (Design Report) that was prepared by Geo-Logic Associates for Republic Services (Discharger), dated September 2015, and submitted to the State Water Resources Control Board GeoTracker System on December 16, 2015. The Report was submitted for the construction of Phase CC-4 liner system at the Sunshine Canyon City/County Landfill (Landfill), which is regulated under waste discharge requirements (WDRs) included in Order No. R4-2008-0088 adopted by this Regional Board on October 2, 2008. The Design Report provides the design and construction information of an approximate 55-acre area within the permitted footprint of the Landfill, including liner and leachate collection systems, subdrain system, grading plans, and slope stability analyses.

Regional Board staff has reviewed the Design Report and found that the proposed liner system design meets the requirements of the WDRs and standards described in California Code of Regulations, title 27, section 20310 et. al. The Design Report is therefore approved. During the proposed landfill construction, if any revision of the Design Report is necessary, the Discharger must submit an amendment to the Design Report, at least 90 days prior to the construction involved the revision, to the Regional Board for the review and approval of Regional Board staff.

In accordance with Requirement D.9 of the WDRs, prior to the start of construction of any containment structure, a geologic map of the final excavation grade shall be prepared for review, approval, and confirmation in the field by Regional Board staff. A final construction quality assurance (CQA) report, including drawings documenting "as-built" conditions, shall be submitted within 60 days after the completion of each part or subpart of liner construction.

A public notice letter regarding this approval was sent to interested parties on March 15, 2016, to meet General Provision No. M.22. of the WDRs, which states: "*During oversight of this Order, wherever the Executive Officer is authorized to grant any approval under a particular provision of this Order, the Executive Officer is directed to assess if there is controversy associated with the decision following public notice and, if so, bring the decision to the Regional Board for approval.*" The deadline for submitting comments regarding this matter was April 14, 2016. During the period, we received an email from Mr. David Nugyen of the County of Los Angeles Department of Public Works (DPW) (copy attached) that provides comments regarding the

Design Report. The email requested that the Regional Board's approval of the Design Report be in conjunction with the approvals and clearances of the DPW on grading and drainage design of the proposed liner construction. In accordance with Requirement M.3. of the WDRs[1], approval of the Design Report by the Regional Board does not release you from the responsibility of complying with any other laws and regulations that may be enforced by the DPW or other regulatory agencies.

If you have any questions or need additional information, please call Dr. Wen Yang, Chief of Landfill Disposal Unit, at (213) 620-2253.

Sincerely,

Samuel Unger

Samuel Unger, P.E.
Executive Officer

Enclosure

Cc: Leslie Graves, Division of Water Quality, State Water Resources Control Board
Michael Wochnick, California Department of Resources Recycling and Recovery, Sacramento
Gerardo Villalobos, Los Angeles County, DPH, Baldwin Park
Martin Aiyitiwa, Los Angeles County Department of Public Works, Alhambra
David Thompson, City of Los Angeles, Environmental Affairs Department
Ted Kowalzcyk, South Coast Air Quality Management District, Diamond Bar
Richard Slade, Upper Los Angeles River Area Watermaster
Mitchell Englander, Councilmember, 12th District, City of Los Angeles
Wayde Hunter, North Valley Coalition, Granada Hills
Wayne Aller, Knollwood Property Owners Association, Granada Hills
Becky Bendickson, Granada Hills North Neighborhood Council
Kim Thompson, Granada Hill North Neighborhood Council
Wayne Adelstein, North Valley Regional Chamber of Commerce
Ralph Kroy, LA City Sunshine Canyon Landfill Community Advisory Committee

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[1] Requirement M.3. of the WDRs states: "*These requirements do not exempt the Discharger from compliance with any other current or future law that may be applicable. They do not legalize this waste management facility, and they leave unaffected any further restraints on the disposal of wastes at this waste management facility that may be contained in other statutes.*"

Yang, Wen@Waterboards

From:	Dave Nguyen <DNGUYEN@dpw.lacounty.gov>
Sent:	Wednesday, April 13, 2016 6:11 PM
To:	Yang, Wen@Waterboards
Cc:	Martins Aiyetiwa; Gabriel Esparza; Karlo Manalo; Nam Doan
Subject:	Sunshine Canyon City-Cnty Landfill_Public Notice, File No. 58-076_2016-03-15 - Comments from Los Angeles County Department of Public Works
Attachments:	Sunshine Cyn City-Cnty Landfill_Public Notice, File No. 58-076_2016-03-15.pdf

Good afternoon Wen,

We appreciated the opportunity to review the Liner Design Report provided as part of the Water Board's Public Notice dated March 15, 2016, for Phase CC-4, Parts 1-5 (attached). Based on our review, we have the following comment:

Since the Sunshine Canyon Landfill Operator, Republic Services, also submitted grading plans and slope stability analysis reports for the construction of Cell CC-4 to the Department of Public Works for review and approval, to ensure the operator also acquire necessary approval of these items from the regulatory agencies, we respectfully request the Water Board to include this clauses (or similar) in the Water Board's approval letter: **"Republic Services is required to obtain necessary approvals and clearances relating to grading and drainage design of Cell CC- 4 that may be required by the Los Angeles County Department of Public Works and other regulatory agencies."**

Please let us know if you have any questions.

Thank you,

David Nguyen
Civil Engineer
County of Los Angeles Department of Public Works
Environmental Programs Division
(626) 458-5189

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

October 23, 2017

Ms. Patti Costa, Environmental Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342

APPROVAL OF CONSTRUCTION QUALITY ASSURANCE REPORT, CELL CC-4, PART 2, LINER INSTALLATION - SUNSHINE CANYON LANDFILL, SYLMAR, CALIFORNIA (FILE NO. 58-076, ORDER NO. R4-2008-0088, WDID NO. 4B190329001)

Dear Ms. Costa:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), has received the *Final Report of Construction Quality Assurance, CC-4 Parts 2, Sunshine Canyon Landfill* (Report), prepared by Geo-Logic Associates for Republic Service (Discharger) and dated October 2017. The Report documents the construction quality assurance (CQA) services performed during the construction of Cell CC-4, Part 2, which consists of approximately 6.2 acres of liner system at the Sunshine Canyon Landfill (Landfill) in Sylmar, California, that is owned and operated by the Discharger. The Report has been submitted to comply with waste discharge requirements (WDRs) Order No. R4-2008-0088, which was adopted by the Regional Board for the Landfill on October 2, 2008, and applicable requirements in title 27 of the California Code of Regulations (27 CCR).

Regional Board staff has completed review of the Report and, based on the information provided and our observations during site inspections at the Landfill conducted on June 12, 2017, July 28, 2017, September 11, 2017, September 28, 2017, and October 20, 2017, have determined that this portion of the landfill liner system meets the requirements in Section D of the WDRs (Requirements for Containment Structures) and Section 20310 et. seq. of 27 CCR (Waste Management Construction Standards). Discharge of municipal solid wastes, as defined in the Section A of the WDRs (Acceptable Materials), in this area of the Landfill is hereby approved.

If you have any questions, please contact me at (213) 620-2253.

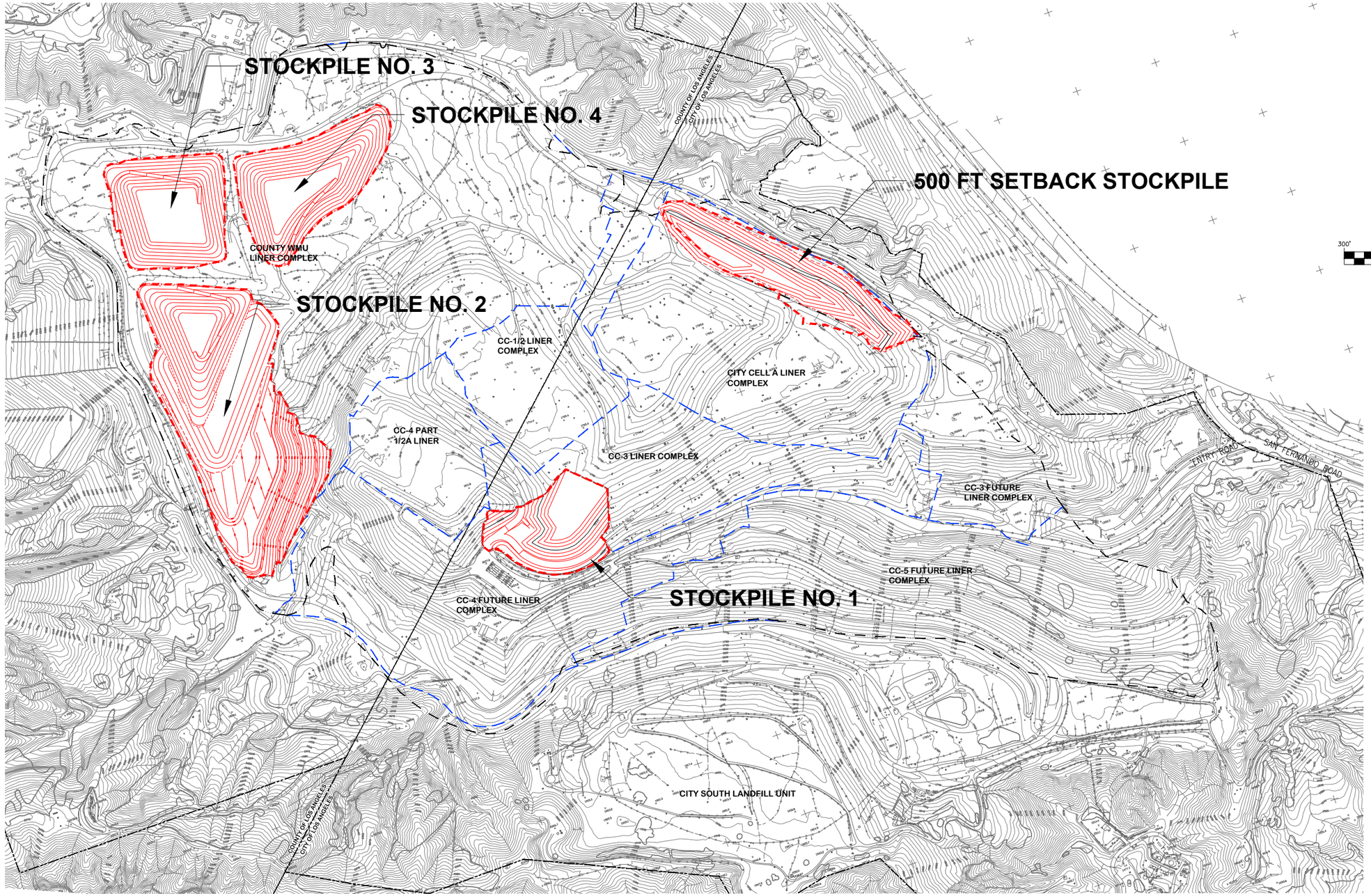
Sincerely,

Wen Yang, Ph.D., C.H.G.
Senior Engineering Geologist
Chief of Land Disposal Unit

cc:

Michael Wochnick, CalRecycle (Michael.Wochnick@CalRecycle.ca.gov)
Maurice Pantoja, Sunshine Canyon Landfill LEA (mpantoja@ph.lacounty.gov)
David Thompson, Sunshine Canyon Landfill LEA (david.thompson@lacity.org)
Martin Aiyitiwa, Los Angeles County Department of Public Works
(MAIYET@dpw.lacounty.gov)
Mohsen Nazemi, South Coast Air Quality Management District (MNazemi1@aqmd.gov)
Wayde Hunter, North Valley Coalition, Granada Hills (WHunter01@aol.com)

ATTACHMENT B



NORTH

GRAPHIC SCALE

300' 0' 150' 300' 600' 1200'

NOTE:
BACKGROUND TOPOGRAPHIC MAPPING BY COOPER AERIAL SURVEYS DATED FEBRUARY 5, 2018.

LEGEND

- WASTE MANAGEMENT UNIT BOUNDARY
- PERMITTED LIMITS OF REFUSE PER 2006 JTD
- LIMITS OF STOCKPILE

This drawing has not been published but rather has been prepared by Geo-Logic Associates, Inc. for use by the client named in the title block, solely in respect of the construction operation, and maintenance of the facility named in the title block. Geo-Logic Associates, Inc. shall not be liable for the use of this drawing on any other facility or for any other purpose.

FOR_REVIEW_ONLY

ORIGINAL DRAWING SIZE IS 22" X 34"

REV. NO.	DATE	DESCRIPTION	APPROVED BY
REV1	00	00	00
REV2	DATE2	DESCRIPTION2	DRAWN2
REV3	DATE3	DESCRIPTION3	DRAWN3
REV4	DATE4	DESCRIPTION4	DRAWN4
REV5	DATE5	DESCRIPTION5	DRAWN5
REV6	DATE6	DESCRIPTION6	DRAWN6

DATE OF ISSUE: JUN_2018
DESIGNED BY: R_JOHNSON
DRAWN BY: C_BARRETT
CHECKED BY: R_JOHNSON
APPROVED BY: R_JOHNSON

DIGALERT 811

Geo-Logic ASSOCIATES
2777 E. GUASTI ROAD
SUITE 1
ONTARIO, CA 91761
(909) 626-2282
www.geo-logic.com

REPUBLIC SERVICES

SUNSHINE CANYON LANDFILL
SYLMAR, CALIFORNIA
OPERATIONS PLANS

STOCKPILE LOCATIONS IN 2018

DWG NO. 1

PROJECT NO. S018.1000.00

C:\Users\cbarrett\Documents\Allied-Republic\Sunshine Canyon LF\Exhibits\TAC Exhibits\SCL - Stockpile Locations for 2018 062618.dwg Jun 26, 2018 - 11:6am By: cbarrett

ATTACHMENT C

SUNSHINE CANYON LANDFILL

SCL-LEA

LOCAL ENFORCEMENT AGENCY

14747 San Fernando Road
Sylmar, California 91324

January 9, 2019

Raymond H. Huff, REPA, Vice President
SCS Engineers
3900 Kilroy Airport Way, Ste 100
Long Beach, CA 90806 via email

Subject: Response to Letter Submittal for Perimeter Migration Monitoring Well 205R, Sunshine Canyon Landfill, SWIS No. 19-AA-2000

Dear Mr. Huff,

On October 25, 2018, the Sunshine Canyon Landfill Local Enforcement Agency (SCL LEA) received a letter in response to increasing levels of methane identified in perimeter mitigation monitoring well 205R located at SCL. Based on the review by the SCL LEA and CalRecycle, it was determined that the justification and support for conclusions made in the report were not adequate and hence SCL LEA does not agree with the conclusions.

The SCL LEA's justification and concerns are as follows:

1. The data presented by SCS Engineers (SCS) from compliance well 205R (D) clearly indicates that the sample collected/monitored contains CH4, CO2, and trace VOC compounds - typical of landfill gas (LFG).
2. The letter did not specify whether or not SCS has performed any gas sampling and testing from the nearby oil fields to determine the nature and characteristics of the gas from it.
3. There was not an indication that SCS had taken samples from the landfill gas control system (GCCS) to determine the baseline characteristics of the LFG being generated from the landfill and compare it with gas detected from compliance well 205R(D).
4. SCS has stated (page 2), that the typical ratio of CH4 to CO2 in LFG ranges was from 1.0 to 1.2. However, gas concentrations of CH4 (19.8%) and CO2 (45.2%) detected on August 23, 2018 (Table 2) clearly indicate ratios close to what CH4/CO2 ratios are SCS has stated. There is no discussion about this specific event.
5. In addition, SCS should determine whether data from Probe 205R(D) (based on the field data presented by SCS for fixed gases and VOCs) is a variation of the concentrations due to spatial variability, (e.g. gas plume source, distance from source, gas extraction system zone of influences, etc.).
6. SCL LEA further suggests the operator (through their consultant) collect samples and perform testing from landfill gas control system as well as the oil field and then compare the results from Probe 205R(D) to these two sources. To adequately perform such a comparison, a one-year study of both sources should be conducted.

If you have questions, please feel free to contact me at (626) 430 -5540.

Sincerely,

Shikari Nakagawa-Ota, R.E.H.S
SCL LEA Program Manager

Enclosure

cc: Megan Emslander, CalRecycle (via LEA Portal)
David Thompson, SCL LEA (Electronic copy)
Jose Gutiérrez, SCL LEA (Electronic copy)
Dee Hanson-Lugo, SCL LEA (Electronic copy)
George Kashikarin, SCL LEA (Electronic copy)
Patricia Hundt, SCL LEA (Electronic copy)
Chris Coyle, SCL (Electronic copy)
Josh Mills, SCL (Electronic copy)

October 24, 2018
File No. 01208033.29

Ms. Shikari Nakagawa-Ota, REHS
Chief Environmental Health Specialist
Local Enforcement Agency (LEA) Program
Los Angeles County Department of Public Health
5050 Commerce Drive
Baldwin Park, California 91706

Subject: **Perimeter Migration Monitoring Well 205R, Sunshine Canyon Landfill, 14747 San Fernando Road, Sylmar, California 91342 (SWIS Facility 19-AA-2000)**

Dear Ms. Nakagawa-Ota:

This letter has been prepared by **SCS Engineers (SCS)** on behalf of Sunshine Canyon Landfill (SCL), in response to increasing levels of methane (CH_4) identified in perimeter migration monitoring well 205R located at SCL (Note: we refer to each monitoring location as a well, and each screened interval at a given location as a probe). While methane levels identified in the deeper probes within this well are still below the regulatory threshold of 5 percent by volume, they have been increasing in concentration over the past four years, and have slightly exceeded 3% by volume.

BACKGROUND

SCL is an open, active canyon landfill operation, with 363 permitted acres, and accepts approximately 8,000 tons of municipal solid waste (MSW) per day. SCL is situated at the eastern end of the Santa Susana Mountains and is bounded to the west and south by mountains and open space, to the north by mountains and Interstate 5, and to the east by San Fernando Road and Interstate 5. The location of SCL is provided on **Figure 1**, **Attachment A**.

Landfill gas (LFG) migration from SCL is currently controlled via an LFG collection and control system (GCCS) consisting of a network of approximately 1,008 LFG extraction points inter-connected to a total of six destruction devices, including 5 enclosed flares and a turbine power plant. The GCCS operates continuously, with August 2018 average flow rate of approximately 20,500 standard cubic feet per minute (scfm) and a methane concentration approximately 43% by volume.

LFG migration from SCL is monitored by a network of 30 migration monitoring wells located around the perimeter of SCL. Within each well, there are multiple probes located at multiple depths, based on surface elevation, depth to groundwater, and base of waste elevation; for a total of 132 probes, within 30 wells. The perimeter migration monitoring well network at SCL is provided on **Figure 2**, **Attachment A**.

DISCUSSION

Monitoring Activities

Since March 2013, concentrations of CH_4 in the deeper probes (B-E) in well P-205R have ranged from non-detect to 3.4 percent by volume (May 2018). Details on CH_4 detections within the five probes within well P-205R are presented in **Table 1**, below.

Table 1. Well P-205R Probe Methane Details

Probe Designation	Probe Depth (feet bgs)	Screened Interval (feet bgs)	Methane Detections (% by volume)		
			Min	Max	Most Recent[1]
A	11	6-11	ND	ND	ND
B	25	20-25	ND	1.5	0.7
C	39	33-39	0.2	2.0	1.8
D	53	48-53	0.8	3.4	2.8
E	67	63-67	ND	2.9	1.6

bgs = below ground surface
ND = Non-detect
[1]Most recent monitoring event is September 2018.

Graphs of gas composition and pressures detected in probes A-E within well P-205R from 2014 to present are presented in **Figures 3a through 3e, Attachment A**, respectively. **Attachment B** contains well P-205R probe data from 2014 to present.

As shown on **Figure 3d**, probe P-205R(D) has the highest concentration of CH_4 detected in this well, consistently over time. **Figure 3d** also shows significantly elevated carbon dioxide (CO_2) in relation to CH_4, which is not generally indicative of the composition of landfill gas (LFG). For example, the typical ratio of CH_4 to CO_2 in LFG ranges from 1.0 to 1.2. However, the data for probe P-205R(D) have demonstrated ratios ranging from 0.05 to 0.07 in data from 2018. **Figure 3d** also shows an inverse relationship between CO_2 and Balance Gas, which is assumed to be nitrogen. Nitrogen is typically found at concentrations 2 to 4 times lower than CO_2 in LFG, but in this case, nitrogen is present at concentrations higher than CO_2.

Gas Sample Analysis

In response to slightly elevated CH_4 concentrations identified in probe P-205R(D), gas samples were collected from select probes within well P-205R, as well as other perimeter wells at SCL in January, February, March, June, July, August, and September of 2018. A summary of the analytical data from Probe P-205(D) is presented in **Table 2**, below. Copies of all analytical data from samples collected in 2018 are provided in **Attachment C**.

Table 2. Probe P-205R(D) Analytical Results - 2018

Analyte	01/25	02/15	03/29	06/29[1]	07/26	08/23	09/27
Concentration in % by volume							
Methane	2.74	2.73	2.89	2.96	2.74	19.8	2.69
Carbon Dioxide	46.4	47.5	47.3	47.6	47.2	45.2	47.5
Concentration in parts per million by volume (ppmv)							
Ethane	<5	<5	<5	<5	<5	<5	<5
TGNMO[2]	19.5	<5	17.9	10.3	14.7	7.41	12.1
Hydrogen Sulfide	0.42	0.97	0.54	<0.2	<0.1	<0.1	<0.1
Volatile Organic Compounds (VOCs) Concentration in parts per billion by volume (ppbv)							
Benzene	7.52	6.64	5.95	3.95	5.14	5.26	4.20
Dichlorobenzenes[3]	<12	<3	<6	<0.6	3.39	3.33	3.69
Toluene	<8	2.23	<4	1.22	2.55	2.34	2.71
m+p Xylenes	<8	1.84	<4	1.01	2.53	1.89	1.57
o-Xylene	<8	<1.4	<4	0.78	<1.4	<1.4	<1.4
TO-15 Analysis (concentration in ppbv)[1]							
Acetone	NA	NA	NA	63.0	NA	NA	NA
Isopropyl Alcohol	NA	NA	NA	108	NA	NA	NA
n-Hexane	NA	NA	NA	0.85	NA	NA	NA
1,2,4-Trimethylbenzene	NA	NA	NA	0.69	NA	NA	NA

[1]TO-15 analysis requested on June sample. More analytes and lower detection limits provided.
[2]TGNMO – Total Gaseous non-Methane, non-Ethane organics reported as ppmvC.
[3]Total amount containing meta, para, and ortho isomers.
NA – Analyte not analyzed.

As shown in **Table 2**, the CH_4 and CO_2 results match what was identified from field monitoring of the probes. In addition, it should be noted that the only volatile organic compounds (VOCs) detected from probe samples are generally associated with petrogenic (e.g., hydrocarbon) sources, including benzene, toluene, xylenes, hexane, etc. Key LFG VOC indicators (e.g., vinyl chloride, freons, methylene chloride, and other halogenated compounds) were not detected in samples from P-205R, or any of the sample results provided in **Attachment C**. Ethane, which is a very common constituent in LFG, was also not found. These chemicals are commonly detected as the "leading edge" of any subsurface LFG plume, but were not found in the samples.

Nearby LFG Well Data

The closest LFG extraction wells to P-205R are CGW-915 and CGW-916, both approximately 215 feet northeast of well P-205R. These wells were installed in 2015 and have been under vacuum since installation. Gas composition and flow readings from these wells from late-July (selected to match the latest lab sample analysis date from probe P-205R[D]) and the most recent readings from these wells are presented in **Table 3**, below.

Table 3. Nearby LFG Well Measurements

Well Designation	Date of Reading	LFG Flow (scfm)	Gas Composition (% by volume)			
			CH_4	CO_2	O_2	Balance Gas
CGW-915	7/16/18	10	18.1	23.7	0.1	58.1
	10/10/18	4.2	26.1	29.5	0	44.4
CGW-916	7/24/18	1.6	27.1	30.9	0	42
	10/10/18	14.5	32.4	30.3	0	37.3

As shown in **Table 3**, both the July and October readings from the closest LFG wells to P-205 show CO_2 levels significantly lower than the levels detected in probe P-205R(D). The highest CO_2 reading from July (well CGW-916) is more than 20 percentage points lower than the CO_2 identified in the P-205R(D) sample from July (refer to **Table 2**).

Figure 4, Attachment A contains a graph of the CO_2 levels identified in the LFG extraction wells near P-205R (CGW-915 and CGW-916). As shown in **Figure 4**, With the exception of late-2017, CO2 levels from the LFG extraction wells have always been lower than the CO_2 levels identified in probe P-205R(D). This indicates that it is unlikely that the CO_2 identified in P-205R(D) originated from the landfill.

However, this point does not address the elevated CH_4 identified in probe P-205R(D), unless the CH_4 and CO_2 identified in probe P-205R(D) are interrelated. In order to verify that the CH_4 and CO_2 are interrelated, the CH_4 and CO_2 monitoring data from probe P-205R(D) were separated and re-graphed using a logarithmic scale. This graph is presented in **Figure 5, Attachment A**. As shown in **Figure 5**, variability in concentration is directly proportional for CH_4 and CO_2 within this probe, which indicates that the parameters are directly related. As such, if the CO_2 is not likely derived from LFG, then the CH_4 would not expected to be either.

Nearby Oil Wells

Due to the elevated CO_2; the lack of ethane, vinyl chloride, and other common LFG constituents in the samples analyzed from probe P-205R(D); and the presence of various petrogenic chemicals, additional research on possible petrogenic sources in the area of SCL was conducted. As shown in **Figure 2**, there are approximately 9 abandoned oil wells located either within, or in close proximity to SCL. Of these nine wells, the closest to well P-205R is Eadie #1. Records of this well obtained from the California Department of Oil, Gas and Geothermal Resources (DOGGR) are provided in **Attachment D**. A brief history this well is provided below.

Eadie #1

Exploratory oil well "Eadie 1" is located approximately 650 feet to the southwest of well P-205. Eadie 1 was drilled to a maximum depth of 8,011 feet below ground surface (bgs). Drilling was completed on November 11, 1953. Following electric logging of the hole, two concrete plugs were installed from 850 to 766 feet and 530 to 400 feet bgs. 10 feet of cement inside of an 11 and ¾ inch casing, with a welded steel plate were used to abandon the well on November 13, 1953. The capped well was at an elevation of approximately 2,132 feet above mean sea level (msl) at the time of abandonment.

In 1992, as part of the proposed expansion of SCL, eight oil wells were proposed for re-abandonment. The project was postponed until June 1997, when the upper 200 feet of Eadie #1 was overdrilled and 140 cubic feet of cement was added to the hole. Following abandonment activities, the well was cut off five feet below surface and covered with a steel plate. This would make the elevation of the top capped well approximately 2,127 feet msl and the elevation of the bottom of the cement plug approximately 1,932 feet msl, which is approximately 50 feet higher than the surface of well P-205R (surface elevation of well P-205R is 1,869 feet msl).

CONCLUSIONS

It appears that the low-level of CH_4 detected in well P-205R did not originate from the landfill. This conclusion is supported by the following observations:

1. Monitoring data for probes B-E in well P-205R show significantly elevated CO_2 (maximum value of 49.4 percent by volume in Probe P-205R[D]) associated with low-level CH_4 (maximum value of 3.4 percent by volume in Probe P-205R[D]). Laboratory data confirms both the low CH_4 and high CO_2 levels detected in probes B-E of well P-205R. These levels and ratios are not typical for LFG migration from a landfill.
2. CO_2 levels identified in probe P-205R(D) are higher than CO_2 levels identified in raw LFG from the closest LFG extraction wells (**Figure 4**).
3. The CH_4 identified in P-205R(D) is related to the elevated CO_2 identified in P-205R(D), as shown in **Figure 5** and are likely from the same source
4. With the exception of acetone and isopropyl alcohol, which are both typical lab contaminants, only petrogenic VOCs were identified in samples analyzed from P-205R(D). Other common "leading edge" contaminants in LFG were not detected.
5. There is an abandoned oil well located 650 feet to the southwest of P-205R that may be a potential source of methane and CO_2. The fact that the probes within P-205R are located at a depth that is below the concrete plug for this well, makes this point more significant.

RECOMMENDATIONS

Based on off-site impact from petrogenic sources, SCL is requesting removal of the AOC threshold of 3% by volume for probes within perimeter migration monitoring well P-205R as well as modification of sampling frequency for this probe to quarterly. Additionally, SCL is requesting the opportunity to evaluate the origin of methane should the level in the P-205R probes ever exceed the 5% by volume threshold prior to the issuance of any regulatory violations.

CLOSING

If you have any questions in regard to this submittal, please contact either of the undersigned at (562) 426-9544.

Sincerely,

Raymond H. Huff, REPA
Vice President
SCS Engineers

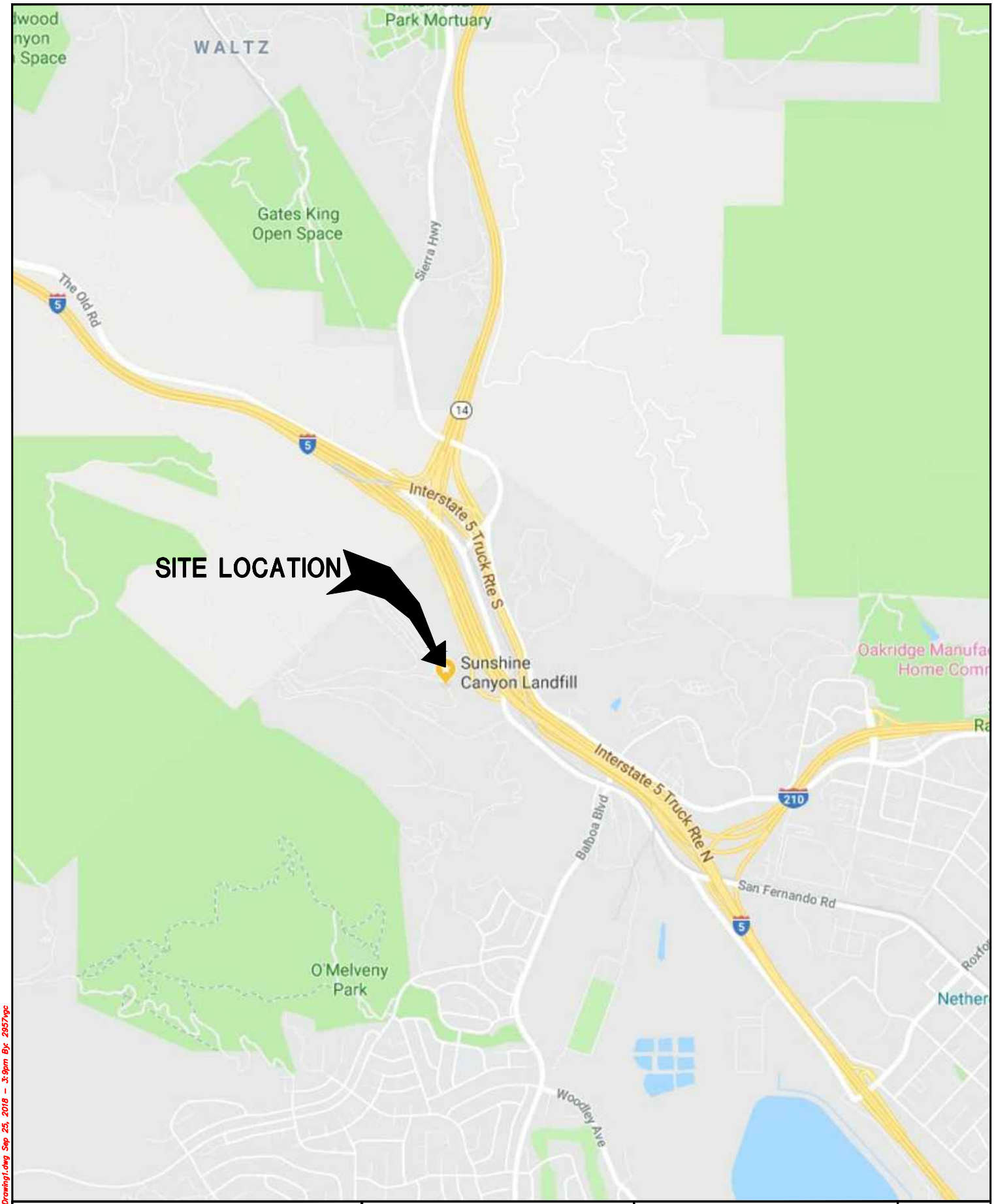
Patrick S. Sullivan, REPA, CPP, BCES
Senior Vice President
SCS Engineers

attachments

cc: Josh Mills, SCL
Chris Coyle, SCL

ATTACHMENT A

FIGURES



SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3900 KILROY AIRPORT WAY, SUITE 100
LONG BEACH, CA 90806
PH. (562) 426-9544 FAX. (562) 427-0805

PROJ. NO.	DWN. BY:	ACAD FILE:
---	V. CHEW	---
DSN. BY:	CHK. BY:	APP. BY:
---	---	---

CLIENT:

SHEET TITLE: SITE LOCATION

PROJECT TITLE: SUNSHINE CANYON LANDFILL SYLMAR, CA

DATE: 09-25-2018

SCALE: N.T.S.

DRAWING NO. FIG 1

C:\Users\2957vgc\Documents\Drawing1.dwg Sep 25, 2018 - 3:9pm By: 2957vgc

Figure 2 - Perimeter Well Location Map Showing Abandoned Oil Wells

Sunshine Canyon Landfill, Sylmar, California

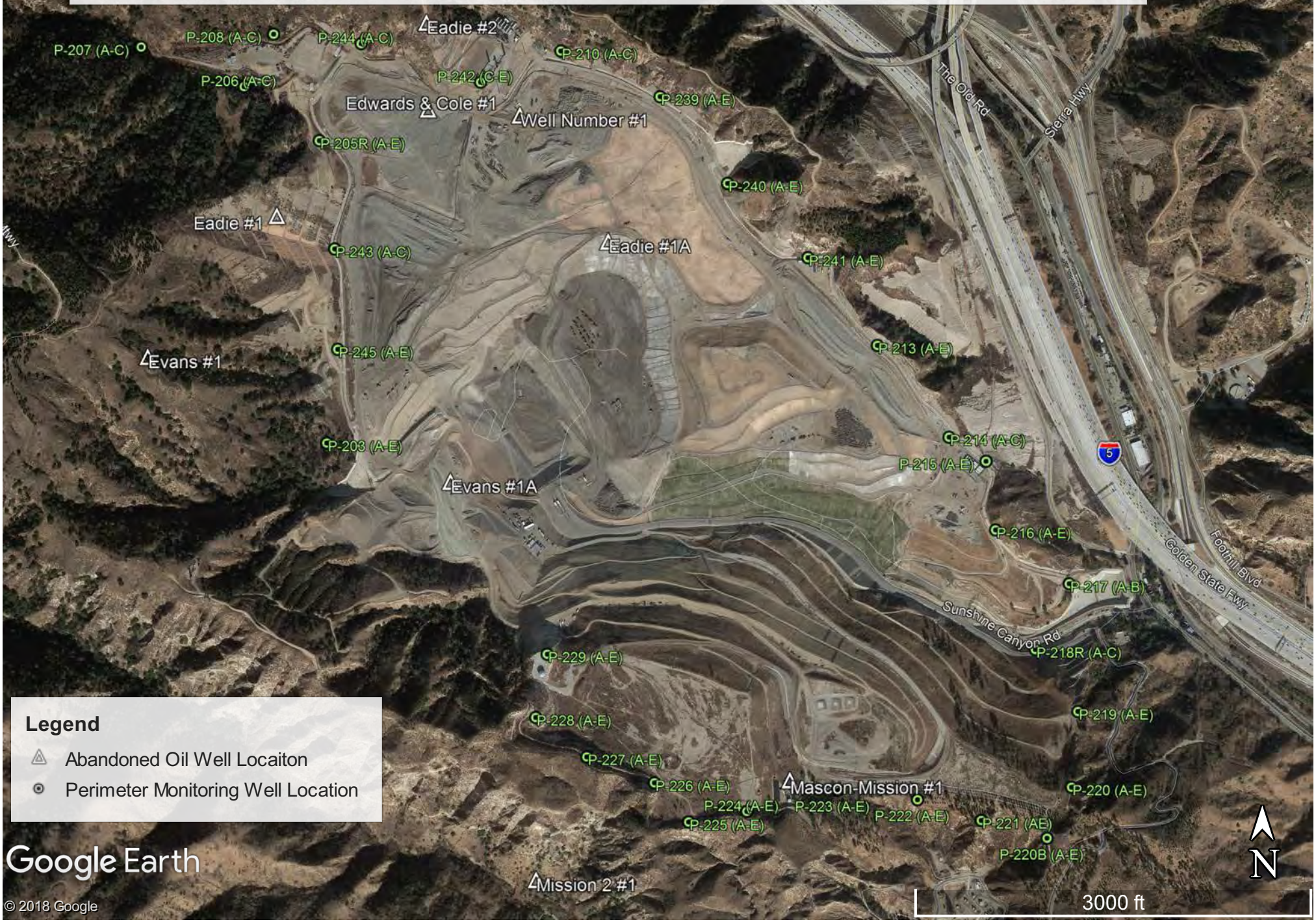


Figure 3a. Well P-205R(A) Readings from 2014 to Present.

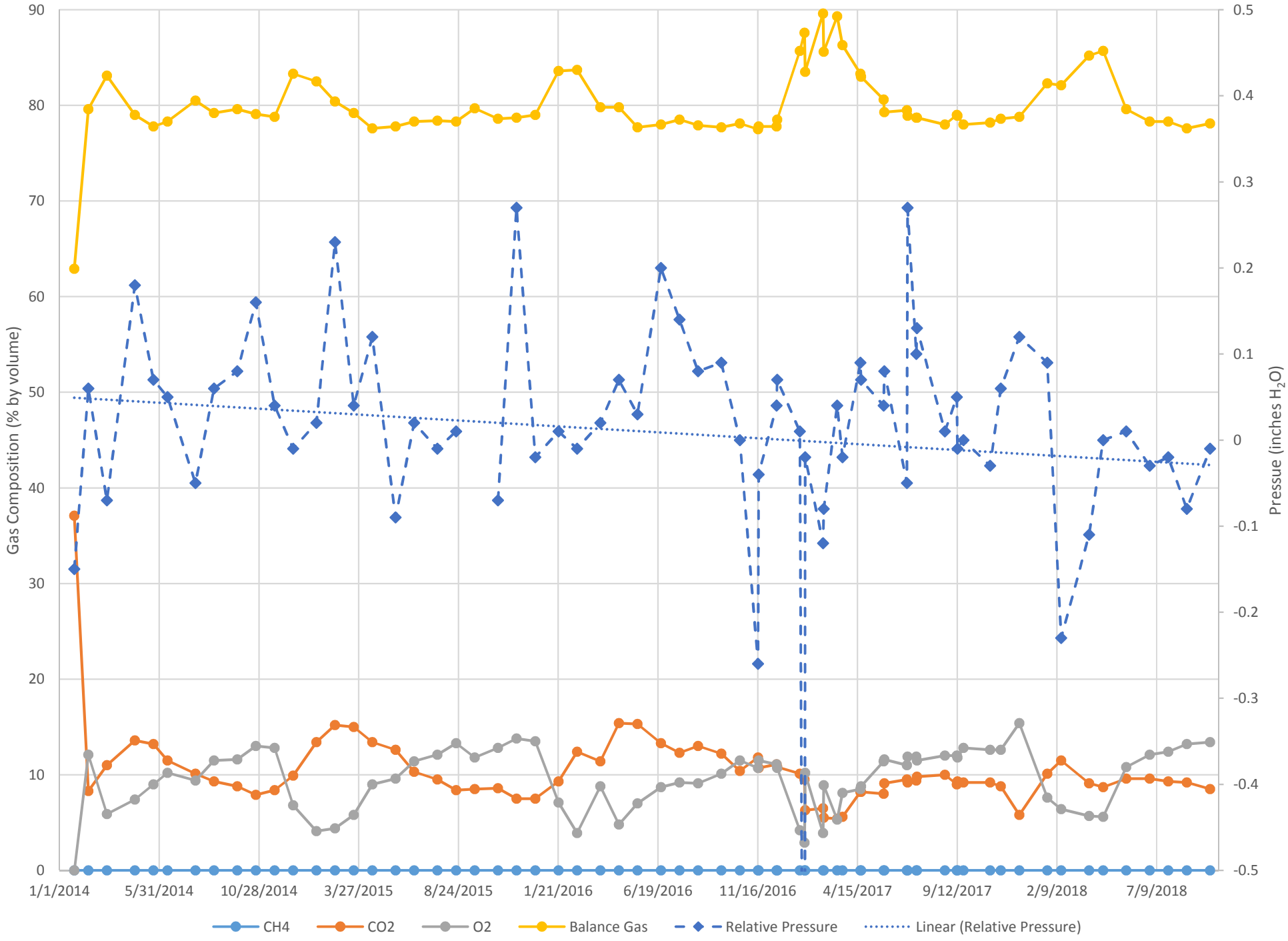


Figure 3b. Well P-205R(B) Readings from 2014 to Present.

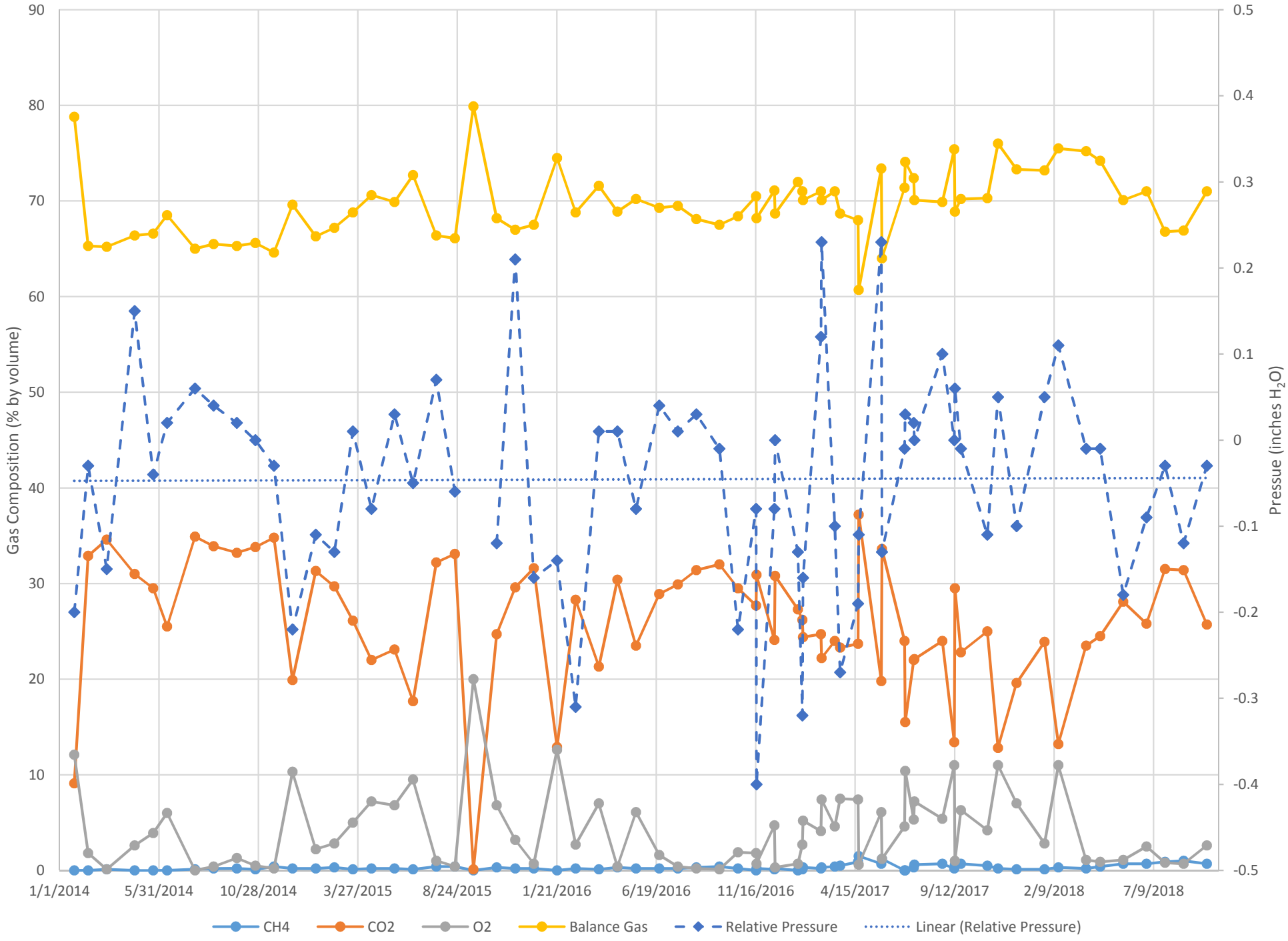


Figure 3c. Well P-205R(C) Readings from 2014 to Present.

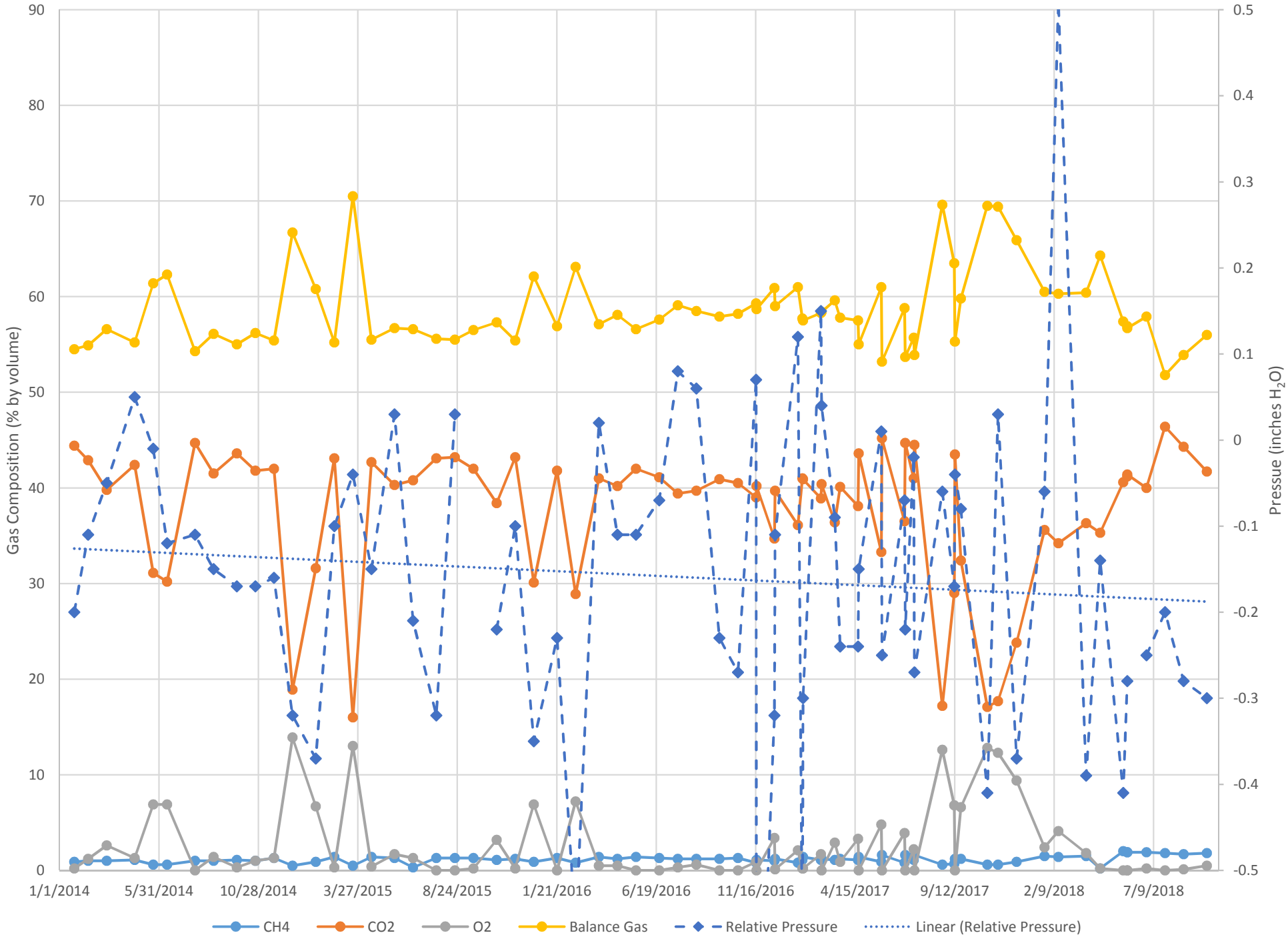


Figure 3d. Well P-205R(D) Readings from 2014 to Present.

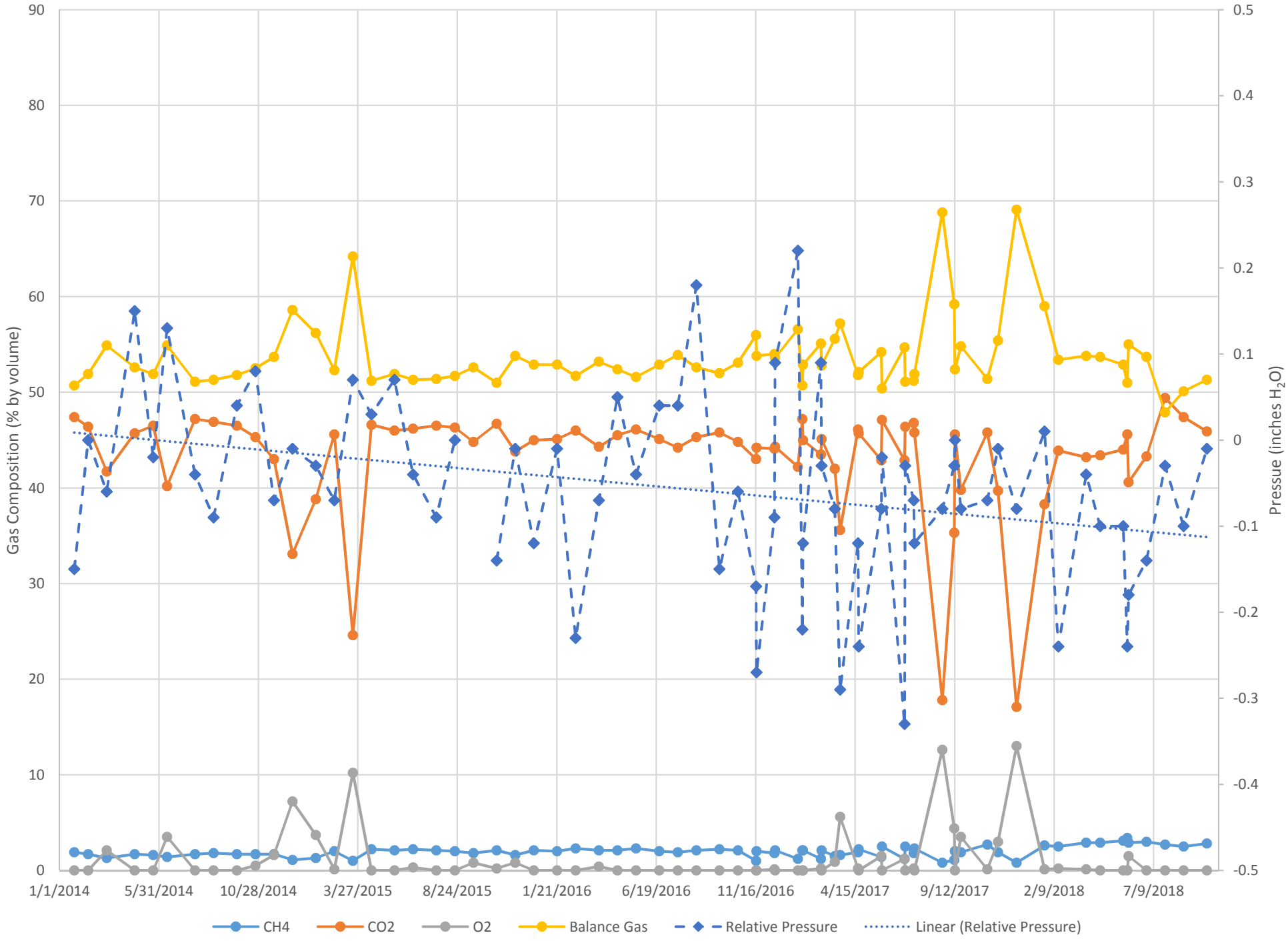


Figure 3e. Well P-205R(E) Readings from 2014 to Present.

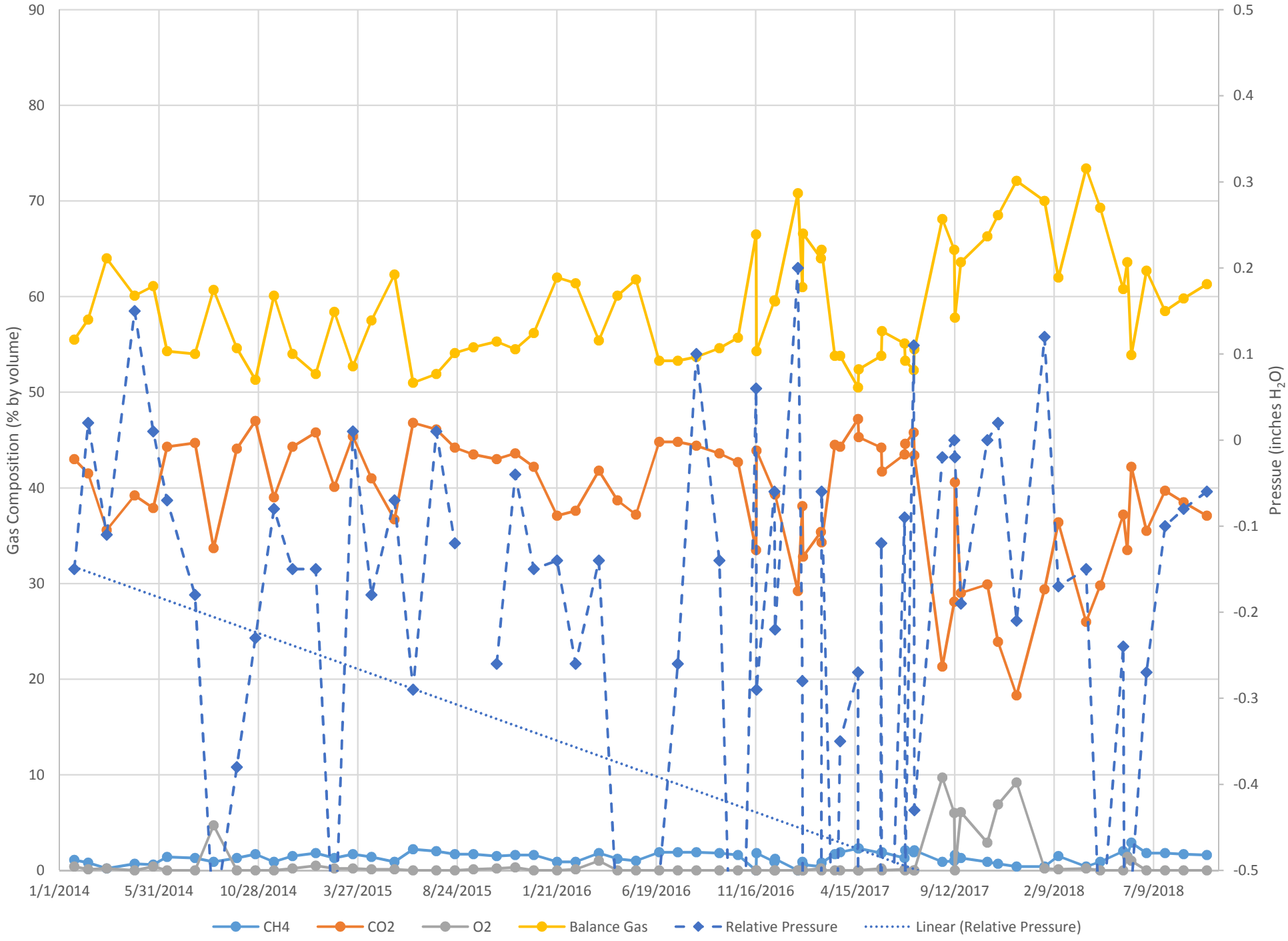


Figure 4. Carbon Dioxide Level Comparison.

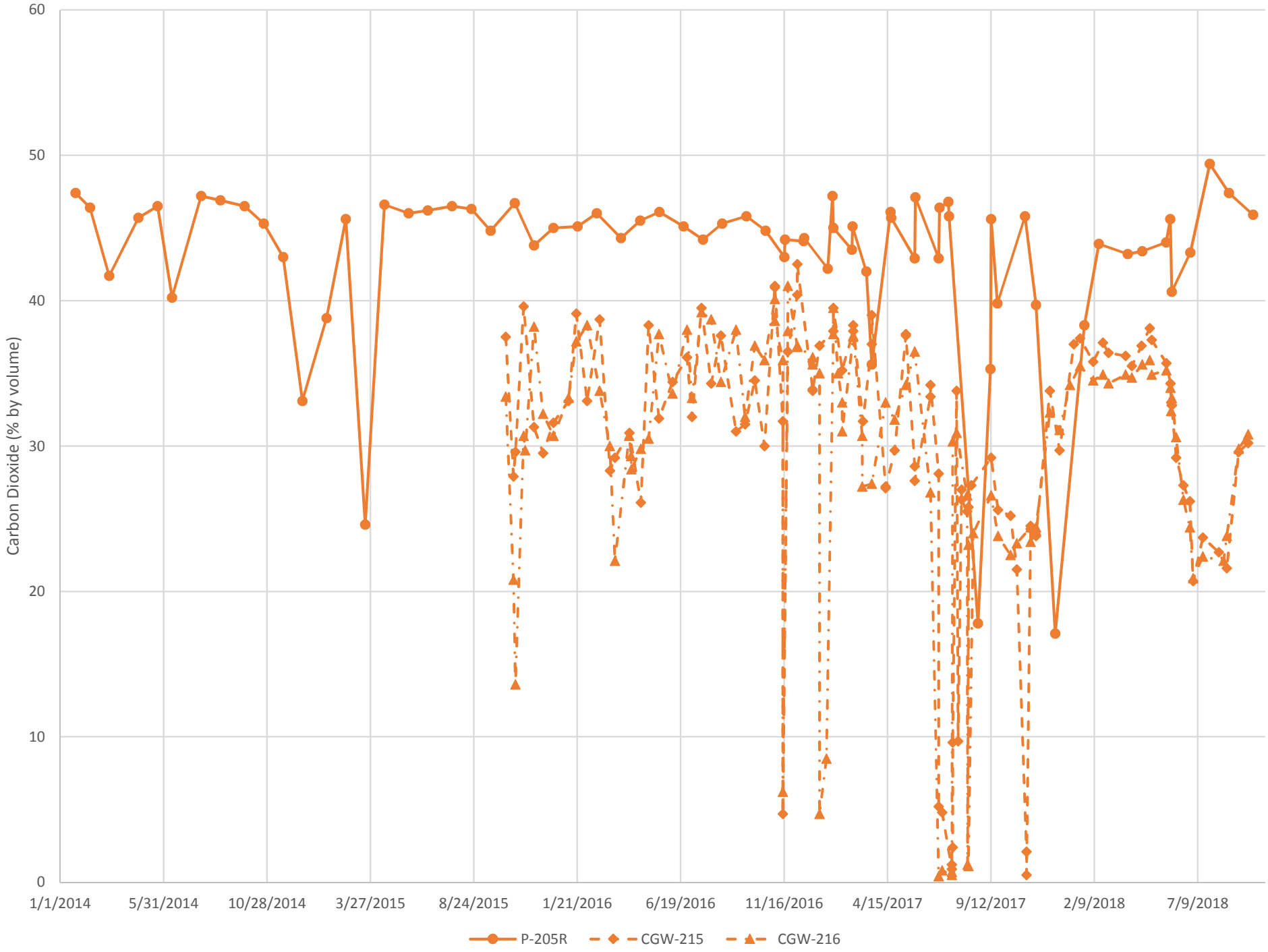
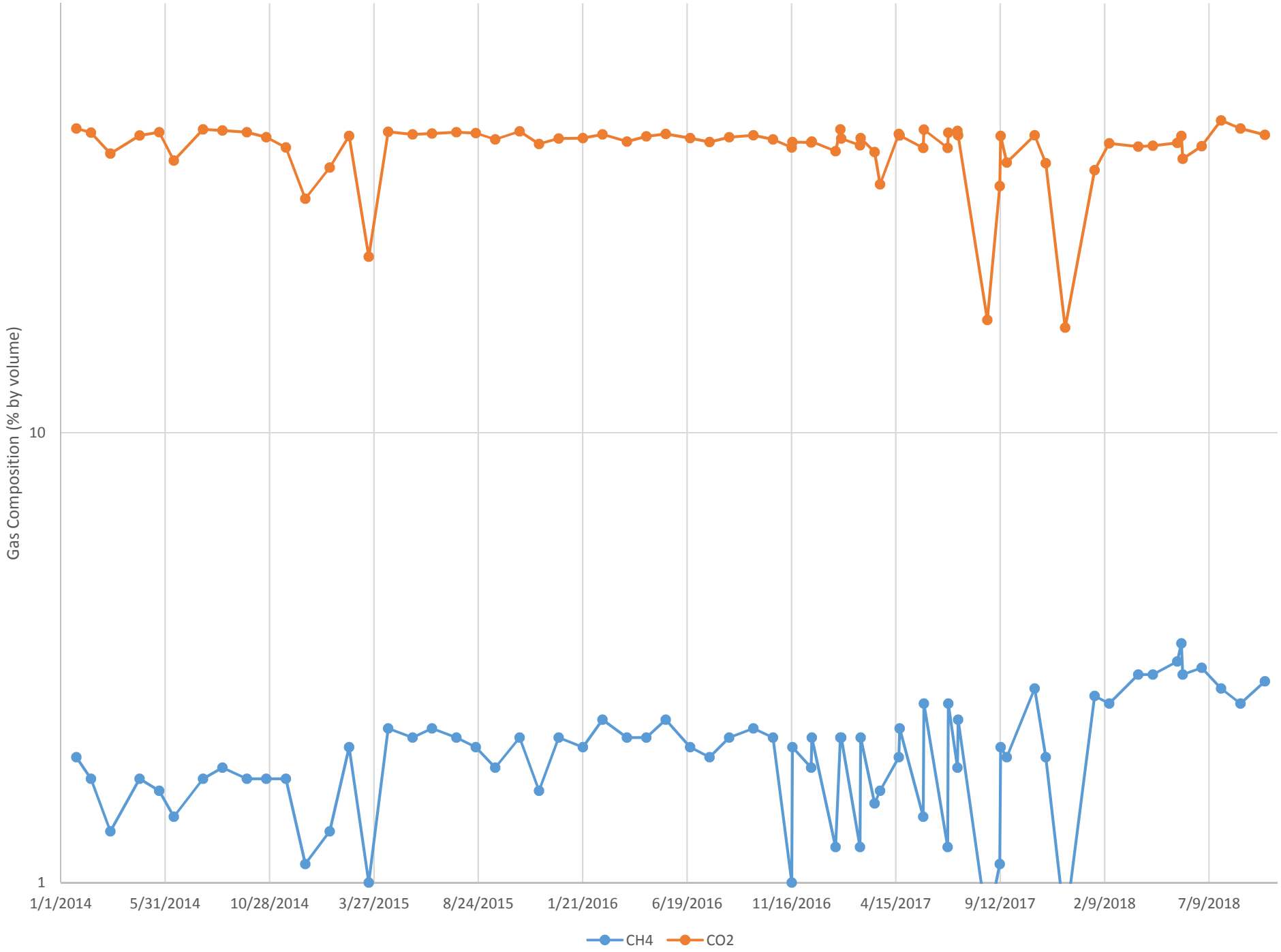


Figure 5. Well P-205R(D) Readings from 2014 to Present - Logarithmic Scale.



ATTACHMENT B

PROBE DATA

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/23/2014 9:20:00 AM	0	37.1	0	62.9	-0.15	28.1	Robert Johns	Robert Johns	3/13/2014 9:36:21 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	2/13/2014 10:23:00 AM	0	8.3	12.1	79.6	0.06	28.15	Robert Johns	Robert Johns	2/14/2014 5:42:10 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	3/13/2014 9:12:00 AM	0	11	5.9	83.1	-0.07	27.98	Robert Johns	Robert Johns	3/14/2014 1:05:23 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	4/24/2014 9:49:00 AM	0	13.6	7.4	79	0.18	27.94	ROBERT JOHNS	ROBERT JOHNS	4/25/2014 10:28:55 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	5/22/2014 9:56:00 AM	0	13.2	9	77.8	0.07	27.93	ROBERT JOHNS	ROBERT JOHNS	5/23/2014 12:24:14 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	6/12/2014 9:45:00 AM	0	11.5	10.2	78.3	0.05	27.91	ROBERT JOHNS	ROBERT JOHNS	6/27/2014 8:58:54 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	7/24/2014 10:48:00 AM	0	10.1	9.4	80.5	-0.05	27.84	Robert Johns	Robert Johns	7/25/2014 12:13:51 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	8/21/2014 9:51:00 AM	0	9.3	11.5	79.2	0.06	27.92	ROBERT JOHNS	ROBERT JOHNS	8/26/2014 10:18:17 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/25/2014 9:51:00 AM	0	8.8	11.6	79.6	0.08	27.9	Robert Johns	Robert Johns	9/29/2014 8:19:11 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	10/23/2014 9:50:00 AM	0	7.9	13	79.1	0.16	27.99	Robert Johns	Robert Johns	10/27/2014 2:00:35 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	11/20/2014 9:49:00 AM	0	8.4	12.8	78.8	0.04	28.04	ROBERT JOHNS	ROBERT JOHNS	11/21/2014 11:09:21 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	12/18/2014 10:08:00 AM	0	9.9	6.8	83.3	-0.01	28.28	ROBERT JOHNS	ROBERT JOHNS	12/19/2014 10:04:54 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/22/2015 10:38:00 AM	0	13.4	4.1	82.5	0.02	28.33	ROBERT JOHNS	ROBERT JOHNS	1/27/2015 4:47:42 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	2/19/2015 9:55:00 AM	0	15.2	4.4	80.4	0.23	28.21	Robert Johns	Robert Johns	2/26/2015 2:07:43 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	3/19/2015 10:23:00 AM	0	15	5.8	79.2	0.04	28.13	ROBERT JOHNS	ROBERT JOHNS	3/25/2015 8:12:41 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	4/16/2015 9:46:00 AM	0	13.4	9	77.6	0.12	28.15	ROBERT JOHNS	ROBERT JOHNS	4/17/2015 10:51:22 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	5/21/2015 9:28:00 AM	0	12.6	9.6	77.8	-0.09	28.04	ROBERT JOHNS	ROBERT JOHNS	5/22/2015 11:40:57 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	6/18/2015 9:11:00 AM	0	10.3	11.4	78.3	0.02	28.08	ROBERT JOHNS	ROBERT JOHNS	6/25/2015 4:06:00 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	7/23/2015 9:23:00 AM	0	9.5	12.1	78.4	-0.01	28.11	ROBERT JOHNS	ROBERT JOHNS	7/30/2015 3:40:16 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	8/20/2015 9:34:00 AM	0	8.4	13.3	78.3	0.01	28.01	ROBERT JOHNS	ROBERT JOHNS	8/27/2015 9:49:04 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/17/2015 10:38:00 AM	0	8.5	11.8	79.7		27.99	ROBERT JOHNS	ROBERT JOHNS	9/30/2015 10:09:43 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	10/22/2015 10:32:00 AM	0	8.6	12.8	78.6	-0.07	28.01	ROBERT JOHNS	ROBERT JOHNS	10/23/2015 10:10:10 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	11/19/2015 9:58:00 AM	0	7.5	13.8	78.7	0.27	28.06	ROBERT JOHNS	ROBERT JOHNS	11/20/2015 2:22:04 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	12/17/2015 9:38:00 AM	0	7.5	13.5	79	-0.02	28.19	ROBERT JOHNS	ROBERT JOHNS	12/22/2015 4:37:26 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/21/2016 9:32:00 AM	0	9.3	7.1	83.6	0.01	28.22	ROBERT JOHNS	ROBERT JOHNS	1/26/2016 9:54:28 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	2/18/2016 9:39:00 AM	0	12.4	3.9	83.7	-0.01	28	ROBERT JOHNS	ROBERT JOHNS	2/19/2016 8:19:00 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	3/24/2016 9:58:00 AM	0	11.4	8.8	79.8	0.02	28.12	ROBERT JOHNS	ROBERT JOHNS	3/29/2016 2:14:47 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	4/21/2016 9:27:00 AM	0	15.4	4.8	79.8	0.07	27.91	ROBERT JOHNS	ROBERT JOHNS	4/29/2016 11:11:25 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	5/19/2016 7:51:00 AM	0	15.3	7	77.7	0.03	27.94	ROBERT JOHNS	ROBERT JOHNS	5/20/2016 3:54:34 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	6/23/2016 9:14:00 AM	0	13.3	8.7	78	0.2	27.98	ROBERT JOHNS	ROBERT JOHNS	6/28/2016 6:36:07 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	7/21/2016 9:36:00 AM	0	12.3	9.2	78.5	0.14	28	ROBERT JOHNS	ROBERT JOHNS	8/2/2016 1:52:18 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	8/18/2016 8:48:00 AM	0	13	9.1	77.9	0.08	27.91	ROBERT JOHNS	ROBERT JOHNS	8/23/2016 3:16:19 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/22/2016 7:53:00 AM	0	12.2	10.1	77.7	0.09	27.9	ROBERT JOHNS	ROBERT JOHNS	9/30/2016 1:39:56 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	10/20/2016 8:06:00 AM	0	10.4	11.5	78.1	0	28.04	ROBERT JOHNS	ROBERT JOHNS	10/28/2016 10:04:23 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	11/16/2016 1:12:22 PM	0	11.8	10.7	77.5	-0.26	27.87			11/16/2016 2:39:49 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	11/17/2016 8:06:00 AM	0	10.7	11.5	77.8	-0.04	27.99	ROBERT JOHNS	ROBERT JOHNS	11/22/2016 11:05:07 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	12/14/2016 8:18:09 AM	0	11.1	11.1	77.8	0.04	28.15			12/15/2016 4:58:00 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	12/15/2016 7:54:00 AM	0	10.8	10.7	78.5	0.07	28.01	ROBERT JOHNS	ROBERT JOHNS	12/16/2016 4:02:08 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/18/2017 11:46:49 AM	0	10.1	4.2	85.7	0.01	28.14	BN	BN	1/19/2017 11:57:15 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/25/2017 8:24:17 AM	0	9.5	2.9	87.6	-1.23	28.23	BN	BN	1/26/2017 12:29:21 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/26/2017 9:25:00 AM	0	6.3	10.2	83.5	-0.02	28.27	ROBERT JOHNS	ROBERT JOHNS	2/1/2017 2:00:41 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	2/22/2017 8:05:15 AM	0	6.5	3.9	89.6	-0.12	28.12	BN	BN	2/23/2017 10:56:07 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	2/23/2017 9:17:00 AM	0	5.5	8.9	85.6	-0.08	28.03	ROBERT JOHNS	ROBERT JOHNS	3/6/2017 8:55:18 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	3/15/2017 8:08:50 AM	0	5.4	5.3	89.3	0.04	28.14	BN	BN	3/16/2017 4:47:59 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	3/23/2017 8:58:00 AM	0	5.6	8.1	86.3	-0.02	28.02	ROBERT JOHNS	ROBERT JOHNS	4/4/2017 11:25:12 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	4/19/2017 8:30:57 AM	0	8.2	8.5	83.3	0.09	28.13	BS	BN	4/20/2017 11:41:09 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	4/20/2017 9:21:00 AM	0	8.2	8.8	83	0.07	28.08	ROBERT JOHNS	ROBERTJOHNS	4/26/2017 9:09:22 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	5/24/2017 9:28:53 AM	0	8	11.4	80.6	0.04	27.93	BN	BN	5/25/2017 9:07:46 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	5/25/2017 9:39:00 AM	0	9.1	11.6	79.3	0.08	27.84	ROBERT JOHNS	ROBERT JOHNS	6/4/2017 11:51:57 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	6/28/2017 8:48:21 AM	0	9.5	11	79.5	-0.05	27.96	BS	BS	6/30/2017 6:48:17 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	6/29/2017 9:48:00 AM	0	9.2	11.9	78.9	0.27	27.92	ROBERT JOHNS	ROBERT JOHNS	7/7/2017 8:14:36 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	7/12/2017 9:54:03 AM	0	9.4	11.9	78.7	0.1	28.06	BS	BS	7/14/2017 11:32:40 AM

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	7/13/2017 8:38:00 AM	0	9.8	11.5	78.7	0.13	28.01	ROBERT JOHNS	ROBERT JOHNS	7/31/2017 12:51:16 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	8/24/2017 10:05:00 AM	0	10	12	78	0.01	27.87	ROBERT JOHNS	ROBERT JOHNS	8/28/2017 1:32:38 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/11/2017 10:40:03 AM	0	9	12	79	0.05	28.05	mq	mq	9/11/2017 5:57:34 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/12/2017 11:45:40 AM	0	9.3	11.8	78.9	-0.01	28	tr	mq	9/12/2017 1:33:13 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/21/2017 7:48:00 AM	0	9.2	12.8	78	0	27.83	ROBERT JOHNS	ROBERT JOHNS	9/30/2017 12:41:48 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	10/31/2017 9:18:22 AM	0	9.2	12.6	78.2	-0.03	27.9	ROBERT JOHNS	ROBERT JOHNS	11/1/2017 11:20:11 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	11/16/2017 9:43:00 AM	0	8.8	12.6	78.6	0.06	27.98	ROBERT JOHNS	ROBERT JOHNS	11/19/2017 9:52:48 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	12/14/2017 9:23:00 AM	0	5.8	15.4	78.8	0.12	28.04	ROBERT JOHNS	ROBERT JOHNS	12/15/2017 7:43:26 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/25/2018 11:02:06 AM	0	10.1	7.6	82.3	0.09	28.14			1/25/2018 5:25:20 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	2/15/2018 10:48:05 AM	0	11.5	6.4	82.1	-0.23	28.2	AR	AR	2/15/2018 4:29:24 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	3/29/2018 10:01:45 AM	0	9.1	5.7	85.2	-0.11	28.17			3/29/2018 4:40:11 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	4/19/2018 9:55:31 AM	0	8.7	5.6	85.7	0	28.06			4/19/2018 11:25:05 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	5/24/2018 7:41:37 AM	0	9.6	10.8	79.6	0.01				5/24/2018 11:36:41 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	6/28/2018 7:57:14 AM	0	9.6	12.1	78.3	-0.03	28.02			6/28/2018 11:02:21 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	7/26/2018 8:01:50 AM	0	9.3	12.4	78.3	-0.02	28.11			7/26/2018 11:07:05 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	8/23/2018 8:07:10 AM	0	9.2	13.2	77.6	-0.08				8/23/2018 1:06:39 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/27/2018 8:02:45 AM	0	8.5	13.4	78.1	-0.01		SD	SD	9/27/2018 10:32:54 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/23/2014 9:22:00 AM	0	9.1	12.1	78.8	-0.2	28.1	Robert Johns	Robert Johns	3/13/2014 9:36:21 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	2/13/2014 10:26:00 AM	0	32.9	1.8	65.3	-0.03	28.15	Robert Johns	Robert Johns	2/14/2014 5:42:10 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	3/13/2014 9:15:00 AM	0.1	34.6	0.1	65.2	-0.15	27.98	Robert Johns	Robert Johns	3/14/2014 1:05:23 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	4/24/2014 9:51:00 AM	0	31	2.6	66.4	0.15	27.94	ROBERT JOHNS	ROBERT JOHNS	4/25/2014 10:28:55 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	5/22/2014 9:57:00 AM	0	29.5	3.9	66.6	-0.04	27.95	ROBERT JOHNS	ROBERT JOHNS	5/23/2014 12:24:14 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	6/12/2014 9:47:00 AM	0	25.5	6	68.5	0.02	27.91	ROBERT JOHNS	ROBERT JOHNS	6/27/2014 8:58:54 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	7/24/2014 10:50:00 AM	0.1	34.9	0	65	0.06	27.84	Robert Johns	Robert Johns	7/25/2014 12:13:51 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	8/21/2014 9:56:00 AM	0.2	33.9	0.4	65.5	0.04	27.92	ROBERT JOHNS	ROBERT JOHNS	8/26/2014 10:18:17 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/25/2014 9:53:00 AM	0.2	33.2	1.3	65.3	0.02	27.94	Robert Johns	Robert Johns	9/29/2014 8:19:11 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	10/23/2014 9:52:00 AM	0.1	33.8	0.5	65.6	0	27.99	Robert Johns	Robert Johns	10/27/2014 2:00:35 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	11/20/2014 9:52:00 AM	0.4	34.8	0.2	64.6	-0.03	28.05	ROBERT JOHNS	ROBERT JOHNS	11/21/2014 11:09:22 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	12/18/2014 10:10:00 AM	0.2	19.9	10.3	69.6	-0.22	28.27	ROBERT JOHNS	ROBERT JOHNS	12/19/2014 10:04:54 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/22/2015 10:40:00 AM	0.2	31.3	2.2	66.3	-0.11	28.33	ROBERT JOHNS	ROBERT JOHNS	1/27/2015 4:47:42 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	2/19/2015 9:58:00 AM	0.3	29.7	2.8	67.2	-0.13	28.22	Robert Johns	Robert Johns	2/26/2015 2:07:43 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	3/19/2015 10:27:00 AM	0.1	26.1	5	68.8	0.01	28.13	ROBERT JOHNS	ROBERT JOHNS	3/25/2015 8:12:41 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	4/16/2015 9:48:00 AM	0.2	22	7.2	70.6	-0.08	28.14	ROBERT JOHNS	ROBERT JOHNS	4/17/2015 10:51:22 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	5/21/2015 9:30:00 AM	0.2	23.1	6.8	69.9	0.03	28.03	ROBERT JOHNS	ROBERT JOHNS	5/22/2015 11:40:57 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	6/18/2015 9:13:00 AM	0.1	17.7	9.5	72.7	-0.05	28.07	ROBERT JOHNS	ROBERT JOHNS	6/25/2015 4:06:00 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	7/23/2015 9:26:00 AM	0.4	32.2	1	66.4	0.07	28.1	ROBERT JOHNS	ROBERT JOHNS	7/30/2015 3:40:16 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	8/20/2015 9:37:00 AM	0.4	33.1	0.4	66.1	-0.06	28.02	ROBERT JOHNS	ROBERT JOHNS	8/27/2015 9:49:04 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/17/2015 10:43:00 AM	0	0.1	20	79.9		28	ROBERT JOHNS	ROBERT JOHNS	9/30/2015 10:09:43 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	10/22/2015 10:33:00 AM	0.3	24.7	6.8	68.2	-0.12	28	ROBERT JOHNS	ROBERT JOHNS	10/23/2015 10:10:10 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	11/19/2015 9:59:00 AM	0.2	29.6	3.2	67	0.21	28.06	ROBERT JOHNS	ROBERT JOHNS	11/20/2015 2:22:04 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	12/17/2015 9:40:00 AM	0.2	31.6	0.7	67.5	-0.16	28.19	ROBERT JOHNS	ROBERT JOHNS	12/22/2015 4:37:26 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/21/2016 9:33:00 AM	0	12.9	12.6	74.5	-0.14	28.23	ROBERT JOHNS	ROBERT JOHNS	1/26/2016 9:54:28 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	2/18/2016 9:41:00 AM	0.2	28.3	2.7	68.8	-0.31	28	ROBERT JOHNS	ROBERT JOHNS	2/19/2016 8:19:00 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	3/24/2016 10:00:00 AM	0.1	21.3	7	71.6	0.01	28.11	ROBERT JOHNS	ROBERT JOHNS	3/29/2016 2:14:47 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	4/21/2016 9:29:00 AM	0.3	30.4	0.4	68.9	0.01	27.91	ROBERT JOHNS	ROBERT JOHNS	4/29/2016 11:11:25 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	5/19/2016 7:52:00 AM	0.2	23.5	6.1	70.2	-0.08	27.93	ROBERT JOHNS	ROBERT JOHNS	5/20/2016 3:54:34 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	6/23/2016 9:16:00 AM	0.2	28.9	1.6	69.3	0.04	27.98	ROBERT JOHNS	ROBERT JOHNS	6/28/2016 6:36:07 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	7/21/2016 9:39:00 AM	0.2	29.9	0.4	69.5	0.01	28	ROBERT JOHNS	ROBERT JOHNS	8/2/2016 1:52:18 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	8/18/2016 8:50:00 AM	0.3	31.4	0.2	68.1	0.03	27.92	ROBERT JOHNS	ROBERT JOHNS	8/23/2016 3:16:19 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/22/2016 7:56:00 AM	0.4	32	0.1	67.5	-0.01	27.91	ROBERT JOHNS	ROBERT JOHNS	9/30/2016 1:39:56 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	10/20/2016 8:08:00 AM	0.2	29.5	1.9	68.4	-0.22	28.04	ROBERT JOHNS	ROBERT JOHNS	10/28/2016 10:04:23 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	11/16/2016 1:15:27 PM	0	27.7	1.8	70.5	-0.08	27.86			11/16/2016 2:39:49 PM

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	11/17/2016 8:08:00 AM	0.2	30.9	0.7	68.2	-0.4	27.99	ROBERT JOHNS	ROBERT JOHNS	11/22/2016 11:05:07 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	12/14/2016 8:20:30 AM	0.1	24.1	4.7	71.1	-0.08	28.15			12/15/2016 4:58:00 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	12/15/2016 7:56:00 AM	0.2	30.8	0.3	68.7	0	28.01	ROBERT JOHNS	ROBERT JOHNS	12/16/2016 4:02:08 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/18/2017 11:49:40 AM	0	27.3	0.7	72	-0.13	28.13	BN	BN	1/19/2017 11:57:15 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/25/2017 8:27:24 AM	0.1	26.2	2.7	71	-0.32	28.23	BN	BN	1/26/2017 12:29:21 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/26/2017 9:26:00 AM	0.3	24.4	5.2	70.1	-0.16	28.27	ROBERT JOHNS	ROBERT JOHNS	2/1/2017 2:00:41 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	2/22/2017 8:07:48 AM	0.2	24.7	4.1	71	0.12	28.12	BN	BN	2/23/2017 10:56:07 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	2/23/2017 9:19:00 AM	0.3	22.2	7.4	70.1	0.23	28.03	ROBERT JOHNS	ROBERT JOHNS	3/6/2017 8:55:18 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	3/15/2017 8:11:31 AM	0.4	24	4.6	71	-0.1	28.14	BN	BN	3/16/2017 4:47:59 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	3/23/2017 9:01:00 AM	0.5	23.3	7.5	68.7	-0.27	28.02	ROBERT JOHNS	ROBERT JOHNS	4/4/2017 11:25:12 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	4/19/2017 8:33:34 AM	0.9	23.7	7.4	68	-0.19	28.14	BS	BN	4/20/2017 11:41:09 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	4/20/2017 9:26:00 AM	1.5	37.2	0.6	60.7	-0.11	28.08	ROBERT JOHNS	ROBERTJOHNS	4/26/2017 9:09:22 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	5/24/2017 9:31:16 AM	0.7	19.8	6.1	73.4	0.23	27.95	BN	BN	5/25/2017 9:07:46 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	5/25/2017 9:45:00 AM	1.2	33.6	1.2	64	-0.13	27.85	ROBERT JOHNS	ROBERT JOHNS	6/4/2017 11:51:57 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	6/28/2017 8:50:55 AM	0	24	4.6	71.4	-0.01	27.97	BS	BS	6/30/2017 6:48:17 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	6/29/2017 9:49:00 AM	0	15.5	10.4	74.1	0.03	27.92	ROBERT JOHNS	ROBERT JOHNS	7/7/2017 8:14:36 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	7/12/2017 9:56:41 AM	0.3	22	5.3	72.4	0.02	28.06	BS	BS	7/14/2017 11:32:40 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	7/13/2017 8:41:00 AM	0.6	22.1	7.2	70.1	0	28.01	ROBERT JOHNS	ROBERT JOHNS	7/31/2017 12:51:16 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	8/24/2017 9:59:00 AM	0.7	24	5.4	69.9	0.1	27.89	ROBERT JOHNS	ROBERT JOHNS	8/28/2017 1:32:38 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/11/2017 10:43:03 AM	0.2	13.4	11	75.4	0	28.05	mq	mq	9/11/2017 5:57:34 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/12/2017 11:49:28 AM	0.6	29.5	1	68.9	0.06	28.03	tr	mq	9/12/2017 1:33:13 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/21/2017 7:50:00 AM	0.7	22.8	6.3	70.2	-0.01	27.82	ROBERT JOHNS	ROBERT JOHNS	9/30/2017 12:41:48 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	10/31/2017 9:21:25 AM	0.5	25	4.2	70.3	-0.11	27.9	ROBERT JOHNS	ROBERT JOHNS	11/1/2017 11:20:11 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	11/16/2017 9:45:00 AM	0.2	12.8	11	76	0.05	27.97	ROBERT JOHNS	ROBERT JOHNS	11/19/2017 9:52:48 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	12/14/2017 9:26:00 AM	0.1	19.6	7	73.3	-0.1	28.02	ROBERT JOHNS	ROBERT JOHNS	12/15/2017 7:43:26 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/25/2018 11:05:21 AM	0.1	23.9	2.8	73.2	0.05	28.14			1/25/2018 5:25:20 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	2/15/2018 10:51:05 AM	0.3	13.2	11	75.5	0.11	28.21	AR	AR	2/15/2018 4:29:24 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	3/29/2018 10:05:06 AM	0.2	23.5	1.1	75.2	-0.01	28.16			3/29/2018 4:40:11 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	4/19/2018 9:59:14 AM	0.4	24.5	0.9	74.2	-0.01	28.08			4/19/2018 11:25:05 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	5/24/2018 7:47:02 AM	0.7	28.1	1.1	70.1	-0.18	28.16			5/24/2018 11:36:41 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	6/28/2018 8:01:09 AM	0.7	25.8	2.5	71	-0.09	28.04			6/28/2018 11:02:21 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	7/26/2018 8:07:42 AM	0.9	31.5	0.8	66.8	-0.03	28.1			7/26/2018 11:07:05 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	8/23/2018 8:12:21 AM	1	31.4	0.7	66.9	-0.12	28.12			8/23/2018 1:06:39 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/27/2018 8:06:10 AM	0.7	25.7	2.6	71	-0.03	28.08	SD	SD	9/27/2018 10:32:54 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/23/2014 9:24:00 AM	0.9	44.4	0.2	54.5	-0.2	28.1	Robert Johns	Robert Johns	3/13/2014 9:36:21 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	2/13/2014 10:30:00 AM	1	42.9	1.2	54.9	-0.11	28.15	Robert Johns	Robert Johns	2/14/2014 5:42:10 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	3/13/2014 9:18:00 AM	1	39.8	2.6	56.6	-0.05	27.98	Robert Johns	Robert Johns	3/14/2014 1:05:23 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	4/24/2014 9:57:00 AM	1.1	42.4	1.3	55.2	0.05	27.94	ROBERT JOHNS	ROBERT JOHNS	4/25/2014 10:28:55 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/22/2014 9:59:00 AM	0.6	31.1	6.9	61.4	-0.01	27.95	ROBERT JOHNS	ROBERT JOHNS	5/23/2014 12:24:14 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	6/12/2014 9:49:00 AM	0.6	30.2	6.9	62.3	-0.12	27.91	ROBERT JOHNS	ROBERT JOHNS	6/27/2014 8:58:54 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	7/24/2014 10:53:00 AM	1	44.7	0	54.3	-0.11	27.84	Robert Johns	Robert Johns	7/25/2014 12:13:51 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	8/21/2014 9:58:00 AM	1	41.5	1.4	56.1	-0.15	27.92	ROBERT JOHNS	ROBERT JOHNS	8/26/2014 10:18:17 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/25/2014 9:56:00 AM	1.1	43.6	0.3	55	-0.17	27.94	Robert Johns	Robert Johns	9/29/2014 8:19:11 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	10/23/2014 9:55:00 AM	1	41.8	1	56.2	-0.17	28	Robert Johns	Robert Johns	10/27/2014 2:00:35 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	11/20/2014 9:56:00 AM	1.3	42	1.3	55.4	-0.16	28.05	ROBERT JOHNS	ROBERT JOHNS	11/21/2014 11:09:22 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	12/18/2014 10:13:00 AM	0.5	18.9	13.9	66.7	-0.32	28.27	ROBERT JOHNS	ROBERT JOHNS	12/19/2014 10:04:54 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/22/2015 10:43:00 AM	0.9	31.6	6.7	60.8	-0.37	28.33	ROBERT JOHNS	ROBERT JOHNS	1/27/2015 4:47:42 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	2/19/2015 10:00:00 AM	1.4	43.1	0.3	55.2	-0.1	28.21	Robert Johns	Robert Johns	2/26/2015 2:07:43 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	3/19/2015 10:29:00 AM	0.5	16	13	70.5	-0.04	28.12	ROBERT JOHNS	ROBERT JOHNS	3/25/2015 8:12:41 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	4/16/2015 9:50:00 AM	1.4	42.7	0.4	55.5	-0.15	28.14	ROBERT JOHNS	ROBERT JOHNS	4/17/2015 10:51:22 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/21/2015 9:33:00 AM	1.3	40.3	1.7	56.7	0.03	28.04	ROBERT JOHNS	ROBERT JOHNS	5/22/2015 11:40:57 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	6/18/2015 9:16:00 AM	0.3	40.8	1.3	56.6	-0.21	28.07	ROBERT JOHNS	ROBERT JOHNS	6/25/2015 4:06:00 PM

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	7/23/2015 9:30:00 AM	1.3	43.1	0	55.6	-0.32	28.1	ROBERT JOHNS	ROBERT JOHNS	7/30/2015 3:40:16 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	8/20/2015 9:40:00 AM	1.3	43.2	0	55.5	0.03	28.01	ROBERT JOHNS	ROBERT JOHNS	8/27/2015 9:49:04 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/17/2015 10:46:00 AM	1.3	42	0.2	56.5		28	ROBERT JOHNS	ROBERT JOHNS	9/30/2015 10:09:43 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	10/22/2015 10:35:00 AM	1.1	38.4	3.2	57.3	-0.22	28	ROBERT JOHNS	ROBERT JOHNS	10/23/2015 10:10:10 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	11/19/2015 10:02:00 AM	1.2	43.2	0.2	55.4	-0.1	28.06	ROBERT JOHNS	ROBERT JOHNS	11/20/2015 2:22:04 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	12/17/2015 9:42:00 AM	0.9	30.1	6.9	62.1	-0.35	28.18	ROBERT JOHNS	ROBERT JOHNS	12/22/2015 4:37:26 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/21/2016 9:37:00 AM	1.3	41.8	0	56.9	-0.23	28.23	ROBERT JOHNS	ROBERT JOHNS	1/26/2016 9:54:28 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	2/18/2016 9:43:00 AM	0.8	28.9	7.2	63.1	-0.57	28.01	ROBERT JOHNS	ROBERT JOHNS	2/19/2016 8:19:00 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	3/24/2016 10:02:00 AM	1.4	41	0.5	57.1	0.02	28.11	ROBERT JOHNS	ROBERT JOHNS	3/29/2016 2:14:47 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	4/21/2016 9:36:00 AM	1.2	40.2	0.5	58.1	-0.11	27.91	ROBERT JOHNS	ROBERT JOHNS	4/29/2016 11:11:25 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/19/2016 7:56:00 AM	1.4	42	0	56.6	-0.11	27.94	ROBERT JOHNS	ROBERT JOHNS	5/20/2016 3:54:34 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	6/23/2016 9:20:00 AM	1.3	41.1	0	57.6	-0.07	27.98	ROBERT JOHNS	ROBERT JOHNS	6/28/2016 6:36:07 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	7/21/2016 9:44:00 AM	1.2	39.4	0.3	59.1	0.08	28	ROBERT JOHNS	ROBERT JOHNS	8/2/2016 1:52:18 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	8/18/2016 8:53:00 AM	1.2	39.7	0.6	58.5	0.06	27.92	ROBERT JOHNS	ROBERT JOHNS	8/23/2016 3:16:19 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/22/2016 7:57:00 AM	1.2	40.9	0	57.9	-0.23	27.9	ROBERT JOHNS	ROBERT JOHNS	9/30/2016 1:39:56 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	10/20/2016 8:13:00 AM	1.3	40.5	0	58.2	-0.27	28.04	ROBERT JOHNS	ROBERT JOHNS	10/28/2016 10:04:23 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	11/16/2016 1:20:31 PM	0.8	39	0.9	59.3	0.07	27.86			11/16/2016 2:39:49 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	11/17/2016 8:12:00 AM	1.1	40.2	0	58.7	-0.83	27.99	ROBERT JOHNS	ROBERT JOHNS	11/22/2016 11:05:07 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	12/14/2016 8:23:54 AM	1	34.7	3.4	60.9	-0.32	28.15			12/15/2016 4:58:00 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	12/15/2016 8:02:00 AM	1.2	39.7	0.1	59	-0.11	28	ROBERT JOHNS	ROBERT JOHNS	12/16/2016 4:02:08 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/18/2017 11:53:21 AM	0.8	36.1	2.1	61	0.12	28.13	BN	BN	1/19/2017 11:57:15 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/25/2017 8:32:01 AM	1.1	41	0.2	57.7	-0.62	28.24	BN	BN	1/26/2017 12:29:21 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/26/2017 9:32:00 AM	1.4	40.9	0.2	57.5	-0.3	28.27	ROBERT JOHNS	ROBERT JOHNS	2/1/2017 2:00:41 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	2/22/2017 8:11:34 AM	1.1	38.9	1.7	58.3	0.15	28.12	BN	BN	2/23/2017 10:56:07 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	2/23/2017 9:24:00 AM	1.2	40.4	0	58.4	0.04	28.03	ROBERT JOHNS	ROBERT JOHNS	3/6/2017 8:55:18 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	3/15/2017 8:14:39 AM	1.1	36.4	2.9	59.6	-0.09	28.15	BN	BN	3/16/2017 4:47:59 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	3/23/2017 9:05:00 AM	1.2	40.1	0.9	57.8	-0.24	28.02	ROBERT JOHNS	ROBERT JOHNS	4/4/2017 11:25:12 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	4/19/2017 8:37:12 AM	1.1	38.1	3.3	57.5	-0.24	28.14	BS	BN	4/20/2017 11:41:09 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	4/20/2017 9:28:00 AM	1.4	43.6	0	55	-0.15	28.08	ROBERT JOHNS	ROBERTJOHNS	4/26/2017 9:09:22 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/24/2017 9:34:35 AM	0.9	33.3	4.8	61	0.01	27.94	BN	BN	5/25/2017 9:07:46 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/25/2017 9:50:00 AM	1.6	45.2	0	53.2	-0.25	27.85	ROBERT JOHNS	ROBERT JOHNS	6/4/2017 11:51:57 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	6/28/2017 8:54:25 AM	0.8	36.5	3.9	58.8	-0.07	27.97	BS	BS	6/30/2017 6:48:17 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	6/29/2017 9:54:00 AM	1.6	44.7	0	53.7	-0.22	27.92	ROBERT JOHNS	ROBERT JOHNS	7/7/2017 8:14:36 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	7/12/2017 10:00:23 AM	1.1	41	2.2	55.7	-0.02	28.05	BS	BS	7/14/2017 11:32:40 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	7/13/2017 8:45:00 AM	1.6	44.5	0	53.9	-0.27	28.02	ROBERT JOHNS	ROBERT JOHNS	7/31/2017 12:51:16 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	8/24/2017 10:06:00 AM	0.6	17.2	12.6	69.6	-0.06	27.89	ROBERT JOHNS	ROBERT JOHNS	8/28/2017 1:32:38 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/11/2017 10:48:10 AM	0.7	29	6.8	63.5	-0.17	28.04	mq	mq	9/11/2017 5:57:34 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/12/2017 11:52:50 AM	1.2	43.5	0	55.3	-0.04	28.02	tr	mq	9/12/2017 1:33:13 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/21/2017 7:53:00 AM	1.2	32.4	6.6	59.8	-0.08	27.83	ROBERT JOHNS	ROBERT JOHNS	9/30/2017 12:41:48 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	10/31/2017 9:23:04 AM	0.6	17.1	12.8	69.5	-0.41	27.89	ROBERT JOHNS	ROBERT JOHNS	11/1/2017 11:20:11 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	11/16/2017 9:47:00 AM	0.6	17.7	12.3	69.4	0.03	27.97	ROBERT JOHNS	ROBERT JOHNS	11/19/2017 9:52:48 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	12/14/2017 9:28:00 AM	0.9	23.8	9.4	65.9	-0.37	28.04	ROBERT JOHNS	ROBERT JOHNS	12/15/2017 7:43:26 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/25/2018 11:09:30 AM	1.5	35.6	2.4	60.5	-0.06	28.14			1/25/2018 5:25:20 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	2/15/2018 10:57:05 AM	1.4	34.2	4.1	60.3	0.51	28.21	AR	AR	2/15/2018 4:29:24 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	3/29/2018 10:09:14 AM	1.5	36.3	1.8	60.4	-0.39	28.16			3/29/2018 4:40:11 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	4/19/2018 10:04:37 AM	0.2	35.3	0.2	64.3	-0.14	28.08			4/19/2018 11:25:05 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/24/2018 7:51:55 AM	2	40.6	0	57.4	-0.41	28.15			5/24/2018 11:36:41 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/30/2018 7:58:03 AM	1.9	41.2	0	56.9	-0.28	27.97	mq	mq	5/30/2018 3:59:32 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/30/2018 7:59:11 AM	1.9	41.4	0	56.7		27.97	mq	mq	5/30/2018 3:59:32 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	6/28/2018 8:06:19 AM	1.9	40	0.2	57.9	-0.25	28.04			6/28/2018 11:02:21 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	7/26/2018 8:14:28 AM	1.8	46.4	0	51.8	-0.2	28.1			7/26/2018 11:07:05 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	8/23/2018 8:18:39 AM	1.7	44.3	0.1	53.9	-0.28	28.13			8/23/2018 1:06:39 PM

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/27/2018 8:10:25 AM	1.8	41.7	0.5	56	-0.3	28.08	SD	SD	9/27/2018 10:32:54 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/23/2014 9:27:00 AM	1.9	47.4	0	50.7	-0.15	28.1	Robert Johns	Robert Johns	3/13/2014 9:36:21 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	2/13/2014 10:36:00 AM	1.7	46.4	0	51.9	0	28.15	Robert Johns	Robert Johns	2/14/2014 5:42:10 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	3/13/2014 9:20:00 AM	1.3	41.7	2.1	54.9	-0.06	27.98	Robert Johns	Robert Johns	3/14/2014 1:05:23 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	4/24/2014 10:00:00 AM	1.7	45.7	0	52.6	0.15	27.94	ROBERT JOHNS	ROBERT JOHNS	4/25/2014 10:28:55 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/22/2014 10:04:00 AM	1.6	46.5	0	51.9	-0.02	27.95	ROBERT JOHNS	ROBERT JOHNS	5/23/2014 12:24:14 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/12/2014 9:51:00 AM	1.4	40.2	3.5	54.9	0.13	27.91	ROBERT JOHNS	ROBERT JOHNS	6/27/2014 8:58:54 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	7/24/2014 10:59:00 AM	1.7	47.2	0	51.1	-0.04	27.84	Robert Johns	Robert Johns	7/25/2014 12:13:51 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	8/21/2014 10:01:00 AM	1.8	46.9	0	51.3	-0.09	27.92	ROBERT JOHNS	ROBERT JOHNS	8/26/2014 10:18:17 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/25/2014 10:02:00 AM	1.7	46.5	0	51.8	0.04	27.94	Robert Johns	Robert Johns	9/29/2014 8:19:11 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	10/23/2014 9:57:00 AM	1.7	45.3	0.5	52.5	0.08	27.99	Robert Johns	Robert Johns	10/27/2014 2:00:35 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	11/20/2014 9:59:00 AM	1.7	43	1.6	53.7	-0.07	28.05	ROBERT JOHNS	ROBERT JOHNS	11/21/2014 11:09:22 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	12/18/2014 10:16:00 AM	1.1	33.1	7.2	58.6	-0.01	28.27	ROBERT JOHNS	ROBERT JOHNS	12/19/2014 10:04:54 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/22/2015 10:45:00 AM	1.3	38.8	3.7	56.2	-0.03	28.33	ROBERT JOHNS	ROBERT JOHNS	1/27/2015 4:47:42 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	2/19/2015 10:05:00 AM	2	45.6	0.1	52.3	-0.07	28.21	Robert Johns	Robert Johns	2/26/2015 2:07:43 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	3/19/2015 10:33:00 AM	1	24.6	10.2	64.2	0.07	28.12	ROBERT JOHNS	ROBERT JOHNS	3/25/2015 8:12:41 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	4/16/2015 9:53:00 AM	2.2	46.6	0	51.2	0.03	28.14	ROBERT JOHNS	ROBERT JOHNS	4/17/2015 10:51:22 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/21/2015 9:37:00 AM	2.1	46	0	51.9	0.07	28.04	ROBERT JOHNS	ROBERT JOHNS	5/22/2015 11:40:57 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/18/2015 9:19:00 AM	2.2	46.2	0.3	51.3	-0.04	28.07	ROBERT JOHNS	ROBERT JOHNS	6/25/2015 4:06:00 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	7/23/2015 9:34:00 AM	2.1	46.5	0	51.4	-0.09	28.1	ROBERT JOHNS	ROBERT JOHNS	7/30/2015 3:40:16 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	8/20/2015 9:45:00 AM	2	46.3	0	51.7	0	28.01	ROBERT JOHNS	ROBERT JOHNS	8/27/2015 9:49:04 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/17/2015 10:52:00 AM	1.8	44.8	0.8	52.6		28.01	ROBERT JOHNS	ROBERT JOHNS	9/30/2015 10:09:43 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	10/22/2015 10:38:00 AM	2.1	46.7	0.2	51	-0.14	28.01	ROBERT JOHNS	ROBERT JOHNS	10/23/2015 10:10:10 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	11/19/2015 10:04:00 AM	1.6	43.8	0.8	53.8	-0.01	28.06	ROBERT JOHNS	ROBERT JOHNS	11/20/2015 2:22:04 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	12/17/2015 9:45:00 AM	2.1	45	0	52.9	-0.12	28.19	ROBERT JOHNS	ROBERT JOHNS	12/22/2015 4:37:26 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/21/2016 9:42:00 AM	2	45.1	0	52.9	-0.01	28.22	ROBERT JOHNS	ROBERT JOHNS	1/26/2016 9:54:28 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	2/18/2016 9:47:00 AM	2.3	46	0	51.7	-0.23	28.01	ROBERT JOHNS	ROBERT JOHNS	2/19/2016 8:19:00 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	3/24/2016 10:04:00 AM	2.1	44.3	0.4	53.2	-0.07	28.11	ROBERT JOHNS	ROBERT JOHNS	3/29/2016 2:14:47 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	4/21/2016 9:40:00 AM	2.1	45.5	0	52.4	0.05	27.91	ROBERT JOHNS	ROBERT JOHNS	4/29/2016 11:11:25 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/19/2016 8:00:00 AM	2.3	46.1	0	51.6	-0.04	27.93	ROBERT JOHNS	ROBERT JOHNS	5/20/2016 3:54:34 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/23/2016 9:24:00 AM	2	45.1	0	52.9	0.04	27.98	ROBERT JOHNS	ROBERT JOHNS	6/28/2016 6:36:07 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	7/21/2016 9:48:00 AM	1.9	44.2	0	53.9	0.04	28	ROBERT JOHNS	ROBERT JOHNS	8/2/2016 1:52:18 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	8/18/2016 8:56:00 AM	2.1	45.3	0	52.6	0.18	27.92	ROBERT JOHNS	ROBERT JOHNS	8/23/2016 3:16:19 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/22/2016 8:01:00 AM	2.2	45.8	0	52	-0.15	27.92	ROBERT JOHNS	ROBERT JOHNS	9/30/2016 1:39:56 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	10/20/2016 8:16:00 AM	2.1	44.8	0	53.1	-0.06	28.04	ROBERT JOHNS	ROBERT JOHNS	10/28/2016 10:04:23 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	11/16/2016 1:26:52 PM	1	43	0	56	-0.17	27.86			11/16/2016 2:39:49 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	11/17/2016 8:16:00 AM	2	44.2	0	53.8	-0.27	27.99	ROBERT JOHNS	ROBERT JOHNS	11/22/2016 11:05:07 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	12/14/2016 8:28:22 AM	1.8	44.1	0.1	54	-0.09	28.15			12/15/2016 4:58:00 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	12/15/2016 8:05:00 AM	2.1	44.3	0	53.6	0.09	28	ROBERT JOHNS	ROBERT JOHNS	12/16/2016 4:02:08 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/18/2017 11:58:06 AM	1.2	42.2	0	56.6	0.22	28.12	BN	BN	1/19/2017 11:57:15 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/25/2017 8:37:00 AM	2.1	47.2	0	50.7	-0.22	28.24	BN	BN	1/26/2017 12:29:21 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/26/2017 9:37:00 AM	2.1	45	0	52.9	-0.12	28.27	ROBERT JOHNS	ROBERT JOHNS	2/1/2017 2:00:41 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	2/22/2017 8:16:23 AM	1.2	43.5	0.2	55.1	0.09	28.12	BN	BN	2/23/2017 10:56:07 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	2/23/2017 9:27:00 AM	2.1	45.1	0	52.8	-0.03	28.03	ROBERT JOHNS	ROBERT JOHNS	3/6/2017 8:55:18 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	3/15/2017 8:19:02 AM	1.5	42	0.9	55.6	-0.08	28.15	BN	BN	3/16/2017 4:47:59 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	3/23/2017 9:07:00 AM	1.6	35.6	5.6	57.2	-0.29	28.03	ROBERT JOHNS	ROBERT JOHNS	4/4/2017 11:25:12 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	4/19/2017 8:41:50 AM	1.9	46.1	0.2	51.8	-0.12	28.13	BS	BN	4/20/2017 11:41:09 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	4/20/2017 9:31:00 AM	2.2	45.7	0	52.1	-0.24	28.08	ROBERT JOHNS	ROBERTJOHNS	4/26/2017 9:09:22 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/24/2017 9:38:49 AM	1.4	42.9	1.5	54.2	-0.08	27.95	BN	BN	5/25/2017 9:07:46 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/25/2017 9:54:00 AM	2.5	47.1	0	50.4	-0.02	27.85	ROBERT JOHNS	ROBERT JOHNS	6/4/2017 11:51:57 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/28/2017 8:59:01 AM	1.2	42.9	1.2	54.7	-0.33	27.96	BS	BS	6/30/2017 6:48:17 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/29/2017 9:58:00 AM	2.5	46.4	0	51.1	-0.03	27.91	ROBERT JOHNS	ROBERT JOHNS	7/7/2017 8:14:36 AM

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	7/12/2017 10:04:59 AM	1.8	46.8	0.2	51.2	-0.07	28.06	BS	BS	7/14/2017 11:32:40 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	7/13/2017 8:50:00 AM	2.3	45.8	0	51.9	-0.12	28.02	ROBERT JOHNS	ROBERT JOHNS	7/31/2017 12:51:16 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	8/24/2017 10:08:00 AM	0.8	17.8	12.6	68.8	-0.08	27.89	ROBERT JOHNS	ROBERT JOHNS	8/28/2017 1:32:38 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/11/2017 10:52:56 AM	1.1	35.3	4.4	59.2	-0.03	28.04	mq	mq	9/11/2017 5:57:34 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/12/2017 11:56:28 AM	2	45.6	0	52.4	0	28.02	tr	mq	9/12/2017 1:33:13 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/21/2017 7:55:00 AM	1.9	39.8	3.5	54.8	-0.08	27.83	ROBERT JOHNS	ROBERT JOHNS	9/30/2017 12:41:48 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	10/31/2017 9:28:59 AM	2.7	45.8	0.1	51.4	-0.07	27.9	ROBERT JOHNS	ROBERT JOHNS	11/1/2017 11:20:11 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	11/16/2017 9:51:00 AM	1.9	39.7	3	55.4	-0.01	27.97	ROBERT JOHNS	ROBERT JOHNS	11/19/2017 9:52:48 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	12/14/2017 9:30:00 AM	0.8	17.1	13	69.1	-0.08	28.03	ROBERT JOHNS	ROBERT JOHNS	12/15/2017 7:43:26 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/25/2018 11:15:43 AM	2.6	38.3	0.1	59	0.01	28.13			1/25/2018 5:25:20 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	2/15/2018 11:02:05 AM	2.5	43.9	0.2	53.4	-0.24	28.21	AR	AR	2/15/2018 4:29:24 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	3/29/2018 10:14:44 AM	2.9	43.2	0.1	53.8	-0.04	28.15			3/29/2018 4:40:11 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	4/19/2018 10:09:53 AM	2.9	43.4	0	53.7	-0.1	28.08			4/19/2018 11:25:05 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/24/2018 7:58:46 AM	3.1	44	0	52.9	-0.1	28.15			5/24/2018 11:36:41 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/30/2018 8:08:31 AM	3.4	45.6	0	51	-0.24	27.97	mq	mq	5/30/2018 3:59:32 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/1/2018 7:33:40 AM	2.9	40.6	1.5	55	-0.18	28.06	MQ	MQ	6/4/2018 12:37:30 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/28/2018 8:11:55 AM	3	43.3	0	53.7	-0.14	28.03			6/28/2018 11:02:21 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	7/26/2018 8:21:40 AM	2.7	49.4	0	47.9	-0.03	28.11			7/26/2018 11:07:05 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	8/23/2018 8:24:58 AM	2.5	47.4	0	50.1	-0.1	28.12			8/23/2018 1:06:39 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/27/2018 8:18:31 AM	2.8	45.9	0	51.3	-0.01	28.08	SD	SD	9/27/2018 10:32:54 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/23/2014 9:31:00 AM	1.1	43	0.4	55.5	-0.15	28.1	Robert Johns	Robert Johns	3/13/2014 9:36:21 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	2/13/2014 10:43:00 AM	0.8	41.5	0.1	57.6	0.02	28.15	Robert Johns	Robert Johns	2/14/2014 5:42:10 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	3/13/2014 9:23:00 AM	0.2	35.6	0.2	64	-0.11	27.98	Robert Johns	Robert Johns	3/14/2014 1:05:23 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	4/24/2014 10:07:00 AM	0.7	39.2	0	60.1	0.15	27.94	ROBERT JOHNS	ROBERT JOHNS	4/25/2014 10:28:55 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/22/2014 10:07:00 AM	0.6	37.9	0.4	61.1	0.01	27.95	ROBERT JOHNS	ROBERT JOHNS	5/23/2014 12:24:14 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/12/2014 9:56:00 AM	1.4	44.3	0	54.3	-0.07	27.91	ROBERT JOHNS	ROBERT JOHNS	6/27/2014 8:58:54 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	7/24/2014 11:08:00 AM	1.3	44.7	0	54	-0.18	27.84	Robert Johns	Robert Johns	7/25/2014 12:13:51 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	8/21/2014 10:05:00 AM	0.9	33.7	4.7	60.7	-0.56	27.92	ROBERT JOHNS	ROBERT JOHNS	8/26/2014 10:18:17 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/25/2014 10:06:00 AM	1.3	44.1	0	54.6	-0.38	27.94	Robert Johns	Robert Johns	9/29/2014 8:19:11 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	10/23/2014 10:01:00 AM	1.7	47	0	51.3	-0.23	27.99	Robert Johns	Robert Johns	10/27/2014 2:00:35 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	11/20/2014 10:04:00 AM	0.9	39	0	60.1	-0.08	28.05	ROBERT JOHNS	ROBERT JOHNS	11/21/2014 11:09:22 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	12/18/2014 10:22:00 AM	1.5	44.3	0.2	54	-0.15	28.27	ROBERT JOHNS	ROBERT JOHNS	12/19/2014 10:04:54 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/22/2015 10:49:00 AM	1.8	45.8	0.5	51.9	-0.15	28.33	ROBERT JOHNS	ROBERT JOHNS	1/27/2015 4:47:42 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	2/19/2015 10:08:00 AM	1.3	40.1	0.2	58.4	-0.6	28.21	Robert Johns	Robert Johns	2/26/2015 2:07:43 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	3/19/2015 10:37:00 AM	1.7	45.4	0.2	52.7	0.01	28.12	ROBERT JOHNS	ROBERT JOHNS	3/25/2015 8:12:41 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	4/16/2015 9:57:00 AM	1.4	41	0.1	57.5	-0.18	28.14	ROBERT JOHNS	ROBERT JOHNS	4/17/2015 10:51:22 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/21/2015 9:41:00 AM	0.9	36.7	0.1	62.3	-0.07	28.04	ROBERT JOHNS	ROBERT JOHNS	5/22/2015 11:40:57 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/18/2015 9:23:00 AM	2.2	46.8	0	51	-0.29	28.08	ROBERT JOHNS	ROBERT JOHNS	6/25/2015 4:06:00 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	7/23/2015 9:39:00 AM	2	46.1	0	51.9	0.01	28.1	ROBERT JOHNS	ROBERT JOHNS	7/30/2015 3:40:16 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	8/20/2015 9:51:00 AM	1.7	44.2	0	54.1	-0.12	28.01	ROBERT JOHNS	ROBERT JOHNS	8/27/2015 9:49:04 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/17/2015 10:58:00 AM	1.7	43.5	0.1	54.7		28.01	ROBERT JOHNS	ROBERT JOHNS	9/30/2015 10:09:43 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	10/22/2015 10:41:00 AM	1.5	43	0.2	55.3	-0.26	28	ROBERT JOHNS	ROBERT JOHNS	10/23/2015 10:10:10 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	11/19/2015 10:07:00 AM	1.6	43.6	0.3	54.5	-0.04	28.06	ROBERT JOHNS	ROBERT JOHNS	11/20/2015 2:22:04 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	12/17/2015 9:48:00 AM	1.6	42.2	0	56.2	-0.15	28.19	ROBERT JOHNS	ROBERT JOHNS	12/22/2015 4:37:26 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/21/2016 9:48:00 AM	0.9	37.1	0	62	-0.14	28.22	ROBERT JOHNS	ROBERT JOHNS	1/26/2016 9:54:28 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	2/18/2016 9:51:00 AM	0.9	37.6	0.1	61.4	-0.26	28	ROBERT JOHNS	ROBERT JOHNS	2/19/2016 8:19:00 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	3/24/2016 10:06:00 AM	1.8	41.8	1	55.4	-0.14	28.11	ROBERT JOHNS	ROBERT JOHNS	3/29/2016 2:14:47 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	4/21/2016 9:44:00 AM	1.2	38.7	0	60.1	-0.56	27.91	ROBERT JOHNS	ROBERT JOHNS	4/29/2016 11:11:25 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/19/2016 8:04:00 AM	1	37.2	0	61.8	-0.65	27.93	ROBERT JOHNS	ROBERT JOHNS	5/20/2016 3:54:34 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/23/2016 9:28:00 AM	1.9	44.8	0	53.3	-0.51	27.98	ROBERT JOHNS	ROBERT JOHNS	6/28/2016 6:36:07 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	7/21/2016 9:52:00 AM	1.9	44.8	0	53.3	-0.26	28	ROBERT JOHNS	ROBERT JOHNS	8/2/2016 1:52:18 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	8/18/2016 9:01:00 AM	1.9	44.4	0	53.7	0.1	27.92	ROBERT JOHNS	ROBERT JOHNS	8/23/2016 3:16:19 PM

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/22/2016 8:03:00 AM	1.8	43.6	0	54.6	-0.14	27.91	ROBERT JOHNS	ROBERT JOHNS	9/30/2016 1:39:56 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	10/20/2016 8:20:00 AM	1.6	42.7	0	55.7	-0.93	28.04	ROBERT JOHNS	ROBERT JOHNS	10/28/2016 10:04:23 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	11/16/2016 1:31:55 PM	0	33.5	0	66.5	0.06	27.86			11/16/2016 2:39:49 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	11/17/2016 8:21:00 AM	1.8	43.9	0	54.3	-0.29	27.99	ROBERT JOHNS	ROBERT JOHNS	11/22/2016 11:05:07 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	12/14/2016 8:32:41 AM	0.9	39.5	0	59.6	-0.06	28.15			12/15/2016 4:58:00 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	12/15/2016 8:10:00 AM	1.2	39.3	0	59.5	-0.22	28	ROBERT JOHNS	ROBERT JOHNS	12/16/2016 4:02:08 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/18/2017 12:02:44 PM	0	29.2	0	70.8	0.2	28.13	BN	BN	1/19/2017 11:57:15 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/25/2017 8:41:51 AM	0.9	38.1	0	61	-0.28	28.24	BN	BN	1/26/2017 12:29:21 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/26/2017 9:41:00 AM	0.6	32.8	0	66.6	-0.8	28.27	ROBERT JOHNS	ROBERT JOHNS	2/1/2017 2:00:41 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	2/22/2017 8:21:12 AM	0.4	35.4	0.2	64	-1.41	28.12	BN	BN	2/23/2017 10:56:07 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	2/23/2017 9:32:00 AM	0.8	34.3	0	64.9	-0.06	28.03	ROBERT JOHNS	ROBERT JOHNS	3/6/2017 8:55:18 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	3/15/2017 8:23:51 AM	1.7	44.5	0	53.8	-0.7	28.15	BN	BN	3/16/2017 4:47:59 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	3/23/2017 9:12:00 AM	1.9	44.3	0	53.8	-0.35	28.02	ROBERT JOHNS	ROBERT JOHNS	4/4/2017 11:25:12 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	4/19/2017 8:46:23 AM	2.3	47.2	0	50.5	-0.27	28.14	BS	BN	4/20/2017 11:41:09 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	4/20/2017 9:34:00 AM	2.3	45.3	0	52.4	-11.18	28.08	ROBERT JOHNS	ROBERTJOHNS	4/26/2017 9:09:22 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/24/2017 9:42:52 AM	1.8	44.2	0.2	53.8	-0.12	27.94	BN	BN	5/25/2017 9:07:46 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/25/2017 9:59:00 AM	1.9	41.7	0	56.4	-0.96	27.84	ROBERT JOHNS	ROBERT JOHNS	6/4/2017 11:51:57 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/28/2017 9:03:41 AM	1.3	43.5	0.1	55.1	-0.09	27.96	BS	BS	6/30/2017 6:48:17 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/29/2017 10:03:00 AM	2.1	44.6	0	53.3	-0.51	27.92	ROBERT JOHNS	ROBERT JOHNS	7/7/2017 8:14:36 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	7/12/2017 10:10:07 AM	1.9	45.8	0	52.3	0.11	28.05	BS	BS	7/14/2017 11:32:40 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	7/13/2017 8:53:00 AM	2.1	43.4	0	54.5	-0.43	28.02	ROBERT JOHNS	ROBERT JOHNS	7/31/2017 12:51:16 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	8/24/2017 10:09:00 AM	0.9	21.3	9.7	68.1	-0.02	27.89	ROBERT JOHNS	ROBERT JOHNS	8/28/2017 1:32:38 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/11/2017 10:58:30 AM	1	28.1	6	64.9	0	28.04	mq	mq	9/11/2017 5:57:34 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/12/2017 12:01:24 PM	1.6	40.6	0	57.8	-0.02	28.02	tr	mq	9/12/2017 1:33:13 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/21/2017 7:58:00 AM	1.3	29	6.1	63.6	-0.19	27.83	ROBERT JOHNS	ROBERT JOHNS	9/30/2017 12:41:48 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	10/31/2017 9:32:32 AM	0.9	29.9	2.9	66.3	0	27.9	ROBERT JOHNS	ROBERT JOHNS	11/1/2017 11:20:11 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	11/16/2017 9:53:00 AM	0.7	23.9	6.9	68.5	0.02	27.97	ROBERT JOHNS	ROBERT JOHNS	11/19/2017 9:52:48 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	12/14/2017 9:32:00 AM	0.4	18.3	9.2	72.1	-0.21	28.03	ROBERT JOHNS	ROBERT JOHNS	12/15/2017 7:43:26 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/25/2018 11:20:45 AM	0.4	29.4	0.2	70	0.12	28.13			1/25/2018 5:25:20 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	2/15/2018 11:07:04 AM	1.5	36.4	0.1	62	-0.17	28.21	AR	AR	2/15/2018 4:29:24 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	3/29/2018 10:21:17 AM	0.4	26	0.2	73.4	-0.15	28.15			3/29/2018 4:40:11 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	4/19/2018 10:15:03 AM	0.9	29.8	0	69.3	-0.59	28.08			4/19/2018 11:25:05 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/24/2018 8:04:40 AM	2	37.2	0	60.8	-0.24	28.14			5/24/2018 11:36:41 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/30/2018 8:15:27 AM	1.5	33.5	1.4	63.6	-1.47	27.98	mq	mq	5/30/2018 3:59:32 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/5/2018 8:32:17 AM	2.9	42.2	1	53.9	-0.52	28.01	MQ	MQ	6/8/2018 6:39:50 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/28/2018 8:17:25 AM	1.8	35.5	0	62.7	-0.27	28.02			6/28/2018 11:02:21 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	7/26/2018 8:28:48 AM	1.8	39.7	0	58.5	-0.1	28.1			7/26/2018 11:07:05 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	8/23/2018 8:32:39 AM	1.7	38.5	0	59.8	-0.08	27.9			8/23/2018 1:06:39 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/27/2018 8:25:18 AM	1.6	37.1	0	61.3	-0.06	28.08	SD	SD	9/27/2018 10:32:54 AM

ATTACHMENT C

ANALYTICAL RESULTS

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Sample

Report Date: February 2, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon LF
Project No.: 07218035.00
Date Received: January 26, 2018
Date Analyzed: January 26, 2018

AtmAA Lab No.:	10268-1
Sample I.D.:	Probe 205RD
Components	*(Concentration in ppmv)*
Methane	27400
Carbon dioxide	464000
Ethane	<5
TGNMO	19.5
Hydrogen sulfide	0.42
	(Concentration in ppbv)
Benzene	7.52
Benzyl chloride	<8
Chlorobenzene	<8
Dichlorobenzenes*	<12
1,1-dichloroethane	<10
1,2-dichloroethane	<10
1,1-dichloroethylene	<10
Dichloromethane	<10
1,2-dibromoethane	<6
Perchloroethylene	<6
Carbon tetrachloride	<8
Toluene	<8
1,1,1-trichloroethane	<6
Trichloroethene	<6
Chloroform	<8
Vinyl chloride	<8
m+p-xylenes	<8
o-xylene	<8

Methane, ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)

Project Location: Sunshine Canyon LF
Date Received: January 26, 2018
Date Analyzed: January 26, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	Probe 205RD	27500	27400	27400	0.18
Ethane	Probe 205RD	<5	<5	---	---
TGNMO	Probe 205RD	18.9	20.1	19.5	3.1
Hydrogen sulfide	Probe 205RD	0.39	0.44	0.42	6.0
		(Concentration in ppbv)			
Benzene	Probe 205RD	7.99	7.05	7.52	6.2
Benzyl chloride	Probe 205RD	<8	<8	---	---
Chlorobenzene	Probe 205RD	<8	<8	---	---
Dichlorobenzenes	Probe 205RD	<12	<12	---	---
1,1-dichloroethane	Probe 205RD	<10	<10	---	---
1,2-dichloroethane	Probe 205RD	<10	<10	---	---
1,1-dichloroethylene	Probe 205RD	<10	<10	---	---
Dichloromethane	Probe 205RD	<10	<10	---	---
1,2-dibromoethane	Probe 205RD	<6	<6	---	---
Perchloroethene	Probe 205RD	<6	<6	---	---
Carbon tetrachloride	Probe 205RD	<8	<8	---	---
Toluene	Probe 205RD	<8	<8	---	---
1,1,1-trichloroethane	Probe 205RD	<6	<6	---	---
Trichloroethene	Probe 205RD	<6	<6	---	---
Chloroform	Probe 205RD	<8	<8	---	---
Vinyl chloride	Probe 205RD	<8	<8	---	---
m+p-xylenes	Probe 205RD	<8	<8	---	---
o-xylene	Probe 205RD	<8	<8	---	---

One Tedlar bag sample, laboratory number 10268-1, was analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 4 repeat measurements from one Tedlar bag sample is 3.9%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☐ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00

PROJECT MANAGER: RAY AL AYASS

PROJECT NAME: SUNSHINE CANYON

W.O. / S.O. #:

PROJECT LOCATION: SYLMAR CA

SAMPLER NAME AND SIGNATURE: A ROMO

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC (EPA METHOD 25)	TAC (TABLE 1)	H2S	CH4	CO2	ETHANE	TGNMO	LAB USE ONLY
	PROBE 205R D	AIR	1-25-18@ 16:15 HRS	TEDLAR 10 L	NONE		X	X	X	X	X	X	X	102681

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE: 1-26-18	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE: 1/26/18
COMPANY:	TIME:	COMPANY:	TIME:	COMPANY:	TIME:	COMPANY:	TIME: 09:55

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Samples

Report Date: March 2, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon
Project No.: 07218035.00 Task 1
Date Received: February 16, 2018
Date Analyzed: February 16, 2018

AtmAA Lab No.:	10478-28	10478-29	10478-30	10478-31	10478-32
	P-240E	P-205R-C	P-205R-D	P-205R-E	P-218-B
Components	*(Concentration in ppmv)*				
Methane	76000	20200	27300	16700	1180
Carbon dioxide	2400	442000	475000	384000	346000
Ethane	1230	<5	<5	<5	<5
TGNMO	265	<5	<5	<5	<5
Hydrogen sulfide	<0.2	<0.2	0.97	1.26	<0.2
	(Concentration in ppbv)				
Benzene	5.04	6.45	6.64	1.94	1.06
Benzyl chloride	<1.4	<1.4	<1.4	<1.4	<1.4
Chlorobenzene	<1.4	<1.4	<1.4	<1.4	<1.4
Dichlorobenzenes*	<3	<3	<3	<3	<3
1,1-dichloroethane	<1.4	<1.4	<1.4	<1.4	<1.4
1,2-dichloroethane	<1.4	<1.4	<1.4	<1.4	<1.4
1,1-dichloroethylene	<1.4	<1.4	<1.4	<1.4	<1.4
Dichloromethane	<3	<3	<3	<3	<3
1,2-dibromoethane	<1	<1	<1	<1	<1
Perchloroethylene	<1	<1	<1	<1	35.7
Carbon tetrachloride	<1.4	<1.4	<1.4	<1.4	<1.4
Toluene	<1.4	<1.4	2.23	1.65	<1.4
1,1,1-trichloroethane	<1	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	1.06
Vinyl chloride	<1	<1	<1	<1	<1
m+p-xylenes	<1.4	1.47	1.84	<1.4	<1.4
o-xylene	<1.4	<1.4	<1.4	<1.4	<1.4

Methane was measured by thermal conductivity detection/gas chromatography (TCD/GC), EPA Method 3C.
Ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/ total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)

Project Location: Sunshine Canyon
Date Received: February 16, 2018
Date Analyzed: February 16, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	P-240E	75800	76100	76000	0.20
Ethane	P-240E	1230	1230	1230	0.0
TGNMO	P-240E	265	265	265	0.0
Hydrogen sulfide	P-240E	<0.2	<0.2	---	---
	P-205R-C	<0.2	<0.2	---	---
	P-205R-D	1.00	0.94	0.97	3.1
	P-205R-E	1.22	1.31	1.26	3.6
	P-218-B	<0.2	<0.2	---	---
		(Concentration in ppbv)			
Benzene	P-240E	5.01	5.07	5.04	0.60
Benzyl chloride	P-240E	<1.4	<1.4	---	---
Chlorobenzene	P-240E	<1.4	<1.4	---	---
Dichlorobenzenes	P-240E	<3	<3	---	---
1,1-dichloroethane	P-240E	<1.4	<1.4	---	---
1,2-dichloroethane	P-240E	<1.4	<1.4	---	---
1,1-dichloroethylene	P-240E	<1.4	<1.4	---	---
Dichloromethane	P-240E	<3	<3	---	---
1,2-dibromoethane	P-240E	<1	<1	---	---
Perchloroethene	P-240E	<1	<1	---	---
Carbon tetrachloride	P-240E	<1.4	<1.4	---	---
Toluene	P-240E	<1.4	<1.4	---	---
1,1,1-trichloroethane	P-240E	<1	<1	---	---
Trichloroethene	P-240E	<1	<1	---	---
Chloroform	P-240E	<1	<1	---	---

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)
(continued)

Project Location: Sunshine Canyon
Date Received: February 16, 2018
Date Analyzed: February 16, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppbv)			
Vinyl chloride	P-240E	<1	<1	---	---
m+p-xylenes	P-240E	<1.4	<1.4	---	---
o-xylene	P-240E	<1.4	<1.4	---	---

Five Tedlar bag samples, laboratory numbers 10478-(28-32), were analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 6 repeat measurements from five Tedlar bag samples is 1.2%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☒ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218D35.00 TASK 01

PROJECT MANAGER: RAY AL AYASS

PROJECT NAME: SUNSHINE CANYON

W.O. / S.O. #:

PROJECT LOCATION: SYLMAR CA

SAMPLER NAME AND SIGNATURE:

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC (EPA METHOD 25)	TAC (TABLE 1)	H_2S	CH_4	CO_2	ETHANE	TGNMO			LAB USE ONLY
	P-240E	LFG	2-15-18 12:45 pm	10L TEDLAR	NONE	10478-28	X	X	X	X	X	X	X			
	P-205R-C	LFG	2-15-18 1300 pm	10L TEDLAR	NONE	-29	X	X	X	X	X	X	X			
	P-205R-D	LFG	2-15-18 1315 pm	10L TEDLAR	NONE	-30	X	X	X	X	X	X	X			
	P-205R-E	LFG	2-15-18 1330 pm	10L TEDLAR	NONE	-31	X	X	X	X	X	X	X			
	P-218-B	LFG	2-15-18 1345 pm	10L TEDLAR	NONE	-32	X	X	X	X	X	X	X			

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
COMPANY: SCS-FS	TIME: 2/16/18	COMPANY: SCS	TIME: 2-16-7 10:00	COMPANY:	TIME:	COMPANY: ATMZ	TIME: 2-16-18 10:30

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Sample

Report Date: April 11, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon LF
Project No.: 07218035.00 Task 01
Date Received: March 30, 2018
Date Analyzed: March 30, 2018

AtmAA Lab No.:	10888-13	10898-14
Sample I.D.:	Probe 205R-C	Probe 205R-D
Components	*(Concentration in ppmv)*	
Methane	16000	28900
Carbon dioxide	389000	473000
Ethane	<5	<5
TGNMO	17.9	17.9
Hydrogen sulfide	<0.1	0.54
	(Concentration in ppbv)	
Benzene	5.56	5.95
Benzyl chloride	<4	<4
Chlorobenzene	<4	<4
Dichlorobenzenes*	<6	<6
1,1-dichloroethane	<4	<4
1,2-dichloroethane	<4	<4
1,1-dichloroethylene	<4	<4
Dichloromethane	<4	<4
1,2-dibromoethane	<3	<3
Perchloroethylene	<3	<3
Carbon tetrachloride	<4	<4
Toluene	<4	<4
1,1,1-trichloroethane	<3	<3
Trichloroethene	<3	<3
Chloroform	<3	<3
Vinyl chloride	<3	<3
m+p-xylenes	<4	<4
o-xylene	<4	<4

Methane, ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)

Project Location: Sunshine Canyon LF
Date Received: March 30, 2018
Date Analyzed: March 30, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	Probe 205R-C	16200	15900	16000	0.93
Ethane	Probe 205R-C	<5	<5	---	---
TGNMO	Probe 205R-C	17.3	18.5	17.9	3.4
Hydrogen sulfide	Probe 205R-C	<0.1	<0.1	---	---
	Probe 205R-D	0.53	0.55	0.54	1.8
		(Concentration in ppbv)			
Benzene	Probe 205R-C	5.64	5.48	5.56	1.4
Benzyl chloride	Probe 205R-C	<4	<4	---	---
Chlorobenzene	Probe 205R-C	<4	<4	---	---
Dichlorobenzenes	Probe 205R-C	<6	<6	---	---
1,1-dichloroethane	Probe 205R-C	<4	<4	---	---
1,2-dichloroethane	Probe 205R-C	<4	<4	---	---
1,1-dichloroethylene	Probe 205R-C	<4	<4	---	---
Dichloromethane	Probe 205R-C	<4	<4	---	---
1,2-dibromoethane	Probe 205R-C	<3	<3	---	---
Perchloroethene	Probe 205R-C	<3	<3	---	---
Carbon tetrachloride	Probe 205R-C	<4	<4	---	---
Toluene	Probe 205R-C	<4	<4	---	---
1,1,1-trichloroethane	Probe 205R-C	<3	<3	---	---
Trichloroethene	Probe 205R-C	<3	<3	---	---
Chloroform	Probe 205R-C	<3	<3	---	---
Vinyl chloride	Probe 205R-C	<3	<3	---	---
m+p-xylenes	Probe 205R-C	<4	<4	---	---
o-xylene	Probe 205R-C	<4	<4	---	---

Two Tedlar bag samples, laboratory numbers 10898-(13 & 14), were analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 4 repeat measurements from two Tedlar bag samples is 1.9%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☒ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00 TASK 01

PROJECT MANAGER: RAY ALAYASS

PROJECT NAME: SUNSHINE CLN

W.O. / S.O. #:

PROJECT LOCATION: SYLMAR CA.

SAMPLER NAME AND SIGNATURE:

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC	TRC	H2S	CH4	CO2	ETHANE	TGNMD			LAB USE ONLY
	P205R-C	LFG	3-29-18 1330 PM	10L TEDLAR	NONE	10898-13	X	X	X	X	X	X	X			
	P205R-D	LFG	3-29-18 1345 PM	10L TEDLAR	NONE	14	X	X	X	X	X	X	X			

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
COMPANY: SCS-FS	TIME:	COMPANY: DCS	TIME: 10	COMPANY:	TIME:	COMPANY:	TIME:

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Samples

Report Date: July 6, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon
Project No.: 07218035.00
Date Received: June 29, 2018
Date Analyzed: June 29, 2018

AtmAA Lab No.:	11808-1	11808-2	11808-3
	P-205RC	P-205RD	P-205RE
Components		*(Concentration in ppmv)*	
Methane	19700	29600	19200
Carbon dioxide	445000	476000	398000
Ethane	<5	<5	<5
TGNMO	14.2	10.3	9.50
Hydrogen sulfide	<0.2	<0.2	1.93
		(Concentration in ppbv)	
Benzene	3.82	3.95	1.38
Benzyl chloride	<1.4	<1.4	<1.4
Chlorobenzene	<1.4	<1.4	<1.4
Dichlorobenzenes*	<3	<3	<3
1,1-dichloroethane	<1.4	<1.4	<1.4
1,2-dichloroethane	<1.4	<1.4	<1.4
1,1-dichloroethylene	<1.4	<1.4	<1.4
Dichloromethane	<2	<2	<2
1,2-dibromoethane	<1	<1	<1
Perchloroethylene	<1	<1	<1
Carbon tetrachloride	<1.4	<1.4	<1.4
Toluene	<1.4	<1.4	<1.4
1,1,1-trichloroethane	<1	<1	<1
Trichloroethene	<1	<1	<1
Chloroform	<1	<1	<1
Vinyl chloride	<1	<1	<1
m+p-xylenes	1.47	<1.4	<1.4
o-xylene	<1.4	<1.4	<1.4

Methane was measured by thermal conductivity detection/gas chromatography (TCD/GC), EPA Method 3C.
Ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/ total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY

(Repeat Analyses)

Project Location: Sunshine Canyon
Date Received: June 29, 2018
Date Analyzed: June 29, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	P-205RC	19600	19800	19700	0.51
Ethane	P-205RC	<5	<5	---	---
TGNMO	P-205RC	14.2	14.3	14.2	0.35
Hydrogen sulfide	P-205RE	1.91	1.95	0.97	3.1
		(Concentration in ppbv)			
Benzene	P-205RC	3.70	3.95	3.82	3.3
Benzyl chloride	P-205RC	<1.4	<1.4	---	---
Chlorobenzene	P-205RC	<1.4	<1.4	---	---
Dichlorobenzenes	P-205RC	<3	<3	---	---
1,1-dichloroethane	P-205RC	<1.4	<1.4	---	---
1,2-dichloroethane	P-205RC	<1.4	<1.4	---	---
1,1-dichloroethylene	P-205RC	<1.4	<1.4	---	---
Dichloromethane	P-205RC	<2	<2	---	---
1,2-dibromoethane	P-205RC	<1	<1	---	---
Perchloroethene	P-205RC	<1	<1	---	---
Carbon tetrachloride	P-205RC	<1.4	<1.4	---	---
Toluene	P-205RC	<1.4	<1.4	---	---
1,1,1-trichloroethane	P-205RC	<1	<1	---	---
Trichloroethene	P-205RC	<1	<1	---	---
Chloroform	P-205RC	<1	<1	---	---
Vinyl chloride	P-205RC	<1	<1	---	---
m+p-xylenes	P-205RC	<1.4	1.47	---	---
o-xylene	P-205RC	<1.4	<1.4	---	---

Three Tedlar bag samples, laboratory numbers 11808-(1-3), were analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 4 repeat measurements from two Tedlar bag samples is 1.8%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:
PAGE 1 OF 1
TURNAROUND TIME REQUIRED: ☒ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00
PROJECT MANAGER: RAY AL AYASS
PROJECT NAME: SUNSHINE CANYON
W.O. / S.O. #:
PROJECT LOCATION: SYLMAR, CA
SAMPLER NAME AND SIGNATURE:

ANALYSES REQUESTED

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC	TAC	H2S	CH4	CO2	ETHANE	TGNMOC			LAB USE ONLY
118090 -1	PROBE 205RC	AIR	06-28-18 13:07	10L TEDLAR	NONE		X	X	X	X	X	X	X			
-2																
-2	PROBE 205RD	AIR	06-28-18 13:30	10 L TEDLAR	NONE		X	X	X	X	X	X	X			
-3	PROBE 205RE	AIR	06-28-18 13:40	10 L TEDLAR	NONE		X	X	X	X	X	X	X			

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
COMPANY: SCS	TIME: 1000	COMPANY: DS	TIME:	COMPANY:	TIME:	COMPANY: Afsa AA	TIME: 11:00 6/29/18

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LABORATORY ANALYSIS REPORT

TO-15 Component Analysis in Probe Tedlar Bag Samples, by GC/MS

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Report Date: July 12, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon
Project No.: 07218035.00
Date Received: June 29, 2018
Date Analyzed: June 29, 2018

AtmAA Lab No.:	11808-1	11808-2	11808-3
Sample ID:	Probe 205RC	Probe 205RD	Probe 205RE
Components	(Concentations in ppbv)		
Freon 12	<0.6	<0.6	<0.6
Chloromethane	<0.8	<0.8	<0.8
Freon 114	<0.6	<0.6	<0.6
Vinyl Chloride	<0.6	<0.6	<0.6
1,3-Butadiene	<0.8	<0.8	<0.8
Bromomethane	<0.8	<0.8	<0.8
Chloroethane	<0.6	<0.6	<0.6
Bromoethene	<0.8	<0.8	<0.8
Acetone	61.6	63.0	108
Freon 11	<0.6	<0.6	<0.6
Isopropyl Alcohol	78.6	108	133
1,1-Dichloroethene	<0.8	<0.8	<0.8
Methylene Chloride	<0.8	<0.8	<0.8
3-Chloro-1-Propene	<0.8	<0.8	<0.8
Carbon Disulfide	<0.6	<0.6	<0.6
Freon 113	<0.6	<0.6	<0.6
trans-1,2-Dichloroethene	<0.8	<0.8	<0.8
1,1-Dichloroethane	<0.8	<0.8	<0.8
MTBE	<0.8	<0.8	<0.8
Vinyl Acetate	<1	<1	<1
2-Butanone	<2	<2	<2
cis-1,2-Dichloroethene	<0.8	<0.8	<0.8
n-Hexane	0.94	0.85	<0.8
Chloroform	<0.6	<0.6	<0.6
Ethyl Acetate	<0.8	<0.8	<0.8
Tetrahydrofuran	<0.8	<0.8	<0.8
1,2-Dichloroethane	<0.8	<0.8	<0.8
1,1,1-Trichloroethane	<0.6	<0.6	<0.6
Benzene	3.82	3.95	1.38
Carbon Tetrachloride	<0.6	<0.6	<0.6
Cyclohexane	<0.8	<0.8	<0.8
1,2-Dichloropropane	<0.8	<0.8	<0.8
Bromodichloromethane	<0.8	<0.8	<0.8
Trichloroethene	<0.6	<0.6	<0.6
1,4-Dioxane	<0.8	<0.8	<0.8
2,2,4-Trimethyl Pentane	<0.8	<0.8	<0.8
n-Heptane	<0.8	<0.8	<0.8
cis-1,3-Dichloropropene	<0.8	<0.8	<0.8
4-Methyl-2-pentanone	<0.8	<0.8	<0.8
trans-1,3-Dichloropropene	<0.8	<0.8	<0.8
1,1-2-Trichloroethane	<0.8	<0.8	<0.8
Toluene	0.98	1.22	1.06
2-Hexanone	<0.8	<0.8	<0.8
Dibromochloromethane	<0.6	<0.6	<0.6
1,2-Dibromomethane	<0.6	<0.6	<0.6
Tetrachloroethene	<0.6	<0.6	<0.6
Chlorobenzene	<0.8	<0.8	<0.8
Ethylbenzene	<0.6	<0.6	<0.6
m,p-Xylene	1.36	1.01	1.20
Bromoform	<0.6	<0.6	<0.6
Styrene	<0.6	<0.6	<0.6
1,1,2,2-Tetrachloroethane	<0.6	<0.6	<0.6
o-Xylene	1.18	0.78	1.01
Benzyl Chloride	<0.8	<0.8	<0.8
4-Ethyl Toluene	<0.6	<0.6	<0.6
1,3,5-Trimethyl Benzene	<0.6	<0.6	<0.6
1,2,4-Trimethyl Benzene	0.67	0.69	0.65
1,3-Dichlorobenzene	<0.6	<0.6	<0.6
1,4-Dichlorobenzene	<0.6	<0.6	<0.6
1,2-Dichlorobenzene	<0.6	<0.6	<0.6
1,2,4-Trichlorobenzene	<0.8	<0.8	<0.8
Hexachlorobutadiene	<0.6	<0.6	<0.6

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)

Project Location: Sunshine Canyon
Date Received: June 29, 2018
Date Analyzed: June 29, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppbv)			
Freon-12	Probe 205RC	<0.6	<0.6	---	---
Chloromethane	Probe 205RC	<0.8	<0.8	---	---
Freon 114	Probe 205RC	<0.6	<0.6	---	---
Vinyl Chloride	Probe 205RC	<0.6	<0.6	---	---
1,3-Butadiene	Probe 205RC	<0.8	<0.8	---	---
Bromomethane	Probe 205RC	<0.8	<0.8	---	---
Chloroethane	Probe 205RC	<0.6	<0.6	---	---
Bromoethene	Probe 205RC	<0.8	<0.8	---	---
Acetone	Probe 205RC	56.1	67.2	61.6	9.0
Freon 11	Probe 205RC	<0.6	<0.6	---	---
Isopropyl Alcohol	Probe 205RC	73.8	83.5	78.6	6.2
1,1-Dichloroethene	Probe 205RC	<0.8	<0.8	---	---
Methylene Chloride	Probe 205RC	<0.8	<0.8	---	---
3-Chloro-1-Propene	Probe 205RC	<0.8	<0.8	---	---
Carbon Disulfide	Probe 205RC	<0.6	<0.6	---	---
Freon 113	Probe 205RC	<0.6	<0.6	---	---
trans-1,2-Dichloroethene	Probe 205RC	<0.8	<0.8	---	---
1,1-Dichloroethane	Probe 205RC	<0.8	<0.8	---	---
MTBE	Probe 205RC	<0.8	<0.8	---	---
Vinyl Acetate	Probe 205RC	<1	<1	---	---
2-Butanone	Probe 205RC	<2	<2	---	---

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)
(continued)

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppbv)			
cis-1,2-Dichloroethene	Probe 205RC	<0.8	<0.8	---	---
n-Hexane	Probe 205RC	0.85	1.02	0.94	9.1
Chloroform	Probe 205RC	<0.6	<0.6	---	---
Ethyl Acetate	Probe 205RC	<0.8	<0.8	---	---
Tetrahydrofuran	Probe 205RC	<0.8	<0.8	---	---
1,2-Dichloroethane	Probe 205RC	<0.8	<0.8	---	---
1,1,1-Trichloroethane	Probe 205RC	<0.6	<0.6	---	---
Benzene	Probe 205RC	3.70	3.95	3.82	3.3
Carbon Tetrachloride	Probe 205RC	<0.6	<0.6	---	---
Cyclohexane	Probe 205RC	<0.8	<0.8	---	---
1,2-Dichloropropane	Probe 205RC	<0.8	<0.8	---	---
Bromodichloromethane	Probe 205RC	<0.8	<0.8	---	---
Trichloroethene	Probe 205RC	<0.6	<0.6	---	---
1,4-Dioxane	Probe 205RC	<0.8	<0.8	---	---
2,2,4-Trimethyl Pentane	Probe 205RC	<0.8	<0.8	---	---
n-Heptane	Probe 205RC	<0.8	<0.8	---	---
cis-1,3-Dichloropropene	Probe 205RC	<0.8	<0.8	---	---
4-Methyl-2-pentanone	Probe 205RC	<0.8	<0.8	---	---
trans-1,3-Dichloropropene	Probe 205RC	<0.8	<0.8	---	---
1,1-2-Trichloroethane	Probe 205RC	<0.8	<0.8	---	---
Toluene	Probe 205RC	0.96	1.01	0.98	2.5
2-Hexanone	Probe 205RC	<0.8	<0.8	---	---

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)
(continued)

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppbv)			
Dibromochloromethane	Probe 205RC	<0.6	<0.6	---	---
1,2-Dibromomethane	Probe 205RC	<0.6	<0.6	---	---
Tetrachloroethene	Probe 205RC	<0.6	<0.6	---	---
Chlorobenzene	Probe 205RC	<0.8	<0.8	---	---
Ethylbenzene	Probe 205RC	<0.6	<0.6	---	---
m,p-Xylene	Probe 205RC	1.24	1.47	1.36	8.5
Bromoform	Probe 205RC	<0.6	<0.6	---	---
Styrene	Probe 205RC	<0.6	<0.6	---	---
1,1,2,2-Tetrachloroethane	Probe 205RC	<0.6	<0.6	---	---
o-Xylene	Probe 205RC	1.20	1.15	1.18	2.1
Benzyl Chloride	Probe 205RC	<0.8	<0.8	---	---
4-Ethyl Toluene	Probe 205RC	<0.6	<0.6	---	---
1,3,5-Trimethyl Benzene	Probe 205RC	<0.6	<0.6	---	---
1,2,4-Trimethyl Benzene	Probe 205RC	0.69	0.65	0.67	3.0
1,3-Dichlorobenzene	Probe 205RC	<0.6	<0.6	---	---
1,4-Dichlorobenzene	Probe 205RC	<0.6	<0.6	---	---
1,2-Dichlorobenzene	Probe 205RC	<0.6	<0.6	---	---
1,2,4-Trichlorobenzene	Probe 205RC	<0.8	<0.8	---	---
Hexachlorobutadiene	Probe 205RC	<0.6	<0.6	---	---

Three Tedlar bag samples, laboratory numbers 11808-(1-3), were analyzed for TO-15 components y GC/MS. Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 8 repeat measurements from the three Tedlar bag samples is 5.5%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☒ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00

PROJECT MANAGER: RAY AL AYASS

PROJECT NAME: SUNSHINE CANYON

W.O. / S.O. #:

PROJECT LOCATION: SYLMAR, CA

SAMPLER NAME AND SIGNATURE:

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC	TAC	H_2S	CH_4	CO_2	ETHANE	TGNMOC			LAB USE ONLY
1180080-1	PROBE 205RC	AIR	06-28-18 13:07	10L TEDLAR	NONE		X	X	X	X	X	X	X			
-2	PROBE 205RD	AIR	06-28-18 13:30	10L TEDLAR	NONE		X	X	X	X	X	X	X			
-3	PROBE 205RE	AIR	06-28-18 13:40	10L TEDLAR	NONE		X	X	X	X	X	X	X			

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
COMPANY: SCS	TIME: 1000	COMPANY: DOS	TIME:	COMPANY:	TIME:	COMPANY: Alpha	TIME: 11:00 6/29/18

FORM NO. 107 REV. 3/14 TWIN CONCEPTS

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Samples

Report Date: August 6, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon
Project No.: 07218035.00
Date Received: July 27, 2018
Date Analyzed: July 27-30, 2018

AtmAA Lab No.:	12088-10	12088-11	12088-12	12088-13
	P-205R-C	P-205R-D	P-205R-E	P-220B-B
Components		*(Concentration in ppmv)*		
Methane	19500	27400	18800	74.1
Carbon dioxide	446000	472000	387000	90600
Ethane	<5	<5	<5	<1
TGNMO	14.2	14.7	12.2	6.01
Hydrogen sulfide	<0.1	<0.1	1.26	<0.1
		(Concentration in ppbv)		
Benzene	5.42	5.14	1.82	<1
Benzyl chloride	<1.4	<1.4	<1.4	<1.4
Chlorobenzene	<1.4	<1.4	<1.4	<1.4
Dichlorobenzenes*	3.69	3.39	3.36	<3
1,1-dichloroethane	<1.4	<1.4	<1.4	<1.4
1,2-dichloroethane	<1.4	<1.4	<1.4	<1.4
1,1-dichloroethylene	<1.4	<1.4	<1.4	<1.4
Dichloromethane	<2	<2	<2	<2
1,2-dibromoethane	<1	<1	<1	<1
Perchloroethylene	<1	<1	<1	2.39
Carbon tetrachloride	<1.4	<1.4	<1.4	<1.4
Toluene	2.58	2.55	2.23	1.40
1,1,1-trichloroethane	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Vinyl chloride	<1	<1	<1	<1
m+p-xylenes	3.09	2.53	3.00	<1.4
o-xylene	1.62	<1.4	<1.4	<1.4

Methane was measured by thermal conductivity detection/gas chromatography (TCD/GC), EPA Method 3C.
Ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/ total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY

(Repeat Analyses)

Project Location: Sunshine Canyon
Date Received: July 27, 2018
Date Analyzed: July 27-30, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	P-205R-C	19600	19400	19500	0.51
Ethane	P-205R-C	<5	<5	---	---
TGNMO	P-205R-C	14.0	14.4	14.2	1.4
Hydrogen sulfide	P-205R-C	<0.1	<0.1	---	---
	P-205R-E	1.23	1.30	1.26	2.8
	P-220B-B	<0.1	<0.1	---	---
		(Concentration in ppbv)			
Benzene	P-205R-C	5.51	5.32	5.42	1.8
Benzyl chloride	P-205R-C	<1.4	<1.4	---	---
Chlorobenzene	P-205R-C	<1.4	<1.4	---	---
Dichlorobenzenes	P-205R-C	3.59	3.79	3.69	2.7
1,1-dichloroethane	P-205R-C	<1.4	<1.4	---	---
1,2-dichloroethane	P-205R-C	<1.4	<1.4	---	---
1,1-dichloroethylene	P-205R-C	<1.4	<1.4	---	---
Dichloromethane	P-205R-C	<2	<2	---	---
1,2-dibromoethane	P-205R-C	<1	<1	---	---
Perchloroethene	P-205R-C	<1	<1	---	---
Carbon tetrachloride	P-205R-C	<1.4	<1.4	---	---
Toluene	P-205R-C	2.28	2.87	2.58	11
1,1,1-trichloroethane	P-205R-C	<1	<1	---	---
Trichloroethene	P-205R-C	<1	<1	---	---
Chloroform	P-205R-C	<1	<1	---	---
Vinyl chloride	P-205R-C	<1	<1	---	---
m+p-xylenes	P-205R-C	3.23	2.95	3.09	4.5
o-xylene	P-205R-C	1.84	1.40	1.62	14

Four Tedlar bag samples, laboratory numbers 12088-(10-13), were analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 8 repeat measurements from four Tedlar bag samples is 4.8%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☑ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00

PROJECT MANAGER: Ray Al Ayass

PROJECT NAME: Sunshine Canyon

W.O. / S.O. #:

PROJECT LOCATION: Sylmar, CA

SAMPLER NAME AND SIGNATURE: Saulo DIAZ -

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC	TAC	H_2S	CH_4	CO_2	Ethane	TGNMO			LAB USE ONLY
	Probe 205R-C	AIR	07/26/18 @ 1400 HRS	10L TEDLAR	NONE		X	X	X	X	X	X	X			120558-10
	Probe 205R-D	AIR	07/26/18 @ 1415 HRS	10L TEDLAR	NONE		X	X	X	X	X	X	X			-11
	Probe 205R-E	AIR	07/26/18 @ 1425 HRS	10L TEDLAR	NONE		X	X	X	X	X	X	X			-12
	Probe 220B-B	AIR	07/26/18 @ 1500 HRS	10L TEDLAR	NONE		X	X	X	X	X	X	X			-13

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
	7/27/18						7/27/18
COMPANY: SCS	TIME: 1000	COMPANY:	TIME:	COMPANY:	TIME:	COMPANY: ATMAH	TIME:

FORM NO. 107 REV. 3/14 TWIN CONCEPTS

AtmAA Inc.
23917 Craftsman Rd., Calabasas, CA 91302 • (818) 223-3277 • FAX (818) 223-8250

environmental consultants
laboratory services
atmaa.com

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Samples

Report Date: September 4, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon
Project No.: 07218035.00
Date Received: August 24, 2018
Date Analyzed: August 24, 2018

AtmAA Lab No.:	12368-3	12368-4	12368-5	12368-6
	P-205R-B	P-205R-C	P-205R-D	P-205R-E
Components		*(Concentration in ppmv)*		
Methane	11600	19800	27200	19400
Carbon dioxide	313000	452000	474000	392000
Ethane	<5	<5	<5	<1
TGNMO	7.51	7.97	7.41	7.44
Hydrogen sulfide	0.17	<0.1	<0.1	1.05
		(Concentration in ppbv)		
Benzene	3.35	5.95	5.26	2.94
Benzyl chloride	<1.4	<1.4	<1.4	<1.4
Chlorobenzene	<1.4	<1.4	<1.4	<1.4
Dichlorobenzenes*	3.54	<3	3.33	3.79
1,1-dichloroethane	<1.4	<1.4	<1.4	<1.4
1,2-dichloroethane	<1.4	<1.4	<1.4	<1.4
1,1-dichloroethylene	<1.4	<1.4	<1.4	<1.4
Dichloromethane	<2	<2	<2	<2
1,2-dibromoethane	<1	<1	<1	<1
Perchloroethylene	<1	<1	<1	<1
Carbon tetrachloride	<1.4	<1.4	<1.4	<1.4
Toluene	2.66	1.91	2.34	2.02
1,1,1-trichloroethane	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Vinyl chloride	<1	<1	<1	<1
m+p-xylenes	2.70	1.75	1.89	1.82
o-xylene	1.66	1.43	<1.4	<1.4

Methane was measured by thermal conductivity detection/gas chromatography (TCD/GC), EPA Method 3C.
Ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/ total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Eung
Laboratory Director

QUALITY ASSURANCE SUMMARY

(Repeat Analyses)

Project Location: Sunshine Canyon
Date Received: August 24, 2018
Date Analyzed: August 24, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	P-205R-B	11600	11600	11600	0.0
Ethane	P-205R-B	<5	<5	---	---
TGNMO	P-205R-B	7.79	7.23	7.51	3.7
Hydrogen sulfide	P-205R-B	0.17	0.17	0.17	0.0
	P-205R-C	<0.1	<0.1	---	---
	P-205R-D	<0.1	<0.1	---	---
	P-205R-E	1.06	1.04	1.05	0.95
		(Concentration in ppbv)			
Benzene	P-205R-B	3.51	3.19	3.35	4.8
Benzyl chloride	P-205R-B	<1.4	<1.4	---	---
Chlorobenzene	P-205R-B	<1.4	<1.4	---	---
Dichlorobenzenes	P-205R-B	3.36	3.73	3.54	5.2
1,1-dichloroethane	P-205R-B	<1.4	<1.4	---	---
1,2-dichloroethane	P-205R-B	<1.4	<1.4	---	---
1,1-dichloroethylene	P-205R-B	<1.4	<1.4	---	---
Dichloromethane	P-205R-B	<2	<2	---	---
1,2-dibromoethane	P-205R-B	<1	<1	---	---
Perchloroethene	P-205R-B	<1	<1	---	---
Carbon tetrachloride	P-205R-B	<1.4	<1.4	---	---
Toluene	P-205R-B	2.50	2.81	2.66	5.8
1,1,1-trichloroethane	P-205R-B	<1	<1	---	---
Trichloroethene	P-205R-B	<1	<1	---	---
Chloroform	P-205R-B	<1	<1	---	---
Vinyl chloride	P-205R-B	<1	<1	---	---
m+p-xylenes	P-205R-B	2.49	2.90	2.70	7.6
o-xylene	P-205R-B	1.57	1.75	1.66	5.4

Four Tedlar bag samples, laboratory numbers 12368-(3-6), were analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 9 repeat measurements from four Tedlar bag samples is 3.7%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☑ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00

PROJECT MANAGER: Ray Al Ayass

PROJECT NAME: Sunshine Canyon

W.O. / S.O. #:

PROJECT LOCATION: Sylmar, CA

SAMPLER NAME AND SIGNATURE: Saulo DIAZ - [signature]

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC	TAC	H_2S	CH_4	CO_2	Ethane	TGNMO			LAB USE ONLY
12368-3	Probe 205R-B	AIR	08/23/18 @ 1400	10L TEDLAR	NONE		X	X	X	X	X	X	X			
-4	Probe 205R-C	AIR	08/23/18 @ 1410	10L TEDLAR	NONE		X	X	X	X	X	X	X			
-5	Probe 205R-D	AIR	08/23/18 @ 1420	10L TEDLAR	NONE		X	X	X	X	X	X	X			
-6	Probe 205R-E	AIR	08/23/18 @ 1430	10L TEDLAR	NONE		X	X	X	X	X	X	X			

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
[signature]	8-24-18	[signature]	8-24-18			[signature]	8/24/18
COMPANY:	TIME:	COMPANY:	TIME: 1010	COMPANY:	TIME:	COMPANY:	TIME:

FORM NO. 107 REV. 3/14 TWIN CONCEPTS

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environmental consultants
laboratory services
atmaa.com

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Samples

Report Date: October 11, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon
Project No.: 07218035.00
Date Received: September 28, 2018
Date Analyzed: September 28 & 29, 2018

AtmAA Lab No.:	12718-8	12718-9	12718-10
	P 205R-C	P 205R-D	P 205R-E
Components	*(Concentration in ppmv)*		
Methane	19000	26900	16500
Carbon dioxide	442000	475000	374000
Ethane	<5	<5	<5
TGNMO	12.0	12.1	8.58
Hydrogen sulfide	<0.1	<0.1	1.38
	(Concentration in ppbv)		
Benzene	3.92	4.20	1.75
Benzyl chloride	<1.4	<1.4	<1.4
Chlorobenzene	<1.4	<1.4	<1.4
Dichlorobenzenes*	2.90	3.69	3.56
1,1-dichloroethane	<1.4	<1.4	<1.4
1,2-dichloroethane	<1.4	<1.4	<1.4
1,1-dichloroethylene	<1.4	<1.4	<1.4
Dichloromethane	<2	<2	<2
1,2-dibromoethane	<1	<1	<1
Perchloroethylene	<1	<1	<1
Carbon tetrachloride	<1.4	<1.4	<1.4
Toluene	1.99	2.71	2.34
1,1,1-trichloroethane	<1	<1	<1
Trichloroethene	<1	<1	<1
Chloroform	<1	<1	<1
Vinyl chloride	<1	<1	<1
m+p-xylenes	1.52	1.57	<1.4
o-xylene	<1.4	<1.4	<1.4

Methane was measured by thermal conductivity detection/gas chromatography (TCD/GC), EPA Method 3C.
Ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/ total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY

(Repeat Analyses)

Project Location: Sunshine Canyon
Date Received: September 28, 2018
Date Analyzed: September 28 & 29, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	P 205R-C	19000	19000	19000	0.0
Ethane	P 205R-C	<5	<5	---	---
TGNMO	P 205R-C	11.9	12.1	12.0	0.83
Hydrogen sulfide	P 205R-C	<0.1	<0.1	---	---
	P 205R-E	1.36	1.39	1.38	1.1
		(Concentration in ppbv)			
Benzene	P 205R-C	3.88	3.95	3.92	0.89
Benzyl chloride	P 205R-C	<1.4	<1.4	---	---
Chlorobenzene	P 205R-C	<1.4	<1.4	---	---
Dichlorobenzenes	P 205R-C	2.90	2.90	2.90	0.0
1,1-dichloroethane	P 205R-C	<1.4	<1.4	---	---
1,2-dichloroethane	P 205R-C	<1.4	<1.4	---	---
1,1-dichloroethylene	P 205R-C	<1.4	<1.4	---	---
Dichloromethane	P 205R-C	<2	<2	---	---
1,2-dibromoethane	P 205R-C	<1	<1	---	---
Perchloroethene	P 205R-C	<1	<1	---	---
Carbon tetrachloride	P 205R-C	<1.4	<1.4	---	---
Toluene	P 205R-C	2.02	1.96	1.99	1.5
1,1,1-trichloroethane	P 205R-C	<1	<1	---	---
Trichloroethene	P 205R-C	<1	<1	---	---
Chloroform	P 205R-C	<1	<1	---	---
Vinyl chloride	P 205R-C	<1	<1	---	---
m+p-xylenes	P 205R-C	1.52	1.52	1.52	0.0
o-xylene	P 205R-C	<1.4	<1.4	---	---

Three Tedlar bag samples, laboratory numbers 12718-(8-10), were analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 7 repeat measurements from two Tedlar bag samples is 0.62%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES: 3

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☒ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00

PROJECT MANAGER: RAY AL AYASS

PROJECT NAME: SUNSHINE CANYON LANDFILL

W.O. / S.O. #:

PROJECT LOCATION: SYLMAR, CA

SAMPLER NAME AND SIGNATURE:

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC	TAC	H2S	CH4	CO2	ETHANE	TGNMOC			LAB USE ONLY
12718-8	PROBE 205R-C	AIR	9-27-18 @ 13:05 HRS	10 L TEDLAR	NONE		X	X	X	X	X	X	X			
-9 -10	PROBE 205R-D	AIR	9-27-18 @ 13:15 HRS	10 L TEDLAR	NONE		X	X	X	X	X	X	X			
	PROBE 205 R-E	AIR	9-27-18 @ 13:20 HRS	10 L TEDLAR	NONE		X	X	X	X	X	X	X			

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
COMPANY: SCS	TIME: 1018	COMPANY: SCS	TIME: 1012	COMPANY:	TIME:	COMPANY:	TIME: 9-28-17 11:50

FORM NO. 107 REV. 3/14 TWIN CONCEPTS

ATTACHMENT D

DOGGR WELL RECORDS

PROPERTY/WELL TRANSFER OR ACQUISTION

TEXACO E. & P. INC. – T1600

TO

CHEVRONTEXACO EXPL. & PROD., CO. – C5680

TRANSFER EFFECTIVE AUGUST 22, 2002

CHEVRONTEXACO EXPL. & PROD., CO. – C5680

TO

CHEVRON U.S.A. INC. – C5640

TRANSFER EFFECTIVE JULY 11, 2005

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF WELL PLUGGING AND RE-ABANDONMENT

Ventura, California

July 8, 1997

Cheryl S. Grayson
Grayson Services, Inc.
4004 S. Enos Lane
Bakersfield, CA 93312

Your report of the plugging and re-abandonment of well Texaco, Inc. "Eadie" 1,

A.P.I. No. 037-06077, Section 23, T. 3N, R. 16W, SBB.& M.,

---- field, Los Angeles County,

dated June 23, 1997, received June 25, 1997, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and the filing of well records.

William F. Guerard, Jr
State Oil and Gas Supervisor

By
Patrick J. Kinnear
Deputy Supervisor

tkc

cc: Update

Modified OG159 (4/94)

OPERATOR Texaco

WELL NO. "Eadie" 1

MAP

A.P.I. 037-06077

SECTION 23, T. 3 N, R. 16 W

INTENTION	Supp. Abd.	Supp. Abd.	Supp. Abd.			
NOTICE DATED	—	9-16-93	6-2-97			
P-REPORT NUMBER	292.068	293.349	[illegible]			
CHECKED BY/DATE						
MAP LETTER DATED						
SYMBOL			NO *			

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	3-6-93		9-20-93		6-11-97							
HISTORY					6-25-97							
SUMMARY												
E-LOG												
MUD LOG												
DIPMETER												
DIRECTIONAL												
CORE/SWS												
CBL												

ENGINEERING CHECK

T-REPORTS			✓			
OPERATOR'S NAME			✓			
WELL NO.			✓			
LOC & ELEV			✓			
SIGNATURE			✓			
SURFACE INSP.			OK			
DRILL CARD						
RECORD'S COMPLETE			SB			

FINAL LETTER OK

MAILED

RELEASED BOND

INJECTION BOOK

IDLE WELL LIST

SURFACE INSP. CARD

REMARKS: * COORDINATES NOT COMPATIBLE WITH MAP GRID.

OK TO RELEASE FROM CONFIDENTIAL

ABANDONED-REMOVED FROM E.D.P.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. T297-129

Report on Operations

Cheryl S. Grayson
GRAYSON SERVICES, INC.
4004 S. Enos Lane
Bakersfield, CA 93312

Ventura, California
July 8, 1997

Texaco, Inc.
Your operations at well "Eadie" 1, API No. 037-06077, Sec. 23, T. 3N, R. 16W, S.B. B.&M. ---------- Field, in Los Angeles County, were witnessed on 6-10-97. Steve Mulqueen, representative of the supervisor, was present from 1000 to 1200. There were also present Bob Grayson, Jr.
Present condition of well: 11 3/4" cem 500'. TD 8011'. Plugged w/ cem 850'-766', 530'-400' & 200'-5'.

The operations were performed for the purpose of re-abandonment.

DECISION:

The plugging operations as witnessed and reported are approved.

tkc

William F. Guerard, Jr.
State Oil and Gas Supervisor

By

Patrick J. Kinnear
Deputy Supervisor

OG109 (Modified 1993)

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

5 T129

CEMENTING/PLUGGING MEMO

Texaco, Inc.

Operator GRAYSON SERVICES, INC. Well No. "Eddie" 1
API No. 037 - 06077 Sec. 23, T. 3N, R. 16W, SB B&M
Field —, County LOS ANGELES. On 6-10-97,
Mr. ~~Ms.~~ STEVE MULQUEEN, representative of the supervisor, was present from 1000 to 1200.
There were also present BOB GRAYSON, JR.
Casing record of well: 11 3/4" cem 500'. TD 8011. Plugged w/ cem 850'-766', 530'-400' & 200'-5'.

The operations were performed for the purpose of RE-ABANDONMENT

☐ The plugging/cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____' are approved.

Hole size: _____" fr. _____' to _____', _____" to _____' & _____" to _____'

Casing				Cemented			Top of Fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			

Casing/tubing recovered: _____" shot/cut at _____', _____', _____' pulled fr. _____';
_____" shot/cut at _____', _____', _____' pulled fr. _____'.

Junk (in hole): _____

Hole fluid (bailed to) at _____'. Witnessed by _____

Mudding	Date	bbls.	Displaced	Poured	Fill	Engr.
CLAY GEL (OLD THICK MUD)	6-9-97	—			CIRCULATED TO SURFACE	SPM

CLEAN OUT TO 205'

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engr.	Depth	Wt/Sample	Date & Time	Engr.
6-9-97	140 cf	TBG @ 200'	1500	SPM	5'	VISUAL	6/10 1100	SPM

OGD10 (11/93/GSR1/5M)

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

HISTORY OF OIL OR GAS WELL

Operator Grayson Service Inc. Field Newhall County Los Angeles
Well Eadie #1, Sec. 23, T 3N, R 16W, MD B. & M.
A.P.I. No. 037-06077 Name Bob Grayson (Person submitting report) Title V. Pres. (President, Secretary, or Agent)
Date 6/23/97, 19

Signature Bob Grayson

4004 S. Enos Lane Bakersfield, Calif. 93312 (Address) (805) 589-5444 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Date	
6/6/97	(Make Location) M.I.R.U. Installed well head and B.O.P.E. Drilled with 6" bit 2'to 12' in cement, broke thru cement. Cleaned out mud 12' to 40'. P.O.H. Changed out to 9 7/8" bit. Clean out to 40'. Closed well in.
6/9/97	R.I.H. and clean out to 205'. Circulated with water. Drill pipe @ 200'. Mix and pump 140 cubic feet of neat cement with returns to surface.
6/10/97	Cut off casing @ 5' Weld on steel plate and back fill.

RECEIVED
JUN 25 1997
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

Kenyon Engineering, Inc.
ENGINEERING • PLANNING • SURVEYING
12138 INDUSTRIAL BLVD., SUITE 240
VICTORVILLE, CA 92392
(619) 241-6146
FAX: (619) 241-0566

RECEIVED JUN 16 1997

June 12, 1997

BROWNING FERRIS INDUSTRIES
ATTN: BRAD COOLEY
14747 San Fernando Road
Sylmar, CA 91342

RE: OIL WELLS

Dear Brad:

Pursuant to our conversation here are the coordinates and elevations for the capped oil wells.

OIL WELL IN NORTH CANYON	PADUA # 1	OIL WELL AT TOP OF CUT	EADIE # 1
N 33534.11		N 33093.26	
E 32508.41		E 29181.64	
EL 1686.10		EL 2132.46	

If you should have any questions pertaining to the above please feel free to contact our office.

Thank you!

Sincerely,
KENYON ENGINEERING, INC.

Craig L. Johnson
Project Manager

CLJ:cb

RECEIVED JUN 25 1997
DIVISION OF GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. P297-226

PERMIT TO CONDUCT WELL OPERATIONS

(field code)

(area code)

(new pool code

(old pool code)

Cheryl S. Grayson
Grayson Services, Inc.
4004 S. Enos Lane
Bakersfield, CA. 93312

Ventura, California
June 13, 1997

Your supplementary proposal to abandon well Texaco Inc. "Eadie" 1, A.P.I. No. 037-06077, Section 23, T. 3N, R. 16W, S.B. B.&M., ---------- field, ---------- area, ---------- pool, Los Angeles County, dated 6/2/97, received 6/11/97, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. THIS DIVISION SHALL BE NOTIFIED:
   a. To witness cementing operations.

SAF:sf

Engineer Steven A. Fields

Phone (805) 654-4761

William F. Guerard, Jr.
State Oil and Gas Supervisor

By

Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (Modified 1993)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY			
BOND	FORMS		EDP WELL FILE
	OGD114	OGD121	
		✓	

A notice to the Division of Oil and Gas dated FEB 28, 19 92, stating the intention to

ABANDON (Drill, rework, abandon) well TEXACO INC. EADIE #1 (Well designation), API No. 037-06077,

Sec. 23, T. 3N, R. 16W, _____ B.& M., NEWHALL Field,

LOS ANGELES County, should be amended because of changed conditions.

1. The complete casing record of the well (present hole), including plugs and perforations, is as follows:

11 3/4" CASING TO 500'

PLUGGED WITH CEMENT 850'-766', 530'-400', 15'-5'

2. The total depth is: 8011 feet. The effective depth is: _____ feet.

3. Present completion zone (s): _____ (Name). Anticipated completion zone (s): _____ (Name).

4. Present zone pressure: _____ psi. Anticipated/existing new zone pressure: _____ psi.

We now propose: *(A complete program is preferred and may be attached.)*

1. M.I.R.U.
2. DRILL OUT SURFACE PLUG FROM 15'-5'.
3. PLUG WITH CEMENT FROM 200' TO SURFACE.
4. WELD ON STEEL PLATE.

RECEIVED
JUN 11 1997
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

Note: If the well is to be redrilled, show proposed bottom-hole coordinates and estimated true vertical depth.
The Division must be notified if changes to this plan become necessary.

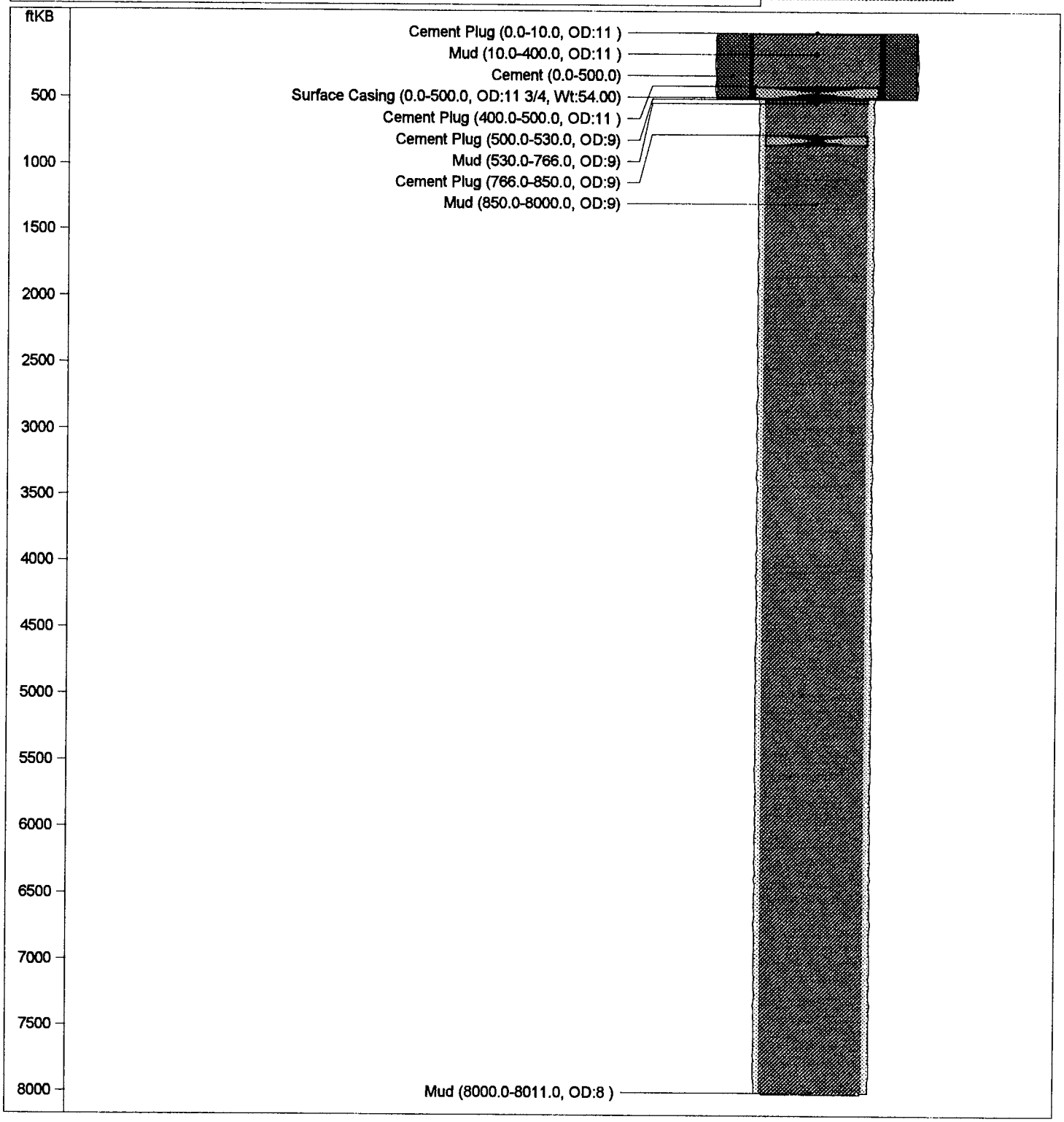
Name of Operator	Telephone Number	
GRAYSON SERVICE INC.	(805) 399-6300	
Address	City	Zip Code
4004 S. ENOS LANE	BAKERSFIELD	93312
Name of Person Filing Notice	Signature	Date
BOB GRAYSON	Bob Grayson	6-2-97

File In Duplicate

OG123 (3/90/GSR1/5M)

04037060770000	
Well Name	EADIE 1
Operator	TEXACO E & P INC
Field Name	ANY FIELD
TD	8011.0 ftKB
PBTD	0.0 ftKB
Approval Date	22-Jul-53
Spud Date	16-Aug-53
TD Date	13-Nov-53
Production Date	
Injection Date	
P/A Date	13-Nov-53

Division of Oil & Gas Conservation



6/2/97

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

REPORT OF CORRECTION OR CANCELLATION

Ventura, California

October 24, 1996

Brand Burfield
PRA Group
2495 Industrial Parkway West
Hayward, CA 94545

In accordance with Division 3 of the Public Resources Code, Section 3202 - If operations have not commenced within one year of receipt of the notice, the notice will be considered canceled.

the following changes pertaining to your well Texaco Inc. "Eadie" 1 (Well Designation)
---------- field, Los Angeles County,

Sec. 23, T. 3N, R. 16W, S.B. B.&M., is being made in our records:

__ The corrected location is _____

__ The corrected elevation _____

__ Report No. _____, dated _____, has been corrected as follows:

XX Your notice to abandon (Drill, abandon, etc.) dated September 16, 1993 and our report No. P293-349 issued in answer thereto, are hereby canceled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

__ Other: _____

tkc

William F. Guerard, Jr.
State Oil and Gas Supervisor

By _____
Patrick J. Kinnear
Deputy Supervisor

OG165 (Modified 6/94)

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

WELL STATUS INQUIRY

Ventura, California

September 28, 1994

Brand Burfield
PRA Group
2495 Industrial Parkway West
Hayward, CA 94545

In a notice dated September 16, 1993, you propose to abandon well Texaco, Inc. "Eadie" 1 (037-06077)
Sec. 23, T. 3N, R. 16W, S.B. B. & M., Los Angeles County.

Please indicate below, conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

svl

William F. Guerard, Jr.
State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

_____ **PROPOSED WORK HAS BEEN DONE.** (If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.*)

_____ **PROPOSED WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT** _____ 19___

_____ **PROPOSED WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.****

_____ **SUPPLEMENTARY NOTICE (Form OG 123) Attached).**

_____ **PLEASE CONSIDER THIS FORM AS A SUPPLEMENTARY NOTICE.**

_____ **WE DO NOT INTEND TO DO THE PROPOSED WORK.** Please cancel our notice to _____, dated _____ 19___.

_____ **OTHER:** _____

_____
(Signature)

_____
(Name and Title) (Date)

* Division 3 of the Public Resources Code states in part:
Section 3215...Well records shall be filed 60 days after completion or suspension of proposed work.

** Section 3203...If operations have not commenced within one year or receipt of the notice, the notice will be considered canceled.
(To prevent cancellation, file a Supplementary Notice with the division)

ODG3 (modified 9/93)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. P293-349

PERMIT TO CONDUCT WELL OPERATIONS

--
(field code)
--
(area code)
--
(new pool code
--
(old pool code)

Brand Burfield
PRA GROUP
2495 Industrial Parkway West
Hayward, CA. 94545

Ventura, California
September 22, 1993

Your supplementary proposal to abandon well Texaco, Inc. "Eadie" 1, A.P.I. No. 037-06077, Section 23, T. 3N, R. 16W, S.B. B.&M., --- field, --- area, --- pool, Los Angeles County, dated 9/16/93, received 9/20/93, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P292-068, dated March 11, 1992 shall apply.

cc: Texaco, Inc.

NO BOND REQUIRED

Engineer Steven A. Fields

Phone (805) 654-4761

William F. Guerard, Jr.
State Oil and Gas Supervisor

By

Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (Modified 1993)

344

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES
WELL STATUS INQUIRY

Ventura, California

September 14, 1993

Brand Burfield
PRA GROUP
2495 Industrial Parkway West
Hayward, CA. 94545

In a notice not dated, you propose to reabandon
Texaco E&P Inc. "Edie" 1 (037-06077) Sec. 23, T. 3N, R. 16W, S.B. B.& M.,
Los Angeles County.

Please indicate below, conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

William F. Guerard, Jr.
State Oil and Gas Supervisor

By _____
Patrick J. Kinnear
Deputy Supervisor

_____ **PROPOSED WORK HAS BEEN DONE.** (If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.*)

_____ **PROPOSED WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT** _____ 19___

X **PROPOSED WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.****

_____ **SUPPLEMENTARY NOTICE (Form OG 123) Attached).**

X **PLEASE CONSIDER THIS FORM AS A SUPPLEMENTARY NOTICE.**

_____ **WE DO NOT INTEND TO DO THE PROPOSED WORK.** Please cancel our notice to _____, dated _____ 19___.

_____ **OTHER:** _____

(Signature)

BRAND BURFIELD - STAFF GEOLOGIST 9/16/93
(Name and Title) (Date)

DIVISION OF OIL AND GAS
RECEIVED
SEP 20 1993
VENTURA, CALIFORNIA

* Division 3 of the Public Resources Code states in part:
Section 3215...Well records shall be filed 60 days after completion or suspension of proposed work.

** Section 3203...If operations have not commenced within one year or receipt of the notice, the notice will be considered canceled.
(To prevent cancellation, file a Supplementary Notice with the division)

ODG3 (modified 9/93)

PRA Group
CONSULTING ENGINEERS

No. GB-100/G202-07
September 17, 1993

State of California-Resources Agency
Department of Conservation
Division of Oil and Gas
1000 S. Hill Road, Ste. 116
Ventura, CA 93003-4458

Attention: Mr. Steve Fields

SUBJECT: Transmittal of Well Status Inquiry Forms for Proposed Oil Well Abandonment at the Sunshine Canyon Sanitary Landfill, Sylmar, California.

Dear Mr. Fields:

We have received the Well Status Inquiry forms sent to us by your office, dated September 14, 1993. It is still our intention to abandon the oil wells prior to construction of the proposed landfill expansion at the subject site. Due to unforeseen delays in the construction schedule, it has been necessary to postpone the proposed oil well abandonment program. Enclosed with this letter are the completed well status inquiry forms for the proposed oil well abandonment at the subject site. We will notify you as soon as a tentative schedule for well abandonment is set up.

Thank you for your consideration. If you have any questions, please contact this office.

Very truly yours,

THE PRA GROUP, INC.

Brand W. Burfield
Staff Geologist

Irving D. Affeldt
Principal

bwb/G20207.1

enclosures: Well Status Inquiry forms (10 total)

DIVISION OF OIL AND GAS
RECEIVED
SEP 2 0 1993
VENTURA, CALIFORNIA

The PRA Group, Inc.
▲ WASTE MANAGEMENT ▲ ENVIRONMENTAL ▲ CIVIL ▲ GEOTECHNICAL ▲ GROUNDWATER ▲ GEOLOGY ▲
2495 INDUSTRIAL PARKWAY WEST, HAYWARD, CA 94545
TEL (510) 732-9895 FAX (510) 732-0289

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P292-068
Field Code --
Area Code --
New Pool Code --
Old Pool Code --

PERMIT TO CONDUCT WELL OPERATIONS

PRA GROUP, CONSUL. ENGINEERS
2495 Industrial Parkway West
Hayward, California 94545

Ventura, California
March 11, 1992

Your supplementary proposal to abandon well TEPI/"Eadie" 1, A.P.I. No. 037-06077, Section 23, T. 3N, R. 16W, S.B. B.&M., ---------- field, ---------- area, ---------- pool, Los Angeles County, dated -----, received 3/6/92, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class I 1M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. This office shall be consulted before deviating from the proposed abandonment program.
4. THIS DIVISION SHALL BE NOTIFIED:
   a. To witness the placing of the surface plug or to verify its location.

NOTE: Please have well surveyed by a licensed surveyor and submit results to this office.

SF:tkc
cc: Texaco E. & P. Inc.

Engineer Steve Fields

Phone (805) 654-4761

K.P. HENDERSON, Acting Chief

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY			
BOND	FORMS		EDP WELL
	OGD114	OGD121	FILE
		✓	✓

A notice to the Division of Oil and Gas dated February 28th, 19 92, stating the intention to

abandon (Drill, rework, abandon) well "Eadie" #1 (Well designation), API No. 037-06077,

Sec. 23, T. 3 N, R. 16 W, S.B. B.&M., ~~Newhall~~ Los Angeles Field,

Los Angeles County, should be amended because of changed conditions.

1. The complete casing record of the well (present hole), including plugs and perforations, is as follows:

11-3/4" casing to 500'.
Plugged with cement from 850'-766', 530'-400', and 15'-5'.

2. The total depth is: 8011 feet. The effective depth is: _____ feet.

3. Present completion zone (s): _____ (Name) Anticipated completion zone (s): _____ (Name).

4. Present zone pressure: _____ psi. Anticipated/existing new zone pressure: _____ psi.

We now propose: *(A complete program is preferred and may be attached.)*

The proposed work program is attached to this permit.

DIVISION OF OIL AND GAS
RECEIVED
MAR 0 6 1992
VENTURA, CALIFORNIA

Note: If the well is to be redrilled, show proposed bottom-hole coordinates and estimated true vertical depth.
The Division must be notified if changes to this plan become necessary.

Name of Operator	Telephone Number	
PRA Group	(510) 732-9890	
Address	City	Zip Code
2495 Industrial Parkway West	Hayward	94545
Name of Person Filing Notice	Signature	Date

File In Duplicate

OG123 (3/90/GSR1/5M)

DIVISION OF OIL AND GAS
RECEIVED
MAR 0 6 1992
VENTURA, CALIFORNIA

No. GB-100/G102-23
February 28, 1992

Proposed Work Program

1. Locate oil wells.

2. Drill out existing surface seal and drilling mud from each oil well casing to a depth of approximately 60 feet below existing grade.

3. Reabandon each oil well by installing a new surface seal of tremied cement grout into the upper 60 feet of each oil well casing.

PRA Group
CONSULTING ENGINEERS

DIVISION OF OIL AND GAS
RECEIVED
MAR 0 6 1992
VENTURA, CALIFORNIA

No. GB-100/G102-23
February 28, 1992

Department Of Conservation
Division Of Oil And Gas
1000 S. Hill Road, Suite 116
Ventura, CA 93003-4468

Attention: Mr. Steve Fields

SUBJECT: Confirmation of Telephone Conversation Regarding Abandonment of Oil Wells at the Proposed Sunshine Canyon Sanitary Landfill County Extension, Los Angeles County, California.

Dear Mr. Fields:

With regards to our telephone conversation of February 7, 1992, I would like to confirm in writing our discussion regarding the procedure to be followed during oil well abandonment. Construction is scheduled to begin at the landfill extension site very soon and it is important to us that our oil well abandonment program run as smoothly as possible.

It is our understanding that the current standards for the abandonment of oil wells approved by the Division of Oil and Gas (DOG) state that the well must have neat cement grout seals across the producing interval, the saltwater/freshwater interface (if applicable), and at the surface. During our phone conversation, we also discussed the available DOG abandonment records and concluded that six of the eight wells at the subject site (Newhall Field, well nos. 53, 54, 55, 56, 57 and 61) were abandoned to current DOG standards. The abandonment records for the other two wells (Newhall Field, well nos. 59 and 63) are incomplete.

It is proposed to replace the existing surface seals in all of the oil wells with new seals deep enough not to be undercut by the proposed earthwork. In our conversation, I confirmed that it would be acceptable to the DOG if the well casing was drilled out to a depth of 60 feet below grade and a new neat cement surface seal was installed. It is our understanding that it will not be necessary for DOG personnel to perform leak testing since our plan is to replace the surface seals.

The PRA Group, Inc.
▲ WASTE MANAGEMENT ▲ ENVIRONMENTAL ▲ CIVIL ▲ GEOTECHNICAL ▲ GROUNDWATER ▲ GEOLOGY ▲
2495 INDUSTRIAL PARKWAY WEST, HAYWARD, CA 94545
TEL (510) 732-9895 FAX (510) 732-0289

Enclosed with this letter are permit applications for the proposed work at the subject site. Thank you for your prompt consideration. If you have any questions, please contact this office.

Very truly yours,

THE PRA GROUP, INC.

Brand Burfield
Staff Geologist

Irving D. Affeldt, CEG 1108
Principal

bwb/G10223.DOG

enclosures: Permit applications for oil well abandonment

FORM 159 (9-49)

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

REPORT OF WELL ABANDONMENT

Los Angeles 15, California, January 27, 1954

Mr R L Jackson
The Texas Co
P O Box 320
Long Beach 1 California

Dear Sir

Your report of abandonment of Well No. "Radie" 1, Sec. 23, T. 3 N, R. 16 W, S B B. & M., Newhall oil field, Los Angeles County, dated December 16, 1953, has been examined in conjunction with records filed in this office.

A review of the reports and records shows that the requirements of this Division, which are based on all information filed with it, have been fulfilled.

MAP	MAP BOOK	CARD	BOND	FORMS
18A				

Yours truly

R. D. BUSH
State Oil and Gas Supervisor

By R. J. Mallory
Deputy Supervisor

cc Mr R D Bush
Company
Conservation Committee
orig Mr R F Cory

es

82601 7-53 6700 SPO

FORM 100. 7-48
CALIFORNIA STATE PRINTING OFFICE

SUBMIT LOG IN DUPLICATE
FILL THIS BLANK IN WITH TYPEWRITER. WRITE ON ONE SIDE OF PAPER ONLY

DIVISION OF OIL AND GAS
RECEIVED
JAN 7 1954
LOS ANGELES, CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

WELL SUMMARY REPORT

Operator The Texas Company Field (Weldon Canyon)

Well No. Eadie #1 Sec. 23, T. 3N, R. 16W, S.B. B. & M.

Location 2425.28' S along Sec. line and 1482.21' W at rt. angles to said line from the NE cor. of Sec. 23, T3N, R16W, SBB&M

Elevation above sea level 2137.1 feet.
All depth measurements taken from top of Kelly Bushing which is 11.5 feet above ground.

In compliance with the provisions of Chapter 93, Statutes of 1939, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date December 16, 1953

Signed [illegible]

[illegible] (Engineer or Geologist) R. L. Fatton (Superintendent) Title Superintendent (President, Secretary or Agent)

Commenced drilling 8-16-53 Completed drilling 11-13-53 Drilling tools ~~Cable~~ Rotary

Total depth 8011' Plugged depth 0

Junk

GEOLOGICAL MARKERS	DEPTH

Commenced producing Abandoned (date) Flowing/gas lift/pumping (cross out unnecessary words)

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production						
Production after 30 days						

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Drilled	Number of Sacks of Cement	Depth of Cementing if through perforations
11 3/4"	500'	surf	54#	New	Smls	J-55	17 1/2	450	

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				

Electrical Log Depths 500' to 8011' (Attach Copy of Log)

FORM 103.
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JAN 7 1954
LOS ANGELES, CALIFORNIA

History of Oil or Gas Well

OPERATOR The Texas Company FIELD (Weldon Canyon) Reinhart

Well No. Eadie #1, Sec. 23, T. 3N, R. 16W, S.B. B. & M.

Signed R. Stetson

Date December 16, 1953 Title Superintendent
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. **Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production.** Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date	
1953	DRILLING CONTRACTOR - FOWLER DRILLING CO.
8-16	Spudded in at 11:00 P.M. in 11" hole.
8-17	Lost circulation at 114', regained circulation at 130'. Drilled ahead with partial circulation.
8-18	Drilled 11" hole to 496' opened 11" hole to 17½" from 0 to 267'. Lost circulation at 175'. Mixed lost circulation material and regained circulation at 205'.
8-19	Opened hole to 17½" to 496' and drilled to 500'. Ran 12 joints, 11¾", 54#, casing, 503' overall including Baker Float shoe. Cemented at 500 K.B. with 450 sacks Construction cement mixed with 3% gel. Used 1 top rubber plug. Displaced with 322 cu. ft. of mud. Did not bump plug. No cement return to surface. Cement in place at 11:15 P.M. B. J. Equipment.
8-20	Cement set 2 hours. Ran 200 feet of 2" pipe on outside of the casing to top of cement. Pumped in 80 sacks cement. Set 2 hours then pumped in 70 sacks. Got cement returns to surface. In place 4:30 A.M.
8-22	Installed blowout prevention equipment and tested at 1500 psi. Drilled 9-7/8" hole ahead. Mud weight, 73; viscosity, 43; sand, 2%; water loss, 9 cc.
8-25	Drilled 9-7/8" hole to 1446'. Cored with 8½" core barrel from 1446 to 1462'. Recovered 3'. Drilled 8½" hole to 1568'.
8-26	Opened 8½" hole to 9-7/8" from 1446' to 1568' and drilled to 1900'.
8-27	Circulated and conditioned mud for electric log. Drilled 9-7/8" hole ahead to 2075'.
8-29	Cored 8½" hole from 2075' to 2166'. Mud weight, 76; viscosity, 48; sand, 1.5%; water loss 4.5 cc.
9-1	Drilled 8½" hole to 2435', cored 8½" hole from 2435' to 2455' then drilled 8½" hole ahead to 2604'.

DIVISION OF OIL AND GAS

Monthly of [illegible]

The Texas Company — Weldon Canyon

Wadda #1 — 23 — 3W — 16W — B.S.

December 16, 1953 — Superintendent

[illegible]

DRILLING CONTRACTOR - FOWLER DRILLING CO.

1953	
8-16	Spudded in at 11:00 P.M. in 11" hole.
8-17	Lost circulation at 114', regained circulation at 130'. Drilled ahead with partial circulation.
8-18	Drilled 11" hole to 496' opened 11" hole to 17½" from 0 to 267'. Lost circulation at 175'. Mixed lost circulation material and regained circulation at 205'.
8-19	Opened hole to 17½" to 496' and drilled to 500'. Ran 12 joints, 11¾", 38¾, casing, 503' overall including Halmer Float shoe. Cemented at 500 K.B. with 450 sacks Construction cement mixed with 3% gel. Used 1 top rubber plug. Displaced with 322 [illegible] of mud. [illegible] not bump plug. No cement return to surface. Cement in place at 11:15 P.M. S. J. equipment.
8-20	Cement set 2 hours. Ran 200 feet of 2" pipe on outside of the casing to top of cement. Pumped in 80 sacks cement. Set 2 hours then pumped in 70 sacks. Got cement returns to surface. In place 4:30 A.M.
8-22	Installed blowout prevention equipment and tested at 1500 psi. Drilled 9-7/8" hole ahead. Mud weight, 73; viscosity, 43; sand, 2%; water loss, 9 cc.
8-25	Drilled 9-7/8" hole to 1446'. Cored with 8¾" core barrel from 1446 to 1462'. Recovered 3'. Drilled 8¾" hole to 1568'.
8-26	Opened 6¼" hole to 9-7/8" from 1446' to 1568' and drilled to 1900'.
8-27	Circulated and conditioned mud for electric log. Drilled 9-7/8" hole ahead to 2075'.
8-29	Cored 6¼" hole from 2075' to 2166'. Mud weight, 76; viscosity, 48; sand, 1.5%; water loss 4.5 cc.
9-4	Drilled 8¾" hole to 2435'. Cored 6¼" hole from 2435' to 2435' then drilled 8¾" hole ahead to 2604'.

DIVISION OF OIL AND GAS
RECEIVED
JAN 7 1954
LOS ANGELES, CALIFORNIA

9-2 Opened 8½" hole to 9-7/8" from 2075' to 2298'. Ran electric log.

9-4 Drilled 9-7/8" hole to 2806' changed to 8½" Reed core barrel and cored ahead to 2882'.

9-5 Ran electric log and hole caliper. Mud weight, 77; viscosity, 45; sand, ½" water loss 4 cc.
Ran DPT #1. Set packer at 2815' tail to 2882'. Medium blow for 1 hour. Gas in 15 minutes. Recovered 310' of gassy thin mud. Salinity 3020 ppg. B.I.F.P. 200 psi B.H.S.P. 200 psi.

9-6 Opened 8½" hole to 9-7/8" from 2806' to 2882' and drilled to 2950', changed to 8½" Reed corehead and cored from 2950' to 3005'.

9-7 Ran electric log and hole caliper.
Ran H.P.T. #2, set packer 2955' tail to 3005'. Open 7½ minutes, medium blow declined steadily. Gas in 25 minutes. Recovered 1750' of gassy muddy water. Salinity 1120 ppg. B.H.F.P. 800 psi B.H.S.P. 880 psi. Incomplete build up.

9-9 Opened 8½" hole to 9-7/8" from 2950' to 3005'.

9-10 Drilled 9-7/8" hole to 3490' changed to 8½" Reed corehead and cored from 3490' to 3523' changed to 9-7/8" bit and drilled ahead.

9-12 Mud weight, 79; viscosity, 43; sand, 3%; water loss, 6 cc.

9-15 Drilled 9-7/8" hole to 3856' changed to 8½" corebarrel and cored to 3873' changed to 9-7/8" bit and drilled ahead.

9-19 Mud weight, 81; viscosity, 45; sand, 3%; water loss, 6.4 cc.

9-22 Cored 9-7/8" hole from 4643' to 4653'.

9-26 Mud weight, 81; viscosity, 48; sand, 4%; water loss, 7 cc.

9-27 Reamed from 5286' to 5316'.

9-30 Drilled to 5526' and cored 9-7/8" hole from 5526' to 5544'.

10-3 Mud weight, 81; viscosity, 48; sand, 4%; water loss 6 cc.

10-4 Drilled to 6054', cored from 6054' to 6073' in 9-7/8" hole.

10-10 Drilled 9-7/8" hole to 6508'. Cored from 6508' to 6514' in 9-7/8" hole. Mud weight, 82; viscosity, 45; sand, 4%; water loss, 6 cc.

10-13 Drilled to 6660', cored 9-7/8" hole from 6660' to 6668', drilled ahead in 9-7/8" hole.

10-17 Mud weight, 82; viscosity, 46; sand, 4%; water loss, 7 cc.

10-18 Cored from 6990' to 7000' with 9-7/8" bit. Ran Schlumberger electric log, side wall sampler and dip meter.

10-19 Drilled 8-1/2" hole to 7042' opened hole to 9-7/8" from 7000' to 7042'.

10-24 Mud weight, 82; viscosity, 47; sand, 2%; water loss, 6 cc. Drilled 9-7/8" hole to 7367'.

10-28 Drilled 9-7/8" hole to 7606'.

10-29 Cleaned out 50' cavings. Hole filling with fractured shale. Raised mud weight to 90# per cu. ft.

10-31 Drilled 9-7/8" hole to 7716'. Tight hole from 7600' to 7500'. Pulled up to 5000' to circulate and lost circulation. Ran in hole and circulated at intervals, lowered mud weight from 88 to 80 lbs per cu. ft. Regained circulation. Shale running at 7200' to 7400'. Lowered water loss of the mud.

11-1 Reamed from 7290' to 7450'. Tried to stop shale from coming in 7430' to 7450'. Mud weight, 80; viscosity, 62; sand, 2%; water loss, 5 cc. Changed to emulsion type mud.

11-2 Conditioned hole, shale running. Mud weight 80#; viscosity 65 to 90 seconds, sand 2%; water loss 3.3 cc in 30 minutes.

11-3 Conditioned mud and hole. Shale stopped running. Mud weight 80 to 81#; viscosity 80 to 95 seconds; sand, 2%; water loss 2.0 cc in 30 minutes.

11-4 Drilled 9-7/8" hole ahead.

11-7 Drilled 9-7/3" hole to 7879'. Ran Schlumberger electric log and side wall sampler. Sidewall sampler stuck at 2009'. Ran socket as drill pipe and released sampler.

11-8 Drilled 9-7/8" hole to 7905'. Cored 8½" hole from 7905' to 7913'. Mud weight, 80; viscosity, 115; sand, 2%; water loss, 3 cc.

11-9 Cored from 7913' to 7923'. Opened 8½" rat hole to 9-7/8" from 7905' to 7923'.

11-11 Drilled 9-7/8" hole to 8000' changed to 8½" corehead and cored from 8000' to 8011'.

11-12 Ran Schlumberger electric log. Hung 4½" drill pipe at 850'. Pumped in 75 sacks Construction cement with 2% calcium chloride. Cement in place 11:10 A.M. Cement set 6 hours. Top of plug 766'. Approved by D.O.G. Plug job #2: Hung pipe at 530'. Pumped in 75 sacks cement. In place at 8:00 P.M.

11-13 Located top of plug #2 at 400'. Placed 10 lineal feet of cement in 11¾" casing at surface and welded on steel plate. Rig released at 9:00 A.M.
Well abandoned.

The Texas Company

Eadie #2

Waldon Canyon

Section 23 T3N R16W

DIVISION OF OIL AND GAS
RECEIVED
JAN 7 1954
LOS ANGELES, CALIFORNIA

INCLINATIONS

Depth	Degree of Drift
100'	0 degrees 30 minutes
249'	0 degrees 45 minutes
400'	½ degree
596'	1 degree 30 minutes
696'	1 degree 30 minutes
790'	0 degrees 45 minutes
850'	½ degree
1010'	1 degree 15 minutes
1090'	0 degrees 45 minutes
1210'	1 degree 15 minutes
1300'	½ degree
1396'	1 degree 45 minutes
1477'	1 degree 30 minutes
1568'	1 degree 15 minutes
1660'	1½ degrees
1750'	1 degree 30 minutes
1840'	2 degrees 15 minutes
1900'	2 degrees 15 minutes
1990'	2 degrees 15 minutes
2173'	3 degrees
2267'	2 degrees 35 minutes
2324'	2½ degrees
2421'	2 degrees 30 minutes
2520'	2 degrees 30 minutes
2604'	1 degree 45 minutes
2720'	2 degrees 30 minutes
2806'	2½ degrees
2930'	2 degrees
3022'	2½ degrees
3102'	1½ degrees
3220'	1 degree 45 minutes
3265'	50 minutes
3313'	1½ degrees
3428'	1 degree 15 minutes
3457'	1 degree 30 minutes
3560'	1½ degrees
3652'	1 degree 15 minutes
3745'	1 degree 15 minutes
3960'	1½ degrees
4050'	1½ degrees
4232'	1 degree 0 minutes
4268'	1 degree 15 minutes
4502'	¾ degree
4596'	50 minutes
4719'	0 degrees 45 minutes

Depth	Degree of Drift
4928'	½ degree
5018'	0 degrees 30 minutes
5260'	0 degrees 45 minutes
5357'	1 degree
5450'	1 degree 45 minutes
5570'	1 degree 45 minutes
5698'	1 degree 35 minutes
5819'	1 degree 45 minutes
5911'	1½ degrees
6096'	2 degrees 15 minutes
6204'	4 degrees 15 minutes
6321'	3 degrees 45 minutes
6384'	4 degrees
6437'	3 degrees 45 minutes
6514'	1½ degrees
6564'	3 degrees
6615'	3 degrees
6660'	3½ degrees
6826'	2 degrees 40 minutes
6939'	2½ degrees
6990'	2 degrees 30 minutes
7101'	2½ degrees
7273'	3 degrees
7342'	1 degree 45 minutes
7413'	2 degrees
7567'	2 degrees

The Texas Company

Well #1

Weldon Canyon

Section 23-3N-16W

SCHLUMBERGER SIDE-WALL SAMPLES
Described by W. S. King
10-16-53

Depth	Recovery	
3063'	1½"	Sand, mottled tan to light green gray, firm, friable, conglomeratic, with subrounded pebbles to 1/4" diameter, matrix is coarse grained, silty, tight, patchy faint oil stain, faint odor, very patchy fluorescence, faint straw cut.
3105'	2"	Sand, light gray to tan stained, friable, fine grained, fair sorting with rare pebbles to 1/4", silty, fair to poor porosity and permeability, mottled tan oil stain, mottled yellow fluorescence, fair odor, light amber cut.
3246'	1"	Sand, patchy light oil stain to medium gray, friable, fine to very coarse grained, poorly sorted, tight, faint odor, uneven yellow fluorescence where stained, remainder is gray, light straw cut.
3595'	1"	Sand, mottled green gray to tarnish gray, friable, appears crushed, conglomeratic with rounded pebbles to 1/4" diameter, matrix coarse grained, very poorly sorted, silty, arkosic, uneven light tan staining, spotty yellow fluorescence, faint odor, very pale straw cut.
3940'	1/2"	Sand, medium gray, badly broken and mud injected, appears conglomeratic, matrix silty and tight, no odor, no visible stain, rare spots yellow fluorescence.
3967'	1/4"	Igneous pebble with light gray coarse grained, sand along one edge. Pebble dark gray to black, very hard, common pyritization, microcrystalline. Occasional spots yellow fluorescence in sand.
4026'	1"	Sand, light gray with greenish and tan spots, friable, medium to coarse grained, with rare pebbles to 1/4" diameter and 2 1/8" strata fine grained, silty, oil stained sand which have patchy yellow fluorescence, faint odor, remainder of core is gray.
4143'	1/2"	Sand, conglomeratic, light gray, occasional faint tan spots oil stain, friable, coarse grained with subrounded pebbles to 1/4" diameter, quartzose, arkosic, matrix very poorly sorted, silty, tight, no odor, patchy dull yellow fluorescence, weak spotty stain, extremely light yellow straw cut.

The Texas Company (Golden Canyon)

Eadie #1 Section 23-3S-16W

SCHLUMBERGER SIDE-WALL SAMPLES
Described by G. W. Benson
11-6-53

Depth	Rec.	
7191'	½"	Silty brown shale with occasional thin stringers of fine grained sand. Shale broken up. Sample broken up. No oil shows.
7280'	½"	Silty brown shale as at 7191' above with few thin streaks of gray, fine grained sand with occasional medium grains. No oil shows.
7322'	½"	Gray and brown silty shale as at 7280' above. No oil shows.
7421'	1"	Brown silty shale as at 7322' above and light gray sandy shale. Sand is very fine grained. Gray shale is slightly micaceous, slickensided. No oil shows.
7520'.	Not recovered	
7580'	3/4"	Gray, slightly sand shale as at 7322' above. No oil shows.
7599'	3/4"	Gray, sandy shale as at 7580' above. One patch yellow fluorescence.
7683'	1/2"	Hard, brown-gray, sandy shale, broken up. Few patches yellow fluorescence.
7786'	1/2"	Hard, brown-gray shale as at 7683' above. One small patch yellow fluorescence.
7808'	3/4"	Gray sandy shale with occasional streaks of gray, fine grained sand. Occasional streaks yellow fluorescence.
7820'	Rec. (est.) 3/4"	Hard, light and dark gray shale. Dark gray shale is slightly micaceous. Broken up.

Bullet with sample was recovered with cavings in Core #26.

The Texas Company

Radie #1

Weldon Canyon

Section 23-3N-16W

CORE DESCRIPTION
Described by L. B. Freeman
8-25-53

Core #1
1446-1462' Rec. 3'

2½' Oil stained sandstone, fine to medium grained, coarse, material scattered throughout, rounded to subangular, arkosic, poor to fair sorting, dirty, very silty, tight to poor porosity and permeability, massive to poorly bedded, 35° dips; sharp gassy odor, weak straw cut at top of recovery to very faint cut at base -- core looks slightly more permeable at top than at bottom, fair but even staining, weak pale yellow fluorescence.

½' Interbedded dark gray, sandy siltstone and tight oil stained sand as above in 1 - 1½" interbeds, good 30-35° dips.

Core #2
2075-2093' Rec. 14'

Described by R. M. Crivetti

8' Very fine grained silty oil sand - 1' friable then 2' hard then 5' friable, medium brown oil stained, locally clayey, tight to low porosity and permeability, massive to vaguely bedded with 45-55° dips - strong gasoline odor, even staining and gravity oil fluorescence. Dark brown cut.

3' Shale - well bedded, silty to sandy with laminae of oil saturated very fine sand, near center of interval is tight pebble conglomerate. Dips 55-57° on shale partings.

3' Very fine grained silty oil sand - firm to firm friable, fairly well bedded (dips 56°). Medium brown, well saturated, strong gasoline odor, even bright yellow (hi gravity oil) fluorescence. Grains angular. Low porosity and permeability to tight. Dark brown cuts mostly ground up in removing from core barrel as core stuck (Core washed over with water during removal).

Core #3
2093-2113' Rec. 5' 3' Described by L. B. Freeman
Interbedded oil stained sand and gray siltstone; sand is light tan, fine grained silty, quartzose, finely micaceous, fair sorting, tight due to silty character, one 4" bed of coarse grained oil stained sand, but still silty and tight, good sharp high gravity oil odor, good even staining, yellow fluorescence, fair straw cut, gas bubbles in mud sheath; interbedded shales are dark gray, finely micaceous, locally sandy, no shows in siltstone; excellent 60° dips, upper 3' is about 40% siltstone and 60% sand.

2' Siltstone, fragments of massive siltstone, dark medium gray, finely micaceous, occasionally sandy, no shows except for some free oil along fracture planes and gas bubbles in mud sheath.

Core #4
2112-31' Rec. 18' 18' Siltstone, banded dark gray and brown, predominantly well and thinly bedded, almost a "poker-chip" parting, firm, generally sandy throughout with very fine grained quartzitic sand; siltstone is interbedded with very thin beds (1/8"-1") of very fine grained tan, quartzitic oil stained sand, silty, tight, estimate total of 2½' of oil stained sand in recovery. All having good odor, fair straw cut, even staining and even yellow fluorescence; siltstone has free oil along rare fracture plane, excellent 30° dips.

Core #5
2131-2150' No Recovery

Core #6
2150-2166' Rec. 20' 20' (4' pickup from core #5 (?))
Siltstone, medium gray to brown banded, firm, well and thinly bedded, gritty throughout but very impermeable, rare thin interbed to ¼" of very fine grained light gray to tan, silty, tight quartzitic sand, occasionally a thin streak of sand is faintly oil stained having a faint odor and no cut; excellent 80-90° dips (not overturned).

Core #7
2435-55' Rec. 16' 6". Described by L. B. Freeman
Fragments of medium gray, tight, sandy siltstone, no shows, and fine grained, silty, dirty, tight, quartzitose, tan oil stained sand, good odor, cut and fluorescence.

15½' Siltstone, banded medium gray and brown in ¼" - ½" beds, well bedded, brown siltstone is finely sandy and very foraminiferal; several 1/16" laminae of very fine grained, very tight, silty, oil stained sand, faint odor, faint cut, good fluorescence, excellent 75° dips.

Core #8
2806-2816' Rec. 9' 9' Siltstone, banded and interbedded dark medium gray and dark brown, excellent 45° dips, firm, breaks easily along bedding planes, local slickensides along bedding planes, occasionally siltstone is finely sandy, abundant forams especially in brown beds, occasional broken shell fragment and fish remain; siltstone is interbedded with thin stringers of oil stained sand generally ½" thick but as thick as 2", fine grained, well sorted, angular to subangular, firm, micaceous, fairly clean, poor permeability, fair friability, sharp high gravity oil odor, good tan staining, strong dark brown cut, even yellow fluorescence, abundant gas bubbles in mud sheath, estimate total of 1' oil stained sand in core.

Core #9
2816-2831' Rec. 7' 7' Interbedded siltstone and oil stained sand; siltstone is banded gray and brown as in Core #8, excellent 45° dips; oil stained sand is fine to medium grained, subangular, slightly silty, fair permeability, predominantly quartz with some feldspar and biotite, occasional pink and rust colored grains, occurs generally as ½" interbeds, maximum 2" beds, estimate total 4' sand in core, unevenly and weakly oil stained, medium gray to faintly tan where stained, faint sour gassy odor, weak spotty pale yellow fluorescense, weak straw cut, looks wet.

Core #10 2831-2851	Rec. 16'	16'	Described by W. S. King Interbedded oil stained sand & shale Shale, brown gray and light to medium gray, banded, 1/8" to ½" thick, firm, laminated, easily broken, silty, abundant forams. Oil stained sand, common streaks or stringers 1/8" to ½" thick, (two stks to 1" thick), lt gry w/ silt brown cast, friable, fine grained, slightly silty, fair sorting, apparent fair P & P. Good high gravity oil odor, amber cut, dull yellow to bright yellow fluorescence. Cut (CCl_4) fluoresces bright milky yellow. 30 second flash. Approx 10% of core is oil st. sand. Siltstone shells at 2833' and 2840' are med gry, hd., & dense, calcareous. Good 37°-42° dips.
Core #11 2851-2871	Rec. 10'	10'	Interbedded oil stained sand & shale as in core No. 10. Shale, brown gray to med gray, banded, firm, silty, laminated, abun forams, occ slicked bedding surface. Sand in thinz streaks from paper thin to ½" thick, lt gry w/brn cast, friable fine grained, silty; subangular grains, apparent fair to poor P & P, good high gravity odor, amber cut, med to bright yellow fluorescence, cut (CCl_4) fluoresces bright milky yellow. About 20% of core is oil stained sand. Good gas flash from core barrel. Excellent 37° dips.
Core #12 2871-2881	Rec. 10'	10'	Interbedded oil stained sand & shale as in core last above. Shale, as above, firm to hard, occ broken & slightly slicked Sand, as above, in streaks & very thin to ½" thick partings. Good odor, amber cut, med yellow fluorescence, cut fluoresces milky yellow. No barrel flash. Approx 20% is oil stained sand. Excellent 40-41° dips.
Core #13 2950-2955	Rec. 2½'	½'	Described by W. S. King Oil Stained Sand as in cores above, med gray with light tan cast, friable fair bedding, fine grained, silty, fair sorting, fair P & P, micromicaceous, common fragments & disseminated carbonaceous material. Good odor, dk brown cut, med yellow fluorescence, CCl_4 cut fluoresces med yellow w/ faint green cast.

Core #13 cont'd 1½' Interbedded shale and oil stained sand, as in cores above, w/common streaks carbonaceous material. Approx. 20% oil std. sd.

½' Oil std sand, med gry, w/lt tan case, hard med-crse grained, conglomeratic, silty, very poorly sorted. Pebbles to ¼" inch diam are subrounded. Poor P&P. Good odor dark brown CCl_4 cut. Med yellow fluorescence, which shows few brighter patches. Cut fluoresces med yellow w/faint green cast. good 51° dips.

Core #14
2955-2975 Rec 1½' 1½' Conglomeritic oil stained sand. fair staining, friable but w/hard streaks, med crse grained, silty, v poorly sorted, subrounded pebbles ranging to ⅛" diam. fair to poor P&P. Friable sand appears to have better P&P than hd sd. Fossil shell frags noted. Good odor, amber cut, bright yellow fluorescence, cut fluoresces bright yellow w/ slight green cast. One 2" piece siltstone, brown gry, vy hd, well bedded, locally sandy, common forams, slicked on one surface.

Core #15
2975-2995 Rec. 12ft 12' Oil Sand, lt brn gry, friable to loose, med crse grained, poorly sorted, silty, locally gradding to pebbly coarse sand, rare streaks dark gry siltstone 1/8" to ⅛" thick. Pebbles are subrndd, range to 12 diam. Entire core shows easy flat parting. Fair to poor P&P Good odor, dk brown cut, dull yellow to bright yellow fluor, cut fluoresces bright yellow, Locally fluorescence is uneven but no gray patches. Possibly wet. Fair dips 45°

Core #16
2995-3005 Rec. 3' 3' Described by R. M. Grivetti
Conglomeritic Oil Sand - tan gray, loose to easily friable, poorly sorted, med to coarse sand studded with grits and pebbles to 2" in diameter. Recovered one fragment metamorphic boulder over 4" in diameter. Sand has fair to excellent P&P in few firm pieces recovered. (Core blew out of barrel when pumped out and is mostly loose sand and gravel). Pebbles are well rounded and polished - mostly metamorphic types but w/ some partially decomposed granites Strong gasoline odor, weak but even fluorescence, good dark brown CCl_4 cuts.

Core #17
3490-3505 Rec. 15'

Described by L.B. Freeman 9-11-53

3½' Oil Stained Sand - light tan to medium gray, fine grained w/ local scattered coarse grits and rare rounded pebbles arkosic, finely micaceous, fair sorting, silty, low p & p, fair friability, occ. thininterbeds to ¼" of dark gray-brown foraminiferal siltstone, excellent 53° dips, weak spotty staining, very faint petroleum odor with strong brackish water odor, pale straw cut where weakly stained to dark brown cut, weak spotty pale yellow fluorescence looks tight & wet.

1' Oil stained Sandstone - lithology as above but w/ more coarse grained material and fairly well cemented, firm to hard, massive, shows as above, looks tight & wet.

½' Interbedded Oil Stained Sand & Siltstone. AS IN TOP 3', sd & sltsth in alternating ¼" interbeds, good 55-60° dips, shows as above.

5' Oil Stained Sand, light tan to light med gray, med grained w/much fine material and some scattered coarse angular grits, poor to very poor sorting, firm to hard, massive, arkosic, angular to subangular, some silt, tight, shows as in top 3½' with weaker staining.

5' Interbedded siltstone & Oil stained sand as in top 3½' top 2' of this recovery has 70-90° contorted dips, bottom 3' has good 60° dips.

estimated total 8'+ oil stained sand in core.

Core #18
3505-3524 Rec. 9'

4' Oil Stained Sand, med to crse. grained top 6" grading downward into fine grained, massive, arkosic, subangular grains, hard at top where well cemented to firm at bottom, silty throughout, tight at top to low P & P on bottom, fairly friability, light tan where stained to med gray, vy faint pet odor, weak uneven staining, pale straw cut, weak pale yellow patchy fluorescence, looks & smells wet, rare ⅛" silt streaks.

1' Interbedded gray brown foraminiferal siltstone and tight fine grained oil stained sand, lith and shows as in top 3' (⅛ to ⅛" interbeds)

4' Oil Stained Sand, conglomeritic, medium to coarse grained, locally pebbly, very poorly sorted, angular to subrounded grains, tight firm at top to hard in bottom 3", massive to poorly bedded, locally silty, arkosic, finely micaceous w/occas large biotite flakes, rare ⅛" gray brown foraminiferal sltstn beds giving good 55-60° dips; shows as in upper 3' but w/amber cuts, looks & smells wet.

Core #19
3656-3673' Rec. 12'

12' Oil Stained Sand, medium gray to light gray-tan where patchily stained, predominantly coarse grained with local grading at bottom to medium and fine grained, occasionally pebbly, subangular, massive to poorly bedded, firm to soft, where soft is easily friable, silty, tite to low p & p, predominantly quartz with scattered feldspar and biotite, occasional 1/8 - ½" streak of gray-brown gritty siltstone in top 10' of recovery, bottom 10' has one 2" interbed of dark gray siltstone, good 55-60° dips; very faint petroleum odor, weak and patchy dark brown to lite tan oil staining, bright to dull yellow spotty fluorescense, pale straw cut to fair dark brown cut where better stained, looks wet.

Core #20
4643-53' Rec. 7' 6' Described by L. B. Freeman 9-22-53
Siltstone, dark gray-brown, gritty with very fine grained rounded quartz sand, finely micaceous, locally slickensided along bedding planes, impermeable, contains laminae up to ¼" of oil stained sand, predominantly arkosic, silty, firm, tight, laminae are mainly fine and subangular grained but occasionally are coarse grained and angular containing scattered green mineral fragments (apatite?), good 45-50° dips, weakly oil stained, faint odor, weak to fair straw cut, uneven yellow fluorescence, looks tight and wet.

1' Sandstone, light gray, medium grained, angular to subrounded, poorly sorted in rounding hard, well cemented, tight, arkosic, rare fine biotite, no shows.

Core #21
5526-5544' Rec. 1' ½' Described by G. T. Benson 9-30-53
Siltstone. Dark brown with slight greenish tint, soft, finely micaceous. Contains occasional rounded pieces dark gray siltstone to medium sand grain size. Much drilling mud intermeixed.

½' Sandstone. Light gray to white. Fine grained, fairly poorly sorted, well cemented, silty arkose. Grains are subrounded. Friable. Contains about 10% gray siltstone intercalated in very thin to 1/8" thick beds. Sand contains considerable amount of clay. No cut color. No fluorescence.

Core #22
6054-73' Rec. 18' 12' Described by L. B. Freeman - 10-5-53
Sand, medium gray, fine to medium grained, subrounded to occasionally angular, quartzose some feldspar and occasional biotite, massive, firm to locally soft and easily friable, silty, and clayey with kaolinitic material, pebbly throughout with well rounded pebbles to 1/4" of dark gray igneous material, very crumbly at 6065' where sand contains several rounded medium gray siltstone pebbles to 2", no dips noted, low permeability to tight, no shows.

6' Sandstone, lithology as above, less pebbly, very well cemented, hard, tight, no shows.

(Weldon Canyon)

Core #23
6508-6514' Rec. 4' 4'

Described by G. T. Benson 10-10-53
Shale. Dark gray and black interbedded, very hard, laminated. Contains many thin to 1/4" thick beds of gray-white, fine grained, well cemented, quartzose, micaceous sand. Shale contains fish remains (?), few thin irregular patches of tarry material. No oil stain, odor or fluorescence. Dips 85 to 90°.

Core #24
6600-60' Rec. 8' 8'

Described by L. B. Freeman 10-13-53
Interbedded gray siltstone, brown siltstone and gray sandstone; core is predominantly medium grained siltstone, finely micaceous, rare fine grained quartz sand grits, beds to 1"; brown siltstone is in thin laminae 1/4" thick, generally gritty with fine to medium grained quartz sand; sandstone in laminae to 1/4" except for one 1" bed, light medium gray, fine grained, angular to rounded, silty, clayey with white kaolinitic material, quartzose, abundant biotite, tight, excellent 85-90° dips; no odor, stain, cut, or fluorescence.

Core #25
6990-7000' Rec. 10' 10'

Described by W. S. King
Interbedded silty shale, siltstone, and occasional sandy streaks. Banded dark gray to dark brown gray, to light gray in sandy streaks. Firm to hard, well bedded, most of core broken into large angular fragments, with common slicks on fractured surfaces. Occasional sand streaks (About 20% of core) are fine to medium grained, silty, very poorly sorted, arkosic, quartzose, tight. One 1/2" streak near top of fine grained, silty, fair oil stained sand, friable, fair yellow fluorescence, straw cut, fair odor. Rest of sand streaks fluoresce light yellow, with faint odor, light straw cut, some dark, free oil stain on fractured surfaces. Excellent 80-90° dips.

Core #26 No Recovery 3½'

Described by G. T. Benson 11-9-53
Cavings in drilling mud. Cavings to 5" diameter consisting of hard, gray, slightly sandy shale, and hard, brown, very well cemented, fine grained, calcareous sand with occasional patches of gray, fine grained sand. No oil shows.

Core #27
7923-7923' Rec. 10' 0½'

Described by G. T. Benson
Shale. Hard, dark gray-brown, silty, massive to poorly laminated, fractured and locally broken up. Fracture surfaces show slickensides. Measured dips 70° and 83°, usually near 85°.

1½' Breccia-Conglomerate. Granitic and metamorphic pebbles and granules up to 2" diameter in dark grayish brown shale matrix. Pebbles angular to subrounded. Few fractures show slickensides. No oil shows.

Core #28
8000-8011' Rec. 11'

Described by W. G. King
Silty shale, medium to dark gray with brown cast, firm to very hard, well bedded, banded with very thin to 1/4" thick strata medium and dark gray. Locally very silty. Greater portion of core broken into large angular fragments with slickensided surfaces. Occasional slicked fracture surfaces covered with calcite. One fracture contains 1/4" thick zone of black crumbly gouge. Rare mega fossil fragments, very rare microfossils (?). Good 79° to 84° dips. No shows.

FORM 109-D

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 153-1360

Mr. R L Jackson, Long Beach 1 Calif.
Agent for THE TEXAS CO

Los Angeles 15 Calif. November 18 1953

DEAR SIR:

Operations at your well No. "Eadie" 1 Sec. 23, T. 3 N, R. 16 W, S B B. & M., Newhall Field, in Los Angeles County, were witnessed by J. E. Foster, Inspector, representative of the supervisor, on November 13, 1953. There was also present E. Ballard, Drilling Foreman; M. Honeycutt, Drilling Foreman.

Casing Record 11-3/4" cem. 500'. T.D. 8011', plugged with cement 850'-766', 530'-400', and 15'-5'.

Junk None

The operations were performed for the purpose of witnessing the plugging operations in the process of abandonment.

The inspector arrived at the well at xxxx and Mr. xxxxx reported:

INSPECTOR G. J. BORKOVICH VISITED THE WELL FROM 7:50 - 8:20 P.M., NOVEMBER 12, 1953, AND MR. BALLARD REPORTED:

1. A 9-7/8" rotary hole was drilled from 500' to 8000'; an 8-1/2" rotary hole, 8000'-8011'.
2. On November 12, 1953, 75 sacks of cement was pumped into the hole through 4-1/2" drill pipe hanging at 850', filling to 766'.

THE INSPECTOR NOTED:

1. The cement plug at the reported depth of 766' supported 7 points of the weight of the drill pipe.
2. The driller's tally showed 766' of drill pipe in the hole.

THE INSPECTOR ARRIVED AT THE WELL AT 1:30 P.M. AND MR. BALLARD REPORTED:

1. On November 13, 1953, 75 sacks of cement was pumped into the hole through 4-1/2" drill pipe hanging at 530'.
2. The top of the cement was found at 400'.
3. A bridging plug of paper sacks was placed 10' below the top of the 11-3/4" casing.
4. On November 13, 1953, 7 sacks of cement was poured into the hole.

THE INSPECTOR NOTED THAT the top of the cement filled to the top of the 11-3/4" casing, which is 5' below the surface of the ground.

The test was completed at 1:45 p.m.

THE PLUGGING OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED.

JFF:OH

cc Company

Orig Mr R F Cory

R. D. BUSH
State Oil and Gas Supervisor

By R. N. Walling Deputy

62547 7-53 17,850 ⓢ SPO

FORM 111 (1-49)

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS

No. P 153-1402

Los Angeles 15 Calif. November 18 19 53

Mr. R L Jackson

Long Beach Calif.

Agent for THE TEXAS CO

DEAR SIR:

Your proposal to abandon Well No. "Eadie" 1,

Section 23, T. 3 N, R. 16 W, S B B. & M., Newhall Field, Los Angeles County,

dated Nov. 16 19 53, received Nov. 17 19 53, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE

The base of the fresh waters as indicated by the electric log is at 800'.

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth.
   8011
2. Complete casing record.
   11-3/4", 54#, J-55 casing cemented solid at 500'.
3. Last produced. Prospect well, no commercial showings."

PROPOSAL

"The proposed work is as follows:

1. Place cement plug 850' to 766', Division of Oil and Gas to witness top.
2. Place cement plug 530' to 400'.
3. Place 10 lineal feet of cement at surface in the 11-3/4" casing. Division of Oil and Gas to witness.
4. Cap with steel plate and abandon."

DECISION

THE PROPOSAL, COVERING WORK ALREADY COMPLETED IN ACCORDANCE WITH PRIOR AGREEMENT, IS APPROVED.

FEK:OH

F/G

Orig Mr R F Cory

cc Company

R. D. BUSH
State Oil and Gas Supervisor

Blanket bond.

By R. N. Nelling Deputy

FORM 108. 5/613 2-52 20M ⓑ SPO

DIVISION OF OIL AND GAS
RECEIVED
NOV 17 1953
LOS ANGELES, CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Notice of Intention to Abandon Well

This notice must be given at least five days before work is to begin; one copy only

Santa Paula Calif. November 16, 19 53

DIVISION OF OIL AND GAS

Los Angeles, Calif.

In compliance with Secs. 3228, 3229, 3230, 3231 and 3232, Ch. 93, Stat. 1939, notice is hereby given that it is our intention to abandon well No. Eadie #1

Sec. 23, T. 3N, R. 16W, S.B. B. & M. (Weldon Canyon) Field,

Los Angeles County, commencing work on the 12th day

of November 19 53

The present condition of the well is as follows:

1. Total depth.

   8011

2. Complete casing record.

   11¾", 54#, J-55 casing cemented solid at 500'.

3. Last produced. Prospect well, no commercial showings

Date	Net oil	Gravity	Cut

The proposed work is as follows:

1. Place cement plug 850' to 766', Division of Oil and Gas to witness top.
2. Place cement plug 530' to 400'.
3. Place 10 lineal feet of cement at surface in the 11¾" casing. Division of Oil and Gas to witness.
4. Cap with steel plate and abandon.

The Texas Company
(Name of Operator)

By R.F.Cory-Dist.Petr.Engineer

WWK-UFB
TWB-IF-File

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

FORM 109-D

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 153-1105

Los Angeles 15 Calif. September 16 19 53

Mr R L Jackson
Mr P O Box 320
Long Beach Calif.

Agent for THE TEXAS CO

PROSPECT WELL

DEAR SIR:

Operations at your well No. "Eadie" 1 Sec. 23, T. 3 W, R. 16 W, S B B. & M., Newhall Field, in Los Angeles County, were witnessed by G. J. Borkovich, Inspector, representative of the supervisor, on September 8, 19 53. There was also present E. Ballard, Drilling Foreman; H. R. Dixon, Driller.

Casing Record 11-3/4" cem. 503'. T.D. 3035'.

Junk None

The operations were performed for the purpose of inspecting blowout prevention equipment and installation.

The inspector arrived at the well at 12:45 p.m. and Mr. Ballard reported:

1. A 17-1/2" rotary hole was drilled from the surface to 503'.
2. On August 19, 1953, 11-3/4", 54 lb. casing was cemented at 503' with 450 sacks of cement.
3. Cement did not return to the surface.
4. On August 19, 1953, 150 sacks of cement was pumped down around the 11-3/4" casing through 2" pipe hanging at 200'.
5. A 9-7/8" rotary hole was drilled from 503' to 3035'.

THE INSPECTOR NOTED THAT THE WELL WAS EQUIPPED WITH THE FOLLOWING BLOWOUT PREVENTION EQUIPMENT:

1. A Shaffer double cellar control gate for closing in the well with the drill pipe out of the hole, and for closing around the 4-1/2" drill pipe.
2. A Hydril blowout preventer for closing around the 4-1/2" drill pipe.
3. The controls for the above equipment were located outside the derrick.
4. A 2" mud fill-up line with a 2" high pressure stopcock into the 11-3/4" casing below the above equipment.
5. A high pressure stopcock on the kelly.

The inspection was completed at 1:15 p.m.

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

GJB:OH

10/15/53 Keuper-Sandy
TD 6800'
Box fresh conditions
Shale 2000-2900'
1st [illegible] at 2900
No shows so far
Torbert.
850-750 [illegible]
540-480 Co [illegible]
10 [illegible] 2006 [illegible]
OK [illegible]

cc The Texas Co (Attn Mr T W Bell)
929 South Broadway
LOS ANGELES 15

Orig Mr R F Cory Dist Engineer
The Texas Co
Box 510
Santa Paula California

R. D. BUSH
State Oil and Gas Supervisor

By R. N. Walling Deputy

82547 7-53 17,950 ② SPO

FORM 111 (1-49)

E

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS

No. P 153-941

Los Angeles 15 Calif. July 22 1953

Mr. S L Jackson
P O Box 320
Long Beach Calif.

(2)

Agent for THE TEXAS CO

DEAR SIR:

Your proposal to drill Well No. "Madie" 1,

Section 23, T. 3 N, R. 16 W, S B B. & M., Newhall Field, Los Angeles County,

dated July 14 19 53, received July 15 19 53, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES

"Location of well: 2425.28 feet South along section line and 1482.21 feet West at right angles to said line from the Northeast corner of section 23, T. 3 N., R. 16 W., S.B.B. &M.

Elevation of ground above sea level 2125 feet Ground datum. (Topo)

All depth measurements taken from top of Kelly Bushing which is 12 feet above ground."

PROPOSAL

"PROPOSED CASING PROGRAM

Size of Casing

Inches A.P.I.	Weight	Grade and Type	Top	Bottom	Cementing Depths
11 3/4"	47#	J-55	Surface	500	500' w/500 sacks

Intended zone or zones of completion:

It is understood that if changes in this plan become necessary we are to notify you before running casing."

DECISION

THE PROPOSAL IS APPROVED PROVIDED THAT

1. A supplementary proposal shall be filed with this Division prior to running any additional casing, or placing any cement plugs. Additional requirements will be specified at that time.
2. Blowout prevention equipment, sufficient to provide a complete close-in of the well under pressure at any time, shall be installed and approved by this division.
3. THIS DIVISION SHALL BE NOTIFIED TO INSPECT the installed blowout prevention equipment before drilling below 1000'.

ERMA:OH

cc The Texas Co (Attention Mr T W Bell)
929 South Broadway
LOS ANGELES 15

Orig Mr R F Cory Dist Engineer
The Texas Co
Box 510
Santa Paula California

R. D. BUSH
State Oil and Gas Supervisor

By E. H. Meisser Deputy

Blanket bond.

FORM 105

STATE OF CALIFORNIA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

037-06077

DIVISION OF OIL AND GAS
RECEIVED
JUL 15 1953
LOS ANGELES, CALIFORNIA

E

7

Notice of Intention to Drill New Well

This notice and surety bond must be filed before drilling begins

Santa Paula Calif. July 14 1953

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division III, Article 4, Public Resources Code, notice is hereby given that it is our intention to commence the work of drilling well No. "Eadie" #1, Sec. 23, T. 3 N, R. 16 W, S.B. B. & M., ~~Weldon Canyon~~ Newhall Field, Los Angeles County.

Legal description of lease
(Attach map or plat to scale)

Location of Well: 2425.28 feet South (Direction) along ~~property~~ section line and 1482.21 feet West (Direction) at right angles to said line from the Northeast corner of ~~property~~ section 23, T. 3 N., R. 16 W., S.B.B.&M.

Elevation of ground above sea level 2125 feet Ground datum. (Topo)

All depth measurements taken from top of Kelly Bushing (Derrick Floor, Rotary Table or Kelly Bushing) which is 12 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS
11 3/4"	47#	J-55	Surface	500	500' W/500 sacks

Intended zone or zones of completion: Prospect Well

18A	M34				

It is understood that if changes in this plan become necessary we are to notify you before running casing.

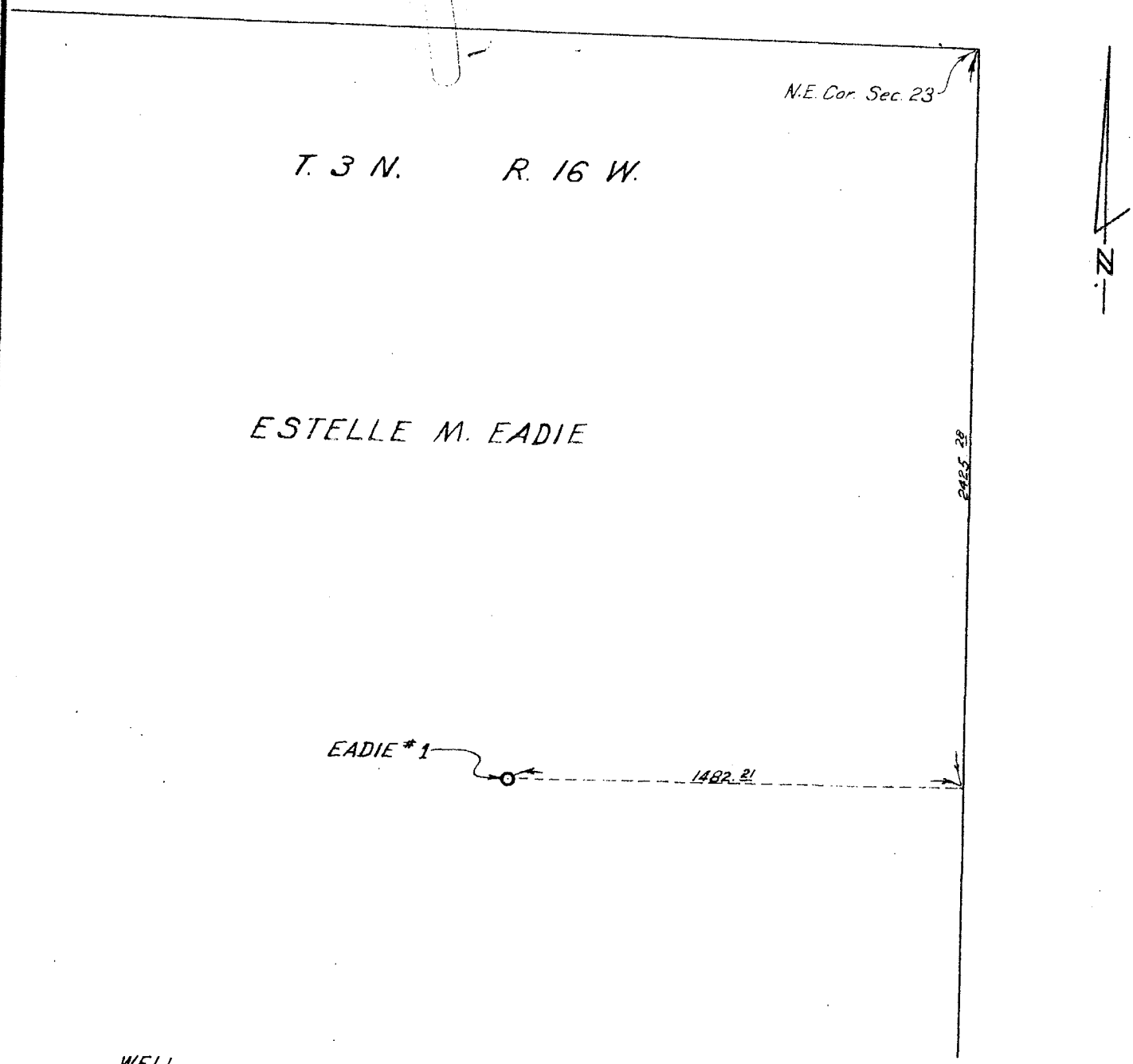
Address P. O. Box 510

Telephone Number 7F

The Texas Company
(Name of Operator)

By R. F. Cory
R.F.Cory - District Pet. Engineer

SEND ONE COPY OF NOTICE TO DIVISION OFFICE IN DISTRICT WHERE WELL IS LOCATED



WELL	DESCRIPTION
Eadie # 1 F.B. C.B.	2425.28 ft. S'ly along the E. line of Sec. 23, T.3N., R.16W. S.B.B.&M., from the N.E. cor. thereof, thence W'ly at right angles thereto 1482.21 ft.

DIVISION OF OIL AND GAS
RECEIVED
JUL 2 8 1953
SANTA PAULA, CALIFORNIA

1

REVISED TO	BY				
		Weldon Can. Area POOL Ventura DISTRICT	THE TEXAS CO. PACIFIC COAST DIVISION ENGINEERING OFFICE — PRODUCING DEP'T SIGNAL HILL, CALIF.	APPROVED: DATE 7-15-53	DR. BY W.E.K. TR. BY CH. BY SCALE: 1" = 500' DWG. NO. 2C-271-7197
		LOCATION EADIE #1 L.A. COUNTY			

PRINTED ON CLEARPRINT NO. 1000-H

T.W.B. - H.F.A. - G.R.C.[2] - J.L.S.[5] - R.L.P. - A.A.A. - G.M.R.[2]

October 24, 2018
File No. 01208033.29

Ms. Shikari Nakagawa-Ota, REHS
Chief Environmental Health Specialist
Local Enforcement Agency (LEA) Program
Los Angeles County Department of Public Health
5050 Commerce Drive
Baldwin Park, California 91706

Subject: **Perimeter Migration Monitoring Well 205R, Sunshine Canyon Landfill, 14747 San Fernando Road, Sylmar, California 91342 (SWIS Facility 19-AA-2000)**

Dear Ms. Nakagawa-Ota:

This letter has been prepared by **SCS Engineers (SCS)** on behalf of Sunshine Canyon Landfill (SCL), in response to increasing levels of methane (CH_4) identified in perimeter migration monitoring well 205R located at SCL (Note: we refer to each monitoring location as a well, and each screened interval at a given location as a probe). While methane levels identified in the deeper probes within this well are still below the regulatory threshold of 5 percent by volume, they have been increasing in concentration over the past four years, and have slightly exceeded 3% by volume.

BACKGROUND

SCL is an open, active canyon landfill operation, with 363 permitted acres, and accepts approximately 8,000 tons of municipal solid waste (MSW) per day. SCL is situated at the eastern end of the Santa Susana Mountains and is bounded to the west and south by mountains and open space, to the north by mountains and Interstate 5, and to the east by San Fernando Road and Interstate 5. The location of SCL is provided on **Figure 1**, **Attachment A**.

Landfill gas (LFG) migration from SCL is currently controlled via an LFG collection and control system (GCCS) consisting of a network of approximately 1,008 LFG extraction points inter-connected to a total of six destruction devices, including 5 enclosed flares and a turbine power plant. The GCCS operates continuously, with August 2018 average flow rate of approximately 20,500 standard cubic feet per minute (scfm) and a methane concentration approximately 43% by volume.

LFG migration from SCL is monitored by a network of 30 migration monitoring wells located around the perimeter of SCL. Within each well, there are multiple probes located at multiple depths, based on surface elevation, depth to groundwater, and base of waste elevation; for a total of 132 probes, within 30 wells. The perimeter migration monitoring well network at SCL is provided on **Figure 2**, **Attachment A**.

DISCUSSION

Monitoring Activities

Since March 2013, concentrations of CH_4 in the deeper probes (B-E) in well P-205R have ranged from non-detect to 3.4 percent by volume (May 2018). Details on CH_4 detections within the five probes within well P-205R are presented in **Table 1**, below.

Table 1. Well P-205R Probe Methane Details

Probe Designation	Probe Depth (feet bgs)	Screened Interval (feet bgs)	Methane Detections (% by volume)		
			Min	Max	Most Recent[1]
A	11	6-11	ND	ND	ND
B	25	20-25	ND	1.5	0.7
C	39	33-39	0.2	2.0	1.8
D	53	48-53	0.8	3.4	2.8
E	67	63-67	ND	2.9	1.6

bgs = below ground surface
ND = Non-detect
[1]Most recent monitoring event is September 2018.

Graphs of gas composition and pressures detected in probes A-E within well P-205R from 2014 to present are presented in **Figures 3a through 3e, Attachment A**, respectively. **Attachment B** contains well P-205R probe data from 2014 to present.

As shown on **Figure 3d**, probe P-205R(D) has the highest concentration of CH_4 detected in this well, consistently over time. **Figure 3d** also shows significantly elevated carbon dioxide (CO_2) in relation to CH_4, which is not generally indicative of the composition of landfill gas (LFG). For example, the typical ratio of CH_4 to CO_2 in LFG ranges from 1.0 to 1.2. However, the data for probe P-205R(D) have demonstrated ratios ranging from 0.05 to 0.07 in data from 2018. **Figure 3d** also shows an inverse relationship between CO_2 and Balance Gas, which is assumed to be nitrogen. Nitrogen is typically found at concentrations 2 to 4 times lower than CO_2 in LFG, but in this case, nitrogen is present at concentrations higher than CO_2.

Gas Sample Analysis

In response to slightly elevated CH_4 concentrations identified in probe P-205R(D), gas samples were collected from select probes within well P-205R, as well as other perimeter wells at SCL in January, February, March, June, July, August, and September of 2018. A summary of the analytical data from Probe P-205(D) is presented in **Table 2**, below. Copies of all analytical data from samples collected in 2018 are provided in **Attachment C**.

Table 2. Probe P-205R(D) Analytical Results - 2018

Analyte	01/25	02/15	03/29	06/29[1]	07/26	08/23	09/27
Concentration in % by volume							
Methane	2.74	2.73	2.89	2.96	2.74	19.8	2.69
Carbon Dioxide	46.4	47.5	47.3	47.6	47.2	45.2	47.5
Concentration in parts per million by volume (ppmv)							
Ethane	<5	<5	<5	<5	<5	<5	<5
TGNMO[2]	19.5	<5	17.9	10.3	14.7	7.41	12.1
Hydrogen Sulfide	0.42	0.97	0.54	<0.2	<0.1	<0.1	<0.1
Volatile Organic Compounds (VOCs) Concentration in parts per billion by volume (ppbv)							
Benzene	7.52	6.64	5.95	3.95	5.14	5.26	4.20
Dichlorobenzenes[3]	<12	<3	<6	<0.6	3.39	3.33	3.69
Toluene	<8	2.23	<4	1.22	2.55	2.34	2.71
m+p Xylenes	<8	1.84	<4	1.01	2.53	1.89	1.57
o-Xylene	<8	<1.4	<4	0.78	<1.4	<1.4	<1.4
TO-15 Analysis (concentration in ppbv)[1]							
Acetone	NA	NA	NA	63.0	NA	NA	NA
Isopropyl Alcohol	NA	NA	NA	108	NA	NA	NA
n-Hexane	NA	NA	NA	0.85	NA	NA	NA
1,2,4-Trimethylbenzene	NA	NA	NA	0.69	NA	NA	NA

[1]TO-15 analysis requested on June sample. More analytes and lower detection limits provided.
[2]TGNMO – Total Gaseous non-Methane, non-Ethane organics reported as ppmvC.
[3]Total amount containing meta, para, and ortho isomers.
NA – Analyte not analyzed.

As shown in **Table 2**, the CH_4 and CO_2 results match what was identified from field monitoring of the probes. In addition, it should be noted that the only volatile organic compounds (VOCs) detected from probe samples are generally associated with petrogenic (e.g., hydrocarbon) sources, including benzene, toluene, xylenes, hexane, etc. Key LFG VOC indicators (e.g., vinyl chloride, freons, methylene chloride, and other halogenated compounds) were not detected in samples from P-205R, or any of the sample results provided in **Attachment C**. Ethane, which is a very common constituent in LFG, was also not found. These chemicals are commonly detected as the "leading edge" of any subsurface LFG plume, but were not found in the samples.

Nearby LFG Well Data

The closest LFG extraction wells to P-205R are CGW-915 and CGW-916, both approximately 215 feet northeast of well P-205R. These wells were installed in 2015 and have been under vacuum since installation. Gas composition and flow readings from these wells from late-July (selected to match the latest lab sample analysis date from probe P-205R[D]) and the most recent readings from these wells are presented in **Table 3**, below.

Table 3. Nearby LFG Well Measurements

Well Designation	Date of Reading	LFG Flow (scfm)	Gas Composition (% by volume)			
			CH_4	CO_2	O_2	Balance Gas
CGW-915	7/16/18	10	18.1	23.7	0.1	58.1
	10/10/18	4.2	26.1	29.5	0	44.4
CGW-916	7/24/18	1.6	27.1	30.9	0	42
	10/10/18	14.5	32.4	30.3	0	37.3

As shown in **Table 3**, both the July and October readings from the closest LFG wells to P-205 show CO_2 levels significantly lower than the levels detected in probe P-205R(D). The highest CO_2 reading from July (well CGW-916) is more than 20 percentage points lower than the CO_2 identified in the P-205R(D) sample from July (refer to **Table 2**).

Figure 4, Attachment A contains a graph of the CO_2 levels identified in the LFG extraction wells near P-205R (CGW-915 and CGW-916). As shown in **Figure 4**, With the exception of late-2017, CO2 levels from the LFG extraction wells have always been lower than the CO_2 levels identified in probe P-205R(D). This indicates that it is unlikely that the CO_2 identified in P-205R(D) originated from the landfill.

However, this point does not address the elevated CH_4 identified in probe P-205R(D), unless the CH_4 and CO_2 identified in probe P-205R(D) are interrelated. In order to verify that the CH_4 and CO_2 are interrelated, the CH_4 and CO_2 monitoring data from probe P-205R(D) were separated and re-graphed using a logarithmic scale. This graph is presented in **Figure 5, Attachment A**. As shown in **Figure 5**, variability in concentration is directly proportional for CH_4 and CO_2 within this probe, which indicates that the parameters are directly related. As such, if the CO_2 is not likely derived from LFG, then the CH_4 would not expected to be either.

Nearby Oil Wells

Due to the elevated CO_2; the lack of ethane, vinyl chloride, and other common LFG constituents in the samples analyzed from probe P-205R(D); and the presence of various petrogenic chemicals, additional research on possible petrogenic sources in the area of SCL was conducted. As shown in **Figure 2**, there are approximately 9 abandoned oil wells located either within, or in close proximity to SCL. Of these nine wells, the closest to well P-205R is Eadie #1. Records of this well obtained from the California Department of Oil, Gas and Geothermal Resources (DOGGR) are provided in **Attachment D**. A brief history this well is provided below.

Eadie #1

Exploratory oil well "Eadie 1" is located approximately 650 feet to the southwest of well P-205. Eadie 1 was drilled to a maximum depth of 8,011 feet below ground surface (bgs). Drilling was completed on November 11, 1953. Following electric logging of the hole, two concrete plugs were installed from 850 to 766 feet and 530 to 400 feet bgs. 10 feet of cement inside of an 11 and ¾ inch casing, with a welded steel plate were used to abandon the well on November 13, 1953. The capped well was at an elevation of approximately 2,132 feet above mean sea level (msl) at the time of abandonment.

In 1992, as part of the proposed expansion of SCL, eight oil wells were proposed for re-abandonment. The project was postponed until June 1997, when the upper 200 feet of Eadie #1 was overdrilled and 140 cubic feet of cement was added to the hole. Following abandonment activities, the well was cut off five feet below surface and covered with a steel plate. This would make the elevation of the top capped well approximately 2,127 feet msl and the elevation of the bottom of the cement plug approximately 1,932 feet msl, which is approximately 50 feet higher than the surface of well P-205R (surface elevation of well P-205R is 1,869 feet msl).

CONCLUSIONS

It appears that the low-level of CH_4 detected in well P-205R did not originate from the landfill. This conclusion is supported by the following observations:

1. Monitoring data for probes B-E in well P-205R show significantly elevated CO_2 (maximum value of 49.4 percent by volume in Probe P-205R[D]) associated with low-level CH_4 (maximum value of 3.4 percent by volume in Probe P-205R[D]). Laboratory data confirms both the low CH_4 and high CO_2 levels detected in probes B-E of well P-205R. These levels and ratios are not typical for LFG migration from a landfill.
2. CO_2 levels identified in probe P-205R(D) are higher than CO_2 levels identified in raw LFG from the closest LFG extraction wells (**Figure 4**).
3. The CH_4 identified in P-205R(D) is related to the elevated CO_2 identified in P-205R(D), as shown in **Figure 5** and are likely from the same source
4. With the exception of acetone and isopropyl alcohol, which are both typical lab contaminants, only petrogenic VOCs were identified in samples analyzed from P-205R(D). Other common "leading edge" contaminants in LFG were not detected.
5. There is an abandoned oil well located 650 feet to the southwest of P-205R that may be a potential source of methane and CO_2. The fact that the probes within P-205R are located at a depth that is below the concrete plug for this well, makes this point more significant.

RECOMMENDATIONS

Based on off-site impact from petrogenic sources, SCL is requesting removal of the AOC threshold of 3% by volume for probes within perimeter migration monitoring well P-205R as well as modification of sampling frequency for this probe to quarterly. Additionally, SCL is requesting the opportunity to evaluate the origin of methane should the level in the P-205R probes ever exceed the 5% by volume threshold prior to the issuance of any regulatory violations.

CLOSING

If you have any questions in regard to this submittal, please contact either of the undersigned at (562) 426-9544.

Sincerely,

Raymond H. Huff, REPA
Vice President
SCS Engineers

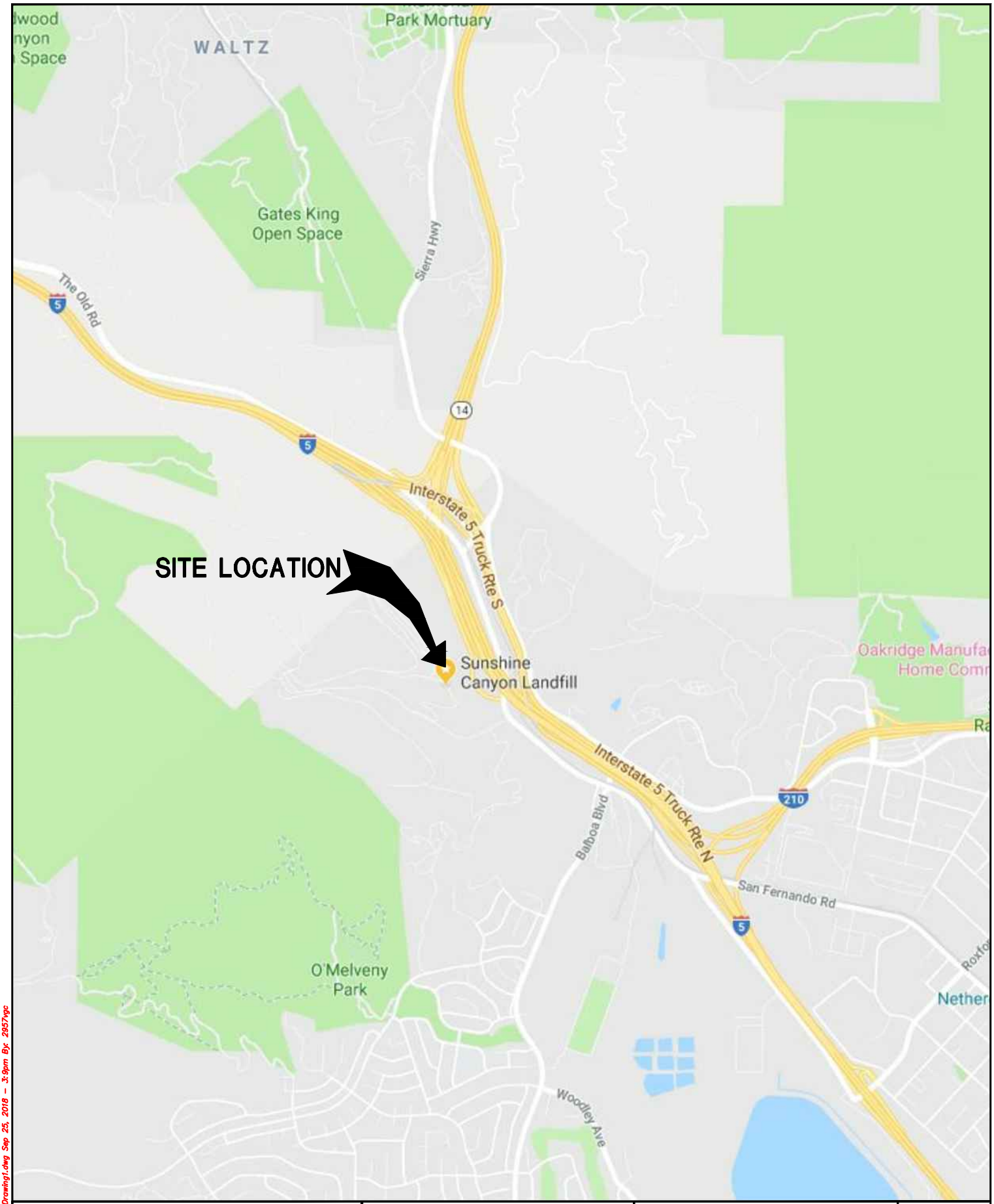
Patrick S. Sullivan, REPA, CPP, BCES
Senior Vice President
SCS Engineers

attachments

cc: Josh Mills, SCL
Chris Coyle, SCL

ATTACHMENT A

FIGURES



SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3900 KILROY AIRPORT WAY, SUITE 100
LONG BEACH, CA 90806
PH. (562) 426-9544 FAX. (562) 427-0805

PROJ. NO.	DWN. BY:	ACAD FILE:
---	V. CHEW	---
DSN. BY:	CHK. BY:	APP. BY:
---	---	---

CLIENT:

SHEET TITLE: SITE LOCATION

PROJECT TITLE: SUNSHINE CANYON LANDFILL SYLMAR, CA

DATE: 09-25-2018

SCALE: N.T.S.

DRAWING NO. FIG 1

C:\Users\2957vgc\Documents\Drawing1.dwg Sep 25, 2018 - 3:9pm By: 2957vgc

Figure 2 - Perimeter Well Location Map Showing Abandoned Oil Wells

Sunshine Canyon Landfill, Sylmar, California

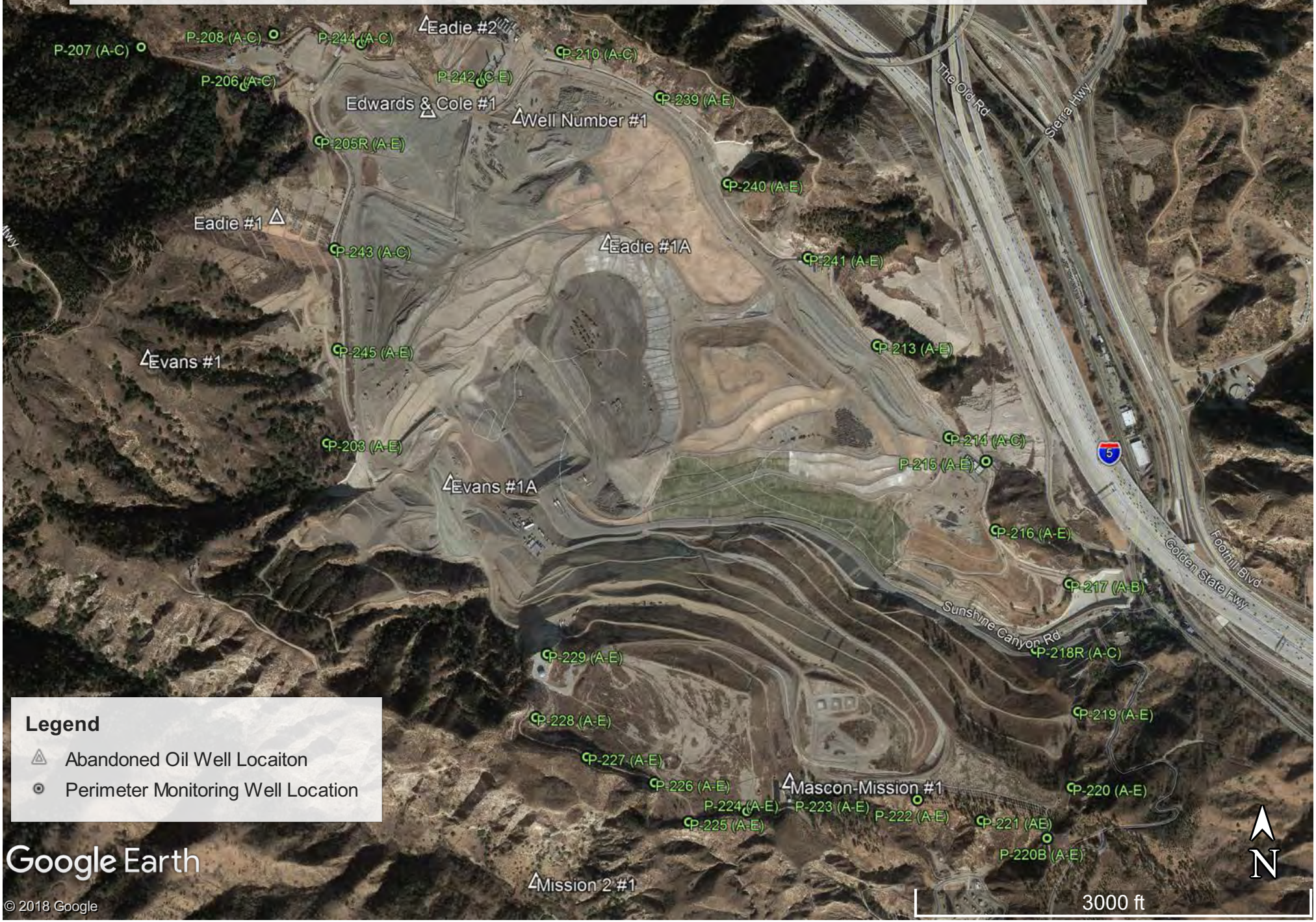


Figure 3a. Well P-205R(A) Readings from 2014 to Present.

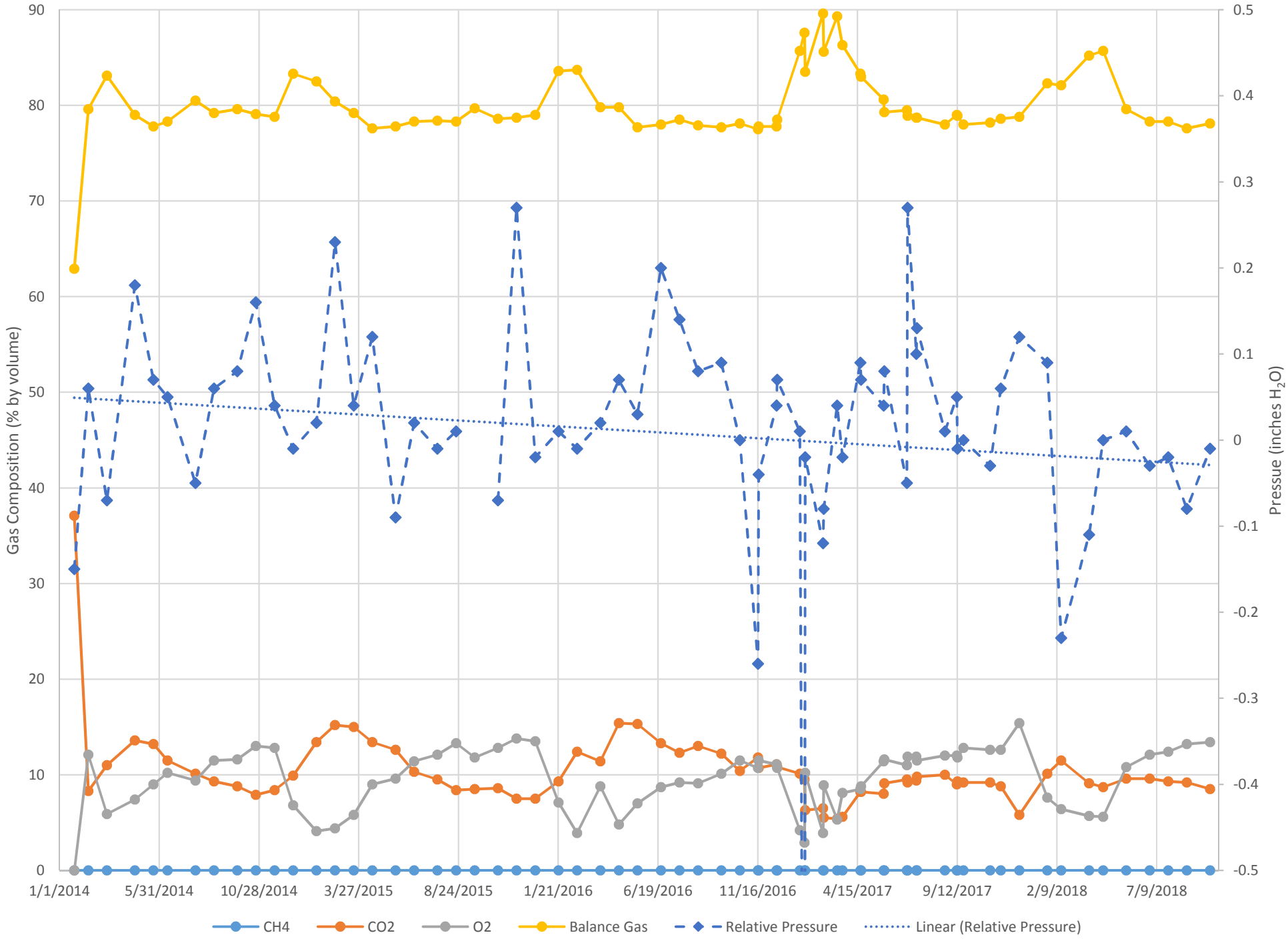


Figure 3b. Well P-205R(B) Readings from 2014 to Present.

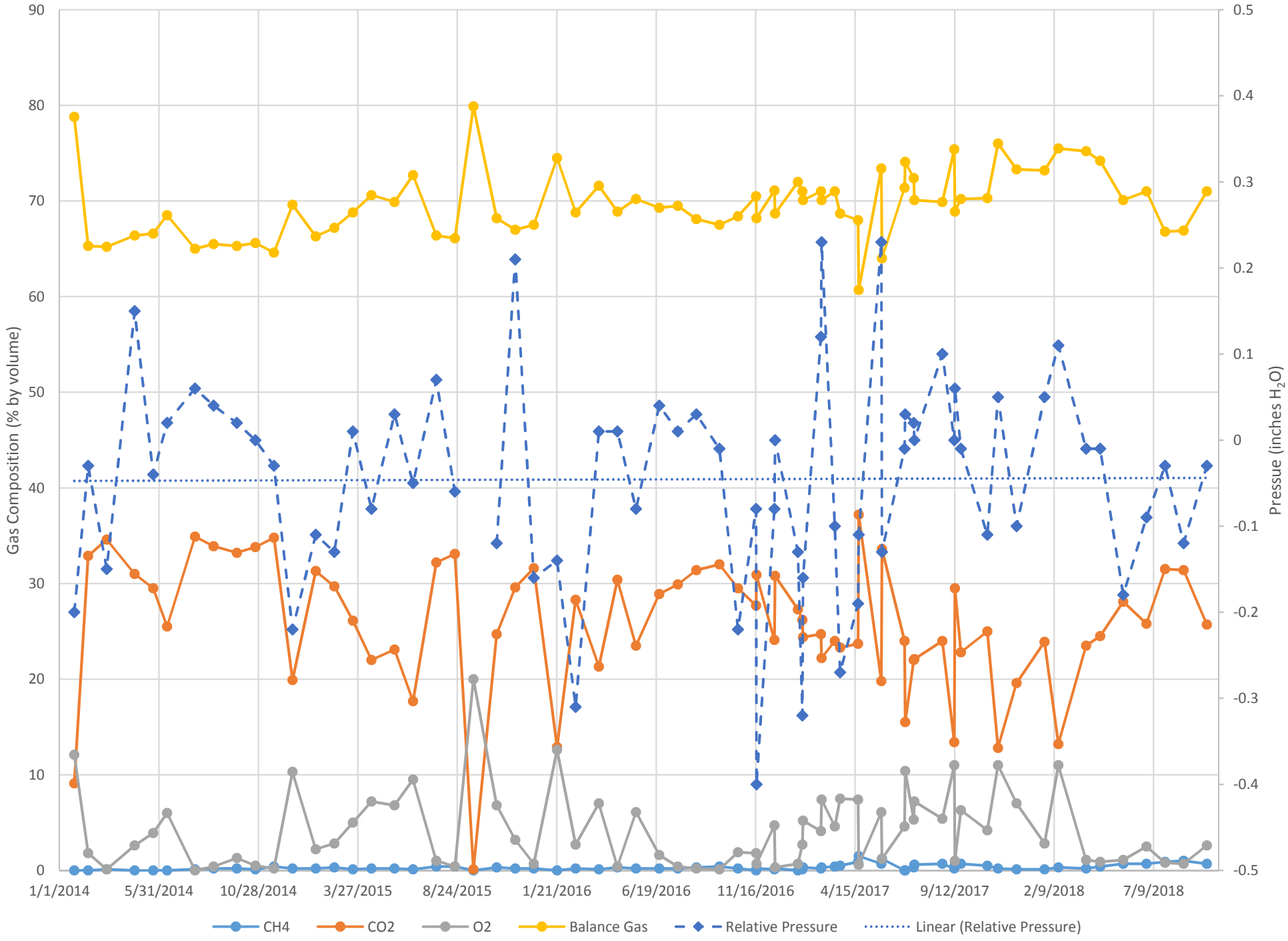


Figure 3c. Well P-205R(C) Readings from 2014 to Present.

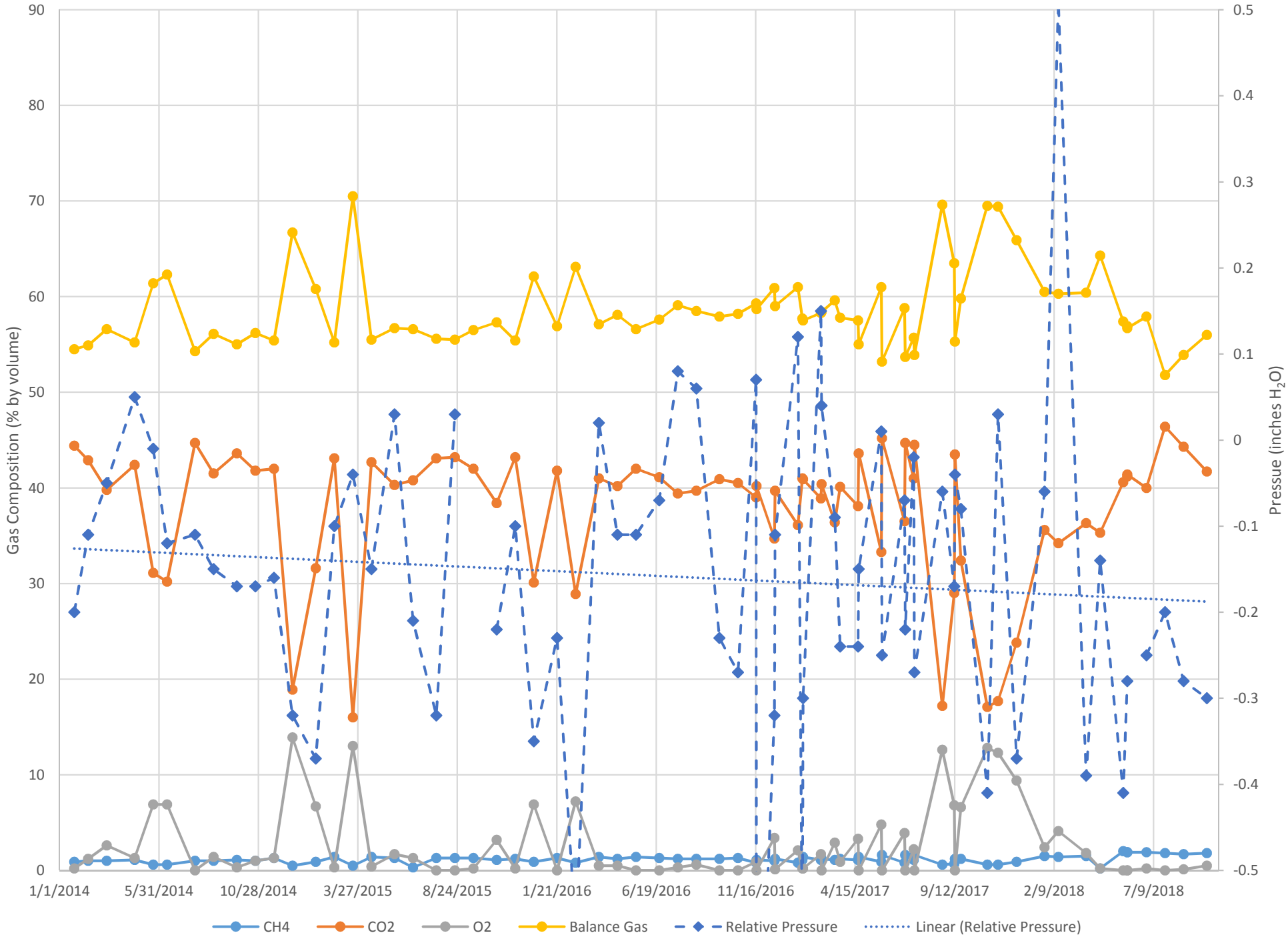


Figure 3d. Well P-205R(D) Readings from 2014 to Present.

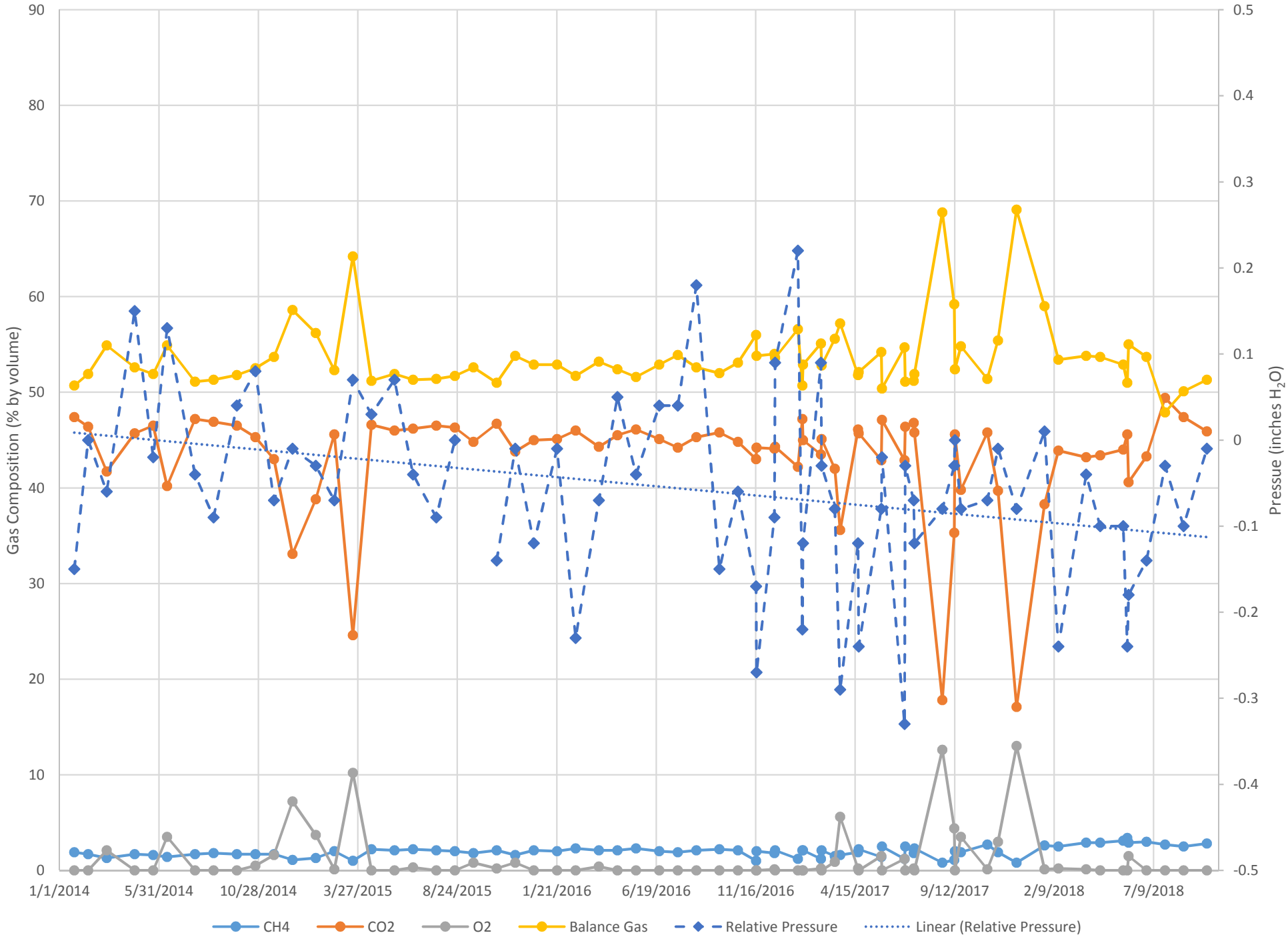


Figure 3e. Well P-205R(E) Readings from 2014 to Present.

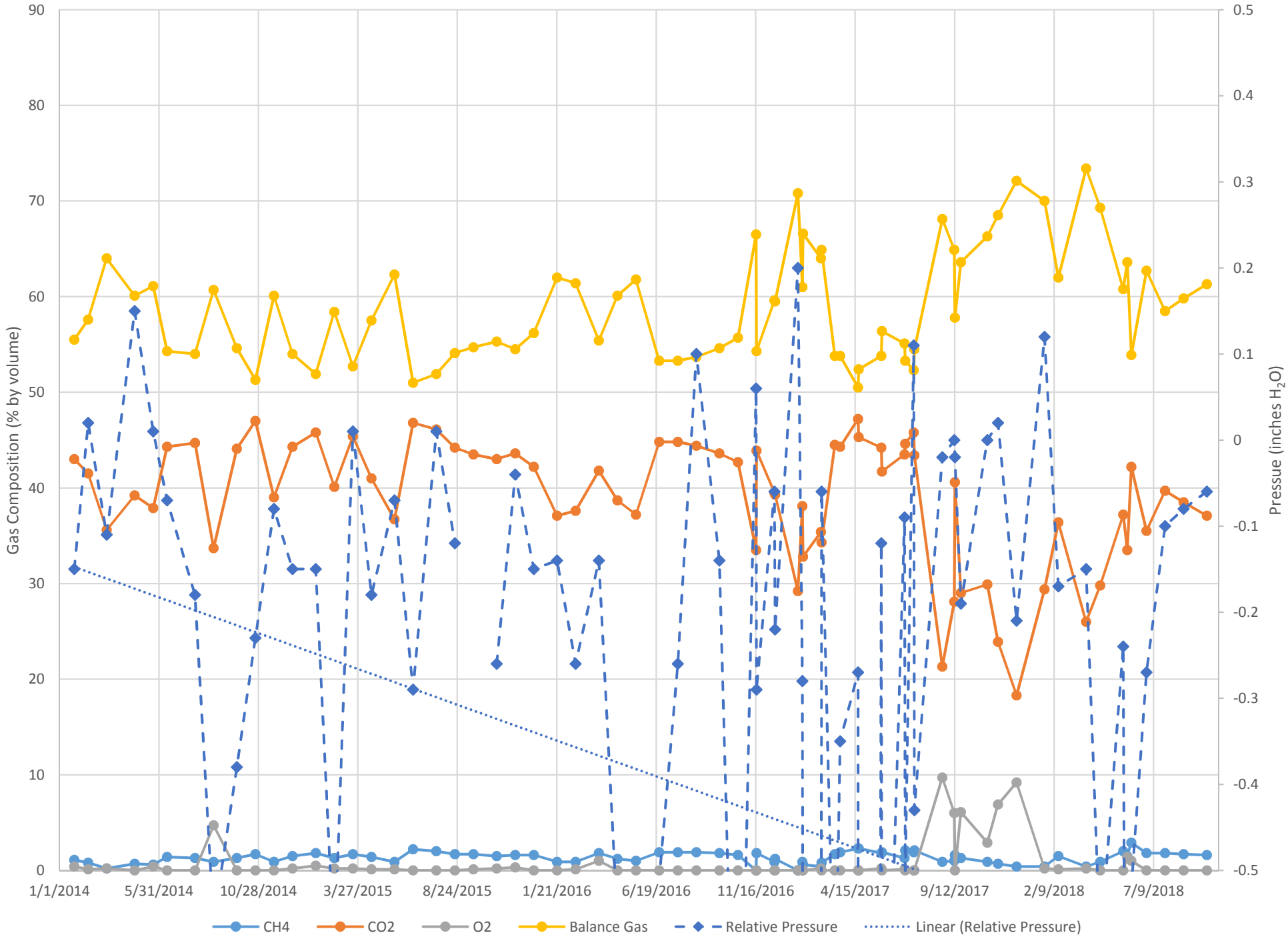


Figure 4. Carbon Dioxide Level Comparison.

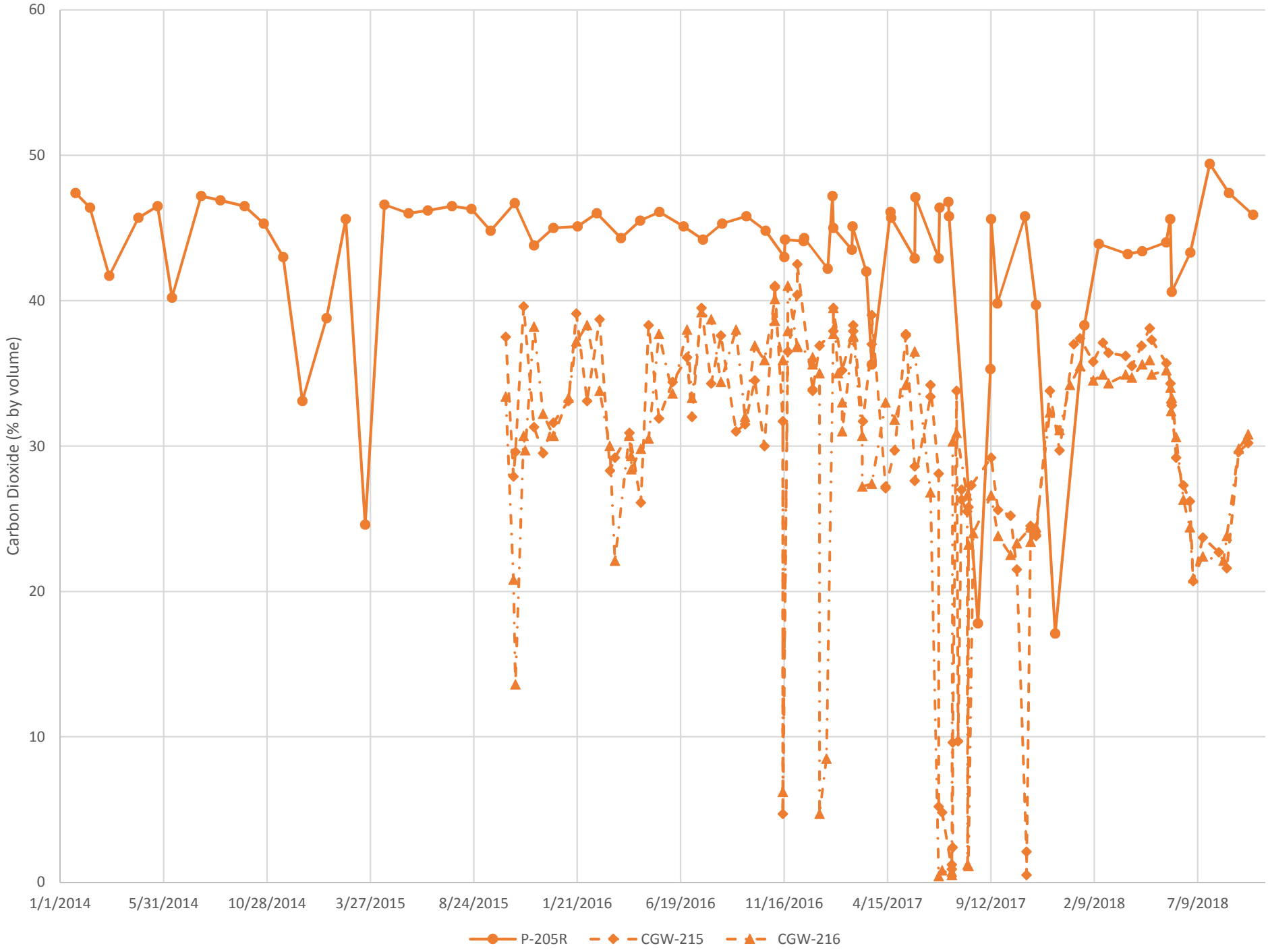
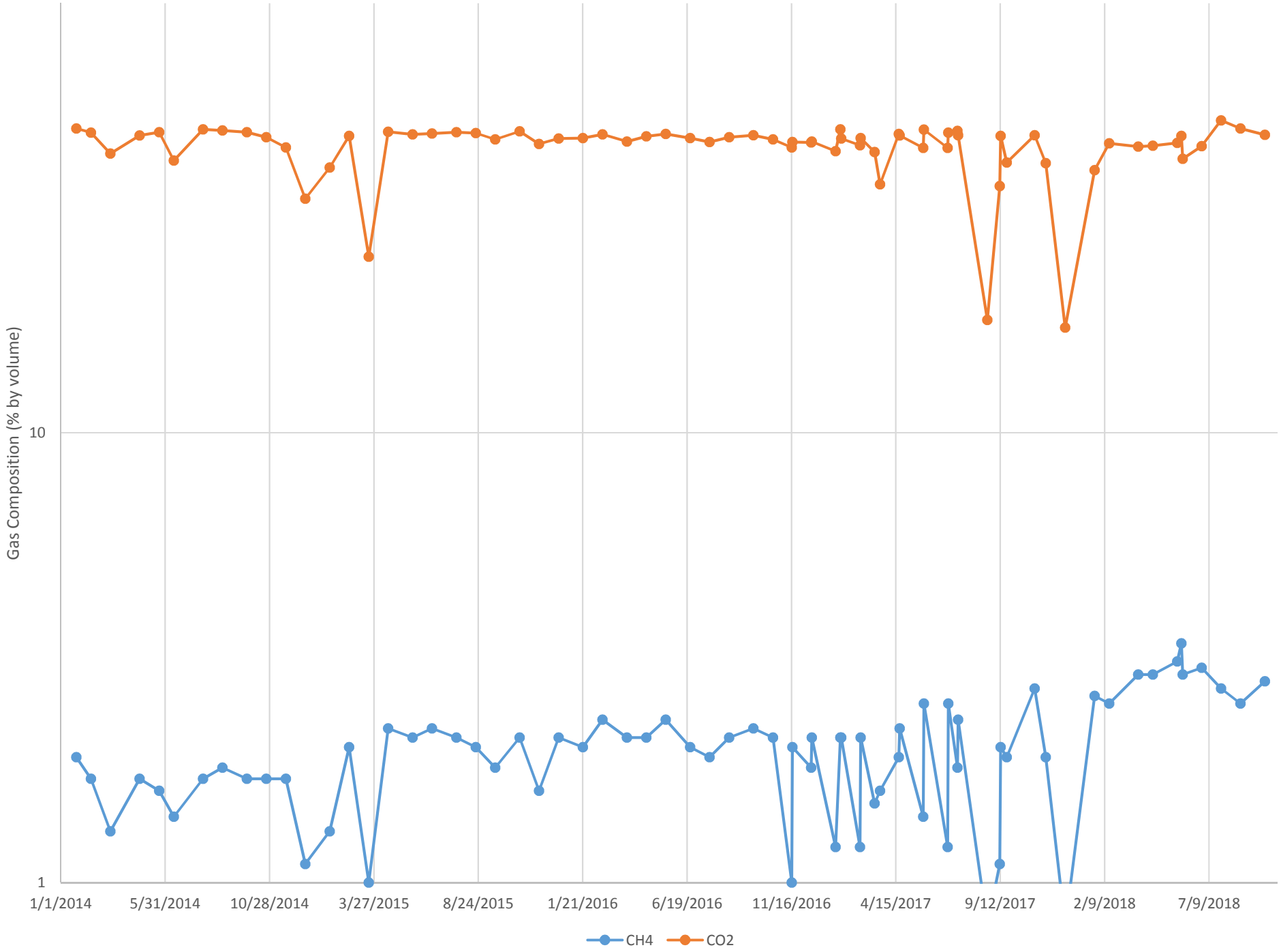


Figure 5. Well P-205R(D) Readings from 2014 to Present - Logarithmic Scale.



ATTACHMENT B

PROBE DATA

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/23/2014 9:20:00 AM	0	37.1	0	62.9	-0.15	28.1	Robert Johns	Robert Johns	3/13/2014 9:36:21 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	2/13/2014 10:23:00 AM	0	8.3	12.1	79.6	0.06	28.15	Robert Johns	Robert Johns	2/14/2014 5:42:10 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	3/13/2014 9:12:00 AM	0	11	5.9	83.1	-0.07	27.98	Robert Johns	Robert Johns	3/14/2014 1:05:23 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	4/24/2014 9:49:00 AM	0	13.6	7.4	79	0.18	27.94	ROBERT JOHNS	ROBERT JOHNS	4/25/2014 10:28:55 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	5/22/2014 9:56:00 AM	0	13.2	9	77.8	0.07	27.93	ROBERT JOHNS	ROBERT JOHNS	5/23/2014 12:24:14 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	6/12/2014 9:45:00 AM	0	11.5	10.2	78.3	0.05	27.91	ROBERT JOHNS	ROBERT JOHNS	6/27/2014 8:58:54 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	7/24/2014 10:48:00 AM	0	10.1	9.4	80.5	-0.05	27.84	Robert Johns	Robert Johns	7/25/2014 12:13:51 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	8/21/2014 9:51:00 AM	0	9.3	11.5	79.2	0.06	27.92	ROBERT JOHNS	ROBERT JOHNS	8/26/2014 10:18:17 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/25/2014 9:51:00 AM	0	8.8	11.6	79.6	0.08	27.9	Robert Johns	Robert Johns	9/29/2014 8:19:11 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	10/23/2014 9:50:00 AM	0	7.9	13	79.1	0.16	27.99	Robert Johns	Robert Johns	10/27/2014 2:00:35 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	11/20/2014 9:49:00 AM	0	8.4	12.8	78.8	0.04	28.04	ROBERT JOHNS	ROBERT JOHNS	11/21/2014 11:09:21 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	12/18/2014 10:08:00 AM	0	9.9	6.8	83.3	-0.01	28.28	ROBERT JOHNS	ROBERT JOHNS	12/19/2014 10:04:54 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/22/2015 10:38:00 AM	0	13.4	4.1	82.5	0.02	28.33	ROBERT JOHNS	ROBERT JOHNS	1/27/2015 4:47:42 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	2/19/2015 9:55:00 AM	0	15.2	4.4	80.4	0.23	28.21	Robert Johns	Robert Johns	2/26/2015 2:07:43 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	3/19/2015 10:23:00 AM	0	15	5.8	79.2	0.04	28.13	ROBERT JOHNS	ROBERT JOHNS	3/25/2015 8:12:41 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	4/16/2015 9:46:00 AM	0	13.4	9	77.6	0.12	28.15	ROBERT JOHNS	ROBERT JOHNS	4/17/2015 10:51:22 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	5/21/2015 9:28:00 AM	0	12.6	9.6	77.8	-0.09	28.04	ROBERT JOHNS	ROBERT JOHNS	5/22/2015 11:40:57 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	6/18/2015 9:11:00 AM	0	10.3	11.4	78.3	0.02	28.08	ROBERT JOHNS	ROBERT JOHNS	6/25/2015 4:06:00 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	7/23/2015 9:23:00 AM	0	9.5	12.1	78.4	-0.01	28.11	ROBERT JOHNS	ROBERT JOHNS	7/30/2015 3:40:16 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	8/20/2015 9:34:00 AM	0	8.4	13.3	78.3	0.01	28.01	ROBERT JOHNS	ROBERT JOHNS	8/27/2015 9:49:04 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/17/2015 10:38:00 AM	0	8.5	11.8	79.7		27.99	ROBERT JOHNS	ROBERT JOHNS	9/30/2015 10:09:43 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	10/22/2015 10:32:00 AM	0	8.6	12.8	78.6	-0.07	28.01	ROBERT JOHNS	ROBERT JOHNS	10/23/2015 10:10:10 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	11/19/2015 9:58:00 AM	0	7.5	13.8	78.7	0.27	28.06	ROBERT JOHNS	ROBERT JOHNS	11/20/2015 2:22:04 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	12/17/2015 9:38:00 AM	0	7.5	13.5	79	-0.02	28.19	ROBERT JOHNS	ROBERT JOHNS	12/22/2015 4:37:26 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/21/2016 9:32:00 AM	0	9.3	7.1	83.6	0.01	28.22	ROBERT JOHNS	ROBERT JOHNS	1/26/2016 9:54:28 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	2/18/2016 9:39:00 AM	0	12.4	3.9	83.7	-0.01	28	ROBERT JOHNS	ROBERT JOHNS	2/19/2016 8:19:00 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	3/24/2016 9:58:00 AM	0	11.4	8.8	79.8	0.02	28.12	ROBERT JOHNS	ROBERT JOHNS	3/29/2016 2:14:47 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	4/21/2016 9:27:00 AM	0	15.4	4.8	79.8	0.07	27.91	ROBERT JOHNS	ROBERT JOHNS	4/29/2016 11:11:25 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	5/19/2016 7:51:00 AM	0	15.3	7	77.7	0.03	27.94	ROBERT JOHNS	ROBERT JOHNS	5/20/2016 3:54:34 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	6/23/2016 9:14:00 AM	0	13.3	8.7	78	0.2	27.98	ROBERT JOHNS	ROBERT JOHNS	6/28/2016 6:36:07 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	7/21/2016 9:36:00 AM	0	12.3	9.2	78.5	0.14	28	ROBERT JOHNS	ROBERT JOHNS	8/2/2016 1:52:18 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	8/18/2016 8:48:00 AM	0	13	9.1	77.9	0.08	27.91	ROBERT JOHNS	ROBERT JOHNS	8/23/2016 3:16:19 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/22/2016 7:53:00 AM	0	12.2	10.1	77.7	0.09	27.9	ROBERT JOHNS	ROBERT JOHNS	9/30/2016 1:39:56 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	10/20/2016 8:06:00 AM	0	10.4	11.5	78.1	0	28.04	ROBERT JOHNS	ROBERT JOHNS	10/28/2016 10:04:23 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	11/16/2016 1:12:22 PM	0	11.8	10.7	77.5	-0.26	27.87			11/16/2016 2:39:49 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	11/17/2016 8:06:00 AM	0	10.7	11.5	77.8	-0.04	27.99	ROBERT JOHNS	ROBERT JOHNS	11/22/2016 11:05:07 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	12/14/2016 8:18:09 AM	0	11.1	11.1	77.8	0.04	28.15			12/15/2016 4:58:00 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	12/15/2016 7:54:00 AM	0	10.8	10.7	78.5	0.07	28.01	ROBERT JOHNS	ROBERT JOHNS	12/16/2016 4:02:08 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/18/2017 11:46:49 AM	0	10.1	4.2	85.7	0.01	28.14	BN	BN	1/19/2017 11:57:15 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/25/2017 8:24:17 AM	0	9.5	2.9	87.6	-1.23	28.23	BN	BN	1/26/2017 12:29:21 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/26/2017 9:25:00 AM	0	6.3	10.2	83.5	-0.02	28.27	ROBERT JOHNS	ROBERT JOHNS	2/1/2017 2:00:41 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	2/22/2017 8:05:15 AM	0	6.5	3.9	89.6	-0.12	28.12	BN	BN	2/23/2017 10:56:07 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	2/23/2017 9:17:00 AM	0	5.5	8.9	85.6	-0.08	28.03	ROBERT JOHNS	ROBERT JOHNS	3/6/2017 8:55:18 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	3/15/2017 8:08:50 AM	0	5.4	5.3	89.3	0.04	28.14	BN	BN	3/16/2017 4:47:59 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	3/23/2017 8:58:00 AM	0	5.6	8.1	86.3	-0.02	28.02	ROBERT JOHNS	ROBERT JOHNS	4/4/2017 11:25:12 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	4/19/2017 8:30:57 AM	0	8.2	8.5	83.3	0.09	28.13	BS	BN	4/20/2017 11:41:09 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	4/20/2017 9:21:00 AM	0	8.2	8.8	83	0.07	28.08	ROBERT JOHNS	ROBERTJOHNS	4/26/2017 9:09:22 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	5/24/2017 9:28:53 AM	0	8	11.4	80.6	0.04	27.93	BN	BN	5/25/2017 9:07:46 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	5/25/2017 9:39:00 AM	0	9.1	11.6	79.3	0.08	27.84	ROBERT JOHNS	ROBERT JOHNS	6/4/2017 11:51:57 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	6/28/2017 8:48:21 AM	0	9.5	11	79.5	-0.05	27.96	BS	BS	6/30/2017 6:48:17 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	6/29/2017 9:48:00 AM	0	9.2	11.9	78.9	0.27	27.92	ROBERT JOHNS	ROBERT JOHNS	7/7/2017 8:14:36 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	7/12/2017 9:54:03 AM	0	9.4	11.9	78.7	0.1	28.06	BS	BS	7/14/2017 11:32:40 AM

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	7/13/2017 8:38:00 AM	0	9.8	11.5	78.7	0.13	28.01	ROBERT JOHNS	ROBERT JOHNS	7/31/2017 12:51:16 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	8/24/2017 10:05:00 AM	0	10	12	78	0.01	27.87	ROBERT JOHNS	ROBERT JOHNS	8/28/2017 1:32:38 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/11/2017 10:40:03 AM	0	9	12	79	0.05	28.05	mq	mq	9/11/2017 5:57:34 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/12/2017 11:45:40 AM	0	9.3	11.8	78.9	-0.01	28	tr	mq	9/12/2017 1:33:13 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/21/2017 7:48:00 AM	0	9.2	12.8	78	0	27.83	ROBERT JOHNS	ROBERT JOHNS	9/30/2017 12:41:48 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	10/31/2017 9:18:22 AM	0	9.2	12.6	78.2	-0.03	27.9	ROBERT JOHNS	ROBERT JOHNS	11/1/2017 11:20:11 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	11/16/2017 9:43:00 AM	0	8.8	12.6	78.6	0.06	27.98	ROBERT JOHNS	ROBERT JOHNS	11/19/2017 9:52:48 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	12/14/2017 9:23:00 AM	0	5.8	15.4	78.8	0.12	28.04	ROBERT JOHNS	ROBERT JOHNS	12/15/2017 7:43:26 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	1/25/2018 11:02:06 AM	0	10.1	7.6	82.3	0.09	28.14			1/25/2018 5:25:20 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	2/15/2018 10:48:05 AM	0	11.5	6.4	82.1	-0.23	28.2	AR	AR	2/15/2018 4:29:24 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	3/29/2018 10:01:45 AM	0	9.1	5.7	85.2	-0.11	28.17			3/29/2018 4:40:11 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	4/19/2018 9:55:31 AM	0	8.7	5.6	85.7	0	28.06			4/19/2018 11:25:05 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	5/24/2018 7:41:37 AM	0	9.6	10.8	79.6	0.01				5/24/2018 11:36:41 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	6/28/2018 7:57:14 AM	0	9.6	12.1	78.3	-0.03	28.02			6/28/2018 11:02:21 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	7/26/2018 8:01:50 AM	0	9.3	12.4	78.3	-0.02	28.11			7/26/2018 11:07:05 AM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	8/23/2018 8:07:10 AM	0	9.2	13.2	77.6	-0.08				8/23/2018 1:06:39 PM
Sunshine Canyon Landfill	P00205RA	P-205RA	Active	9/27/2018 8:02:45 AM	0	8.5	13.4	78.1	-0.01		SD	SD	9/27/2018 10:32:54 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/23/2014 9:22:00 AM	0	9.1	12.1	78.8	-0.2	28.1	Robert Johns	Robert Johns	3/13/2014 9:36:21 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	2/13/2014 10:26:00 AM	0	32.9	1.8	65.3	-0.03	28.15	Robert Johns	Robert Johns	2/14/2014 5:42:10 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	3/13/2014 9:15:00 AM	0.1	34.6	0.1	65.2	-0.15	27.98	Robert Johns	Robert Johns	3/14/2014 1:05:23 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	4/24/2014 9:51:00 AM	0	31	2.6	66.4	0.15	27.94	ROBERT JOHNS	ROBERT JOHNS	4/25/2014 10:28:55 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	5/22/2014 9:57:00 AM	0	29.5	3.9	66.6	-0.04	27.95	ROBERT JOHNS	ROBERT JOHNS	5/23/2014 12:24:14 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	6/12/2014 9:47:00 AM	0	25.5	6	68.5	0.02	27.91	ROBERT JOHNS	ROBERT JOHNS	6/27/2014 8:58:54 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	7/24/2014 10:50:00 AM	0.1	34.9	0	65	0.06	27.84	Robert Johns	Robert Johns	7/25/2014 12:13:51 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	8/21/2014 9:56:00 AM	0.2	33.9	0.4	65.5	0.04	27.92	ROBERT JOHNS	ROBERT JOHNS	8/26/2014 10:18:17 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/25/2014 9:53:00 AM	0.2	33.2	1.3	65.3	0.02	27.94	Robert Johns	Robert Johns	9/29/2014 8:19:11 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	10/23/2014 9:52:00 AM	0.1	33.8	0.5	65.6	0	27.99	Robert Johns	Robert Johns	10/27/2014 2:00:35 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	11/20/2014 9:52:00 AM	0.4	34.8	0.2	64.6	-0.03	28.05	ROBERT JOHNS	ROBERT JOHNS	11/21/2014 11:09:22 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	12/18/2014 10:10:00 AM	0.2	19.9	10.3	69.6	-0.22	28.27	ROBERT JOHNS	ROBERT JOHNS	12/19/2014 10:04:54 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/22/2015 10:40:00 AM	0.2	31.3	2.2	66.3	-0.11	28.33	ROBERT JOHNS	ROBERT JOHNS	1/27/2015 4:47:42 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	2/19/2015 9:58:00 AM	0.3	29.7	2.8	67.2	-0.13	28.22	Robert Johns	Robert Johns	2/26/2015 2:07:43 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	3/19/2015 10:27:00 AM	0.1	26.1	5	68.8	0.01	28.13	ROBERT JOHNS	ROBERT JOHNS	3/25/2015 8:12:41 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	4/16/2015 9:48:00 AM	0.2	22	7.2	70.6	-0.08	28.14	ROBERT JOHNS	ROBERT JOHNS	4/17/2015 10:51:22 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	5/21/2015 9:30:00 AM	0.2	23.1	6.8	69.9	0.03	28.03	ROBERT JOHNS	ROBERT JOHNS	5/22/2015 11:40:57 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	6/18/2015 9:13:00 AM	0.1	17.7	9.5	72.7	-0.05	28.07	ROBERT JOHNS	ROBERT JOHNS	6/25/2015 4:06:00 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	7/23/2015 9:26:00 AM	0.4	32.2	1	66.4	0.07	28.1	ROBERT JOHNS	ROBERT JOHNS	7/30/2015 3:40:16 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	8/20/2015 9:37:00 AM	0.4	33.1	0.4	66.1	-0.06	28.02	ROBERT JOHNS	ROBERT JOHNS	8/27/2015 9:49:04 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/17/2015 10:43:00 AM	0	0.1	20	79.9		28	ROBERT JOHNS	ROBERT JOHNS	9/30/2015 10:09:43 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	10/22/2015 10:33:00 AM	0.3	24.7	6.8	68.2	-0.12	28	ROBERT JOHNS	ROBERT JOHNS	10/23/2015 10:10:10 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	11/19/2015 9:59:00 AM	0.2	29.6	3.2	67	0.21	28.06	ROBERT JOHNS	ROBERT JOHNS	11/20/2015 2:22:04 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	12/17/2015 9:40:00 AM	0.2	31.6	0.7	67.5	-0.16	28.19	ROBERT JOHNS	ROBERT JOHNS	12/22/2015 4:37:26 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/21/2016 9:33:00 AM	0	12.9	12.6	74.5	-0.14	28.23	ROBERT JOHNS	ROBERT JOHNS	1/26/2016 9:54:28 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	2/18/2016 9:41:00 AM	0.2	28.3	2.7	68.8	-0.31	28	ROBERT JOHNS	ROBERT JOHNS	2/19/2016 8:19:00 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	3/24/2016 10:00:00 AM	0.1	21.3	7	71.6	0.01	28.11	ROBERT JOHNS	ROBERT JOHNS	3/29/2016 2:14:47 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	4/21/2016 9:29:00 AM	0.3	30.4	0.4	68.9	0.01	27.91	ROBERT JOHNS	ROBERT JOHNS	4/29/2016 11:11:25 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	5/19/2016 7:52:00 AM	0.2	23.5	6.1	70.2	-0.08	27.93	ROBERT JOHNS	ROBERT JOHNS	5/20/2016 3:54:34 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	6/23/2016 9:16:00 AM	0.2	28.9	1.6	69.3	0.04	27.98	ROBERT JOHNS	ROBERT JOHNS	6/28/2016 6:36:07 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	7/21/2016 9:39:00 AM	0.2	29.9	0.4	69.5	0.01	28	ROBERT JOHNS	ROBERT JOHNS	8/2/2016 1:52:18 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	8/18/2016 8:50:00 AM	0.3	31.4	0.2	68.1	0.03	27.92	ROBERT JOHNS	ROBERT JOHNS	8/23/2016 3:16:19 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/22/2016 7:56:00 AM	0.4	32	0.1	67.5	-0.01	27.91	ROBERT JOHNS	ROBERT JOHNS	9/30/2016 1:39:56 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	10/20/2016 8:08:00 AM	0.2	29.5	1.9	68.4	-0.22	28.04	ROBERT JOHNS	ROBERT JOHNS	10/28/2016 10:04:23 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	11/16/2016 1:15:27 PM	0	27.7	1.8	70.5	-0.08	27.86			11/16/2016 2:39:49 PM

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	11/17/2016 8:08:00 AM	0.2	30.9	0.7	68.2	-0.4	27.99	ROBERT JOHNS	ROBERT JOHNS	11/22/2016 11:05:07 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	12/14/2016 8:20:30 AM	0.1	24.1	4.7	71.1	-0.08	28.15			12/15/2016 4:58:00 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	12/15/2016 7:56:00 AM	0.2	30.8	0.3	68.7	0	28.01	ROBERT JOHNS	ROBERT JOHNS	12/16/2016 4:02:08 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/18/2017 11:49:40 AM	0	27.3	0.7	72	-0.13	28.13	BN	BN	1/19/2017 11:57:15 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/25/2017 8:27:24 AM	0.1	26.2	2.7	71	-0.32	28.23	BN	BN	1/26/2017 12:29:21 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/26/2017 9:26:00 AM	0.3	24.4	5.2	70.1	-0.16	28.27	ROBERT JOHNS	ROBERT JOHNS	2/1/2017 2:00:41 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	2/22/2017 8:07:48 AM	0.2	24.7	4.1	71	0.12	28.12	BN	BN	2/23/2017 10:56:07 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	2/23/2017 9:19:00 AM	0.3	22.2	7.4	70.1	0.23	28.03	ROBERT JOHNS	ROBERT JOHNS	3/6/2017 8:55:18 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	3/15/2017 8:11:31 AM	0.4	24	4.6	71	-0.1	28.14	BN	BN	3/16/2017 4:47:59 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	3/23/2017 9:01:00 AM	0.5	23.3	7.5	68.7	-0.27	28.02	ROBERT JOHNS	ROBERT JOHNS	4/4/2017 11:25:12 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	4/19/2017 8:33:34 AM	0.9	23.7	7.4	68	-0.19	28.14	BS	BN	4/20/2017 11:41:09 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	4/20/2017 9:26:00 AM	1.5	37.2	0.6	60.7	-0.11	28.08	ROBERT JOHNS	ROBERTJOHNS	4/26/2017 9:09:22 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	5/24/2017 9:31:16 AM	0.7	19.8	6.1	73.4	0.23	27.95	BN	BN	5/25/2017 9:07:46 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	5/25/2017 9:45:00 AM	1.2	33.6	1.2	64	-0.13	27.85	ROBERT JOHNS	ROBERT JOHNS	6/4/2017 11:51:57 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	6/28/2017 8:50:55 AM	0	24	4.6	71.4	-0.01	27.97	BS	BS	6/30/2017 6:48:17 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	6/29/2017 9:49:00 AM	0	15.5	10.4	74.1	0.03	27.92	ROBERT JOHNS	ROBERT JOHNS	7/7/2017 8:14:36 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	7/12/2017 9:56:41 AM	0.3	22	5.3	72.4	0.02	28.06	BS	BS	7/14/2017 11:32:40 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	7/13/2017 8:41:00 AM	0.6	22.1	7.2	70.1	0	28.01	ROBERT JOHNS	ROBERT JOHNS	7/31/2017 12:51:16 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	8/24/2017 9:59:00 AM	0.7	24	5.4	69.9	0.1	27.89	ROBERT JOHNS	ROBERT JOHNS	8/28/2017 1:32:38 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/11/2017 10:43:03 AM	0.2	13.4	11	75.4	0	28.05	mq	mq	9/11/2017 5:57:34 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/12/2017 11:49:28 AM	0.6	29.5	1	68.9	0.06	28.03	tr	mq	9/12/2017 1:33:13 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/21/2017 7:50:00 AM	0.7	22.8	6.3	70.2	-0.01	27.82	ROBERT JOHNS	ROBERT JOHNS	9/30/2017 12:41:48 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	10/31/2017 9:21:25 AM	0.5	25	4.2	70.3	-0.11	27.9	ROBERT JOHNS	ROBERT JOHNS	11/1/2017 11:20:11 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	11/16/2017 9:45:00 AM	0.2	12.8	11	76	0.05	27.97	ROBERT JOHNS	ROBERT JOHNS	11/19/2017 9:52:48 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	12/14/2017 9:26:00 AM	0.1	19.6	7	73.3	-0.1	28.02	ROBERT JOHNS	ROBERT JOHNS	12/15/2017 7:43:26 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	1/25/2018 11:05:21 AM	0.1	23.9	2.8	73.2	0.05	28.14			1/25/2018 5:25:20 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	2/15/2018 10:51:05 AM	0.3	13.2	11	75.5	0.11	28.21	AR	AR	2/15/2018 4:29:24 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	3/29/2018 10:05:06 AM	0.2	23.5	1.1	75.2	-0.01	28.16			3/29/2018 4:40:11 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	4/19/2018 9:59:14 AM	0.4	24.5	0.9	74.2	-0.01	28.08			4/19/2018 11:25:05 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	5/24/2018 7:47:02 AM	0.7	28.1	1.1	70.1	-0.18	28.16			5/24/2018 11:36:41 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	6/28/2018 8:01:09 AM	0.7	25.8	2.5	71	-0.09	28.04			6/28/2018 11:02:21 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	7/26/2018 8:07:42 AM	0.9	31.5	0.8	66.8	-0.03	28.1			7/26/2018 11:07:05 AM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	8/23/2018 8:12:21 AM	1	31.4	0.7	66.9	-0.12	28.12			8/23/2018 1:06:39 PM
Sunshine Canyon Landfill	P00205RB	P-205RB	Active	9/27/2018 8:06:10 AM	0.7	25.7	2.6	71	-0.03	28.08	SD	SD	9/27/2018 10:32:54 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/23/2014 9:24:00 AM	0.9	44.4	0.2	54.5	-0.2	28.1	Robert Johns	Robert Johns	3/13/2014 9:36:21 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	2/13/2014 10:30:00 AM	1	42.9	1.2	54.9	-0.11	28.15	Robert Johns	Robert Johns	2/14/2014 5:42:10 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	3/13/2014 9:18:00 AM	1	39.8	2.6	56.6	-0.05	27.98	Robert Johns	Robert Johns	3/14/2014 1:05:23 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	4/24/2014 9:57:00 AM	1.1	42.4	1.3	55.2	0.05	27.94	ROBERT JOHNS	ROBERT JOHNS	4/25/2014 10:28:55 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/22/2014 9:59:00 AM	0.6	31.1	6.9	61.4	-0.01	27.95	ROBERT JOHNS	ROBERT JOHNS	5/23/2014 12:24:14 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	6/12/2014 9:49:00 AM	0.6	30.2	6.9	62.3	-0.12	27.91	ROBERT JOHNS	ROBERT JOHNS	6/27/2014 8:58:54 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	7/24/2014 10:53:00 AM	1	44.7	0	54.3	-0.11	27.84	Robert Johns	Robert Johns	7/25/2014 12:13:51 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	8/21/2014 9:58:00 AM	1	41.5	1.4	56.1	-0.15	27.92	ROBERT JOHNS	ROBERT JOHNS	8/26/2014 10:18:17 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/25/2014 9:56:00 AM	1.1	43.6	0.3	55	-0.17	27.94	Robert Johns	Robert Johns	9/29/2014 8:19:11 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	10/23/2014 9:55:00 AM	1	41.8	1	56.2	-0.17	28	Robert Johns	Robert Johns	10/27/2014 2:00:35 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	11/20/2014 9:56:00 AM	1.3	42	1.3	55.4	-0.16	28.05	ROBERT JOHNS	ROBERT JOHNS	11/21/2014 11:09:22 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	12/18/2014 10:13:00 AM	0.5	18.9	13.9	66.7	-0.32	28.27	ROBERT JOHNS	ROBERT JOHNS	12/19/2014 10:04:54 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/22/2015 10:43:00 AM	0.9	31.6	6.7	60.8	-0.37	28.33	ROBERT JOHNS	ROBERT JOHNS	1/27/2015 4:47:42 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	2/19/2015 10:00:00 AM	1.4	43.1	0.3	55.2	-0.1	28.21	Robert Johns	Robert Johns	2/26/2015 2:07:43 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	3/19/2015 10:29:00 AM	0.5	16	13	70.5	-0.04	28.12	ROBERT JOHNS	ROBERT JOHNS	3/25/2015 8:12:41 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	4/16/2015 9:50:00 AM	1.4	42.7	0.4	55.5	-0.15	28.14	ROBERT JOHNS	ROBERT JOHNS	4/17/2015 10:51:22 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/21/2015 9:33:00 AM	1.3	40.3	1.7	56.7	0.03	28.04	ROBERT JOHNS	ROBERT JOHNS	5/22/2015 11:40:57 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	6/18/2015 9:16:00 AM	0.3	40.8	1.3	56.6	-0.21	28.07	ROBERT JOHNS	ROBERT JOHNS	6/25/2015 4:06:00 PM

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	7/23/2015 9:30:00 AM	1.3	43.1	0	55.6	-0.32	28.1	ROBERT JOHNS	ROBERT JOHNS	7/30/2015 3:40:16 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	8/20/2015 9:40:00 AM	1.3	43.2	0	55.5	0.03	28.01	ROBERT JOHNS	ROBERT JOHNS	8/27/2015 9:49:04 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/17/2015 10:46:00 AM	1.3	42	0.2	56.5		28	ROBERT JOHNS	ROBERT JOHNS	9/30/2015 10:09:43 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	10/22/2015 10:35:00 AM	1.1	38.4	3.2	57.3	-0.22	28	ROBERT JOHNS	ROBERT JOHNS	10/23/2015 10:10:10 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	11/19/2015 10:02:00 AM	1.2	43.2	0.2	55.4	-0.1	28.06	ROBERT JOHNS	ROBERT JOHNS	11/20/2015 2:22:04 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	12/17/2015 9:42:00 AM	0.9	30.1	6.9	62.1	-0.35	28.18	ROBERT JOHNS	ROBERT JOHNS	12/22/2015 4:37:26 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/21/2016 9:37:00 AM	1.3	41.8	0	56.9	-0.23	28.23	ROBERT JOHNS	ROBERT JOHNS	1/26/2016 9:54:28 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	2/18/2016 9:43:00 AM	0.8	28.9	7.2	63.1	-0.57	28.01	ROBERT JOHNS	ROBERT JOHNS	2/19/2016 8:19:00 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	3/24/2016 10:02:00 AM	1.4	41	0.5	57.1	0.02	28.11	ROBERT JOHNS	ROBERT JOHNS	3/29/2016 2:14:47 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	4/21/2016 9:36:00 AM	1.2	40.2	0.5	58.1	-0.11	27.91	ROBERT JOHNS	ROBERT JOHNS	4/29/2016 11:11:25 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/19/2016 7:56:00 AM	1.4	42	0	56.6	-0.11	27.94	ROBERT JOHNS	ROBERT JOHNS	5/20/2016 3:54:34 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	6/23/2016 9:20:00 AM	1.3	41.1	0	57.6	-0.07	27.98	ROBERT JOHNS	ROBERT JOHNS	6/28/2016 6:36:07 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	7/21/2016 9:44:00 AM	1.2	39.4	0.3	59.1	0.08	28	ROBERT JOHNS	ROBERT JOHNS	8/2/2016 1:52:18 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	8/18/2016 8:53:00 AM	1.2	39.7	0.6	58.5	0.06	27.92	ROBERT JOHNS	ROBERT JOHNS	8/23/2016 3:16:19 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/22/2016 7:57:00 AM	1.2	40.9	0	57.9	-0.23	27.9	ROBERT JOHNS	ROBERT JOHNS	9/30/2016 1:39:56 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	10/20/2016 8:13:00 AM	1.3	40.5	0	58.2	-0.27	28.04	ROBERT JOHNS	ROBERT JOHNS	10/28/2016 10:04:23 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	11/16/2016 1:20:31 PM	0.8	39	0.9	59.3	0.07	27.86			11/16/2016 2:39:49 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	11/17/2016 8:12:00 AM	1.1	40.2	0	58.7	-0.83	27.99	ROBERT JOHNS	ROBERT JOHNS	11/22/2016 11:05:07 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	12/14/2016 8:23:54 AM	1	34.7	3.4	60.9	-0.32	28.15			12/15/2016 4:58:00 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	12/15/2016 8:02:00 AM	1.2	39.7	0.1	59	-0.11	28	ROBERT JOHNS	ROBERT JOHNS	12/16/2016 4:02:08 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/18/2017 11:53:21 AM	0.8	36.1	2.1	61	0.12	28.13	BN	BN	1/19/2017 11:57:15 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/25/2017 8:32:01 AM	1.1	41	0.2	57.7	-0.62	28.24	BN	BN	1/26/2017 12:29:21 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/26/2017 9:32:00 AM	1.4	40.9	0.2	57.5	-0.3	28.27	ROBERT JOHNS	ROBERT JOHNS	2/1/2017 2:00:41 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	2/22/2017 8:11:34 AM	1.1	38.9	1.7	58.3	0.15	28.12	BN	BN	2/23/2017 10:56:07 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	2/23/2017 9:24:00 AM	1.2	40.4	0	58.4	0.04	28.03	ROBERT JOHNS	ROBERT JOHNS	3/6/2017 8:55:18 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	3/15/2017 8:14:39 AM	1.1	36.4	2.9	59.6	-0.09	28.15	BN	BN	3/16/2017 4:47:59 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	3/23/2017 9:05:00 AM	1.2	40.1	0.9	57.8	-0.24	28.02	ROBERT JOHNS	ROBERT JOHNS	4/4/2017 11:25:12 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	4/19/2017 8:37:12 AM	1.1	38.1	3.3	57.5	-0.24	28.14	BS	BN	4/20/2017 11:41:09 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	4/20/2017 9:28:00 AM	1.4	43.6	0	55	-0.15	28.08	ROBERT JOHNS	ROBERTJOHNS	4/26/2017 9:09:22 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/24/2017 9:34:35 AM	0.9	33.3	4.8	61	0.01	27.94	BN	BN	5/25/2017 9:07:46 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/25/2017 9:50:00 AM	1.6	45.2	0	53.2	-0.25	27.85	ROBERT JOHNS	ROBERT JOHNS	6/4/2017 11:51:57 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	6/28/2017 8:54:25 AM	0.8	36.5	3.9	58.8	-0.07	27.97	BS	BS	6/30/2017 6:48:17 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	6/29/2017 9:54:00 AM	1.6	44.7	0	53.7	-0.22	27.92	ROBERT JOHNS	ROBERT JOHNS	7/7/2017 8:14:36 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	7/12/2017 10:00:23 AM	1.1	41	2.2	55.7	-0.02	28.05	BS	BS	7/14/2017 11:32:40 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	7/13/2017 8:45:00 AM	1.6	44.5	0	53.9	-0.27	28.02	ROBERT JOHNS	ROBERT JOHNS	7/31/2017 12:51:16 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	8/24/2017 10:06:00 AM	0.6	17.2	12.6	69.6	-0.06	27.89	ROBERT JOHNS	ROBERT JOHNS	8/28/2017 1:32:38 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/11/2017 10:48:10 AM	0.7	29	6.8	63.5	-0.17	28.04	mq	mq	9/11/2017 5:57:34 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/12/2017 11:52:50 AM	1.2	43.5	0	55.3	-0.04	28.02	tr	mq	9/12/2017 1:33:13 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/21/2017 7:53:00 AM	1.2	32.4	6.6	59.8	-0.08	27.83	ROBERT JOHNS	ROBERT JOHNS	9/30/2017 12:41:48 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	10/31/2017 9:23:04 AM	0.6	17.1	12.8	69.5	-0.41	27.89	ROBERT JOHNS	ROBERT JOHNS	11/1/2017 11:20:11 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	11/16/2017 9:47:00 AM	0.6	17.7	12.3	69.4	0.03	27.97	ROBERT JOHNS	ROBERT JOHNS	11/19/2017 9:52:48 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	12/14/2017 9:28:00 AM	0.9	23.8	9.4	65.9	-0.37	28.04	ROBERT JOHNS	ROBERT JOHNS	12/15/2017 7:43:26 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	1/25/2018 11:09:30 AM	1.5	35.6	2.4	60.5	-0.06	28.14			1/25/2018 5:25:20 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	2/15/2018 10:57:05 AM	1.4	34.2	4.1	60.3	0.51	28.21	AR	AR	2/15/2018 4:29:24 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	3/29/2018 10:09:14 AM	1.5	36.3	1.8	60.4	-0.39	28.16			3/29/2018 4:40:11 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	4/19/2018 10:04:37 AM	0.2	35.3	0.2	64.3	-0.14	28.08			4/19/2018 11:25:05 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/24/2018 7:51:55 AM	2	40.6	0	57.4	-0.41	28.15			5/24/2018 11:36:41 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/30/2018 7:58:03 AM	1.9	41.2	0	56.9	-0.28	27.97	mq	mq	5/30/2018 3:59:32 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	5/30/2018 7:59:11 AM	1.9	41.4	0	56.7		27.97	mq	mq	5/30/2018 3:59:32 PM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	6/28/2018 8:06:19 AM	1.9	40	0.2	57.9	-0.25	28.04			6/28/2018 11:02:21 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	7/26/2018 8:14:28 AM	1.8	46.4	0	51.8	-0.2	28.1			7/26/2018 11:07:05 AM
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	8/23/2018 8:18:39 AM	1.7	44.3	0.1	53.9	-0.28	28.13			8/23/2018 1:06:39 PM

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RC	P-205RC	Active	9/27/2018 8:10:25 AM	1.8	41.7	0.5	56	-0.3	28.08	SD	SD	9/27/2018 10:32:54 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/23/2014 9:27:00 AM	1.9	47.4	0	50.7	-0.15	28.1	Robert Johns	Robert Johns	3/13/2014 9:36:21 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	2/13/2014 10:36:00 AM	1.7	46.4	0	51.9	0	28.15	Robert Johns	Robert Johns	2/14/2014 5:42:10 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	3/13/2014 9:20:00 AM	1.3	41.7	2.1	54.9	-0.06	27.98	Robert Johns	Robert Johns	3/14/2014 1:05:23 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	4/24/2014 10:00:00 AM	1.7	45.7	0	52.6	0.15	27.94	ROBERT JOHNS	ROBERT JOHNS	4/25/2014 10:28:55 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/22/2014 10:04:00 AM	1.6	46.5	0	51.9	-0.02	27.95	ROBERT JOHNS	ROBERT JOHNS	5/23/2014 12:24:14 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/12/2014 9:51:00 AM	1.4	40.2	3.5	54.9	0.13	27.91	ROBERT JOHNS	ROBERT JOHNS	6/27/2014 8:58:54 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	7/24/2014 10:59:00 AM	1.7	47.2	0	51.1	-0.04	27.84	Robert Johns	Robert Johns	7/25/2014 12:13:51 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	8/21/2014 10:01:00 AM	1.8	46.9	0	51.3	-0.09	27.92	ROBERT JOHNS	ROBERT JOHNS	8/26/2014 10:18:17 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/25/2014 10:02:00 AM	1.7	46.5	0	51.8	0.04	27.94	Robert Johns	Robert Johns	9/29/2014 8:19:11 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	10/23/2014 9:57:00 AM	1.7	45.3	0.5	52.5	0.08	27.99	Robert Johns	Robert Johns	10/27/2014 2:00:35 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	11/20/2014 9:59:00 AM	1.7	43	1.6	53.7	-0.07	28.05	ROBERT JOHNS	ROBERT JOHNS	11/21/2014 11:09:22 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	12/18/2014 10:16:00 AM	1.1	33.1	7.2	58.6	-0.01	28.27	ROBERT JOHNS	ROBERT JOHNS	12/19/2014 10:04:54 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/22/2015 10:45:00 AM	1.3	38.8	3.7	56.2	-0.03	28.33	ROBERT JOHNS	ROBERT JOHNS	1/27/2015 4:47:42 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	2/19/2015 10:05:00 AM	2	45.6	0.1	52.3	-0.07	28.21	Robert Johns	Robert Johns	2/26/2015 2:07:43 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	3/19/2015 10:33:00 AM	1	24.6	10.2	64.2	0.07	28.12	ROBERT JOHNS	ROBERT JOHNS	3/25/2015 8:12:41 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	4/16/2015 9:53:00 AM	2.2	46.6	0	51.2	0.03	28.14	ROBERT JOHNS	ROBERT JOHNS	4/17/2015 10:51:22 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/21/2015 9:37:00 AM	2.1	46	0	51.9	0.07	28.04	ROBERT JOHNS	ROBERT JOHNS	5/22/2015 11:40:57 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/18/2015 9:19:00 AM	2.2	46.2	0.3	51.3	-0.04	28.07	ROBERT JOHNS	ROBERT JOHNS	6/25/2015 4:06:00 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	7/23/2015 9:34:00 AM	2.1	46.5	0	51.4	-0.09	28.1	ROBERT JOHNS	ROBERT JOHNS	7/30/2015 3:40:16 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	8/20/2015 9:45:00 AM	2	46.3	0	51.7	0	28.01	ROBERT JOHNS	ROBERT JOHNS	8/27/2015 9:49:04 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/17/2015 10:52:00 AM	1.8	44.8	0.8	52.6		28.01	ROBERT JOHNS	ROBERT JOHNS	9/30/2015 10:09:43 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	10/22/2015 10:38:00 AM	2.1	46.7	0.2	51	-0.14	28.01	ROBERT JOHNS	ROBERT JOHNS	10/23/2015 10:10:10 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	11/19/2015 10:04:00 AM	1.6	43.8	0.8	53.8	-0.01	28.06	ROBERT JOHNS	ROBERT JOHNS	11/20/2015 2:22:04 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	12/17/2015 9:45:00 AM	2.1	45	0	52.9	-0.12	28.19	ROBERT JOHNS	ROBERT JOHNS	12/22/2015 4:37:26 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/21/2016 9:42:00 AM	2	45.1	0	52.9	-0.01	28.22	ROBERT JOHNS	ROBERT JOHNS	1/26/2016 9:54:28 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	2/18/2016 9:47:00 AM	2.3	46	0	51.7	-0.23	28.01	ROBERT JOHNS	ROBERT JOHNS	2/19/2016 8:19:00 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	3/24/2016 10:04:00 AM	2.1	44.3	0.4	53.2	-0.07	28.11	ROBERT JOHNS	ROBERT JOHNS	3/29/2016 2:14:47 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	4/21/2016 9:40:00 AM	2.1	45.5	0	52.4	0.05	27.91	ROBERT JOHNS	ROBERT JOHNS	4/29/2016 11:11:25 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/19/2016 8:00:00 AM	2.3	46.1	0	51.6	-0.04	27.93	ROBERT JOHNS	ROBERT JOHNS	5/20/2016 3:54:34 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/23/2016 9:24:00 AM	2	45.1	0	52.9	0.04	27.98	ROBERT JOHNS	ROBERT JOHNS	6/28/2016 6:36:07 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	7/21/2016 9:48:00 AM	1.9	44.2	0	53.9	0.04	28	ROBERT JOHNS	ROBERT JOHNS	8/2/2016 1:52:18 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	8/18/2016 8:56:00 AM	2.1	45.3	0	52.6	0.18	27.92	ROBERT JOHNS	ROBERT JOHNS	8/23/2016 3:16:19 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/22/2016 8:01:00 AM	2.2	45.8	0	52	-0.15	27.92	ROBERT JOHNS	ROBERT JOHNS	9/30/2016 1:39:56 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	10/20/2016 8:16:00 AM	2.1	44.8	0	53.1	-0.06	28.04	ROBERT JOHNS	ROBERT JOHNS	10/28/2016 10:04:23 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	11/16/2016 1:26:52 PM	1	43	0	56	-0.17	27.86			11/16/2016 2:39:49 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	11/17/2016 8:16:00 AM	2	44.2	0	53.8	-0.27	27.99	ROBERT JOHNS	ROBERT JOHNS	11/22/2016 11:05:07 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	12/14/2016 8:28:22 AM	1.8	44.1	0.1	54	-0.09	28.15			12/15/2016 4:58:00 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	12/15/2016 8:05:00 AM	2.1	44.3	0	53.6	0.09	28	ROBERT JOHNS	ROBERT JOHNS	12/16/2016 4:02:08 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/18/2017 11:58:06 AM	1.2	42.2	0	56.6	0.22	28.12	BN	BN	1/19/2017 11:57:15 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/25/2017 8:37:00 AM	2.1	47.2	0	50.7	-0.22	28.24	BN	BN	1/26/2017 12:29:21 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/26/2017 9:37:00 AM	2.1	45	0	52.9	-0.12	28.27	ROBERT JOHNS	ROBERT JOHNS	2/1/2017 2:00:41 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	2/22/2017 8:16:23 AM	1.2	43.5	0.2	55.1	0.09	28.12	BN	BN	2/23/2017 10:56:07 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	2/23/2017 9:27:00 AM	2.1	45.1	0	52.8	-0.03	28.03	ROBERT JOHNS	ROBERT JOHNS	3/6/2017 8:55:18 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	3/15/2017 8:19:02 AM	1.5	42	0.9	55.6	-0.08	28.15	BN	BN	3/16/2017 4:47:59 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	3/23/2017 9:07:00 AM	1.6	35.6	5.6	57.2	-0.29	28.03	ROBERT JOHNS	ROBERT JOHNS	4/4/2017 11:25:12 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	4/19/2017 8:41:50 AM	1.9	46.1	0.2	51.8	-0.12	28.13	BS	BN	4/20/2017 11:41:09 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	4/20/2017 9:31:00 AM	2.2	45.7	0	52.1	-0.24	28.08	ROBERT JOHNS	ROBERTJOHNS	4/26/2017 9:09:22 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/24/2017 9:38:49 AM	1.4	42.9	1.5	54.2	-0.08	27.95	BN	BN	5/25/2017 9:07:46 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/25/2017 9:54:00 AM	2.5	47.1	0	50.4	-0.02	27.85	ROBERT JOHNS	ROBERT JOHNS	6/4/2017 11:51:57 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/28/2017 8:59:01 AM	1.2	42.9	1.2	54.7	-0.33	27.96	BS	BS	6/30/2017 6:48:17 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/29/2017 9:58:00 AM	2.5	46.4	0	51.1	-0.03	27.91	ROBERT JOHNS	ROBERT JOHNS	7/7/2017 8:14:36 AM

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	7/12/2017 10:04:59 AM	1.8	46.8	0.2	51.2	-0.07	28.06	BS	BS	7/14/2017 11:32:40 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	7/13/2017 8:50:00 AM	2.3	45.8	0	51.9	-0.12	28.02	ROBERT JOHNS	ROBERT JOHNS	7/31/2017 12:51:16 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	8/24/2017 10:08:00 AM	0.8	17.8	12.6	68.8	-0.08	27.89	ROBERT JOHNS	ROBERT JOHNS	8/28/2017 1:32:38 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/11/2017 10:52:56 AM	1.1	35.3	4.4	59.2	-0.03	28.04	mq	mq	9/11/2017 5:57:34 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/12/2017 11:56:28 AM	2	45.6	0	52.4	0	28.02	tr	mq	9/12/2017 1:33:13 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/21/2017 7:55:00 AM	1.9	39.8	3.5	54.8	-0.08	27.83	ROBERT JOHNS	ROBERT JOHNS	9/30/2017 12:41:48 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	10/31/2017 9:28:59 AM	2.7	45.8	0.1	51.4	-0.07	27.9	ROBERT JOHNS	ROBERT JOHNS	11/1/2017 11:20:11 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	11/16/2017 9:51:00 AM	1.9	39.7	3	55.4	-0.01	27.97	ROBERT JOHNS	ROBERT JOHNS	11/19/2017 9:52:48 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	12/14/2017 9:30:00 AM	0.8	17.1	13	69.1	-0.08	28.03	ROBERT JOHNS	ROBERT JOHNS	12/15/2017 7:43:26 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	1/25/2018 11:15:43 AM	2.6	38.3	0.1	59	0.01	28.13			1/25/2018 5:25:20 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	2/15/2018 11:02:05 AM	2.5	43.9	0.2	53.4	-0.24	28.21	AR	AR	2/15/2018 4:29:24 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	3/29/2018 10:14:44 AM	2.9	43.2	0.1	53.8	-0.04	28.15			3/29/2018 4:40:11 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	4/19/2018 10:09:53 AM	2.9	43.4	0	53.7	-0.1	28.08			4/19/2018 11:25:05 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/24/2018 7:58:46 AM	3.1	44	0	52.9	-0.1	28.15			5/24/2018 11:36:41 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	5/30/2018 8:08:31 AM	3.4	45.6	0	51	-0.24	27.97	mq	mq	5/30/2018 3:59:32 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/1/2018 7:33:40 AM	2.9	40.6	1.5	55	-0.18	28.06	MQ	MQ	6/4/2018 12:37:30 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	6/28/2018 8:11:55 AM	3	43.3	0	53.7	-0.14	28.03			6/28/2018 11:02:21 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	7/26/2018 8:21:40 AM	2.7	49.4	0	47.9	-0.03	28.11			7/26/2018 11:07:05 AM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	8/23/2018 8:24:58 AM	2.5	47.4	0	50.1	-0.1	28.12			8/23/2018 1:06:39 PM
Sunshine Canyon Landfill	P00205RD	P-205RD	Active	9/27/2018 8:18:31 AM	2.8	45.9	0	51.3	-0.01	28.08	SD	SD	9/27/2018 10:32:54 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/23/2014 9:31:00 AM	1.1	43	0.4	55.5	-0.15	28.1	Robert Johns	Robert Johns	3/13/2014 9:36:21 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	2/13/2014 10:43:00 AM	0.8	41.5	0.1	57.6	0.02	28.15	Robert Johns	Robert Johns	2/14/2014 5:42:10 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	3/13/2014 9:23:00 AM	0.2	35.6	0.2	64	-0.11	27.98	Robert Johns	Robert Johns	3/14/2014 1:05:23 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	4/24/2014 10:07:00 AM	0.7	39.2	0	60.1	0.15	27.94	ROBERT JOHNS	ROBERT JOHNS	4/25/2014 10:28:55 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/22/2014 10:07:00 AM	0.6	37.9	0.4	61.1	0.01	27.95	ROBERT JOHNS	ROBERT JOHNS	5/23/2014 12:24:14 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/12/2014 9:56:00 AM	1.4	44.3	0	54.3	-0.07	27.91	ROBERT JOHNS	ROBERT JOHNS	6/27/2014 8:58:54 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	7/24/2014 11:08:00 AM	1.3	44.7	0	54	-0.18	27.84	Robert Johns	Robert Johns	7/25/2014 12:13:51 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	8/21/2014 10:05:00 AM	0.9	33.7	4.7	60.7	-0.56	27.92	ROBERT JOHNS	ROBERT JOHNS	8/26/2014 10:18:17 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/25/2014 10:06:00 AM	1.3	44.1	0	54.6	-0.38	27.94	Robert Johns	Robert Johns	9/29/2014 8:19:11 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	10/23/2014 10:01:00 AM	1.7	47	0	51.3	-0.23	27.99	Robert Johns	Robert Johns	10/27/2014 2:00:35 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	11/20/2014 10:04:00 AM	0.9	39	0	60.1	-0.08	28.05	ROBERT JOHNS	ROBERT JOHNS	11/21/2014 11:09:22 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	12/18/2014 10:22:00 AM	1.5	44.3	0.2	54	-0.15	28.27	ROBERT JOHNS	ROBERT JOHNS	12/19/2014 10:04:54 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/22/2015 10:49:00 AM	1.8	45.8	0.5	51.9	-0.15	28.33	ROBERT JOHNS	ROBERT JOHNS	1/27/2015 4:47:42 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	2/19/2015 10:08:00 AM	1.3	40.1	0.2	58.4	-0.6	28.21	Robert Johns	Robert Johns	2/26/2015 2:07:43 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	3/19/2015 10:37:00 AM	1.7	45.4	0.2	52.7	0.01	28.12	ROBERT JOHNS	ROBERT JOHNS	3/25/2015 8:12:41 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	4/16/2015 9:57:00 AM	1.4	41	0.1	57.5	-0.18	28.14	ROBERT JOHNS	ROBERT JOHNS	4/17/2015 10:51:22 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/21/2015 9:41:00 AM	0.9	36.7	0.1	62.3	-0.07	28.04	ROBERT JOHNS	ROBERT JOHNS	5/22/2015 11:40:57 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/18/2015 9:23:00 AM	2.2	46.8	0	51	-0.29	28.08	ROBERT JOHNS	ROBERT JOHNS	6/25/2015 4:06:00 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	7/23/2015 9:39:00 AM	2	46.1	0	51.9	0.01	28.1	ROBERT JOHNS	ROBERT JOHNS	7/30/2015 3:40:16 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	8/20/2015 9:51:00 AM	1.7	44.2	0	54.1	-0.12	28.01	ROBERT JOHNS	ROBERT JOHNS	8/27/2015 9:49:04 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/17/2015 10:58:00 AM	1.7	43.5	0.1	54.7		28.01	ROBERT JOHNS	ROBERT JOHNS	9/30/2015 10:09:43 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	10/22/2015 10:41:00 AM	1.5	43	0.2	55.3	-0.26	28	ROBERT JOHNS	ROBERT JOHNS	10/23/2015 10:10:10 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	11/19/2015 10:07:00 AM	1.6	43.6	0.3	54.5	-0.04	28.06	ROBERT JOHNS	ROBERT JOHNS	11/20/2015 2:22:04 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	12/17/2015 9:48:00 AM	1.6	42.2	0	56.2	-0.15	28.19	ROBERT JOHNS	ROBERT JOHNS	12/22/2015 4:37:26 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/21/2016 9:48:00 AM	0.9	37.1	0	62	-0.14	28.22	ROBERT JOHNS	ROBERT JOHNS	1/26/2016 9:54:28 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	2/18/2016 9:51:00 AM	0.9	37.6	0.1	61.4	-0.26	28	ROBERT JOHNS	ROBERT JOHNS	2/19/2016 8:19:00 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	3/24/2016 10:06:00 AM	1.8	41.8	1	55.4	-0.14	28.11	ROBERT JOHNS	ROBERT JOHNS	3/29/2016 2:14:47 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	4/21/2016 9:44:00 AM	1.2	38.7	0	60.1	-0.56	27.91	ROBERT JOHNS	ROBERT JOHNS	4/29/2016 11:11:25 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/19/2016 8:04:00 AM	1	37.2	0	61.8	-0.65	27.93	ROBERT JOHNS	ROBERT JOHNS	5/20/2016 3:54:34 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/23/2016 9:28:00 AM	1.9	44.8	0	53.3	-0.51	27.98	ROBERT JOHNS	ROBERT JOHNS	6/28/2016 6:36:07 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	7/21/2016 9:52:00 AM	1.9	44.8	0	53.3	-0.26	28	ROBERT JOHNS	ROBERT JOHNS	8/2/2016 1:52:18 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	8/18/2016 9:01:00 AM	1.9	44.4	0	53.7	0.1	27.92	ROBERT JOHNS	ROBERT JOHNS	8/23/2016 3:16:19 PM

Site Name	Point ID	Point Name	Status	Record Date	CH4 [%]	CO2 [%]	O2 [%]	Bal Gas [%]	Rel Press ["H2O]	Baro Press ["hg]	Field Technician	Download Technician	Upload Date
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/22/2016 8:03:00 AM	1.8	43.6	0	54.6	-0.14	27.91	ROBERT JOHNS	ROBERT JOHNS	9/30/2016 1:39:56 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	10/20/2016 8:20:00 AM	1.6	42.7	0	55.7	-0.93	28.04	ROBERT JOHNS	ROBERT JOHNS	10/28/2016 10:04:23 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	11/16/2016 1:31:55 PM	0	33.5	0	66.5	0.06	27.86			11/16/2016 2:39:49 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	11/17/2016 8:21:00 AM	1.8	43.9	0	54.3	-0.29	27.99	ROBERT JOHNS	ROBERT JOHNS	11/22/2016 11:05:07 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	12/14/2016 8:32:41 AM	0.9	39.5	0	59.6	-0.06	28.15			12/15/2016 4:58:00 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	12/15/2016 8:10:00 AM	1.2	39.3	0	59.5	-0.22	28	ROBERT JOHNS	ROBERT JOHNS	12/16/2016 4:02:08 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/18/2017 12:02:44 PM	0	29.2	0	70.8	0.2	28.13	BN	BN	1/19/2017 11:57:15 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/25/2017 8:41:51 AM	0.9	38.1	0	61	-0.28	28.24	BN	BN	1/26/2017 12:29:21 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/26/2017 9:41:00 AM	0.6	32.8	0	66.6	-0.8	28.27	ROBERT JOHNS	ROBERT JOHNS	2/1/2017 2:00:41 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	2/22/2017 8:21:12 AM	0.4	35.4	0.2	64	-1.41	28.12	BN	BN	2/23/2017 10:56:07 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	2/23/2017 9:32:00 AM	0.8	34.3	0	64.9	-0.06	28.03	ROBERT JOHNS	ROBERT JOHNS	3/6/2017 8:55:18 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	3/15/2017 8:23:51 AM	1.7	44.5	0	53.8	-0.7	28.15	BN	BN	3/16/2017 4:47:59 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	3/23/2017 9:12:00 AM	1.9	44.3	0	53.8	-0.35	28.02	ROBERT JOHNS	ROBERT JOHNS	4/4/2017 11:25:12 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	4/19/2017 8:46:23 AM	2.3	47.2	0	50.5	-0.27	28.14	BS	BN	4/20/2017 11:41:09 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	4/20/2017 9:34:00 AM	2.3	45.3	0	52.4	-11.18	28.08	ROBERT JOHNS	ROBERTJOHNS	4/26/2017 9:09:22 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/24/2017 9:42:52 AM	1.8	44.2	0.2	53.8	-0.12	27.94	BN	BN	5/25/2017 9:07:46 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/25/2017 9:59:00 AM	1.9	41.7	0	56.4	-0.96	27.84	ROBERT JOHNS	ROBERT JOHNS	6/4/2017 11:51:57 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/28/2017 9:03:41 AM	1.3	43.5	0.1	55.1	-0.09	27.96	BS	BS	6/30/2017 6:48:17 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/29/2017 10:03:00 AM	2.1	44.6	0	53.3	-0.51	27.92	ROBERT JOHNS	ROBERT JOHNS	7/7/2017 8:14:36 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	7/12/2017 10:10:07 AM	1.9	45.8	0	52.3	0.11	28.05	BS	BS	7/14/2017 11:32:40 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	7/13/2017 8:53:00 AM	2.1	43.4	0	54.5	-0.43	28.02	ROBERT JOHNS	ROBERT JOHNS	7/31/2017 12:51:16 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	8/24/2017 10:09:00 AM	0.9	21.3	9.7	68.1	-0.02	27.89	ROBERT JOHNS	ROBERT JOHNS	8/28/2017 1:32:38 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/11/2017 10:58:30 AM	1	28.1	6	64.9	0	28.04	mq	mq	9/11/2017 5:57:34 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/12/2017 12:01:24 PM	1.6	40.6	0	57.8	-0.02	28.02	tr	mq	9/12/2017 1:33:13 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/21/2017 7:58:00 AM	1.3	29	6.1	63.6	-0.19	27.83	ROBERT JOHNS	ROBERT JOHNS	9/30/2017 12:41:48 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	10/31/2017 9:32:32 AM	0.9	29.9	2.9	66.3	0	27.9	ROBERT JOHNS	ROBERT JOHNS	11/1/2017 11:20:11 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	11/16/2017 9:53:00 AM	0.7	23.9	6.9	68.5	0.02	27.97	ROBERT JOHNS	ROBERT JOHNS	11/19/2017 9:52:48 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	12/14/2017 9:32:00 AM	0.4	18.3	9.2	72.1	-0.21	28.03	ROBERT JOHNS	ROBERT JOHNS	12/15/2017 7:43:26 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	1/25/2018 11:20:45 AM	0.4	29.4	0.2	70	0.12	28.13			1/25/2018 5:25:20 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	2/15/2018 11:07:04 AM	1.5	36.4	0.1	62	-0.17	28.21	AR	AR	2/15/2018 4:29:24 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	3/29/2018 10:21:17 AM	0.4	26	0.2	73.4	-0.15	28.15			3/29/2018 4:40:11 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	4/19/2018 10:15:03 AM	0.9	29.8	0	69.3	-0.59	28.08			4/19/2018 11:25:05 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/24/2018 8:04:40 AM	2	37.2	0	60.8	-0.24	28.14			5/24/2018 11:36:41 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	5/30/2018 8:15:27 AM	1.5	33.5	1.4	63.6	-1.47	27.98	mq	mq	5/30/2018 3:59:32 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/5/2018 8:32:17 AM	2.9	42.2	1	53.9	-0.52	28.01	MQ	MQ	6/8/2018 6:39:50 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	6/28/2018 8:17:25 AM	1.8	35.5	0	62.7	-0.27	28.02			6/28/2018 11:02:21 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	7/26/2018 8:28:48 AM	1.8	39.7	0	58.5	-0.1	28.1			7/26/2018 11:07:05 AM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	8/23/2018 8:32:39 AM	1.7	38.5	0	59.8	-0.08	27.9			8/23/2018 1:06:39 PM
Sunshine Canyon Landfill	P00205RE	P-205RE	Active	9/27/2018 8:25:18 AM	1.6	37.1	0	61.3	-0.06	28.08	SD	SD	9/27/2018 10:32:54 AM

ATTACHMENT C

ANALYTICAL RESULTS

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23917 Craftsman Rd., Calabasas, CA 91302 • (818) 223-3277 • FAX (818) 223-8250

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Sample

Report Date: February 2, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon LF
Project No.: 07218035.00
Date Received: January 26, 2018
Date Analyzed: January 26, 2018

AtmAA Lab No.:	10268-1
Sample I.D.:	Probe 205RD
Components	*(Concentration in ppmv)*
Methane	27400
Carbon dioxide	464000
Ethane	<5
TGNMO	19.5
Hydrogen sulfide	0.42
	(Concentration in ppbv)
Benzene	7.52
Benzyl chloride	<8
Chlorobenzene	<8
Dichlorobenzenes*	<12
1,1-dichloroethane	<10
1,2-dichloroethane	<10
1,1-dichloroethylene	<10
Dichloromethane	<10
1,2-dibromoethane	<6
Perchloroethylene	<6
Carbon tetrachloride	<8
Toluene	<8
1,1,1-trichloroethane	<6
Trichloroethene	<6
Chloroform	<8
Vinyl chloride	<8
m+p-xylenes	<8
o-xylene	<8

Methane, ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)

Project Location: Sunshine Canyon LF
Date Received: January 26, 2018
Date Analyzed: January 26, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	Probe 205RD	27500	27400	27400	0.18
Ethane	Probe 205RD	<5	<5	---	---
TGNMO	Probe 205RD	18.9	20.1	19.5	3.1
Hydrogen sulfide	Probe 205RD	0.39	0.44	0.42	6.0
		(Concentration in ppbv)			
Benzene	Probe 205RD	7.99	7.05	7.52	6.2
Benzyl chloride	Probe 205RD	<8	<8	---	---
Chlorobenzene	Probe 205RD	<8	<8	---	---
Dichlorobenzenes	Probe 205RD	<12	<12	---	---
1,1-dichloroethane	Probe 205RD	<10	<10	---	---
1,2-dichloroethane	Probe 205RD	<10	<10	---	---
1,1-dichloroethylene	Probe 205RD	<10	<10	---	---
Dichloromethane	Probe 205RD	<10	<10	---	---
1,2-dibromoethane	Probe 205RD	<6	<6	---	---
Perchloroethene	Probe 205RD	<6	<6	---	---
Carbon tetrachloride	Probe 205RD	<8	<8	---	---
Toluene	Probe 205RD	<8	<8	---	---
1,1,1-trichloroethane	Probe 205RD	<6	<6	---	---
Trichloroethene	Probe 205RD	<6	<6	---	---
Chloroform	Probe 205RD	<8	<8	---	---
Vinyl chloride	Probe 205RD	<8	<8	---	---
m+p-xylenes	Probe 205RD	<8	<8	---	---
o-xylene	Probe 205RD	<8	<8	---	---

One Tedlar bag sample, laboratory number 10268-1, was analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 4 repeat measurements from one Tedlar bag sample is 3.9%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☐ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00

PROJECT MANAGER: RAY AL AYASS

PROJECT NAME: SUNSHINE CANYON

W.O. / S.O. #:

PROJECT LOCATION: SYLMAR CA

SAMPLER NAME AND SIGNATURE: A ROMO

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC (EPA METHOD 25)	TAC (TABLE 1)	H2S	CH4	CO2	ETHANE	TGNMO	LAB USE ONLY
	PROBE 205R D	AIR	1-25-18@ 16:15 HRS	TEDLAR 10 L	NONE		X	X	X	X	X	X	X	102681

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE: 1-26-18	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE: 1/26/18
COMPANY:	TIME:	COMPANY:	TIME:	COMPANY:	TIME:	COMPANY:	TIME: 09:55

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Samples

Report Date: March 2, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon
Project No.: 07218035.00 Task 1
Date Received: February 16, 2018
Date Analyzed: February 16, 2018

AtmAA Lab No.:	10478-28	10478-29	10478-30	10478-31	10478-32
	P-240E	P-205R-C	P-205R-D	P-205R-E	P-218-B
Components	*(Concentration in ppmv)*				
Methane	76000	20200	27300	16700	1180
Carbon dioxide	2400	442000	475000	384000	346000
Ethane	1230	<5	<5	<5	<5
TGNMO	265	<5	<5	<5	<5
Hydrogen sulfide	<0.2	<0.2	0.97	1.26	<0.2
	(Concentration in ppbv)				
Benzene	5.04	6.45	6.64	1.94	1.06
Benzyl chloride	<1.4	<1.4	<1.4	<1.4	<1.4
Chlorobenzene	<1.4	<1.4	<1.4	<1.4	<1.4
Dichlorobenzenes*	<3	<3	<3	<3	<3
1,1-dichloroethane	<1.4	<1.4	<1.4	<1.4	<1.4
1,2-dichloroethane	<1.4	<1.4	<1.4	<1.4	<1.4
1,1-dichloroethylene	<1.4	<1.4	<1.4	<1.4	<1.4
Dichloromethane	<3	<3	<3	<3	<3
1,2-dibromoethane	<1	<1	<1	<1	<1
Perchloroethylene	<1	<1	<1	<1	35.7
Carbon tetrachloride	<1.4	<1.4	<1.4	<1.4	<1.4
Toluene	<1.4	<1.4	2.23	1.65	<1.4
1,1,1-trichloroethane	<1	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	1.06
Vinyl chloride	<1	<1	<1	<1	<1
m+p-xylenes	<1.4	1.47	1.84	<1.4	<1.4
o-xylene	<1.4	<1.4	<1.4	<1.4	<1.4

Methane was measured by thermal conductivity detection/gas chromatography (TCD/GC), EPA Method 3C.
Ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/ total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)

Project Location: Sunshine Canyon
Date Received: February 16, 2018
Date Analyzed: February 16, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	P-240E	75800	76100	76000	0.20
Ethane	P-240E	1230	1230	1230	0.0
TGNMO	P-240E	265	265	265	0.0
Hydrogen sulfide	P-240E	<0.2	<0.2	---	---
	P-205R-C	<0.2	<0.2	---	---
	P-205R-D	1.00	0.94	0.97	3.1
	P-205R-E	1.22	1.31	1.26	3.6
	P-218-B	<0.2	<0.2	---	---
		(Concentration in ppbv)			
Benzene	P-240E	5.01	5.07	5.04	0.60
Benzyl chloride	P-240E	<1.4	<1.4	---	---
Chlorobenzene	P-240E	<1.4	<1.4	---	---
Dichlorobenzenes	P-240E	<3	<3	---	---
1,1-dichloroethane	P-240E	<1.4	<1.4	---	---
1,2-dichloroethane	P-240E	<1.4	<1.4	---	---
1,1-dichloroethylene	P-240E	<1.4	<1.4	---	---
Dichloromethane	P-240E	<3	<3	---	---
1,2-dibromoethane	P-240E	<1	<1	---	---
Perchloroethene	P-240E	<1	<1	---	---
Carbon tetrachloride	P-240E	<1.4	<1.4	---	---
Toluene	P-240E	<1.4	<1.4	---	---
1,1,1-trichloroethane	P-240E	<1	<1	---	---
Trichloroethene	P-240E	<1	<1	---	---
Chloroform	P-240E	<1	<1	---	---

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)
(continued)

Project Location: Sunshine Canyon
Date Received: February 16, 2018
Date Analyzed: February 16, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppbv)			
Vinyl chloride	P-240E	<1	<1	---	---
m+p-xylenes	P-240E	<1.4	<1.4	---	---
o-xylene	P-240E	<1.4	<1.4	---	---

Five Tedlar bag samples, laboratory numbers 10478-(28-32), were analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 6 repeat measurements from five Tedlar bag samples is 1.2%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☒ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218D35.00 TASK 01

PROJECT MANAGER: RAY AL AYASS

PROJECT NAME: SUNSHINE CANYON

W.O. / S.O. #:

PROJECT LOCATION: SYLMAR CA

SAMPLER NAME AND SIGNATURE:

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC (EPA METHOD 25)	TAC (TABLE 1)	H_2S	CH_4	CO_2	ETHANE	TGNMO			LAB USE ONLY
	P-240E	LFG	2-15-18 12:45 pm	10L TEDLAR	NONE	10478-28	X	X	X	X	X	X	X			
	P-205R-C	LFG	2-15-18 1300 pm	10L TEDLAR	NONE	-29	X	X	X	X	X	X	X			
	P-205R-D	LFG	2-15-18 1315 pm	10L TEDLAR	NONE	-30	X	X	X	X	X	X	X			
	P-205R-E	LFG	2-15-18 1330 pm	10L TEDLAR	NONE	-31	X	X	X	X	X	X	X			
	P-218-B	LFG	2-15-18 1345 pm	10L TEDLAR	NONE	-32	X	X	X	X	X	X	X			

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
COMPANY: SCS-FS	TIME: 2/16/18	COMPANY: SCS	TIME: 2-16-7 10:00	COMPANY:	TIME:	COMPANY: ATMZ	TIME: 2-16-18 10:30

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Sample

Report Date: April 11, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon LF
Project No.: 07218035.00 Task 01
Date Received: March 30, 2018
Date Analyzed: March 30, 2018

AtmAA Lab No.:	10888-13	10898-14
Sample I.D.:	Probe 205R-C	Probe 205R-D
Components	*(Concentration in ppmv)*	
Methane	16000	28900
Carbon dioxide	389000	473000
Ethane	<5	<5
TGNMO	17.9	17.9
Hydrogen sulfide	<0.1	0.54
	(Concentration in ppbv)	
Benzene	5.56	5.95
Benzyl chloride	<4	<4
Chlorobenzene	<4	<4
Dichlorobenzenes*	<6	<6
1,1-dichloroethane	<4	<4
1,2-dichloroethane	<4	<4
1,1-dichloroethylene	<4	<4
Dichloromethane	<4	<4
1,2-dibromoethane	<3	<3
Perchloroethylene	<3	<3
Carbon tetrachloride	<4	<4
Toluene	<4	<4
1,1,1-trichloroethane	<3	<3
Trichloroethene	<3	<3
Chloroform	<3	<3
Vinyl chloride	<3	<3
m+p-xylenes	<4	<4
o-xylene	<4	<4

Methane, ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)

Project Location: Sunshine Canyon LF
Date Received: March 30, 2018
Date Analyzed: March 30, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	Probe 205R-C	16200	15900	16000	0.93
Ethane	Probe 205R-C	<5	<5	---	---
TGNMO	Probe 205R-C	17.3	18.5	17.9	3.4
Hydrogen sulfide	Probe 205R-C	<0.1	<0.1	---	---
	Probe 205R-D	0.53	0.55	0.54	1.8
		(Concentration in ppbv)			
Benzene	Probe 205R-C	5.64	5.48	5.56	1.4
Benzyl chloride	Probe 205R-C	<4	<4	---	---
Chlorobenzene	Probe 205R-C	<4	<4	---	---
Dichlorobenzenes	Probe 205R-C	<6	<6	---	---
1,1-dichloroethane	Probe 205R-C	<4	<4	---	---
1,2-dichloroethane	Probe 205R-C	<4	<4	---	---
1,1-dichloroethylene	Probe 205R-C	<4	<4	---	---
Dichloromethane	Probe 205R-C	<4	<4	---	---
1,2-dibromoethane	Probe 205R-C	<3	<3	---	---
Perchloroethene	Probe 205R-C	<3	<3	---	---
Carbon tetrachloride	Probe 205R-C	<4	<4	---	---
Toluene	Probe 205R-C	<4	<4	---	---
1,1,1-trichloroethane	Probe 205R-C	<3	<3	---	---
Trichloroethene	Probe 205R-C	<3	<3	---	---
Chloroform	Probe 205R-C	<3	<3	---	---
Vinyl chloride	Probe 205R-C	<3	<3	---	---
m+p-xylenes	Probe 205R-C	<4	<4	---	---
o-xylene	Probe 205R-C	<4	<4	---	---

Two Tedlar bag samples, laboratory numbers 10898-(13 & 14), were analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 4 repeat measurements from two Tedlar bag samples is 1.9%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☒ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00 TASK 01

PROJECT MANAGER: RAY ALAYASS

PROJECT NAME: SUNSHINE CLN

W.O. / S.O. #:

PROJECT LOCATION: SYLMAR CA.

SAMPLER NAME AND SIGNATURE:

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC	TRC	H2S	CH4	CO2	ETHANE	TGNMD			LAB USE ONLY
	P205R-C	LFG	3-29-18 1330 PM	10L TEDLAR	NONE	10898-13	X	X	X	X	X	X	X			
	P205R-D	LFG	3-29-18 1345 PM	10L TEDLAR	NONE	14	X	X	X	X	X	X	X			

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
COMPANY: SCS-FS	TIME:	COMPANY: DCS	TIME: 10	COMPANY:	TIME:	COMPANY:	TIME:

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Samples

Report Date: July 6, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon
Project No.: 07218035.00
Date Received: June 29, 2018
Date Analyzed: June 29, 2018

AtmAA Lab No.:	11808-1	11808-2	11808-3
	P-205RC	P-205RD	P-205RE
Components		*(Concentration in ppmv)*	
Methane	19700	29600	19200
Carbon dioxide	445000	476000	398000
Ethane	<5	<5	<5
TGNMO	14.2	10.3	9.50
Hydrogen sulfide	<0.2	<0.2	1.93
		(Concentration in ppbv)	
Benzene	3.82	3.95	1.38
Benzyl chloride	<1.4	<1.4	<1.4
Chlorobenzene	<1.4	<1.4	<1.4
Dichlorobenzenes*	<3	<3	<3
1,1-dichloroethane	<1.4	<1.4	<1.4
1,2-dichloroethane	<1.4	<1.4	<1.4
1,1-dichloroethylene	<1.4	<1.4	<1.4
Dichloromethane	<2	<2	<2
1,2-dibromoethane	<1	<1	<1
Perchloroethylene	<1	<1	<1
Carbon tetrachloride	<1.4	<1.4	<1.4
Toluene	<1.4	<1.4	<1.4
1,1,1-trichloroethane	<1	<1	<1
Trichloroethene	<1	<1	<1
Chloroform	<1	<1	<1
Vinyl chloride	<1	<1	<1
m+p-xylenes	1.47	<1.4	<1.4
o-xylene	<1.4	<1.4	<1.4

Methane was measured by thermal conductivity detection/gas chromatography (TCD/GC), EPA Method 3C.
Ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/ total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY

(Repeat Analyses)

Project Location: Sunshine Canyon
Date Received: June 29, 2018
Date Analyzed: June 29, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	P-205RC	19600	19800	19700	0.51
Ethane	P-205RC	<5	<5	---	---
TGNMO	P-205RC	14.2	14.3	14.2	0.35
Hydrogen sulfide	P-205RE	1.91	1.95	0.97	3.1
		(Concentration in ppbv)			
Benzene	P-205RC	3.70	3.95	3.82	3.3
Benzyl chloride	P-205RC	<1.4	<1.4	---	---
Chlorobenzene	P-205RC	<1.4	<1.4	---	---
Dichlorobenzenes	P-205RC	<3	<3	---	---
1,1-dichloroethane	P-205RC	<1.4	<1.4	---	---
1,2-dichloroethane	P-205RC	<1.4	<1.4	---	---
1,1-dichloroethylene	P-205RC	<1.4	<1.4	---	---
Dichloromethane	P-205RC	<2	<2	---	---
1,2-dibromoethane	P-205RC	<1	<1	---	---
Perchloroethene	P-205RC	<1	<1	---	---
Carbon tetrachloride	P-205RC	<1.4	<1.4	---	---
Toluene	P-205RC	<1.4	<1.4	---	---
1,1,1-trichloroethane	P-205RC	<1	<1	---	---
Trichloroethene	P-205RC	<1	<1	---	---
Chloroform	P-205RC	<1	<1	---	---
Vinyl chloride	P-205RC	<1	<1	---	---
m+p-xylenes	P-205RC	<1.4	1.47	---	---
o-xylene	P-205RC	<1.4	<1.4	---	---

Three Tedlar bag samples, laboratory numbers 11808-(1-3), were analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 4 repeat measurements from two Tedlar bag samples is 1.8%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:
PAGE 1 OF 1
TURNAROUND TIME REQUIRED: ☒ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00
PROJECT MANAGER: RAY AL AYASS
PROJECT NAME: SUNSHINE CANYON
W.O. / S.O. #:
PROJECT LOCATION: SYLMAR, CA
SAMPLER NAME AND SIGNATURE:

ANALYSES REQUESTED

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC	TAC	H2S	CH4	CO2	ETHANE	TGNMOC			LAB USE ONLY
118090 -1	PROBE 205RC	AIR	06-28-18 13:07	10L TEDLAR	NONE		X	X	X	X	X	X	X			
-2																
-2	PROBE 205RD	AIR	06-28-18 13:30	10 L TEDLAR	NONE		X	X	X	X	X	X	X			
-3	PROBE 205RE	AIR	06-28-18 13:40	10 L TEDLAR	NONE		X	X	X	X	X	X	X			

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
COMPANY: SCS	TIME: 1000	COMPANY: DS	TIME:	COMPANY:	TIME:	COMPANY: Afsa AA	TIME: 11:00 6/29/18

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LABORATORY ANALYSIS REPORT

TO-15 Component Analysis in Probe Tedlar Bag Samples, by GC/MS

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Report Date: July 12, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon
Project No.: 07218035.00
Date Received: June 29, 2018
Date Analyzed: June 29, 2018

AtmAA Lab No.:	11808-1	11808-2	11808-3
Sample ID:	Probe 205RC	Probe 205RD	Probe 205RE
Components	(Concentations in ppbv)		
Freon 12	<0.6	<0.6	<0.6
Chloromethane	<0.8	<0.8	<0.8
Freon 114	<0.6	<0.6	<0.6
Vinyl Chloride	<0.6	<0.6	<0.6
1,3-Butadiene	<0.8	<0.8	<0.8
Bromomethane	<0.8	<0.8	<0.8
Chloroethane	<0.6	<0.6	<0.6
Bromoethene	<0.8	<0.8	<0.8
Acetone	61.6	63.0	108
Freon 11	<0.6	<0.6	<0.6
Isopropyl Alcohol	78.6	108	133
1,1-Dichloroethene	<0.8	<0.8	<0.8
Methylene Chloride	<0.8	<0.8	<0.8
3-Chloro-1-Propene	<0.8	<0.8	<0.8
Carbon Disulfide	<0.6	<0.6	<0.6
Freon 113	<0.6	<0.6	<0.6
trans-1,2-Dichloroethene	<0.8	<0.8	<0.8
1,1-Dichloroethane	<0.8	<0.8	<0.8
MTBE	<0.8	<0.8	<0.8
Vinyl Acetate	<1	<1	<1
2-Butanone	<2	<2	<2
cis-1,2-Dichloroethene	<0.8	<0.8	<0.8
n-Hexane	0.94	0.85	<0.8
Chloroform	<0.6	<0.6	<0.6
Ethyl Acetate	<0.8	<0.8	<0.8
Tetrahydrofuran	<0.8	<0.8	<0.8
1,2-Dichloroethane	<0.8	<0.8	<0.8
1,1,1-Trichloroethane	<0.6	<0.6	<0.6
Benzene	3.82	3.95	1.38
Carbon Tetrachloride	<0.6	<0.6	<0.6
Cyclohexane	<0.8	<0.8	<0.8
1,2-Dichloropropane	<0.8	<0.8	<0.8
Bromodichloromethane	<0.8	<0.8	<0.8
Trichloroethene	<0.6	<0.6	<0.6
1,4-Dioxane	<0.8	<0.8	<0.8
2,2,4-Trimethyl Pentane	<0.8	<0.8	<0.8
n-Heptane	<0.8	<0.8	<0.8
cis-1,3-Dichloropropene	<0.8	<0.8	<0.8
4-Methyl-2-pentanone	<0.8	<0.8	<0.8
trans-1,3-Dichloropropene	<0.8	<0.8	<0.8
1,1-2-Trichloroethane	<0.8	<0.8	<0.8
Toluene	0.98	1.22	1.06
2-Hexanone	<0.8	<0.8	<0.8
Dibromochloromethane	<0.6	<0.6	<0.6
1,2-Dibromomethane	<0.6	<0.6	<0.6
Tetrachloroethene	<0.6	<0.6	<0.6
Chlorobenzene	<0.8	<0.8	<0.8
Ethylbenzene	<0.6	<0.6	<0.6
m,p-Xylene	1.36	1.01	1.20
Bromoform	<0.6	<0.6	<0.6
Styrene	<0.6	<0.6	<0.6
1,1,2,2-Tetrachloroethane	<0.6	<0.6	<0.6
o-Xylene	1.18	0.78	1.01
Benzyl Chloride	<0.8	<0.8	<0.8
4-Ethyl Toluene	<0.6	<0.6	<0.6
1,3,5-Trimethyl Benzene	<0.6	<0.6	<0.6
1,2,4-Trimethyl Benzene	0.67	0.69	0.65
1,3-Dichlorobenzene	<0.6	<0.6	<0.6
1,4-Dichlorobenzene	<0.6	<0.6	<0.6
1,2-Dichlorobenzene	<0.6	<0.6	<0.6
1,2,4-Trichlorobenzene	<0.8	<0.8	<0.8
Hexachlorobutadiene	<0.6	<0.6	<0.6

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)

Project Location: Sunshine Canyon
Date Received: June 29, 2018
Date Analyzed: June 29, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppbv)			
Freon-12	Probe 205RC	<0.6	<0.6	---	---
Chloromethane	Probe 205RC	<0.8	<0.8	---	---
Freon 114	Probe 205RC	<0.6	<0.6	---	---
Vinyl Chloride	Probe 205RC	<0.6	<0.6	---	---
1,3-Butadiene	Probe 205RC	<0.8	<0.8	---	---
Bromomethane	Probe 205RC	<0.8	<0.8	---	---
Chloroethane	Probe 205RC	<0.6	<0.6	---	---
Bromoethene	Probe 205RC	<0.8	<0.8	---	---
Acetone	Probe 205RC	56.1	67.2	61.6	9.0
Freon 11	Probe 205RC	<0.6	<0.6	---	---
Isopropyl Alcohol	Probe 205RC	73.8	83.5	78.6	6.2
1,1-Dichloroethene	Probe 205RC	<0.8	<0.8	---	---
Methylene Chloride	Probe 205RC	<0.8	<0.8	---	---
3-Chloro-1-Propene	Probe 205RC	<0.8	<0.8	---	---
Carbon Disulfide	Probe 205RC	<0.6	<0.6	---	---
Freon 113	Probe 205RC	<0.6	<0.6	---	---
trans-1,2-Dichloroethene	Probe 205RC	<0.8	<0.8	---	---
1,1-Dichloroethane	Probe 205RC	<0.8	<0.8	---	---
MTBE	Probe 205RC	<0.8	<0.8	---	---
Vinyl Acetate	Probe 205RC	<1	<1	---	---
2-Butanone	Probe 205RC	<2	<2	---	---

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)
(continued)

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppbv)			
cis-1,2-Dichloroethene	Probe 205RC	<0.8	<0.8	---	---
n-Hexane	Probe 205RC	0.85	1.02	0.94	9.1
Chloroform	Probe 205RC	<0.6	<0.6	---	---
Ethyl Acetate	Probe 205RC	<0.8	<0.8	---	---
Tetrahydrofuran	Probe 205RC	<0.8	<0.8	---	---
1,2-Dichloroethane	Probe 205RC	<0.8	<0.8	---	---
1,1,1-Trichloroethane	Probe 205RC	<0.6	<0.6	---	---
Benzene	Probe 205RC	3.70	3.95	3.82	3.3
Carbon Tetrachloride	Probe 205RC	<0.6	<0.6	---	---
Cyclohexane	Probe 205RC	<0.8	<0.8	---	---
1,2-Dichloropropane	Probe 205RC	<0.8	<0.8	---	---
Bromodichloromethane	Probe 205RC	<0.8	<0.8	---	---
Trichloroethene	Probe 205RC	<0.6	<0.6	---	---
1,4-Dioxane	Probe 205RC	<0.8	<0.8	---	---
2,2,4-Trimethyl Pentane	Probe 205RC	<0.8	<0.8	---	---
n-Heptane	Probe 205RC	<0.8	<0.8	---	---
cis-1,3-Dichloropropene	Probe 205RC	<0.8	<0.8	---	---
4-Methyl-2-pentanone	Probe 205RC	<0.8	<0.8	---	---
trans-1,3-Dichloropropene	Probe 205RC	<0.8	<0.8	---	---
1,1-2-Trichloroethane	Probe 205RC	<0.8	<0.8	---	---
Toluene	Probe 205RC	0.96	1.01	0.98	2.5
2-Hexanone	Probe 205RC	<0.8	<0.8	---	---

QUALITY ASSURANCE SUMMARY
(Repeat Analyses)
(continued)

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppbv)			
Dibromochloromethane	Probe 205RC	<0.6	<0.6	---	---
1,2-Dibromomethane	Probe 205RC	<0.6	<0.6	---	---
Tetrachloroethene	Probe 205RC	<0.6	<0.6	---	---
Chlorobenzene	Probe 205RC	<0.8	<0.8	---	---
Ethylbenzene	Probe 205RC	<0.6	<0.6	---	---
m,p-Xylene	Probe 205RC	1.24	1.47	1.36	8.5
Bromoform	Probe 205RC	<0.6	<0.6	---	---
Styrene	Probe 205RC	<0.6	<0.6	---	---
1,1,2,2-Tetrachloroethane	Probe 205RC	<0.6	<0.6	---	---
o-Xylene	Probe 205RC	1.20	1.15	1.18	2.1
Benzyl Chloride	Probe 205RC	<0.8	<0.8	---	---
4-Ethyl Toluene	Probe 205RC	<0.6	<0.6	---	---
1,3,5-Trimethyl Benzene	Probe 205RC	<0.6	<0.6	---	---
1,2,4-Trimethyl Benzene	Probe 205RC	0.69	0.65	0.67	3.0
1,3-Dichlorobenzene	Probe 205RC	<0.6	<0.6	---	---
1,4-Dichlorobenzene	Probe 205RC	<0.6	<0.6	---	---
1,2-Dichlorobenzene	Probe 205RC	<0.6	<0.6	---	---
1,2,4-Trichlorobenzene	Probe 205RC	<0.8	<0.8	---	---
Hexachlorobutadiene	Probe 205RC	<0.6	<0.6	---	---

Three Tedlar bag samples, laboratory numbers 11808-(1-3), were analyzed for TO-15 components y GC/MS. Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 8 repeat measurements from the three Tedlar bag samples is 5.5%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☒ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00

PROJECT MANAGER: RAY AL AYASS

PROJECT NAME: SUNSHINE CANYON

W.O. / S.O. #:

PROJECT LOCATION: SYLMAR, CA

SAMPLER NAME AND SIGNATURE:

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC	TAC	H_2S	CH_4	CO_2	ETHANE	TGNMOC			LAB USE ONLY
1180080-1	PROBE 205RC	AIR	06-28-18 13:07	10L TEDLAR	NONE		X	X	X	X	X	X	X			
-2	PROBE 205RD	AIR	06-28-18 13:30	10L TEDLAR	NONE		X	X	X	X	X	X	X			
-3	PROBE 205RE	AIR	06-28-18 13:40	10L TEDLAR	NONE		X	X	X	X	X	X	X			

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
COMPANY: SCS	TIME: 1000	COMPANY: DOS	TIME:	COMPANY:	TIME:	COMPANY: Alpha	TIME: 11:00 6/29/18

FORM NO. 107 REV. 3/14 TWIN CONCEPTS

AtmAA Inc.
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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Samples

Report Date: August 6, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon
Project No.: 07218035.00
Date Received: July 27, 2018
Date Analyzed: July 27-30, 2018

AtmAA Lab No.:	12088-10	12088-11	12088-12	12088-13
	P-205R-C	P-205R-D	P-205R-E	P-220B-B
Components		*(Concentration in ppmv)*		
Methane	19500	27400	18800	74.1
Carbon dioxide	446000	472000	387000	90600
Ethane	<5	<5	<5	<1
TGNMO	14.2	14.7	12.2	6.01
Hydrogen sulfide	<0.1	<0.1	1.26	<0.1
		(Concentration in ppbv)		
Benzene	5.42	5.14	1.82	<1
Benzyl chloride	<1.4	<1.4	<1.4	<1.4
Chlorobenzene	<1.4	<1.4	<1.4	<1.4
Dichlorobenzenes*	3.69	3.39	3.36	<3
1,1-dichloroethane	<1.4	<1.4	<1.4	<1.4
1,2-dichloroethane	<1.4	<1.4	<1.4	<1.4
1,1-dichloroethylene	<1.4	<1.4	<1.4	<1.4
Dichloromethane	<2	<2	<2	<2
1,2-dibromoethane	<1	<1	<1	<1
Perchloroethylene	<1	<1	<1	2.39
Carbon tetrachloride	<1.4	<1.4	<1.4	<1.4
Toluene	2.58	2.55	2.23	1.40
1,1,1-trichloroethane	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Vinyl chloride	<1	<1	<1	<1
m+p-xylenes	3.09	2.53	3.00	<1.4
o-xylene	1.62	<1.4	<1.4	<1.4

Methane was measured by thermal conductivity detection/gas chromatography (TCD/GC), EPA Method 3C.
Ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/ total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY

(Repeat Analyses)

Project Location: Sunshine Canyon
Date Received: July 27, 2018
Date Analyzed: July 27-30, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	P-205R-C	19600	19400	19500	0.51
Ethane	P-205R-C	<5	<5	---	---
TGNMO	P-205R-C	14.0	14.4	14.2	1.4
Hydrogen sulfide	P-205R-C	<0.1	<0.1	---	---
	P-205R-E	1.23	1.30	1.26	2.8
	P-220B-B	<0.1	<0.1	---	---
		(Concentration in ppbv)			
Benzene	P-205R-C	5.51	5.32	5.42	1.8
Benzyl chloride	P-205R-C	<1.4	<1.4	---	---
Chlorobenzene	P-205R-C	<1.4	<1.4	---	---
Dichlorobenzenes	P-205R-C	3.59	3.79	3.69	2.7
1,1-dichloroethane	P-205R-C	<1.4	<1.4	---	---
1,2-dichloroethane	P-205R-C	<1.4	<1.4	---	---
1,1-dichloroethylene	P-205R-C	<1.4	<1.4	---	---
Dichloromethane	P-205R-C	<2	<2	---	---
1,2-dibromoethane	P-205R-C	<1	<1	---	---
Perchloroethene	P-205R-C	<1	<1	---	---
Carbon tetrachloride	P-205R-C	<1.4	<1.4	---	---
Toluene	P-205R-C	2.28	2.87	2.58	11
1,1,1-trichloroethane	P-205R-C	<1	<1	---	---
Trichloroethene	P-205R-C	<1	<1	---	---
Chloroform	P-205R-C	<1	<1	---	---
Vinyl chloride	P-205R-C	<1	<1	---	---
m+p-xylenes	P-205R-C	3.23	2.95	3.09	4.5
o-xylene	P-205R-C	1.84	1.40	1.62	14

Four Tedlar bag samples, laboratory numbers 12088-(10-13), were analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 8 repeat measurements from four Tedlar bag samples is 4.8%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☑ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00

PROJECT MANAGER: Ray Al Ayass

PROJECT NAME: Sunshine Canyon

W.O. / S.O. #:

PROJECT LOCATION: Sylmar, CA

SAMPLER NAME AND SIGNATURE: Saulo DIAZ -

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC	TAC	H_2S	CH_4	CO_2	Ethane	TGNMO			LAB USE ONLY
	Probe 205R-C	AIR	07/26/18 @ 1400 HRS	10L TEDLAR	NONE		X	X	X	X	X	X	X			120558-10
	Probe 205R-D	AIR	07/26/18 @ 1415 HRS	10L TEDLAR	NONE		X	X	X	X	X	X	X			-11
	Probe 205R-E	AIR	07/26/18 @ 1425 HRS	10L TEDLAR	NONE		X	X	X	X	X	X	X			-12
	Probe 220B-B	AIR	07/26/18 @ 1500 HRS	10L TEDLAR	NONE		X	X	X	X	X	X	X			-13

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
	7/27/18						7/27/18
COMPANY: SCS	TIME: 1000	COMPANY:	TIME:	COMPANY:	TIME:	COMPANY: ATMAH	TIME:

FORM NO. 107 REV. 3/14 TWIN CONCEPTS

AtmAA Inc.
23917 Craftsman Rd., Calabasas, CA 91302 • (818) 223-3277 • FAX (818) 223-8250

environmental consultants
laboratory services
atmaa.com

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Samples

Report Date: September 4, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon
Project No.: 07218035.00
Date Received: August 24, 2018
Date Analyzed: August 24, 2018

AtmAA Lab No.:	12368-3	12368-4	12368-5	12368-6
	P-205R-B	P-205R-C	P-205R-D	P-205R-E
Components		*(Concentration in ppmv)*		
Methane	11600	19800	27200	19400
Carbon dioxide	313000	452000	474000	392000
Ethane	<5	<5	<5	<1
TGNMO	7.51	7.97	7.41	7.44
Hydrogen sulfide	0.17	<0.1	<0.1	1.05
		(Concentration in ppbv)		
Benzene	3.35	5.95	5.26	2.94
Benzyl chloride	<1.4	<1.4	<1.4	<1.4
Chlorobenzene	<1.4	<1.4	<1.4	<1.4
Dichlorobenzenes*	3.54	<3	3.33	3.79
1,1-dichloroethane	<1.4	<1.4	<1.4	<1.4
1,2-dichloroethane	<1.4	<1.4	<1.4	<1.4
1,1-dichloroethylene	<1.4	<1.4	<1.4	<1.4
Dichloromethane	<2	<2	<2	<2
1,2-dibromoethane	<1	<1	<1	<1
Perchloroethylene	<1	<1	<1	<1
Carbon tetrachloride	<1.4	<1.4	<1.4	<1.4
Toluene	2.66	1.91	2.34	2.02
1,1,1-trichloroethane	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Vinyl chloride	<1	<1	<1	<1
m+p-xylenes	2.70	1.75	1.89	1.82
o-xylene	1.66	1.43	<1.4	<1.4

Methane was measured by thermal conductivity detection/gas chromatography (TCD/GC), EPA Method 3C.
Ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/ total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Eung
Laboratory Director

QUALITY ASSURANCE SUMMARY

(Repeat Analyses)

Project Location: Sunshine Canyon
Date Received: August 24, 2018
Date Analyzed: August 24, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	P-205R-B	11600	11600	11600	0.0
Ethane	P-205R-B	<5	<5	---	---
TGNMO	P-205R-B	7.79	7.23	7.51	3.7
Hydrogen sulfide	P-205R-B	0.17	0.17	0.17	0.0
	P-205R-C	<0.1	<0.1	---	---
	P-205R-D	<0.1	<0.1	---	---
	P-205R-E	1.06	1.04	1.05	0.95
		(Concentration in ppbv)			
Benzene	P-205R-B	3.51	3.19	3.35	4.8
Benzyl chloride	P-205R-B	<1.4	<1.4	---	---
Chlorobenzene	P-205R-B	<1.4	<1.4	---	---
Dichlorobenzenes	P-205R-B	3.36	3.73	3.54	5.2
1,1-dichloroethane	P-205R-B	<1.4	<1.4	---	---
1,2-dichloroethane	P-205R-B	<1.4	<1.4	---	---
1,1-dichloroethylene	P-205R-B	<1.4	<1.4	---	---
Dichloromethane	P-205R-B	<2	<2	---	---
1,2-dibromoethane	P-205R-B	<1	<1	---	---
Perchloroethene	P-205R-B	<1	<1	---	---
Carbon tetrachloride	P-205R-B	<1.4	<1.4	---	---
Toluene	P-205R-B	2.50	2.81	2.66	5.8
1,1,1-trichloroethane	P-205R-B	<1	<1	---	---
Trichloroethene	P-205R-B	<1	<1	---	---
Chloroform	P-205R-B	<1	<1	---	---
Vinyl chloride	P-205R-B	<1	<1	---	---
m+p-xylenes	P-205R-B	2.49	2.90	2.70	7.6
o-xylene	P-205R-B	1.57	1.75	1.66	5.4

Four Tedlar bag samples, laboratory numbers 12368-(3-6), were analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 9 repeat measurements from four Tedlar bag samples is 3.7%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES:

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☑ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00

PROJECT MANAGER: Ray Al Ayass

PROJECT NAME: Sunshine Canyon

W.O. / S.O. #:

PROJECT LOCATION: Sylmar, CA

SAMPLER NAME AND SIGNATURE: Saulo DIAZ - [signature]

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC	TAC	H_2S	CH_4	CO_2	Ethane	TGNMO			LAB USE ONLY
12368-3	Probe 205R-B	AIR	08/23/18 @ 1400	10L TEDLAR	NONE		X	X	X	X	X	X	X			
-4	Probe 205R-C	AIR	08/23/18 @ 1410	10L TEDLAR	NONE		X	X	X	X	X	X	X			
-5	Probe 205R-D	AIR	08/23/18 @ 1420	10L TEDLAR	NONE		X	X	X	X	X	X	X			
-6	Probe 205R-E	AIR	08/23/18 @ 1430	10L TEDLAR	NONE		X	X	X	X	X	X	X			

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
[signature]	8-24-18	[signature]	8-24-18			[signature]	8/24/18
COMPANY:	TIME:	COMPANY:	TIME: 1010	COMPANY:	TIME:	COMPANY:	TIME:

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environmental consultants
laboratory services
atmaa.com

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Components Analysis in Probe Tedlar Bag Samples

Report Date: October 11, 2018
Client: SCS Field Services
Project Location: Sunshine Canyon
Project No.: 07218035.00
Date Received: September 28, 2018
Date Analyzed: September 28 & 29, 2018

AtmAA Lab No.:	12718-8	12718-9	12718-10
	P 205R-C	P 205R-D	P 205R-E
Components	*(Concentration in ppmv)*		
Methane	19000	26900	16500
Carbon dioxide	442000	475000	374000
Ethane	<5	<5	<5
TGNMO	12.0	12.1	8.58
Hydrogen sulfide	<0.1	<0.1	1.38
	(Concentration in ppbv)		
Benzene	3.92	4.20	1.75
Benzyl chloride	<1.4	<1.4	<1.4
Chlorobenzene	<1.4	<1.4	<1.4
Dichlorobenzenes*	2.90	3.69	3.56
1,1-dichloroethane	<1.4	<1.4	<1.4
1,2-dichloroethane	<1.4	<1.4	<1.4
1,1-dichloroethylene	<1.4	<1.4	<1.4
Dichloromethane	<2	<2	<2
1,2-dibromoethane	<1	<1	<1
Perchloroethylene	<1	<1	<1
Carbon tetrachloride	<1.4	<1.4	<1.4
Toluene	1.99	2.71	2.34
1,1,1-trichloroethane	<1	<1	<1
Trichloroethene	<1	<1	<1
Chloroform	<1	<1	<1
Vinyl chloride	<1	<1	<1
m+p-xylenes	1.52	1.57	<1.4
o-xylene	<1.4	<1.4	<1.4

Methane was measured by thermal conductivity detection/gas chromatography (TCD/GC), EPA Method 3C.
Ethane, and total gaseous non-methane organics (TGNMO) were measured by flame ionization detection/ total combustion analysis (FID/TCA) Method 25.
Ethane is reported as ppmvC.
TGNMO is total gaseous non-methane, non-ethane organics reported as ppmvC.
** total amount containing meta, para, and ortho isomers*

Brian W. Fung
Laboratory Director

QUALITY ASSURANCE SUMMARY

(Repeat Analyses)

Project Location: Sunshine Canyon
Date Received: September 28, 2018
Date Analyzed: September 28 & 29, 2018

Components	Sample ID	Repeat Analysis Run #1	Repeat Analysis Run #2	Mean Conc.	% Diff. From Mean
		(Concentration in ppmv)			
Methane	P 205R-C	19000	19000	19000	0.0
Ethane	P 205R-C	<5	<5	---	---
TGNMO	P 205R-C	11.9	12.1	12.0	0.83
Hydrogen sulfide	P 205R-C	<0.1	<0.1	---	---
	P 205R-E	1.36	1.39	1.38	1.1
		(Concentration in ppbv)			
Benzene	P 205R-C	3.88	3.95	3.92	0.89
Benzyl chloride	P 205R-C	<1.4	<1.4	---	---
Chlorobenzene	P 205R-C	<1.4	<1.4	---	---
Dichlorobenzenes	P 205R-C	2.90	2.90	2.90	0.0
1,1-dichloroethane	P 205R-C	<1.4	<1.4	---	---
1,2-dichloroethane	P 205R-C	<1.4	<1.4	---	---
1,1-dichloroethylene	P 205R-C	<1.4	<1.4	---	---
Dichloromethane	P 205R-C	<2	<2	---	---
1,2-dibromoethane	P 205R-C	<1	<1	---	---
Perchloroethene	P 205R-C	<1	<1	---	---
Carbon tetrachloride	P 205R-C	<1.4	<1.4	---	---
Toluene	P 205R-C	2.02	1.96	1.99	1.5
1,1,1-trichloroethane	P 205R-C	<1	<1	---	---
Trichloroethene	P 205R-C	<1	<1	---	---
Chloroform	P 205R-C	<1	<1	---	---
Vinyl chloride	P 205R-C	<1	<1	---	---
m+p-xylenes	P 205R-C	1.52	1.52	1.52	0.0
o-xylene	P 205R-C	<1.4	<1.4	---	---

Three Tedlar bag samples, laboratory numbers 12718-(8-10), were analyzed for SCAQMD Rule 1150.1 components, methane, and total gaseous non-methane organics (TGNMO). Agreement between repeat analyses is a measure of precision and is shown above in the column "% Difference from Mean". The average % difference from mean for 7 repeat measurements from two Tedlar bag samples is 0.62%.

CHAIN OF CUSTODY RECORD

SCS FIELD SERVICES

9383 Charles Smith Avenue
Rancho Cucamonga, CA 91730
Office 909-373-2508 Fax 909-373-2518

TOTAL NUMBER OF SAMPLES: 3

PAGE 1 OF 1

TURNAROUND TIME REQUIRED: ☒ Std. ☐ 3-Day ☐ 24-Hr. ☐ Other

PROJECT NUMBER: 07218035.00

PROJECT MANAGER: RAY AL AYASS

PROJECT NAME: SUNSHINE CANYON LANDFILL

W.O. / S.O. #:

PROJECT LOCATION: SYLMAR, CA

SAMPLER NAME AND SIGNATURE:

I.D. NUMBER	SAMPLE DESIGNATION	SAMPLE MATRIX	DATE/TIME COLLECTED	CONTAINER SIZE/TYPE	SAMPLE PRESERVATIVE	SPECIAL INSTRUCTIONS/COMMENTS	TOC	TAC	H2S	CH4	CO2	ETHANE	TGNMOC			LAB USE ONLY
12718-8	PROBE 205R-C	AIR	9-27-18 @ 13:05 HRS	10 L TEDLAR	NONE		X	X	X	X	X	X	X			
-9 -10	PROBE 205R-D	AIR	9-27-18 @ 13:15 HRS	10 L TEDLAR	NONE		X	X	X	X	X	X	X			
	PROBE 205 R-E	AIR	9-27-18 @ 13:20 HRS	10 L TEDLAR	NONE		X	X	X	X	X	X	X			

NOTES:

SAMPLE CONDITION UPON RECEIPT:

RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:	RELINQUISHED BY:	DATE:	ACCEPTED BY:	DATE:
COMPANY: SCS	TIME: 1018	COMPANY: SCS	TIME: 1012	COMPANY:	TIME:	COMPANY:	TIME: 9-28-17 11:50

FORM NO. 107 REV. 3/14 TWIN CONCEPTS

ATTACHMENT D

DOGGR WELL RECORDS

PROPERTY/WELL TRANSFER OR ACQUISTION

TEXACO E. & P. INC. – T1600

TO

CHEVRONTEXACO EXPL. & PROD., CO. – C5680

TRANSFER EFFECTIVE AUGUST 22, 2002

CHEVRONTEXACO EXPL. & PROD., CO. – C5680

TO

CHEVRON U.S.A. INC. – C5640

TRANSFER EFFECTIVE JULY 11, 2005

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF WELL PLUGGING AND RE-ABANDONMENT

Ventura, California

July 8, 1997

Cheryl S. Grayson
Grayson Services, Inc.
4004 S. Enos Lane
Bakersfield, CA 93312

Your report of the plugging and re-abandonment of well Texaco, Inc. "Eadie" 1,

A.P.I. No. 037-06077, Section 23, T. 3N, R. 16W, SBB.& M.,

---- field, Los Angeles County,

dated June 23, 1997, received June 25, 1997, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and the filing of well records.

William F. Guerard, Jr
State Oil and Gas Supervisor

By
Patrick J. Kinnear
Deputy Supervisor

tkc

cc: Update

Modified OG159 (4/94)

OPERATOR Texaco

WELL NO. "Eadie" 1

MAP

A.P.I. 037-06077

SECTION 23, T. 3 N, R. 16 W

INTENTION	Supp. Abd.	Supp. Abd.	Supp. Abd.			
NOTICE DATED	—	9-16-93	6-2-97			
P-REPORT NUMBER	292.068	293.349	[illegible]			
CHECKED BY/DATE						
MAP LETTER DATED						
SYMBOL			NO *			

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	3-6-93		9-20-93		6-11-97							
HISTORY					6-25-97							
SUMMARY												
E-LOG												
MUD LOG												
DIPMETER												
DIRECTIONAL												
CORE/SWS												
CBL												

ENGINEERING CHECK

T-REPORTS			✓			
OPERATOR'S NAME			✓			
WELL NO.			✓			
LOC & ELEV			✓			
SIGNATURE			✓			
SURFACE INSP.			OK			
DRILL CARD						
RECORD'S COMPLETE			SB			

FINAL LETTER OK

MAILED

RELEASED BOND

INJECTION BOOK

IDLE WELL LIST

SURFACE INSP. CARD

REMARKS: * COORDINATES NOT COMPATIBLE WITH MAP GRID.

OK TO RELEASE FROM CONFIDENTIAL

ABANDONED-REMOVED FROM E.D.P.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. T297-129

Report on Operations

Cheryl S. Grayson
GRAYSON SERVICES, INC.
4004 S. Enos Lane
Bakersfield, CA 93312

Ventura, California
July 8, 1997

Texaco, Inc.
Your operations at well "Eadie" 1, API No. 037-06077, Sec. 23, T. 3N, R. 16W, S.B. B.&M. ---------- Field, in Los Angeles County, were witnessed on 6-10-97. Steve Mulqueen, representative of the supervisor, was present from 1000 to 1200. There were also present Bob Grayson, Jr.
Present condition of well: 11 3/4" cem 500'. TD 8011'. Plugged w/ cem 850'-766', 530'-400' & 200'-5'.

The operations were performed for the purpose of re-abandonment.

DECISION:

The plugging operations as witnessed and reported are approved.

tkc

William F. Guerard, Jr.
State Oil and Gas Supervisor

By

Patrick J. Kinnear
Deputy Supervisor

OG109 (Modified 1993)

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

5 T129

CEMENTING/PLUGGING MEMO

Texaco, Inc.

Operator GRAYSON SERVICES, INC. Well No. "Eddie" 1
API No. 037 - 06077 Sec. 23, T. 3N, R. 16W, SB B&M
Field —, County LOS ANGELES. On 6-10-97,
Mr. ~~Ms.~~ STEVE MULQUEEN, representative of the supervisor, was present from 1000 to 1200.
There were also present BOB GRAYSON, JR.
Casing record of well: 11 3/4" cem 500'. TD 8011. Plugged w/ cem 850'-766', 530'-400' & 200'-5'.

The operations were performed for the purpose of RE-ABANDONMENT

☐ The plugging/cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____' are approved.

Hole size: _____" fr. _____' to _____', _____" to _____' & _____" to _____'

Casing				Cemented			Top of Fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			

Casing/tubing recovered: _____" shot/cut at _____', _____', _____' pulled fr. _____';
_____" shot/cut at _____', _____', _____' pulled fr. _____'.

Junk (in hole): _____

Hole fluid (bailed to) at _____'. Witnessed by _____

Mudding	Date	bbls.	Displaced	Poured	Fill	Engr.
CLAY GEL (OLD THICK MUD)	6-9-97	—			CIRCULATED TO SURFACE	SPM

CLEAN OUT TO 205'

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engr.	Depth	Wt/Sample	Date & Time	Engr.
6-9-97	140 cf	TBG @ 200'	1500	SPM	5'	VISUAL	6/10 1100	SPM

OGD10 (11/93/GSR1/5M)

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

HISTORY OF OIL OR GAS WELL

Operator Grayson Service Inc. Field Newhall County Los Angeles
Well Eadie #1, Sec. 23, T 3N, R 16W, MD B. & M.
A.P.I. No. 037-06077 Name Bob Grayson (Person submitting report) Title V. Pres. (President, Secretary, or Agent)
Date 6/23/97, 19

Signature Bob Grayson

4004 S. Enos Lane Bakersfield, Calif. 93312 (Address) (805) 589-5444 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Date	
6/6/97	(Make Location) M.I.R.U. Installed well head and B.O.P.E. Drilled with 6" bit 2'to 12' in cement, broke thru cement. Cleaned out mud 12' to 40'. P.O.H. Changed out to 9 7/8" bit. Clean out to 40'. Closed well in.
6/9/97	R.I.H. and clean out to 205'. Circulated with water. Drill pipe @ 200'. Mix and pump 140 cubic feet of neat cement with returns to surface.
6/10/97	Cut off casing @ 5' Weld on steel plate and back fill.

RECEIVED
JUN 25 1997
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

Kenyon Engineering, Inc.
ENGINEERING • PLANNING • SURVEYING
12138 INDUSTRIAL BLVD., SUITE 240
VICTORVILLE, CA 92392
(619) 241-6146
FAX: (619) 241-0566

RECEIVED JUN 16 1997

June 12, 1997

BROWNING FERRIS INDUSTRIES
ATTN: BRAD COOLEY
14747 San Fernando Road
Sylmar, CA 91342

RE: OIL WELLS

Dear Brad:

Pursuant to our conversation here are the coordinates and elevations for the capped oil wells.

OIL WELL IN NORTH CANYON	PADUA # 1	OIL WELL AT TOP OF CUT	EADIE # 1
N 33534.11		N 33093.26	
E 32508.41		E 29181.64	
EL 1686.10		EL 2132.46	

If you should have any questions pertaining to the above please feel free to contact our office.

Thank you!

Sincerely,
KENYON ENGINEERING, INC.

Craig L. Johnson
Project Manager

CLJ:cb

RECEIVED JUN 25 1997
DIVISION OF GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. P297-226

PERMIT TO CONDUCT WELL OPERATIONS

(field code)

(area code)

(new pool code

(old pool code)

Cheryl S. Grayson
Grayson Services, Inc.
4004 S. Enos Lane
Bakersfield, CA. 93312

Ventura, California
June 13, 1997

Your supplementary proposal to abandon well Texaco Inc. "Eadie" 1, A.P.I. No. 037-06077, Section 23, T. 3N, R. 16W, S.B. B.&M., ---------- field, ---------- area, ---------- pool, Los Angeles County, dated 6/2/97, received 6/11/97, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. THIS DIVISION SHALL BE NOTIFIED:
   a. To witness cementing operations.

SAF:sf

Engineer Steven A. Fields

Phone (805) 654-4761

William F. Guerard, Jr.
State Oil and Gas Supervisor

By

Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (Modified 1993)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY			
BOND	FORMS		EDP WELL FILE
	OGD114	OGD121	
		✓	

A notice to the Division of Oil and Gas dated FEB 28, 19 92, stating the intention to

ABANDON (Drill, rework, abandon) well TEXACO INC. EADIE #1 (Well designation), API No. 037-06077,

Sec. 23, T. 3N, R. 16W, _____ B.& M., NEWHALL Field,

LOS ANGELES County, should be amended because of changed conditions.

1. The complete casing record of the well (present hole), including plugs and perforations, is as follows:

11 3/4" CASING TO 500'

PLUGGED WITH CEMENT 850'-766', 530'-400', 15'-5'

2. The total depth is: 8011 feet. The effective depth is: _____ feet.

3. Present completion zone (s): _____ (Name). Anticipated completion zone (s): _____ (Name).

4. Present zone pressure: _____ psi. Anticipated/existing new zone pressure: _____ psi.

We now propose: *(A complete program is preferred and may be attached.)*

1. M.I.R.U.
2. DRILL OUT SURFACE PLUG FROM 15'-5'.
3. PLUG WITH CEMENT FROM 200' TO SURFACE.
4. WELD ON STEEL PLATE.

RECEIVED
JUN 11 1997
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

Note: If the well is to be redrilled, show proposed bottom-hole coordinates and estimated true vertical depth.
The Division must be notified if changes to this plan become necessary.

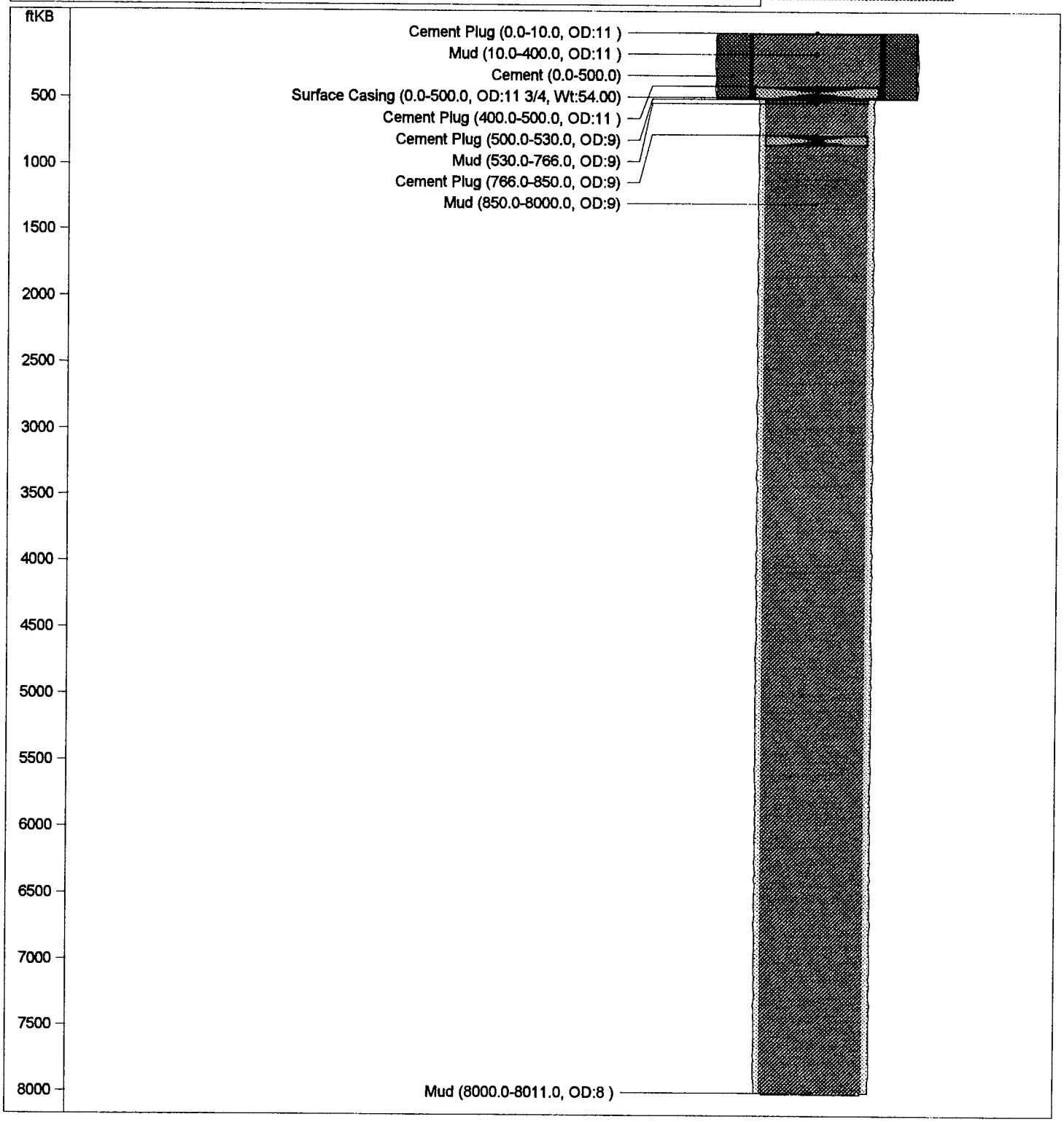
Name of Operator	Telephone Number	
GRAYSON SERVICE INC.	(805) 399-6300	
Address	City	Zip Code
4004 S. ENOS LANE	BAKERSFIELD	93312
Name of Person Filing Notice	Signature	Date
BOB GRAYSON	Bob Grayson	6-2-97

File In Duplicate

OG123 (3/90/GSR1/5M)

04037060770000	
Well Name	EADIE 1
Operator	TEXACO E & P INC
Field Name	ANY FIELD
TD	8011.0 ftKB
PBTD	0.0 ftKB
Approval Date	22-Jul-53
Spud Date	16-Aug-53
TD Date	13-Nov-53
Production Date	
Injection Date	
P/A Date	13-Nov-53

Division of Oil & Gas Conservation



6/2/97

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

REPORT OF CORRECTION OR CANCELLATION

Ventura, California

October 24, 1996

Brand Burfield
PRA Group
2495 Industrial Parkway West
Hayward, CA 94545

In accordance with Division 3 of the Public Resources Code, Section 3202 - If operations have not commenced within one year of receipt of the notice, the notice will be considered canceled.

the following changes pertaining to your well Texaco Inc. "Eadie" 1 (Well Designation)
---------- field, Los Angeles County,

Sec. 23, T. 3N, R. 16W, S.B. B.&M., is being made in our records:

__ The corrected location is _____

__ The corrected elevation _____

__ Report No. _____, dated _____, has been corrected as follows:

XX Your notice to abandon (Drill, abandon, etc.) dated September 16, 1993 and our report No. P293-349 issued in answer thereto, are hereby canceled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

__ Other: _____

tkc

William F. Guerard, Jr.
State Oil and Gas Supervisor

By _____
Patrick J. Kinnear
Deputy Supervisor

OG165 (Modified 6/94)

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

WELL STATUS INQUIRY

Ventura, California

September 28, 1994

Brand Burfield
PRA Group
2495 Industrial Parkway West
Hayward, CA 94545

In a notice dated September 16, 1993, you propose to abandon well Texaco, Inc. "Eadie" 1 (037-06077)
Sec. 23, T. 3N, R. 16W, S.B. B. & M., Los Angeles County.

Please indicate below, conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

svl

William F. Guerard, Jr.
State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

_____ **PROPOSED WORK HAS BEEN DONE.** (If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.*)

_____ **PROPOSED WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT** _____ 19___

_____ **PROPOSED WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.****

_____ **SUPPLEMENTARY NOTICE (Form OG 123) Attached).**

_____ **PLEASE CONSIDER THIS FORM AS A SUPPLEMENTARY NOTICE.**

_____ **WE DO NOT INTEND TO DO THE PROPOSED WORK.** Please cancel our notice to _____, dated _____ 19___.

_____ **OTHER:** _____

_____
(Signature)

_____
(Name and Title) (Date)

* Division 3 of the Public Resources Code states in part:
Section 3215...Well records shall be filed 60 days after completion or suspension of proposed work.

** Section 3203...If operations have not commenced within one year or receipt of the notice, the notice will be considered canceled.
(To prevent cancellation, file a Supplementary Notice with the division)

ODG3 (modified 9/93)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. P293-349

PERMIT TO CONDUCT WELL OPERATIONS

--
(field code)
--
(area code)
--
(new pool code
--
(old pool code)

Brand Burfield
PRA GROUP
2495 Industrial Parkway West
Hayward, CA. 94545

Ventura, California
September 22, 1993

Your supplementary proposal to abandon well Texaco, Inc. "Eadie" 1, A.P.I. No. 037-06077, Section 23, T. 3N, R. 16W, S.B. B.&M., --- field, --- area, --- pool, Los Angeles County, dated 9/16/93, received 9/20/93, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Requirements specified in permit No. P292-068, dated March 11, 1992 shall apply.

cc: Texaco, Inc.

NO BOND REQUIRED

Engineer Steven A. Fields

Phone (805) 654-4761

William F. Guerard, Jr.
State Oil and Gas Supervisor

By

Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (Modified 1993)

344

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES
WELL STATUS INQUIRY

Ventura, California

September 14, 1993

Brand Burfield
PRA GROUP
2495 Industrial Parkway West
Hayward, CA. 94545

In a notice not dated, you propose to reabandon
Texaco E&P Inc. "Edie" 1 (037-06077) Sec. 23, T. 3N, R. 16W, S.B. B.& M.,
Los Angeles County.

Please indicate below, conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

William F. Guerard, Jr.
State Oil and Gas Supervisor

By _____
Patrick J. Kinnear
Deputy Supervisor

_____ **PROPOSED WORK HAS BEEN DONE.** (If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.*)

_____ **PROPOSED WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT** _____ 19___

X **PROPOSED WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.****

_____ **SUPPLEMENTARY NOTICE (Form OG 123) Attached).**

X **PLEASE CONSIDER THIS FORM AS A SUPPLEMENTARY NOTICE.**

_____ **WE DO NOT INTEND TO DO THE PROPOSED WORK.** Please cancel our notice to _____, dated _____ 19___.

_____ **OTHER:** _____

(Signature)

BRAND BURFIELD - STAFF GEOLOGIST 9/16/93
(Name and Title) (Date)

DIVISION OF OIL AND GAS
RECEIVED
SEP 20 1993
VENTURA, CALIFORNIA

* Division 3 of the Public Resources Code states in part:
Section 3215...Well records shall be filed 60 days after completion or suspension of proposed work.

** Section 3203...If operations have not commenced within one year or receipt of the notice, the notice will be considered canceled.
(To prevent cancellation, file a Supplementary Notice with the division)

ODG3 (modified 9/93)

PRA Group
CONSULTING ENGINEERS

No. GB-100/G202-07
September 17, 1993

State of California-Resources Agency
Department of Conservation
Division of Oil and Gas
1000 S. Hill Road, Ste. 116
Ventura, CA 93003-4458

Attention: Mr. Steve Fields

SUBJECT: Transmittal of Well Status Inquiry Forms for Proposed Oil Well Abandonment at the Sunshine Canyon Sanitary Landfill, Sylmar, California.

Dear Mr. Fields:

We have received the Well Status Inquiry forms sent to us by your office, dated September 14, 1993. It is still our intention to abandon the oil wells prior to construction of the proposed landfill expansion at the subject site. Due to unforeseen delays in the construction schedule, it has been necessary to postpone the proposed oil well abandonment program. Enclosed with this letter are the completed well status inquiry forms for the proposed oil well abandonment at the subject site. We will notify you as soon as a tentative schedule for well abandonment is set up.

Thank you for your consideration. If you have any questions, please contact this office.

Very truly yours,

THE PRA GROUP, INC.

Brand W. Burfield
Staff Geologist

Irving D. Affeldt
Principal

bwb/G20207.1

enclosures: Well Status Inquiry forms (10 total)

DIVISION OF OIL AND GAS
RECEIVED
SEP 2 0 1993
VENTURA, CALIFORNIA

The PRA Group, Inc.
▲ WASTE MANAGEMENT ▲ ENVIRONMENTAL ▲ CIVIL ▲ GEOTECHNICAL ▲ GROUNDWATER ▲ GEOLOGY ▲
2495 INDUSTRIAL PARKWAY WEST, HAYWARD, CA 94545
TEL (510) 732-9895 FAX (510) 732-0289

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P292-068
Field Code --
Area Code --
New Pool Code --
Old Pool Code --

PERMIT TO CONDUCT WELL OPERATIONS

PRA GROUP, CONSUL. ENGINEERS
2495 Industrial Parkway West
Hayward, California 94545

Ventura, California
March 11, 1992

Your supplementary proposal to abandon well TEPI/"Eadie" 1, A.P.I. No. 037-06077, Section 23, T. 3N, R. 16W, S.B. B.&M., ---------- field, ---------- area, ---------- pool, Los Angeles County, dated -----, received 3/6/92, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class I 1M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. This office shall be consulted before deviating from the proposed abandonment program.
4. THIS DIVISION SHALL BE NOTIFIED:
   a. To witness the placing of the surface plug or to verify its location.

NOTE: Please have well surveyed by a licensed surveyor and submit results to this office.

SF:tkc
cc: Texaco E. & P. Inc.

Engineer Steve Fields

Phone (805) 654-4761

K.P. HENDERSON, Acting Chief

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY			
BOND	FORMS		EDP WELL
	OGD114	OGD121	FILE
		✓	✓

A notice to the Division of Oil and Gas dated February 28th, 19 92, stating the intention to

abandon (Drill, rework, abandon) well "Eadie" #1 (Well designation), API No. 037-06077,

Sec. 23, T. 3 N, R. 16 W, S.B. B.&M., ~~Newhall~~ Los Angeles Field,

Los Angeles County, should be amended because of changed conditions.

1. The complete casing record of the well (present hole), including plugs and perforations, is as follows:

11-3/4" casing to 500'.
Plugged with cement from 850'-766', 530'-400', and 15'-5'.

2. The total depth is: 8011 feet. The effective depth is: _____ feet.

3. Present completion zone (s): _____ (Name) Anticipated completion zone (s): _____ (Name).

4. Present zone pressure: _____ psi. Anticipated/existing new zone pressure: _____ psi.

We now propose: *(A complete program is preferred and may be attached.)*

The proposed work program is attached to this permit.

DIVISION OF OIL AND GAS
RECEIVED
MAR 0 6 1992
VENTURA, CALIFORNIA

Note: If the well is to be redrilled, show proposed bottom-hole coordinates and estimated true vertical depth.
The Division must be notified if changes to this plan become necessary.

Name of Operator	Telephone Number	
PRA Group	(510) 732-9890	
Address	City	Zip Code
2495 Industrial Parkway West	Hayward	94545
Name of Person Filing Notice	Signature	Date

File In Duplicate

OG123 (3/90/GSR1/5M)

DIVISION OF OIL AND GAS
RECEIVED
MAR 0 6 1992
VENTURA, CALIFORNIA

No. GB-100/G102-23
February 28, 1992

Proposed Work Program

1. Locate oil wells.

2. Drill out existing surface seal and drilling mud from each oil well casing to a depth of approximately 60 feet below existing grade.

3. Reabandon each oil well by installing a new surface seal of tremied cement grout into the upper 60 feet of each oil well casing.

PRA Group
CONSULTING ENGINEERS

DIVISION OF OIL AND GAS
RECEIVED
MAR 0 6 1992
VENTURA, CALIFORNIA

No. GB-100/G102-23
February 28, 1992

Department Of Conservation
Division Of Oil And Gas
1000 S. Hill Road, Suite 116
Ventura, CA 93003-4468

Attention: Mr. Steve Fields

SUBJECT: Confirmation of Telephone Conversation Regarding Abandonment of Oil Wells at the Proposed Sunshine Canyon Sanitary Landfill County Extension, Los Angeles County, California.

Dear Mr. Fields:

With regards to our telephone conversation of February 7, 1992, I would like to confirm in writing our discussion regarding the procedure to be followed during oil well abandonment. Construction is scheduled to begin at the landfill extension site very soon and it is important to us that our oil well abandonment program run as smoothly as possible.

It is our understanding that the current standards for the abandonment of oil wells approved by the Division of Oil and Gas (DOG) state that the well must have neat cement grout seals across the producing interval, the saltwater/freshwater interface (if applicable), and at the surface. During our phone conversation, we also discussed the available DOG abandonment records and concluded that six of the eight wells at the subject site (Newhall Field, well nos. 53, 54, 55, 56, 57 and 61) were abandoned to current DOG standards. The abandonment records for the other two wells (Newhall Field, well nos. 59 and 63) are incomplete.

It is proposed to replace the existing surface seals in all of the oil wells with new seals deep enough not to be undercut by the proposed earthwork. In our conversation, I confirmed that it would be acceptable to the DOG if the well casing was drilled out to a depth of 60 feet below grade and a new neat cement surface seal was installed. It is our understanding that it will not be necessary for DOG personnel to perform leak testing since our plan is to replace the surface seals.

The PRA Group, Inc.
▲ WASTE MANAGEMENT ▲ ENVIRONMENTAL ▲ CIVIL ▲ GEOTECHNICAL ▲ GROUNDWATER ▲ GEOLOGY ▲
2495 INDUSTRIAL PARKWAY WEST, HAYWARD, CA 94545
TEL (510) 732-9895 FAX (510) 732-0289

Enclosed with this letter are permit applications for the proposed work at the subject site. Thank you for your prompt consideration. If you have any questions, please contact this office.

Very truly yours,

THE PRA GROUP, INC.

Brand Burfield
Staff Geologist

Irving D. Affeldt, CEG 1108
Principal

bwb/G10223.DOG

enclosures: Permit applications for oil well abandonment

FORM 159 (9-49)

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

REPORT OF WELL ABANDONMENT

Los Angeles 15, California, January 27, 1954

Mr R L Jackson
The Texas Co
P O Box 320
Long Beach 1 California

Dear Sir

Your report of abandonment of Well No. "Radie" 1, Sec. 23, T. 3 N, R. 16 W, S B B. & M., Newhall oil field, Los Angeles County, dated December 16, 1953, has been examined in conjunction with records filed in this office.

A review of the reports and records shows that the requirements of this Division, which are based on all information filed with it, have been fulfilled.

MAP	MAP BOOK	CARD	BOND	FORMS
18A				

Yours truly

R. D. BUSH
State Oil and Gas Supervisor

By R. J. Mallory
Deputy Supervisor

cc Mr R D Bush
Company
Conservation Committee
orig Mr R F Cory

es

82601 7-53 6700 SPO

FORM 100. 7-48
CALIFORNIA STATE PRINTING OFFICE

SUBMIT LOG IN DUPLICATE
FILL THIS BLANK IN WITH TYPEWRITER. WRITE ON ONE SIDE OF PAPER ONLY

DIVISION OF OIL AND GAS
RECEIVED
JAN 7 1954
LOS ANGELES, CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

WELL SUMMARY REPORT

Operator The Texas Company Field (Weldon Canyon)

Well No. Eadie #1 Sec. 23, T. 3N, R. 16W, S.B. B. & M.

Location 2425.28' S along Sec. line and 1482.21' W at rt. angles to said line from the NE cor. of Sec. 23, T3N, R16W, SBB&M

Elevation above sea level 2137.1 feet.
All depth measurements taken from top of Kelly Bushing which is 11.5 feet above ground.

In compliance with the provisions of Chapter 93, Statutes of 1939, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date December 16, 1953

Signed [illegible]

[illegible] (Engineer or Geologist) R. L. Fatton (Superintendent) Title Superintendent (President, Secretary or Agent)

Commenced drilling 8-16-53 Completed drilling 11-13-53 Drilling tools ~~Cable~~ Rotary

Total depth 8011' Plugged depth 0

Junk

GEOLOGICAL MARKERS	DEPTH

Commenced producing Abandoned (date) Flowing/gas lift/pumping (cross out unnecessary words)

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production						
Production after 30 days						

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Drilled	Number of Sacks of Cement	Depth of Cementing if through perforations
11 3/4"	500'	surf	54#	New	Smls	J-55	17 1/2	450	

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				

Electrical Log Depths 500' to 8011' (Attach Copy of Log)

FORM 103.
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JAN 7 1954
LOS ANGELES, CALIFORNIA

History of Oil or Gas Well

OPERATOR The Texas Company FIELD (Weldon Canyon) Reinhart

Well No. Eadie #1, Sec. 23, T. 3N, R. 16W, S.B. B. & M.

Signed R. Stetson

Date December 16, 1953 Title Superintendent
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. **Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production.** Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date	
1953	DRILLING CONTRACTOR - FOWLER DRILLING CO.
8-16	Spudded in at 11:00 P.M. in 11" hole.
8-17	Lost circulation at 114', regained circulation at 130'. Drilled ahead with partial circulation.
8-18	Drilled 11" hole to 496' opened 11" hole to 17½" from 0 to 267'. Lost circulation at 175'. Mixed lost circulation material and regained circulation at 205'.
8-19	Opened hole to 17½" to 496' and drilled to 500'. Ran 12 joints, 11¾", 54#, casing, 503' overall including Baker Float shoe. Cemented at 500 K.B. with 450 sacks Construction cement mixed with 3% gel. Used 1 top rubber plug. Displaced with 322 cu. ft. of mud. Did not bump plug. No cement return to surface. Cement in place at 11:15 P.M. B. J. Equipment.
8-20	Cement set 2 hours. Ran 200 feet of 2" pipe on outside of the casing to top of cement. Pumped in 80 sacks cement. Set 2 hours then pumped in 70 sacks. Got cement returns to surface. In place 4:30 A.M.
8-22	Installed blowout prevention equipment and tested at 1500 psi. Drilled 9-7/8" hole ahead. Mud weight, 73; viscosity, 43; sand, 2%; water loss, 9 cc.
8-25	Drilled 9-7/8" hole to 1446'. Cored with 8½" core barrel from 1446 to 1462'. Recovered 3'. Drilled 8½" hole to 1568'.
8-26	Opened 8½" hole to 9-7/8" from 1446' to 1568' and drilled to 1900'.
8-27	Circulated and conditioned mud for electric log. Drilled 9-7/8" hole ahead to 2075'.
8-29	Cored 8½" hole from 2075' to 2166'. Mud weight, 76; viscosity, 48; sand, 1.5%; water loss 4.5 cc.
9-1	Drilled 8½" hole to 2435', cored 8½" hole from 2435' to 2455' then drilled 8½" hole ahead to 2604'.

DIVISION OF OIL AND GAS

Monthly of [illegible]

The Texas Company — Weldon Canyon

Wadda #1 — 23 — 3W — 16W — B.S.

December 16, 1953 — Superintendent

[illegible]

DRILLING CONTRACTOR - FOWLER DRILLING CO.

1953	
8-16	Spudded in at 11:00 P.M. in 11" hole.
8-17	Lost circulation at 114', regained circulation at 130'. Drilled ahead with partial circulation.
8-18	Drilled 11" hole to 496' opened 11" hole to 17½" from 0 to 267'. Lost circulation at 175'. Mixed lost circulation material and regained circulation at 205'.
8-19	Opened hole to 17½" to 496' and drilled to 500'. Ran 12 joints, 11¾", 38¾, casing, 503' overall including Halmer Float shoe. Cemented at 500 K.B. with 450 sacks Construction cement mixed with 3% gel. Used 1 top rubber plug. Displaced with 322 [illegible] of mud. [illegible] not bump plug. No cement return to surface. Cement in place at 11:15 P.M. S. J. equipment.
8-20	Cement set 2 hours. Ran 200 feet of 2" pipe on outside of the casing to top of cement. Pumped in 80 sacks cement. Set 2 hours then pumped in 70 sacks. Got cement returns to surface. In place 4:30 A.M.
8-22	Installed blowout prevention equipment and tested at 1500 psi. Drilled 9-7/8" hole ahead. Mud weight, 73; viscosity, 43; sand, 2%; water loss, 9 cc.
8-25	Drilled 9-7/8" hole to 1446'. Cored with 8¾" core barrel from 1446 to 1462'. Recovered 3'. Drilled 8¾" hole to 1568'.
8-26	Opened 6¼" hole to 9-7/8" from 1446' to 1568' and drilled to 1900'.
8-27	Circulated and conditioned mud for electric log. Drilled 9-7/8" hole ahead to 2075'.
8-29	Cored 6¼" hole from 2075' to 2166'. Mud weight, 76; viscosity, 48; sand, 1.5%; water loss 4.5 cc.
9-4	Drilled 8¾" hole to 2435'. Cored 6¼" hole from 2435' to 2435' then drilled 8¾" hole ahead to 2604'.

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9-2 Opened 8½" hole to 9-7/8" from 2075' to 2298'. Ran electric log.

9-4 Drilled 9-7/8" hole to 2806' changed to 8½" Reed core barrel and cored ahead to 2882'.

9-5 Ran electric log and hole caliper. Mud weight, 77; viscosity, 45; sand, ½" water loss 4 cc.
Ran DPT #1. Set packer at 2815' tail to 2882'. Medium blow for 1 hour. Gas in 15 minutes. Recovered 310' of gassy thin mud. Salinity 3020 ppg. B.I.F.P. 200 psi B.H.S.P. 200 psi.

9-6 Opened 8½" hole to 9-7/8" from 2806' to 2882' and drilled to 2950', changed to 8½" Reed corehead and cored from 2950' to 3005'.

9-7 Ran electric log and hole caliper.
Ran H.P.T. #2, set packer 2955' tail to 3005'. Open 7½ minutes, medium blow declined steadily. Gas in 25 minutes. Recovered 1750' of gassy muddy water. Salinity 1120 ppg. B.H.F.P. 800 psi B.H.S.P. 880 psi. Incomplete build up.

9-9 Opened 8½" hole to 9-7/8" from 2950' to 3005'.

9-10 Drilled 9-7/8" hole to 3490' changed to 8½" Reed corehead and cored from 3490' to 3523' changed to 9-7/8" bit and drilled ahead.

9-12 Mud weight, 79; viscosity, 43; sand, 3%; water loss, 6 cc.

9-15 Drilled 9-7/8" hole to 3856' changed to 8½" corebarrel and cored to 3873' changed to 9-7/8" bit and drilled ahead.

9-19 Mud weight, 81; viscosity, 45; sand, 3%; water loss, 6.4 cc.

9-22 Cored 9-7/8" hole from 4643' to 4653'.

9-26 Mud weight, 81; viscosity, 48; sand, 4%; water loss, 7 cc.

9-27 Reamed from 5286' to 5316'.

9-30 Drilled to 5526' and cored 9-7/8" hole from 5526' to 5544'.

10-3 Mud weight, 81; viscosity, 48; sand, 4%; water loss 6 cc.

10-4 Drilled to 6054', cored from 6054' to 6073' in 9-7/8" hole.

10-10 Drilled 9-7/8" hole to 6508'. Cored from 6508' to 6514' in 9-7/8" hole. Mud weight, 82; viscosity, 45; sand, 4%; water loss, 6 cc.

10-13 Drilled to 6660', cored 9-7/8" hole from 6660' to 6668', drilled ahead in 9-7/8" hole.

10-17 Mud weight, 82; viscosity, 46; sand, 4%; water loss, 7 cc.

10-18 Cored from 6990' to 7000' with 9-7/8" bit. Ran Schlumberger electric log, side wall sampler and dip meter.

10-19 Drilled 8-1/2" hole to 7042' opened hole to 9-7/8" from 7000' to 7042'.

10-24 Mud weight, 82; viscosity, 47; sand, 2%; water loss, 6 cc. Drilled 9-7/8" hole to 7367'.

10-28 Drilled 9-7/8" hole to 7606'.

10-29 Cleaned out 50' cavings. Hole filling with fractured shale. Raised mud weight to 90# per cu. ft.

10-31 Drilled 9-7/8" hole to 7716'. Tight hole from 7600' to 7500'. Pulled up to 5000' to circulate and lost circulation. Ran in hole and circulated at intervals, lowered mud weight from 88 to 80 lbs per cu. ft. Regained circulation. Shale running at 7200' to 7400'. Lowered water loss of the mud.

11-1 Reamed from 7290' to 7450'. Tried to stop shale from coming in 7430' to 7450'. Mud weight, 80; viscosity, 62; sand, 2%; water loss, 5 cc. Changed to emulsion type mud.

11-2 Conditioned hole, shale running. Mud weight 80#; viscosity 65 to 90 seconds, sand 2%; water loss 3.3 cc in 30 minutes.

11-3 Conditioned mud and hole. Shale stopped running. Mud weight 80 to 81#; viscosity 80 to 95 seconds; sand, 2%; water loss 2.0 cc in 30 minutes.

11-4 Drilled 9-7/8" hole ahead.

11-7 Drilled 9-7/3" hole to 7879'. Ran Schlumberger electric log and side wall sampler. Sidewall sampler stuck at 2009'. Ran socket as drill pipe and released sampler.

11-8 Drilled 9-7/8" hole to 7905'. Cored 8½" hole from 7905' to 7913'. Mud weight, 80; viscosity, 115; sand, 2%; water loss, 3 cc.

11-9 Cored from 7913' to 7923'. Opened 8½" rat hole to 9-7/8" from 7905' to 7923'.

11-11 Drilled 9-7/8" hole to 8000' changed to 8½" corehead and cored from 8000' to 8011'.

11-12 Ran Schlumberger electric log. Hung 4½" drill pipe at 850'. Pumped in 75 sacks Construction cement with 2% calcium chloride. Cement in place 11:10 A.M. Cement set 6 hours. Top of plug 766'. Approved by D.O.G. Plug job #2: Hung pipe at 530'. Pumped in 75 sacks cement. In place at 8:00 P.M.

11-13 Located top of plug #2 at 400'. Placed 10 lineal feet of cement in 11¾" casing at surface and welded on steel plate. Rig released at 9:00 A.M.
Well abandoned.

The Texas Company

Eadie #2

Waldon Canyon

Section 23 T3N R16W

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INCLINATIONS

Depth	Degree of Drift
100'	0 degrees 30 minutes
249'	0 degrees 45 minutes
400'	½ degree
596'	1 degree 30 minutes
696'	1 degree 30 minutes
790'	0 degrees 45 minutes
850'	½ degree
1010'	1 degree 15 minutes
1090'	0 degrees 45 minutes
1210'	1 degree 15 minutes
1300'	½ degree
1396'	1 degree 45 minutes
1477'	1 degree 30 minutes
1568'	1 degree 15 minutes
1660'	1½ degrees
1750'	1 degree 30 minutes
1840'	2 degrees 15 minutes
1900'	2 degrees 15 minutes
1990'	2 degrees 15 minutes
2173'	3 degrees
2267'	2 degrees 35 minutes
2324'	2½ degrees
2421'	2 degrees 30 minutes
2520'	2 degrees 30 minutes
2604'	1 degree 45 minutes
2720'	2 degrees 30 minutes
2806'	2½ degrees
2930'	2 degrees
3022'	2½ degrees
3102'	1½ degrees
3220'	1 degree 45 minutes
3265'	50 minutes
3313'	1½ degrees
3428'	1 degree 15 minutes
3457'	1 degree 30 minutes
3560'	1½ degrees
3652'	1 degree 15 minutes
3745'	1 degree 15 minutes
3960'	1½ degrees
4050'	1½ degrees
4232'	1 degree 0 minutes
4268'	1 degree 15 minutes
4502'	¾ degree
4596'	50 minutes
4719'	0 degrees 45 minutes

Depth	Degree of Drift
4928'	½ degree
5018'	0 degrees 30 minutes
5260'	0 degrees 45 minutes
5357'	1 degree
5450'	1 degree 45 minutes
5570'	1 degree 45 minutes
5698'	1 degree 35 minutes
5819'	1 degree 45 minutes
5911'	1½ degrees
6096'	2 degrees 15 minutes
6204'	4 degrees 15 minutes
6321'	3 degrees 45 minutes
6384'	4 degrees
6437'	3 degrees 45 minutes
6514'	1½ degrees
6564'	3 degrees
6615'	3 degrees
6660'	3½ degrees
6826'	2 degrees 40 minutes
6939'	2½ degrees
6990'	2 degrees 30 minutes
7101'	2½ degrees
7273'	3 degrees
7342'	1 degree 45 minutes
7413'	2 degrees
7567'	2 degrees

The Texas Company

Well #1

Weldon Canyon

Section 23-3N-16W

SCHLUMBERGER SIDE-WALL SAMPLES
Described by W. S. King
10-16-53

Depth	Recovery	
3063'	1½"	Sand, mottled tan to light green gray, firm, friable, conglomeratic, with subrounded pebbles to 1/4" diameter, matrix is coarse grained, silty, tight, patchy faint oil stain, faint odor, very patchy fluorescence, faint straw cut.
3105'	2"	Sand, light gray to tan stained, friable, fine grained, fair sorting with rare pebbles to 1/4", silty, fair to poor porosity and permeability, mottled tan oil stain, mottled yellow fluorescence, fair odor, light amber cut.
3246'	1"	Sand, patchy light oil stain to medium gray, friable, fine to very coarse grained, poorly sorted, tight, faint odor, uneven yellow fluorescence where stained, remainder is gray, light straw cut.
3595'	1"	Sand, mottled green gray to tarnish gray, friable, appears crushed, conglomeratic with rounded pebbles to 1/4" diameter, matrix coarse grained, very poorly sorted, silty, arkosic, uneven light tan staining, spotty yellow fluorescence, faint odor, very pale straw cut.
3940'	1/2"	Sand, medium gray, badly broken and mud injected, appears conglomeratic, matrix silty and tight, no odor, no visible stain, rare spots yellow fluorescence.
3967'	1/4"	Igneous pebble with light gray coarse grained, sand along one edge. Pebble dark gray to black, very hard, common pyritization, microcrystalline. Occasional spots yellow fluorescence in sand.
4026'	1"	Sand, light gray with greenish and tan spots, friable, medium to coarse grained, with rare pebbles to 1/4" diameter and 2 1/8" strata fine grained, silty, oil stained sand which have patchy yellow fluorescence, faint odor, remainder of core is gray.
4143'	1/2"	Sand, conglomeratic, light gray, occasional faint tan spots oil stain, friable, coarse grained with subrounded pebbles to 1/4" diameter, quartzose, arkosic, matrix very poorly sorted, silty, tight, no odor, patchy dull yellow fluorescence, weak spotty stain, extremely light yellow straw cut.

The Texas Company (Golden Canyon)

Eadie #1 Section 23-3S-16W

SCHLUMBERGER SIDE-WALL SAMPLES
Described by G. W. Benson
11-6-53

Depth	Rec.	
7191'	½"	Silty brown shale with occasional thin stringers of fine grained sand. Shale broken up. Sample broken up. No oil shows.
7280'	½"	Silty brown shale as at 7191' above with few thin streaks of gray, fine grained sand with occasional medium grains. No oil shows.
7322'	½"	Gray and brown silty shale as at 7280' above. No oil shows.
7421'	1"	Brown silty shale as at 7322' above and light gray sandy shale. Sand is very fine grained. Gray shale is slightly micaceous, slickensided. No oil shows.
7520'.	Not recovered	
7580'	3/4"	Gray, slightly sand shale as at 7322' above. No oil shows.
7599'	3/4"	Gray, sandy shale as at 7580' above. One patch yellow fluorescence.
7683'	1/2"	Hard, brown-gray, sandy shale, broken up. Few patches yellow fluorescence.
7786'	1/2"	Hard, brown-gray shale as at 7683' above. One small patch yellow fluorescence.
7808'	3/4"	Gray sandy shale with occasional streaks of gray, fine grained sand. Occasional streaks yellow fluorescence.
7820'	Rec. (est.) 3/4"	Hard, light and dark gray shale. Dark gray shale is slightly micaceous. Broken up.

Bullet with sample was recovered with cavings in Core #26.

The Texas Company

Radie #1

Weldon Canyon

Section 23-3N-16W

CORE DESCRIPTION
Described by L. B. Freeman
8-25-53

Core #1
1446-1462' Rec. 3'

2½' Oil stained sandstone, fine to medium grained, coarse, material scattered throughout, rounded to subangular, arkosic, poor to fair sorting, dirty, very silty, tight to poor porosity and permeability, massive to poorly bedded, 35° dips; sharp gassy odor, weak straw cut at top of recovery to very faint cut at base -- core looks slightly more permeable at top than at bottom, fair but even staining, weak pale yellow fluorescence.

½' Interbedded dark gray, sandy siltstone and tight oil stained sand as above in 1 - 1½" interbeds, good 30-35° dips.

Core #2
2075-2093' Rec. 14'

Described by R. M. Crivetti

8' Very fine grained silty oil sand - 1' friable then 2' hard then 5' friable, medium brown oil stained, locally clayey, tight to low porosity and permeability, massive to vaguely bedded with 45-55° dips - strong gasoline odor, even staining and gravity oil fluorescence. Dark brown cut.

3' Shale - well bedded, silty to sandy with laminae of oil saturated very fine sand, near center of interval is tight pebble conglomerate. Dips 55-57° on shale partings.

3' Very fine grained silty oil sand - firm to firm friable, fairly well bedded (dips 56°). Medium brown, well saturated, strong gasoline odor, even bright yellow (hi gravity oil) fluorescence. Grains angular. Low porosity and permeability to tight. Dark brown cuts mostly ground up in removing from core barrel as core stuck (Core washed over with water during removal).

Core #3
2093-2113' Rec. 5' 3' Described by L. B. Freeman
Interbedded oil stained sand and gray siltstone; sand is light tan, fine grained silty, quartzose, finely micaceous, fair sorting, tight due to silty character, one 4" bed of coarse grained oil stained sand, but still silty and tight, good sharp high gravity oil odor, good even staining, yellow fluorescence, fair straw cut, gas bubbles in mud sheath; interbedded shales are dark gray, finely micaceous, locally sandy, no shows in siltstone; excellent 60° dips, upper 3' is about 40% siltstone and 60% sand.

2' Siltstone, fragments of massive siltstone, dark medium gray, finely micaceous, occasionally sandy, no shows except for some free oil along fracture planes and gas bubbles in mud sheath.

Core #4
2112-31' Rec. 18' 18' Siltstone, banded dark gray and brown, predominantly well and thinly bedded, almost a "poker-chip" parting, firm, generally sandy throughout with very fine grained quartzitic sand; siltstone is interbedded with very thin beds (1/8"-1") of very fine grained tan, quartzitic oil stained sand, silty, tight, estimate total of 2½' of oil stained sand in recovery. All having good odor, fair straw cut, even staining and even yellow fluorescence; siltstone has free oil along rare fracture plane, excellent 30° dips.

Core #5
2131-2150' No Recovery

Core #6
2150-2166' Rec. 20' 20' (4' pickup from core #5 (?))
Siltstone, medium gray to brown banded, firm, well and thinly bedded, gritty throughout but very impermeable, rare thin interbed to ¼" of very fine grained light gray to tan, silty, tight quartzitic sand, occasionally a thin streak of sand is faintly oil stained having a faint odor and no cut; excellent 80-90° dips (not overturned).

Core #7
2435-55' Rec. 16' 6". Described by L. B. Freeman
Fragments of medium gray, tight, sandy siltstone, no shows, and fine grained, silty, dirty, tight, quartzitose, tan oil stained sand, good odor, cut and fluorescence.

15½' Siltstone, banded medium gray and brown in ¼" - ½" beds, well bedded, brown siltstone is finely sandy and very foraminiferal; several 1/16" laminae of very fine grained, very tight, silty, oil stained sand, faint odor, faint cut, good fluorescence, excellent 75° dips.

Core #8
2806-2816' Rec. 9' 9' Siltstone, banded and interbedded dark medium gray and dark brown, excellent 45° dips, firm, breaks easily along bedding planes, local slickensides along bedding planes, occasionally siltstone is finely sandy, abundant forams especially in brown beds, occasional broken shell fragment and fish remain; siltstone is interbedded with thin stringers of oil stained sand generally ½" thick but as thick as 2", fine grained, well sorted, angular to subangular, firm, micaceous, fairly clean, poor permeability, fair friability, sharp high gravity oil odor, good tan staining, strong dark brown cut, even yellow fluorescence, abundant gas bubbles in mud sheath, estimate total of 1' oil stained sand in core.

Core #9
2816-2831' Rec. 7' 7' Interbedded siltstone and oil stained sand; siltstone is banded gray and brown as in Core #8, excellent 45° dips; oil stained sand is fine to medium grained, subangular, slightly silty, fair permeability, predominantly quartz with some feldspar and biotite, occasional pink and rust colored grains, occurs generally as ½" interbeds, maximum 2" beds, estimate total 4' sand in core, unevenly and weakly oil stained, medium gray to faintly tan where stained, faint sour gassy odor, weak spotty pale yellow fluorescense, weak straw cut, looks wet.

Core #10 2831-2851	Rec. 16'	16'	Described by W. S. King Interbedded oil stained sand & shale Shale, brown gray and light to medium gray, banded, 1/8" to ½" thick, firm, laminated, easily broken, silty, abundant forams. Oil stained sand, common streaks or stringers 1/8" to ½" thick, (two stks to 1" thick), lt gry w/ silt brown cast, friable, fine grained, slightly silty, fair sorting, apparent fair P & P. Good high gravity oil odor, amber cut, dull yellow to bright yellow fluorescence. Cut (CCl_4) fluoresces bright milky yellow. 30 second flash. Approx 10% of core is oil st. sand. Siltstone shells at 2833' and 2840' are med gry, hd., & dense, calcareous. Good 37°-42° dips.
Core #11 2851-2871	Rec. 10'	10'	Interbedded oil stained sand & shale as in core No. 10. Shale, brown gray to med gray, banded, firm, silty, laminated, abun forams, occ slicked bedding surface. Sand in thinz streaks from paper thin to ½" thick, lt gry w/brn cast, friable fine grained, silty; subangular grains, apparent fair to poor P & P, good high gravity odor, amber cut, med to bright yellow fluorescence, cut (CCl_4) fluoresces bright milky yellow. About 20% of core is oil stained sand. Good gas flash from core barrel. Excellent 37° dips.
Core #12 2871-2881	Rec. 10'	10'	Interbedded oil stained sand & shale as in core last above. Shale, as above, firm to hard, occ broken & slightly slicked Sand, as above, in streaks & very thin to ½" thick partings. Good odor, amber cut, med yellow fluorescence, cut fluoresces milky yellow. No barrel flash. Approx 20% is oil stained sand. Excellent 40-41° dips.
Core #13 2950-2955	Rec. 2½'	½'	Described by W. S. King Oil Stained Sand as in cores above, med gray with light tan cast, friable fair bedding, fine grained, silty, fair sorting, fair P & P, micromicaceous, common fragments & disseminated carbonaceous material. Good odor, dk brown cut, med yellow fluorescence, CCl_4 cut fluoresces med yellow w/ faint green cast.

Core #13 cont'd 1½' Interbedded shale and oil stained sand, as in cores above, w/common streaks carbonaceous material. Approx. 20% oil std. sd.

½' Oil std sand, med gry, w/lt tan case, hard med-crse grained, conglomeratic, silty, very poorly sorted. Pebbles to ¼" inch diam are subrounded. Poor P&P. Good odor dark brown CCl_4 cut. Med yellow fluorescence, which shows few brighter patches. Cut fluoresces med yellow w/faint green cast. good 51° dips.

Core #14
2955-2975 Rec 1½' 1½' Conglomeritic oil stained sand. fair staining, friable but w/hard streaks, med crse grained, silty, v poorly sorted, subrounded pebbles ranging to ⅛" diam. fair to poor P&P. Friable sand appears to have better P&P than hd sd. Fossil shell frags noted. Good odor, amber cut, bright yellow fluorescence, cut fluoresces bright yellow w/ slight green cast. One 2" piece siltstone, brown gry, vy hd, well bedded, locally sandy, common forams, slicked on one surface.

Core #15
2975-2995 Rec. 12ft 12' Oil Sand, lt brn gry, friable to loose, med crse grained, poorly sorted, silty, locally gradding to pebbly coarse sand, rare streaks dark gry siltstone 1/8" to ⅛" thick. Pebbles are subrndd, range to 12 diam. Entire core shows easy flat parting. Fair to poor P&P Good odor, dk brown cut, dull yellow to bright yellow fluor, cut fluoresces bright yellow, Locally fluorescence is uneven but no gray patches. Possibly wet. Fair dips 45°

Core #16
2995-3005 Rec. 3' 3' Described by R. M. Grivetti
Conglomeritic Oil Sand - tan gray, loose to easily friable, poorly sorted, med to coarse sand studded with grits and pebbles to 2" in diameter. Recovered one fragment metamorphic boulder over 4" in diameter. Sand has fair to excellent P&P in few firm pieces recovered. (Core blew out of barrel when pumped out and is mostly loose sand and gravel). Pebbles are well rounded and polished - mostly metamorphic types but w/ some partially decomposed granites Strong gasoline odor, weak but even fluorescence, good dark brown CCl_4 cuts.

Core #17
3490-3505 Rec. 15'

Described by L.B. Freeman 9-11-53

3½' Oil Stained Sand - light tan to medium gray, fine grained w/ local scattered coarse grits and rare rounded pebbles arkosic, finely micaceous, fair sorting, silty, low p & p, fair friability, occ. thininterbeds to ¼" of dark gray-brown foraminiferal siltstone, excellent 53° dips, weak spotty staining, very faint petroleum odor with strong brackish water odor, pale straw cut where weakly stained to dark brown cut, weak spotty pale yellow fluorescence looks tight & wet.

1' Oil stained Sandstone - lithology as above but w/ more coarse grained material and fairly well cemented, firm to hard, massive, shows as above, looks tight & wet.

½' Interbedded Oil Stained Sand & Siltstone. AS IN TOP 3', sd & sltsth in alternating ¼" interbeds, good 55-60° dips, shows as above.

5' Oil Stained Sand, light tan to light med gray, med grained w/much fine material and some scattered coarse angular grits, poor to very poor sorting, firm to hard, massive, arkosic, angular to subangular, some silt, tight, shows as in top 3½' with weaker staining.

5' Interbedded siltstone & Oil stained sand as in top 3½' top 2' of this recovery has 70-90° contorted dips, bottom 3' has good 60° dips.

estimated total 8'+ oil stained sand in core.

Core #18
3505-3524 Rec. 9'

4' Oil Stained Sand, med to crse. grained top 6" grading downward into fine grained, massive, arkosic, subangular grains, hard at top where well cemented to firm at bottom, silty throughout, tight at top to low P & P on bottom, fairly friability, light tan where stained to med gray, vy faint pet odor, weak uneven staining, pale straw cut, weak pale yellow patchy fluorescence, looks & smells wet, rare ⅛" silt streaks.

1' Interbedded gray brown foraminiferal siltstone and tight fine grained oil stained sand, lith and shows as in top 3' (⅛ to ⅛" interbeds)

4' Oil Stained Sand, conglomeritic, medium to coarse grained, locally pebbly, very poorly sorted, angular to subrounded grains, tight firm at top to hard in bottom 3", massive to poorly bedded, locally silty, arkosic, finely micaceous w/occas large biotite flakes, rare ⅛" gray brown foraminiferal sltstn beds giving good 55-60° dips; shows as in upper 3' but w/amber cuts, looks & smells wet.

Core #19
3656-3673' Rec. 12'

12' Oil Stained Sand, medium gray to light gray-tan where patchily stained, predominantly coarse grained with local grading at bottom to medium and fine grained, occasionally pebbly, subangular, massive to poorly bedded, firm to soft, where soft is easily friable, silty, tite to low p & p, predominantly quartz with scattered feldspar and biotite, occasional 1/8 - ½" streak of gray-brown gritty siltstone in top 10' of recovery, bottom 10' has one 2" interbed of dark gray siltstone, good 55-60° dips; very faint petroleum odor, weak and patchy dark brown to lite tan oil staining, bright to dull yellow spotty fluorescense, pale straw cut to fair dark brown cut where better stained, looks wet.

Core #20
4643-53' Rec. 7' 6' Described by L. B. Freeman 9-22-53
Siltstone, dark gray-brown, gritty with very fine grained rounded quartz sand, finely micaceous, locally slickensided along bedding planes, impermeable, contains laminae up to ¼" of oil stained sand, predominantly arkosic, silty, firm, tight, laminae are mainly fine and subangular grained but occasionally are coarse grained and angular containing scattered green mineral fragments (apatite?), good 45-50° dips, weakly oil stained, faint odor, weak to fair straw cut, uneven yellow fluorescence, looks tight and wet.

1' Sandstone, light gray, medium grained, angular to subrounded, poorly sorted in rounding hard, well cemented, tight, arkosic, rare fine biotite, no shows.

Core #21
5526-5544' Rec. 1' ½' Described by G. T. Benson 9-30-53
Siltstone. Dark brown with slight greenish tint, soft, finely micaceous. Contains occasional rounded pieces dark gray siltstone to medium sand grain size. Much drilling mud intermeixed.

½' Sandstone. Light gray to white. Fine grained, fairly poorly sorted, well cemented, silty arkose. Grains are subrounded. Friable. Contains about 10% gray siltstone intercalated in very thin to 1/8" thick beds. Sand contains considerable amount of clay. No cut color. No fluorescence.

Core #22
6054-73' Rec. 18' 12' Described by L. B. Freeman - 10-5-53
Sand, medium gray, fine to medium grained, subrounded to occasionally angular, quartzose some feldspar and occasional biotite, massive, firm to locally soft and easily friable, silty, and clayey with kaolinitic material, pebbly throughout with well rounded pebbles to 1/4" of dark gray igneous material, very crumbly at 6065' where sand contains several rounded medium gray siltstone pebbles to 2", no dips noted, low permeability to tight, no shows.

6' Sandstone, lithology as above, less pebbly, very well cemented, hard, tight, no shows.

(Weldon Canyon)

Core #23
6508-6514' Rec. 4' 4'

Described by G. T. Benson 10-10-53
Shale. Dark gray and black interbedded, very hard, laminated. Contains many thin to 1/4" thick beds of gray-white, fine grained, well cemented, quartzose, micaceous sand. Shale contains fish remains (?), few thin irregular patches of tarry material. No oil stain, odor or fluorescence. Dips 85 to 90°.

Core #24
6600-60' Rec. 8' 8'

Described by L. B. Freeman 10-13-53
Interbedded gray siltstone, brown siltstone and gray sandstone; core is predominantly medium grained siltstone, finely micaceous, rare fine grained quartz sand grits, beds to 1"; brown siltstone is in thin laminae 1/4" thick, generally gritty with fine to medium grained quartz sand; sandstone in laminae to 1/4" except for one 1" bed, light medium gray, fine grained, angular to rounded, silty, clayey with white kaolinitic material, quartzose, abundant biotite, tight, excellent 85-90° dips; no odor, stain, cut, or fluorescence.

Core #25
6990-7000' Rec. 10' 10'

Described by W. S. King
Interbedded silty shale, siltstone, and occasional sandy streaks. Banded dark gray to dark brown gray, to light gray in sandy streaks. Firm to hard, well bedded, most of core broken into large angular fragments, with common slicks on fractured surfaces. Occasional sand streaks (About 20% of core) are fine to medium grained, silty, very poorly sorted, arkosic, quartzose, tight. One 1/2" streak near top of fine grained, silty, fair oil stained sand, friable, fair yellow fluorescence, straw cut, fair odor. Rest of sand streaks fluoresce light yellow, with faint odor, light straw cut, some dark, free oil stain on fractured surfaces. Excellent 80-90° dips.

Core #26 No Recovery 3½'

Described by G. T. Benson 11-9-53
Cavings in drilling mud. Cavings to 5" diameter consisting of hard, gray, slightly sandy shale, and hard, brown, very well cemented, fine grained, calcareous sand with occasional patches of gray, fine grained sand. No oil shows.

Core #27
7923-7923' Rec. 10' 0½'

Described by G. T. Benson
Shale. Hard, dark gray-brown, silty, massive to poorly laminated, fractured and locally broken up. Fracture surfaces show slickensides. Measured dips 70° and 83°, usually near 85°.

1½' Breccia-Conglomerate. Granitic and metamorphic pebbles and granules up to 2" diameter in dark grayish brown shale matrix. Pebbles angular to subrounded. Few fractures show slickensides. No oil shows.

Core #28
8000-8011' Rec. 11'

Described by W. G. King
Silty shale, medium to dark gray with brown cast, firm to very hard, well bedded, banded with very thin to 1/4" thick strata medium and dark gray. Locally very silty. Greater portion of core broken into large angular fragments with slickensided surfaces. Occasional slicked fracture surfaces covered with calcite. One fracture contains 1/4" thick zone of black crumbly gouge. Rare mega fossil fragments, very rare microfossils (?). Good 79° to 84° dips. No shows.

FORM 109-D

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 153-1360

Mr. R L Jackson, Long Beach 1 Calif.
Agent for THE TEXAS CO

Los Angeles 15 Calif. November 18 1953

DEAR SIR:

Operations at your well No. "Eadie" 1 Sec. 23, T. 3 N, R. 16 W, S B B. & M., Newhall Field, in Los Angeles County, were witnessed by J. E. Foster, Inspector, representative of the supervisor, on November 13, 1953. There was also present E. Ballard, Drilling Foreman; M. Honeycutt, Drilling Foreman.

Casing Record 11-3/4" cem. 500'. T.D. 8011', plugged with cement 850'-766', 530'-400', and 15'-5'.

Junk None

The operations were performed for the purpose of witnessing the plugging operations in the process of abandonment.

The inspector arrived at the well at xxxx and Mr. xxxxx reported:

INSPECTOR G. J. BORKOVICH VISITED THE WELL FROM 7:50 - 8:20 P.M., NOVEMBER 12, 1953, AND MR. BALLARD REPORTED:

1. A 9-7/8" rotary hole was drilled from 500' to 8000'; an 8-1/2" rotary hole, 8000'-8011'.
2. On November 12, 1953, 75 sacks of cement was pumped into the hole through 4-1/2" drill pipe hanging at 850', filling to 766'.

THE INSPECTOR NOTED:

1. The cement plug at the reported depth of 766' supported 7 points of the weight of the drill pipe.
2. The driller's tally showed 766' of drill pipe in the hole.

THE INSPECTOR ARRIVED AT THE WELL AT 1:30 P.M. AND MR. BALLARD REPORTED:

1. On November 13, 1953, 75 sacks of cement was pumped into the hole through 4-1/2" drill pipe hanging at 530'.
2. The top of the cement was found at 400'.
3. A bridging plug of paper sacks was placed 10' below the top of the 11-3/4" casing.
4. On November 13, 1953, 7 sacks of cement was poured into the hole.

THE INSPECTOR NOTED THAT the top of the cement filled to the top of the 11-3/4" casing, which is 5' below the surface of the ground.

The test was completed at 1:45 p.m.

THE PLUGGING OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED.

JFF:OH

cc Company

Orig Mr R F Cory

R. D. BUSH
State Oil and Gas Supervisor

By R. N. Walling Deputy

62547 7-53 17,850 ⓢ SPO

FORM 111 (1-49)

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS

No. P 153-1402

Los Angeles 15 Calif. November 18 19 53

Mr. R L Jackson

Long Beach Calif.

Agent for THE TEXAS CO

DEAR SIR:

Your proposal to abandon Well No. "Eadie" 1,

Section 23, T. 3 N, R. 16 W, S B B. & M., Newhall Field, Los Angeles County,

dated Nov. 16 19 53, received Nov. 17 19 53, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE

The base of the fresh waters as indicated by the electric log is at 800'.

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth.
   8011
2. Complete casing record.
   11-3/4", 54#, J-55 casing cemented solid at 500'.
3. Last produced. Prospect well, no commercial showings."

PROPOSAL

"The proposed work is as follows:

1. Place cement plug 850' to 766', Division of Oil and Gas to witness top.
2. Place cement plug 530' to 400'.
3. Place 10 lineal feet of cement at surface in the 11-3/4" casing. Division of Oil and Gas to witness.
4. Cap with steel plate and abandon."

DECISION

THE PROPOSAL, COVERING WORK ALREADY COMPLETED IN ACCORDANCE WITH PRIOR AGREEMENT, IS APPROVED.

FEK:OH

F/G

Orig Mr R F Cory

cc Company

R. D. BUSH
State Oil and Gas Supervisor

Blanket bond.

By R. N. Nelling Deputy

FORM 108. 5/613 2-52 20M ⓑ SPO

DIVISION OF OIL AND GAS
RECEIVED
NOV 17 1953
LOS ANGELES, CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Notice of Intention to Abandon Well

This notice must be given at least five days before work is to begin; one copy only

Santa Paula Calif. November 16, 19 53

DIVISION OF OIL AND GAS

Los Angeles, Calif.

In compliance with Secs. 3228, 3229, 3230, 3231 and 3232, Ch. 93, Stat. 1939, notice is hereby given that it is our intention to abandon well No. Eadie #1

Sec. 23, T. 3N, R. 16W, S.B. B. & M. (Weldon Canyon) Field,

Los Angeles County, commencing work on the 12th day

of November 19 53

The present condition of the well is as follows:

1. Total depth.

   8011

2. Complete casing record.

   11¾", 54#, J-55 casing cemented solid at 500'.

3. Last produced. Prospect well, no commercial showings

Date	Net oil	Gravity	Cut

The proposed work is as follows:

1. Place cement plug 850' to 766', Division of Oil and Gas to witness top.
2. Place cement plug 530' to 400'.
3. Place 10 lineal feet of cement at surface in the 11¾" casing. Division of Oil and Gas to witness.
4. Cap with steel plate and abandon.

The Texas Company
(Name of Operator)

By R.F.Cory-Dist.Petr.Engineer

WWK-UFB
TWB-IF-File

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

FORM 109-D

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 153-1105

Los Angeles 15 Calif. September 16 19 53

Mr R L Jackson
Mr P O Box 320
Long Beach Calif.

Agent for THE TEXAS CO

PROSPECT WELL

DEAR SIR:

Operations at your well No. "Eadie" 1 Sec. 23, T. 3 W, R. 16 W, S B B. & M., Newhall Field, in Los Angeles County, were witnessed by G. J. Borkovich, Inspector, representative of the supervisor, on September 8, 19 53. There was also present E. Ballard, Drilling Foreman; H. R. Dixon, Driller.

Casing Record 11-3/4" cem. 503'. T.D. 3035'.

Junk None

The operations were performed for the purpose of inspecting blowout prevention equipment and installation.

The inspector arrived at the well at 12:45 p.m. and Mr. Ballard reported:

1. A 17-1/2" rotary hole was drilled from the surface to 503'.
2. On August 19, 1953, 11-3/4", 54 lb. casing was cemented at 503' with 450 sacks of cement.
3. Cement did not return to the surface.
4. On August 19, 1953, 150 sacks of cement was pumped down around the 11-3/4" casing through 2" pipe hanging at 200'.
5. A 9-7/8" rotary hole was drilled from 503' to 3035'.

THE INSPECTOR NOTED THAT THE WELL WAS EQUIPPED WITH THE FOLLOWING BLOWOUT PREVENTION EQUIPMENT:

1. A Shaffer double cellar control gate for closing in the well with the drill pipe out of the hole, and for closing around the 4-1/2" drill pipe.
2. A Hydril blowout preventer for closing around the 4-1/2" drill pipe.
3. The controls for the above equipment were located outside the derrick.
4. A 2" mud fill-up line with a 2" high pressure stopcock into the 11-3/4" casing below the above equipment.
5. A high pressure stopcock on the kelly.

The inspection was completed at 1:15 p.m.

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

GJB:OH

10/15/53 Keuper-Sandy
TD 6800'
Box fresh conditions
Shale 2000-2900'
1st [illegible] at 2900
No shows so far
Torbert.
850-750 [illegible]
540-480 Co [illegible]
10 [illegible] 2006 [illegible]
OK [illegible]

cc The Texas Co (Attn Mr T W Bell)
929 South Broadway
LOS ANGELES 15

Orig Mr R F Cory Dist Engineer
The Texas Co
Box 510
Santa Paula California

R. D. BUSH
State Oil and Gas Supervisor

By R. N. Walling Deputy

82547 7-53 17,950 ② SPO

FORM 111 (1-49)

E

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS

No. P 153-941

Los Angeles 15 Calif. July 22 1953

Mr. S L Jackson
P O Box 320
Long Beach Calif.

(2)

Agent for THE TEXAS CO

DEAR SIR:

Your proposal to drill Well No. "Madie" 1,

Section 23, T. 3 N, R. 16 W, S B B. & M., Newhall Field, Los Angeles County,

dated July 14 19 53, received July 15 19 53, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES

"Location of well: 2425.28 feet South along section line and 1482.21 feet West at right angles to said line from the Northeast corner of section 23, T. 3 N., R. 16 W., S.B.B. &M.

Elevation of ground above sea level 2125 feet Ground datum. (Topo)

All depth measurements taken from top of Kelly Bushing which is 12 feet above ground."

PROPOSAL

"PROPOSED CASING PROGRAM

Size of Casing

Inches A.P.I.	Weight	Grade and Type	Top	Bottom	Cementing Depths
11 3/4"	47#	J-55	Surface	500	500' w/500 sacks

Intended zone or zones of completion:

It is understood that if changes in this plan become necessary we are to notify you before running casing."

DECISION

THE PROPOSAL IS APPROVED PROVIDED THAT

1. A supplementary proposal shall be filed with this Division prior to running any additional casing, or placing any cement plugs. Additional requirements will be specified at that time.
2. Blowout prevention equipment, sufficient to provide a complete close-in of the well under pressure at any time, shall be installed and approved by this division.
3. THIS DIVISION SHALL BE NOTIFIED TO INSPECT the installed blowout prevention equipment before drilling below 1000'.

ERMA:OH

cc The Texas Co (Attention Mr T W Bell)
929 South Broadway
LOS ANGELES 15

Orig Mr R F Cory Dist Engineer
The Texas Co
Box 510
Santa Paula California

R. D. BUSH
State Oil and Gas Supervisor

By E. H. Meisser Deputy

Blanket bond.

FORM 105

STATE OF CALIFORNIA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

037-06077

DIVISION OF OIL AND GAS
RECEIVED
JUL 15 1953
LOS ANGELES, CALIFORNIA

E

7

Notice of Intention to Drill New Well

This notice and surety bond must be filed before drilling begins

Santa Paula Calif. July 14 1953

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division III, Article 4, Public Resources Code, notice is hereby given that it is our intention to commence the work of drilling well No. "Eadie" #1, Sec. 23, T. 3 N, R. 16 W, S.B. B. & M., ~~Weldon Canyon~~ Newhall Field, Los Angeles County.

Legal description of lease
(Attach map or plat to scale)

Location of Well: 2425.28 feet South (Direction) along ~~property~~ section line and 1482.21 feet West (Direction) at right angles to said line from the Northeast corner of ~~property~~ section 23, T. 3 N., R. 16 W., S.B.B.&M.

Elevation of ground above sea level 2125 feet Ground datum. (Topo)

All depth measurements taken from top of Kelly Bushing (Derrick Floor, Rotary Table or Kelly Bushing) which is 12 feet above ground.

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS
11 3/4"	47#	J-55	Surface	500	500' W/500 sacks

Intended zone or zones of completion: Prospect Well

18A	M34				

It is understood that if changes in this plan become necessary we are to notify you before running casing.

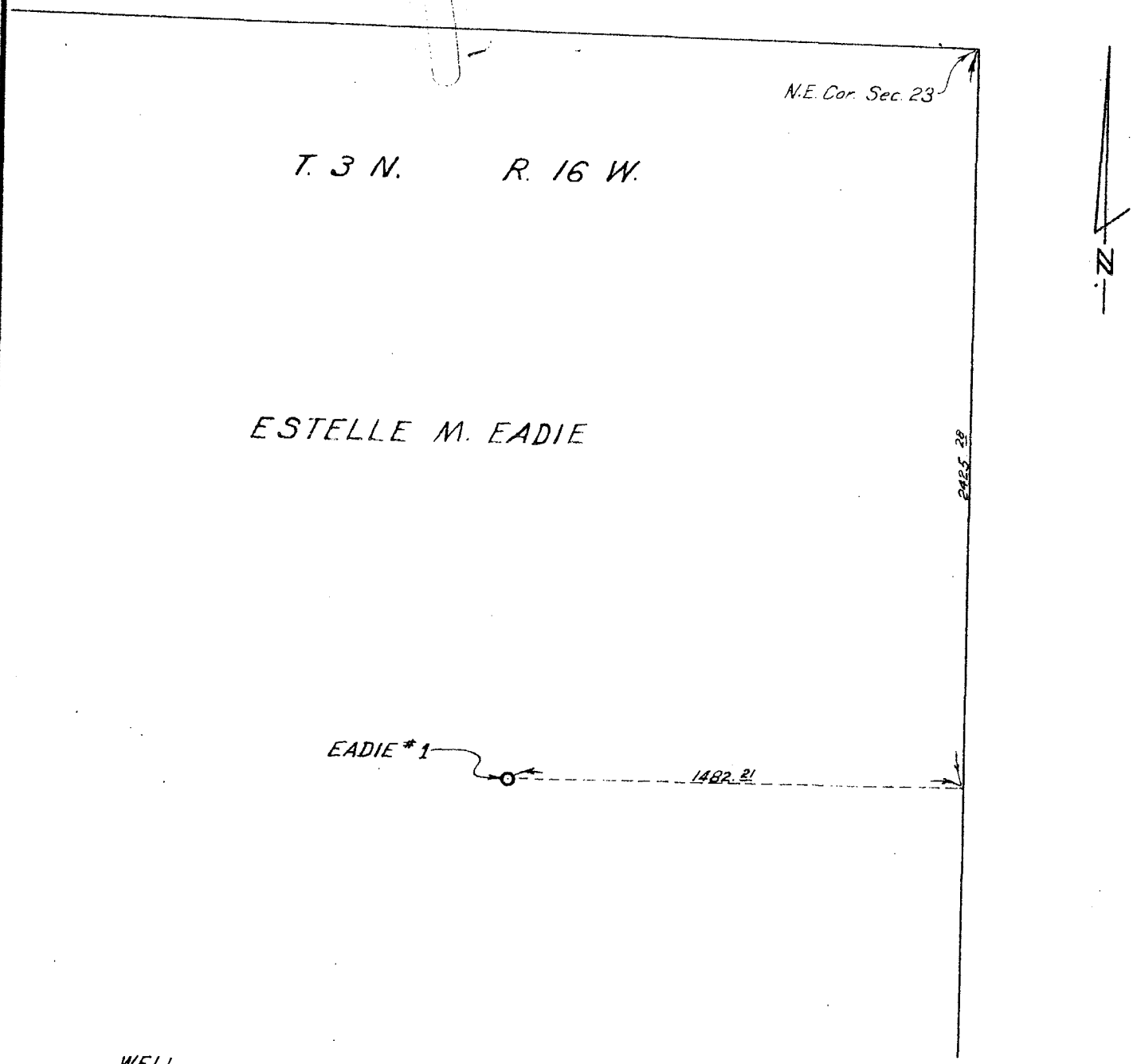
Address P. O. Box 510

Telephone Number 7F

The Texas Company
(Name of Operator)

By R. F. Cory
R.F.Cory - District Pet. Engineer

SEND ONE COPY OF NOTICE TO DIVISION OFFICE IN DISTRICT WHERE WELL IS LOCATED



WELL	DESCRIPTION
Eadie # 1 F.B. C.B.	2425.28 ft. S'ly along the E. line of Sec. 23, T.3N., R.16W. S.B.B.&M., from the N.E. cor. thereof, thence W'ly at right angles thereto 1482.21 ft.

DIVISION OF OIL AND GAS
RECEIVED
JUL 2 8 1953
SANTA PAULA, CALIFORNIA

1

REVISED TO	BY				
		Weldon Can. Area POOL Ventura DISTRICT	THE TEXAS CO. PACIFIC COAST DIVISION ENGINEERING OFFICE — PRODUCING DEP'T SIGNAL HILL, CALIF.	APPROVED: DATE 7-15-53	DR. BY W.E.K. TR. BY CH. BY SCALE: 1" = 500' DWG. NO. 2C-271-7197
		LOCATION EADIE #1 L.A. COUNTY			

PRINTED ON CLEARPRINT NO. 1000-H

T.W.B. - H.F.A. - G.R.C.[2] - J.L.S.[5] - R.L.P. - A.A.A. - G.M.R.[2]

ATTACHMENT D

BOARD OF PUBLIC WORKS
MEMBERS

KEVIN JAMES
PRESIDENT

HEATHER MARIE REPENNING
VICE PRESIDENT

MICHAEL R. DAVIS
PRESIDENT PRO TEMPORE

JOEL F. JACINTO
COMMISSIONER

LUZ M. RIVAS
COMMISSIONER

CITY OF LOS ANGELES
CALIFORNIA

ERIC GARCETTI
MAYOR

BUREAU OF SANITATION

ENRIQUE C. ZALDIVAR
DIRECTOR

TRACI J. MINAMIDE
CHIEF OPERATING OFFICER

LISA B. MOWERY
CHIEF FINANCIAL OFFICER

ADEL H. HAGEKHALIL
ALEXANDER E. HELOU
LEO N. MARTINEZ
MAS DOJIRI
ASSISTANT DIRECTORS

TIMEYIN DAFETA
HYPERION EXECUTIVE PLANT MANAGER

INDUSTRIAL WASTE
MANAGEMENT DIVISION
2714 MEDIA CENTER DRIVE
LOS ANGELES, CA 90065
OFFICE: (323) 342-6200
FAX: (323) 342-6111

October 18, 2017

SUNSHINE CANYON LANDFILL
14747 San Fernando Road
Sylmar, Ca 91342

In Reply Refer to: IU128862.prm/jnc

Attn: Josh Mills, Environmental Manager

ISSUANCE OF INDUSTRIAL WASTEWATER PERMIT FOR IU128862
PERMIT: W-535428

The Bureau of Sanitation has completed a review of Sunshine Canyon Landfill's application to discharge industrial wastewater to the City of Los Angeles sewer system. Pursuant to the Bureau's audit, it has been determined that this facility is subject to requirements as a Non-Categorical Significant Industrial User, and other applicable Federal, State and Local wastewater discharge requirements. Therefore, in accordance with provisions of the Los Angeles Municipal Code (L.A.M.C.) Section 64.30, this Industrial Wastewater Permit is being issued to include comprehensive permit conditions which identify the requirements that are applicable to Sunshine Canyon Landfill. All discharges from this facility and actions and reports relating thereto shall be in accordance with the terms and conditions of this permit.

This permit shall become effective at midnight on **October 18, 2017** and shall expire at midnight on **August 31, 2020**. During the term of this permit, the permittee shall immediately notify the Bureau of Sanitation of any changes to the facility, process, production, or pretreatment system that may change the characteristics which causes it to be different from that expressly allowed under this permit.

If there are any questions regarding these permit conditions, please contact Jocelyn Carrillo of my staff at (323) 342-6082.

Sincerely,

ENRIQUE C. ZALDIVAR, Director
LA Sanitation

By Michael Simpson

Michael Simpson, Division Manager
Industrial Waste Management Division

c: SIU Permitting Section
Bhupendra Patel, Chief Environmental Compliance Inspector II

RECEIVED NOV 0 1 2017

INDUSTRIAL USER
PERMIT REQUIREMENTS AND CONDITIONS

Legal Name: Browning-Ferris Industries of Calif.,Inc.
Dba Name: SUNSHINE CANYON LANDFILL
Industrial User No: IU128862

INDUSTRIAL WASTEWATER PERMIT NO.
W-535428

CITY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS
BUREAU OF SANITATION

INDUSTRIAL WASTE MANAGEMENT DIVISION
2714 MEDIA CENTER DRIVE
LOS ANGELES, CA 90065
(323) 342-6200

INDUSTRIAL WASTEWATER PERMIT

INDUSTRIAL USER NO:	IU128862
PERMIT NO:	W-535428
EFFECTIVE DATE:	09/01/2014
AMENDED DATE:	NA
EXPIRATION DATE:	08/31/2020

LEGAL BUSINESS NAME:	BROWNING-FERRIS INDUSTRIES OF CALIF.,INC.
DOING BUSINESS AS:	SUNSHINE CANYON LANDFILL
MAILING ADDRESS:	14747 SAN FERNANDO ROAD SYLMAR, CA 91342
LOCATION ADDRESS:	14747 SAN FERNANDO ROAD SYLMAR, CA 91342
CATEGORY:	NON-CATEGORICAL SIU
POINT OF DISCHARGE:	PUBLIC SEWER

In accordance with the provisions of the Los Angeles Municipal Code (L.A.M.C.) Section 64.30, the above identified industrial user is hereby authorized to discharge industrial wastewater through the approved point of discharge identified herein in accordance with the discharge limitations, conditions, and requirements set forth in this permit and the L.A.M.C. Compliance with this permit does not relieve the industrial user of its obligation to comply with all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such laws, regulations, standards or requirements that may become effective during the term of this permit.

The industrial user must comply with the provisions of L.A.M.C. Section 64.30 and all terms and conditions of this permit. Noncompliance with the terms and conditions of this permit shall constitute a violation of the L.A.M.C. Section 64.30 and may subject the industrial user to administrative actions or other legal proceedings. This permit becomes void upon any change of ownership or location whatsoever.

Enrique C. Zaldivar, Director
LA Sanitation

BY: Michael Simpson

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PART 1 - SAMPLE POINT DESCRIPTION AND FACILITY FLOW INFORMATION	**1**
PART 2 - DISCHARGE LIMITATIONS	**2**
PART 3 - MONITORING REQUIREMENTS	**3**
PART 4 - REPORTING REQUIREMENTS	**5**
PART 5 - SPECIAL CONDITIONS	**7**
PART 6 - STANDARD CONDITIONS	**SC-1**
APPENDICES	See Appendix

Appendix A: Fact Sheet

Appendix B: Attachments

Attachment 1 – Site Plan

Attachment 2 – Site Liquid Management Plan

Attachment 3 – Process Flow

Attachment 4 – Sewer Facilities Charge Certificates

Attachment 5 – Sewer Capacity Availability Request (SCAR)

Attachment 6 – 14747 San Fernando Road Sewer Map

Appendix C: Self-Monitoring Report Form and Instructions

PART 1 - SAMPLE POINT DESCRIPTION AND FACILITY FLOW INFORMATION

A. Sample Point

The industrial user is authorized to discharge industrial wastewater to the City of Los Angeles sewer system from the sample point(s) listed below.

INDUSTRIAL WASTEWATER PERMIT	SAMPLE POINT	FLOW PER OPERATIONAL DAY (GPD)		DESCRIPTION
		TOTAL	PROCESS	
W-535428	01	300,000	300,000	Secured Sampling Facility is located at Magnetic Flow meter Vault.

B. Industrial User Flow

Facility Flow Information [1]	Total (GPD)	Process (GPD)
	300,000	300,000

Footnotes to Sample Point Description and Industrial User Flow Information

[1] Sunshine Canyon Landfill shall not discharge greater than 300,000 gpd of leachate to the City sewer system. Refer to **Part 5. B – Special Conditions.**

PART 2 - DISCHARGE LIMITATIONS

The discharge from the designated sample points shall not exceed the following discharge limitations:

A. Industrial Wastewater Permit W-535428

1. Sample Point 01 – Significant Non-Categorical Industrial User

DISCHARGE LIMITATIONS	
Constituent	**Local Instantaneous Maximum, mg/l**
Arsenic (Total)	3.00
Cadmium (Total)	15.00
Chromium (Total)	10.00
Copper (Total)	15.00
Lead (Total)	5.00
Nickel (Total)	12.00
Silver (Total)	5.00
Zinc (Total)	25.00
Cyanide (Total)	10.00
Cyanide (Free)[1]	2.00
Sulfides (Dissolved)	0.10
Oil & Grease (Total)	600.00
Oil & Grease (Floatable)	None Visible
pH (Standard Units)	5.50 - 11.00

Footnotes to Discharge Limitations

[1]Cyanide (Free) shall mean cyanide amenable to chlorination as defined by 40 CFR 136.

PART 3 – MONITORING REQUIREMENTS

The industrial user shall monitor the designated sample point, for the following constituents, at the indicated frequency and by the indicated sample type.

A. Industrial Wastewater Permit W-535428

1. Sample Point 01

MONITORING REQUIREMENTS FOR REGULATED PARAMETERS		
Constituent	**Measurement Frequency**	**Sample Type**
Daily Sample Flow	Semi-Annual	Flow
Arsenic (Total)l	Semi-Annual	Grab or Composite[1]
Cadmium (Total)	Semi-Annual	Grab or Composite[1]
Chloride[2]	Semi-Annual	Grab or Composite
Chromium (Total)	Semi-Annual	Grab or Composite[1]
Copper (Total)	Semi-Annual	Grab or Composite[1]
Cyanide (Free)	Semi-Annual	Grab
Cyanide (Total)	Semi-Annual	Grab
Dissolved Sulfides	Semi-Annual	Grab or Composite[1]
Lead (Total)	Semi-Annual	Grab or Composite[1]
Nickel (Total)	Semi-Annual	Grab or Composite[1]
Oil & Grease (Total)	Semi-Annual	Grab
pH[3]	Semi-Annual	Grab
Silver (Total)	Semi-Annual	Grab or Composite[1]
Zinc (Total)	Semi-Annual	Grab or Composite[1]

B. Representative Monitoring and Sampling

1. Monitoring and sampling shall be carried out during a period of normal operations.

2. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit. The handling, storage and analyses of all samples taken for the determination of the wastewater characteristics discharged shall be performed by laboratories certified by the State of California or approved by the Director of the Bureau of Sanitation.

3. The detection limits employed for wastewater analysis shall be lower than the permit limits established for a given parameter.

4. The industrial user is responsible for maintaining and cleaning the designated sample point(s) to prevent any build-up of oil and grease, sediment or sludge. Failure to do so does not invalidate sampling test results. Analytical results from samples taken from designated sample points according to accepted sampling procedure shall be accepted as binding.

5. Sample Points identified in the Industrial Wastewater Permit shall not be changed without notification and approval by the Director.

FOOTNOTES TO MONITORING REQUIREMENTS

[1]The local limits for heavy metals can be compared to the results from grab sampling as well as composite sampling.

[2]The City of Los Angeles is establishing a database for chlorides.

[3]Refer to Part 5. A – Special Conditions.

PART 4 – REPORTING REQUIREMENTS

A. Self-Monitoring

1. The industrial user shall implement a self-monitoring program for the designated Industrial Wastewater Permit. Monitoring results obtained shall be summarized and reported on the enclosed report form entitled "Periodic Compliance Report" and submitted with a US Post Office postmark date by the 15th day of the month following the monitoring period. Facsimiles (faxes) of self-monitoring reports shall not be accepted. Reports with original signatures must be submitted by the due date.

   The first self-monitoring report for the monitoring period of **July 1 – December 31, 2017** shall be submitted by **January 15, 2018.** Subsequent reports shall be submitted in accordance with the following schedule:

SELF-MONITORING REPORT SCHEDULE			
Industrial Wastewater Permit	**Type of Report**	**Monitoring Period**	**Report Due Date**
W-535428 Sample Point 01	Local Limits Periodic Compliance Report	Jan 1 - Jun 30 Jul 1 - Dec 31	Jul 15 Jan 15

2. All portions of the Periodic Compliance Report form must be completed or the report may not be accepted.

3. The report shall indicate the nature and concentration of all pollutants in the effluent for which sampling and analyses were performed including measured or estimated maximum and average daily flows. The report shall be based upon data obtained through appropriate sampling and analyses performed which represents the conditions occurring during the period covered by the report.

4. Copies of all laboratory results shall be submitted with each report.

5. The Bureau of Sanitation will not accept reports where monitoring was conducted outside the monitoring period specified in this permit.

B. Self-Monitoring Report Submittal

All self-monitoring reports required by this permit shall be submitted to the Director at the following address:

City of Los Angeles
Bureau of Sanitation
Industrial Waste Management Division
2714 Media Center Drive
Los Angeles, CA 90065

Attn: Information Systems Support Squad

C. Additional Monitoring

If the industrial user monitors any pollutant more frequently than required by this permit, using test procedures prescribed in 40 CFR 136 or amendments thereto or otherwise approved by EPA or specified in this permit, the results of such monitoring shall be reported in the compliance report and submitted to the Director.

D. Automatic Resampling

If the results of the industrial user's wastewater analysis indicate a violation has occurred, the industrial user must comply with the following:

1. Inform the Director of the violation within 24 hours by contacting the Bureau of Sanitation Industrial Waste Management Division SIU Inspection Group at (323) 342-6200; and

2. Repeat the sampling and pollutant analysis and submit, in writing, the results of this second analysis within 30 days after becoming aware of the violation.

E. Pre-notification of Monitoring and Sampling

The industrial user shall notify the SIU Inspection Group by telephone at (323) 342-6200 at least 48 hours in advance of any monitoring or sampling to be performed. Notification shall include the date, time and location of proposed monitoring or sampling. Monitoring and sampling shall be carried out during a period of normal operations. Prior to the commencement of any sampling or monitoring, the Director may request that the industrial user furnish to the Director a split sample and all supporting data (i.e., methodology, flow measuring data, strip chart recordings and other pertinent information). The Director reserves the right to refuse any data developed from the monitoring or sampling activity if the industrial user fails to comply with the pre-notification procedure or other requirements of sampling and analysis.

PART 5 – SPECIAL CONDITIONS

A. pH MONITORING AND RECORDING SYSTEM

The pH of the wastewater discharge to the sewer system shall be monitored and recorded continuously using a pH meter and recording device. To ensure the proper operation and continued accuracy of the pH meter, Sunshine Canyon Landfill shall clean, maintain, and calibrate the device periodically in accordance with the manufacturer's requirements. A logbook for pH calibration must be kept. The pH chart must be initialed daily by an operator at the facility to validate the proper operation of the pH monitoring and recording system.

B. DISCHARGE REQUIREMENTS

Sunshine Canyon Landfill is allowed to discharge a total of 300,000 gpd (208.33 gpm) of landfill leachate at a maximum flow rate of 250 gpm, not exceeding 300,000 gallons per day through the sewer connection located at 14747 N. San Fernando Road, Sylmar into the City of Los Angeles sewer system.

C. SECURED SAMPLING FACILITY INSTALLATION

1. **By November 30, 2017, Sunshine Canyon Landfill** shall submit plans and diagrams for installation of a Secured Sampling Facility (SSF) at Sample Point 01, located at Magnetic Flow meter Vault, for Bureau approval. The SSF must be an enclosed structure with a bottom opening for tubing and probes and possesses minimum inside dimensions of 24" X 27" X 36". A lockable door is required to provide safe and convenient access to the internal space of the SSF by representatives of the Bureau. The door must be equipped with a latch and hasp or other mechanism such that a padlock can be installed by a Bureau representative to secure the facility during sampling with Bureau equipment. The SSF must be designed such that a sampling tube and pH probe cable can pass from the monitoring equipment to the sample point. The design must ensure that such a sampling tube will be tamper proof. The SSF may be designed so that it is removable when not in use. However, when in use, it must be secured to the sampling location such that it cannot removed until the sampling event is completed and the Bureau has unlocked the door and removed its equipment.

2. **Within 30 days of approval,** Sunshine Canyon Landfill shall complete installation of the SSF.

D. SAMPLE POINT IDENTIFICATION

Within **30 days** after installation of the Sampling Point, Sample Point shall be identified with a sign or placard containing the following information:

City of Los Angeles
Sample Point 01
IW Permit No. W-535428

The sign or placard shall have minimum dimensions of 4 inches by 16 inches, with lettering a minimum height of 3/4 inches. The sign or placard shall be protected, or placed on a material which will withstand corrosion and water damage. The sign or placard shall be posted at the sampling location to allow for immediate identification

E. FLOW METER CALIBRATION

To ensure proper operation and continued accuracy of the industrial wastewater flow measurement device, Sunshine Canyon Landfill shall clean, maintain, and calibrate the device periodically in accordance with the manufacturer's requirements. A maintenance record shall be available at all times for Bureau of Sanitation review.

PART 6 – STANDARD CONDITIONS

A. Prohibitions

1. General Prohibitive Standards

The Industrial User shall comply with all the general prohibitive discharge standards in the General Pretreatment Regulations, 40 CFR 403, and the L.A.M.C. Section 64.30. Except as expressly allowed in an Industrial Wastewater Permit, no Industrial User shall introduce or cause to be introduced into the POTW any of the following:

a) Gasoline, mercury, total identifiable chlorinated hydrocarbons, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, solvents, pesticides or jet fuel;

b) Liquids, solids or gases which by reason of their nature or quantity are flammable, reactive, explosive, corrosive, or radioactive, or by interaction with other materials could result in fire, explosion or injury. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastewater with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40CFR261;

c) Solid or viscous materials which could cause obstruction to the flow or operation of the POTW;

d) Toxic pollutants in sufficient quantity to injure or interfere with any wastewater treatment process, including private pretreatment systems, to constitute a hazard or cause injury to human, animal, plant or fish life, or to exceed any limitation set forth in this Permit;

e) Noxious or malodorous liquids, gases, or solids in sufficient quantity either singly or by interaction with other materials to create a public nuisance, hazard to life, or to prevent entry of any person to the POTW;

f) Pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems;

g) Material of sufficient quantity to interfere with any POTW treatment plant process or to render any product thereof unsuitable for reclamation and reuse;

h) Material in sufficient quantity to cause the POTW to be in noncompliance with biosolids use or disposal criteria, guidelines or regulations in conjunction with Section 405 of the Act, the Solid Waste Disposal Act (SWDA), the Clean Air Act, the Toxic Substances Control Act, the Marine Protection Research and Sanctuaries Act, or State criteria (including those contained in any state sludge management plan prepared pursuant to Title II of SWDA) applicable to the biosolids management method being used;

i) Material which will cause the POTW to violate its NPDES Permit, applicable Federal and State statutes, rules or regulations;

j) Wastewater containing pigment which is not removed in the ordinary POTW treatment process and which creates a visual contrast with the material appearance of the POTW discharge observable at the point of POTW discharge;

k) Wastewater having a heat content in such quantities that the temperature of the wastewater at the introduction into the POTW Collection system exceeds 140 degrees Fahrenheit, or at the introduction into the POTW treatment plant exceeds 104 degrees Fahrenheit;

l) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

m) Pollutants, including oxygen demanding pollutants, released at a flow rate or pollutant concentration which will cause or contribute to interference;

n) Storm water collected and discharged to the POTW;

o) Single pass cooling water in excess of 200 gallons per day discharged to the POTW;

p) Wastewater which constitutes a hazard or causes injury to human; animal, plant or fish life or creates a public nuisance;

q) Recognizable portions of the human or animal anatomy;

r) Floatable material which is readily removable;

s) Radioactive wastes or isotopes;

t) Grinder food wastes from commercial kitchens, markets, or food plants;

u) Trucked or hauled pollutants, except at discharge points designated by the City;

v) Human or animal blood suspected or known to contain bloodborne pathogen(s);

w) Pharmaceutical wastes;

x) Medical wastes; or

y) Sharps.

B. Permit Provisions

1. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

2. Duty to Comply

The Industrial User must comply with the provisions of L.A.M.C. 64.30 and all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action or enforcement proceedings, including civil or criminal penalties, injunctive relief and summary abatements.

3. Duty to Mitigate

The Industrial User shall take all reasonable steps to minimize or correct any adverse impact to the public treatment plant or the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. Modification or Revision of the Permit

This permit may be modified, revoked and reissued or terminated for good causes including, but not limited to, the following:

a) The incorporation of any new or revised Federal, State or Local pretreatment standards or requirements;

b) Material or significant alterations or additions to the Industrial User's operational processes or discharge volume or character which were not covered in the effective permit;

c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;

d) Information indicating that the permitted discharge poses a threat to the City of Los Angeles' collection and treatment systems, POTW personnel or the receiving waters;

e) A violation of any terms or conditions of this permit;

f) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

g) A revision of or a grant of variance from such categorical standards pursuant to 40 CFR 403.13.

h) A request of the Industrial User, provided such request does not create a violation of any existing applicable requirements, standards, laws or rules and regulations; or

i) A correction of typographical or other errors in the permit.

5. Property Rights

The issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor does it authorize any violation of Federal, State or Local laws or regulations.

6. Limitation of Permit Transfer

An Industrial Wastewater Permit shall not be transferable by operation of law or otherwise, either from one location to another or from one person to another. Statutory mergers or name changes shall not constitute a transfer or a change in ownership.

7. Duty to Reapply

To continue an activity regulated by this permit after the expiration date, the Industrial User must file an application for permit renewal at least 90 days before the expiration date of this permit.

8. Dilution

The Industrial User shall not increase the use of potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

9. Compliance with Applicable Pretreatment Standards and Requirements

The Industrial User shall comply at all times with any and all applicable Local, State and Federal pretreatment standards and requirements including Best Management Practices and any such standards or requirements that may become effective during the term of this permit. In addition, the Industrial User may be required to prepare a pollution prevention plan.

10. Confidentiality

a) Any information, except for discharge and effluent data, submitted to the City pursuant to this Permit may be claimed by the Industrial User to be confidential. Any such claim must be asserted at the time of submission of the information or data to the City. The claim may be asserted by stamping the words "Confidential Business Information" on each page containing such information or by other means; however, if no claim is asserted at the time of submission, the City may make the information available to the public without further notice. If such a claim is asserted, the information will be treated in accordance with the procedures set forth in 40 CFR Part 2 (Public Information).

b) Information and data provided to the City which is effluent data shall be available to the public without restriction.

C. Operation and Maintenance of Pollution Controls

1. Proper Operation and Maintenance

The Industrial User shall at all times properly operate and maintain all facilities and systems for treatment and control (and related appurtenances) which are installed or used by the Industrial User to achieve compliance with the conditions of this permit. Proper operation and maintenance includes but is not limited to effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction of efficiency of operation or loss or failure of all or part of the pretreatment facility, the Industrial User shall, to the extent necessary to maintain compliance with its permit, control its production or discharge (or both) until operation of the pretreatment facility is restored or an alternative method of pretreatment is provided. This requirement applies, for example, when the primary source of power of the pretreatment facility fails or is reduced. It shall not be a defense for an Industrial User in an enforcement action to state that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Removed Substances

Solids, sludge, filter backwash or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

4. Bypass of Treatment Facilities

a) Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury or severe property damage or no feasible alternatives exist.

b) The Industrial User may allow bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.

c) Notification of bypass:

(1) Anticipated bypass. If the Industrial User knows in advance of the need for a bypass, written notice shall be submitted to the Director at least ten days prior to the anticipated date of bypass.

(2) Unanticipated bypass. The Industrial User shall provide oral notice of an unanticipated bypass that exceeds applicable Pretreatment Standards to the Director at (323) 342-6200 within 24 hours from the time the Industrial User becomes aware of the bypass. A written notice shall also be provided within 5 days of the time the Industrial User becomes aware of the bypass. The written notice shall contain the following:

(i) A description of the bypass including its cause and duration;

(ii) Whether the bypass has been corrected; and

(iii) The steps taken or to be taken to reduce, eliminate and prevent reoccurrence of bypassing.

D. Monitoring and Records

1. Flow Measurements

If flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharge. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a

maximum deviation of less than 5 percent from true discharge rates throughout the range of expected discharge volumes.

2. Inspection and Entry

The Industrial User shall allow the Director or an authorized representative, upon the presentation of credentials and other documents, entry to and inspection of the premises. The applicant, by accepting any permit issued pursuant to L.A.M.C. Section 64.30, does hereby consent and agree to the entry upon the premises, described in the permit, by Department personnel for the following purposes as required by this permit or L.A.M.C Section 64.30 or other applicable laws. The City shall be afforded access at all reasonable times:

a) for the purposes of inspection, sampling, flow measurement, examination of records in the performance of other authorized duties;

b) to set up on the Industrial User's property such devices as are necessary to conduct sampling inspections, compliance monitoring, flow measuring or metering operations;

c) to inspect and copy any records, reports, test results or other information required to carry out the provisions of L.A.M.C. Section 64.30, the industrial wastewater permit, or other applicable laws; and

d) to photograph any waste, waste container, vehicle, waste treatment process, discharge location, or violation discovered during an inspection.

The applicant, by accepting any permit issued, does hereby consent and agree to entry upon the premises as described herein. Any person violating this authority shall be guilty of a misdemeanor.

3. Retention of Records

a) The Industrial User shall retain records of all monitoring information, including documentation associated with Best Management Practices and all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the City of Los Angeles at any time.

b) All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City of Los Angeles shall be retained and preserved by the Industrial User until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

4. Record Contents

Records of sampling and analyses shall include the following:

a) the date, exact place, time and methods of sampling or measurement, and sample preservation techniques or procedures;

b) Who performed the sampling or measurements;

c) The date(s) analyses were performed;

d) Who performed the analyses;

e) The analytical techniques or methods used; and

f) The results of such analyses.

5. Falsifying Information

No person shall knowingly make any false statement, representation or certification in any application, record, report, plan or other document filed with the City of Los Angeles. In addition, no person shall tamper with or knowingly render inaccurate any monitoring device required under this permit.

The reports and other documents required to be submitted or maintained under this Industrial Wastewater Permit shall be subject to:

a) The provisions of 18 U.S.C. Section 1001 relating to fraud and false statements;

b) The provisions of Section 309 (c) (4) of the Clean Water Act (CWA), as amended, governing false statements, representation or certification; and

c) The provisions of Section 309 (c) (6) of the Clean Water Act (CWA), as amended, regarding responsible corporate officers.

E. Additional Reporting Requirements

1. Notification of Planned Changes

The Industrial User shall immediately notify the Director in advance of any significant change to the Industrial User's operations or system which might alter the nature, quality, or volume of its wastewater including the listed or characteristic hazardous wastes for which the Industrial User had submitted initial notification under 40 CFR 403.12(p). The Director may require that a new Industrial Wastewater Permit application be filed and a new permit obtained before any planned changes take place.

2. Duty to Provide Information

The Industrial User shall furnish to the Director any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit. The Industrial User shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

3. Notification of a Slug or Potential Slug Discharge

The Industrial User shall notify the Director immediately upon the occurrence of a slug discharge or any changes at its facility affecting the potential for a slug discharge of substance(s) prohibited by L.A.M.C. Section 64.30 that may enter the public sewer. The Director shall be notified by telephone at (323) 342-6200. The notification of a slug discharge shall include location of discharge, date and time thereof, type of waste, including concentration and volume, and corrective action taken. The Industrial User's notification of accidental cases in accordance with this permit does not relieve it of other reporting requirements that arise under Local, State or Federal laws.

Within five (5) days following an accidental discharge, the Industrial User shall submit to the Director a detailed written report. The report shall contain the following:

a) A description and cause of the slug or accidental discharge, the cause(s) thereof and the impact on the Industrial User's compliance status. The description should also include the location of discharge and the type, concentration and volume of waste.

b) The duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.

c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such a slug discharge, accidental discharge or any other conditions of noncompliance.

4. Operating Upsets

Any Industrial User that experiences an upset in operations that places the Industrial User in a temporary state of noncompliance with the provisions of either this permit or with L.A.M.C. Section 64.30 shall notify the Director within 24 hours of becoming aware of the upset at (323) 342-6200. The notification shall include the location of discharge, type of material, concentration and volume, and corrective actions taken.

A written follow-up report of the upset shall be filed by the Industrial User with the Director within five (5) days. The report shall contain the following information:

a) A description of the upset, the cause(s) thereof and the upset's impact on the Industrial User's compliance status;

b) The duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur; and

c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset or other conditions of noncompliance.

The report must also demonstrate that the treatment facility was being operated in a prudent and workmanlike manner.

A documented and verified operating upset shall be an affirmative defense to any enforcement action brought against the Industrial User for violations attributable to the upset event.

5. Slug Discharge Control Plan

Upon request by the Bureau of Sanitation, the Industrial User is required to submit a Slug Discharge Control Plan to address how the Industrial User will respond to spills, bypass, and any accidental discharges that could violate any permit limits or conditions or impact the City sewer system. The plan shall contain detailed procedures to be followed by the Industrial User in the event a slug discharge occurs. The Slug Discharge Control Plan must contain, at a minimum, the following:

a) Description of sewer discharge practices, including non-routine batch discharges;

b) Description of stored chemicals including type and characteristic, volume, and chemical hazard classification;

c) Procedures for promptly notifying the City of slug discharges, including any discharges that would violate a prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days;

d) Any necessary procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operation, control of plant site run-off and worker training;

e) Any necessary measures for building any containment structures or equipment;

f) Any necessary measures for controlling toxic organics (including solvents); and/or

g) Measures and equipment for emergency response.

6. Notification of Hazardous Waste Discharged into POTW

An Industrial User not exempt from the requirements under 40 CFR 403.12(p) shall notify the City of Los Angeles, Bureau of Sanitation; the EPA Region 9, Hazardous Waste Management Division; and the California Environmental Protection Agency, Department of Toxic Substances Control in writing of any discharge into the City of Los Angeles sewer system of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR part 261. The written notification shall be submitted to the City of Los Angeles Bureau of Sanitation, the EPA Region 9 and the California Environmental Protection Agency.

7. Signatory Requirements

All applications, reports or information submitted by the Industrial User to the Director must contain the following certification statement and be signed by an authorized representative indicated below:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

An authorized representative shall mean the following:

(a) a president, secretary, treasurer, or vice-president in charge of a principal business function, or any other person who performs similar policy or decision-making functions, if the Industrial User is a corporation;
(b) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to (1) make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; (2) ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements; and (3) sign documents in accordance with corporate procedures;
(c) a general partner or proprietor if the Industrial User is a partnership or proprietorship, respectively;
(d) a principal executive officer or director having responsibility for the overall operation of the discharging facility or a ranking elected official if the Industrial User is a governmental entity, charitable organization or other such unincorporated entity; or
(e) a representative authorized in writing by any individual designated above, if the authorization is submitted to the Director and specifies an individual or a position having responsibility for the overall operation of the facility. This includes the position of plant manager, a position of equivalent responsibility, or an individual having overall responsibility for environmental matters for the company. If an authorization under Paragraph (e) is no longer accurate because a different individual or position has the responsibility for the overall operation of the facility, or overall responsibility for environmental matters of the company, a new authorization satisfying the requirements of Paragraph (e) of this Permit must be submitted to the Director prior to, or together with, any reports to be signed by an authorized representative.

8. Annual Publication

A list of all industries which were in significant noncompliance of applicable federal pretreatment standards, Best Management Practices or other pretreatment requirements during the twelve (12) previous months shall be annually published by the Director in a newspaper(s) of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW. Accordingly, the Industrial User is apprised that noncompliance with this permit may lead to an enforcement action and may result in publication of its name in an appropriate newspaper. For purposes of this provision, significant noncompliance is defined under 40 CFR 403.8 (f)(2)(viii) and L.A.M.C. Section 64.30.E.8.

9. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the Industrial User from civil and/or criminal penalties for noncompliance under L.A.M.C. Section 64.30 or State or Federal laws and regulations.

10. Penalties for Violations of Permit Conditions

The L.A.M.C. Section 64.30 provides that any person who violates a permit condition is subject to a civil penalty in the maximum sum provided by law for each day in which such violation occurs. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of up to $1000.00 per violation per day and/or by imprisonment in the County Jail for a period of not more than six (6) months. The Industrial User may also be subject to sanctions under State and/or Federal law.

11. Liability For Costs Incurred From Unlawful Discharge

Whenever any Industrial User introduces or causes to be introduced wastewater in violation of this permit or the L.A.M.C. and such discharge, either singly or by interaction with other discharges, results in damage to or is otherwise detrimental to or adversely affects the P.O.T.W., the storm drain system, or any Waters of the State, said Industrial User shall be liable to the City for reasonable costs necessary to correct that discharge, detriment or adverse effect, including, but not limited to labor, material, inspection, transportation, overhead, and incidental expenses associated with the corrective action. The Industrial User shall additionally be liable to the City for the reasonable costs of investigation by the City arising from the unlawful discharge.

12. Civil Liability

Violation of any pretreatment standards or requirements or any term or condition or applicable compliance schedule of this permit, the Industrial User shall be civilly liable to the City in a sum of not to exceed twenty-five thousand dollars ($25,000) a day for each violation.

13. Resource Conservation Recovery Act Notification and California Hazardous Waste Control Law

It is the responsibility of the Industrial User to ensure that the operations performed at their site comply with federal hazardous waste management regulations under subtitles C & D of the Resource Conservation and Recovery Act (RCRA) and California hazardous waste management regulations under the Hazardous Waste Control Law (Chap. 6.5, HSC, Sec. 25100 et. seq.) and California Code of Regulations (CCR), Titles 8 and 22. For information on federal and state hazardous waste regulations, contact the California Environmental Protection Agency, Department of Toxic Substances Control.

F. Definitions

1. Best Management Practices (BMP) - Activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce pollutants in discharges. BMP also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

2. Bi-Monthly - Once every other month.

3. Bypass - The intentional diversion of wastestreams from any portion of an Industrial User's treatment facility.

4. Categorical Pretreatment Standards - Limitations on pollutant discharges to POTWs, promulgated by EPA in accordance with Section 307 of the Clean Water Act, that apply to specified process wastewaters of particular industrial categories.

5. Commercial Establishment – A private establishment such as a restaurant, hotel, laundry, store, filling station, or recreational facility. A nonprofit private or government entity such as a church, school, hospital, military facility, correctional institution recreational facility or a facility owned or operated by a charitable organization is considered a commercial establishment.

6. Commingled Load – A load of septage which includes septage generated both within and outside the City's boundaries.

7. Composite Sample - A sample that is collected over time, formed either by continuous sampling or by mixing discrete samples. The sample may be composited either as a flow proportional composite sample (collected either as a constant sample volume at time intervals proportional to stream flow or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquot) or as a time composite sample (composed of discrete sample aliquot collected in one container at constant time intervals providing representative samples irrespective of stream flow).

8. Cooling Water

   a) Uncontaminated - Water used only for cooling purposes which has no direct contact with any raw material, intermediate or final product and which does not contain a level of contaminants detectably higher than that of the intake water.

   b) Contaminated - Water used only for cooling purposes which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides or by direct contact with process materials and/or wastewater.

9. Daily Maximum - The maximum allowable discharge of a pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.

10. Director - The Director of the Bureau of Sanitation of the Department of Public Works of the City of Los Angeles or the duly authorized representative thereof.

11. Domestic Septage – The liquid or solid material removed from a private sewage disposal system (PSDS), portable toilet or other holding device that receives only domestic sewage.

12. Domestic Wastewater (Domestic Sewage) – Sanitary wastewater and wastewater generated from household type operations.

13. Establishment - An economic unit, generally at a single physical location, where business is conducted or where services or industrial operations are performed.

14. Facility - All buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with such person) and is authorized by the City of Los Angeles to discharge industrial wastewater to the POTW. A facility may contain more than one establishment.

15. Food Service Establishment - A facility engaged in preparing food for consumption by the public such as, but not limited to, a restaurant, bakery, commercial kitchen, caterer, hotel, school, hospital, prison, correctional facility, or care institution.

16. Four (4) - Day Average – The average of daily values for four consecutive monitoring days.

17. Grab Sample - An individual sample collected in less than 15 minutes, without regard for flow.

18. Gravity Grease Interceptor (GGI) - An approved device with a minimum total volume of 300 gallons that is specifically designed to separate, trap, and hold nonpetroleum fats, oil, and grease (FOG) from an industrial wastewater discharge, and which shall be remotely located from where food is handled, and is identified by the following: volume, a minimum retention time of 30 minutes, baffle(s), a minimum of two compartments, and gravity separation.

19. Hydromechanical Grease Interceptor (HGI) - An approved device that is installed in an industrial wastewater drainage system to separate, trap, and hold nonpetroleum fats, oil, and grease (FOG) from a wastewater discharge and is identified by flow rate, retention time, and separation efficiency. HGI design incorporates, in combination or separately, air entrainment, hydromechanical separation, interior baffling, and internal barriers.

20. Industrial User – A person that has been authorized to discharge industrial wastewater into the City of Los Angeles POTW.

21. Industrial Wastewater - Liquid and any water - carried waste other than domestic sewage. Wastewater generated from household type operations, including, but not limited to dishwashing, laundry, and car washing, performed at commercial establishments for or to support commercial purposes is considered industrial wastewater.

22. Instantaneous Maximum - The allowable maximum concentration determined from the analysis of any discrete or composited sample collected, independent of the industrial flow rate and the duration of the sampling event.

23. Interference - A discharge which alone or in conjunction with a discharge or discharges from other sources both:

    a) Inhibits or disrupts the POTW, its treatment processes or operations or its sludge processes, use or disposal; and

    b) Causes a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or prevents the use of disposal of sewage sludge. The following statutory provisions and regulations or permits issued thereunder apply (or more stringent State or Local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA) and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act and the Marine Protection, Research and Sanctuaries Act.

24. Monthly Average - The maximum allowable value for the average of all observations obtained during one calendar month. Compliance with the monthly average discharge limit is required regardless of the number of samples analyzed and averaged. Therefore, if only one sample is taken during the calendar month, results of the one analysis will be used to determine compliance with the monthly average.

25. Non-Domestic Septage – The liquid or solid material removed from a private sewage disposal system (PSDS) or other sanitation holding device that receives industrial wastewater or a combination of domestic and industrial wastewater.

26. Pass Through - A discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, cause a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

27. Person - Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their legal representatives, agents or assigns. The masculine gender shall include the feminine, the singular shall include the plural where indicated by the context.

28. Portable Toilet – Any portable or permanently installed sanitation apparatus or system which includes a tank for toilet waste retention. Portable Toilet includes sanitation holding devices from airplanes, trains, boats with type III marine sanitation devices, buses, movie dressing room trailers, recreational vehicles, or other similar transport vehicles.

29. Private Septage Disposal Facility (PSDF) – A disposal site, other than a City designated discharge location, with a direct connection to the City sewer, which accommodates the discharge of hauled septage.

30. Publicly Owned Treatment Works (POTW) - A treatment works as defined by Section 212 of the Clean Water Act which is owned by the State or municipality. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant.

31. Resource Conservation and Recovery Act (RCRA) - A Federal statute regulating the management of hazardous waste from its generation through ultimate disposal. The Act contains requirements for waste generators, transporters and owners and operators of treatment, storage and disposal facilities.

32. Sanitary Wastewater – Wastewater of human origin derived from toilets, urinals, showers, baths and restroom sinks.

33. Septage – The liquid or solid material removed from a private sewage disposal system (PSDS), portable toilet or other sanitation holding device that receives wastewater.

34. Septage Hauler – A person or an owner/operator of a business that holds Septage Disposal Permit(s) issued by the Director to discharge septage to the City's P.O.T.W.

35. Slug Discharge - Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations, local limits or permit conditions.

36. Total Toxic Organics (TTO) - The sum of the masses or concentrations greater than 0.01 mg/l of the specific toxic organic compounds regulated by specific categorical pretreatment regulations which is found in the discharge at specific quantifiable concentrations.

37. Type III Marine Sanitation Device – A device that is designed to prevent the overboard discharge of treated or untreated domestic sewage.

38. Upset - An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Industrial User, excluding such factors as operational error, improperly designed or inadequate treatment facilities or improper operation and maintenance or lack thereof.

39. Wastewater - Liquid and water - carried industrial and/or domestic wastes and sewage from facilities including, but not limited to, dwellings, commercial buildings, industrial facilities, agricultural activities, hospitals, medical facilities and other institutions, together with other wastes which may be present, whether treated or untreated, which enter the POTW.

APPENDIX A

Fact Sheet

FACT SHEET
Amended Date: 10/18/2017

A. INDUSTRIAL USER INFORMATION

SUNSHINE CANYON LANDFILL
14747 San Fernando Road
Sylmar, CA 91342

IU128862
W-535428

Josh Mills, Environmental Manager
(818) 362-2124

B. DESCRIPTION OF FACILITY OPERATIONS

Sunshine Canyon Landfill is primarily engaged in receiving and processing municipal waste (SIC 4953). The landfill generates various liquid streams at the site including mildly contaminated seep water, leachate, gas system condensate, and gas well liquids. The seep water consists of three different streams which include cutoff wall water, mildly contaminated seep water impacted by the landfill, and subdrain water.

The different liquid streams generated at the landfill are presented below:

1. Gas Well Liquids: Gas well liquids are liquids pumped from the gas extraction wells in order to allow for removal of landfill gas (LFG) from the landfill. The gas condensate is collected at the low points in the gas collection system throughout the site and at the flare stations. The gas well liquids are stored in frac tank storage area and are pumped to the sewer lift station for direct sewer discharge.

2. Condensate: Gas condensate is produced due to the temperature drop that takes place as the LFG is conveyed from the gas extraction wells to the flare stations for combustion. Condensate is pumped to the frac tank storage area and then pumped to the sewer lift station for direct sewer discharge.

3. Seep Water: Spring (Seep) and underdrain water emerges and is collected throughout the landfill area. Seep water contains trace levels of VOCs. Seep Water sources may be treated in the on-site water reuse treatment systems or may be directly discharged. There are three types of Seep Water, each treated separately, as described below.

- City Seep Water: collected from gravity drains under the old city portion of the landfill.
- Cutoff Wall Water: subsurface water (groundwater) pumped from area near the front entrance of the site. This stream is similar in characteristics to the Seep Water.
- Subdrain Water: spring water collected underneath the County landfill, and conveyed by gravity to the front entrance area of the landfill.

4. Leachate: The leachate is collected at the bottom of the lined disposal areas. Extraction pumps convey leachate streams to the treatment systems for on-site water reuse or directly to the direct sewer discharge.

Operation at the facility began in 1958. Sunshine Canyon Landfill operates six days per week and employs 60 personnel.

C. SAMPLE POINT DESCRIPTION/FACILITY FLOW INFORMATION

INDUSTRIAL WASTEWATER PERMIT	SAMPLE POINT	FLOW PER OPERATIONAL DAY (GPD)		DESCRIPTION
		TOTAL	PROCESS	
W-535428	01	300,000	300,000	Secured Sampling Facility is located at the Magnetic Flow meter Vault.
TOTAL		300,000	300,000	----

D. PROCESS UNIT OPERATION/FLOW INFORMATION

PERMIT NUMBER	SAMPLE POINT	PROCESS UNIT OPERATION CODE	PROCESS DESCRIPTION
W-535428	01	LWDB000	Landfill Leachate Collection

E. DILUTION/AUXILIARY OPERATION/FLOW INFORMATION

Sunshine Canyon Landfill does not generate any dilution wastestream that combines with a process wastestream prior to Sample Point 01.

F. FLOW MEASURING DEVICE

Sunshine Canyon Landfill has installed an inline Flow meter totalizer to monitor the wastewater discharge to the City sewer.

G. PRETREATMENT UNIT OPERATION(S)

Process wastewater generated from Gas Well Liquids, Condensate, Seep Water and Leachate flows through an optional on-site treatment system or chlorination. Treatment systems were installed to treat the cutoff water, seep water, subdrain water, and leachate streams; these streams may be treated for use on site for dust control and/or may be directly discharged to the sewer with or without treatment. The gas well liquids and gas system condensate flows do not undergo any pre-treatment and are discharged directly to the City Sewer through Sample Point 01.

INDUSTRIAL WASTEWATER PERMIT W-535428

PRETREATMENT UNIT OPERATION CODE	PRETREATMENT UNIT OPERATION DESCRIPTION
AD0010	ADSORPTION - ACTIVATED CARBON
NE0010	NEUTRALIZATION
0110TR	RECIRCULATION

H. POLLUTION PREVENTION

SUNSHINE CANYON LANDFILL has implemented the following pollution prevention practice(s).

POLLUTION PREVENTION PRACTICE CODE	POLLUTION PREVENTION PRACTICE DESCRIPTION
OPM60	**Employee training**
OPM70	**Housekeeping**

I. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

See permit, PART 2 - DISCHARGE LIMITATIONS.
See permit, PART 3 - MONITORING REQUIREMENTS

J. REPORTING REQUIREMENTS

See permit, PART 4 - REPORTING REQUIREMENTS.

K. SPECIAL CONDITIONS

See permit, PART 5 - SPECIAL CONDITIONS.

L. STANDARD CONDITIONS

See permit, PART 6 - STANDARD CONDITIONS.

M. RATIONALE FOR EFFLUENT LIMITATIONS

Sunshine Canyon Landfill does not perform any of the operations covered under the Federal Pretreatment Categorical Standards. However, the Federal definition of Significant Industrial User applies to this facility because the process wastewater generated and discharged is greater than 25,000 gpd. As a result, Sunshine Canyon Landfill is required to comply with 40 CFR 403.12.

Since the total process wastewater from this facility is greater than 25,000 gallons per day, this facility is classified as a Significant Industrial User.

Sample Point 01 is the last point of discharge to the sewer system and the Local Limit applies at this point. One set of limits apply to the discharges from this facility to the City of Los Angeles sewer system: the Local Limits. Therefore, Sunshine Canyon Landfill is required to self-monitor for Local Limits semi-annually.

Prepared By: Jocelyn Carrillo Date: _____

Reviewed By: Nic Tolentino Date: _____

IU128862.fst/jnc

APPENDIX B
Attachments

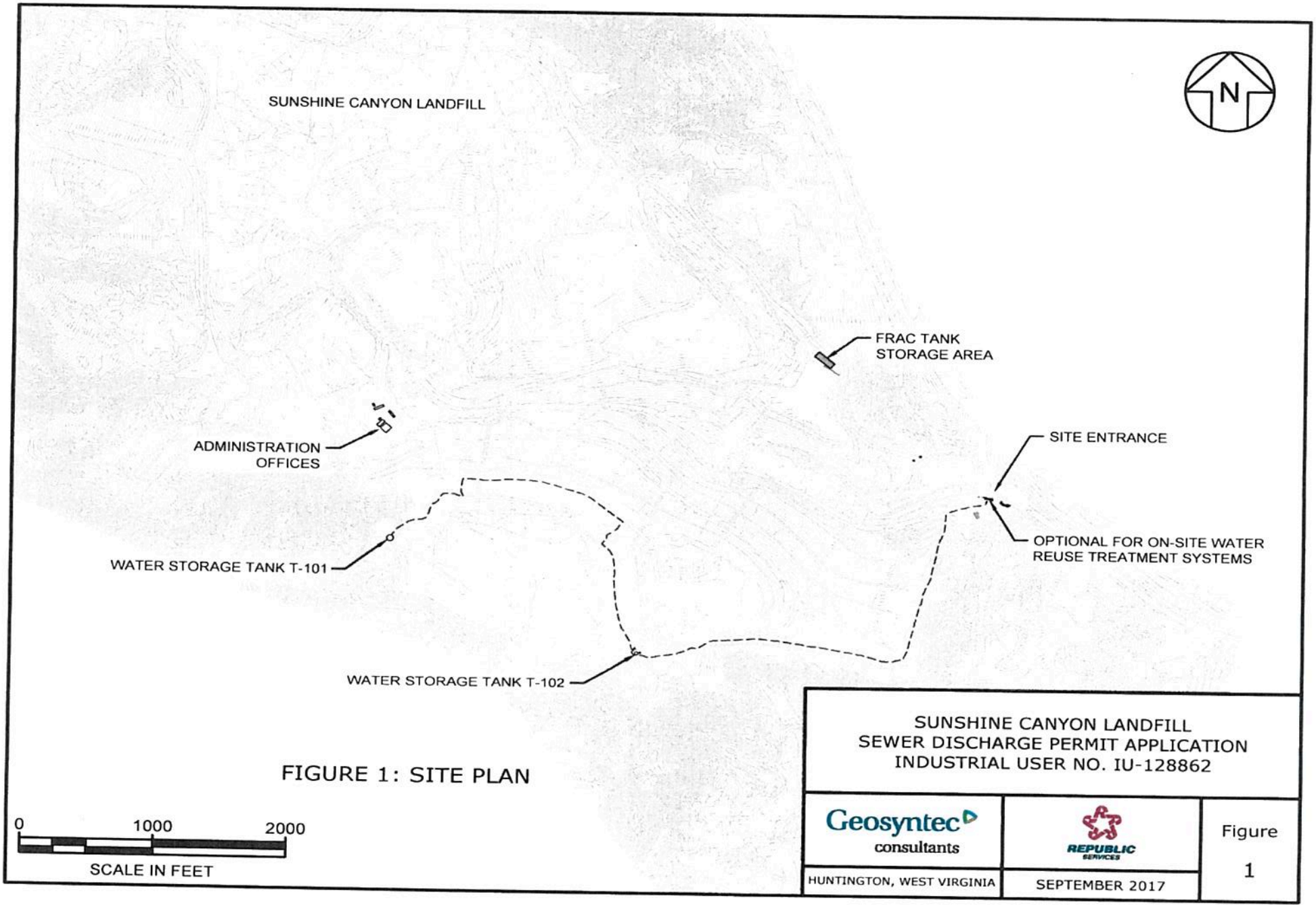


FIGURE 1: SITE PLAN

SUNSHINE CANYON LANDFILL
SEWER DISCHARGE PERMIT APPLICATION
INDUSTRIAL USER NO. IU-128862

Geosyntec consultants	REPUBLIC SERVICES	Figure 1
HUNTINGTON, WEST VIRGINIA	SEPTEMBER 2017	

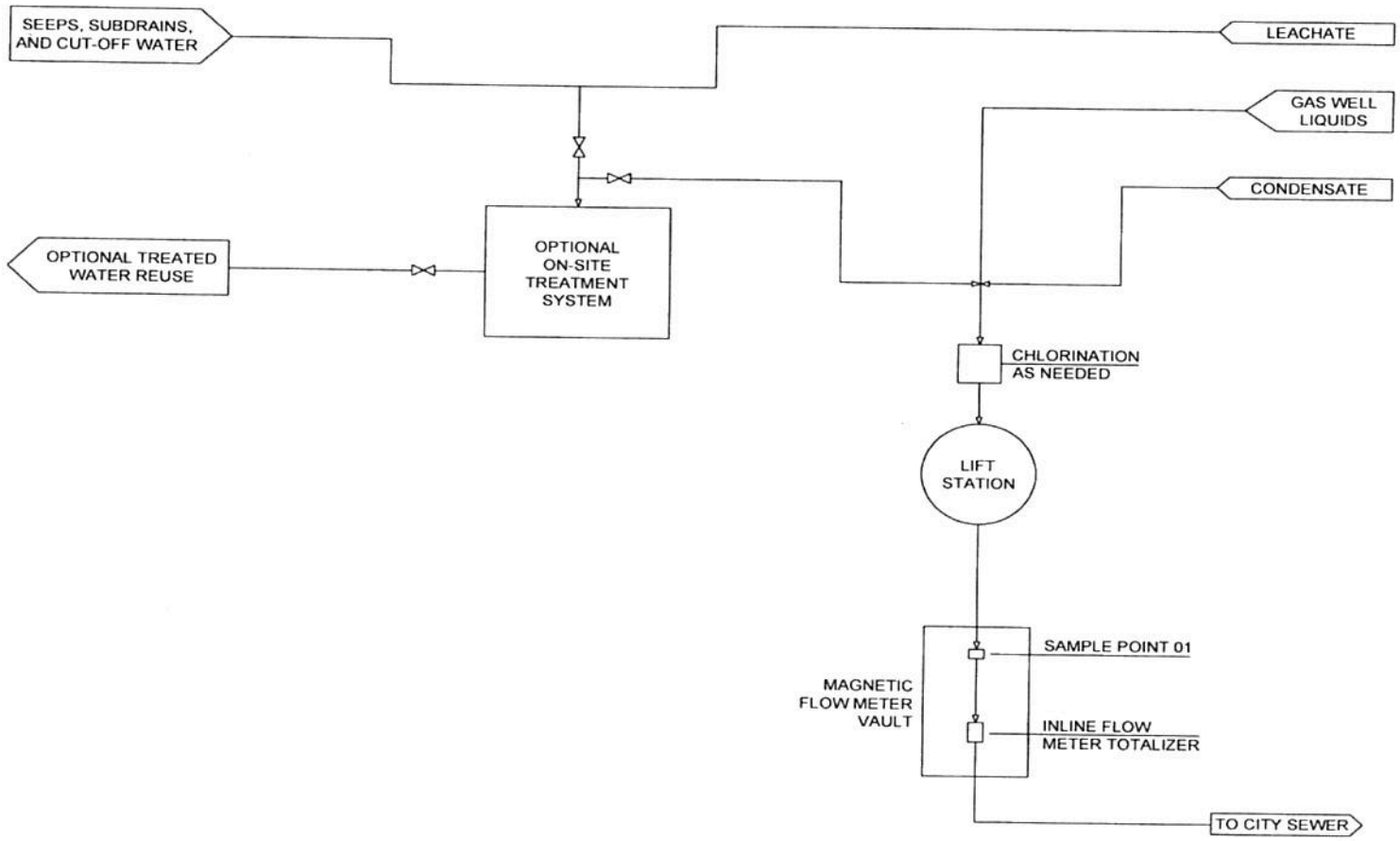


FIGURE 2: SITE LIQUIDS MANAGEMENT PLAN

SUNSHINE CANYON LANDFILL
SEWER DISCHARGE PERMIT APPLICATION
INDUSTRIAL USER NO. IU-128862

Geosyntec consultants	REPUBLIC SERVICES	Figure 2
HUNTINGTON, WEST VIRGINIA	SEPTEMBER 2017	

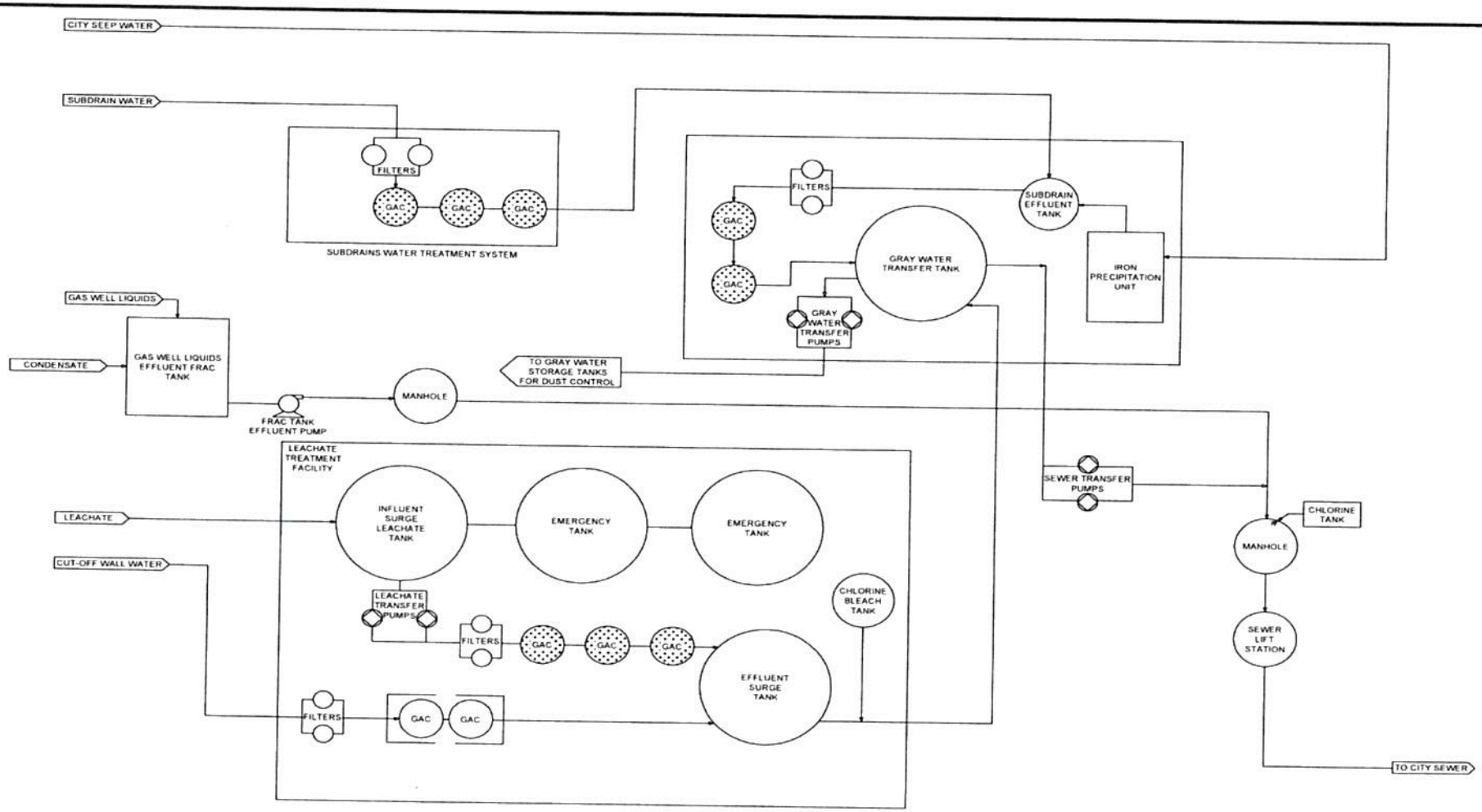


FIGURE 3: PROCESS FLOW SCHEMATIC FOR THE OPTIONAL ON-SITE WATER REUSE TREATMENT SYSTEMS

SUNSHINE CANYON LANDFILL
SEWER DISCHARGE PERMIT APPLICATION
INDUSTRIAL USER NO. IU-128862

Geosyntec consultants	REPUBLIC SERVICES	Figure 3
HUNTINGTON, WEST VIRGINIA	SEPTEMBER 2017	

SEWER FACILITIES CHARGE (SFC)
BONDED AND SPECIAL SEWER CONNECTION CERTIFICATE

City of Los Angeles
Department of Public Works
Bureau of Engineering

JOB ADDRESS: 14747 N SAN FERNANDO ROAD
Applicant Name: REPUBLIC SERVICES, INC
Address: 18500 N ALLIED WAY
City: PHOENIX State: AZ Zip Code: 85054
Phone No.: 818.362.2151

Date Issued: 05/24/2017
Engineering District: Valley
Issued By: Lee guilbeaux , VALLEY DISTRICT
Tract No.: TR 10422
Lot No.: LT 9
APN: 2601011012
Previous Certificate
Issued: 2014811132 2015810613
Sewer Map No: 225-135-2,228-133-4,228-133-2
Sewer Permit No.: S2014810129
Remarks: SUNSHINE CANYON LANDFILL
INDUSTRIAL WASTE PERMIT W-535428

SEWER FACILITIES CHARGE CREDIT FLOW AFTER JULY 1, 1994

ID	FACILITY DESCRIPTION	RATE	UNIT	QUANTITY	AMOUNT

Subtotal SFC Credited = $0.00

SEWER FACILITIES CHARGE FLOW FEE

ID	FACILITY DESCRIPTION	RATE	UNIT	QUANTITY	AMOUNT
159708	INDUSTRIAL DISCHARGE	386.00	GPD	182,000.00	$702,520.00

Subtotal SFC Fee = $702,520.00

Total SFC Amount Due =$702,520.00 - $0.00= $702,520.00

BONDED SEWER FEES:

Bonded Sewer Fee = $74.00 x = $0.00
Bonded Lateral Fee = $84.00 x = $0.00
7% Surcharge for Bonded Lateral Fee= $0.00
Total Bonded Amount Due= $0.00

X_____Date:_____

The following Sewerage Facilities Charges have been paid for the above described property by the above signed in behalf of the owner and succeeding owners in accordance with Sections 64.11.2, 64.11.3,64.16.1, of the L.A.M.C..	**CERTIFICATE NO.: C-2017810921**
The following Sewer Fees (SPECIAL FEE)(BONDED) House Connection Sewer in accordance with Section 64.15 (B)/64.18 have been paid for (all) (a portion) of the property described above by the above signed in behalf of the owner and succeeding owners.	**CERTIFICATE NO.: D-**

City of Los Angeles
Bureau of Engineering

Sewer Capacity Availability Request (SCAR)

To: Bureau of Sanitation
The following request is submitted to you on behalf of the applicant requesting to connect to the public sewer system. Please verify that the capacity exists at the requested location for the proposed developments shown below. The results are good for 180 days from the date the sewer capacity approval from the Bureau of Sanitation.

Job Address:	**14747 SAN FERNANDO RD**	Sanitation Scar ID:	**60-3563-0317**
Date Submitted	03/10/2017	Request Will Serve Letter?	No
BOE District:	Valley District		
Applicant:	GEO-LOGIC ASSOCIATES, INC		
Address:	2777 E GUASTI RD STE 1	City :	ONTARIO
State:	CA	Zip:	91761
Phone:	530-632-1215	Fax:	
Email:	CBARRETT@GEO-LOGIC.COM	BPA No.	14042-20000-05291
S-Map:	350	Wye Map:	228-137-3

SIMM Map - Maintenance Hole Locations

No.	Street Name	U/S MH	D/S MH	Diam. (in)	Approved Flow %	Notes
1	SAN FERNANDO RD	35001001	35001002	18	100.00	

Proposed Facility Description

No.	Proposed Use Description	Sewage Generation (GPD)	Unit	Qty	GPD
1	DEWATERING	1	GPD	300,000	300,000
				Proposed Total Flow (gpd):	**300,000**

Remarks 1] Approved for the maximum allowable capacity of 300,000 GPD.(208.33 gpm). 2] Maximum allowable flow rate will be 250 gpm, not exceeding 300,000 gallons per day. 3] IWP is required.

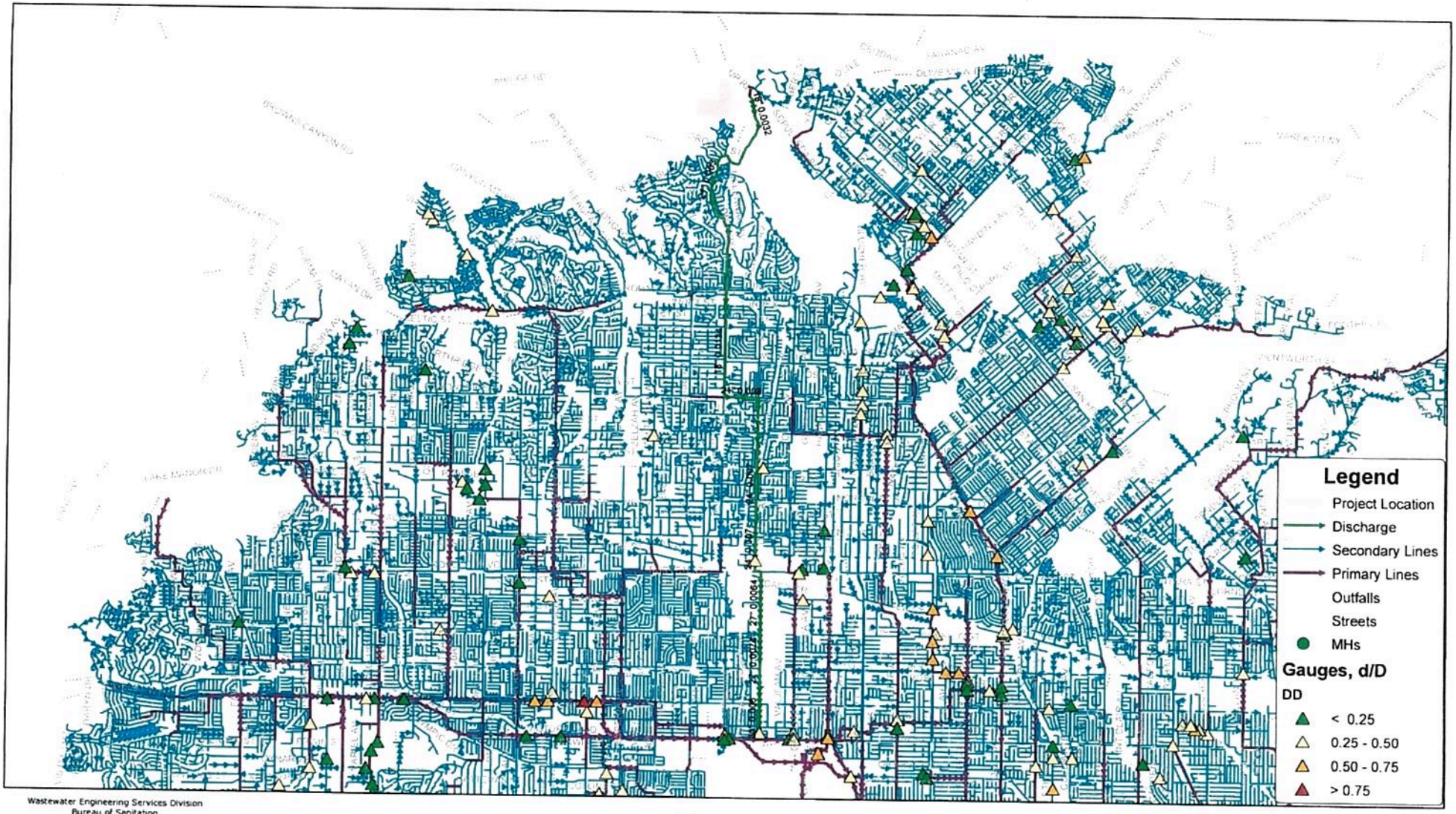
Note: Results are good for 180 days from the date of approval by the Bureau of Sanitation

Date Processed: 03/13/2017 Expires On:

Processed by:
Bureau of Sanitation
Phone: 323-342-6207
Sanitation Status: SAN Review Completed
Reviewed by: Ricardo Avendano on 03/13/2017

Submitted by: IRENE CHIA
Bureau of Engineering
Phone:

Fees Collected	Yes	SCAR FEE (W:37 / QC:707)	$2,568.50
Date Collected	03/10/2017	SCAR Status:	**SAN Review Completed**



Wastewater Engineering Services Division
Bureau of Sanitation
City of Los Angeles

environment LA SANITATION
CITY OF LOS ANGELES

Thomas Brother Data reproduced with permission granted by THOMAS BROS MAP

Figure 1
14747 SAN FERNANDO RD.
Sewer Map

N
W E
S

0 3,0006,000 12,000 18,000 24,000
Feet

Appendix B: Attachment 6 of 6 Page 1 of 1	
DBA: SUNSHINE CANYON LANDFILL	**IU 128862**
Permit(s) W- 535428	

APPENDIX C

Self-Monitoring Report Form and Instructions

CITY OF LOS ANGELES BUREAU OF SANITATION	**INDUSTRIAL WASTE MANAGEMENT DIVISION PERIODIC COMPLIANCE REPORT**	SEND REPORT TO: CITY OF LOS ANGELES INDUSTRIAL WASTE MANAGEMENT DIVISION 2714 MEDIA CENTER DR. LOS ANGELES, CA 90065

PERMIT W - 535428	**IU- 128862**	**PH.# (818) 362-2096**	

DBA: **SUNSHINE CANYON LANDFILL**

ADDRESS: **14747 San Fernando Road Sylmar, CA 91342**

SAMPLE POINT NO.: **01-001**

SAMPLE DESC:
End-of-pipe -- Normal Operations

FLOW INFORMATION

DAILY FLOWRATES:

1) SAMPLE DAY FLOW: _____ GPD, [ ]M [ ]E [ ]C

2) AVE. FLOW FOR THE MONITORING PERIOD: _____ GPD, [ ]M [ ]E [ ]C

3) MAX. FLOW FOR THE MONITORING PERIOD: _____ GPD, [ ]M [ ]E [ ]C

AUXILIARY FLOW ON DAY OF SAMPLING:

1) BOILER BLOWDOWN: _____ GPD, [ ]M [ ]E [ ]C

2) NON-CONTACT COOLING: _____ GPD, [ ]M [ ]E [ ]C

3) DEMINERALIZATION/BACKWASH: _____ GPD, [ ]M [ ]E [ ]C

4) COOLING TOWER BLEEDOFF: _____ GPD, [ ]M [ ]E [ ]C

5) OTHERS,( ): _____ GPD, [ ]M [ ]E [ ]C

BATCH DISCHARGE ONLY:

1) NO. OF OPERATIONAL DAYS: _____ DAYS

2) NO. OF DAYS FOR ACCUM: _____ DAYS

3) DISCHARGE VOLUME: _____ GALLONS

SAMPLING INFORMATION

SAMPLE TYPE	DATE		TIME		SPLIT SAMPLE (Y/N)	* PRE-NOTIFICATION DATE	SAMPLED BY	LABORATORY NAME	LABORATORY CERT. #
	START	END	START	END					
COMP									
GRAB									

DCC-Discharge Case Condition; TTO-Total Toxic Organic; CN-Cyanide
MO-Monthly; BM-BiMonthly; QT-Quarterly; SA-SemiAnnual; AN-Annual;
GPD-Gallons Per Day; M-Measured; E-Estimated; C-Calculated; COMP-Compostie;
G-Grab;
Mg/l-Milligrams Per Liter; PPD-Pounds Per Day

NOTE: *TO PRE-NOTIFY CALL (323) 342-6200.
1. Report must be submitted with U.S. Post Office postmark date by the 15th day of the month following the monitoring period.
2. Facsimiles (faxes) of these reports shall not be accepted.

FOR OFFICIAL USE ONLY:

POSTMARK DATE: _____
RECEIVED DATE: _____

SMR DATA INPUT BY: _____
INPUT DATE: _____

REVIEWED BY: _____
REVIEW DATE: _____

PERMIT W- 535428 IU- 128862	PERIODIC COMPLIANCE REPORT	CITY OF LOS ANGELES, BUREAU OF SANITATION
DBA: SUNSHINE CANYON LANDFILL	SAMPLE POINT: 01-001	

DISCHARGE LIMITS: LOCAL

ANALYTE	MONITORING	INSTANTANEOUS		DAILY		MONTHLY	
		LIMIT	UNIT	LIMIT	UNIT	LIMIT	UNIT
Arsenic, Total	Semi-Annual	3.00	mg/l				
Cadmium, Total	Semi-Annual	15.00	mg/l				
Chloride	Semi-Annual						
Chromium, Total	Semi-Annual	10.00	mg/l				
Copper, Total	Semi-Annual	15.00	mg/l				
Cyanide (Free)	Semi-Annual	2.00	mg/l				
Cyanide (Total)	Semi-Annual	10.00	mg/l				
Dissolved Sulfides	Semi-Annual	0.10	mg/l				
Lead, Total	Semi-Annual	5.00	mg/l				
Nickel, Total	Semi-Annual	12.00	mg/l				
Oil & Grease (Total)	Semi-Annual	600.00	mg/l				
pH	Semi-Annual	5.50 - 11.00	SU				
Silver, Total	Semi-Annual	5.00	mg/l				
Zinc, Total	Semi-Annual	25.00	mg/l				

SAMPLE POINT NO.: **01-001** **IU- 128862** PERMIT **W- 535428**	**INDUSTRIAL WASTE MANAGEMENT DIVISION** **PERIODIC COMPLIANCE REPORT**	CITY OF LOS ANGELES BUREAU OF SANITATION

SAMPLE DESC: **End-of-pipe -- Normal Operations**

GRAB DATE:	GRAB TIME:	COMP. START DATE	END DATE:	COMP. START TIME	END TIME

LABORATORY RESULTS

ANALYTE	SAMPLE TYPE		LABORATORY RESULTS		*VIOLATION	
	COMP	GRAB	CONCENTRATION	UNITS	YES	NO
Arsenic, Total						
Cadmium, Total						
Chromium, Total						
Copper, Total						
Lead, Total						
Nickel, Total						
Silver, Total						
Zinc, Total						
Chloride						
Cyanide (Free)						
Cyanide (Total)						
Oil & Grease (Total)						
Dissolved Sulfides						
pH						

* SEE PERMIT FOR THE DISCHARGE LIMITS. IF IN VIOLATION, ATTACH A STATEMENT OF REASON FOR VIOLATION AND CORRECTIVE ACTION TAKEN.

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATEHERING THE INFORMATION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

AUTH. REPRESENTATIVE SIGNATURE	PRINT NAME	TITLE	DATE

SELF-MONITORING REPORT FORM INSTRUCTIONS

==========

SECTION I : **FLOW INFORMATION**

Report all flows in terms of Gallons Per Day (GPD) unless noted otherwise and check (✓) if the reported flow was (M) Measured, (E) Estimated, or (C)Calculated.

A. DAILY FLOWRATES

A.1 SAMPLE DAY FLOW - Enter the discharge flow *during the sampling period (the day/s the sample was collected).*

A.2 AVERAGE FLOW FOR THE MONITORING PERIOD - Enter the average daily discharge flow *throughout the monitoring period.* For example, if the report was submitted for the 1st Bi-Monthly monitoring period, the flow should be the average daily flow during the months of January thru February.

A.3 MAXIMUM FLOW FOR THE MONITORING PERIOD - Enter the maximum discharge flow *for a single day throughout the monitoring period.*

B. AUXILLARY FLOW ON DAY OF SAMPLING - Provide a breakdown of the sources of auxillary flows *during the sampling period.* Possible sources are: B.1) Boiler Blowdown; B.2) Non-Contact Cooling; B.3) Demineralizer\ Backwash; B.4) Cooling Tower Bleedoff; and, B.5) Others (specify).

C. BATCH DISCHARGER ONLY - Applies to industrial users that discharge wastewater on a batch basis.

C.1 NO. OF OPERATIONAL DAYS - Enter the number of days that manufacturing has been performed since last batch discharge.

C.2 NO. OF DAYS FOR ACCUMULATION - Enter the number of days the wastewater has been accumulated since last batch discharge.

C.3 DISCHARGE VOLUME - Enter the total volume of wastewater discharged per batch in gallons.

SECTION II : **SAMPLING INFORMATION**

A. SAMPLING DATES (COMPOSITE) - Enter the start date and end date for the duration of the composite sampling.
B. SAMPLING TIME (COMPOSITE) - Enter the start time and end time for the duration of the composite sampling.
C. SAMPLING DATE/TIME (GRAB) - Enter the date and time the grab sample was collected.
D. SPLIT SAMPLE (Y/N) - Enter "Y=Yes" if the sample collected is a City split sample. Enter "N=No" if not.
E. PRE-NOTIFICATION DATE - Enter the date the City was pre-notified prior to planned sampling.
F SAMPLED BY - Enter the name of the person who collected the sample.
G. LABORATORY NAME - Enter the name of the laboratory who performed the analysis.
H. LABORATORY CERT. NO. - Enter the State Certificate Number of the laboratory who performed the analysis.

SECTION III : **LABORATORY TEST RESULTS**

A. GRAB SAMPLE DATE/TIME - Enter the same information reported in Section II.C of instruction above.
B. COMPOSITE DATE/TIME - Enter the same information reported in Section II.A and II.B of instruction above.
C. SAMPLE TYPE - Check (✓) whether a composite sample or grab sample was used to analyze the analyte.
D. LABORATORY RESULTS - Enter the result (concentration) of the laboratory analysis and their corresponding units (e.g., mg/l, ppm). **The laboratory report must be submitted along with the self-monitoring report.**
E. VIOLATION - Check (✓) if any of the analytes exceeded the discharge limit. Refer to the discharge limits in Section IV of these instructions or the permit for the analyte of concern.
F. SIGNATURE OF AUTHORIZED REPRESENTATIVE, ETC... - Self Explanatory

SECTION IV : **FEDERAL AND LOCAL DISCHARGE LIMITS**

A list of the federal and local discharge limits are attached as a guide for the industrial user to determine discharge violations as noted in Section III.E of instruction above. These pages need not be submitted.

SECTION V : **CERTIFICATES/PRODUCTION DATA**

These forms apply to an industrial user (IU) required to submit any of the following: 1) Cyanide Certification, 2) Zero Discharge Certification, 3) TTO Certification, and, 4) Production Data.

A. FROM (date) TO (date) - Enter the inclusive dates (monitoring period) on the form.
B. SIGNATURE OF AUTHORIZED REPRESENTATIVE, ETC.. - Self Explanatory
C. FOR PRODUCTION BASED IU ONLY - Enter the production data *during the monitoring period* including product description, quantity, and unit.

Revised SCL Permit Fact Sheet and Amendments

Permit Information – Application for upgrading from Local Industrial User to Significant Industrial User due to increased discharge capacity [Industrial User: IU128862; Replace Permit No. W-535428]

A. Industrial User Information

Republic Services Inc.
BFI Sunshine Canyon Landfill
14747 San Fernando Road,
Sylmar, CA 91342

Mr. Josh Mills – Environmental Manager
(818) 362-2124

B. Description of Facility Operations

Republic Services Inc. operates BFI Sunshine Canyon Landfill (SCL), a sanitary landfill in Sylmar, California, which receives and processes municipal waste brought in from the City, County and other sources. SCL currently holds an industrial sewer discharge permit No. W-535428.

The landfill generates various liquid streams at the site including mildly contaminated seep water, leachate, gas system condensate, and gas well liquids. The seep water consists of three different streams which include cutoff wall water, mildly contaminated seep water impacted by the landfill, and subdrain water. Treatment systems were previously installed to treat the cutoff water, seep water, subdrain water, and leachate streams; these streams may be treated for use on site for dust control and/or may be directly discharged to the sewer with or without treatment. The gas well liquids and gas system condensate flows do not undergo any pre-treatment and are discharged directly to the sewer and off-site to the POTW.

Figure 1 presents a facility plan of the Sunshine Canyon Landfill, showing the location of the optional on-site water reuse treatment. **Figure 2** presents a simplified schematic illustrating liquid routing to the sewer discharge and the as-needed addition of chlorine prior to direct discharge. **Figure 3** presents details on the optional on-site water reuse treatment systems.

C. Landfill Liquid Sources

The different liquid streams generated at the landfill are presented below.

Gas Well Liquids:

Gas well liquids are liquids pumped from the gas extraction wells in order to allow for removal of landfill gas (LFG) from the landfill. The gas condensate is collected at the low points in the gas collection system throughout the site and at the flare stations. The gas well liquids are stored in frac tank storage area and are pumped to the sewer lift station for direct sewer discharge.

Condensate:

Gas condensate is produced due to the temperature drop that takes place as the LFG is conveyed from the gas extraction wells to the flare stations for combustion. Condensate is pumped to the frac tank storage area and then pumped to the sewer lift station for direct sewer discharge.

Seep Water:

Spring (Seep) and underdrain water emerges and is collected throughout the landfill area. Seep water contains trace levels of VOCs. Seep Water sources may be treated in the on-site water reuse treatment systems or may be directly discharged. There are three types of Seep Water, each treated separately, as described below.

- City Seep Water: collected from gravity drains under the old city portion of the landfill.
- Cutoff Wall Water: subsurface water (groundwater) pumped from area near the front entrance of the site. This stream is similar in characteristics to the Seep Water.
- Subdrain Water: spring water collected underneath the County landfill, and conveyed by gravity to the front entrance area of the landfill.

Leachate:

The leachate is collected at the bottom of the lined disposal areas. Extraction pumps convey leachate streams to the treatment systems for on-site water reuse or directly to the direct sewer discharge.

D. Sample Point Description/Facility Flow Information

The sewer discharge connection from the Sunshine Canyon Landfill runs along San Fernando Road to a sewer manhole at the intersection of San Fernando Road and Balboa Avenue **(see Figure 3)**. The discharge system will include:

- Sample Point 01

- Inline Flow Meter/Totalizer

Figure 2 shows the proposed configuration and location of the sewer monitoring system including Sample Point 01. The description of the sewer sampling point and the discharge flow is listed below.

Industrial Wastewater Permit	Sample Point	Daily Flow (GPD)	Description
	01	300,000	Secured sampling station will be installed in accordance with IWD Requirements

E. Sewer Discharge System

The current sampling point will be moved to the magmeter vault which will be used for sampling and tracking of the total daily discharge to the sewer. As part of the daily responsibilities, the Operator will log the flow totalizer during discharge of wastewater to the sewer. If required by the City, additional treatment such as addition of chlorine will be added as necessary to meet direct discharge requirements. The current existing treatment is currently for on-site water reuse and not for discharge. Sanitary sewage is assumed to have standard sewer service.

F. Spill Control/Emergency Storage

All treatment systems are built in a secondary containment structure to contain any spills. The seep water streams, including field pumps, as well as the treatment systems for on-site water reuse operation will shut off in the event the Gray Water Transfer Tank (T-402) reaches high level and cannot accept any water. Under such conditions, there will be no input of water to the Gray Water System.

If the high level is a result of high level conditions in the Gray Water Storage Tanks, the Gray Water PLC will turn on the sewer discharge pumps and begin discharge of water to the sewer. Under such conditions or when high level alarm is experienced in the Gray Water System, the PLC will initiate a phone communication to alert site operators.

The frac tanks are located inside a containment structure with the conveyance line being double contained and discharging into the manhole near the lift station. If the high level in the lift station is triggered, the gas well liquid pumps will shut off. If the high high level alarm is experienced, the PLC will initiate a phone communication to alert site operators.

FIGURES

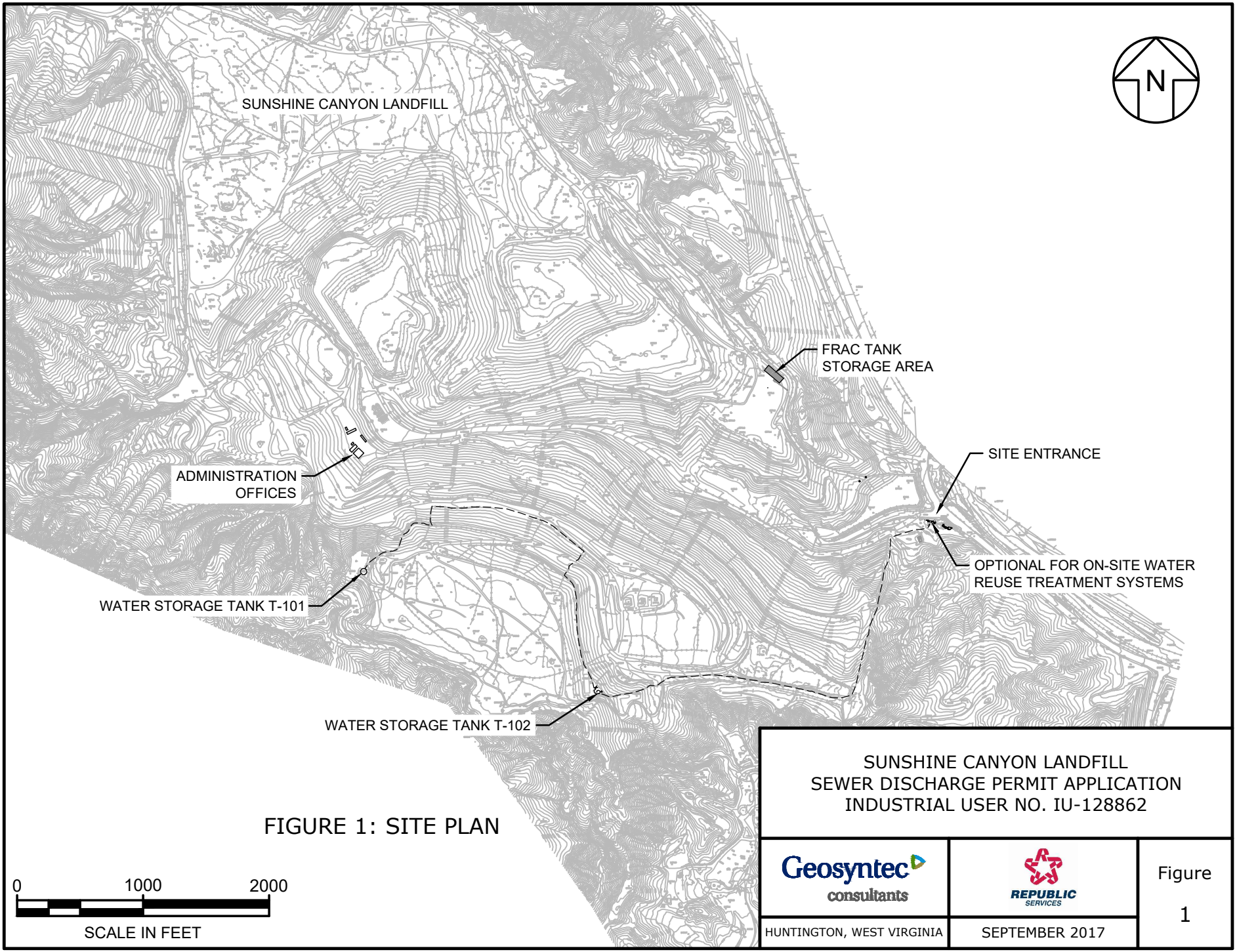


FIGURE 1: SITE PLAN

SUNSHINE CANYON LANDFILL
SEWER DISCHARGE PERMIT APPLICATION
INDUSTRIAL USER NO. IU-128862

Geosyntec consultants

REPUBLIC SERVICES

HUNTINGTON, WEST VIRGINIA

SEPTEMBER 2017

Figure 1

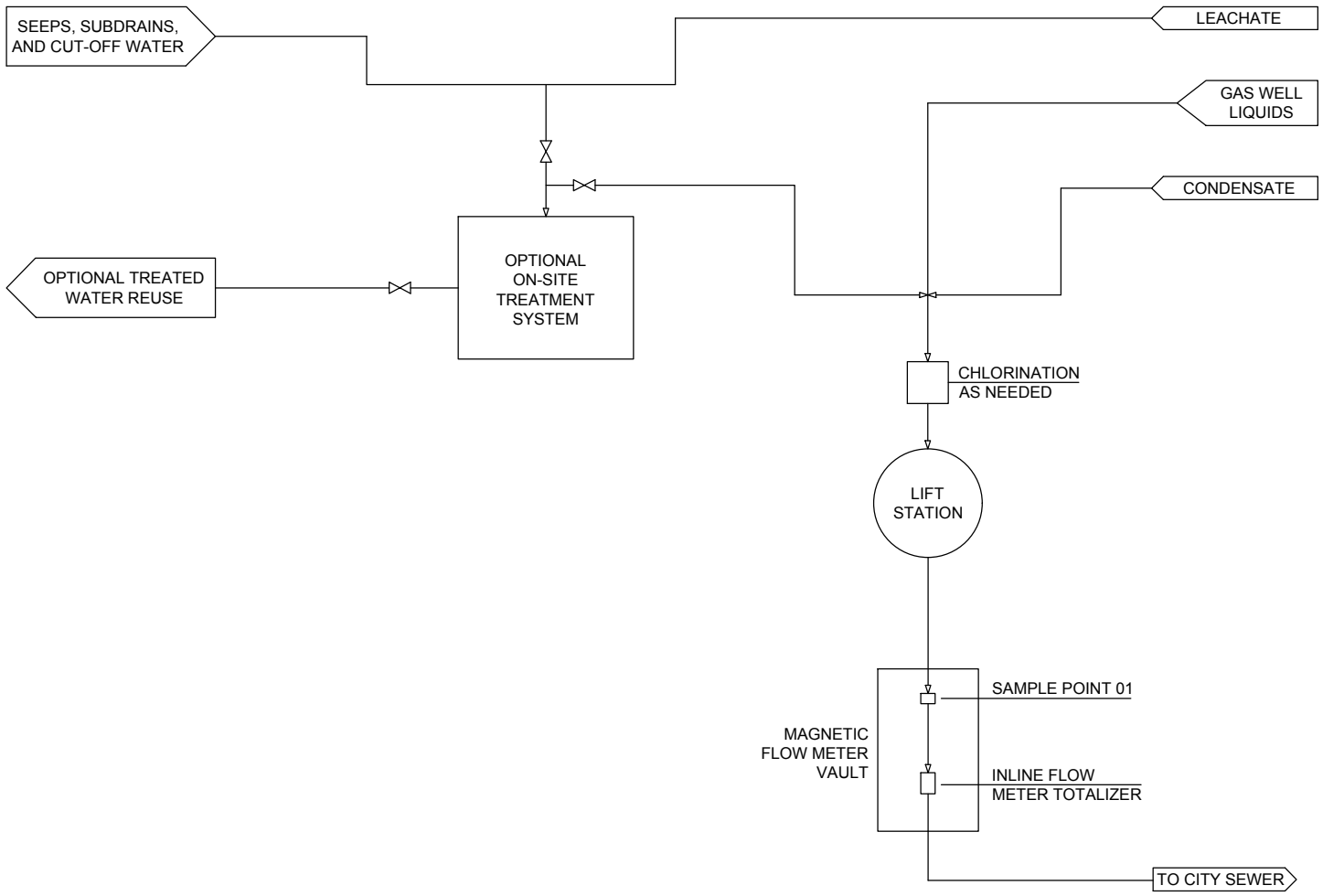


FIGURE 2: SITE LIQUIDS MANAGEMENT PLAN

SUNSHINE CANYON LANDFILL
SEWER DISCHARGE PERMIT APPLICATION
INDUSTRIAL USER NO. IU-128862

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HUNTINGTON, WEST VIRGINIA

SEPTEMBER 2017

Figure 2

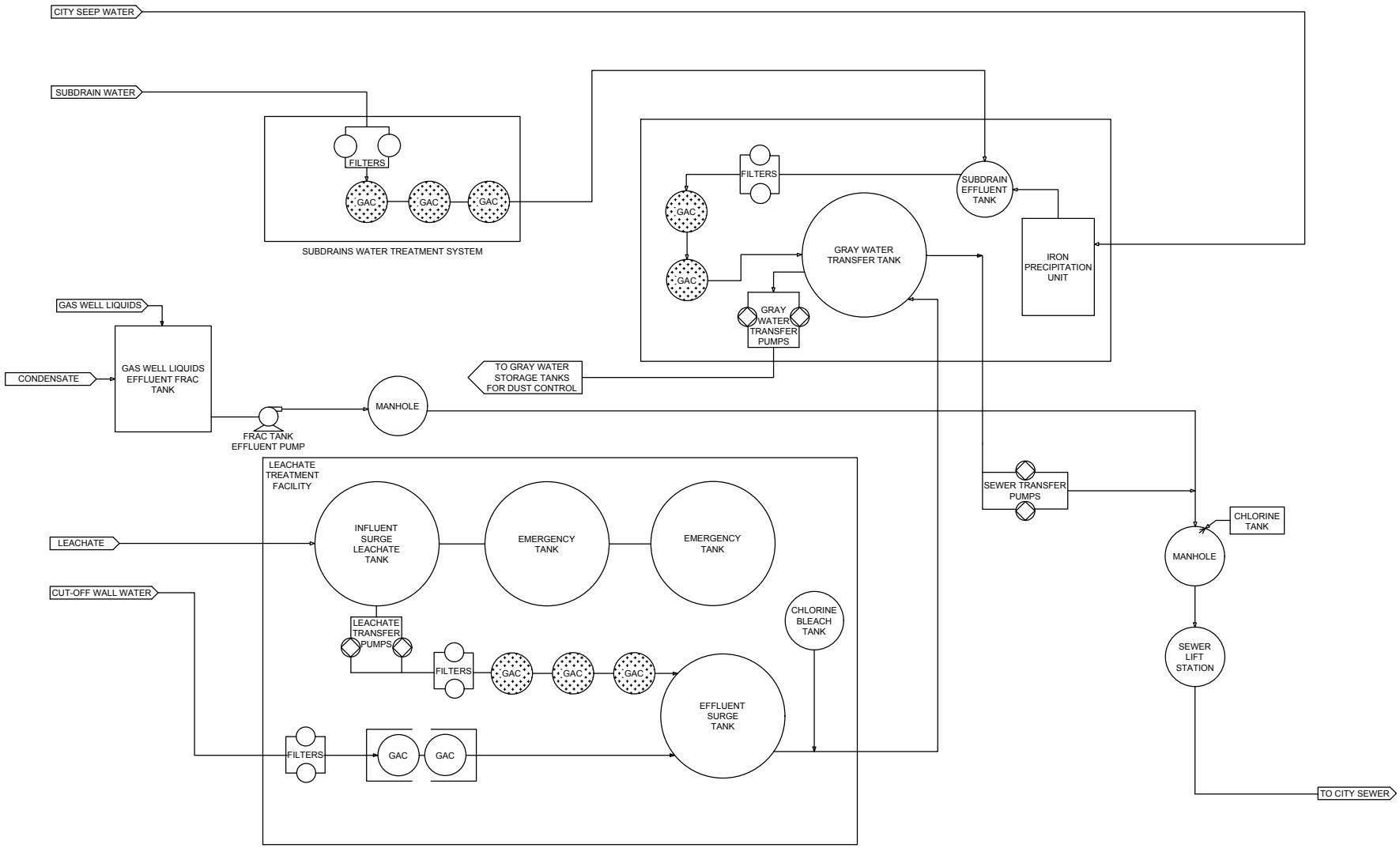

FIGURE 3: PROCESS FLOW SCHEMATIC FOR THE OPTIONAL ON-SITE WATER REUSE TREATMENT SYSTEMS

SUNSHINE CANYON LANDFILL
SEWER DISCHARGE PERMIT APPLICATION
INDUSTRIAL USER NO. IU-128862

Geosyntec consultants

REPUBLIC SERVICES

Figure 3

HUNTINGTON, WEST VIRGINIA

SEPTEMBER 2017

ATTACHMENT 1
SAFETY DATA SHEETS

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12.5% SODIUM HYPOCHLORITE SOLUTION

Material Safety Data Sheet

Emergency 24 Hour Telephone: CHEMTREC 800.424.9300

Corporate Headquarters: Hasa Inc.
23119 Drayton Street
Saugus, California 91350
Telephone • 661.259.5848
Fax • 661.259.1538

IDENTIFICATION OF PRODUCT	
Product Name:	HASA 12.5% Sodium Hypochlorite Solution
Common Chemical Names:	Hypochlorite solution sodium salt, sodium hypochlorite
Chemical Names of Ingredients [>1.0% by weight]:	Sodium hypochlorite
Chemical Family:	Inorganic halogen compound
CAS Registry Number:	7681-52-9
Empirical Formula:	NaOCl
Molecular Weight:	74.45

PHYSICAL AND CHEMICAL PROPERTIES			
Vapor Pressure:	12.1 mm Hg at 20ºC [12.5% solution]	**Flash Point:**	Not Applicable.
Weight/Gallon:	10.0 lbs. (4.54 kg.)	**pH:**	11.2 – 11.4
Density [liquid]:	1.20 at 20ºC (68ºF)	**Odor:**	Slight Bleach
Bulk Density:	Not Applicable.	**Boiling Point:**	Decomposes
Melting Point:	Not Applicable.	**Freezing Point:**	-20° Fahrenheit
Physical State:	Liquid Solution	**Color:**	Straw Yellow
Solubility in Water:	Complete	**Stability:**	Stable

PHYSICAL HAZARDS	
Potential for Fire:	None. Nonflammable and Noncombustible liquid.
Potential for Explosion:	None. Nonflammable and Noncombustible liquid.
Reactivity:	Violent reactions with amines, ammonium aldehyde, ammonium carbonate, aziridine, methanol, phenylacetonitrile, ammonium nitrate, ammonium oxylate, ammonium phosphate, cellulose, ethylene imine. Do not mix acids, aqua ammonia, or other organic or inorganic chemicals with this product.
Extinguishing Media	N/A
Fire Fighting Procedures:	N/A

HEALTH HAZARDS	
Signs and Symptoms of Exposure:	Eyes and skin irritation. Chemical burns to broken skin.
Medical Conditions Aggravated by Exposure:	No data available.
Oral [ingestion] LD_{50}:	No data available.
Dermal [skin absorption] LD_{50}:	No data available.
Inhalation [breathing] LC_{50}:	No data available.
Eye Irritation:	Irritating. May cause eye damage.
Skin Irritation:	Mild irritation. Not considered to be a skin sensitizer.
OSHA PEL:	None established.
ACGIH TLV/TWA:	None established.

POTENTIAL ROUTE [S] OF ENTRY	
Inhalation [Breathing]:	Unlikely to occur. Vapor may cause irritation to upper respiratory tract.
Dermal [Skin]:	Contact with broken skin may cause burning, blistering, and tissue destruction if not washed off immediately.
Eyes:	Corrosive to eyes.
Ingestion:	Not anticipated. May cause severe chemical burns to esophagus and to stomach lining.

CARCINOGENIC [CANCER POTENTIAL] INFORMATION	
National Toxicological Program [NTP] *Sixth Annual Report on Carcinogens:*	Not listed.
***International Agency for Research on Cancer [IARC] Monographs*, V. 1-53, Supps. 1-8:**	Not listed.
Listed by Federal OSHA as Carcinogens:	Not listed.

***Safe Drinking Water and Toxic Enforcement Act of 1986* [Proposition 65, California only]:**

Small quantities – less than 100 ppm (parts per million) – of impurities, including bromates, may be found in all chlorinating products, including this product. Bromates are derived from bromides, which are present in sodium chloride (table salt) from which chlorine is manufactured. Additional small quantities of bromates may be generated during the disinfection process. Bromates are known by the State of California to cause cancer when administered by the oral (drinking or ingesting) route. Read and follow label directions and use care when handling or using this product. The US Environmental Protection Agency has established a maximum contaminant level (MCL) for bromates in drinking water at 10 ppb (parts per billion). Application of this product in accordance with label directions at use dilution will not exceed this level.

This warning is provided pursuant to Proposition 65, the Safe Drinking Water and Toxic Enforcement act of 1986, Chapter 6.6 of the California Health and Safety Code, which requires the Governor of California to publish a list of chemicals “known to the state to cause cancer or reproductive toxicity.” This list is compiled in accordance with the procedures established under the proposition, and can be obtained on the internet from California’s Office of Environmental Health Hazard Assessment at http://www.oehha.ca.gov. There are over 700 chemical substances on this list.

GENERAL PRECAUTIONS FOR SAFE USE AND HANDLING
Open containers carefully. Sodium hypochlorite solutions are packaged with vented closures. Do not use containers which are leaking or show evidence of having leaked. Mix only with water. Do not mix with other chemicals. Use clean, dry utensils when mixing. Do not discharge this product or mixtures of this product into lakes, streams, ponds, bays, estuaries, or the ocean. Sodium hypochlorite is toxic to aquatic organisms at very low levels.

PERSONAL PROTECTION AND HYGIENE
Wear goggles or face shield and rubber gloves when handling. Remove and wash contaminated clothing before reuse. Wash hands after handling.

CLEAN-UP OF SPILLS
Store this product in a cool, dry area, away from sunlight and heat to avoid deterioration. In case of spill, flood area where spill has occurred with large quantities of water. With permission from local authorities, diluted product may be flushed to a sanitary sewer. Product may also be absorbed with sand or diatomaceous earth. Absorbed products must be disposed of in accordance with applicable Federal, State, and/or local regulations. Contact HASA, Inc. for guidance.

FIRST AID	
Eye Contact:	Flush with water. Remove contact lenses [if applicable]. Hold eyelids open. Continue flushing with water for 15 minutes. Get prompt medical attention.
Skin Contact:	Wash affected area with water for 15 minutes. Get medical attention.
Ingestion [swallowing]:	Drink large quantities of water. DO NOT give vinegar or other acids. DO NOT induce vomiting. Get prompt medical attention.

FEDERAL/STATE LISTS/REGISTRATION/S/REPORTING REQUIREMENTS	
CERCLA Hazardous Substance [Section 1010 [4], P.L. 96-510]:	RQ=100 lbs [80 gallons for 12.5% solution]
Extremely Hazardous Substance [40 CFR 355, Appendix A]:	Not listed.
Pesticide Product 7 U.S.C. 136 et seq.:	Registered as a pesticide product by Federal EPA.
Toxic Substance under TSCA:	Not reported.
Pesticide Product [various State Laws]:	Registered as pesticide product in states where marked.

MATERIAL CLASSIFICATION	
OSHA Hazard Communication Standard, Department of Labor, Occupational Safety and Health Division, 29 CFR 1910.1200:	Irritant

Hazardous Materials Transportation Regulations, Department of Transportation (Federal) 49 CFR 172.101	
Proper Shipping Description [1 gallon or less]:	Consumer Commodity, ORM-D
Proper Shipping Description [greater than 1 gallon]:	Hypochlorite Solutions, 8, UN1791, P.G. III

National Fire Protection Association NFPA 704 [1990]:	2-0-0
BOCA National Fire Prevention Code/National Building Code [1999 editions]:	Irritant
Standard Fire Prevention Code/Standard Building Code [1997 editions]:	Irritant
Uniform Fire Code/Uniform Building Code [1997 editions]:	Irritant

Uniform Fire Code Standards 79-3, Uniform Fire Code, V. II [1997 edition]:	2-0-0

RETURNABLE CONTAINERS
Returnable (deposit) containers must be resealed and the contents drained therefrom prior to return to the distributor or manufacturer for credit. Do not offer leaking or damaged containers for transportation.Call HASA, Inc. or your distributor for instructions.

Please Note: The information contained herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge and belief. NO WARRANTY OR GUARANTEE, expressed or implied, is made regarding the product performance, product stability, or as to any other condition of use, handling, transportation, and storage. Customer use, handling, transportation, and storage may involve additional safety and/or performance considerations. Our technical personnel will be happy to respond to questions regarding safe handling, storage, transportation and use procedures. The safe handling, storage, transportation and use procedures remain the sole responsibility of the customer. No suggestions for handling, storage, transportation or use are intended as or to be construed as recommendations which may infringe on any existing patents or violate any Federal, State, and/or local law and/or regulation, ordinance, standard, etc.. This Material Safety Data Sheet has been prepared by HASA, Inc. staff from test reports and other information available in the public domain.

Material Safety Data Sheet

Product: Sodium Hydroxide 50%
Date of Preparation: 10/06

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Sodium Hydroxide 50%
Chemical Formula: A Blend of Water Treatment Application Materials
Emergency Telephone: 800-535-5053 (InfoTrac)
Manufacturer: Heisler Green Chemical Company
3051 Oak Grove Road,
Downers Grove, IL. 60515 **Non Emergency Tel. No.: 630-271-1218**

Section 2 - Composition/Information on Ingredients

Ingredient Name	CAS Number	% wt or % vol	OSHA PEL TWA STEL	ACGIH TLV TWA STEL	Other
Sodium Hydroxide	1310732	50.0	2mg/m3		
Non Hazardous Ingredients		50.0			
TOTAL		100			

Section 3 - Hazards Identification

+ + + + Emergency Overview + + + +

HMIS	
H	3
F	0
R	1
PPE	J
+Sec.8	

Potential Health Effects

Primary Entry Routes: Eye Contact, Skin Contact.
Acute Effects: Corrosive to eyes, skin and mucous membranes
Inhalation: High mist concentrations can cause irritation of eyes, nose, throat and lungs. Corrosive mists.
May cause damage to the upper respiratory tract and even to the lung tissue proper that could produce chemical pneumonia, depending on the severity of exposure.
Eye: Major Potential Hazard. Destructive to eye tissue on contact. Will cause severe burns that result in damage to the eyes and even blindness.
Skin: Major Potential Hazard. Destructive to tissues contacted, producing severe burns and temporary loss of hair.
Ingestion: Can cause severe burns and complete perforation of mucous membranes of the mouth, throat, esophagus and stomach if swallowed. Can prove fatal.
Carcinogenesis: IARC, NTP, and OSHA do not list this product or its components as a carcinogen.
Medical Conditions Aggravated by Long-term Exposure: No specific information provided on compounds at date of issue.
Chronic Effects: May cause multiple areas of superficial destruction of the skin or dermatitis.

Section 4 - First Aid Measures

Inhalation: Remove person out of contaminated area to fresh air. If breathing has stopped artificial respiration should be started. Oxygen may be administered if readily available. Seek medical attention immediately.
Eye Contact: Flush eyes with a large amount of water for 15 minutes. Seek medical attention IMMEDIATELY. After first aid, get appropriate in-plant, paramedic or community medical support.
Skin Contact: Wash affected areas thoroughly with soap and water for at least 15 minutes. Seek medical attention if any irritation persists.
Ingestion: If swallowed, give large quantities of water to drink. If available give several glasses of milk. DO NOT induce vomiting. After first aid, IMMEDIATELY seek appropriate in-plant, paramedic, or community medical support. Never give anything by mouth to an unconscious person.

Section 5 - Fire-Fighting Measures

Flash Point: Non-Flammable
Flash Point Method: NA
Burning Rate: NA
Auto-ignition Temperature: Does not burn.
LEL: NIA
UEL: NIA
Extinguishing Media: Water fog, Alcohol foam, Carbon Dioxide, Dry Chemical
Unusual Fire or Explosion Hazards: None known other than material can splatter above 100°C/120°F.
Hazardous Combustion Products: Carbon Monoxide might be released
Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill/Leak Procedures:
Small Spills: Absorb spill with paper towel or similar absorbent; or flush to sewer or ground with large amounts of water.
Large Spills:
Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways. Absorb spill with vermiculite, oil dry or similar non-reactant absorbent.
Cleanup: Accumulate the absorbed materials and dispose of according to federal, state and local regulations.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120)

Section 7 - Handling and Storage

Handling Precautions: Use the recommended safety controls and personal protective equipment as outlined. Fully review all data before handling of the material itself. Avoid contact with skin or eyes. Avoid breathing dust or mist. Keep from contact with clothing and other combustible materials. Observe good personal hygiene and housekeeping practices.
Storage Requirements: Do not store this material near any strong acids, bases, oxidizers, flammables or any other type of reactive material. Do not expose the material to temperature extremes.
Regulatory Requirements: Store materials according to all local, state and federal guidelines that are established for corrosive materials.

Section 8 - Exposure Controls/Personal Protection

Engineering Controls:
Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.
Administrative Controls:
Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessel, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.
Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye-and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.
Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.
Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.
Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section – 9 Physical and Chemical Properties

Physical State: Liquid
Appearance and Odor: Clear to hazy liquid, characteristic odor
Vapor Pressure: Same as water
Vapor Density (Air=1): Same as water
Specific Gravity (H_2O=1, at 4^oC): 1.52
pH: 14+/-
Water Solubility: Complete
Other Solubilities: ND
Boiling Point: 212F
Freezing/Melting Point: +/- 32 F
% Volatile: 50%+/-
Evaporation Rate: <1.00

Section 10 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions. However, avoid temperature extremes.
Polymerization: Hazardous polymerization will not occur.
Chemical Incompatibilities: Strong Acids, Leather, Wool, Aluminum, Zinc, Tin and alloys, Oxidizers or any other type of reactive material.
Conditions to Avoid: Contact with any reactive material of any sort. Extreme temperatures
Hazardous Decomposition Products: Reacts with reducing sugars to form hazardous carbon monoxide. Contact with metals may release flammable hydrogen gas.

Section 11 - Toxicological Information

Eye Effects: Corrosive
Acute Inhalation Effects: Corrosive
Skin Effects: Corrosive
Acute Oral Effects: Corrosive to mucous membranes
Chronic Effects: Not determined for this specific blend
Carcinogenesis: Non Carcinogenic
Mutagenicity: Non Mutagenetic
Teratogenicity: Not determined for the blend
**See NIOSH, RTECS, for additional toxicity data.

Section 12 - Ecological Information

Eco-toxicity: No specific data is available on this product. However, for the chemical components which make up this product, there may be specific data available and in the public domain. Consult the data available for each individual raw material component.
Environmental Fate: Ground and/or water
Environmental Degradation: NIA
Soil Absorption/Mobility: No studies have been conducted for this blend

Section 13 - Disposal Considerations

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable federal, state and local regulations.
Disposal Regulatory Requirements:
Container Cleaning and Disposal: Triple rinse the empty containers with water before disposal to re-conditioner or land fill or garbage.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Sodium Hyrdroxide
Contains:
Shipping Symbols:
Hazard Class: 8
UN No.: 1824
Packing Group: II
Requirements
Label Code: C
Emergency Response Guide No: 154

Packaging Authorizations
a) Exceptions:
b) Non-bulk Packaging:
C) Bulk Packaging

Quantity Limitations
a) Passenger, Aircraft or Railcar:
b) Cargo Aircraft Only:

Vessel Stowage

a) Vessel Stowage:
b) Other:

Section 15 - Regulatory Information

EPA Regulations:
RCRA Hazardous Waste Number (40 CFR 261.33):
RCRA Hazardous Waste Classification (40 CFR 261.): Not classified.
CERCLA Hazardous Substance (40 CFR 302.4) listed/unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307 (a), CAA, Sec. 112
CERCLA Reportable Quantity (RQ), lb(kg) Not listed

SARA 311/312 Codes:
SARA 313 Toxic Chemical (40CFR 372.65): Not listed
SARA 302/304 EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed
Threshold Planning Quantity (TPQ)
OSHA Regulations:
Air Contaminant (20 CFR 1910.1000, Table Z-1, Z-1-A) See Section 2
OSHA Specifically Regulated Substance (29 CFR 1910.) See Section 2
State Regulations: As a product blend the materials are generally not listed. Check with your local state regulatory board for more detailed information regarding the specific components of this product.

Section 16 - Other Information

Prepared By: G. Garcia,
Revision Notes:

Additional Hazard Rating Systems:
Disclaimer:

USER'S RESPONSIBILITY

The information and recommendations contained herein cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee instructional programs for your operation.

DISCLAIMER OF LIABILITY

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this material. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state and local laws and regulations remains the responsibility of the user.

ATTACHMENT 2
SPCC PLAN

engineers | scientists | innovators

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC PLAN)

FOR

SUNSHINE CANYON LANDFILL

14747 San Fernando Road
Sylmar, CA 91342

August 2017

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN
GENERAL INFORMATION

1. Name of Facility Sunshine Canyon Landfill

2. Type of Facility Municipal Solid Waste Landfill

3. Location of Facility 14747 San Fernando Road, Sylmar, CA 91342

4. Name and address of Owner or Operator:

Name: Sunshine Canyon Landfill, a Republic Services Company

Address: 14747 San Fernando Road, Sylmar, CA 91342

5. Designated Person Accountable For Oil Spill Prevention at Facility (SPCC Coordinator):

Name: Kate Logan

Title: Interim Operations Manager

MANAGEMENT APPROVAL

This SPCC Plan will be implemented as herein described.

Signature:

Name: Rob Sherman

Title: General Manager

PERIODIC PLAN REVIEW

In accordance with 40 CFR 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every five years. As a result of this review and evaluation, Sunshine Canyon Landfill will amend the SPCC Plan within six months of the review to include more effective prevention and spill technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Review Date	Signature of Reviewer

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC PLAN)

FOR

SUNSHINE CANYON LANDFILL

14747 San Fernando Road
Sylmar, CA 91342

April 2013

PREPARED BY

A-MEHR, INC.
23016 MILL CREEK DRIVE
LAGUNA HILLS, CA 93016
(949) 206-0157

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR, Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

Printed Name of Registered Professional Engineer : M. Ali Mehrazarin, P.E.

Signature of Registered Professional Engineer: M. Ali Meh

Registration No. 42575
State: California

Seal

REGISTERED PROFESSIONAL ENGINEER
Mohammad Ali Mehrazarin
42575
Exp. 3/31/14
CIVIL
STATE OF CALIFORNIA

Date: 4/24/13

EMERGENCY CONTACTS

A. SPCC COORDINATOR

Kate Logan	**(817) 846-9023**

B. ASSISTANT SPCC COORDINATOR

Ricky Dhupar	**(818) 822-2024**

C. GENERAL MANAGER

Chris Coyle	**(623) 241-8418**

D. LOS ANGELES FIRE DEPARTMENT **911**

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OIL SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) PLAN SUNSHINE CANYON LANDFILL

1. INTRODUCTION

This SPCC Plan has been prepared, in accordance with Republic Services, Inc. policies and 40 CFR 112.7, for Sunshine Canyon Landfill in Los Angeles County, California to address the storage and management of petroleum products. The plan describes procedures, structures, and equipment at the facility to prevent spills and to prevent or mitigate any impact on the environment.

2. FACILITY DESCRIPTION

2.1 General

The Sunshine Canyon Landfill is a municipal solid waste disposal site located on a 1,036-acre parcel of land in Los Angeles County.

Potential petroleum products spill hazards at Sunshine Canyon Landfill are related to storage and use of fuels and lubricants required for the operation of heavy equipment. The site stores and/or uses petroleum products in the form of diesel fuel, motor oils, waste oil, gear oil, and hydraulic oil. Provisions for prevention of spills of the landfill liquids are documented in this SPCC Plan, although the management of such liquids is not mandated under 40 CFR 112.7.

Drawing 1 is an overall site plan and a detailed plan of the industrial and maintenance areas of the site, showing the location of the storage tanks and related facilities.

2.2 Petroleum Products Storage Tanks

Table 1 lists the storage tanks at Sunshine Canyon Landfill. All are aboveground storage tanks (AST). Additional information on the tanks is as follows:

Tank No. 1 is an unused 1,000-gallon double-walled AST stored in the boneyard. This tank is empty and is not permitted for use at the present time.

Tanks 2-6 are double-walled steel AST's located in the landfill equipment maintenance area, containing waste oil and various lubricant products. These tanks are located under a canopy alongside the maintenance shop.

In addition to the petroleum products stored in the tanks listed in Table 1, bulk tanks and smaller quantities of lubricants and related products are stored and used in several places in the maintenance area. Small quantity containers are kept in storage bins, and drums are placed on containment pallets in covered locations.

Landfill heavy equipment is fueled on the landfill by a mobile service truck.

TABLE 1
STORAGE TANK INVENTORY

NO.	TYPE	PRODUCT	TANK MATERIAL	CONTAIN-MENT	CAPACITY (gal.)	LOCATION
1	AST	Empty – Not Used	Steel tank, concrete vault	Double Walled	1,000	Maintenance Area
2	AST	Trans Oil	Steel	Double Walled	480	Maintenance Area
3	AST	Motor Oil	Steel	Double Walled	480	Maintenance Area
4	AST	Gear/ Differential Oil	Steel	Double Walled	480	Maintenance Area
5	AST	Drive train fluid; Hydraulic Oil	Steel	Double Walled	Split tank; 2 @ 240	Maintenance Area
6	AST	Waste Oil	Steel	Double Walled	500	Maintenance Area
7	AST	Waste Oil	Steel	Double Walled	200	Maintenance Area

2.3 Hazardous Waste Temporary Storage

Hazardous or other unacceptable waste discovered at the landfill is stored temporarily in a locked storage container. Secondary containment is provided within the container. Materials are typically stored in this location for less than 90 days before being removed by a licensed contractor from the site for disposal at a licensed hazardous waste facility.

2.4 Regulatory Applicability

2.4.1 Navigable Waters

Stormwater runoff from Sunshine Canyon Landfill is controlled by a series of permanent and temporary drainage structures. All stormwater is conveyed to the site's Terminal Basin. Stormwater discharges through three inlet structures then to a concrete box channel underneath San Fernando Road into the Weldon Creek Flood Control Channel which is part of the City of Los Angeles flood control system. This channel ultimately flows to the Los Angeles River. The Los Angeles River is considered navigable waters of the United States for purposes of 40 CFR 112.

2.4.2 Oil Storage

Sunshine Canyon Landfill is required to prepare an SPCC plan under 40 CFR 112.1 et. seq. because its total above ground storage capacity is greater than 1,320 gallons of petroleum products. (40 CFR 112.1 (d)(2)).

3. SPILL HISTORY AND POTENTIAL

3.1 Past Spill Occurrences - 112.7(a)

The only known spill events at Sunshine Canyon Landfill in the last 5 years have been minor spills related to hydraulic line breaks, and fuel line or fuel tank leaks on landfill equipment or customer

vehicles. These spills have been cleaned up immediately in accordance with with the procedures in this plan. Procedures for prevention of such occurrences are contained herein.

3.2 Potential Spill Occurrences - 112.7(b)

Although it is unlikely that a major spill event would occur at the facility, small spills may occur due to tank overflows and pipe or pump leaks. In the event of containment failure, on site adsorbents, shovels, and "absorbent snakes" are located in at the maintenance shop and spotter bins and are used to prevent spills from leaving the property. Should any significant release of diesel fuel occur during transfers or equipment fueling, the flow from the release would not drain into the storm water drainage system.

4. SPILL PREVENTION MEASURES

4.1 Containment and Diversionary Structures - 112.7(c)

As noted above, all AST's handling petroleum products on the site are of double walled construction, providing control of any major leak in the primary container. Other AST's are located inside containment structures, as detailed in Section 4.3 below.

4.2 Facility Drainage Control – 112(e)(1)

Stormwater runoff from Sunshine Canyon Landfill is controlled by a series of permanent and temporary drainage structures. All stormwater is conveyed to the site's Terminal Basin. Stormwater discharges through three inlet structures then to a concrete box channel underneath San Fernando Road into the Weldon Creek Flood Control Channel which is part of the City of Los Angeles flood control system.

4.3 Bulk Storage Tanks / Secondary Containment – 112.7(e)

4.3.1 Materials of Construction – 12.7(e)(2)(I)

Materials of construction of each storage tank are listed in Table 1. To date, the tanks have exhibited no significant corrosion or deterioration.

4.3.2 Capacity And Impermeability Of Secondary Containment - 112.7(e)(2)(ii); 112.7(e)(2)(iii)(B)

All tanks on site are of double walled construction, providing integral secondary containment.

4.3.3 Testing Of Aboveground Tanks - 112.7(e)(2)(vi)

All above ground tanks are visually inspected daily to assess tank integrity. These inspections are documented as described in Section 4.6. Areas inspected include the following, if applicable:

- Leak and spills
- Corrosion deterioration
- Foundation deterioration
- Tank auxiliary equipment (valve, piping and pumps)
- Secondary containment structure

4.3.4 Fail-Safe Engineering For Tank Installation - 112.7(e)(2)(viii)

All tanks on site are of double walled construction, providing integral secondary containment.

4.3.5 Plant Effluent Discharged Into Navigable Waters - 112.7(e)(2)(ix)

The facility produces no plant effluent.

4.3.6 Correction Of Visible Leaks - 112.7(e)(2)(x)

As cited above, the AST's are regularly inspected visually to determine integrity and assess condition of operating equipment. Steps will be immediately taken to correct any visible leaks.

4.3.7 Mobile/Portable Oil Storage Tanks - 112.7(e)(2)(xi)

Motor oils, gear lube, transmission and hydraulic fluids are stored in 55-gallon drums located in the maintenance area, as described in Sections 2.2 and 4.1 above. Most drums are kept on portable containment pallets. The site maintains an adequate supply of absorbents on hand to provide additional containment for spills.

4.4 Facility Transfer Operations, Pumping, And In-Plant Process - 112.7(E) (3)

4.4.1 Buried Piping - 112.7(e)(3)(I)

There is no buried piping conveying petroleum liquids on site.

4.4.2 Inspection of Above-Ground Valves and Pipelines - 112.7(e)(3)(iv)

All exposed valves/hoses units associated with AST's are regularly inspected for leaks as part of the inspection program described in Section 4.6 below.

4.4.3 Vehicular Traffic - 112.7(e)(3)(v)

There are no above ground pipelines exposed to vehicular traffic.

4.5 Facility Truck Loading/Unloading - 112.7(e)(4)

4.5.1 Tank Truck Loading Procedures - 112.7(e)(4)(I)

All loading and unloading procedures meet the minimum requirements and regulations of the Department of Transportation. Site personnel involved with loading and unloading operations will familiarize themselves with these requirements.

4.5.2 Interlocked Warning System - 112.7(e)(4)(iii)

(Not applicable)

4.5.3 Examination of Tank Truck Drains - 112.7 (e)(4)(iv)

(Not applicable)

4.5.4 Procedures for Fueling Vehicles and Equipment

The following procedures are followed when transferring diesel fuel to vehicles or landfill operating equipment via a mobile service truck.

The following spill cleanup equipment shall be on hand at the location of fueling:

a) A drip bucket/pan.
b) Two watertight covered containers, one labeled 'Clean Absorbent' and the other 'Used Absorbent'.
c) A supply of clean, dry absorbent.
d) A shovel.
e) A yard brush.

The fueling operation shall observe the following precautions and procedures:

a) The fueler must hold the nozzle while filling the vehicle.
b) The fueler must not overfill the tank.
c) The fueler must not keep the nozzle open using a device or method other than his/her hand.
d) The fueler must place the drip pan/bucket on the ground beneath the vehicle fill opening to catch any overfill. Any overfill must be replaced immediately in the fuel storage tank.
e) If a spill of less than 25 gallon occurs, the fueler must immediately place absorbent on the spilled fuel, and immediately pick up the absorbed material with a sweeping brush and shovel, and place it in the 'Used Absorbent' receptacle
f) The 'Clean Absorbent' and 'Used Absorbent' storage containers must be protected from rain at all times.
g) Used absorbent must be disposed of in accordance with State and Federal regulations.
h) The fuel pad must be dry cleaned (sweep and shovel - absolutely no water) at the end of every workday.
i) The shovel, yard brush, and drip pan/bucket must always be kept in the vicinity of the fueling activities.
j) The drip pan/bucket must be stored up-side down when not in use.
k) If a spill of 25 gallons or more occurs, take immediate steps to contain the spill, get help, and make sure the incident is reported to the SPCC Coordinator.

4.6 Inspection And Records - 112.7(e)(8)

This inspection program plan is intended to provide a system to prevent and detect system malfunctions, equipment deterioration, and operator errors. The inspection program is designed to provide an early warning of the potential for such events in order that corrective and preventive actions may be taken in a timely manner.

4.7 Inspection Program Administration

The Environmental Managers and the Division Manager are assigned responsibility to detect any unsafe conditions at the facility and prevent adverse consequences. These individuals have the authority to : (1) implement the required inspections, (2) perform necessary evaluations and hazard assessments, and (3) recommend appropriate corrective or remedial actions.

The level of response to a problem and its timing is determined by the nature and seriousness of the problem identified with protection of personnel and the prevention of adverse environmental impact

being of paramount concern. The Division Manager and the Environmental Manager are responsible for directing any remedial and corrective measures that may be required.

The inspection is performed according to a schedule based on operational knowledge and experience with the systems and processes involved. Each inspection item has the content and frequency necessary to alert facility personnel prior to development of a serious problem.

4.8 Documentation and Record Keeping

Inspections (and re-inspection) are documented on a monthly inspection form contained in Appendix A. The Environmental Manager is responsible for planning and implementing any required remedial actions. Records of any remedial actions are kept in the site's records.

All completed forms and attachments are filed in the facility's operating records. These are retained on site for a minimum period of three years from the date of the inspection

4.8.1 Monthly Facility Inspection

Potential spill sources and spill prevention facilities are inspected on a monthly basis as part of the site's overall monthly facility inspection, with results recorded on a monthly inspection form similar to the form located in Appendix A. The following inspection items are most applicable to the SPCC Program:

a. Aboveground Storage Tanks: Inspection will include aboveground foundation and tank structural supports. The outside of the tanks will be observed for signs of deterioration; leaks from seams, rivets, bolts, and gaskets; and accumulation of oil or hazardous substances inside containment structures. Liquid levels will be checked to verify the tanks have not been overfilled. Aboveground tanks may need to be subjected to periodic integrity testing.

b. Aboveground Piping. All aboveground valves and piping will be examined for general condition of items such as supports, flange joints, expansion joints, valve glands and bodies, and drip pans. Periodic pressure or other non-destructive integrity testing may be warranted for piping where facility drainage is such that a failure might lead to a spill event.

c. Containment Structures. Containment walls and berms will be inspected for accumulation of oil or hazardous substances and the source determined. Periodic visual inspections will be performed to ensure the integrity of containment walls and earthen berms.

d. Drum Storage Areas. Areas where lubricants or temporarily stored hazardous wastes are stored will be inspected for evidence of leaks, corrosion or damage. Proper labeling and storage practices will be verified.

4.9 Security - 112.7(e)(9)

4.9.1 Access Control - 112.7(e)(9)(i)

Access to the facility is controlled by a chain link fence or impassible terrain. Vehicular access in and out of the facility is controlled at the entrance gate.

4.9.2 Flow Drains and Valves - 112.7(e)(9)(ii)

There are no flow drains or valves on tanks located at this facility.

4.9.3 Facility Lighting - 112.7(e)(9)(v)

Fuel handling operations are conducted only during daylight hours, or under mobile lighting plants in event of an emergency. Adequate lighting is provided in the administrative area.

4.10 Personnel Training And Spill Prevention Procedures - 112.7(e)(10)

4.10.1 Personnel Training - 112.7(e)(10)(i)

Facility Personnel

a. Facility personnel will participate in annual training that teaches them to perform their duties in a way to prevent the discharge of harmful quantities of oil or hazardous substances. This training will include familiarization with material safety data sheets appropriate to the job assignment and emergency response procedures, and equipment.

b. Facility personnel will be instructed annually on their responsibilities for compliance with the requirements of the spill laws and emergency response regulations applicable to the facility.

c. Accurate records will be maintained of all spill prevention and emergency response training. All personnel training will be recorded on a form similar to the one located in Appendix B.

Tank Truck Drivers

Tank truck drivers loading or unloading materials at the facility shall adhere to the following guidelines:

a. Remain with the vehicle at all times while loading/unloading;

b. Drain the loading/unloading lines to the storage tank and close the drain valves before disconnecting said lines and make sure a drain pan or other appropriate containment device is located under all connections;

c. Inspect the vehicle before departure to be sure all loading/unloading lines have been disconnected and all drain and vent valves are closed; and immediately report any leakage or spillage, including quantity, to the SPCC Coordinator.

4.10.2 SPCC Coordinator - 112.7(e)(10)(ii)

The SPCC Coordinator designated on page (i) of this Plan is responsible for spill prevention and control, training of other personnel and also for response to any site emergency and for reporting emergencies to the appropriate authorities.

4.11 Spill Prevention and Response Briefings - 112.7(e)(10)(iii)

Appropriate facility personnel will be trained annually in spill and emergency response procedures. This training includes reporting, stopping, containing, cleaning up, and disposing of all spill materials, emergency communications, etc. The facility uses environmental self-assessments, monthly safety meetings and monthly inspections as a forum to assure adequate understanding of SPCC procedures by all employees.

5. EMERGENCY PROCEDURES / SPILL RESPONSE

5.1 General

The following sections describe procedures to be followed in the event of a spill or release of a petroleum product or other liquid addressed in the SPCC plan. Hazardous chemical spills are not covered under this plan and are handled per a separate Emergency Response Plan.

USEPA regulations define a spill event as the discharge of oil into, or upon, the navigable waters of the United States or adjoining shorelines, in harmful quantities. Harmful quantities are defined as a discharge that violates applicable water quality standards or causes a sheen upon, or discoloration of, the surface of the water or the adjoining shorelines. Contaminated ground water may also have the potential to seep, leach, or flow into navigable water that would be included in this definition. Storm sewers are considered to fall under the definition of a "navigable waterway" since most storm sewers discharge into a navigable waterway.

An important facet of an effective response procedure during an oil or substance release incident is to keep the material separated from water to minimize migration and the resulting potential increase in human and environmental exposure. Every effort should be made to prevent spills and emphasize substance containment at the source rather than resort to separation of the material from expanded portions of the environment or downstream waters.

5.2 Discovery of a Release

The person discovering a release of material from a container, tank, or operating equipment should initiate certain actions immediately.

- Extinguish any sources of ignition. Until the material is identified as nonflammable and noncombustible, all potential sources of ignition in the area will be removed. Vehicles will be turned off. If the ignition source is stationary, an attempt will be made to move spilled material away from the ignition source. Movement that could potentially create static electricity will be avoided.

- Attempt to stop the release at its source. **Assure that no danger to human health exists first**. Simple procedures (turning valves, plugging leaks, etc.) may be attempted by the discoverer if there is no health or safety hazard and there is a reasonable certainty of the origin of the leak. All efforts to control leaks must be under the supervision of the SPCC Coordinator or Assistance SPCC Coordinator. (This policy applies to the handling of petroleum-based products as described in this Plan. No Site personnel shall come into contact with unknown or hazardous substances illegally brought into the facility.)

- Initiate spill notification and reporting procedures. Report the incident immediately to the Supervisor and the SPCC Coordinator. If there is an immediate threat to human life (e.g. a fire in progress or fumes overcoming workers), an immediate alarm should be sounded to evacuate the building, and the fire department should be called. Request the assistance of the fire department's hazardous materials response team if an uncontrollable spill has occurred and/or if the spill has migrated beyond the site boundaries (see Section 6.2).

5.3 Containment of a Release

Most of the materials at the facility can be safely contained within secondary containment structures if a release occurs. However, if material is released outside the containment areas, it is critical that the material is accurately identified and appropriate control measures are taken in the safest possible manner. SDSs for petroleum products used at the facility are kept on file in the administrative office and maintenance shop and will be reviewed if a release outside of a containment area occurs.

a. Attempt to stop the release at the source. If the source of the release has not been found; if special protective equipment is necessary to approach the release area; or if assistance is required to stop the release, the fire department will be called to halt the discharge at its source. Facility personnel will be available to guide the fire department's efforts.

b. Contain the material released into the environment. Following proper safety procedures, the spill will be contained by absorbent materials and dikes using shovels and brooms. Applicable SDSs for material compatibility, safety, and environmental precautions will be reviewed.

c. Continue the notification procedure. Inform the SPCC Coordinator of the release (the Coordinator shall perform immediate notification as appropriate). Outside contractors will be hired to clean up the spill, if necessary.

5.4 Spill Cleanup

Appropriate personal protective equipment and clean-up procedures can be found in safety data sheets. Care must be taken when cleaning up spills in order to minimize the generation of waste. The Environmental Manager can provide assistance for the issues discussed below.

a. Recover or clean up the material spilled - As much material as possible should be recovered and reused where appropriate. Material that cannot be reused must be declared waste. Liquids absorbed by solid materials shall be shoveled into open top, 55-gallon drums; or if the size of the spill warrants, into a roll-off container(s). When drums are filled after a cleanup, the drum lids shall be secured and the drums shall be appropriately labeled (or re-labeled) identifying the substance(s), the date of the spill/cleanup, and the facility name and location. Combining non-compatible materials can cause potentially dangerous chemical and/or physical reactions or may severely limit disposal options. Compatibility information can be found in safety data sheets.

b. Cleanup of the spill area - Surfaces that are contaminated by the release shall be cleaned by the use of an appropriate substance or water. Cleanup water must be minimized, contained and properly disposed. Occasionally, porous materials (such as wood, soil, or oil-dry) may be contaminated; such materials will require special handling for disposal.

c. Decontaminate tools and equipment used in cleanup - Even if dedicated to cleanup efforts, tools and equipment that have been used must be decontaminated before replacing them in the spill control kit.

5.5 Post-Cleanup Procedures

a. Notification and reports to outside agencies. - The SPCC Coordinator shall determine if a reportable spill has occurred (See Sections 5.1 and 6.2). Verbal notifications to

government agencies and emergency planning committees shall be executed, if necessary. In all cases where verbal notification is given, a confirming written report shall be sent to the same entity.

b. Arrange for proper disposal of any waste materials. - The waste material from the cleanup must be characterized per the State and Federal Regulations. Representative sampling and analysis may be necessary to make this determination. In any case, the SPCC Coordinator shall assure that the waste is transported and disposed of in compliance with applicable laws and regulations. When manifests are needed, the SPCC Coordinator shall see that they are prepared and, when appropriate, returned in the allotted time by the disposal site.

c. Review the contingency and spill plans. - Management and operating personnel shall review spill response efforts, notification procedures, and cleanup equipment usage to evaluate their adequacy during the episode. Where deficiencies are found, the plan shall be revised and amended.

5.6 Internal Report

Spills that are regulated per this plan must be documented using the Log of Special Occurrence (Appendix C). The SPCC Coordinator , a site Environmental Manager or Environmental Specialist, shall prepare the report. At a minimum, the report will document the following items:

a. Date, time, and duration of release.
b. Source and total volume of the release.
c. Spill cleanup procedures.
d. Personnel who discovered and/or participated in the spill remediation.
e. Equipment used during the cleanup.
f. Waste disposal method.
g. Unusual events, injuries, or agency inspections.

5.7 Communications

In case of a fire, spill, or other emergency, paging systems and two-way radios can be used to contact personnel. Telephones are available at the landfill office; cellular phones are also available at the facility.

5.8 Spill, Fire, and Safety Equipment

Portable fire extinguishers are located throughout the facility, are well marked, and are easily accessible. Records are kept on all fire equipment in service and regular testing is performed in accordance with established procedures. Table 2 lists the fire extinguishers, spill, and safety equipment located on site.

Spill control equipment is kept primarily at the maintenance facility. Supplies of absorbent should be kept in the hazardous materials storage bin and any bins used for storage of petroleum products.

TABLE 2

SPILL, FIRE AND SAFETY EQUIPMENT

Purpose	Equipment	Location
Fire Protection	Fire Extinguishers	Each building – See Drawing 1 Landfill heavy equipment Landfill operations water truck
Spill Control / Containment	Disposal drum Oil Dry (or equivalent absorbent) Sorbent socks Shovels Brooms Drain pans	Maintenance Area
Safety Equipment	First Aid Kits Eyewash Stations Showers Portable radios & phones	Each building – See Drawing 1 Leachate treatment plant and maintenance area Locker rooms in break room (Bldg. C) All key personnel

6. IMMEDIATE REPORTING PROCEDURES/EMERGENCY CONTACTS

In the event of an accident or spill at the facility, the manager with direct responsibility for the day-to-day operation of the facility will contact the individuals listed below as soon as practical after the incident has occurred. Contact preference is in the order listed. If spill discharge to surface waters is imminent, the regulatory emergency agencies will be notified of the potential immediately as described below.

6.1 Internal Reporting

In the event of a spill on dry land or in on-site surface water drainage that is contained and recovered, the Local Enforcement Agency (LEA) will be notified as well as the following internal contacts shall be made:

Internal Call List

Name	Position	Office Phone	Pager / Cell
Kate Logan	Interim Operations Manager	(623) 241-8436	(817) 846-9023
Patti Costa	Environmental Manager	(818) 362-2075	(818) 822-2177
Chris Coyle	General Manager	(623) 241-8418	(818) 362-2141

6.2 Reporting to Outside Agencies

After the SPCC Coordinator (or designee) has been notified, he/she will conduct reporting to outside agencies.

6.2.1 Releases / Spills to Land, Air, Navigable or Other Waters

If a spill threatens to reach an off-site waterway, and the spill cannot be contained and recovered by facility personnel, then the following contacts shall be made in addition to the contacts in Section 6.1:

- **LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD**
  - (213) 576-6600

- **FIRE DEPARTMENT**
  - 911

6.2.2 Reporting Procedures

The following information shall be communicated in reporting to outside agencies:

a. name, title, telephone number, and address of reporter;
b. name, telephone number, and address of facility/spill;
c. time, type and amount of materials involved;
d. extent of injuries/illness, if known;
e. possible hazards to human health and environment;
f. any body of water involved;
g. the cause of accident/spill; and
h. the action taken or proposed by the facility/personnel.

6.3 Other Emergency Contacts

a. Hospital / Ambulance 911

b. Spill Cleanup

If landfill personnel cannot contain and re-cover a spill, and the Fire Department is not able or available to do so, the following private spill cleanup contractor will be contacted to provide assistance:

Patriot Environmental Services (661) 287-3737

APPENDIX A

MONTHLY INSPECTION FORM
(SAMPLE)

APPENDIX A

MONTHLY INSPECTION FORM
(SAMPLE)

SUNSHINE CANYON LANDFILL

FACILITY INSPECTION CHECKLIST - MONTHLY

LOCATION	INSPECTED BY	TODAY'S DATE

	1. HOUSEKEEPING	S/U/NA	DATE CORRECTED
	A. Yard and storage area orderly and well maintained		
	- Fluid materials (fuel , lubes, solvents, paints, etc.) stored in inside secondary containment		
	- Any drums stored outside are securely tarped.		
	- Closed containers provided for soiled rag disposal.		
	- All materials piled, racked or stored in a safe manner.		
	- Ladders in working order, slip feet maintained; no cradled or		
	- Secondary containment free of oil/water		
	- Protected from collision damage with barriers		
	- Fire extinguishers available		
	B. Condensate tank levels acceptable. No visible leaks.		
	C. Leachate tank levels acceptable. No visible leaks.		

	2. FIRE PREVENTION / EMERGENCY EQUIPMENT	S/U/NA	DATE CORRECTED
	A. Extinguishers inspected and serviced properly.		
	- Serviced a minimum of annually by licensed company.		
	- Checked monthly by designated company employee.		
	- Extinguishers accessible, location marked properly		
	- Tagged as to service date/repairman		
	- Hoses, standpipes, sprinkler heads in good condition		
	B. All equipment equipped with appropriate fire extinguishers or fire suppression systems		
	C. Smoking restrictions observed.		
	D. Fire blanket mounted and accessible.		
	E. Test fire, security detection / protection devices as required.		
	F. Test emergency lighting equipment if so equipped.		

3. HAZARDOUS MATERIALS AND INSPECTION CHECKLIST	S/U/NA	DATE CORRECTED
A. Perimeter fencing is intact.		
B. Gate lock in working condition.		
C. Proper signage in place.		
- Hazardous Waste Storage Area signs are legible and securely hung.		
- No Smoking signs posted.		
- 4-colored hazardous waste placard hung.		
D. No incompatible waste storage exists.		
- Bleach / Peroxide / Oxidizers are not stored by gasoline, batteries,		
- Batteries are stored in vented, water-tight plastic containers.		
- Miscellaneous reactive waste is stored away from flammable waste.		
- Acids are stored away from bases and lime.		
- All hydrocarbons are stored separately from acids and bases		

SUNSHINE CANYON LANDFILL

FACILITY INSPECTION CHECKLIST - MONTHLY

E. All waste containers are intact		
- Leaking containers are in plastic totes		
- Containers showing signs of corrosion are placed in plastic totes.		
- Check secondary containment pallets for holes or leaks		
- Check base of hazardous lockers for corrosion / holes		
F. All drums are labeled		
- Drums and storage areas with materials are clearly labeled for		
- Drums holding hazardous waste have been labeled with an accumulation sticker listing: - date of initial waste accumulation - landfill name and address - composition and physical state of the waste - California Waste Identification Number - Landfill RCRA identification number		

ABOVE-GROUND STORAGE TANK INSPECTION RECORD						
Tank Name / Number						
Location						
Contents						
Liquid level indicator inspected and found working properly; liquid levels acceptable.						
Signs of damage of deterioration to piping, supports, valve or joints?	Yes					
	No					
Signs of damage or deterioration of containment?	Yes					
	No					
Comments						

SUNSHINE CANYON LANDFILL

FACILITY INSPECTION CHECKLIST - MONTHLY

Describe Leaks and/or Spills	
Corrective Action Taken	

SUMMARY AND COMMENTS	
SIGNATURE	TODAY'S DATE

APPENDIX B

PERSONNEL TRAINING RECORD
(SAMPLE)

PERSONNEL TRAINING RECORD
SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
SUNSHINE CANYON LANDFILL

Description of Training

Instructor Date

EMPLOYEES' NAMES

Printed Name	Signature

APPENDIX C

SPECIAL OCCURRENCES REPORT FORM (SAMPLE)

Sunshine Canyon Landfill

14747 San Fernando Rd.

Sylmar, CA 91342

Tel: 818/ 362-1567

Fax: 818/362-5484

SUNSHINE CANYON LANDFILL

A REPUBLIC SERVICES COMPANY

CITY/COUNTY - REPORT OF SPECIAL OCCURRENCES

	OCCURRENCE #: 1
DATE: SAMPLE	TIME: SAMPLE
REPORT MADE BY: SAMPLE	POSITION: SAMPLE

Check One:

- ☐ Fire
- ☐ Accident
- ☐ Earthquake
- ☐ Explosion
- ☐ Unusual and Sudden Settlement
- ☐ Presence of Hazardous Waste
- ☐ Injury
- ☐ Flooding
- ☐ Other Unusual Occurrences
- ☐ Landslide

Detailed Description of Occurrence:

Actions taken to mitigate this occurrence:

ATTACHMENT 3
WASTE MANIFESTS

engineers | scientists | innovators

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	N/A	1	714-639-7873	17-331

5. Generator's Name and Mailing Address

Sunshine Gas Producers, LLC
14747 San Fernando Road
Sylmar, CA 91342

Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Pure Effect, Inc.

U.S. EPA ID Number: N/A

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

California Carbon
2625 East Grant Street
Wilmington, CA 90744

Facility's Phone: 562-436-1962

U.S. EPA ID Number: N/A

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1. Spent Non-Haz Carbon Media	2	BA	1200	P
2. Spent Non-Haz Carbon Media 2 55 gal drums		DM		P
3. Spent GAC sent to Cal. Carbon				
4. for reactivation.				

13. Special Handling Instructions and Additional Information

Always Wear Proper PPE

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Darrell Hansen | Signature: Darrell Hansen | Month 8 | Day 17 | Year 17

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Jose Alonso | Signature | Month 8 | Day 17 | Year 17

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name | Signature | Month | Day | Year

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

Pure Effect
ENVIRONMENTAL

PACKING SLIP

Date: 1-26-2016

Quote No: PE0119163-CTO

Company: Republic Services Procurement, Inc.
Address: Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342
Attn: Achaya Kelapanda
Phone: 818-833-6508
Fax: 818-362-5484
Project Name:

Ship To: Sunshine Canyon Landfill
Address: 14747 San Fernando Road
Sylmar, CA 91342
Contact: Darryl
Phone: 818-652-5330
Fax:
Customer Representative: ***Caleb Osborne***
Pure Effect Job#: 16-104 #1

F.O.B.: Jobsite	**Terms:** Net 30 Days	**P.O. #: PO5568811**
Shipping: Pure Effect Truck	**Scheduled: 1-27-2016 @ 6am**	**Order Date: 1-20-2016**

Quantity	Description
10,000 lbs	Vacuum and Rebed Service Includes – Transportation, Labor to Vacuum and Dispose of Non-Hazardous Spent Carbon, Refill w/ Activated Carbon (4mm) – Liquid Phase Vessels (Sub-Drain System & Cutoff Wall Site)
1	Reach Lift Rental Charge per Day
	Spent Carbon was sent to California Carbon
	for reactivation

Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by arbitration in accordance with the Uniform Rules of Better Business Arbitration, and judgment upon the award rendered by the Arbitrator (s) may be entered in any Court having jurisdiction thereof.

Signature: Darryl Hansen **Date:** 1/27/16

601 W. Valencia Dr. Fullerton, CA 92832 (714) 639-PURE Fax (714) 639-8530

Pure Effect
ENVIRONMENTAL

PACKING SLIP

Date: 5-17-2016

Quote No: PE0119163-CTO

Company: Republic Services Procurement, Inc.
Address: Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342
Attn: Achaya Kelapanda
Phone: 818-833-6508
Fax: 818-362-5484
Project Name:

Ship To: Sunshine Canyon Landfill
Address: 14747 San Fernando Road
Sylmar, CA 91342

Contact: Darryl
Phone: 818-652-5330
Fax:
Customer Representative: *Caleb Osborne*

Pure Effect Job#: ~~16-104~~ 75 #2 16-103#2

F.O.B.: Jobsite	**Terms:** Net ~~30~~ Days	**P.O. #: PO5797371**
Shipping: Pure Effect Truck	**Scheduled: 5-19-2016 @ 6am**	**Order Date: 5-09-2016**

Quantity	Description
6,000 lbs	Vacuum and Rebed Service Includes – Transportation, Labor to Vacuum and Dispose of Non-Hazardous Spent Carbon, Refill w/ Activated Carbon (4mm) – Liquid Phase Vessels (Leachate Treatment Plant)
1	Reach Lift Rental Charge per Day
	Spent Carbon was sent to California Carbon
	for reactivation

Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by arbitration in accordance with the Uniform Rules of Better Business Arbitration, and judgment upon the award rendered by the Arbitrator (s) may be entered in any Court having jurisdiction thereof.

Signature: D. Henrison **Date:** 5/19/16

601 W. Valencia Dr. Fullerton, CA 92832 (714) 639-PURE Fax (714) 639-8530

Pure Effect
ENVIRONMENTAL

PACKING SLIP

Date: 12-06-2016

Quote No: PE111816-CTO

Company: Republic Services Procurement, Inc.
Address: Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342
Attn: Achaya Kelapanda
Phone: 818-833-6508
Fax: 818-362-5484
Project Name:

Ship To: Sunshine Canyon Landfill
Address: 14747 San Fernando Road
Sylmar, CA 91342
Contact: Darryl
Phone: 818-652-5330
Fax:
Customer Representative: ***Caleb Osborne***
Pure Effect Job#: 16-103 #3

F.O.B.: Jobsite	**Terms:** Net 30 Days	**P.O. #: PO6203629**
Shipping: Pure Effect Truck	**Scheduled: 12-08-2016 @ 7am**	**Order Date: 11-21-2016**

Quantity	Description
6,000 lbs	Vacuum and Rebed Service Includes – Transportation, Labor to Vacuum and Dispose of Non-Hazardous Spent Carbon, Refill w/ Activated Carbon (4mm) – Liquid Phase Vessels (Gray Water System)
1	Reach Lift Rental Charge per Day
	Spent Carbon was sent to California Carbon
	for reactivation.

Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by arbitration in accordance with the Uniform Rules of Better Business Arbitration, and judgment upon the award rendered by the Arbitrator (s) may be entered in any Court having jurisdiction thereof.

Signature: _____ **Date:** 12/8/16

601 W. Valencia Dr. Fullerton, CA 92832 (714) 639-PURE Fax (714) 639-8530

Pure Effect
ENVIRONMENTAL

PACKING SLIP

Date: 10-07-2015

Quote No: 30620151-JHS/MS

Company: Republic Services Procurement, Inc.
Address: Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342
Attn: Achaya Kelapanda
Phone: 818-833-6508
Fax: 818-362-5484
Project Name:

Ship To: Sunshine Canyon Landfill
Address: 14747 San Fernando Road
Sylmar, CA 91342
Contact: Darryl
Phone: 818-652-5330
Fax:
Customer Representative: ***Michael Slaby***
Pure Effect Job#: 15-241 #2

F.O.B.: Jobsite	**Terms:** Net 30 Days	**P.O. #: PO5339774**
Shipping: Pure Effect Truck	**Scheduled: 10-12-2015 @ 7am**	**Order Date: 10-02-2015**

Quantity	Description
6,000 lbs	Vacuum and Rebed Service Includes – Transportation, Labor to Vacuum and Dispose of Non-Hazardous Spent Carbon, Refill w/ Activated Carbon (4mm) – Liquid Phase Vessels
1	Reach Lift Rental Charge per Day
	Spent Carbon was sent to California Carbon
	for reactivation

Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by arbitration in accordance with the Uniform Rules of Better Business Arbitration, and judgment upon the award rendered by the Arbitrator (s) may be entered in any Court having jurisdiction thereof.

Signature: _____ **Date:** 10/12/15

601 W. Valencia Dr. Fullerton, CA 92832 (714) 639-PURE Fax (714) 639-8530

Pure Effect
ENVIRONMENTAL

PACKING SLIP

Date: 10-07-2015

Quote No: 803201511-JHS/MS

Company: Republic Services Procurement, Inc.
Address: Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342
Attn: Achaya Kelapanda
Phone: 818-833-6508
Fax: 818-362-5484
Project Name:

Ship To: Sunshine Canyon Landfill
Address: 14747 San Fernando Road
Sylmar, CA 91342
Contact: Darryl
Phone: 818-652-5330
Fax:
Customer Representative: ***Michael Slaby***
Pure Effect Job#: 15-536

F.O.B.: Jobsite	**Terms:** Net 30 Days	**P.O. #: PO5339776**
Shipping: Pure Effect Truck	**Scheduled:** 10/13/15 & 10/14/15 @ 7am	**Order Date: 10-02-2015**

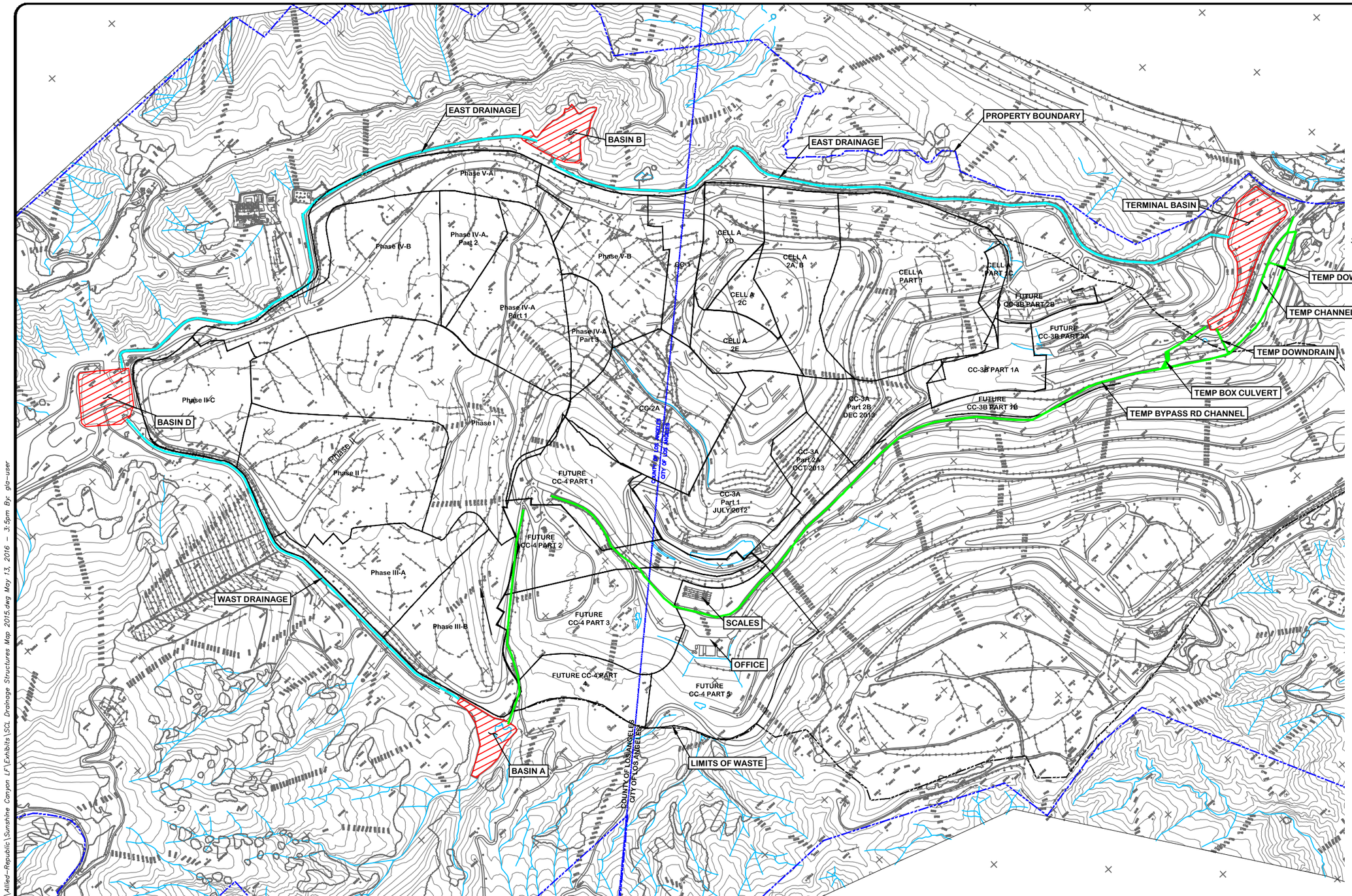
Quantity	Description
10,000 lbs	Vacuum and Rebed Service Includes – Transportation, Labor to Vacuum and Dispose of Non-Hazardous Spent Carbon, Refill w/ Activated Carbon (4mm) – Liquid Phase Vessels
2 Days	Reach Lift Rental Charge per Day
2	Pure Effect Fee for Manifold Cleaning
	Spent Carbon was sent to California Carbon
	for reactivation

Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by arbitration in accordance with the Uniform Rules of Better Business Arbitration, and judgment upon the award rendered by the Arbitrator (s) may be entered in any Court having jurisdiction thereof.

Signature: D. Hamser **Date:** 10/14/15

601 W. Valencia Dr. Fullerton, CA 92832 (714) 639-PURE Fax (714) 639-8530

ATTACHMENT E



FOR_REVIEW_ONLY

REV. NO.	DATE	DESCRIPTION	APPROVED BY
R□□1	D□□□1	D□□□R□□□□	DR□□ □1
R□□□	D□□□□	D□□□R□□□□□	DR□□ □□
R□□□	D□□□□	D□□□R□□□□	DR□□ □□
R□□□	D□□□□	D□□□R□□□□	DR□□ □□
R□□5	D□□□5	D□□□R□□□□5	DR□□ □5
R□□6	D□□□6	D□□□R□□□□6	DR□□ □6

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DIGALERT 811

Geo-Logic ASSOCIATES

REPUBLIC SERVICES

DWG NO. 1

C:\Users\glo-user\Documents\Allied-Republic\Sunshine Canyon LF\Exhibits\SCL Drainage Structures Map 2015.dwg May 13, 2016 - 3:50pm By: glo-user

ATTACHMENT F

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

June 15, 2016

IN REPLY PLEASE
REFER TO FILE: EP-5

Mr. Rob Sherman, General Manager
Sunshine Canyon Landfill
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342-1021

SUNSHINE CANYON CITY/COUNTY LANDFILL
CONDITIONAL USE PERMIT NO. 00-194-(5)
COMMENTS ON THE REVISED WEST DRAINAGE CHANNEL MASTER PLAN

Dear Mr. Sherman:

We have reviewed the following documents submitted by Republic Services, Inc. (Republic) to the Los Angeles County Department of Public Works (Public Works) for the revised West Drainage Channel Master Plan Project:

- Private Drain No. XXXX – Sunshine Canyon Landfill West Drainage, submitted by Republic to Public Works on December 10, 2015; and
- Surface Water Drainage Analysis – West Drainage Master Plan, submitted by Republic to the Los Angeles Regional Water Quality Control Board on January 9, 2015.

Based on our review, the following are our comments:

General Design
Please see enclosed plans containing comments on the Revised WDC Master Plan.

Geotechnical and Materials
The Surface Water Drainage Analysis for the Landfill's WDC Master Plan appears to conceptually meet the proposed development needs. However, in order for the design to be accepted as permanent, it will be necessary to meet all minimum County standards and those standards set forth in the California Code of Regulations, Title 27, Section 21750; Conditional Use Permit No. 00-194-(5) Condition No. 38; and applicable portions of the 2014 County of Los Angeles Building Code.

The following comments must be addressed prior to recommendation of the proposed West Drainage Private Drain for approval by Public Works.

1. Provide a geotechnical map that complies with the provisions of the County of Los Angeles Department of Public Works *Manual for Preparation of Geotechnical Reports*. The geotechnical map shall be based on the proposed improvement plans.

   As outlined in the Department of Public Works Manual for Preparation of Geotechnical Reports, the geotechnical map must show the following:

   a. The aerial distribution of geologic materials with sufficient lateral extent beyond the property limits to determine the potential adverse effects on existing landfill operations and off-site properties, as appropriate, with sufficient geologic symbols to depict clearly site geology.

   b. Existing landfill cell limits; landslides and their limits; all geotechnical cross-sections, including those utilized for slope stability analyses; springs and seeps (discharge rate should be noted); subdrains; limits of shear keys, keyway excavations, and buttress fills; geotechnical hazard setback lines/planes; exploratory excavations and borings locations, including those not removed by grading; and any areas of over-excavation and replacement.

2. All relevant subsurface data and associated logs (soil borings, groundwater wells, borings with inclinometers, gas monitoring wells, etc.) referenced on the geotechnical map must be provided in the report.

3. Natural and manmade slopes with slope gradients steeper than 2:1 (horizontal:vertical) (h:v) or where geologic structure may adversely affect slopes with shallower slope gradients shall be analyzed for slope stability with respect to the proposed improvements.

4. Geotechnical cross-sections shall include all relevant subsurface explorations; illustrate geologic contacts; indicate true and apparent dips of bedding and other discontinuities, such as joints, fractures, faults, etc.; potentiometric surface; seeps; and all other relevant geologic details.

5. Appropriate bedding plane and joint/fracture shear strengths representative of site-specific geologic materials shall be represented in the stability analyses, as appropriate. Provide supporting data for all material strengths utilized in slope stability analyses.

Note: Shear strength values provided in Table No. 20 of the JTD may be used only in seismic slope stability analyses. They are not appropriate for use in static slope stability analyses.

6. Provide static, seismic, and surficial slope stability analyses for all conditions that may impact or alter (i.e. horizontal and/or vertical displacement) the drainage paths of the channel alignment.

7. For each stability analysis presented, a corresponding detailed geotechnical cross-section shall be provided that shows the distribution of geologic materials. The critical failure plane and the various shear strength parameters used in the appropriate segments of each failure plane shall be shown on the analyses. If factors of safety are below County minimum standards then mitigation measures shall be presented.

8. Stability analyses shall investigate the various slope stabilities that may be affected by the proposed development. Methods of analyses (i.e. circular, translational or block, non-circular, etc.), the limit equilibrium methods (i.e. Ordinary Method of Slices, Modified Bishop Method, Morgenstern-Price based General Limit Equilibrium, etc.), and their related analyzed slip surfaces shall be comprehensive and determine the critical failure plane and factor of safety.

9. The Surface Water Drainage Analysis for Sunshine Canyon Landfill West Drainage Channel Master Plan document acknowledged a potential for settlement to occur over those portions of the proposed private drain alignment that traverse existing waste areas.

    a. Provide specific numerical values for the potential total static and seismically induced settlements. All settlement values shall be supported by appropriate data and analyses. Provide mitigation recommendations for all areas where values exceed County settlement policies.

    b. Provide specific distances over which the differential settlement may occur. Refer to the aforementioned Department of Public Works Manual for Preparation of Geotechnical Reports for County standards.

    c. Recommended mitigation measures shall be made part of the plans.

    Note: All mitigation measures on the plans shall be constructed.

10. Address the flow gradient for the proposed West Drainage Private Drain that may experience settlement (even tolerable differential settlement). Provide specific recommendations for preventing areas to create ponding within the private drain. Any section that exceeds permitted flow levels within the channel shall include protective slope improvements to prevent concentrated slope erosion and potentially exposure of buried waste. Provide recommended mitigation measures and details on the plans as necessary.

11. Provide chemical test results (sulfate, chloride, resistivity, etc.) for the on-site soils to address the presence of chemicals deleterious to construction materials and utility lines. The chemical tests must be in accordance with California Test Methods, Department of Transportation, or equivalent. Aqueous solution tests, such as EPA Tests or similar methods, are not acceptable for determination of resistivity. Resistivity tests must be performed on soils in a saturated condition. Recommend mitigation as necessary.

12. In accordance with Section 111 of the County of Los Angeles Building Code, the geotechnical consultant(s) shall make a finding regarding the safety of the site of the proposed work against hazard from landslide, settlement, or slippage and a finding regarding the effect that the proposed building or grading construction will have on the geotechnical stability of the area outside of the proposed work. The finding must be substantiated by appropriate data and analyses and be included in the geotechnical report.

13. Include details for fill placed over existing terrain steeper than 5:1 gradient and a keying and benching detail with all dimensions as determined by a Soils Engineer in the Design Report and plans.

14. Submit plans for verification of compliance with County codes and policies. Plans (scaled at 1-inch ≤ 40-feet) shall include, at a minimum, the following, where applicable:

    a. Existing and proposed grades;
    b. Slope gradients;
    c. Subdrain systems;
    d. Removal and recompaction depths and limits;
    e. Location of existing and proposed channels and related drainage features;
    f. Grading sequences (e.g. ABC slot-cutting or removal of landslide driving force before removing supporting toe, etc.); and

g. All standard general geotechnical notes and fill notes regarding fill compaction and density testing requirements.

Additional drainage and grading requirements of the Department of Public Works can be accessed at http://dpw.lacounty.gov/bsd/publications, typical grading requirements are provided on the Grading Review Sheet (see http://dpw.lacounty.gov/bsd/lib/fp/Drainage and Grading/Plan Check Documents/Grading Review Sheet (12-23-15).pdf). All applicable grading and drainage requirements shall be incorporated into the plans.

15. All geotechnical reports submitted for review must include an electronic copy of the report on a Compact Disk in Adobe® Portable Document Format (PDF). The electronic version shall include an electronically generated representation of the licensee's seal, signature, and date of signing.

Review Exclusions

The following list of items are beyond the scope of this geotechnical review and are assumed to be addressed by others agencies, such as the Regional Water Quality Control Board, except for when those design items potentially affected slope stability analyses of interim and final slope gradients that may have potential health and safety issues or adverse effects to off-site properties:

- Surficial stability of final cover slopes shallower than 2:1 (h:v);
- Potential deformation of final cover under static and seismic loading;
- Design and evaluation of base liner section, alternate liner section, and slope liner section;
- Protective layer (operation layer);
- Landfill gas collection system;
- Leachate collection and removal system.

Water Resources

The following comments on the Private Drain No. XXXX – Sunshine Canyon Landfill West Drainage Plans:

1. **DWG No. 02.** Within the Hydraulic Element table, double-check whether Line C should be from Sta 71+00 to 76+47.46, instead of from 71+00 to 75+47.46.

2. **DWG No. 03.** The interim flow of 700 cubic feet per second (cfs) does not appear in the hydrology of the West Drainage Channel. Please discuss the interim flow of 700 cfs, its source, timing, and impact to the receiving drain

"Line A." Without further context, it appears the incoming flows to Line A consist of 700 cfs from Line E and 1,245 cfs from Line B while the capacity of Line A is 1266 cfs.

3. **DWG No. 06.** Pertaining to the upper chart, the capacity of 724 cfs should be depicted downstream from Sta 37+00.

4. **DWG No. 06.** Pertaining to the upper chart, double check whether the capacity should be shown as Q = 764 cfs, instead of Q = 760 cfs.

5. **DWG No. 10.** Pertaining to Line F, the pipe should be able to pass the burned flow rate of 86 cfs instead of 81 cfs. Pertaining to Line E: the pipe should be able to pass the burned flow rate of 60 cfs instead of 56 cfs.

6. **DWG No. 11.** Pertaining to Debris Basin No. 2, there appears to be duplicate labeling of the concrete channel.

Final review of this Project is contingent upon the approval of Cell CC-4 Development Project and/or any future projects or grading that may alter the design and analysis of the WDC Master Plan.

If you have any questions, please contact Mr. Martins Aiyetiwa at (626) 458-3553, Monday to Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

GAIL FARBER
Director of Public Works

MARTIN AIYETIWA
Senior Civil Engineer
Environmental Programs Division

KM:jl
P:\Sec\PW Comments to SCL West Drainage.doc

Enc.

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

October 24, 2016

Ms. Patti Costa, Environmental Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342

APPROVAL OF REVISED WEST DRAINAGE CHANNEL MASTER PLAN - SUNSHINE CANYON LANDFILL, SYLMAR, CALIFORNIA (FILE NO. 58-076, ORDER NO. R4-2008-0088, GEOTRACKER GLOBAL ID NO. L10006014618)

Dear Ms. Costa:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), is in receipt of your letter dated April 27, 2016, transmitting a revised *Surface Water Drainage Analysis, West Drainage Channel Master Plan, Sunshine Canyon Landfill* (Revised Plan), dated January 7, 2015, that was submitted to the State Water Resources Control Board Geotracker data system on April 27, 2016. The Revised Plan provides updated analysis and design details for the construction of the West Drainage Channel at the Sunshine Canyon City/County Landfill (Landfill), which is owned and operated by Republic Services (Discharger) and regulated under waste discharge requirements (WDRs) included in Order No. R4-2008-0088 adopted by this Regional Board on October 2, 2008.

The initial plan was submitted to the Regional Board on March 28, 2014. In a letter dated July 1, 2014 (copy attached), Regional Board staff provided comments that, among others, expressed concerns about potential damages that may be caused by differential settlements of the closed City Landfill No. 1, over which part of the drainage channel will be constructed. In addition, the letter included comments from the Los Angeles County Department of Public Works (LACDPW) on the technical aspects of the plan.

Reginal Board staff have reviewed the Revised Plan and has determined that comments included in our July 1, 2014, letter have been adequately addressed. Specifically, the Revised Plan proposes to use Geocell-reinforced concrete with a geogrid reinforcement layer in the foundation of the channel in areas underlain by the closed landfill unit. We concur that such a design is expected to be able to offset the effects of potential differential settlements of the existing waste mass. The Revised Plan is therefore approved. In accordance with Section K (Provisions for Drainage and Erosion Control) of the WDRs, all drainage structures at the Landfill shall be protected and maintained continuously to ensure their effectiveness. The Discharger is responsible to inspect, repair, and replace the drainage channel if damages occur during the active life and post-closure period of the Landfill.

Please note that approval of the Revised Plan by the Reginal Board staff is in conjunction with its approval and clearance by other regulatory agencies, including the LADPW. In accordance

with Requirement M.3. of the WDRs[1], approval of the Revised Plan by the Regional Board does not release the Discharger from the responsibility of complying with any other laws and regulations that may be enforced by other regulatory agencies.

A public notice regarding this approval was sent to known interested parties on September 12, 2016, to meet General Provision No. M.22. of the WDRs, which states: "*During oversight of this Order, wherever the Executive Officer is authorized to grant any approval under a particular provision of this Order, the Executive Officer is directed to assess if there is controversy associated with the decision following public notice and, if so, bring the decision to the Regional Board for approval.*" The deadline for submitting comments regarding this matter was October 12, 2016. We received no comments regarding this matter during the period.

If you have any questions, please contact Dr. Wen Yang, Chief of the Land Disposal Unit, at (213) 620-2253 or wyang@waterboards.ca.gov.

Sincerely,

Samuel Unger, P.E.
Executive Officer

Enclosure

Mailing List:

Leslie Graves, State Water Resources Control Board (Leslie.Graves@Waterboards.ca.gov)
Michael Wochnick, CalRecycle (Michael.Wochnick@CalRecycle.ca.gov)
Gerardo Villalobos, Sunshine Canyon Landfill LEA (gvillalobos@ph.lacounty.gov)
David Thompson, Sunshine Canyon Landfill LEA (david.thompson@lacity.org)
Martin Aiyitiwa, Los Angeles County Department of Public Works (MAIYET@dpw.lacounty.gov)
Mohsen Nazemi, South Coast Air Quality Management District (MNazemi1@aqmd.gov)
Richard Slade, Upper Los Angeles River Area Watermaster (ularawatermaster@rcslade.com)
Mitchell Englander, Councilmember, 12th District, City of LA (councilmember.Englander@lacity.org)
Ly Lam, City of Los Angeles Department of City Planning (ly.t.lam@lacity.org)
Dave Nguyen, Los Angeles County Department of Public Works (DNGUYEN@dpw.lacounty.gov)
Wayde Hunter, North Valley Coalition, Granada Hills (WHunter01@aol.com)
Wayne Aller, Knollwood Property Owners Association, Granada Hills (waynealler07@hotmail.com)
Becky Bendickson, Granada Hills North Neighborhood Council (bebend99@gmail.com)
Kim Thompson, Granada Hill North Neighborhood Council (kimthompson@socal.rr.com)

---

[1] Requirement M.3. of the WDRs states: "*These requirements do not exempt the Discharger from compliance with any other current or future law that may be applicable. They do not legalize this waste management facility, and they leave unaffected any further restraints on the disposal of wastes at this waste management facility that may be contained in other statutes.*"

Wayne Adelstein, North Valley Regional Chamber of Commerce (wayne@nvrcc.com)
Ralph Kroy, LA City Sunshine Canyon Landfill Community Advisory Committee (REKroy@aol.com)
Robert Sherman, Republic Services (RSherman@republicservices.com)
Patti Costa, Republic Services (PCosta@republicservices.com)

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

July 1, 2014

Ms. Patti Costa, Environmental Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342

COMMENTS ON WEST DRAINAGE CHANNEL MASTER PLAN - SUNSHINE CANYON LANDFILL, SYLMAR, CALIFORNIA (FILE NO. 58-076, ORDER NO. R4-2008-0088, WDID NO. 4B190329001)

Dear Ms. Costa:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), has received from you a report titled *Surface Water Drainage Analysis, West Drainage Channel Master Plan, Sunshine Canyon Landfill, Los Angeles County, California* (Plan), dated March 2014, prepared by GeoLogic Associates, and submitted to the Regional Board on March 28, 2014.

The Sunshine Canyon (Landfill) is a Class III municipal solid waste landfill that is owned and operated by Republic Services Company and regulated under wasted discharge requirements (WDRs) included in Order No. R4-2008-0088 adopted by the Regional Board on October 2, 2008. In a letter dated August 29, 2013, the Regional Board staff approved a design report for the Phase CC-3B liner construction at the Landfill, with the condition that a detailed design plan for the West Drainage Channel, a permanent storm drain that will be constructed concurrently with the proposed Phase CC-3B liner system, be submitted for the approval of Regional Board staff. The Plan was submitted to meet this condition. Meanwhile, the Plan was also submitted to the Los Angeles County Department of Public Works (LACDPW) for its review.

Regional Board staff has reviewed the Plan and consulted with staff of the LACDPW on the technical aspects of the proposed design. The LACDPW provided its comments on the Plan with a letter addressed to you dated June 16, 2014 (copy attached). The Regional Board staff concurs with those comments in the LACDPW letter and has additional comments on the Plan as follows:

1. A significant portion of the proposed drainage channel will be constructed on top of the City Landfill Unit 1, which has been closed since 1971. A major concern is that differential settlement within the waste mass of the closed landfill could cause serious damage to the proposed concrete channel once it is constructed. Although the Plan proposes a cross section for the portion of the drainage channel over the waste mass (Drawing No. C12) that is different from the cross section for the portion of the channel over native soil (Drawing No. C11), it does not include a discussion to demonstrate that such a design will be adequate to prevent significant damages to the channel that may be caused by differential settlement.

2. Attachment C of the Plan includes drawings of maps, cross sections, and detailed layout of the proposed drainage channel. However, there is no discussion in the Plan to illustrate the purpose of each drawing. Many features and symbols in those drawings are not adequately labeled or referenced. This makes the drawing hard to following and in some cases, not legible. For example, Drawing No. C10 presents two cross sections (Section A-A' and Section B-B'), but there is not a map showing where those cross sections are located and no explanation on the purpose of such cross sections is found in the Plan.

3. Section 5 and Attachment H of the Plan discuss an alternative outfall alignment for the proposed West Drainage Channel. Since the alternative layout involves an extension of the proposed channel line and the excavation of wastes that have been disposed of at the closed City Landfill, a revised design plan must be reviewed and approved by the Regional Board and other regulatory agencies with jurisdiction over the landfill, if the drainage channel is constructed following the alternative outfall alignment.

4. Section D.1. of the WDRs requires that "*All containment structures and erosion and drainage control systems at the Landfill shall be designed and constructed under direct supervision of a California-registered civil engineer or certified engineering geologist, and shall be certified by the individual as meeting the prescriptive standards and/or performance goals of 27 CCR.*" Such a certification is not included in the Plan.

Please address the above comments and the comments provided by the LACDPW in its letter dated June 16, 2014, and submit a revised design plan for the project. Construction of the proposed drainage channel shall not be started until a design plan and final construction plans for the project are approved by the Regional Board staff.

If you have any questions, please contact Dr. Wen Yang, Chief of the Land Disposal Unit, at (213) 620-2253 or wyang@waterboards.ca.gov.

Sincerely,

Samuel Unger

Samuel Unger, P.E.
Executive Officer

Enclosure: Letter from Los Angeles County Department of Public Works, dated June 16, 2014

cc: Emiko Thompson, Los Angele County Department of Public Works
Gerardo Villalobos, Sunshine Canyon Landfill LEA
David Thompson, Sunshine Canyon Landfill LEA
Eugene Tseng, City of Los Angeles, Environmental Affairs Department
Wayde Hunter, North Valley Coalition, Granada Hills

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

June 16, 2014

IN REPLY PLEASE REFER TO FILE EP-5

Ms. Patti K. Costa
Environmental Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342-1021

Dear Ms. Costa:

WEST DRAINAGE CHANNEL MASTER PLAN
SURFACE WATER DRAINAGE ANALYSIS REPORT
SUNSHINE CANYON CITY/COUNTY LANDFILL

We reviewed your Surface Water Drainage Analysis report for the West Drainage Channel Master Plan dated March 2014 pursuant to Condition No. 38 of the Sunshine Canyon City/County Landfill Conditional Use Permit No. 00-194-(5) and have the following comments:

- The Drainage Map, Figure 1, provided under Attachment D shall include adequate topography, clarity, and resolution to depict watershed delineation. Each subarea shall be clearly labeled, and subarea collection points shall be shown. The Time of Concentration path from the most remote point of the subarea to the outlet of the subarea shall also be clearly identified. Elevations at the top and at the outlet point of each subarea shall be shown. The paths through which surface flows from the subareas are conveyed to the proposed West Drainage Channel shall also be shown. All drawings including any details, as well as any attachments must be clearly legible in order to facilitate proper review.

- The final outlet from the downdrain/impact basin area into the Terminal Basin is not clearly depicted in any of the design plans or drainage plans. This information shall be provided in the resubmittal which shall include details for the connection of the West Drainage Channel to the Terminal Basin. Details should include but not be limited to alignment profile and cross sections.

- Subarea SA1 is greater than 40 acres and should be further divided to meet Public Works' hydrology standards. The optimum size for a subarea in the County approved Modified Rational Method model is 40 acres. However, smaller subareas are acceptable.

- Section 3.0 – "Surface Water Drainage Analysis," references the Santa Clara River Watershed. However, the receiving drainage system for the Sunshine Canyon Landfill's watershed is Bull Creek, a tributary to the Los Angeles River which is part of the Los Angeles River Watershed. Accordingly, all drainage run-off analyses shall utilize parameters including fire factors, debris production rates, and peak bulk factors, attributable to the Los Angeles River Watershed, rather than the Santa Clara River Watershed.

- The assumption made in Section 4.0 – "Control Structure Sizing," regarding the non-additive nature of runoff flows generated by the surrounding tributary areas to the Western Drainage Channel cannot be claimed. Some flows will be additive to the 480 cubic feet per second peak outflow rate from Basin A. In order to identify the peak flow rate conveyed within the channel and the downdrain, hydrographs from Basin A and each subarea tributary to the West Drainage Channel must be routed together along the reaches of the West Drainage Channel to the Terminal Basin. The resulting peak outflow rate into the Terminal Basin shall be reevaluated to determine the cumulative flow routing effects due to various factors such as channel storage and timing.

- The current hydrologic analysis for the West Drainage Channel is not based on the topography at the point of the landfill's built-out condition. At build-out a substantial area, shown as the area highlighted in red on the enclosed Drainage Map, will become tributary to the West Drainage Channel. Also, not included in the hydrologic analysis is the contribution from the immediate area south of the trapezoidal channel shown as the area highlighted in yellow on the enclosed Drainage Map. Both of these areas shall be included in the hydrologic analysis.

- Under Attachment C, some of the "Alignment Profile" drawings did not reference the correct "Details" drawings. Detailed call-outs on drawings should be labeled correctly with appropriate symbols (as shown in Drawing No. G01) to ensure that all "Alignment Profile" and "Details" drawings are referenced appropriately.

Please address these comments and resubmit a revised West Drainage Master Plan for further review. If you have any questions, please contact Ms. Emiko Thompson at (626) 458-3521, Monday to Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

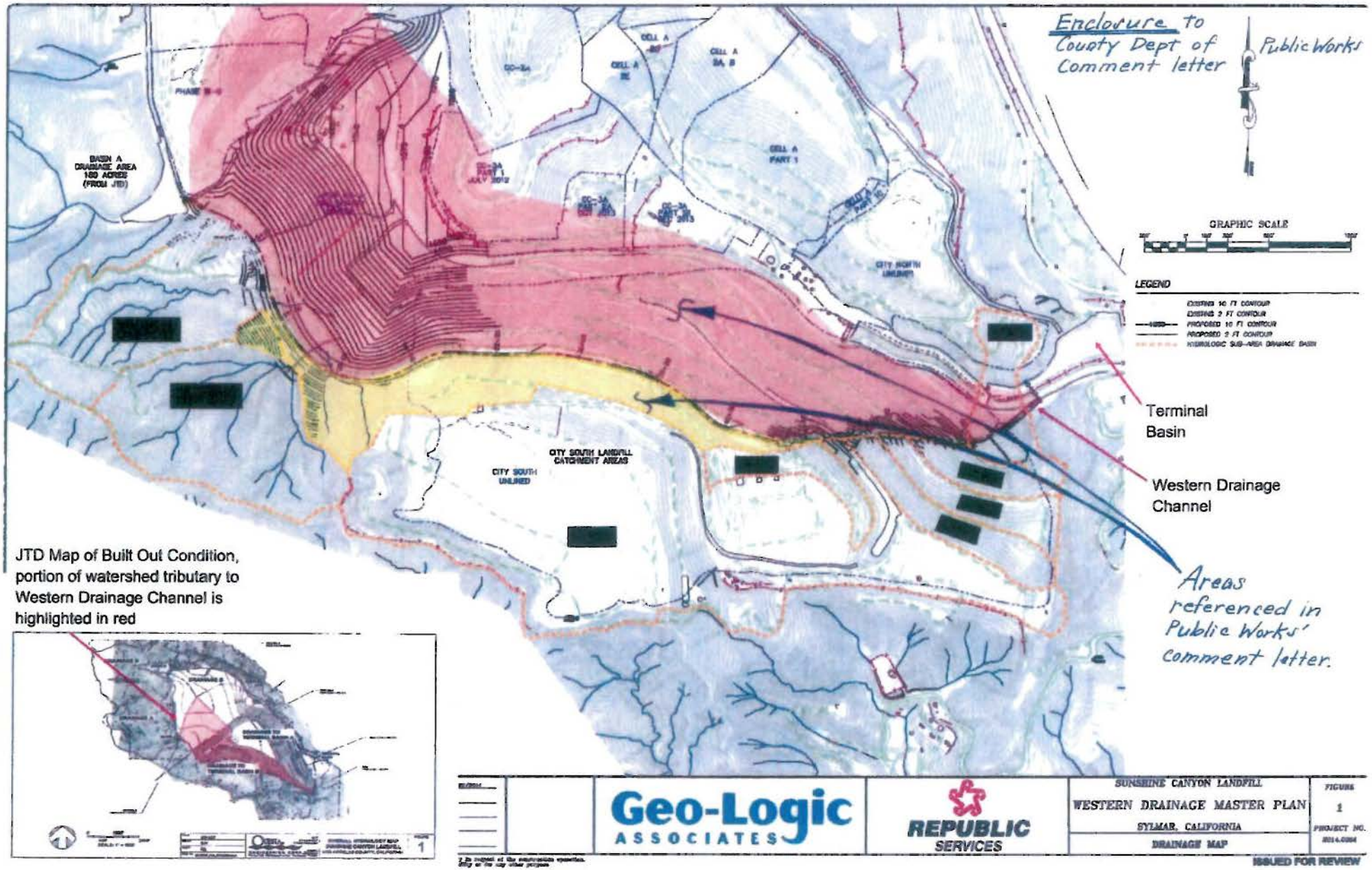
GAIL FARBER
Director of Public Works

PAT PROANO
Assistant Deputy Director
Environmental Programs Division

KM:dy
P:\Sec Western Drainage Master Plan

Enc.

cc: Regional Water Quality Control Board, Los Angeles Region (Wen Yang)
Sunshine Canyon Landfill Local Enforcement Agency (Gerry Villalobos)
Department of Regional Planning (Maria Masis)
City of Los Angeles Department of City Planning (Ly Lam)


Enclosure to County Dept of Public Works Comment letter
BASIN A DRAINAGE AREA 160 ACRES (FROM JTD)
CITY SOUTH LANDFILL CATCHMENT AREAS
CITY SOUTH UNLINED
CITY NORTH UNLINED
GRAPHIC SCALE
LEGEND
Terminal Basin
Western Drainage Channel
Areas referenced in Public Works' comment letter.
JTD Map of Built Out Condition, portion of watershed tributary to Western Drainage Channel is highlighted in red
Geo-Logic ASSOCIATES
REPUBLIC SERVICES
SUNSHINE CANYON LANDFILL
WESTERN DRAINAGE MASTER PLAN
SYLMAR, CALIFORNIA
DRAINAGE MAP
FIGURE 1
ISSUED FOR REVIEW

ATTACHMENT G

SUNSHINE CANYON
Landfill

14747 San Fernando Road
Sylmar, CA 91342

September 28, 2018

Shikari Nakagawa-Ota
SCL- Acting LEA Program Manager
Los Angeles County Department of Public Health – LEA Program
500 Commerce Dr
Baldwin Park, CA 91706

Subject: 2018 WET WEATHER PREPAREDNESS REPORT AND WINTER OPERATIONS PLAN - SUNSHINE CANYON CITY/COUNTY LANDFILL

Dear Ms. Nakagawa-Ota:

In accordance with Sunshine Canyon City/County Landfill (SCL), Solid Waste Facility Permit (SWFP) (Facility #19-AA-2000), Condition 16.I, SWT Engineering (SWT) has prepared this Wet Weather Preparedness Report and Winter Operations Plan (Wet Weather Plan) on behalf of Republic Services, Inc. (Republic). As reported in prior years, the goals of the Wet Weather Plan improvements installed at SCL are classified under four categories:

- **Sediment Management:** Consists of constructed measures to minimize suspended solids from the site runoff exiting the terminal basin;
- **Erosion Control Measures:** Consists of features to prevent rainfall and runoff erosion of daily and intermediate soil layers that cover active refuse fill areas with the purpose of preventing storm water contact to buried refuse. This includes grading of soil covers to prevent surface ponding and subsequent storm water infiltration into the existing refuse fill;
- **Maintenance:** Consists of maintaining existing storm water control structures serving both the active and the closed refuse fill areas; and
- **Expansion:** Consists of installing new runoff control systems to meet the changing needs of the site due to ongoing fill operations.

The following breaks down the four classified categories listed above for the SCL.

Sediment Management and Erosion Control Measures – (Categories 1 and 2):
The following is a list of work that has been completed to address sediment management and erosion control on site:

- Installed 26 acres of ClosureTurf to provide slope protection on slope areas east of the administration buildings (See Drawing 2);
- Inspected Filtrexx compost rolls at the toe of disturbed slopes throughout various areas of the site;
- Track-walked slopes throughout the site to reduce slope erosion and allow establishment of seeded or native vegetation in non-active areas;
- Installed silt fence behind office buildings to reduce sediment run-on onto the pad;
- Graded active landfill decks to prevent erosion by avoiding overly steepened swales and decks; and
- Graded soil cover in active landfill areas to prevent surface ponding.

Maintenance and Expansion of Storm Water Control Systems – (Categories 3 and 4):
The following is a list of maintenance and new stormwater project that have been completed on site:

- Removal of silt, gravel check dams, and vegetation from the perimeter channels;
- Cleanout of sediment Basins A, B, D, and the Terminal Basin;
- Install piping and pump for the interim basin;
- Graded benches to promote positive drainage;
- Cleaned pipes and inlets of vegetation;
- Fiber rolls installed on slopes, prior to down drain flumes/channels, and at the base of all stockpiles;
- Construction of Diversion Berms;
- Installation of 14 acres of coconut matting on the existing slopes south of the office buildings;
- Installation of filter fabric around the sedimentation risers for Basins A, B, and D; and
- Repaired pipe joints and reset down-drains as required.

Planned Sediment Management and Erosion Control Measures
There are a few projects that are currently under construction and scheduled for completion by the end of October 2018 (see Drawings 3 & 4). All of these projects provide additional stormwater controls:

- Hydroseed outside/refuse slopes for erosion protection;
- Install remaining fiber rolls around existing stockpiles; and
- Track walk and install fiber rolls on bare slopes.

The following control systems that were constructed prior to the 2018-2019 wet weather season remain in place as part of the site's overall stormwater management plan:

- Concrete and asphalt lined channels were constructed to replace plastic lined channels along the office road and temporary scale facility;
- A grated road crossing on the paved entry road to the temporary scales which separates runoff flows from vehicle traffic and provides an opportunity for wheel cleaning to minimize silt track out;
- Gabion check dams along the fire road on City South, which allows for the slowing of stormwater flow allowing sediments to settle;
- Installation of Faircloth Skimmers in the terminal basin to control sediment in stormwater discharge;
- Installation of a gabion cage wall in the terminal basin to slow storm water flow and allow deposition of silt; and
- Install of 57 acres of native vegetation on the interim slopes and top deck of cell CC-3A and the top deck of cell CC-3B.

The Intermediate Cover included a Wet Weather Preparedness plan including actions that would be taken prior to a predicted severe wet weather event. These measures will be taken at least 24 hours prior to the projected on-set of the event. The application of these additional measures will be based on an assessment of the existing site conditions prior to the event and what additional measures will be most effective in minimizing surface erosions. The additional measures may include some or all of the following actions:

- Benches will be cambered at 4% to prevent stormwater from flowing onto slope areas and creating erosion rills;

SUNSHINE CANYON
Landfill

14747 San Fernando Road
Sylmar, CA 91342

- Additional fiber rolls/straw wattles will be placed on slope areas at a minimum of twenty vertical feet to slow stormwater flow;
- Application of soil stabilizer containing polymers formulated specifically for stabilization of slopes on appropriate slope areas;
- Construction of additional stormwater control berms as necessary to direct stormwater flow to the appropriate existing on-site structures.

Site inspections by SCL Staff will be conducted prior to each rain event to ensure that all controls remain in place and any items that need to be addressed are completed prior to a rain event. Erosion and sediment controls will be assessed after each rain event and any actions needed to repair or replace a control will be addressed.

If you have any questions or require any additional information, please contact Chris Coyle at 818-362-2141 or Valorie Moore at 818-362-2145.

Sincerely,
Sunshine Canyon Landfill

Chris Coyle
General Manager

10/1/18
Date Signed

Enclosures:

Drawing 1:	Constructed Northern Winterization Plan 1
Drawing 2:	Constructed Southern Winterization Plan 2
Drawing 3:	Planned Northern Winterization Plan 1
Drawing 4:	Planned Southern Winterization Plan 2

ATTACHMENT H

SUNSHINE CANYON LANDFILL
ODOR MITIGATION MEASURES

	DESCRIPTION	SCHEDULE	STATUS AS OF 6/26/2018	POSITIVE IMPACTS OR EFFECTS	QUANTIFIABLE BENEFIT	RATIONALE FOR ODOR MITIGATION MEASURE
LANDFILL GAS MANAGEMENT						
LFG1	**Phase 1 installation of new and replacement vertical gas extraction wells and slope collectors:**					
	23 new and replacement vertical gas wells	April - May 2016	Complete	**Increased gas collection**	Approximate increase in gas flow = 963 SCFM @ 50% CH4 (total for both new gas wells and slope collectors)	Phase 1 new and replacement vertical gas wells installed in areas where gas well monitoring data and surface emission monitoring indicated either (1) inefficient collection of LFG, or (2) surface emissions exceeding SCAQMD Rule 1150.1 requirements. Improvements to the gas collection system infrastructure are designed to increase the overall collection capability and capacity of the system thereby reducing surface emissions and the potential for off-site odors.
	4,100 linear feet (LF) of slope collectors	September - October 2016	Complete	**Increased gas collection**		
LFG2	**Phase 2 installation of new and replacement vertical gas extraction wells:**					
	15 new vertical gas wells	December 2016 - January 2017	Complete	**Increased gas collection**	Estimated increase in LFG flow = 600 SCFM @ 50% CH4 (assumes 40 SCRM/well @50% CH4)	Phase 2 new vertical gas wells installed in recently completed fill areas will ensure gas system coverage in these areas. Improvements to the gas collection system infrastructure are designed to increase the overall collection capability and capacity of the system thereby reducing surface emissions and the potential for off-site odors.
LFG3	**Installation of Horizontal Collectors in Cells CC-3A and CC-3B:**					
	11,000 LF of horizontal collectors	2016	Complete	**Increased gas collection**	Approximate increase in gas flow = 255 SCFM @ 50% CH4 (total for both CC-3A and CC-3B horizontal collectors)	Improvements to the gas collection system infrastructure are designed to increase the overall collection capability and capacity of the system thereby reducing surface emissions and the potential for off-site odors.
LFG4	**Installation of Dewatering Pumps**					
	Installation of 76 new pumps in wells affected by liquids as identified by October 2016 well sounding	December 2016 - January 2017	Complete	**Decrease in volume of liquid in individual gas collection wells:** Removal of liquids from vertical gas wells will increase volume of gas that can be collected from these wells by removing impediment for gas to flow freely through screened interval.	Estimated volume of liquid extracted form a typical gas well per week = 0-30,000 gallons per week. It must be noted that once liquid is pumped out of a well, it is possible that the well may recharge with additional liquids; however, it is also possible that a well will not recharge and therefore the pump may not extract additional liquids from this well location.	Rehabilitation of gas wells by removal of liquids will increase gas collection and decrease potential for surface emissions by restoring efficient gas collection capability to individual wells.
				Decrease in volume of liquid in waste mass: Liquids pumped from gas wells will go to the leachate collection system for treatment and disposal rather than potentially travelling along impervious soil layers to outside slopes causing leachate break-outs and/or draining into vertical gas extraction wells and inhibiting effective well performance.		
				Increase in gas collection: Gas collection capability in individual wells will increase due to liquid removal that could uncover pipe perforations allowing for un-impeded gas flow.		Improvements to the gas collection system infrastructure are designed to increase the overall collection capability and capacity of the system thereby reducing surface emissions and the potential for off-site odors.

SUNSHINE CANYON LANDFILL
ODOR MITIGATION MEASURES

	DESCRIPTION	SCHEDULE	STATUS AS OF 6/26/2018	POSITIVE IMPACTS OR EFFECTS	QUANTIFIABLE BENEFIT	RATIONALE FOR ODOR MITIGATION MEASURE
LFG5	**Leachate Collection System Upgrade**					
	Comprehensive upgrade to aboveground liquid collection/discharge system piping for the removal of liquids from vertical gas collection wells. Upgrade includes purchase and installation of new air compressor, design and installation of piping for connection to liquid extraction pumps in wells affected by liquids.	November 2016-Early January 2017	In progress with early January 2017 completion	**Decrease in volume of liquid in individual gas collection wells:** Removal of liquids from vertical gas wells will increase volume of gas that can be collected from these wells by removing impediment for gas to flow freely through screened interval	Upgrade to liquid/leachate collection system will increase the system capacity to be able to collect an estimated additional 300,000 - 400,000 gallons of liquid per month	Rehabilitation of gas wells by removal of liquids will increase gas collection and decrease potential for surface emissions by restoring efficient gas collection capability to individual wells.
				Decrease in volume of liquid in waste mass: Liquids pumped from gas wells will go to the leachate collection system for treatment and disposal rather than potentially travelling along impervious soil layers to outside slopes causing leachate break-outs and/or draining into vertical gas extraction wells and inhibiting effective well performance		
				Increase in gas collection: Gas collection capability in individual wells will increase due to liquid removal that could uncover pipe perforations allowing for un-impeded gas flow		Increases in the gas collection system infrastructure are designed to reduce the presence of surface emissions and reduce the potential for off-site odors.
LFG6	**Header Upgrade**					
	Cell CC-3A header upgrade (18" header line)	May 2016	Complete	**Increased gas collection capacity**	Header upgrade provided additional vacuum to new wells installed in Cell CC-3A	Improvements to the gas collection system infrastructure are designed to increase the overall collection capability and capacity of the system thereby reducing surface emissions and the potential for off-site odors.
LFG7	**Flare 11 Installation**					
	Design and installation of new, 5,000 SCFM ZULE flare (Flare 11)	Nov-17	Complete	**Increased site gas collection capacity**	New flare capacity will provide site with overall collection capacity of 23,334 SCFM (Flare1 = 4,167 SCFM, Flare 3 = 4,167 SCFM, Flare 9 = 5,000 SCFM, Flare 10 = 5,000 SCFM, Flare 11 = 5,000 SCFM)	Benefit is realized by providing increase in overall site gas collection capacity ahead of gas curve so capacity is in place as new wells are installed and also as positive results of dewatering program are realized.
LFG8	**Vertical Well Installation**					
	Installation of 85 new or replacement Landfill gas extraction wells.	1/1/2018 - 6/1/2018	Complete	**Increased site gas collection capacity**	Approximate increase in gas flow = 850 scfm @ 50% methane. Wells are slowly being brought online and flow will increase with time.	Additional LFG collection capacity decreases the potential for surface emissions and prevents potential for fugitive odors.
LFG9	**Liquids Extraction Pumps**					
	Installation of 46 new pnuematic pumps for wellfield liquids extraction.	1/1/2018 - 6/1/2018	Complete	**Increased site gas collection capacity**	Preventing liquids accumulation in well casings promotes more efficient gas collection.	Increased well casing perforations available to enhance gas collection from influence area.
LFG10	**Horizontal Collectors**					
	Installation of approx. 3,370 linear feet of horizontal collectors.	1/1/2018 - 6/1/2018	Complete	**Increased site gas collection capacity**	Approximate increase in gas flow = 200 scfm @ 50% methane. Wells are slowly being brought online and flow will increase with time.	Additional LFG collection capacity decreases the potential for surface emissions and prevents potential for fugitive odors.
SURFACE EMISSION MANAGEMENT						
SEM1	**Intermediate Cover Enhancement (ICE) Project**					
	Study to determine if specific enhancements to areas of intermediate cover are effective in reducing surface emissions	1Q2017-2Q2017 (6month project)	Final presentation to GHHNC on 12/21/16: Awaiting DPW Approval Thereafter	**Potential mitigation of areas of surface emissions**	Enhancements will be evaluated after 6-month pilot study to determine if positive results are realized, e.g. reduction in surface emissions and/or increase in gas collection in wells in areas surrounding pilot study areas	Potential decrease in number of instantaneous and integrated surface emission "hits" indicating surface emissions and the potential for off-site odors.
SEM2	**Additional Soil Placement**					
	Placement of an additional 12" of soil on intermediate cover areas with surface emissions	December 2016 - January 2017	Complete	**Decrease in potential surface emissions**	Enhancements will be evaluated during monthly SCAQMD Rule 1150.1 monitoring to determine if positive results are realized, e.g. reduction in surface emissions exceeding SCAQMD requirements.	Potential decrease in number of instantaneous and integrated surface emission "hits" indicating surface emissions and the potential for off-site odors.
SEM3	**Monthly Surface Emission Monitoring**					

SUNSHINE CANYON LANDFILL
ODOR MITIGATION MEASURES

	DESCRIPTION	SCHEDULE	STATUS AS OF 6/26/2018	POSITIVE IMPACTS OR EFFECTS	QUANTIFIABLE BENEFIT	RATIONALE FOR ODOR MITIGATION MEASURE
	Surface emission monitoring (integrated and instantaneous) conducted on a monthly basis; required on a quarterly basis by SCAQMD Rule 1150.1 To go above and beyond the 10-10-45 day requirement in Rule 1150.1 for re-monitoring, SEM exceedances (integrated and instantaneous) will be re-monitored within 5 days after initial detection rather than 10 days as allowed by SCAQMD Rule 1150.1.	January 2017 for 5-day Re-Monitoring	On-going	**Decrease in potential surface emissions:** Reducing initial re-monitoring from 10 to 5 days will ensure SEM exceedances are remediated in an expedited manner	Monthly (rather than quarterly) monitoring reveals areas requiring repair to mitigation surface emissions exceeding SCAQMD's Rule 1150.1.	Mitigating surface emissions exceeding SCAQMD's Rule 1150.1 requirements within 5 days rather than the allowed 10 days will potentially reduce the duration an exceedance remains uncorrected.

SUNSHINE CANYON LANDFILL
ODOR MITIGATION MEASURES

	DESCRIPTION	SCHEDULE	STATUS AS OF 6/26/2018	POSITIVE IMPACTS OR EFFECTS	QUANTIFIABLE BENEFIT	RATIONALE FOR ODOR MITIGATION MEASURE
WORKING FACE ODOR MANAGEMENT						
WF1	**Adverse Weather Protocol**					
	Diversion of LA City transfer vehicles and other 3rd party transfer vehicles from 6 - 8 AM when adverse weather conditions are forecasted. "Adverse" conditions generally consist of winds coming from northerly directions with low to moderate wind speeds	September 2016	On-going	**Decrease in potential for trash-related odors**	An analysis of odor complaints called in to SCAMQD for September - November 2016 shows the following: - A reduction of 64% in the number of verified complaints year-over-year (2015 - 2016) from Van Gogh School; - A reduction of 40% in the number of verified complaints year-over-year (2015 - 2016) from Monday through Friday.	Implementation of the Adverse Weather Protocol in September 2016 has demonstrated positive results in reducing the number of SCAQMD verified odor complaints called in to SCAQMD from Van Gogh School and from the overall community Monday through Friday. It is expected that continued implementation of this protocol will result in a decrease in verified odor complaints called in to SCAQMD.
WF2	**Additional Odor Mitigation Equipment**					
	Purchase of seven (7) odor mitigation units (Buffalo Monsoons) put into service at the working face. Units use neutralizer mixed with water to create a misting curtain at working face. Units relocated on a daily basis as determined by working face configuration. Operated continuously from 6 AM - 10 AM and at other times as needed	November 2016	Complete	**Decrease in the potential for trash-related odors:** Increase potential for spraying mist containing neutralizer close to working face area for suppression of odor. Mobile units are easy to move around and place in areas where they can be most effective.	Benefits of using Buffalo Monsoon units will be evaluated. Units are part of the overall program for the mitigation of working face odors.	Use of misting systems near working face is designed to have impact on odor-laden air's ability to migrate off-site
WF3	**Expansion of Perimeter Vapor Systems**					
	Expansion of perimeter vapor odor control system. An additional 2,500 LF has been added on the City South portion of the site and at the entrance.	October 2016	Complete	**Decrease in the potential for trash-related odors**	Vapor systems represent a fairly new technology in the mitigation of odors, therefore the benefits of using vapor systems will be evaluated over time. Vapor systems are part of the overall program for the mitigation of working face odors.	Vapor system releases neutralizer converted to vapor form. Neutralizer vapor moves at same speeds and in same direction as odorous vapors. This allows neutralizer to stay in the air much longer creating more opportunity for contact and neutralization.
OPERATIONS AND MAINTENANCE						
OM1	**Installation of Bubbler Tubes and Pumps in Gas Wells Affected by Liquids**					
	Dedicated bubbler tubes provide effective means for measuring liquid levels in gas wells affected by liquids.	On-going	On-going	**Increased gas collection:** Dedicated bubbler tubes allows liquid level measurement to be taken without introducing air into the collection system or allowing LFG to vent during liquid level measurement	Benefit of dedicated bubbler tubes is realized by not having to open wellhead to take liquid level measurements	Allows for pro-active measure for monitoring wells affected by liquids. This has the potential to reduce off-site odors by avoiding the need to remove the wellhead.
OM2	**Well Integrity Testing**					
	Well integrity testing of all vertical gas collection wells that can be inspected by a down hole camera.	December 2016 - March 2017 & January 2018 - March 2018	Complete	**Increased gas collection:** The well integrity testing results will be used to determine an evaluation and remediation plan for each well that is determined to be ineffective or impacted.	Quantifiable results will be based on the actions identified by the evaluation of the integrity testing results and the remediation plan.	The evaluation of the integrity testing results will lead to a remediation plan to enhance the gas collection system. Increases in gas collection are designed to reduce the presence of surface emissions and reduce the potential for off-site odors.
OM3	**Daily - Blower/flare Station Monitoring**					
	Gas quality, vacuum, flow rate monitored	On-going	On-going	**Provides Data to Ensure System Vacuum:** Ensures blowers/flare stations are operating in accordance within specified parameters	Quantifiable benefit: this O&M task ensures there is sufficient vacuum being applied on system to collect landfill gas being generated.	Optimization of the gas collection system is intended to reduce the presence of surface emissions and the potential for off-site odors.
OM4	**Weekly Inspections/Monitoring of Condensate Sumps and Vertical Gas Wells Impacted by Liquids**					
	All condensate sumps/traps and isolation valves (header, air supply, and condensate or dewatering force main are inspected. All wells with dedicated pumps are inspected and cycle counts recorded Identified issues are addressed immediately	On-going	On-going	**Provides Data to Ensure System Components are Functioning Properly:** Ensures condensate sumps are operating effectively Ensures liquid removal pumps are functioning properly	Quantifiable benefit: this O&M task ensures the condensate sumps and the liquid removal pumps are functioning properly.	Ensures overall liquid collection system optimization and identification of items that need immediate actions or corrective measures. An example would be inspecting for low spots in piping that could accumulate solids that would disrupt liquid removal.
OM5	**Bi-Monthly (2X/Month) Wellfield Monitoring/Tuning**					

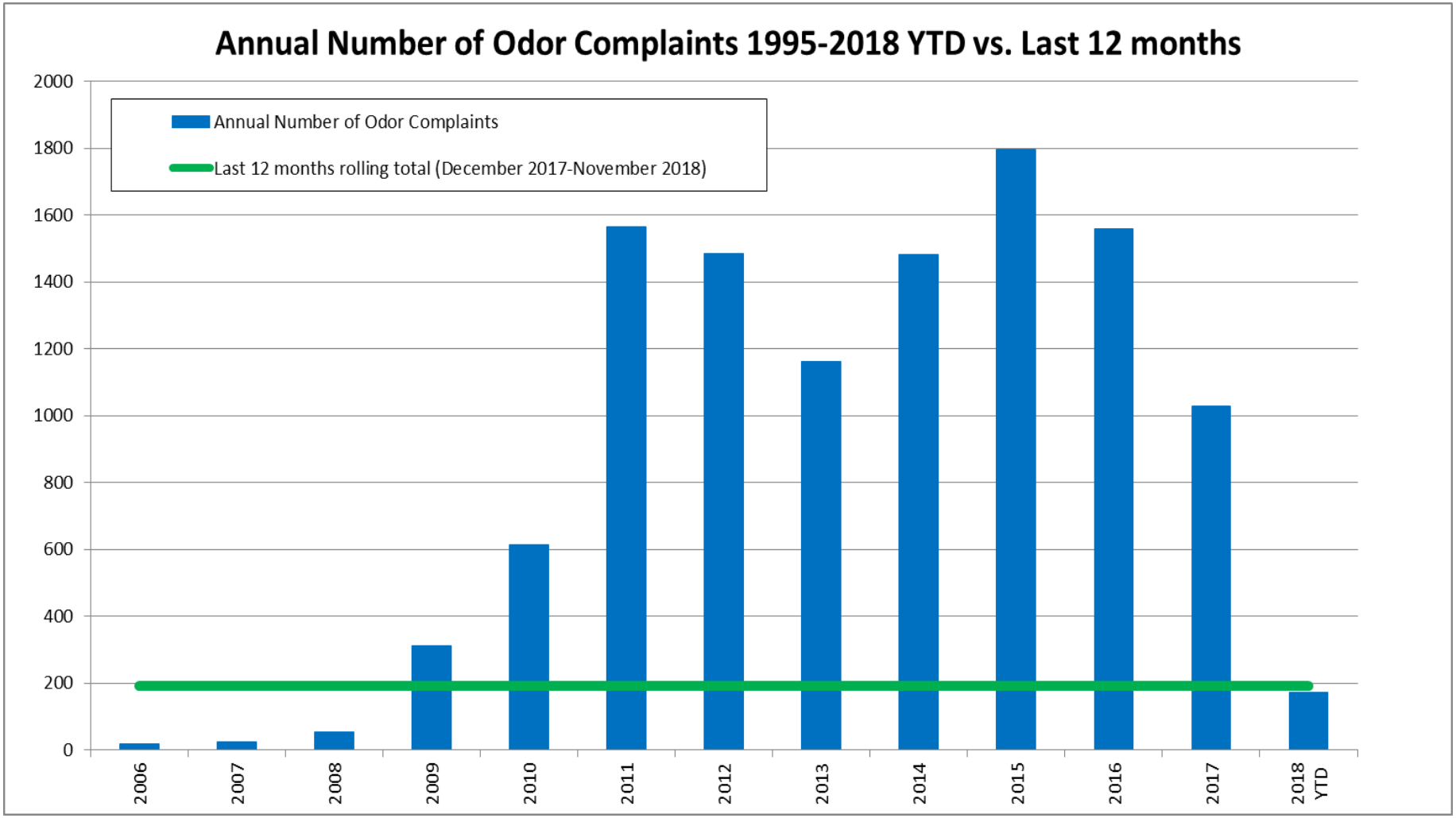
SUNSHINE CANYON LANDFILL
ODOR MITIGATION MEASURES

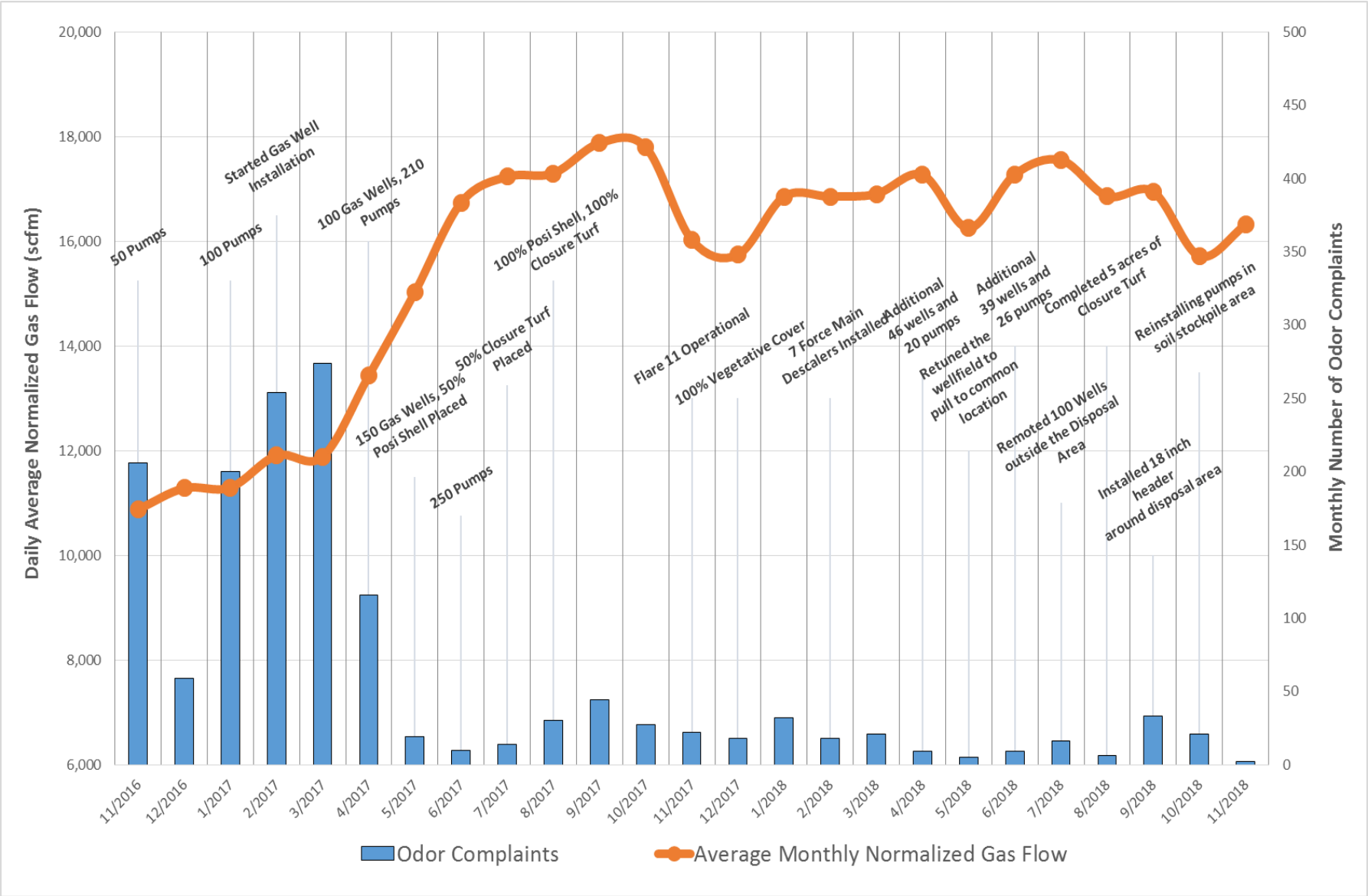
	DESCRIPTION	SCHEDULE	STATUS AS OF 6/26/2018	POSITIVE IMPACTS OR EFFECTS	QUANTIFIABLE BENEFIT	RATIONALE FOR ODOR MITIGATION MEASURE
	All vertical and horizontal LFG wells, LFG collectors, sample ports and soil vapor extraction (SVE) wells are monitored and tuned. In addition, the well casing, wellhead and lateral piping is inspected to ensure all components are tight and functioning properly. This monitoring is required once per month per NSPS regulations. Twice per month monitoring and tuning has been conducted since 2012.	On-going	On-going	**Provides Data to Ensure Overall Health of Wellfield:** Ensures wells are operating in accordance with NSPS requirements. Monitoring results identify potential issues with wells that require tuning and re-monitoring and/or additional measures.	Quantifiable benefit: this O&M task ensures the wellfield is functioning properly and tuned to collect the maximum amount of landfill gas being generated from the waste mass.	Optimization of the gas collection system is intended to reduce the presence of surface emissions and the potential for off-site odors.

ATTACHMENT I

Figures 1 and 2

From December 12, 2018 Presentation to SCAQMD Hearing Board


Annual Number of Odor Complaints 1995-2018 YTD vs. Last 12 months
Annual Number of Odor Complaints
Last 12 months rolling total (December 2017-November 2018)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018 YTD


Daily Average Normalized Gas Flow (scfm)
Monthly Number of Odor Complaints
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
500
450
400
350
300
250
200
150
100
50
0
11/2016
12/2016
1/2017
2/2017
3/2017
4/2017
5/2017
6/2017
7/2017
8/2017
9/2017
10/2017
11/2017
12/2017
1/2018
2/2018
3/2018
4/2018
5/2018
6/2018
7/2018
8/2018
9/2018
10/2018
11/2018
50 Pumps
100 Pumps
Started Gas Well Installation
100 Gas Wells, 210 Pumps
150 Gas Wells, 50% Posi Shell Placed
250 Pumps
50% Closure Turf Placed
100% Posi Shell, 100% Closure Turf
Flare 11 Operational
100% Vegetative Cover
7 Force Main Descalers Installed
Additional 46 wells and 20 pumps
Retuned the wellfield to pull to common location
Additional 39 wells and 26 pumps
Completed 5 acres of Closure Turf
Remoted 100 Wells outside the Disposal Area
Installed 18 inch header around disposal area
Reinstalling pumps in soil stockpile area
Odor Complaints
Average Monthly Normalized Gas Flow

ATTACHMENT J

SUNSHINE CANYON
Landfill

14747 San Fernando Road
Sylmar, CA 91342

November 15, 2018

Mr. Martins Aiyetiwa, PE
Senior Civil Engineer
County of Los Angeles, Department of Public Works
900 South Fremont Avenue
Alhambra, CA 91803-1331

Subject: ADC Pilot Project Using Geosynthetic Panel Product
Monthly Report – October 2018

Dear Mr. Aiyetiwa,

Attached please find the monthly report for October 2018 for the ADC pilot project using geosynthetic panel product at Sunshine Canyon Landfill (SCL).

As outlined in the Evaluation of Alternative Daily Cover (ADC) Using Geosynthetic Panel Product Sunshine Canyon Landfill Third Year of Pilot Project report submitted October 21, 2018; SCL and the SCL LEA have found that the ADC has had a beneficial impact in reducing the number of odor complaints received by the SCAQMD alleging SCL as the source of odor. Therefore, in the third year evaluation report we have requested that the DPW grant approval for the use of the geosynthetic panel product as an acceptable alternative daily cover at Sunshine Canyon Landfill. SCL is respectfully asking for a timeline from the DPW as to when they expect to grant approval of the ADC.

Sincerely,

Chris Coyle
General Manager
Sunshine Canyon Landfill

SUNSHINE CANYON LANDFILL

SCL - LEA

LOCAL ENFORCEMENT AGENCY

December 20, 2017

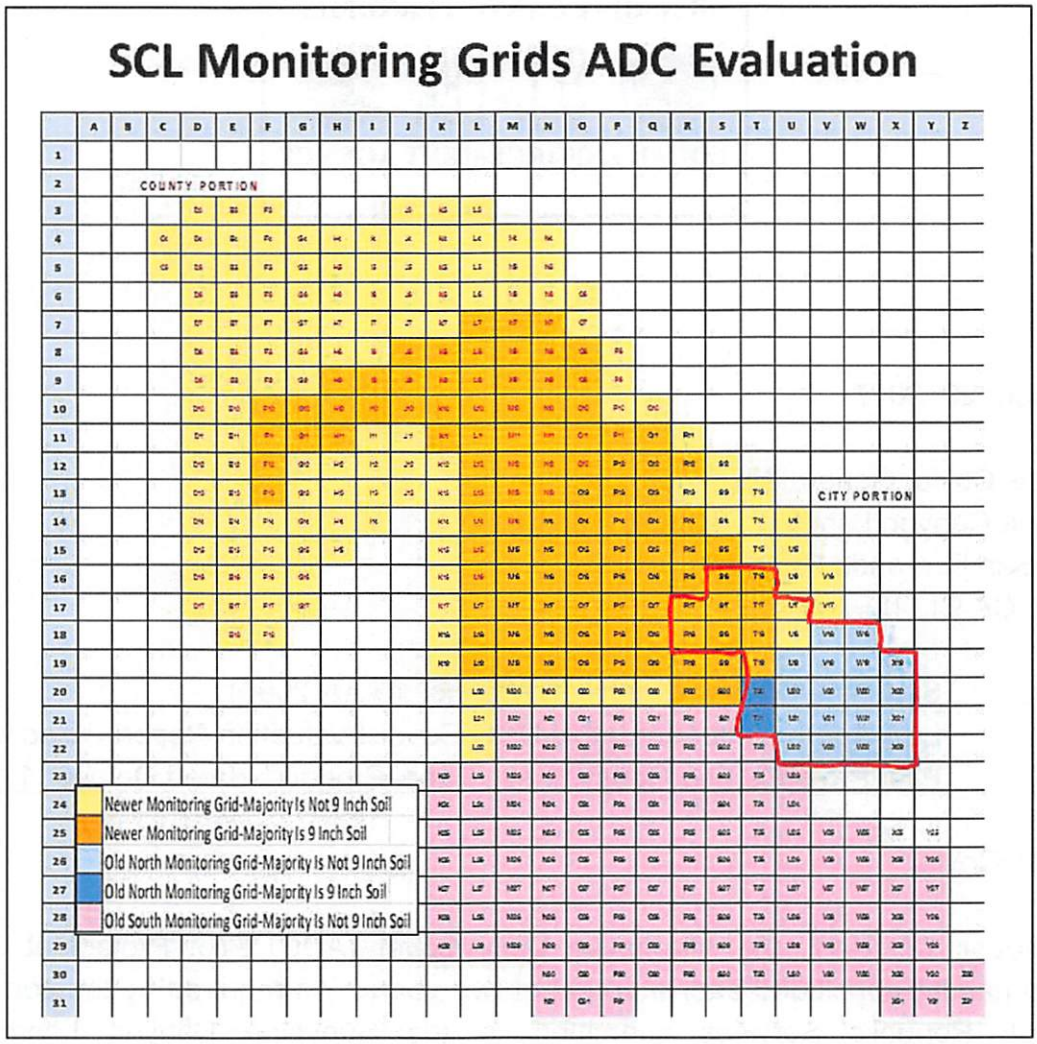
Mr. Chris Coyle, General Manager
Sunshine Canyon Landfill / Republic Services
14747 San Fernando Road
Sylmar, CA 91342

Subject: Sunshine Canyon Landfill (SWIS No. 19-AA-2000)
LEA Approval of Alternative Daily Cover Evaluation Report – Second Year, Pilot Project Using Geosynthetic Panel Product", dated October 11, 2017

Dear Mr. Coyle,

On October 12, 2017, the Alternative Daily Cover (ADC) Pilot Project at Sunshine Canyon Landfill concluded after a period of two years. As required by the conditions of approval, Republic Services submitted to the Sunshine Canyon Landfill Local Enforcement Agency (SCL LEA) a final evaluation report titled "Alternative Daily Cover Evaluation Report – Second Year, Pilot Project Using Geosynthetic Panel Product", dated October 11, 2017. The SCL LEA has completed reviewing the evaluation report along with the submitted monthly reports on the daily inspections of the ADC and has the following comments:

The SCL LEA has conducted its own independent review and evaluation of the effectiveness of the ADC at Sunshine Canyon Landfill. The SCL LEA took a holistic systems approach in evaluating the ADC that took many factors into consideration such as: odor complaints (all complaints), the timing of the implementation of the various aspects of the SCAQMD Abatement Order (e.g., LFG wells, and pump installation schedule), weather conditions (e.g., extraordinary wet season), surface emissions data, in-person observations of the trash removed during LFG well drilling, leachate seeps, and daily SCL LEA observations. Special attention was given to the performance of the ADC for Cell CC-3B, which was completed in April 2017. Cell CC-3B is a cell that utilized ADC and abuts up against an area in which 9" of compacted soil was utilized for daily cover without peel-back (shown in figure below outlined in red).



The specific monitoring grids that comprise of the Cell CC-3B are as shown below:

CELL CC-3B ADC GRIDS						
	S16	T16				
R17	S17	T17	U17			
R18	S18	T18	U18	V18	W18	
		T19	U19	V19	W19	X19
		T20	U20	V20	W20	X20
		T21	U21	V21	W21	X21
			U22	V22	W22	X22

The SCL LEA conducted independent analysis of the instantaneous surface emissions data and the integrated surface emissions data; and conducted data mining and statistical analysis. The SCL LEA also installed visqueen test plots on the side slopes and flat areas of the ADC Cell CC-3B to supplement the surface emissions data analysis. The complete detailed technical files (Excel Spreadsheets) the SCL LEA utilized in the analysis of the ADC have been made available for review in a folder titled *"SCL LEA Odor Mitigation Technical Data and Analysis File (2017)"* at the following link:

https://www.dropbox.com/home/Sunshine%20Canyon%20Landfill%20Local%20Enforcement%20Agency%20Odor%20Mitigation%20Folder/SCL%20LEA%20Odor%20Mitigation%20Technical%20Data%20and%20Analysis%20File%20(2017)

The specific file for the SCAQMD Rule 1150.1 Analysis is titled "*SCL-Rule1150.1Monitoring-110217.xlsx*"

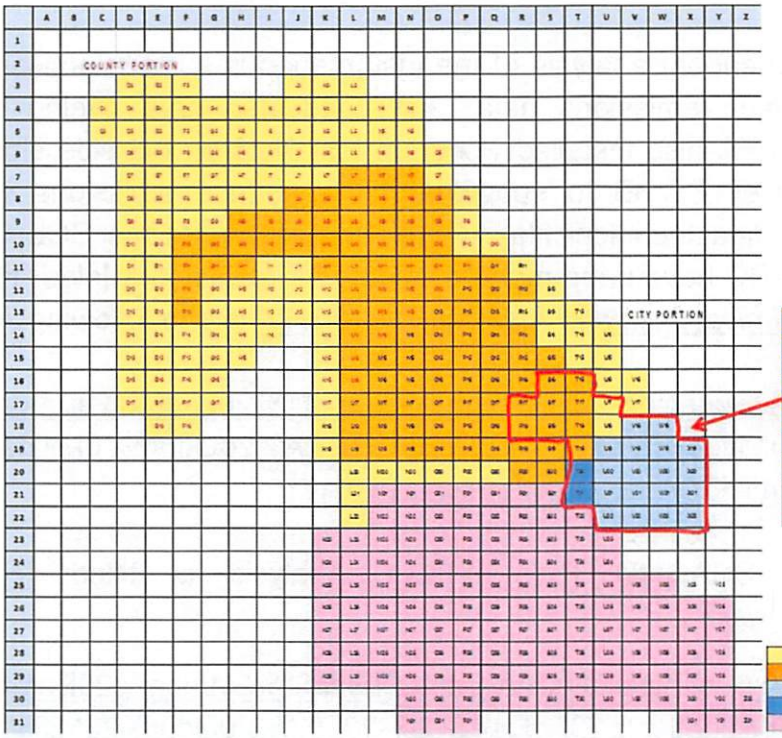
https://www.dropbox.com/home/Sunshine%20Canyon%20Landfill%20Local%20Enforcement%20Agency%20Odor%20Mitigation%20Folder/SCL%20LEA%20Odor%20Mitigation%20Technical%20Data%20and%20Analysis%20File%20(2017)?preview=SCL-Rule1150.1Monitoring-110217.xlsx

Examples of key findings made by the SCL LEA are based on detailed technical analysis, the key analysis are described below:

The general trend after the LFG wells and pumps that were installed (August 2017) for the integrated surface readings in the grids that overlay Cell CC-3B are in compliance with the regulatory requirements, whereas in the past, there were exceedances of the surface emissions threshold (>25 ppm). The SCL LEA is continuously monitoring on a monthly basis the surface emissions data reported in the SCAQMD Rule 1150.1 reports.

The figures below show the overall location of the monitoring grids with the integrated surface emissions data for September 2017. The spreadsheet / database will be periodically updated and analyzed by the SCL LEA to determine the continued impact of the ADC within the context of being one of the complementary mitigations measures with the totality of the overall best combination of mitigation measures.

SCL Monitoring Grids ADC Evaluation



CELL CC-3B ADC GRIDS

	S16	T16			
R17	S17	T17	U17		
R18	S18	T18	U18	V18	W18
		T19	U19	V19	W19	X19
		T20	U20	V20	W20	X20
		T21	U21	V21	W21	X21
			U22	V22	W22	X22

September 2017 Integrated Surface Readings (ppmv Methane)

10.10	32.51	22.47	6.49	7.98	4.84				
3.05	11.11	16.26	5.15	6.65	7.25	6.92			
2.67	6.07	5.03	7.03	4.04	10.27	2.78			
5.37	6.60	23.74	3.90	3.49	3.98	3.36			
5.25	3.45	7.98	2.56	3.59	9.02	3.80	3.54	3.51	
3.60	4.55	10.87	6.78	3.74	3.99	4.55	4.63	4.66	
7.79	3.80	9.07	10.71	8.65	4.54	2.43	3.54	2.59	
3.82	3.95	11.72	10.08		7.61	4.37	3.80	4.45	
4.00	4.06	4.10	4.00	S					

Newer Monitoring Grid-Majority Is Not 9 Inch Soil
Newer Monitoring Grid-Majority Is 9 Inch Soil
Old North Monitoring Grid-Majority Is Not 9 Inch Soil
Old North Monitoring Grid-Majority Is 9 Inch Soil
Old South Monitoring Grid-Majority Is Not 9 Inch Soil

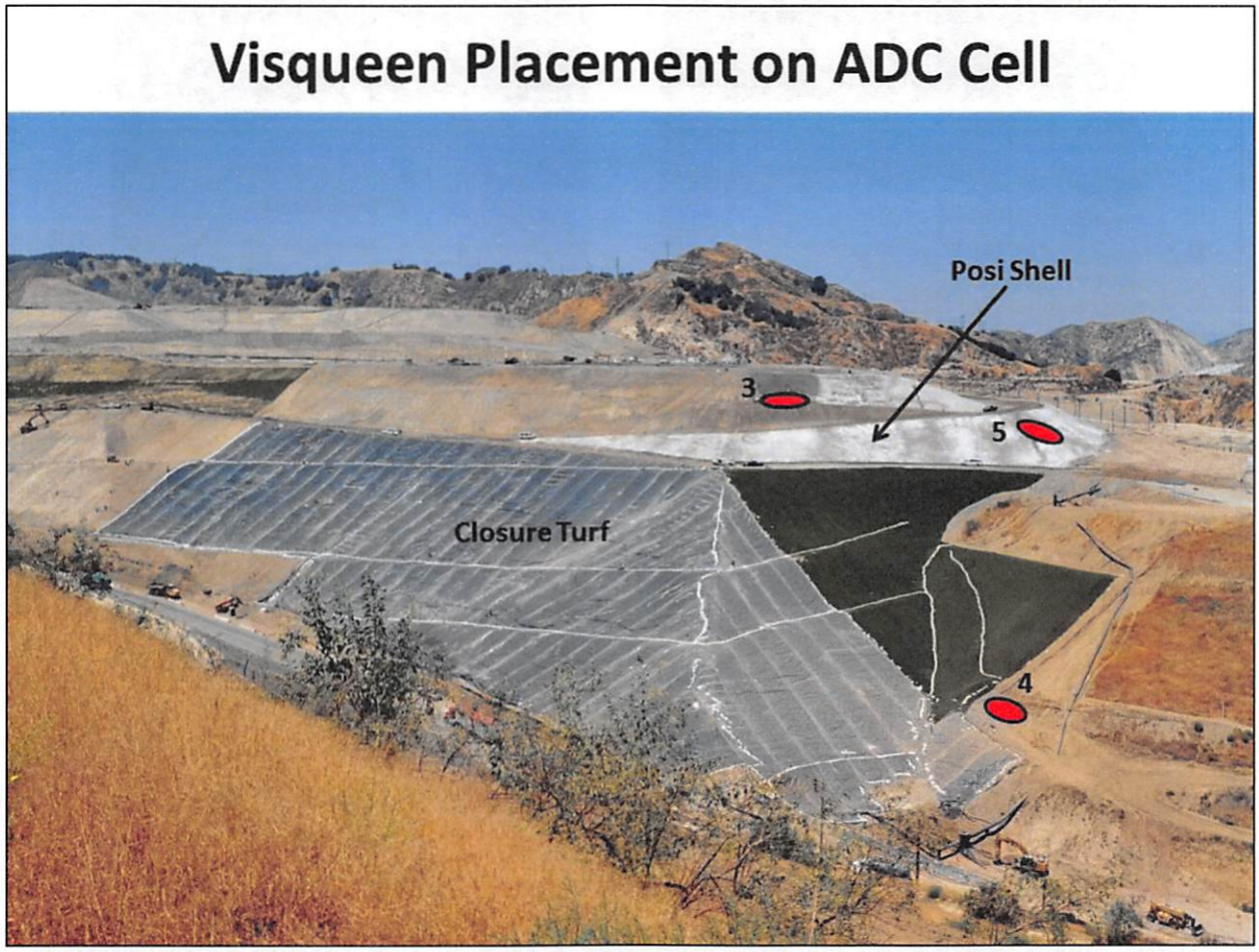
September 2017 Cell CC-3B (ADC Cell) Integrated Surface Readings (ppmv Methane)

10.10	32.51	22.47	6.49	7.98	4.84				
3.05	11.11	16.26	5.15	6.65	7.25	6.92			
2.67	6.07	5.03	7.03	4.04	10.27	2.78			
5.37	6.60	23.74	3.90	3.49	3.98	3.36			
5.25	3.45	7.98	2.56	3.59	9.02	3.80	3.54	3.51	
3.60	4.55	10.87	6.78	3.74	3.99	4.55	4.63	4.66	
7.79	3.80	9.07	10.71	8.65	4.54	2.43	3.54	2.59	
3.82	3.95	11.72	10.08		7.61	4.37	3.80	4.45	
4.00	4.06	4.10	4.00	S					

Individual Grid Emissions by Month for Grids within Cell CC-3B

Newer Monitoring Grid-Majority Is Not 9 Inch Soil
Newer Monitoring Grid-Majority Is 9 Inch Soil
Old North Monitoring Grid-Majority Is Not 9 Inch Soil
Old North Monitoring Grid-Majority Is 9 Inch Soil
Old South Monitoring Grid-Majority Is Not 9 Inch Soil

In order to provide a more real-time physical observable evaluation of the impact of the ADC, the SCL LEA utilized a visqueen field test (as previously done to demonstrate surface emissions) at multiple locations on the ADC Cell CC-3B. The visqueen was installed and the tests ran for a period of two weeks in October 2017.



The SCL LEA evaluation of the ADC utilized in Cell CC-3B also had to take into consideration the implementation of the intermediate cover enhancement (ICE) upgrades mandated by the SCAQMD Abatement Order. Three locations for installing the visqueen were selected on the ADC cell (Location ID# 3, #4, and #5); locations representing the locations most likely to have surface emissions (e.g., steepest slope (#5), transition border area (#4), and in an area that had no enhancement to the intermediate cover (#3).

No "puffing" in the visqueen was observed over a period of two weeks. Also, no leachate seeps were observed by the SCL LEA.

The odor complaint data, which is tracked by SCAQMD, is one of the primary measures utilized by the SCL LEA in determining the overall impact of the ADC and other mitigation measures implemented by the Sunshine Canyon Landfill. The SCL LEA looks at each and every single complaint (not just the verified ones) in its data mining / analysis. SCAQMD data is provided to the SCL LEA staff and the data is loaded onto a database/spreadsheet that looks at the type of complaint (e.g., trash, landfill gas, combination, other, etc.), the time of day, day of week, etc. Data mining and correlative analysis are conducted as part of the SCL LEA evaluation process.

Odor complaints for the key months in 2017 after the completion of the ADC Cell CC-3B and after the majority of the mitigation measures were implemented, were compared to pre-ADC operations/pre-mitigation measure implementation. The comparison shows a significant decrease of odor complaints. The decrease cannot be totally attributed to the implementation of the ADC or the ICE. It is the result of all of the mitigation measures of which the ADC is one. The ADC is designed to complement other programs in which the primary purpose is to improve the overall collection efficiency of the landfill gas collection system. The ADC improves trash-to-trash contact, and enhances movement of LFG

toward the collection wells, and also allows drainage of leachate to the leachate collection system at the bottom liner.

The detailed complaint analysis can be found in several files within the folder named *"SCL LEA Odor Mitigation Technical Data and Analysis File (2017)"* (link provided above).

Below is the SCAQMD data on odor complaints:

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Sunshine Canyon Landfill, Facility ID No. 49111
Odor Complaints Reported to AQMD Alleging SCL; and Notices of Violation (NOV) Summary from 2009 through November 30, 2017

Public Nuisance: AQMD Rule 402; Calif. H&S 41700

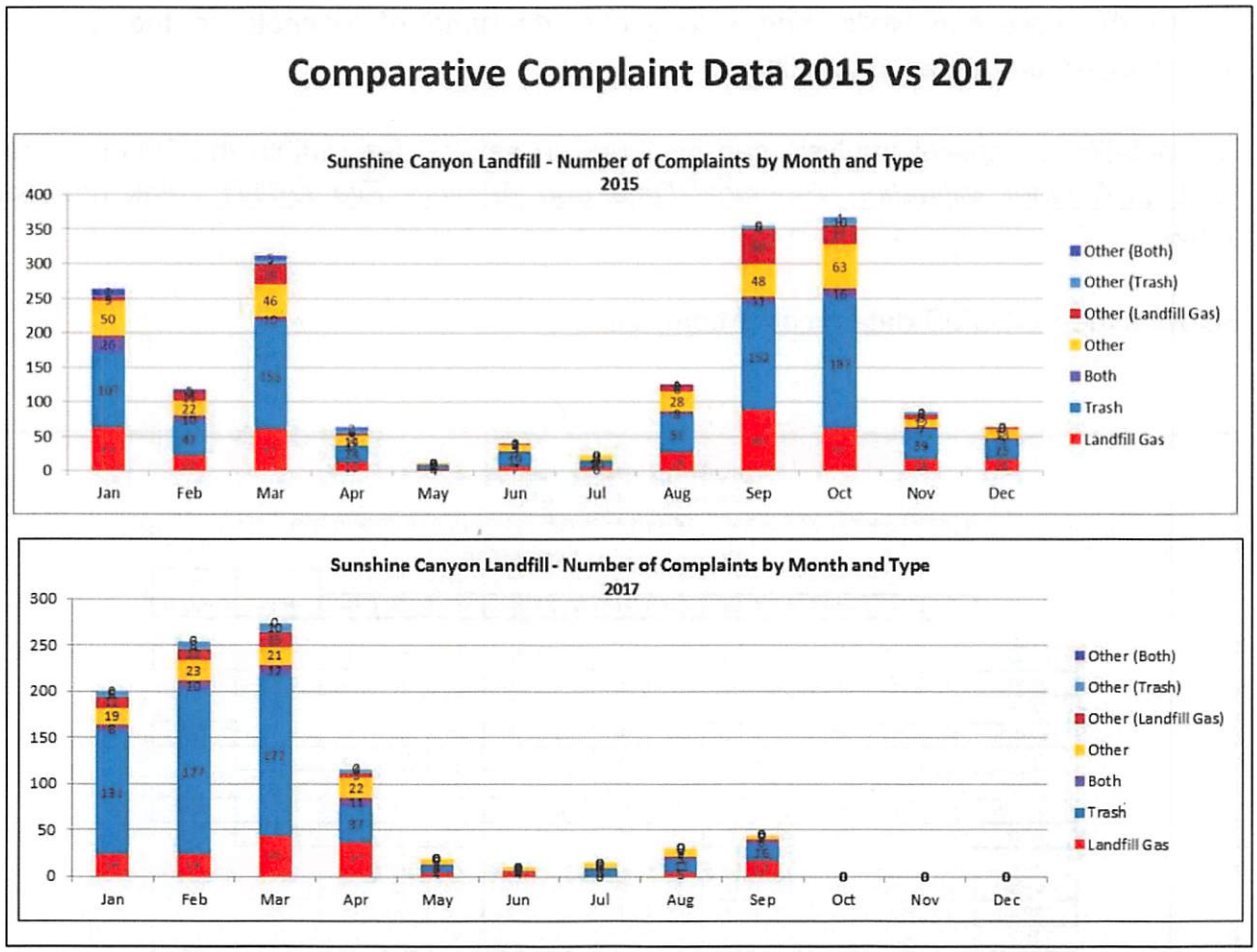
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total NOVs	Total Complaints
2010														
Complaints	64	94	93	56	21	5	13	33	40	39	76	79		613
NOVs	1	2	0	1	0	0	0	0	0	0	0	2	6	
2011														
Complaints	138	173	222	99	92	45	36	138	181	191	126	124		1565
NOVs	2	4	7	2	1	0	0	2	2	3	3	4	30	
2012														
Complaints	163	104	66	129	97	55	113	140	216	171	92	139		1485
NOVs	5	1	1	2	2	1	2	2	4	3	2	4	29	
2013														
Complaints	82	108	112	112	46	62	65	97	136	176	93	72		1161
NOVs	0	1	2	2	0	1	0	0	2	3	3	1	15	
2014														
Complaints	32	37	164	122	52	28	83	81	302	223	80	278		1482
NOVs	0	0	4	5	1	0	2	4	6	5	3	7	37	
2015														
Complaints	260	119	297	60	12	41	23	126	337	370	85	65		1795
NOVs	5	3	7	2	0	0	0	2	11	7	2	0	39	
2016														
Complaints	100	188	185	181	30	74	52	85	206	193	206	59		1559
NOVs	2	4	6	5	0	1	1	1	2	4	4	1	31	
2017														
Complaints	200	254	274	116	19	10	14	30	44	27	22			1010
NOVs	6	7	6	1	0	0	0	0	0	0	0		20	

Total R402 NOVs Issued to Date		
Total Complaints *		10,983
Total R402 NOVs Issued **	214	

* Includes 313 Complaints from 2009
** Includes 7 NOVs from 2009
December 5, 2017

Page 1 of 2

The SCL LEA conducts extensive analysis on the data mining files to independently evaluate the number of odor complaints and the details associated with each compliant. Below is a figure comparing the number and type of odor complaints during the pre-ADC (2015) and post-ADC implementation (2017) time periods. The SCL LEA will be continuing to update the odor complaint data from SCAQMD and also update the data mining and statistical analysis.



Note: October 2017 had 27 complaints, and November 2017 had 22 complaints

As part of the SCL LEA's normal daily duties at Sunshine Canyon Landfill, the onsite LEA inspector would inspect the ADC in the morning prior to the start of operations for compliance with the performance standards for controlling blowing litter, vectors, fires, odor and scavenging. The onsite LEA inspector would conduct a neighborhood survey prior to entering the landfill to determine if they could detect any adverse effects from the use of the ADC at the site. The daily inspection results did not detect any major problems with the ADC. Initially when the pilot project began, there were a couple of occasions when a geosynthetic panel was dislodged due to heavy winds. The landfill operator made adjustments to the Enviro Cover System so that additional ballast was applied each night to the geosynthetic panels. In addition, to ensure that the trash is properly covered each night, the ADC is not used during extreme wind events. A full dirt cover was utilized during these events.

Based on the above analysis and the review of Republic Services final evaluation report, the SCL LEA has made the following determinations:

(1) The SCL LEA has determined that the geosynthetic plastic panel ADC product meets the performance requirements of Title 27, California Code of Regulations,

Section 20690 for controlling blowing litter, vectors, fires, odor and scavenging and is as effective as the nine inches of compacted soil; and

(2) The SCL LEA has determined that the use of the geosynthetic plastic ADC enhances/improves the overall efficiency of the landfill gas collection system in the measurable control of landfill gas emissions; and

(3) The SCL LEA has determined that there is sufficient technical documentation and based upon field observations of the spoils from the drilling of the gas collection wells and the improved landfill gas collection rates to concur with SCAQMD's recommendation to the continued practice of partially peeling back the nine inches of compacted daily soil cover when the landfill is not able to use the ADC. This will improve the overall performance of the leachate collection system, the landfill gas collection system and reduce landfill gas and trash related odors.

Therefore, the SCL LEA concurs with Republic Services conclusion that the geosynthetic panel product (Environmental Products, Inc. (EPI), Enviro™Cover, 1.75 mil thickness) can continue to be used as an ADC at Sunshine Canyon Landfill as part of its daily operations. However, in order to make it a permanent practice, Republic Services is required to amend the Joint Technical Document to reflect this activity.

All associated technical data analysis files used in our analysis have been loaded onto the SCL LEA / Sunshine Canyon Landfill Sharefile FTP site and are also accessible via our SCL LEA website: www.scllea.org

If you have any questions, please contact me at 213-252-3932 or Ms. Dee Lugo at 626-430-5540.

Sincerely,

David Thompson, REHS
SCL LEA Program Manager

Cc: Maurice Pantoja, SCLLEA
Dee Lugo, SCLLEA
Jose Gutierrez, SCLLEA
Wayde Hunter, SCL CAC
Nicholas Sanchez, SCAQMD
Martins Aiyetiwa, DPW
Rob Sherman, Republic Services

SUNSHINE CANYON LANDFILL

April 28, 2017

Mr. Dan Lafferty
Assistant Deputy Director
Los Angeles County Department of Public Works
Environmental Programs Division
(Via Email)

Subject: Request for Extension of Alternative Daily Cover Pilot Project
Sunshine Canyon Landfill, File EP-5

Dear Mr. Lafferty,

By letter dated October 26, 2016, the Los Angeles County Department of Public Works (DPW) approved an extension of the Alternative Daily Cover (ADC) pilot project using geosynthetic panel product (EnviroCover™) to March 27, 2017. The Sunshine Canyon Landfill Local Enforcement Agency (LEA) has approved an extension of the pilot project to October 12, 2017 by letter dated November 2, 2016 (attached). During our meeting yesterday, we provided information that validates the continued use of the ADC and our request for an extension that coincides with the LEA's date of October 12, 2017.

An evaluation report for the ADC pilot project for the period of October 12, 2015 through August 31, 2016 was submitted to DPW and the LEA on September 30, 2016. This report presents the results and findings of the project as related to Title 27 Section 20690 and the performance metrics outlined by the SCL LEA. Based on the information available at the time the evaluation report was written, our recommendation was for the continued use of the ADC as there were positive impacts already being observed and substantiated by available data presented in the evaluation report.

As we discussed at our meeting held on April 27, 2017, we continue to collect data and make observations that strongly indicate the continued use of the ADC will ultimately result in the overall benefit of increased efficiencies to the site's gas collection and control system as well as the leachate collection system that will also contribute to the reduction of potential off-site odors. These data and observations include the following:

- During the installation of vertical gas collection wells recently drilled in the Cell CC-3B portion of the site where only the ADC has been used as daily cover (Monday – Friday), observations of drilling activities have shown the following:
    - A substantial decrease in the amount of liquids present in the waste material;
    - Less odorous waste material being brought up from the boring;
    - Less decomposition of waste material in the drilling spoils (due to less liquid).

14747 San Fernando Rd., Sylmar, CA 91342 (818) 362-2124 Office (818) 362-5484 Fax

- Daily observations of the areas where the ADC is used indicate no odors observed from the underlying waste at the start of operations;
    - These observations are recorded on daily sheets and submitted with the monthly ADC report submitted to DPW and the LEA.

- Daily observations of the areas where the ADC is used show no presence of vectors substantiating the ADC is as effective as soil in controlling vectors.

Based on this information, we respectfully request an extension of the ADC Pilot Project to October 12, 2017.

Sincerely,

Rob Sherman
General Manager
Sunshine Canyon Landfill

Enclosure

Cc: Mr. Bahman Hajialiakbar, LA County DPW
Mr. Martins Aiyetiwa, LA County DPW
Mr. David Thompson, SCL LEA

SUNSHINE CANYON LANDFILL
SCL-LEA
LOCAL ENFORCEMENT AGENCY

14747 San Fernando Road
Sylmar, California 91324

November 2, 2016

Mr. Rob Sherman
General Manager
Sunshine Canyon Landfill
14747 San Fernando Rd.
Sylmar, CA 91342

SUBJECT: Sunshine Canyon Landfill (SWIS No. 19-AA-2000)
LEA Approval For The Continuation of the Geosynthethic ADC Pilot Project

Dear Mr. Sherman,

On November 5, 2014, the Sunshine Canyon Landfill Local Enforcement Agency (SCL LEA) received a proposal to conduct an alternative daily cover (ADC) pilot project at Sunshine Canyon Landfill (landfill) using a geosynthethic panel product. The proposal was submitted to help control odor generation at the landfill by increasing the efficiency of the landfill gas collection system and leachate control system. On November 26, 2014, the SCL LEA approved the pilot project to operate for a one year period to fully evaluate the ADC for controlling "fresh trash odors" as well as long-term effects on the control of "landfill gas odors". The LEA was notified by Republic Services that the pilot project began on October 12, 2015.

As a condition of approval the ADC pilot project was to be monitored on a daily basis by the landfill operator pursuant to the approved ADC Performance Evaluation Procedures. At the conclusion of the ADC pilot project, the landfill operator was required to submit to the SCL LEA and ADC Evaluation Report.

On October 12, 2016, the one-year pilot project came to a conclusion and Republic Services submitted to the SCL LEA an Evaluation Report on the performance of the geosynthetic panel ADC that was utilized at the landfill. The Evaluation Report found that the geosynthetic panel ADC performed as well or better than the daily soil cover in controlling for vectors, fires, odors, blowing litter, and scavenging without presenting a threat to human health and the environment. However, the effect of the ADC on the landfill gas collection system and the leachate collection system could not be evaluated at this time due to the current filling of Cell CC-3B Part 1A. The impact of the ADC and the trash to trash interface on these systems cannot be fully evaluated until after March 2017 when this cell has been completed and the vertical landfill gas collection wells have been

Gerardo Villalobos, REHS
SCL LEA Program Manager
Office: (626) 430-5550
Email: gvillalobos@ph.lacounty.org
For reply: 5050 Commerce Dr. Baldwin Park, CA 91706

installed. Initial results from the small sampling of collection wells that were installed in the City portion of the landfill were the ADC was utilized over areas with the 9" daily cover showed that no liquids were present in the waste columns.

The SCL LEA conducted an independent evaluation of the ADC pilot project. Our preliminary determination is that the geosynthetic panel ADC is having a positive impact on the landfill operations within the limited sampling that is available. The SCL LEA has determined that during the Project period the ADC met the standards for daily cover pursuant to California Code of Regulations, Title 27 Section 20690.

The SCL LEA would propose extending the ADC pilot project for an additional year so that the ADC's effects on the landfill gas control system and leachate control system in Cell CC-3B Part 1A could be fully evaluated. Therefore, the LEA approves the continued implementation of the Project period for an additional 12 months. Continued implementation will require that all procedures associated with the project shall continue during the evaluation period which will run through October 12, 2017. At the end of this period, the SCL LEA shall evaluate the Project's performance to determine if continued use of the ADC will be approved. The SCL LEA reserves the right to modify/amend the current procedures and suspend or revoke this approval should we determine that the use of the ADC is not meeting the performance standards or fails to protect public health and safety and the environment.

Please do not hesitate to contact me should you need to speak to me.

Sincerely,

Gerry Villalobos

Gerry Villalobos, Program Manager
SCL LEA

Cc: David Thompson, SCL LEA
Martins Aiyetiwa, L. A. County Dept. of Public Works

Gerardo Villalobos, REHS
SCL LEA Program Manager
Office: (626) 430-5550
Email: gvillalobos@ph.lacounty.org
For reply: 5050 Commerce Dr. Baldwin Park, CA 91706

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

MARK PESTRELLA, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: EP-5

April 10, 2018

Mr. Chris Coyle, General Manager
Sunshine Canyon Landfill
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342-1021

SUNSHINE CANYON CITY/COUNTY LANDFILL
THIRD EXTENSION OF APPROVAL FOR THE ALTERNATIVE DAILY COVER PILOT PROJECT UTILIZING GEOSYNTHETIC PANEL PRODUCT

Dear Mr. Coyle:

This letter is in response to Republic Services' (Republic) report entitled "Alternative Daily Cover Evaluation Report - Second Year Pilot Project Using Geosynthetic Panel Product" (ADC Report) dated October 25, 2017, and a follow up to the meeting held on January 31, 2018, between Republic and the County of Los Angeles Department of Public Works (Public Works).

Based on the information presented in the ADC Report, along with consideration of the South Coast Air Quality Management Districts' (SCAQMD) reported odor complaints, associated correspondences and supporting information, Public Works hereby grants a third extension of the Alternative Daily Cover (ADC) Pilot Project for Republic to continue implementing the ADC Program at the Sunshine Canyon Landfill (Landfill) until October 25, 2018, subject to the following conditions:

- Republic is required to follow all conditions of approval as prescribed in Public Works' approval letter dated October 27, 2015, (Enclosure 1) with the exception of Condition No. 7.b.i, which states that *"No peeling back of the soil cover shall be conducted after it is applied at the Working Face"*.

- Based on information provided and site observations performed by Public Works staff, Condition No. 7.b.i shall be modified to allow Republic, on Monday mornings, to "peel back" the soil cover previously applied at the Working Face. However, there shall be no "peel back" in places where the cover soil has been in place for more than 30 days. The "peel back" operations shall be managed in a manner to minimize odors.

- If at any time Public Works determines Republic is unable to manage odors as a result of their current "peel back" operations, a reinstatement of the original condition or new/modified condition may be imposed at the Landfill in order to protect the public health and safety within the meaning of Condition 45N of the Conditional Use Permit (CUP) 00-194-(5).

Public Works is unable to grant Republic's request for the permanent use of the ADC material at the Landfill because the objectives of the ADC Pilot Project as stated in Public Works' letter dated October 27, 2015, have not been met, specifically the following reasons:

1. While we acknowledge Republic's various improvements pertaining to landfill gas management, odor mitigation measures and recent decrease in odor complaints reported to the SCAQMD, Republic has not demonstrated a significant decrease in odor complaints for a 12-month period or greater.

2. Republic has not fully demonstrated that they can control fresh trash odors between the hours of 6 a.m. to 9 a.m.

Furthermore, Republic is required to address Public Works' comments, detailed in Enclosure 2, pertaining to the ADC Report dated October 25, 2017. Republic shall address these deficiencies in its Evaluation Report at the end of the third extension period. This report shall also provide observations, monitoring data, results, and recommendations for continued use of the ADC material as an ADC for the Sunshine Canyon Landfill. Such data analysis and evaluation report must include all documentation establishing whether the project's objectives, as stated in the October 27, 2015, letter have been met. The report shall be submitted to Public Works for review at least 30 days prior to October 25, 2018.

Upon conclusion of the ADC pilot project, Public Works will evaluate the submitted report and will determine 1) if the project's objectives have been met as stated in Public Works' October 27, 2015, approval letter, 2) whether to continue, modify, or terminate the 9-inch daily soil cover requirement; and 3) if allowing further use of the ADC material will protect public health and safety within the meaning of Condition 45N of the CUP. If the project's

objectives are successfully met, Public Works, in concert with the Department of Regional Planning and the Department of Public Health, may modify or terminate the use of 9-inch of daily soil cover requirement and/or allow the continued use of the ADC material on a more permanent basis.

If you have any questions, please contact Mr. Martin Aiyetiwa at (626) 458-3553, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

MARK PESTRELLA
Director of Public Works

PHIL K. DOUDAR
Assistant Deputy Director
Environmental Programs Division

GG:jl
P:\eppub\Secfinal\EP-5 Landfills\2018 Folder\Letters\SCL-ADC Extension.docx

Enc.

cc: Department of Regional Planning (Maria Masis, Tim Stapleton)
Department of Public Health (Maurice Pantoja, Dorcas Hanson-Lugo)
South Coast Air Quality Management District (Laki Tisopulo, Amir Dejakhsh)
Sunshine Canyon Landfill – Local Enforcement Agency (Dave Thompson, Maurice Pantoja, Dorcas Hanson-Lugo)
City of Los Angeles Planning Department (Ly Lam, Nicholas Hendricks)
Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force
Sunshine Canyon Landfill – Community Advisory Committee (Wayde Hunter)
North Valley Coalition of Concerned Citizens (Wayde Hunter)
Granada Hills North Neighborhood Council

ENCLOSURE 1

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: EP-5

October 27, 2015

Mr. Rob Sherman, General Manager
Sunshine Canyon Landfill
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342-1021

Dear Mr. Sherman:

SUNSHINE CANYON CITY/COUNTY LANDFILL
PROPOSED ALTERNATIVE DAILY COVER PILOT PROJECT UTILIZING GEOSYNTHETIC PANEL PRODUCT

Republic Services (Republic) submitted a letter dated April 13, 2015, which included a project proposal dated November 2014, to the Department of Public Works requesting to conduct a 1-year pilot project using Environmental Products, Inc.'s (EPI's), Extended Enviro™ cover as an alternative daily cover (ADC) in lieu of the 9 inches of soil currently being used on-site for daily cover. Subsequently, Republic submitted two more revised project proposals with the latest submittal on August 20, 2015 (Report). The revisions were made to address Public Works' requests to further clarify the proposal's performance measurements, emergency response measures, and public outreach requirements.

Based on Public Works' evaluation of the Report dated August 20, 2015, and consistent with the adopted environmental documentation for the Sunshine Canyon City/County Landfill (Landfill), Public Works hereby modifies the additional corrective measures that it imposed in accordance with Condition 45N of the Conditional Use Permit (CUP) No. 000-194-(5) as set forth in letters dated October 22, 2014, and February 26, 2015, to permit Republic to implement its proposed ADC pilot project for a period of 1 year from the implementation date, subject to the "Conditions of Approval" specified in this letter.

This letter addresses only Republic's request for a modification of the additional corrective measures imposed by Public Works in accordance with Condition 45N of the CUP, and does not address any other approvals that may be required by any other agencies in order for Republic to implement the proposed ADC pilot project.

In a letter dated October 5, 2015, the Sunshine Canyon Landfill Joint City/County Technical Advisory Committee (TAC) stated that it endorses the ADC pilot project. On October 8, 2015, Republic notified Public Works that, on the basis of the TAC's letter, it planned to move forward with the pilot project commencing October 12, 2015.

To the extent that Republic considered the TAC's October 5, 2015, letter to effectuate a modification of Public Works' 9-inch cover requirement to allow for the use of the ADC, Republic misconstrued the TAC's letter and its advisory role. It is important that Republic understand that it is required to comply with the County's CUP.

Objectives of the Pilot Project

The objectives of this ADC 1-year pilot project as stated in the Report are as follows:

- Determine if the geosynthetic panel product material meets the performance requirements of Title 27, Section 20690 to meet the requirements for controlling blowing litter, vectors, fires, odor and scavenging.
- Determine if the geosynthetic panel product material is as effective for controlling odors as 9 inches of compacted soil as a daily soil cover material.

An evaluation of the effectiveness of the geosynthetic panel product will be conducted throughout the 1-year term of the pilot period, as well as at the conclusion of this 1-year period. Information collected during the pilot period will be used to determine (1) whether the project objectives have been met, (2) if it results in improvement in the landfill gas collection and management system, and (3) if it leads to potential reduction in odor nuisance and complaints from the surrounding community.

California Environmental Quality Act Compliance

In December 1999, the City of Los Angeles adopted a Final Subsequent Environmental Impact Report (FSEIR) and a General Plan Amendment and Zone Change (GPA/ZC) allowing Browning-Ferris Industries, now Republic, to operate and maintain a separate City Landfill and eventually a joint City/County Landfill. In 2007, the County approved an addendum to the FSEIR in connection with its approval of the CUP.

The FSEIR calls for the application of 6 inches of daily cover or the use of an approved alternative daily cover. We note that the Sunshine Canyon Landfill Local Enforcement Agency has approved the use of the proposed ADC. In addition, Mitigation Measure No. 7.06 of the Mitigation Monitoring and Reporting Summary (MMRS) adopted by the County, provides that if an odor problem develops, appropriate control measures shall be implemented, which include the application of daily cover material or more frequent application of cover material to seal the landfill surface, or adjustments to the wells, equipment and operation of the landfill gas collection and recovery system.

Among the odor control measures contained in the Mitigation Reporting and Monitoring Program (MRMP) adopted by the City, mitigation measure no. 33 provides that when an odor problem develops, appropriate control measures shall be implemented, which include the application of additional dirt daily cover material, or more frequent application of the cover material to seal the landfill surface, or adjustments to the wells, equipment and operation of the landfill gas collection and recovery system.

As discussed in further detail in this letter, with the conditions spelled out in this letter, the proposed ADC is an appropriate measure for controlling odors in conjunction with other corrective measures that are set forth in our letters dated September 27, 2010; October 22, 2014; and February 26, 2015. It is our determination that the ADC Pilot Project as described in this letter is within the scope of the project that is the subject of the FSEIR. Therefore, Public Works is approving the ADC pilot project, subject to the following conditions:

General Conditions of Approval

1. Effective Area – These requirements apply to all areas within the "Limits of Fill" of Exhibit "A-2" as defined in the combined "City/County Project" pursuant to the Los Angeles County CUP.

2. Duration of Pilot Project – 1 year from the date of this letter.

3. Termination – Public Works may terminate the approval of the pilot project at any time, including but not limited to the following causes, as determined by Public Works in its sole discretion:

    a. Republic has failed to comply with any of the requirements specified herein, including the *Evaluation Standards and Program Requirements*, *Reporting Requirements*, and *Additional Requirements*, as specified.

b. Problems arise with the use of the ADC material that cannot be corrected.

c. The use of the ADC material does not meet the objectives of the pilot project as stated in this letter and in the Report.

If, at any time during the term of this pilot project, Public Works terminates the approval of the pilot project, Republic shall revert back to using 9 inches of soil as daily cover at the Landfill unless Public Works approves another form of daily cover in accordance with Condition 45N, in order to promote best gas management practices at the site and to protect public health and safety.

Evaluation Standards and Program Requirements:

4. ADC Material Specifications – The ADC material to be used for the implementation of this project shall be limited to a non-reusable, geosynthetic Extended Enviro™ cover with a thickness of 1.75 millimeters, as stated in the proposal. Any proposed change to this ADC material will require prior approval from Public Works.

5. Equipment Specifications – The Extended Enviro™ cover shall only be deployed using EPI's Extended Enviro™ Cover System Deployer Model 800 (Deployer). Any proposed change to this equipment will require prior approval from Public Works.

6. Soil Usage – Soil to be used as daily cover at the end of operation on Saturdays, or as ballast material during ADC application or as intermediate daily cover, must be free of sulfate (SO_4) prior to its usage, or at a level acceptable to Public Works. Prior testing of the soil must be performed to ensure that sulfate is not present in the soil at a level not acceptable to Public Works. Test results must be provided to Public Works for approval. However, every source of soil material must be tested and approved prior to its use at the site.

7. ADC Material Procedures – The ADC material shall only be applied as described in the following restrictions:

   a. The ADC material shall be applied at the end of each operating day or at more frequent intervals (except Saturday) and shall be left in place at the start of the following day's operations.

i. No removal of this ADC material shall be conducted after it is applied at the Working Face.
ii. The ADC material will be placed over the entire deck of the operating day's Working Face.
iii. The maximum exposure time for the ADC material shall not exceed 5 days.
iv. The ADC material shall not be placed on any outside slopes or slopes that will not be part of the operating day's Working Face for longer than 180 days.
v. The ADC material shall not be used for intermediate or final cover.

b. Six inches of soil shall be used for daily cover at the close of operations on Saturdays and shall remain in place on Monday mornings.
   i. No "peeling back" of the soil cover shall be conducted after it is applied at the Working Face.
   ii. Only soil may be used as cover on the outside and temporary slopes.

c. The ADC material will be used on one lift per day.

d. The maximum size of the Working Face deck area shall be no larger than 3 acres.

8. Material Placement – The ADC material shall be placed as detailed in the Report as follows:

   a. General Placement Procedure
      i. The Deployer is loaded with a roll of the Extended Enviro™ cover and on-site ballast material.
      ii. The Deployer is positioned on the outside edge of the cover area to deploy the first panel of the ADC material. The outside edge shall be positioned at a minimum of 5 feet from the outside of the waste material.
      iii. During the application process, the ADC material is unrolled from the Deployer while ballast material is simultaneously discharged at a controlled rate to securely anchor the ADC material onto the Working Face.
      iv. On successive adjacent runs to deploy the ADC material. The material is placed so that it overlaps by not less than 10 percent, thus forming a compression-type seal creating a continuous closure and impermeable barrier between the waste and the environment.

b. Placement During Windy Conditions – During high-wind conditions, the following operational measures shall be implemented and maintained:
   i. Wind direction and speed must be established to better determine how the ADC material will be deployed.
   ii. Upon determination of the wind direction, the ADC material will be placed parallel to the wind direction to minimize the potential uplifting of the material.
   iii. Additional overlap of the ADC material can be applied, provided that natural tearing and puncturing of the overlapped material as a result of the heavy equipment operating on top of previously covered trash is maintained.

c. Placement During Rainy/Stormy Conditions – During rainy/stormy conditions, the following operational measures shall be implemented and maintained:
   i. Intactness of the ballast material shall be maintained to ensure that the ballast material is not washed away by water runoff.
   ii. No ponding on the surface of the ADC material shall occur. If ponding occurs, appropriate measures shall be taken to resolve this issue.
   iii. Placement of the ADC material on the working face shall be appropriately deployed to prevent stormwater run-off underneath the ADC material and to inhibit continuous contact of stormwater on the disposed solid waste.

If conditions such as high-winds or heavy rains prevent compliance with these restrictions and prevent the ADC material from functioning properly, the operator shall cover the Working Face with 9 inches of soil, which shall be kept in place at the beginning of the next operating day. No "peeling back" of the soil cover shall be conducted after it is applied at the Working Face.

Reporting Requirements:

9. Performance Requirements – In order to determine the effectiveness of the ADC material, the ADC material shall be evaluated in accordance with the performance requirements and standards set forth in CCR Title 27, Section 20690 and 20695, respectively. Evaluation of performance criteria shall be conducted as follows:

   a. Vector
      i. Threshold values for vector populations shall be established prior to commencement of the ADC pilot project; therefore, provide these to us within

14 days from the date of this letter. Based on these threshold values, daily inspection of vector populations shall be recorded in accordance with the recording requirements specified in CCR Title 27, Section 20690(a)(1)(D).

ii. Any vector infestation shall be recorded in the Monthly Reporting Requirements stipulated herein, and controlled immediately upon observation. If infestation cannot be controlled, the use of the ADC material shall be ceased and be replaced with 9 inches of soil as daily cover.

b. Fire
   i. Any burning material, or any solid waste that has the potential to cause fire, shall not be disposed of at the Working Face and shall not be covered with the ADC material. Procedures on handling such materials or solid waste shall be subject to the requirements specified in CCR Title 27, Section 20695(b).
   ii. Any fire incidents, or relocation of any burning material or any solid waste that has the potential to cause fire, shall be recorded in the Monthly Reporting Requirements stipulated herein.

c. Litter
   i. The operator shall control windblown litter from the operating day's Working Face.
   ii. If wind conditions are too extreme for the ADC material to remain intact once applied and all operational adjustments as described in Condition 6 have been proven to be ineffective, the operator shall cease the application of the ADC material and replace it with 9 inches of soil for cover until such time as conditions permit the use of the ADC material.

d. Scavenging
   i. No scavenging activities shall be allowed.
   ii. Any scavenging activities shall be reported to the operations manager and appropriate action must be taken.

e. Odor
   i. Daily observation of the Working Face area for any potential odor sources before, during, and after the placement of the ADC material shall be conducted.

ii. Current odor management program as stipulated in the Final Odor Plan of Action dated June 15, 2012, shall continue to be implemented.
iii. If odor sources have been found within the Working Face area, appropriate odor control measures shall be implemented. If odor persists, Republic may be required to discontinue the use of the ADC material and return to using 9 inches of soil for daily cover in accordance with the conditions concerning "Termination" under the "General Conditions of Approval" of this letter.
iv. Any potential odor sources from the Working Face shall be recorded in the Monthly Reporting Requirements, and shall include, but not be limited to, the approximate location of the source, time and/or period of the duration of odor, weather condition, and odor control measures taken.

f. In addition to the above performance criteria, Republic shall also establish a base line for two areas of the site: (1) where 9 inches of soil cover has been applied, and (2) where the ADC material is applied. The following observations shall be made on both areas in order to measure the performance of the pilot project in comparison to the use of 9 inches of soil cover.
   i. Surface Gas Emissions – Republic shall monitor for any surface gas exceedances, in accordance with the South Coast Air Quality Management District Rule 1150.1.
   ii. Landfill Gas Collection and Recovery System – Republic shall locate wells impacted by fluid build-ups, indicate the amount of fluid that is pumped-out from the well, and record the vacuum pressure before and after fluid is pumped-out.
   iii. Leachate Collection and Recovery System – Republic shall record the amount of leachate that is collected from the sump.
   iv. Public Works reserves the right to add additional criteria that it determines are necessary to evaluate the performance of the ADC at the site.

10. Environmental Monitoring

    a. In addition to implementing the Landfill's current odor management program, which includes on-and-off site odor monitoring, Republic shall also examine the ADC material at the end of each operating day after the Working Face has been completely covered with the ADC material. Any tears, punctures, or unusual observations of the ADC material during its application and/or prior to placing new trash on top of the previous day's application of the ADC material, shall be documented and included in the Monthly Reporting Requirements.

    b. Weather data shall also be collected on a daily basis and reported in the Monthly Reporting Requirements. Weather data shall include but not be limited to ambient temperature, humidity conditions, wind and speed direction, and rainfall.

    c. Daily observations of vectors, blown litter, fire, and any indication of scavenging shall also be included.

11. Monthly Reporting Requirements – Republic shall provide a monthly report to Public Works summarizing all monitoring observations and maintenance issues of the ADC pilot project, including but not limited to any tears, punctures, or unusual observations related to the application of the ADC material; any immediate odors detected at the vicinity of the Working Face during and after the application of the ADC material; and any unusual occurrences at the Working Face, such as, fire, vectors, blowing litter, and scavenging. A copy of the daily logs from the monitoring requirements specified in Republic's proposal and on this letter must also be provided in the monthly report as specified herein.

12. Additional Requirements

    a. Republic shall within 30 days of the date of this letter implement all requirements that were previously required by Public Works in the letters dated October 22, 2014, and February 26, 2015, pursuant to Condition 45N of the CUP except to the extent modified by this letter.

    b. Republic shall cooperate with Public Works in hiring an independent consultant to determine, evaluate, and make recommendations regarding the quality and permeability of soil used for daily and intermediate cover materials at the site.

13. Data Analysis – At the conclusion of this ADC pilot project, Republic shall submit a detailed report documenting all of the observations, monitoring data and results, and recommendations for continued use of the ADC material as an ADC for Sunshine Canyon Landfill. Such Data Analysis and Evaluation Report must also include all documentation establishing whether the project's stated objectives have been met.

Conclusions and Results of the ADC Pilot Project:

At the conclusion of the ADC pilot project, Public Works will evaluate the Data Analysis and Evaluation Report to determine if the project objectives have been met and will consider whether continued modification/elimination of the 9-inch daily soil cover requirement to allow the use of the ADC will protect public health and safety within the meaning of Condition 45N of the CUP. If the project objectives are met, Public Works, in consultation with the Departments of Regional Planning and Public Health, may modify or eliminate the requirement specifying the use of 9 inches of daily soil cover and allow the continued use of the ADC material on a more permanent basis.

All documents and reports required by this letter shall be submitted to the following address:

County of Los Angeles
Department of Public Works
Environmental Programs Division
P.O. Box 1460
Alhambra, California 91802-1460
Attention Martins Aiyetiwa, Landfills Section

If you have any questions, please contact Mr. Martins Aiyetiwa at (626) 458-3553, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

GAIL FARBER
Director of Public Works

RICHARD J. BRUCKNER
Director of Regional Planning

KM:jl
P:\Sec\HOA_1264552_1 Sunshine ADC Pilot Program

cc: Department of Regional Planning (Maria Masis, Jon Sanabria, Dennis Slavin)
Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force
South Coast Air Quality Management District (Mohsen Nazemi, Ed Pupka)
Sunshine Canyon Landfill – Local Enforcement Agency (Dave Thompson, Gerardo Villalobos)
Sunshine Canyon Landfill – Community Advisory Committee (Becky Bendikson, Wayde Hunter)
City of Los Angeles Planning Department (Nicholas Hendricks, Ly Lam, Lisa Webber)
North Valley Coalition of Concerned Citizens (Wayde Hunter)
Granada Hills North Neighborhood Council

Enclosure 2

Public Works' comments to Republic Services' regarding report titled "Alternative Daily Cover Evaluation Report - Second Year Pilot Project Using Geosynthetic Panel Product"

General Comments

1. The ADC Report does not address Condition 6, of Public Works' October 27, 2015 letter, which requires the following: "*Soil to be used as daily cover at the end of operation on Saturdays, or as ballast material during ADC application or as intermediate daily cover, must be free of sulfate (SO4) prior to its usage, or at a level acceptable to Public Works. Prior testing of the soil must be performed to ensure that sulfate is not present in the soil at a level not acceptable to Public Works. Test results must be provided to Public Works for approval. However, every source of soil material must be tested and approved prior to its use at the site."*

Specific Comments

2. Section 4.6.1 Odor Complaints - Odor Complaint evaluations only focused on odor complaints verified by the South Coast Air Quality Management Districts' (SCAQMD) inspectors classified as either "Trash" ("TR") or "Trash/Landfill Gas" ("TR/LFG") odors. The ADC Report shall provide a full detailed analysis and evaluation of the SCAQMD odor complaint data and information taking into consideration all (monthly) odor complaint types per SCAQMD Codes such as, but not limited to, TR, LG, TR/LFG, OO, None, and NFR, etc.; and monthly percentage of all odor complaints from 6:00 AM to 6:00 PM over the total number of odor complaints in that month.

3. Section 4.6.1 Odor Complaints - Recent SCAQMD odor complaint reports do not include odor complaint classification code "Trash/Landfill Gas" ("TR/LFG"). Please provide background and explain. Also, please substantiate Republic's analysis utilizing "TR/LFG" classification code.

4. Section 6.0 – Section 6.0 is missing from the Report. Please provide or clarify.

5. Section 7.0 Evaluation of ADC to Enhance/Improve Efficiency of Landfill Gas Collection System – ADC Report shall address Condition 9.f.i of Public Works October 27, 2015 letter, "Surface Gas Emissions".

   The analysis and evaluation shall also consider additional factors and/or mitigation measures such as, but not limited to, fill locations, gabion cubes installation, pump installation, and enhanced intermediate cover measures in place.

6. Section 7.0 Evaluation of ADC to Enhance/Improve Efficiency of Landfill Gas Collection System – Section 7.0 states the following: *"The ADC likely sheds stormwater better than daily cover soil resulting in less liquids seeping into the waste mass"*. However, the ADC Report continues with the following statement: *"The ADC may contribute to better drainage of liquid through the waste to the leachate collection and removal system".* Statements appear contradictory to one another, please clarify.

7. Section 8.0 Level of ADC Destruction – Section 8.0 discusses one (1) demonstration of the level of destruction of the ADC conducted on September 13, 2016, and a picture of the ADC material observed appears to be approximately 5ft x 3ft. Considering Republic's continued position to prevent impermeable layers of daily cover material in the fill areas, and the extensive amount of ADC Material utilized, perhaps continued and more extensive analysis of the mechanical and natural destruction (over time) of the ADC material should be conducted by a subject matter expert, in order to substantiate the findings.

8. Section 9.0 - Section 9 is missing from the Report. Please provide or clarify.

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

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MARK PESTRELLA, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: EP-5

May 11, 2017

Mr. Rob Sherman, General Manager
Sunshine Canyon Landfill
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342-1021

Dear Mr. Sherman:

SUNSHINE CANYON CITY/COUNTY LANDFILL
REQUEST FOR EXTENSION OF APPROVAL FOR THE ALTERNATIVE DAILY COVER PILOT PROJECT UTILIZING GEOSYNTHETIC PANEL PRODUCT

On April 28, 2017, Republic Services submitted a request for extension of the Alternative Daily Cover (ADC) Pilot Project, utilizing the geosynthetic panel product (EnviroCover™), at the Sunshine Canyon Landfill to October 12, 2017 (Enclosure 1).

Public Works is hereby granting a second extension for Republic Services to continue implementing the ADC Pilot Project, subject to all conditions as prescribed in Public Works' approval letter of October 27, 2015, (Enclosure 2), for an additional 5 months until October 12, 2017. The first extension was granted on October 26, 2016, for a period of 6 months until March 27, 2017.

Republic Services must submit an updated detailed report to Public Works documenting all observations, monitoring data, results, and recommendations for continued use of the ADC material as an ADC for the Sunshine Canyon Landfill. Such data analysis and evaluation report must also include all documentation establishing whether the project's stated objectives as stated in the October 27, 2015, letter have been met. The report shall be submitted for review at least 30 days prior to October 12, 2017.

Upon the conclusion of the project, Public Works will evaluate the submitted report and will determine 1) if the project objectives have been met as stated in Public Works' October 27, 2015, approval letter; 2) whether to continue, modify, or terminate the 9-inch daily soil cover requirement; and 3) if allowing further use of the ADC material will protect public health and safety within the meaning of Condition 45N of the CUP. If the project objectives are successfully met, Public Works, in concert with the Department of Regional

Planning and the Department of Public Health, may modify, or terminate the use of 9-inch of daily soil cover requirement and/or allow the continued use of the ADC material on a more permanent basis.

In the event Republic Services is unable to demonstrate that it has met the objectives of the Pilot Project and obtain Public Works' approval for continued use of the ADC material, the ADC Pilot Project shall terminate and the 9-inch of daily soil cover requirement as stated in the attached letter dated September 27, 2010 (Enclosure 3), shall be reinstated and become effective. Thereafter, Public Works may modify the 9-inch daily soil cover requirement upon request by Republic Services.

If you have any questions, please contact Mr. Martins Aiyetiwa at (626) 458-3553, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

MARK PESTRELLA
Director of Public Works

MARTIN AIYETIWA
Senior Civil Engineer
Environmental Programs Division

MH:jl
P:\Sec\Sunshine ADC Pilot Program Extension 4.26.17.docx

cc: Department of Regional Planning (Dennis Slavin, Jon Sanabria, Maria Masis)
Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force
South Coast Air Quality Management District (Laki Tisopulo, Amir Dejakhsh)
Sunshine Canyon Landfill – Local Enforcement Agency (Dave Thompson, Maurice Pantoja)
Sunshine Canyon Landfill – Community Advisory Committee (Becky Bendikson, Wayde Hunter)
City of Los Angeles Planning Department (Lisa Webber, Ly Lam, Nicholas Hendricks)
North Valley Coalition of Concerned Citizens (Wayde Hunter)
Granada Hills North Neighborhood Council

ENCLOSURE 1

SUNSHINE CANYON LANDFILL

April 28, 2017

Mr. Dan Lafferty
Assistant Deputy Director
Los Angeles County Department of Public Works
Environmental Programs Division
(Via Email)

Subject: Request for Extension of Alternative Daily Cover Pilot Project
Sunshine Canyon Landfill, File EP-5

Dear Mr. Lafferty,

By letter dated October 26, 2016, the Los Angeles County Department of Public Works (DPW) approved an extension of the Alternative Daily Cover (ADC) pilot project using geosynthetic panel product (EnviroCover™) to March 27, 2017. The Sunshine Canyon Landfill Local Enforcement Agency (LEA) has approved an extension of the pilot project to October 12, 2017 by letter dated November 2, 2016 (attached). During our meeting yesterday, we provided information that validates the continued use of the ADC and our request for an extension that coincides with the LEA's date of October 12, 2017.

An evaluation report for the ADC pilot project for the period of October 12, 2015 through August 31, 2016 was submitted to DPW and the LEA on September 30, 2016. This report presents the results and findings of the project as related to Title 27 Section 20690 and the performance metrics outlined by the SCL LEA. Based on the information available at the time the evaluation report was written, our recommendation was for the continued use of the ADC as there were positive impacts already being observed and substantiated by available data presented in the evaluation report.

As we discussed at our meeting held on April 27, 2017, we continue to collect data and make observations that strongly indicate the continued use of the ADC will ultimately result in the overall benefit of increased efficiencies to the site's gas collection and control system as well as the leachate collection system that will also contribute to the reduction of potential off-site odors. These data and observations include the following:

- During the installation of vertical gas collection wells recently drilled in the Cell CC-3B portion of the site where only the ADC has been used as daily cover (Monday – Friday), observations of drilling activities have shown the following:
    - A substantial decrease in the amount of liquids present in the waste material;
    - Less odorous waste material being brought up from the boring;
    - Less decomposition of waste material in the drilling spoils (due to less liquid).

14747 San Fernando Rd., Sylmar, CA 91342 (818) 362-2124 Office (818) 362-5484 Fax

- Daily observations of the areas where the ADC is used indicate no odors observed from the underlying waste at the start of operations;
    - These observations are recorded on daily sheets and submitted with the monthly ADC report submitted to DPW and the LEA.

- Daily observations of the areas where the ADC is used show no presence of vectors substantiating the ADC is as effective as soil in controlling vectors.

Based on this information, we respectfully request an extension of the ADC Pilot Project to October 12, 2017.

Sincerely,

Rob Sherman
General Manager
Sunshine Canyon Landfill

Enclosure

Cc: Mr. Bahman Hajialiakbar, LA County DPW
Mr. Martins Aiyetiwa, LA County DPW
Mr. David Thompson, SCL LEA

ENCLOSURE 2

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: EP-5

October 27, 2015

Mr. Rob Sherman, General Manager
Sunshine Canyon Landfill
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342-1021

Dear Mr. Sherman:

SUNSHINE CANYON CITY/COUNTY LANDFILL
PROPOSED ALTERNATIVE DAILY COVER PILOT PROJECT UTILIZING GEOSYNTHETIC PANEL PRODUCT

Republic Services (Republic) submitted a letter dated April 13, 2015, which included a project proposal dated November 2014, to the Department of Public Works requesting to conduct a 1-year pilot project using Environmental Products, Inc.'s (EPI's), Extended Enviro™ cover as an alternative daily cover (ADC) in lieu of the 9 inches of soil currently being used on-site for daily cover. Subsequently, Republic submitted two more revised project proposals with the latest submittal on August 20, 2015 (Report). The revisions were made to address Public Works' requests to further clarify the proposal's performance measurements, emergency response measures, and public outreach requirements.

Based on Public Works' evaluation of the Report dated August 20, 2015, and consistent with the adopted environmental documentation for the Sunshine Canyon City/County Landfill (Landfill), Public Works hereby modifies the additional corrective measures that it imposed in accordance with Condition 45N of the Conditional Use Permit (CUP) No. 000-194-(5) as set forth in letters dated October 22, 2014, and February 26, 2015, to permit Republic to implement its proposed ADC pilot project for a period of 1 year from the implementation date, subject to the "Conditions of Approval" specified in this letter.

This letter addresses only Republic's request for a modification of the additional corrective measures imposed by Public Works in accordance with Condition 45N of the CUP, and does not address any other approvals that may be required by any other agencies in order for Republic to implement the proposed ADC pilot project.

In a letter dated October 5, 2015, the Sunshine Canyon Landfill Joint City/County Technical Advisory Committee (TAC) stated that it endorses the ADC pilot project. On October 8, 2015, Republic notified Public Works that, on the basis of the TAC's letter, it planned to move forward with the pilot project commencing October 12, 2015.

To the extent that Republic considered the TAC's October 5, 2015, letter to effectuate a modification of Public Works' 9-inch cover requirement to allow for the use of the ADC, Republic misconstrued the TAC's letter and its advisory role. It is important that Republic understand that it is required to comply with the County's CUP.

Objectives of the Pilot Project

The objectives of this ADC 1-year pilot project as stated in the Report are as follows:

- Determine if the geosynthetic panel product material meets the performance requirements of Title 27, Section 20690 to meet the requirements for controlling blowing litter, vectors, fires, odor and scavenging.
- Determine if the geosynthetic panel product material is as effective for controlling odors as 9 inches of compacted soil as a daily soil cover material.

An evaluation of the effectiveness of the geosynthetic panel product will be conducted throughout the 1-year term of the pilot period, as well as at the conclusion of this 1-year period. Information collected during the pilot period will be used to determine (1) whether the project objectives have been met, (2) if it results in improvement in the landfill gas collection and management system, and (3) if it leads to potential reduction in odor nuisance and complaints from the surrounding community.

California Environmental Quality Act Compliance

In December 1999, the City of Los Angeles adopted a Final Subsequent Environmental Impact Report (FSEIR) and a General Plan Amendment and Zone Change (GPA/ZC) allowing Browning-Ferris Industries, now Republic, to operate and maintain a separate City Landfill and eventually a joint City/County Landfill. In 2007, the County approved an addendum to the FSEIR in connection with its approval of the CUP.

The FSEIR calls for the application of 6 inches of daily cover or the use of an approved alternative daily cover. We note that the Sunshine Canyon Landfill Local Enforcement Agency has approved the use of the proposed ADC. In addition, Mitigation Measure No. 7.06 of the Mitigation Monitoring and Reporting Summary (MMRS) adopted by the County, provides that if an odor problem develops, appropriate control measures shall be implemented, which include the application of daily cover material or more frequent application of cover material to seal the landfill surface, or adjustments to the wells, equipment and operation of the landfill gas collection and recovery system.

Among the odor control measures contained in the Mitigation Reporting and Monitoring Program (MRMP) adopted by the City, mitigation measure no. 33 provides that when an odor problem develops, appropriate control measures shall be implemented, which include the application of additional dirt daily cover material, or more frequent application of the cover material to seal the landfill surface, or adjustments to the wells, equipment and operation of the landfill gas collection and recovery system.

As discussed in further detail in this letter, with the conditions spelled out in this letter, the proposed ADC is an appropriate measure for controlling odors in conjunction with other corrective measures that are set forth in our letters dated September 27, 2010; October 22, 2014; and February 26, 2015. It is our determination that the ADC Pilot Project as described in this letter is within the scope of the project that is the subject of the FSEIR. Therefore, Public Works is approving the ADC pilot project, subject to the following conditions:

General Conditions of Approval

1. Effective Area – These requirements apply to all areas within the "Limits of Fill" of Exhibit "A-2" as defined in the combined "City/County Project" pursuant to the Los Angeles County CUP.

2. Duration of Pilot Project – 1 year from the date of this letter.

3. Termination – Public Works may terminate the approval of the pilot project at any time, including but not limited to the following causes, as determined by Public Works in its sole discretion:

    a. Republic has failed to comply with any of the requirements specified herein, including the *Evaluation Standards and Program Requirements*, *Reporting Requirements*, and *Additional Requirements*, as specified.

b. Problems arise with the use of the ADC material that cannot be corrected.

c. The use of the ADC material does not meet the objectives of the pilot project as stated in this letter and in the Report.

If, at any time during the term of this pilot project, Public Works terminates the approval of the pilot project, Republic shall revert back to using 9 inches of soil as daily cover at the Landfill unless Public Works approves another form of daily cover in accordance with Condition 45N, in order to promote best gas management practices at the site and to protect public health and safety.

Evaluation Standards and Program Requirements:

4. ADC Material Specifications – The ADC material to be used for the implementation of this project shall be limited to a non-reusable, geosynthetic Extended Enviro™ cover with a thickness of 1.75 millimeters, as stated in the proposal. Any proposed change to this ADC material will require prior approval from Public Works.

5. Equipment Specifications – The Extended Enviro™ cover shall only be deployed using EPI's Extended Enviro™ Cover System Deployer Model 800 (Deployer). Any proposed change to this equipment will require prior approval from Public Works.

6. Soil Usage – Soil to be used as daily cover at the end of operation on Saturdays, or as ballast material during ADC application or as intermediate daily cover, must be free of sulfate (SO_4) prior to its usage, or at a level acceptable to Public Works. Prior testing of the soil must be performed to ensure that sulfate is not present in the soil at a level not acceptable to Public Works. Test results must be provided to Public Works for approval. However, every source of soil material must be tested and approved prior to its use at the site.

7. ADC Material Procedures – The ADC material shall only be applied as described in the following restrictions:

   a. The ADC material shall be applied at the end of each operating day or at more frequent intervals (except Saturday) and shall be left in place at the start of the following day's operations.

i. No removal of this ADC material shall be conducted after it is applied at the Working Face.
ii. The ADC material will be placed over the entire deck of the operating day's Working Face.
iii. The maximum exposure time for the ADC material shall not exceed 5 days.
iv. The ADC material shall not be placed on any outside slopes or slopes that will not be part of the operating day's Working Face for longer than 180 days.
v. The ADC material shall not be used for intermediate or final cover.

b. Six inches of soil shall be used for daily cover at the close of operations on Saturdays and shall remain in place on Monday mornings.
   i. No "peeling back" of the soil cover shall be conducted after it is applied at the Working Face.
   ii. Only soil may be used as cover on the outside and temporary slopes.

c. The ADC material will be used on one lift per day.

d. The maximum size of the Working Face deck area shall be no larger than 3 acres.

8. Material Placement – The ADC material shall be placed as detailed in the Report as follows:

   a. General Placement Procedure
      i. The Deployer is loaded with a roll of the Extended Enviro™ cover and on-site ballast material.
      ii. The Deployer is positioned on the outside edge of the cover area to deploy the first panel of the ADC material. The outside edge shall be positioned at a minimum of 5 feet from the outside of the waste material.
      iii. During the application process, the ADC material is unrolled from the Deployer while ballast material is simultaneously discharged at a controlled rate to securely anchor the ADC material onto the Working Face.
      iv. On successive adjacent runs to deploy the ADC material. The material is placed so that it overlaps by not less than 10 percent, thus forming a compression-type seal creating a continuous closure and impermeable barrier between the waste and the environment.

b. Placement During Windy Conditions – During high-wind conditions, the following operational measures shall be implemented and maintained:
   i. Wind direction and speed must be established to better determine how the ADC material will be deployed.
   ii. Upon determination of the wind direction, the ADC material will be placed parallel to the wind direction to minimize the potential uplifting of the material.
   iii. Additional overlap of the ADC material can be applied, provided that natural tearing and puncturing of the overlapped material as a result of the heavy equipment operating on top of previously covered trash is maintained.

c. Placement During Rainy/Stormy Conditions – During rainy/stormy conditions, the following operational measures shall be implemented and maintained:
   i. Intactness of the ballast material shall be maintained to ensure that the ballast material is not washed away by water runoff.
   ii. No ponding on the surface of the ADC material shall occur. If ponding occurs, appropriate measures shall be taken to resolve this issue.
   iii. Placement of the ADC material on the working face shall be appropriately deployed to prevent stormwater run-off underneath the ADC material and to inhibit continuous contact of stormwater on the disposed solid waste.

If conditions such as high-winds or heavy rains prevent compliance with these restrictions and prevent the ADC material from functioning properly, the operator shall cover the Working Face with 9 inches of soil, which shall be kept in place at the beginning of the next operating day. No "peeling back" of the soil cover shall be conducted after it is applied at the Working Face.

Reporting Requirements:

9. Performance Requirements – In order to determine the effectiveness of the ADC material, the ADC material shall be evaluated in accordance with the performance requirements and standards set forth in CCR Title 27, Section 20690 and 20695, respectively. Evaluation of performance criteria shall be conducted as follows:

   a. Vector
      i. Threshold values for vector populations shall be established prior to commencement of the ADC pilot project; therefore, provide these to us within

14 days from the date of this letter. Based on these threshold values, daily inspection of vector populations shall be recorded in accordance with the recording requirements specified in CCR Title 27, Section 20690(a)(1)(D).

ii. Any vector infestation shall be recorded in the Monthly Reporting Requirements stipulated herein, and controlled immediately upon observation. If infestation cannot be controlled, the use of the ADC material shall be ceased and be replaced with 9 inches of soil as daily cover.

b. Fire
   i. Any burning material, or any solid waste that has the potential to cause fire, shall not be disposed of at the Working Face and shall not be covered with the ADC material. Procedures on handling such materials or solid waste shall be subject to the requirements specified in CCR Title 27, Section 20695(b).
   ii. Any fire incidents, or relocation of any burning material or any solid waste that has the potential to cause fire, shall be recorded in the Monthly Reporting Requirements stipulated herein.

c. Litter
   i. The operator shall control windblown litter from the operating day's Working Face.
   ii. If wind conditions are too extreme for the ADC material to remain intact once applied and all operational adjustments as described in Condition 6 have been proven to be ineffective, the operator shall cease the application of the ADC material and replace it with 9 inches of soil for cover until such time as conditions permit the use of the ADC material.

d. Scavenging
   i. No scavenging activities shall be allowed.
   ii. Any scavenging activities shall be reported to the operations manager and appropriate action must be taken.

e. Odor
   i. Daily observation of the Working Face area for any potential odor sources before, during, and after the placement of the ADC material shall be conducted.

ii. Current odor management program as stipulated in the Final Odor Plan of Action dated June 15, 2012, shall continue to be implemented.
iii. If odor sources have been found within the Working Face area, appropriate odor control measures shall be implemented. If odor persists, Republic may be required to discontinue the use of the ADC material and return to using 9 inches of soil for daily cover in accordance with the conditions concerning "Termination" under the "General Conditions of Approval" of this letter.
iv. Any potential odor sources from the Working Face shall be recorded in the Monthly Reporting Requirements, and shall include, but not be limited to, the approximate location of the source, time and/or period of the duration of odor, weather condition, and odor control measures taken.

f. In addition to the above performance criteria, Republic shall also establish a base line for two areas of the site: (1) where 9 inches of soil cover has been applied, and (2) where the ADC material is applied. The following observations shall be made on both areas in order to measure the performance of the pilot project in comparison to the use of 9 inches of soil cover.
   i. Surface Gas Emissions – Republic shall monitor for any surface gas exceedances, in accordance with the South Coast Air Quality Management District Rule 1150.1.
   ii. Landfill Gas Collection and Recovery System – Republic shall locate wells impacted by fluid build-ups, indicate the amount of fluid that is pumped-out from the well, and record the vacuum pressure before and after fluid is pumped-out.
   iii. Leachate Collection and Recovery System – Republic shall record the amount of leachate that is collected from the sump.
   iv. Public Works reserves the right to add additional criteria that it determines are necessary to evaluate the performance of the ADC at the site.

10. Environmental Monitoring

    a. In addition to implementing the Landfill's current odor management program, which includes on-and-off site odor monitoring, Republic shall also examine the ADC material at the end of each operating day after the Working Face has been completely covered with the ADC material. Any tears, punctures, or unusual observations of the ADC material during its application and/or prior to placing new trash on top of the previous day's application of the ADC material, shall be documented and included in the Monthly Reporting Requirements.

    b. Weather data shall also be collected on a daily basis and reported in the Monthly Reporting Requirements. Weather data shall include but not be limited to ambient temperature, humidity conditions, wind and speed direction, and rainfall.

    c. Daily observations of vectors, blown litter, fire, and any indication of scavenging shall also be included.

11. Monthly Reporting Requirements – Republic shall provide a monthly report to Public Works summarizing all monitoring observations and maintenance issues of the ADC pilot project, including but not limited to any tears, punctures, or unusual observations related to the application of the ADC material; any immediate odors detected at the vicinity of the Working Face during and after the application of the ADC material; and any unusual occurrences at the Working Face, such as, fire, vectors, blowing litter, and scavenging. A copy of the daily logs from the monitoring requirements specified in Republic's proposal and on this letter must also be provided in the monthly report as specified herein.

12. Additional Requirements

    a. Republic shall within 30 days of the date of this letter implement all requirements that were previously required by Public Works in the letters dated October 22, 2014, and February 26, 2015, pursuant to Condition 45N of the CUP except to the extent modified by this letter.

    b. Republic shall cooperate with Public Works in hiring an independent consultant to determine, evaluate, and make recommendations regarding the quality and permeability of soil used for daily and intermediate cover materials at the site.

13. Data Analysis – At the conclusion of this ADC pilot project, Republic shall submit a detailed report documenting all of the observations, monitoring data and results, and recommendations for continued use of the ADC material as an ADC for Sunshine Canyon Landfill. Such Data Analysis and Evaluation Report must also include all documentation establishing whether the project's stated objectives have been met.

Conclusions and Results of the ADC Pilot Project:

At the conclusion of the ADC pilot project, Public Works will evaluate the Data Analysis and Evaluation Report to determine if the project objectives have been met and will consider whether continued modification/elimination of the 9-inch daily soil cover requirement to allow the use of the ADC will protect public health and safety within the meaning of Condition 45N of the CUP. If the project objectives are met, Public Works, in consultation with the Departments of Regional Planning and Public Health, may modify or eliminate the requirement specifying the use of 9 inches of daily soil cover and allow the continued use of the ADC material on a more permanent basis.

All documents and reports required by this letter shall be submitted to the following address:

County of Los Angeles
Department of Public Works
Environmental Programs Division
P.O. Box 1460
Alhambra, California 91802-1460
Attention Martins Aiyetiwa, Landfills Section

If you have any questions, please contact Mr. Martins Aiyetiwa at (626) 458-3553, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

GAIL FARBER
Director of Public Works

RICHARD J. BRUCKNER
Director of Regional Planning

KM:jl
P:\Sec\HOA_1264552_1 Sunshine ADC Pilot Program

cc: Department of Regional Planning (Maria Masis, Jon Sanabria, Dennis Slavin)
Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force
South Coast Air Quality Management District (Mohsen Nazemi, Ed Pupka)
Sunshine Canyon Landfill – Local Enforcement Agency (Dave Thompson, Gerardo Villalobos)
Sunshine Canyon Landfill – Community Advisory Committee (Becky Bendikson, Wayde Hunter)
City of Los Angeles Planning Department (Nicholas Hendricks, Ly Lam, Lisa Webber)
North Valley Coalition of Concerned Citizens (Wayde Hunter)
Granada Hills North Neighborhood Council

ENCLOSURE 3

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

September 27, 2010

IN REPLY PLEASE REFER TO FILE EP-5

Mr. Kurt Bratton
Vice President
Republic Services, Inc.
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342-1021

Dear Mr. Bratton:

ODOR NUISANCE AT SUNSHINE CANYON LANDFILL
CONDITIONAL USE PERMIT NO. 00-194(5)

Based on information received by this Department and provisions established in Condition No. 45.N of the Sunshine Canyon Landfill (Landfill) Conditional Use Permit (CUP), we are hereby requiring Republic Services, Inc./Browning-Ferris Industries (Republic) to implement additional corrective measures to reduce the odor nuisance resulting from activities related to the operations of the Landfill.

Background

Since late 2009, residents living in the vicinity of the Landfill and staff/students from the nearby Van Gogh Elementary School have filed numerous complaints alleging odors from activities and operations occurring at the Landfill. According to Republic's Quarterly Dust and Odor Complaint Reports and Monthly Reports to the Sunshine Canyon Landfill - Local Enforcement Agency (SCL-LEA), as well as the Order for Abatement issued by the South Coast Air Quality Management District (AQMD) Hearing Board on March 24, 2010, more than 300 complaints were filed in 2009, of which more than half occurred during the month of November. The complaints continued into the first two months of 2010 totaling more than 160 complaints. These complaints resulted in numerous Notices of Violations issued by the AQMD to Republic for creating a Public Nuisance, the highest being five (5) Notices issued in November 2009.

As required by the Order for Abatement and in an attempt to relieve the impacts on the nearby residents, Republic implemented various corrective actions. Conditions pursuant to the Order included: restricting the size of the working face; reducing the amount of trash delivered by transfer stations on Monday mornings; and utilizing misting and odor control systems at the working face.

Other mitigation measures being undertaken include developing study proposals regarding daily cover materials and landfill gas emissions controls, and a plan to augment the vegetation in the southern areas of the Landfill.

Findings and Determination

While we recognize Republic's efforts to comply with AQMD's Order for Abatement, we have determined that additional corrective measures are necessary at this time to further reduce odors related to operations at the working face which is identified in the Order for Abatement as a potential odor contributor. Our determination is based on:

- the frequency and duration of the odor complaints from the surrounding community
- public testimony received by AQMD's Hearing Board during the Order for Abatement proceedings
- consultation with the SCL-LEA, AQMD, and the County Department of Regional Planning
- information contained in Republic's draft Working Face and DustBoss Study Proposal, dated July 28, 2010
- Public Works' physical inspections of the site and surrounding areas

Republic's current practice of removing nearly six inches of soil cover on Monday mornings and leaving approximately three inches of cover remaining on the working face is inconsistent with established sound engineering practice, and a key contributing factor to the odor conditions. This practice compromises the integrity of the soil cover thereby significantly contributing to an odor nuisance and posing a risk to public health and safety.

Additionally, Republic's practice of using tarps as daily cover, from Monday through Friday, on the advancing side of the working face deviates from the standard application of compacted soil as daily cover, which has been proven to be effective in controlling odor and other nuisances. Furthermore, using soil as an odor reduction measure is consistent with the City of Los Angeles' Mitigation Reporting and Monitoring Program, dated February 25, 1999, which provides for the application of additional dirt as daily cover material to mitigate odor impacts (see enclosed Section 4.2.13, No. 33, page 7). The mitigation measure is also consistent with the certified Subsequent Environmental Impact Report for the project.

Corrective Measures

Therefore, pursuant to CUP Condition No. 45.N, Republic is required to implement the following corrective measures within 30 days of the date of this letter:

1. Terminate the use of any alternative materials as daily cover other than compacted soil.

2. Cover disposed solid waste with a minimum of nine inches of compacted soil at the end of every operating day, Monday through Saturday, and at more frequent intervals as necessary, to control vectors, fires, odors, blowing litter, and scavenging. Tarp may only be used to enhance the control of vectors or other nuisance, but may not replace the use of soil.

3. Discontinue the practice of removing compacted soil cover at the beginning of an operating day. The compacted soil cover applied at the end of the previous operating day must be kept in-place.

4. Submit to Public Works for review and approval an Odor Mitigation Plan that incorporates the following elements at a minimum:

   a. Identify and provide status on the measures currently being implemented as required by the AQMD's Order for Abatement

   b. A program for managing odoriferous loads currently received at the Landfill, which would include the following at a minimum:

      - Provide a trained technician to identify odiferous loads.
      - Immediately bury odiferous waste loads at the working face within one hour of its arrival.
      - Develop a program to minimize odors from transfer trucks and direct haul loads.

   c. An odor patrol program, which would include the following at a minimum:

      - Provide a trained technician to conduct odor patrols in the surrounding neighborhoods at a frequency of one patrol per hour from 6 a.m. to 10 a.m., Monday through Saturday, and during adverse wind conditions[1].

1 As defined in AQMD's Order for Abatement dated March 24, 2010, Adverse Wind Conditions mean either: 1) wind speed measured at the existing monitor at the southern berm from all directions as less than 2 mph; or, 2) wind speed measured at the same monitor coming from the north/northeast direction from between 320 degrees and 15 degrees at less than 15 mph. Wind speed is based on measured winds from three continuous one-hour averaging periods commencing at 3 a.m. Any hour in which there is measurable precipitation will not be classified as an adverse wind condition, in that precipitation generally suppresses odors at landfills.

- If odor is detected, identify its potential and/or actual source, including those that may not be related to the Landfill's operation, such as an odorous trash dumpster or transfer trucks.
- If odor is determined to be related to the Landfill's operation, take immediate action to reduce the odor. Document the streets patrolled on a map, time of the patrol, potential source of odor, and immediate actions taken by the Landfill.

d. A landfill gas mitigation plan in preparation for the next rainy season since landfill gas emissions from either the landfill surface or landfill gas control equipment is cited as a potential contributor in the AQMD's Order for Abatement. The plan should include the following at a minimum:

- Description of the site's current Gas Monitoring and Control Plan, including a map showing locations of gas monitoring probes, gas extraction wells, horizontal and vertical gas collection lines, etc.
- Compliance history of the site's landfill gas migration control program from January 1, 2009, to the present quarter as well as any corrective actions.
- Discuss the impacts of the most recent heavy rains on the landfill gas collection system, including identifying locations of damage due to soil erosion, as well as any corrective actions or mitigation measures.
- A work plan that includes preventive measures, such as identifying and filling any surface cracks and installing additional extraction wells, as well as contingency measures.
- An implementation schedule for the above work plan.

5. Include in the Quarterly Dust and Odor Reports, which are required by CUP Condition No. 45.N, the status and effectiveness of mitigation measures 1 through 3 above, and the Odor Mitigation Plan.

6. The corrective measures described above shall not be modified or terminated without prior written approval of the Director of Public Works.

Failure by Republic to implement these corrective measures shall constitute a violation of the CUP and be subject to the penalty provision described in Condition No. 11 of the CUP.

If you have any questions, please contact Mr. Martins Aiyetiwa of this office at (626) 458-3553, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

GAIL FARBER
Director of Public Works

PAT PROANO
Assistant Deputy Director
Environmental Programs Division

LL:dy
P:\sec\Sunshine Canyon Landfill CUP

Enc.

cc: South Coast Air Quality Management District (Edwin Pupka, David Jones)
Department of Regional Planning (Richard Bruckner, Maria Masis, Bruce Durbin)
Department of Public Health (Cindy Chen, Gerry Villalobos)
Sunshine Canyon Landfill Technical Advisory Committee (Richard Bruckner, Michael LoGrande)
City of Los Angeles Department of City Planning (Michael LoGrande, Ly Lam)
Sunshine Canyon Landfill - Local Enforcement Agency (Program Manager)
Members of the Los Angeles County Solid Waste Management Committee/ Integrated Waste Management Task Force
Sunshine Canyon Landfill - Community Advisory Committee (Becky Bendikson, Wayde Hunter)

MITIGATION REPORTING AND MONITORING PROGRAM (MRMP)
SUNSHINE CANYON LANDFILL - CITY OF LOS ANGELES
INCORPORATED AS CONDITIONS OF APPROVAL PURSUANT TO [Q] CONDITION NO. A.7

(Based on Table 7.4-1 (Revised 2/11/99, 10/20/99, 10/26/99) Final SEIR 91-0377-ZC/GPA)

Mitigation Measures	Mitigation Compliance Responsibility	Monitoring Phase	Monitoring Agency/Enforcement Agency
4.1 EARTH RESOURCES			
4.1.1 Grading Activities			
1. All grading activities shall be performed in accordance with the provisions of Division 70 of the City of Los Angeles Building Regulations, CCR Title 14, and with the rules and regulations as established by the City Department of Building and Safety.	Project Proponent	Throughout landfill operations and on an on-going basis.	Monitoring Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City B&S, City LEA, and City BOE
2. Areas outside of and above the cut and fill as shown on the conceptual grading plan shall not be graded, except for the development of ancillary facilities or other related improvements. Additional grading may be necessary for slope stability or drainage purposes. Prior to undertaking any grading activities, the Department of Building and Safety shall be notified and approve any additional grading based on engineering studies (in accordance with CCR Title 14) provided by the project proponent and independently evaluated by the Department of Building and Safety.	Project Proponent	Throughout landfill operations and on an on-going basis.	Monitoring Agency: LARWQCB, CIWMB, City LEA, and City B&S Enforcement Agency: LARWQCB, CIWMB, City B&S, City LEA, and City BOE
3. During excavation, any unsuitable material encountered below the base grade for the landfill, including alluvium, organic material, and landslide debris, shall be removed. Engineered compacted fill shall be placed in those areas to restore the base grade for liner system construction. Excess material not used immediately for cover material shall be stockpiled onsite for future use. The unsuitable material shall be excavated, a portion at a time, as the working area of the landfill progresses to avoid opening large sections of potentially unstable material. A buffer area (i.e., 50-100 horizontal feet or as deemed appropriate to maintain safe working conditions) shall be used between the active cells receiving waste and areas under excavation. In accordance with CCR Title 14 a certified engineering geologist shall delineate the limits of the unsuitable material and associated "backcuts" to facilitate removals during excavation. Removal shall not occur during the rainy season (October 1 - April 30) or when the ground is saturated unless performed under the direction and specifications of a certified engineering geologist.	Project Proponent	Throughout landfill operations and on an on-going basis.	Monitoring Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City B&S, City LEA, and City BOE
4. Grading that allows for construction of ancillary facilities outside of the landfill footprint or that has the potential to impact property beyond the boundary of the landfill shall be approved by the Department of Building and Safety.	Project Proponent	Throughout landfill operations and on an on-going basis.	Monitoring Agency: LARWQCB, CIWMB, and City B&S Enforcement Agency: LARWQCB, CIWMB, and City B&S
5. All grading activities shall be in compliance with specific requirements provided in a comprehensive geotechnical report prepared specifically for the proposed project, including provisions for excavation approved by the Department of Building and Safety, City Engineer, City LEA and other Responsible Agencies.	Project Proponent	Throughout landfill operations and on an on-going basis.	Monitoring Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City B&S, City LEA, and City BOE

Mitigation Measures	Mitigation Compliance Responsibility	Monitoring Phase	Monitoring Agency/Enforcement Agency
6. Revegetation and erosion control procedures on all exposed slopes shall be implemented. The erosion controls to be implemented at the site shall include soil stabilization measures and revegetation in accordance with the approved revegetation plan as approved by the City Building and Safety Department. Interceptor ditches shall be designed to divert storm runoff to a sedimentation basin.	Project Proponent	Throughout landfill operations and on an on-going basis.	Monitoring Agency: LARWQCB, CIWMB, and City LEA ,and City B&S Enforcement Agency: LARWQCB, CIWMB, and City LEA, and City B&S
7. Prior to the initiation of grading activities, the project proponent shall undertake, if necessary, reabandonment procedures as required by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources.	Project Proponent	Throughout landfill operations and on an on-going basis.	Monitoring Agency: California Dept. of Conservation Enforcement Agency: California Dept. of Conservation
4.1.2 Geologic Hazards - Mudflow and Landslide (including lithologic history)			
8. When excavating for the landfill operation, if a landslide is encountered, all material constituting that landslide shall be removed. Excess landslide material not used immediately for cover material shall be stockpiled onsite for future use. If necessary, the landslide area shall be excavated a portion at a time to avoid opening large sections of potentially unstable material. A buffer area shall be maintained between the active landfill cells receiving waste and areas under excavation to remove overburden soils, landslide debris, and weathered bedrock. A qualified geologist shall delineate the limits of the landslide during excavation. Landslide removal shall not commence when the ground is saturated, unless removed under the direction and specifications of a certified engineering geologist.	Project Proponent	Throughout landfill operations and on an on-going basis.	Monitoring Agency: LARWQCB, CIWMB,-City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City B&S, and City BOE
9. Areas of excavation and areas of loose soil (i.e., around haul roads, etc.) shall be stabilized to prevent erosion before the onset of the rainy season.	Project Proponent	Throughout landfill operations and on an on-going basis.	Monitoring Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE
4.1.3 Geologic Hazards - Subsidence Refer to Section 4.1.2, Geologic Hazards - Mudflow and Landslide.			
4.1.4 Geologic Hazards - Seismicity			
10. The landfill facility shall be designed and constructed to meet CCR, Title 14, Division 7, Chapter 3, Article 7.8, § 17777 (Final Site Face) and CCR, Title 23, Division 3, Chapter 15, Article 4, § 2547 (Seismic Design) requirements "to withstand the maximum probable earthquake without damage to the foundations or to the structures which control leachate, surface drainage, erosion, or gas." Design consideration shall include strong ground shaking and secondary ground rupture. In addition, the project proponent shall comply with RCRA, Subtitle D, 40 CFR Part 258, Subpart B, § 258.13 (Fault Areas) which states "new municipal solid waste landfill units and lateral expansions shall not be located within 200 feet (60 meters) of a fault that has had displacement in Holocene time . . ." The landfill design and seismic analysis will be reviewed by the RWQCB.	Project Proponent	Prior to commencement of landfill development.	Monitoring Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City B&S, City LEA, and City BOE
11. An operations checklist shall be used by a registered engineering geologist for surveys following all earthquake events measuring 5.0 on the Richter Scale or greater near the project site. A comparison of operating parameters and site conditions before and after major earthquake events shall be made to verify that systems are operational as designed. Final designs for major engineered	Project Proponent	After earthquake events of 5.0 magnitude or greater.	Monitoring Agency: SCAQMD, LARWQCB, CIWMB, City B&S, and City BOE Enforcement Agency: SCAQMD, LARWQCB, CIWMB, City B&S, and City

Mitigation Measures	Mitigation Compliance Responsibility	Monitoring Phase	Monitoring Agency/Enforcement Agency
structures shall be based on the results of the detailed stability analyses of potential seismic events.			BOE
4.1.5 Geologic Hazards - Liquefaction			
12. Alluvium in the canyon bottoms beneath the footprint of the waste containment system and beneath ancillary structures shall be excavated and, if necessary, replaced with compacted structural fill during construction. A qualified geologist shall be onsite during construction activities to observe removal and replacement of alluvium and verify that all alluvium within the landfill footprint has been removed prior to placement of any compacted fill or construction of any containment system elements.	Project Proponent	Prior to commencement of landfill development.	Monitoring Agency: LARWQCB, CIWMB, City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City B&S, and City BOE
13. The landfill facility shall be designed and constructed in accordance with RCRA, Subtitle D, 40 CFR, Part 258, Subpart B, § 258.14 (Unstable Areas) so that there would be no liquefaction related impacts.	Project Proponent	Prior to commencement of landfill development.	Monitoring Agency: LARWQCB, CIWMB, City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City B&S, and City BOE
14. The landfill facility shall be designed and constructed in accordance with CCR, Title 23, Division 3, Chapter 15, Article 3, § 2530(d) (Classification and Siting Criteria), which requires that "all containment structures at waste management units shall have a foundation or base capable of providing support for the structures and capable of withstanding hydraulic pressure gradients to prevent failure due to settlement, compression, or uplift as certified by a registered civil engineer or certified engineering geologist."	Project Proponent	Prior to commencement of landfill development.	Monitoring Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City B&S, and City BOE
4.1.6 Geologic Hazards - Slope Stability			
15. Final maximum refuse slope gradient at the site shall be no steeper than 2H:1V (horizontal to vertical) for the landfill.	Project Proponent	Prior to commencement of landfill development.	Monitoring Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE
16. Final cut and fill slopes shall have an overall slope gradient no steeper than 1.5H:1V.	Project Proponent	Prior to commencement of landfill development.	Monitoring Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE
17. Final slopes shall be engineered to have a static factor of safety of at least 1.5.	Project Proponent	Prior to commencement of landfill development.	Monitoring Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE
18. Survey monuments shall be installed around the perimeters of the outer fill areas at points where they would not be subject to disturbance by landfill development and marking the 500 foot setback from the more restrictive zone. The exact spacing, location, and characteristics of the survey monuments shall be submitted to and approved by the City Local Enforcement Agency (LEA).	Project Proponent	Prior to commencement of landfill development.	Monitoring Agency: LARWQCB, CIWMB, City LEA, and City BOE Enforcement Agency: LARWQCB, CIWMB, City LEA, and City BOE
4.2 AIR QUALITY			
4.2.1 Existing Conditions			
Refer to Section 4.2.11, Construction, within this table.			

Mitigation Measures	Mitigation Compliance Responsibility	Monitoring Phase	Monitoring Agency/Enforcement Agency
4.2.2 California's SCAB Regional Climatic Characteristics Refer to Section 4.2.11, Construction, within this table.			
4.2.3 Criteria Air Pollutants Refer to Section 4.2.11, Construction, within this table.			
4.2.4 Ambient Air Quality Standards and Annual Statistics Refer to Section 4.2.11, Construction, within this table.			
4.2.5 Air Quality Management Plan Refer to Section 4.2.11, Construction, within this table.			
4.2.6 Proposed Project Overview Refer to Section 4.2.11, Construction, within this table.			
4.2.7 Site Preparation/Construction Phase Refer to Section 4.2.11, Construction, within this table.			
4.2.8 Air Quality Operational Phase (Long-Term) No mitigation measures would be required.			
4.2.9 Health Risk Analysis Refer to Section 4.2. 12, Operations, within this table.			
4.2.10 Project Consistency with Applicable Plans Refer to Section 4.2. 12, Operations, within this table.			
4.2.11 Construction			
19. The following mitigation measures will reduce emissions to the maximum extent reasonably feasible. a. The project proponent will maintain equipment in tune per manufacturer's specifications. b. The project proponent will use catalytic converters on gasoline-powered equipment. c. The project proponent will retard diesel engine injection timing by 2 degrees. d. High-pressure fuel injectors will be installed. e. Heavy equipment will use reformulated, low-emission diesel fuel. f. The project proponent will substitute electric and gasoline-powered equipment for diesel-powered equipment where feasible. g. Where applicable, equipment will not be left idling for prolonged periods. h. The project proponent will curtail (cease or reduce) construction during periods of high ambient pollutant concentrations (i.e., Stage II smog alerts).	Project Proponent	During project construction.	Monitoring Agency: City B&S Enforcement Agency: City B&S Monitoring Agency: SCAQMD Enforcement Agency: SCAQMD
20. Daily watering of active construction areas, active soil stockpiles, and all traveled unpaved roads shall be performed to minimize dust lofting from construction disturbances. Construction areas will also receive a soil stabilization (sealant) product if they are to be left unattended for periods in excess of 5 days and	Project Proponent	During project construction.	Monitoring Agency: SCAQMD and City LEA Enforcement Agency: SCAQMD

Mitigation Measures	Mitigation Compliance Responsibility	Monitoring Phase	Monitoring Agency/Enforcement Agency
control is required.			
21. Wind speed shall be continually monitored using onsite anemometers. Excavation within construction areas shall be halted when the 15-minute average wind speed exceeds 15 mph or when the instantaneous wind speed exceeds 25 mph.	Project Proponent	During project construction.	Monitoring Agency: SCAQMD Enforcement Agency: SCAQMD
22. Graded areas shall be watered as necessary to reduce dust emissions.	Project Proponent	During project construction.	Monitoring Agency: SCAQMD and City LEA Enforcement Agency: SCAQMD
23. Disturbed areas shall be revegetated with an interim ground cover as specified in the proposed revegetation program. Excavation will proceed in a manner to reduce the amount of graded areas at any given time.	Project Proponent	During project construction.	Monitoring Agency: SCAQMD Enforcement Agency: SCAQMD
4.2.12 Operations			
24. <u>Construction Equipment</u> a. The project proponent will maintain equipment in tune per manufacturer's specifications. b. The project proponent will use catalytic converters on gasoline-powered equipment. c. The project proponent will retard diesel engine injection timing by 2 degrees. d. High-pressure fuel injectors will be installed. e. Heavy equipment will use reformulated, low-emission diesel fuel. f. The project proponent will substitute electric and gasoline-powered equipment for diesel-powered equipment where feasible. g. Where applicable, equipment will not be left idling for prolonged periods.	Project Proponent	Throughout landfill operations.	Monitoring Agency: City B&S Enforcement Agency: City B&S
h. The project proponent will curtail (cease or reduce) construction during periods of high ambient pollutant concentrations (i.e., Stage II smog alerts).	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD Enforcement Agency: SCAQMD
25. <u>Refuse Trucks</u> The following measures will be applied to the project proponent's operated trucks that utilize the project site. a. Refuse trucks shall be maintained in proper tune. Trucks observed to emit excessive amounts of smoke (particulate matter) shall either be tuned up or repaired, as applicable.	Project Proponent	Throughout landfill operations.	Monitoring Agency: City B&S Enforcement Agency: City B&S
b. Where applicable, high-pressure fuel injector nozzles shall be used, and diesel engine timing shall be retarded by 2 degrees.	Project Proponent	Throughout landfill operations.	Monitoring Agency: City B&S Enforcement Agency: City B&S
c. Using a progressive fee schedule, the project proponent shall encourage trucks to carry full loads.	Project Proponent	Throughout landfill operations.	Monitoring Agency: City B&S Enforcement Agency: City B&S
d. The project proponent shall encourage trucking to be performed during off-peak hours. This shall be accomplished through coordination of deliveries with the transfer stations that supply refuse, restrictions in the hours of operation, and/or a fee schedule that penalizes haul trucks arriving during peak congestion periods. This will reduce emissions by increasing truck speeds and eliminating prolonged idling in traffic.	Project Proponent	Throughout landfill operations.	Monitoring Agency: City B&S Enforcement Agency: City B&S

Mitigation Measures	Mitigation Compliance Responsibility	Monitoring Phase	Monitoring Agency/Enforcement Agency
e. When operating onsite, trucks shall not be left idling for periods in excess of 5 minutes.	Project Proponent	Throughout landfill operations.	Monitoring Agency: City B&S Enforcement Agency: City B&S
f. Private owner-operators shall be warned that, if their trucks emit excessive amounts of smoke as determined by scale house workers, they will not be allowed future access to the landfill facility.	Project Proponent	Throughout landfill operations.	Monitoring Agency: City B&S Enforcement Agency: City B&S
26. <u>Truck Travel and Fugitive Dust Emissions</u>			
a. To minimize fugitive dust emissions, the access roadways shall be paved, as necessary, and haul roads to the working face areas shall be hard packed and or covered with a crushed stone layer. Paved and/or crushed stone roadways shall extend up to new active fill areas as development of the landfill progresses.	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD Enforcement Agency: SCAQMD
b. Curbs and gutters shall be used. At least twice daily watering or wet sweeping of paved roads to remove windblown surface dust shall occur. AP-42 assigns a control efficiency of 50 percent for twice weekly cleaning of industrial paved roads. With twice daily cleaning, a control efficiency in excess of 90 percent is predicted.	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD Enforcement Agency: SCAQMD
c. For unpaved clay roads, mitigation shall include an SCAQMD-approved chemical dust suppressant with a manufacturer's demonstrated control efficiency in excess of 90 percent shall be regularly applied to inactive areas, during windy periods. Note that this control efficient is less than (i.e., more conservative than) the 95-percent value used at the El Sobrante Landfill.(*Draft South Coast Air Quality Management District Consultation No. 4, Work in Progress Air Quality Analysis Refinements, El Sobrante Landfill Expansion*, TRC Environmental Solutions, Inc., May 2, 1997).	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD Enforcement Agency: SCAQMD
d. For unpaved crushed stone covered roads, mitigation shall include the use of a crushed stone topcoat in addition to the regular application of a SCAQMD-approved chemical dust suppressant and subsequent watering, a control efficiency in excess of 95 percent is predicted.	Project Proponent	Throughout landfill operations.	Monitoring Agency: Project Site Manager and SCAQMD, Enforcement Agency: SCAQMD and
27. <u>Heavy Equipment Operations</u>			
a. Operations shall be restricted to encompass no more than a 10-acre active working face area.	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD Enforcement Agency: SCAQMD
b. The disturbed area (subject to the surface erosion) shall be reduced from 40 acres to 20 acres when operations occur south of the smaller former filling area of the existing inactive City Landfill.	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD Enforcement Agency: SCAQMD
28. <u>Site Erosion</u>			
a. To the extent technically feasible, material excavated from one portion of the project site shall be used as daily cover material in an adjacent area to minimize travel distances for such cover material.	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD Enforcement Agency: SCAQMD
b. Subject to approval by the California Integrated Waste Management Board (CIWMB), filling in each active area shall be prolonged through the utilization of a 20-foot maximum cell height. This would reduce the area of excavation and minimize the disturbances to the landfill, thereby	Project Proponent	Throughout landfill operations.	Monitoring Agency: CIWMB and City LEA Enforcement Agency: CIWMB and City LEA

Mitigation Measures	Mitigation Compliance Responsibility	Monitoring Phase	Monitoring Agency/Enforcement Agency
providing an effective control of fugitive dust.			
c. A temporary vegetation cover shall be established on all slopes that are to remain inactive for a period longer than 180 days.	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD Enforcement Agency: SCAQMD
d. An SCAQMD approved soil stabilization (sealant) product shall be used to retard soil erosion and enhance revegetation. Soil sealant shall be applied when necessary to selected working areas of the landfill. The sealant will also be used as a binder or tackifier to hold seed during revegetation, mulch, and fertilizers in-place until grasses become established and stabilize on the landfill surface.	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD Enforcement Agency: SCAQMD
4.2.13 Odor Impacts			
29. The natural biological processes that generate odors in a landfill through anaerobic decomposition cannot be prevented or avoided. However, the LFGs shall be prevented from escaping to the atmosphere through the use of control measures. These measures include using daily and intermediate cover material over deposited wastes, filling any surface cracks with clean dirt as necessary, and extracting LFG through the use of an LFG collection and recovery system and destroying collected gases by combustion.	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD and City LEA Enforcement Agency: SCAQMD and City LEA
30. Operational techniques shall be utilized to control odor sources at the landfill. The size of the working face shall be limited so that the area of waste exposed to the atmosphere is kept to a minimum.	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD and City LEA Enforcement Agency: SCAQMD and City LEA
31. Solid waste shall be compacted within 1 hour of its arrival at the working face.	Project Proponent	Throughout landfill operations.	Monitoring Agency: City LEA Enforcement Agency: City LEA
32. The LFG collection and recovery system shall be installed in phases as each portion of the landfill site is filled. The final system shall contain a network of gas extraction wells, collection system piping, and flaring facilities. Because the LFG generation begins at lower levels of volume and increases during the landfill site life, the gas will be flared initially until sufficient quantities are available for processing into electricity.	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD and City LEA Enforcement Agency: SCAQMD and City LEA
33. If an odor problem should develop, appropriate control measures shall be implemented. These measures include the application of additional dirt daily cover material or more frequent application of the cover material to seal the landfill surface, or adjustments to the wells, equipment, and operation of the LFG collection and recovery system.	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD, and City LEA Enforcement Agency: SCAQMD and City LEA
34. To ensure that odors are kept to a minimum, the following odor/LFG monitoring program shall be implemented for the proposed landfill project. The monitoring program shall comply with the requirements of SCAQMD Rule 1150.1 and include: a. <u>Sample Probe Installation</u>: One monitoring probe per 1,000 feet or as identified by South Coast Air Quality Management District (SCAQMD) and/or Local Enforcement Agency (LEA))in the landfill expansion, and one probe per 650 feet or as identified by SCAQMD and/or LEA in the City Inactive landfill along the landfill perimeter, or which ever is more restrictive shall be installed to identify potential areas of subsurface landfill gas (LFG) migration. These probes shall be monitored to ensure	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD, and City LEA Enforcement Agency: SCAQMD and City LEA

Mitigation Measures	Mitigation Compliance Responsibility	Monitoring Phase	Monitoring Agency/Enforcement Agency
that quantities of LFG beyond regulatory standards do not vent offsite through subsurface soils. b. Integrated Landfill Surface Sampling: The landfill surface shall be monitored to ensure that the average concentration of total organic compounds over the landfill surface does not exceed SCAQMD's standard of 50 ppm. c. Ambient Air Samples: 24-hour integrated gas samples and required meteorological data shall be taken to assess any impact the landfill is having on the ambient air quality at the landfill perimeter. d. Instantaneous Landfill Surface Monitoring: Spot checks on the landfill sur face shall be made to determine the maximum concentration of total organic compounds measured as methane, measured at any one point on the surface of the landfill does not exceed the SCAQMD's standard of 500 ppm. e. Regular Monitoring and Annual Testing: LFG concentrations at perimeter probes, gas collection system headers, the landfill surface, and in ambient air downwind of the landfill shall be monitored once per month or less frequently (but no less than quarterly) as required by the SCAQMD. The LFG collection system shall be adjusted and improved based on quarterly monitoring data and annual stack testing results.			
35. Landfill gas flares shall be below the adjacent ridges (unless otherwise required by the South Coast Air Quality District). Flaring systems shall be sited as required by the SCAQMD and constructed using BACT. The flames shall be totally contained within the stack. Flame arresters shall be provided to the satisfaction of the City Building and Safety Department. To the extent technically and economically feasible, gas recovered at the landfill site shall be converted to energy or developed for other beneficial uses rather than flared.	Project Proponent	Throughout landfill operations.	Monitoring Agency: SCAQMD, and City B&S Enforcement Agency: SCAQMD and City B&S
4.3 SURFACE AND GROUNDWATER			
4.3.1 Surface Water			
36. To ensure that infiltration of surface water into the closed landfill cells is minimized, surface runoff shall be intercepted and diverted around the landfill. The method of diversion used at the project site shall include the use of lined interceptor ditches placed along the edges of the landfill areas. This system of ditches shall flow into monitored sedimentation basins. After sediment content has been reduced, surface waters shall flow into the existing flood control channel directly east of the project site entrance.	Project Proponent	Prior to commencement of landfill development.	Monitoring Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE Enforcement Agency: LARWQCB, CIWMB, City LEA, City B&S, and City BOE
37. As development of the site proceeds, surface drainage systems shall be maintained so that surface runoff is diverted away from working slopes and isolated from landfilled refuse. Onsite drainage channels would be designed per CCR, Title 23, Division 3, Chapter 15, Article 3, § 2533(C), and County of Los Angeles Public Works Department, Flood Control Division requirements.	Project Proponent	Prior to commencement of landfill development.	Monitoring Agency: LARWQCB, CIWMB, City LEA, and City BOE Enforcement Agency: LARWQCB, CIWMB, City LEA, and City BOE
38. Permanent bench drainage ditches shall be installed when final cover is placed on completed portions of the landfill. These ditches shall be lined. Temporary unlined drainage facilities consisting of diversion ditches (V-ditches) where necessary shall directly intercept natural surface runoff . Any intermittent channel flow in the existing canyon bottom shall be captured, channelized, and conveyed into Sedimentation Basin A. Diversion ditches shall convey surface	Project Proponent	Throughout landfill operations.	Monitoring Agency: LARWQCB, CIWMB, City LEA, and City BOE Enforcement Agency: LARWQCB, CIWMB, City LEA, and City BOE

SUNSHINE CANYON LANDFILL

February 8, 2017

Dr. Wen Yang
Chief, Land Disposal Unit
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Sunshine Canyon Landfill, File No. 58-17
Notice of Stormwater Discharge, Order No. R4-2008-0088
January 20, 2017 Rain Event

Dear Dr. Yang,

This letter provides the follow up of the verbal notification and email on January 20, 2017 regarding stormwater discharge to the main haul road at Sunshine Canyon Landfill. This letter provides additional information related to the occurrence as well as the actions that have been taken to ensure this type of occurrence will not occur in the future.

As reported to you, on Friday, January 20, 2017, between the hours of 2 AM to 2:40 PM, 2.6 inches of rain were recorded at the site's rain gauge located on the City South area of the landfill. The most intense rainfall occurred between 11 AM and 1:00 PM (1.7 inches). During this time, the trapezoidal stormwater channel that runs adjacent to the main haul road became inundated with stormwater due to capacity interference related to the gabion cages and accumulated sediment. Although site operations personnel were in the process of removing the gabion cages during this period of time, stormwater overflowed on to the main haul road, by-passing the box culvert which directs stormwater to the terminal basin. This resulted in stormwater discharge out the entrance of the site on to San Fernando Road. Site personnel took immediate actions to direct stormwater to a nearby stormdrain inlet to prevent water from flowing across San Fernando Road and impacting traffic.

The stormwater flow on to San Fernando Road occurred for approximately 30 minutes based on observations conducted by site personnel. An estimation of the volume of stormwater that flowed out the front gate is 13,410 gallons. This estimate is based on the following assumptions:

1) Observed peak flow depth at entrance road: 0.25 inches
2) Road width/slope: 38 feet/S=0.128 ft/ft
3) Observed duration of flow: 30 minutes

Due to the short duration of this flow, samples of the discharge were not collected.

Immediate corrective actions were taken to ensure stormwater is contained within the trapezoidal channel:

14747 San Fernando Rd., Sylmar, CA 91342 (818) 362-2124 Office (818) 362-5484 Fax

- The gabion cages from the Admin channel crossing down to the box culvert have been removed;
- Accumulated sediment was removed during the week of January 30th as weather permitted;
- K-rails are staged at the front of the site which can be moved quickly should they be needed to contain stormwater flow.

Since the January 20, 2017 storm event, there have been several additional storms; the measures stated above proved successful in mitigating the conditions related to this notice.

Please do not hesitate to contact me if you have any questions or require additional information.

Sincerely,

Patti K. Costa

Patti K. Costa, P.E.
Environmental Manager
Sunshine Canyon Landfill

Cc: David Thompson, SCL LEA
Dorcas Hanson-Lugo, SCL LEA
Rob Sherman, Republic Services
Todd Whittle, Republic Services

ATTACHMENT K

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: EP-5

December 20, 2016

Mr. Rob Sherman, General Manager
Sunshine Canyon Landfill
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342-1021

Dear Mr. Sherman:

SUNSHINE CANYON CITY/COUNTY LANDFILL
PROPOSED INTERMEDIATE COVER ENHANCEMENT (ICE) DEMONSTRATION PROJECT

We have reviewed your request to conduct a 6-month demonstration project for the use of Posi-Shell® to enhance intermediate cover areas at the Sunshine Canyon Landfill. The request is contained in your submittal dated August 11, 2016, as Attachment D entitled:

- Revised Proposal for a Demonstration Project for Intermediate Cover Options, Sunshine Canyon Landfill.

The objective of the demonstration project is to determine if the Posi-Shell® spray-on mixture is effective as intermediate cover material in controlling landfill gas surface emission, odor, and leachate leaking from the intermediate slope areas. The Work Plan also stated that this demonstration project is a requirement of Condition 5 of the Stipulated Agreement between Republic Services and the Sunshine Canyon Landfill – Local Enforcement Agency, which seeks to improve performance of the intermediate cover at the landfill.

Based on Public Works' evaluation of the submitted work plan, and consistent with authority granted under Condition 45 (N) of the Landfill's Conditional Use Permit No. 00-194-(5), Public Works hereby approve Republic's request to conduct the

proposed ICE demonstration project for a period of six months from the implementation date subject to the following "Conditions of Approval":

General Conditions of Approval

1. Duration of Pilot Project – six months from the implementation date.

2. Termination – The Director of Public Works may terminate the approval of the pilot project at any time, including but not limited to the following causes, at the Director's sole discretion:

   a. Republic has failed to comply with any of the requirements specified herein, including the *Evaluation Standards and Program Requirements*, *Reporting Requirements* and *Additional Requirements*, as specified.
   b. Problems arise with the use of the Posi-Shell® that cannot be corrected.
   c. The use of the Posi-Shell® material does not satisfy the objectives of the pilot project as stated in this letter and in the Report.

   If at any time during the term of this demonstration project, the Director of Public Works terminates the approval of the demonstration project, Republic shall revert back to complying with all conditions and requirements pertaining to intermediate cover as stipulated in the CUP.

Specific Conditions of Approval

3. Demonstration Areas – This demonstration project shall be limited to grids M11, L12, L13, O10, O9, N10, and N9 (map attached) and shall be implemented as follow:

   a. Posi-Shell® with the Portland cement additive shall be used to cover grids, M11, L12, L13, and O10. Grids M11, L12, and L13 will have Portland cement added to the mixture and deployed at two spare feet per gallon. Grid O10 will have Portland cement added to the mixture and deployed at the normal application thickness of four square feet per gallon.
   b. Application of additional six inches of compacted soil will be added to the existing intermediate cover on grids N10, N9, and O9. For comparison purposes, this will be conducted concurrently with the Posi-Shell® demonstration project.

4. Republic shall study and report on the impact that this demonstration project has on the growth of vegetation on the intermediate slopes.

5. If the use of Posi-Shell® application is to be proposed or recommended for a more permanent basis, Republic shall submit a detailed plan for Public Works' review and approval on how the plan will satisfy CUP's Condition 44.A and approved CEQA mitigation requirement's that require all slopes inactive for 180 days or longer be planted with interim vegetation.

6. Republic shall ensure that the demonstration project will not inhibit the site's ability to maintain proper erosion controls and odor control during the demonstration period.

Monitoring Requirement

7. Republic shall perform all required South Coast Air Quality Management District Rule 1150.1 surface emission monitoring at the landfill on a monthly basis. For the demonstration project, Republic shall perform the following:

   a. Establish a base line of instantaneous and integrated surface emission on grid M11, L12, L13, O10, O9, N10, and N9.
   b. Record instantaneous and integrated surface emission on grid M11, L12, L13, O10, O9, N10, and N9.
   c. Conduct daily visual inspections on these above grids for any cracks, erosion control issues, and damages.
   d. Keep a weekly log on the effect of weather and operational activities that impacted the demonstration grids.

Reporting Requirement

8. Republic shall provide a monthly report of records and logs of 7b, 7c, and 7d to Public Works summarizing all monitoring observations and maintenance issues of the demonstration project; any immediate odors detected at the vicinity of the demonstration grids.

Data Analysis

9. At the conclusion of this demonstration project, Republic shall submit a detailed report documenting all of the observations, monitoring data and results, and recommendations regarding use of Posi-Shell® at the Sunshine Canyon Landfill. Such Data Analysis and Evaluation Report must also include all documentation establishing whether the project's objectives as stated herein have been met.

Public Works reserves the right to add additional monitoring and reporting requirement that it determines are necessary to evaluate the performance of the ICE Demonstration Project at the site.

Conclusions and Results of the Demonstration Project:

At the conclusion of the Demonstration Project, the Director of Public Works will evaluate the Data Analysis and Evaluation Report to determine if the project objectives have been met and will consider whether the use of Posi-Shell® had enhanced the intermediate cover at the site. If the project's objectives are met, the Director of Public Works, in consultation with the Director of Regional Planning, may approve the use of Posi-Shell® on the intermediate cover on a more permanent basis.

All documents and reports required by this letter shall be submitted to the following address:

County of Los Angeles
Department of Public Works
Environmental Programs Division
P.O. Box 1460
Alhambra, CA 91802-1460
Attention: Martins Aiyetiwa, Landfills Section

This letter addresses only Republic's request for an approval of the work plan to conduct a site specific demonstration project and does not address any other approvals that may be required by any other agency in order for Republic to implement the proposed demonstration pilot project. Republic is required to obtain necessary approvals and clearances relating to this project that may be required by other regulatory agencies. Additionally, this approval does not release Republic from

mitigation requirements as prescribed in Public Works' March 30 and July 14, 2016, odor nuisance letters.

If you have any questions, please contact me at (626) 458-3553, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

GAIL FARBER
Director of Public Works

MARTINS AIYETIWA
Senior Civil Engineer
Environmental Programs Division

MA:jl
P:\Sec\Sunshine ICE Project Approval (final).doc

cc: Department of Regional Planning (Dennis Slavin, Jon Sanabria, Maria Masis)
City of Los Angeles Planning Department (Lisa Webber, Ly Lam, Nicholas Hendricks)
South Coast Air Quality Management District (Laki Tsopulo, Cher Snyder, Amir Dejbakhsh)
Sunshine Canyon Landfill – Local Enforcement Agency (Dave Thompson, Maurice Pantoja)
Sunshine Canyon Landfill – Community Advisory Committee (Wayde Hunter)
Granada Hills North Neighborhood Council
Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force

SUNSHINE CANYON LANDFILL

SCL - LEA

LOCAL ENFORCEMENT AGENCY

14747 San Fernando Road
Sylmar, California 91343

May 16, 2016

Mr. Rob Sherman, General Manager
Republic Services
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342

Subject: Sunshine Canyon City/County Landfill (SWIS # 19-AA-2000)
LEA Approval of Intermediate Cover Enhancement Project

Dear Mr. Sherman,

On April 1, 2016, the Sunshine Canyon Landfill Local Enforcement Agency (LEA) received a revised proposal for the Intermediate Cover Enhancement Project (Project) at the Sunshine Canyon Landfill (Landfill). The proposal was submitted as part of the Stipulated Agreement to address landfill gas and leachate issues related to the Landfill. The Project as proposed is scheduled to run for a period of six months which will allow for the evaluation of several operational approaches to improve the performance of the intermediate cover.

The LEA has reviewed the revised proposal and has determined that it meets the intent of the Project.

In addition to the summary report that will be provided after the conclusion of the Project, the LEA requests the following:

- Submit to the LEA results of the monthly surface emission monitoring for grids L12, L13, M11, N9, N10, O9 an O10 within 30 days for each of the six months of the Project period.
- The LEA shall reserve the right to expand on the types of other intermediate cover enhancements during the Project period to include, but not limited to the:
    - Application of a vegetative layer on a grid to be selected by the LEA.
    - Increase in the number of grids to receive intermediate cover enhancements.
- The LEA must be notified at least 7 days prior to the start of the Project.
- Project activities commence no later than the week of June 5, 2016

Gerry Villalobos
SCL – LEA Program Manager
Office: (626) 430-5550
Email: gvillalobos@ph.lacounty.gov

Mailing Address
5050 Commerce Drive
***Baldwin Park*, CA 91706**

The LEA reserves the right to suspend, modify or revoke this approval if problems are observed during the six month Pilot period. This approval is only for areas of the pilot project under the jurisdiction of the LEA. Note that the LEA will be separately recommending additional operational measures for addressing the fresh trash odors at the working face.

If you have any questions regarding the LEA approval, I can be contacted at (626) 430-5550 or at gvillalobos@ph.lacounty.gov .

Sincerely,

Gerry Villalobos
SCL LEA Program Manager

cc: David Thompson, SCL LEA

SUNSHINE CANYON LANDFILL

March 28, 2017

VIA EMAIL

Clerk of the Board South Coast Air Quality Management District 21865 Copley Dr. Diamond Bar, CA 91765 ClerkofBoard@aqmd.gov	Nicholas Sanchez, Esq. Senior Deputy District Counsel South Coast Air Quality Management District 21865 Copley Dr. Diamond Bar, CA 91765 nsanchez@aqmd.gov

Re: In the Matter of SCAQMD v Browning-Ferris Industries of California
Case No. 3448-14
Condition 10, Intermediate Cover Proposal Expedited Schedule

Dear Clerk and Mr. Sanchez,

Per the Stipulated Abatement Order Condition 10 in the above-matter, an expedited schedule is attached for upgrading and improving the targeted intermediate cover areas at Sunshine Canyon Landfill. The schedule and areas identified are in alignment with the recommended solutions identified in the Intermediate Cover Enhancement Proposal report submitted on 3/15/17.

The expedited schedule calls for 115 acres of intermediate cover area to receive enhancements with portions of the work already in progress. The additional activity will be completed as expeditiously as possible throughout the remainder of 2017.

Sincerely,

Rob Sherman
General Manager
Sunshine Canyon Landfill

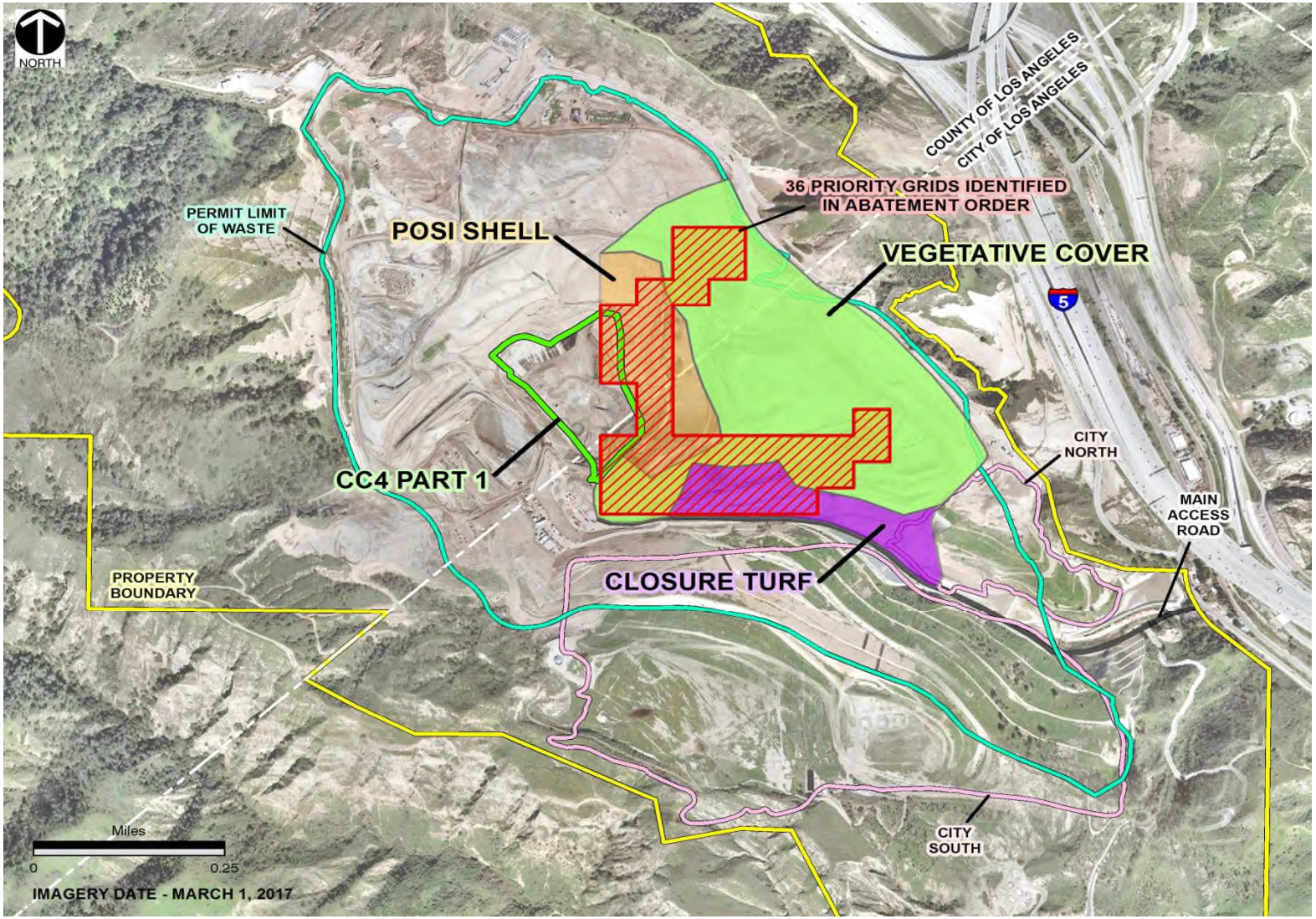
14747 San Fernando Rd., Sylmar, CA 91342 (818) 362-2124 Office (818) 362-5484 Fax

Sunshine Canyon Landfill
Intermediate Cover Proposed Expedited Schedule

	JAN	FEB	MAR	APR	MAY	JUNE	JUL	AUG	SEP	OCT	NOV	DEC
Closure Turf Installation (20.7 acres)												
Intermediate Spray-On Cover (37.3 acres)												
Vegetative Cover Trial Area (5 acres)												
Vegetative Cover Preparation and Seeding (57 acres)												

As of March 28, 2017

Locations for Enhanced Intermediate Covers



ATTACHMENT L

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

May 3, 2017

Mr. Rob Sherman
Sunshine Canyon Landfill
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342-1021

Re: *Final Approval* of Revised BMP Plan for the Control and Treatment of Fresh Trash Odor
Sunshine Canyon Landfill (Facility ID 49111)
Hearing Board Case No. 3448-14

Dear Mr. Sherman,

The South Coast Air Quality Management District (SCAQMD) has received the Revised BMP Plan for the Control and Treatment of Fresh Trash Odor (the "Revised BMP Plan"), as required pursuant to Condition 14 of the Stipulated Order for Abatement ("Order") in Hearing Board Case No. 3448-14. The SCAQMD has performed a preliminary review in consultation with its retained expert consultant and hereby grants Final Approval of this plan.

Consistent with the Order, you are now required to implement all provisions of the Revised BMP Plan for the Control and Treatment of Fresh Trash Odor.

SCAQMD will continue its enforcement of the Order, including continued review of all submittals, consideration of facility operational conditions and practices, SCAQMD inspections, monitoring results, expert consultations, and public complaints to ensure compliance with the Order. In the event that changes in circumstances result in recommended changes to the Revised BMP Plan, you will be contacted by SCAQMD staff. The plan shall continue to be implemented unless otherwise revised by the parties, or modified by the SCAQMD Hearing Board.

Thank you for your attention in this matter. It is recommended that you keep a copy of this final approval in your files. Should you have any questions, please contact Andrew Lee, Senior Air Quality Engineering Manager, (909) 396-2643 or alee@aqmd.gov.

Very truly yours,

Laki Tisopulos, Ph.D., P.E.
Deputy Executive Officer
Engineering and Permitting

cc: Thomas Bruen, esq., via email at tbruen@tbsglaw.com

ATTACHMENT M

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 · www.aqmd.gov

May 3, 2017

Mr. Rob Sherman
Sunshine Canyon Landfill
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342-1021

Re: *Final* Approval of Revised Odorous Load Management Plan
Sunshine Canyon Landfill, Facility ID 49111
Hearing Board Case No. 3448-14

Dear Mr. Sherman,

The South Coast Air Quality Management District (SCAQMD) has received the Revised Odorous Load Management Plan (the "Plan"), as required pursuant to Condition 15 of the Stipulated Order for Abatement ("Order") in Hearing Board Case No. 3448-14. The SCAQMD has performed a preliminary review in consultation with its retained expert consultant and hereby grants Final Approval of this plan.

Consistent with the Order, you are now required to implement all provisions of the Revised Odorous Load Management Plan.

SCAQMD will continue its enforcement of the Order, including continued review of all submittals, consideration of facility operational conditions and practices, SCAQMD inspections, monitoring results, expert consultations, and public complaints to ensure compliance with the Order. In the event that changes in circumstances result in recommended changes to the Plan, you will be contacted by SCAQMD staff. The plan shall continue to be implemented unless otherwise revised by the parties, or modified by the SCAQMD Hearing Board.

Thank you for your attention in this matter. It is recommended that you keep a copy of this final approval in your files. Should you have any questions, please contact Andrew Lee, Senior Air Quality Engineering Manager, (909) 396-2643 or alee@aqmd.gov.

Very truly yours,

Laki Tisopulos, Ph.D., P.E.
Deputy Executive Officer
Engineering and Permitting

cc: Thomas Bruen, esq., via email at tbruen@tbsglaw.com

SUNSHINE CANYON LANDFILL

October 31, 2017

VIA EMAIL

Mr. Nicholas Sanchez, Esq.
Senior Deputy District Counsel
South Coast Air Quality Management District
21865 Copley Dr.
Diamond Bar, CA 91765

Re: In the Matter of SCAQMD v Browning-Ferris Industries of California
Case No. 3448-14 Confirmation of Implementation:
Condition 14.f. Revised Best Management Plan
Condition 15.g. Revised Odorous Load Management Plan

Mr. Sanchez,

This letter will serve as confirmation that the Revised Best Management Plan and Revised Odorous Load Management Plan have been implemented as outlined below.

Condition 14.f. *Respondent shall, within ten (10) business days of receiving approval from the District, implement the Revised Best Management Practices Plan.*

Status: **Complete**
Implementation of the Revised Best Management Practices Plan for the landfill began within 10 days of the approval notification received from the SCAQMD on 5/3/17. Key elements of the plan are identified below:

A. **Use of Misting/Vapor System** – The site's modified dust bosses, buffalo monsoon units, misting fences and vapor system continue to be utilized daily to mitigate working face odors.

B. **Use of EnviroCover™** – Application of the EnviorCover™ product continues as the final evaluation report is under review by the SCL-LEA and County DPW.

C. **Odorous Load Management** – Loads that are identified as odorous are given priority for disposal.

D. **Waste Processing Procedures** – Loads from tippers and walking floor trailers are pushed promptly to the working face.

E. **Annual Training** – Training has been updated and conducted to include training specific to the new odor mitigation measures on site, the identification of odorous loads and procedures for handling.

F. **Direct Application of Deodorizer** – Per approval from the Water Board and SCL LEA, certain pieces of site equipment have been outfitted with a sprayer system to deploy a deodorizer solution mixed with water directly to the waste material at the working face.

G. **Organic Waste Diversion** – Implementation of the transfer station Organic Transload Program as well as the Food Recovery program with Food Finders is in progress. The Chino CASP system is nearing construction completion and the American Transfer station organics pre-processing system is under final design review.

H. **Use of Alternative Working Faces** – Disposal for disposal Cell CC-4A, Part 1 commenced in March of 2017. Disposal in Cell CC-4A, Part 2 commenced in late October, 2017.

Condition 15.g. *Respondent shall, within ten (10) business days of receiving approval from the District, implement the Revised Odorous Load Management Plan.*

Status: **Complete**

Implementation of the Revised Odorous Load Management Plan for the transfer stations began within 10 days of the approval notification received from the SCAQMD on 5/3/17. Key elements of the plan are identified below:

I. **Annual Training** – Training has been updated and conducted to include training specific to the identification of odorous loads, procedures for handling odorous loads and notifications.

J. **Random Load Checks** - Random load checks specific to odorous loads have been incorporated in each site's load check procedures including the identification of routine generators with potential for odorous loads.

K. **Minimize Overnight Storage of Waste in Transfer Trailers** - The amount of waste stored in transfer trailers overnight is kept to a minimum.

L. **On-Site Treatment of Odorous Loads** - Installation of sprayer systems for the application of neutralizer solution directly onto the waste as it is loaded into trailers prior to tarping has been completed for each transfer station.

Please reach out to me with any questions.

Sincerely,

Rob Sherman
General Manager

Sunshine Canyon Landfill
14747 San Fernando Road, Sylmar, CA 91342
Phone 818-362-2124 Fax: 818-362-5484

ATTACHMENT N

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 · www.aqmd.gov

May 3, 2017

Mr. Rob Sherman
Sunshine Canyon Landfill
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342-1021

Re: *Interim* Approval of Sunshine Canyon Landfill Assessment of Physical Barriers and Dust-Odor Containment Structures (Condition 16).
Sunshine Canyon Landfill, Facility ID 49111
Hearing Board Case No. 3448-14

Dear Mr. Sherman,

The South Coast Air Quality Management District (SCAQMD) has received the Sunshine Canyon Landfill Assessment of Physical Barriers and Dust-Odor Containment Structures (the "Plan"), as required pursuant to Condition 16 of the Stipulated Order for Abatement ("Order") in Hearing Board Case No. 3448-14. The SCAQMD has performed a preliminary review in consultation with its retained expert consultant and hereby grants Interim Approval of this plan.

Consistent with the Order, to the extent applicable, you are now required to implement all provisions of the Sunshine Canyon Landfill Assessment of Physical Barriers and Dust-Odor Containment Structures.

However, the SCAQMD has identified the following concern with the proposed plan, which may be addressed during ongoing dialogue with the SCAQMD and the SCL LEA. Control systems using physical barriers contemplated by the Plan, when implemented, will be constructed at a later date due to both operational constraints and potentially extensive approvals required from multiple regulatory agencies. It will be beneficial to combine other mitigation measures as an integral part of the design for proposed physical barriers. Therefore, Interim Approval is granted to facilitate further discussion with the SCAQMD and SCL LEA regarding integration of such additional measures to achieve maximum effect.

SCAQMD will continue its review of the Plan, including consideration of facility operational conditions and practices, SCAQMD inspections, monitoring results, expert consultations, and public complaints to determine whether and when final approval is warranted. In the event that the detailed review of the Plan results in changes to the provisions and/or requirements, you will be contacted by SCAQMD staff. If the Plan warrants final approval, you will receive a final plan approval letter. The current Plan shall be implemented unless otherwise approved by SCAQMD or modified by the SCAQMD Hearing Board.

Thank you for your attention in this matter. It is recommended that you keep a copy of this interim approval in your files. Should you have any questions, please contact Andrew Lee, Senior Air Quality Engineering Manager, (909) 396-2643 or alee@aqmd.gov.

Very truly yours,

Laki Tisopulos, Ph.D., P.E.
Deputy Executive Officer
Engineering and Permitting

cc: Thomas Bruen, esq., via email at tbruen@tbsglaw.com

ATTACHMENT O

NOTICE OF VIOLATION

Los Angeles County Department of Regional Planning
Please contact the investigating planner **Timothy Stapleton**
Email: tstapleton@planning.lacounty.gov
Phone Number: (213) 974-6453 -- *Monday through Thursday before 10am*

Department of Regional Planning
Richard J. Bruckner, *Director*

320 W Temple Street
Los Angeles, CA 90012

(213) 974-6456

http://planning.lacounty.gov

Case Number:
RPZPE2016002500

Permit or Project Number:
CUP00-194

Zone:
A-2-2

Investigating Planner:
Timothy Stapleton

Phone Number:
(213) 974-6453
Monday - Thursday before 10am

Fees Due Now:
$00.00

Compliance Date:
Date of Receipt

October 25, 2016

Republic Services, Inc.
ATTN: Rob Sherman
14747 San Fernando Road
Sylmar, CA 91342

Code Case No: RPZPE2016002500
Conditional Use Permit: 00-194

Dear Property Owner:

A referral from the Los Angeles County Department of Public Works Environmental Programs Division describing non-compliance with required requests under Condition 45.N of Conditional Use Permit (CUP) 00-194 was provided to the Los Angeles County Department of Regional Planning. Please note Condition 45.N below:

45.N. The Permittee shall submit a quarterly report to the Director of Public Works identifying: (1) all fugitive dust and odor complaints from local residents that the Permittee has received for that quarter regarding the Landfill; (2) all notices of violation issued by the SCAQMD or the County LEA; and (3) all measures undertaken by the Permittee to address these complaints and/or correct the violations. The Director of Public Works and the DPH-SWMP shall each have the authority to require the Permittee to implement additional corrective measures for complaints of this nature when such measures are deemed necessary to protect public health and safety.

Please provide the requested information listed in the July 14, 2016 County of Los Angeles Department of Public Works letter, including attachments, to the satisfaction of Public Works. Should you have any questions regarding this requested information, please contact Bahman Hajialiakbar at (626) 458-3502 or via email at BHAJI@dpw.lacounty.gov for more details.

Failure of the owner or person in charge of the premises to comply with this order within fifteen (15) days after the compliance date specified herein, or any written extension thereof, shall subject the violator to a noncompliance fee in the amount of $732.00, unless an appeal from this order is filed within fifteen (15) days after the compliance date. Such appeal must comply with Section 22.60.390(C) of the Los Angeles County Code.

Additionally, under Condition 11, you are subject to a penalty not to exceed $1,000 per day for violating the terms of this grant. Condition 11, in relevant part, states:

11. **Notice is given that any person violating a provision of this grant is guilty of a misdemeanor. Notice is further given that the Commission or a Hearing Officer may, after conducting a public hearing in accordance with Section 22.56.1780, et seq., of the County Code, revoke or modify this grant, if the Commission or Hearing Officer finds that these conditions have been violated or that this grant has been exercised so as to be detrimental to public health or safety, or so as to be a nuisance.**

    In addition to, or in lieu of, the provisions just described, the Permittee shall be subject to a penalty for violating any provision of this grant in an amount determined by the Director of the Department not to exceed $1,000 per day per violation.

To avoid being charged the noncompliance fee, you must comply within fifteen (15) days after the compliance date which has been set at **date of receipt**. To avoid being charged daily penalties described under Condition 11, you must abate the aforementioned zoning violations and bring the subject property into compliance with the Los Angeles County Zoning Ordinance within thirty (30) days from the date of this notice which is **October 25, 2016**.

Failure to correct the violations for **CUP 00-194** by the dates specified herein may cause this matter to be referred to the Regional Planning Commission for consideration pursuant to Condition No. 11 and/or referred to the District Attorney with the request that a criminal complaint be filed if compliance is not achieved. Conviction can result in a penalty of up to six months in jail and/or a one thousand dollar fine, each day in violation constituting a separate offense.

Any inquiry regarding this matter may be addressed to the Department of Regional Planning, 320 W. Temple Street, Los Angeles, CA 90012, Attention: Zoning Enforcement. To speak to the investigating planner directly, please note the contact information listed above. Our offices are closed on Fridays.

Sincerely,

DEPARTMENT OF REGIONAL PLANNING
Richard J. Bruckner
Director

Susana Franco-Rogan
Supervising Regional Planner
Zoning Enforcement West

Enclosures

Payment Receipt

Receipt #: TRC-010356-11-05-2017
Paid On: 05/11/2017

Paid By:

REPUBLIC SERVICES, INC.
18500 N ALLIED Way
PHOENIX, AZ 85054

Project Number - Case Number Fee Name	Payment Method	Reference No.	Paid Amount
RPZPE2016002500			
Violation Penalty - $1,000	Check	7250017	$144,000.00
		Total	$144,000.00

Transaction Note: VIOLATIONS PENALTY

Department of Regional Planning
Richard J. Bruckner, *Director*

320 W Temple Street
Los Angeles, CA 90012

(213) 974-6411

http://planning.lacounty.gov

Received By:
Armeneh Arakilians

Printed On:
5/11/2017

Payment Receipt

Receipt #: TRC-010358-11-05-2017
Paid On: 05/11/2017

Paid By:

REPUBLIC SERVICES, INC.
18500 N ALLIED Way
PHOENIX, AZ 85054

Project Number - Case Number Fee Name	Payment Method	Reference No.	Paid Amount
- Contacts Account			
ACCT# 000265-2016 - Sunshine Cyn LF Penalty - CUP 00-194 (5) CONDITION 11 PENALTY	Check	7250016	$30,000.00
		Total	$30,000.00

Transaction Note: SUPLEMENTAL DEPOSIT FOR CUP 00-194 CONDITION 11

Department of Regional Planning
Richard J. Bruckner, *Director*

320 W Temple Street
Los Angeles, CA 90012

(213) 974-6411

http://planning.lacounty.gov

Received By:
Armeneh Arakilians

Printed On:
5/11/2017

NOTICE OF IMPOSITION OF PENALTY FEE

Los Angeles County Department of Regional Planning
Please contact the investigating planner **Timothy Stapleton**
Email: tstapleton@planning.lacounty.gov
Phone Number: (213) 974-6453 -- *Monday through Thursday before 10am*

Department of Regional Planning
Richard J. Bruckner, *Director*

320 W Temple Street
Los Angeles, CA 90012

(213) 974-6456

http://planning.lacounty.gov

Case Number:
RPZPE2016002500

Permit or Project Number:
CUP00-194

Zone:
A-2-2

Investigating Planner:
Timothy Stapleton

Phone Number:
(213) 974-6453
Monday - Thursday before 10am

Fees Due Now:
$144,000.00

May 4, 2017

BFI/ Republic Services, Inc.
ATTN: Rob Sherman
14747 San Fernando Road
Sylmar, CA 91342

RSherman@republicservices.com

RE: APPEAL OF NOTICE OF VIOLATION
14747 SAN FERNANDO ROAD, LOS ANGELES, CA 91342
Code Enforcement Case Number: RPZPE2016002500

Dear Mr. Sherman:

As you are aware, your appeal of the Notice of Violation (RPZPE2016002500) was heard before a Hearing Officer on May 2, 2017 and was **denied**. Therefore, pursuant to Condition 11 of Conditional Use Permit ("CUP") 00-194, you are required to pay the County of Los Angeles a penalty of $1,000.00/day. The penalty, accrued from the date of the Notice of Violation, October 25, 2016, to the date when you submitted the final documents to the Department of Public Works, April 17, 2017, amounts to $174,000.00.

Condition 11 of CUP 00-194 also requires BFI/Republic, as the permittee, to deposit $30,000.00 to an interest bearing account from which penalty fees may be deducted. The Department of Regional Planning has deducted $30,000.00 from this account. As set forth in Condition 11 of the CUP, the permittee is required to replenish the account to the amount of initial deposit ($30,000.00) within 10 calendar days of the date of this notice.

Pursuant with the Hearing Officer's determination, please provide payment of the balance of the penalty, **$144,000.00**, payable to the County of Los Angeles, to the Department of Regional Planning by 5 p.m. May 11, 2017.

Failure to timely make payment in full may result in a hold or delay of Department of Regional Planning's processing and review of your pending plans or projects.

Any inquiry regarding this matter may be addressed to the Department of Regional Planning, 320 W. Temple Street, Los Angeles, CA 90012, Attention: Zoning Enforcement. To speak directly with the investigator, **Timothy Stapleton**, please call at (213) 974-6453 Monday through Thursday before 10:00 a.m., or send an email at

tstapleton@planning.lacounty.gov. Our offices are closed on Fridays.

Sincerely,

DEPARTMENT OF REGIONAL PLANNING
Richard J. Bruckner
Director

David Muñoz
Acting Supervising Regional Planner
Zoning Enforcement West

c. Thomas Bruen

SUNSHINE CANYON LANDFILL

May 11, 2017

Timothy Stapleton, AICP
Zoning Enforcement West
Department of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012

Mr. Stapleton,

Attached please find the following two checks, as follows:

(1) Check #7250016 in the amount of $30,000 for the replenishment of the trust fund in accordance with Condition 11 of Conditional Use Permit 00-194-(5);
(2) Check #7250017 in the amount of $144,000 for the balance of the penalty as referenced in your letter dated May 4, 2017 (attached).

These checks and the payments represented by these checks are being delivered to you under protest and without waiver of Browning-Ferris Industries of California's right to seek judicial review of the Hearing Officer's tentative decision at the hearing on May 2nd, 2017, and the Department's later decision to impose the monetary penalty, regarding the Department of Regional Planning's Notice of Violation dated October 25, 2016.

We are mindful of the County's statement in your letter that the County may not process any further approvals, which are needed for continued operation of the Sunshine Canyon Landfill, unless this penalty payment is made by the deadline stated in your letter. We are making this payment under protest and will seek the return of the full penalty amount should judicial review overturn the Hearing Officer's decision and/or the Department's subsequent decision to impose the penalty.

Should the County contend that BFIC's payment of the penalty amount under protest will in any way waive or restrict BFIC's right to seek judicial review of the Hearing Officer's or Department's decisions, the Department is not to negotiate the enclosed checks but instead should return both of them to the undersigned promptly.

At the request of our counsel, I am copying County Counsel Julia Weissman and Tracy Swann on this letter.

Sincerely,

Rob Sherman
General Manager
Sunshine Canyon Landfill

cc: Julia Weissman, Esq. (via email)
Tracy Swann, Esq. (via email)

Enclosures

14747 San Fernando Rd., Sylmar, CA 91342 (818) 362-2124 Office (818) 362-5484 Fax

NOTICE OF IMPOSITION OF PENALTY FEE

Los Angeles County Department of Regional Planning
Please contact the investigating planner **Timothy Stapleton**
Email: tstapleton@planning.lacounty.gov
Phone Number: (213) 974-6453 -- *Monday through Thursday before 10am*

Department of Regional Planning
Richard J. Bruckner, *Director*

320 W Temple Street
Los Angeles, CA 90012

(213) 974-6456

http: planning.lacounty.gov

Case Number:
RPZPE2016002500

Permit or Project Number:
CUP00-194

Zone:
A-2-2

Investigating Planner:
Timothy Stapleton

Phone Number:
(213) 974-6453

Fees Due Now:
$144,000.00

May 4, 2017

BFI/ Republic Services, Inc.
ATTN: Rob Sherman
14747 San Fernando Road
Sylmar, CA 91342

RSherman@republicservices.com

RE: APPEAL OF NOTICE OF VIOLATION
14747 SAN FERNANDO ROAD, LOS ANGELES, CA 91342
Code Enforcement Case Number: RPZPE2016002500

Dear Mr. Sherman:

As you are aware, your appeal of the Notice of Violation (RPZPE2016002500) was heard before a Hearing Officer on May 2, 2017 and was **denied**. Therefore, pursuant to Condition 11 of Conditional Use Permit ("CUP") 00-194, you are required to pay the County of Los Angeles a penalty of $1,000.00/day. The penalty, accrued from the date of the Notice of Violation, October 25, 2016, to the date when you submitted the final documents to the Department of Public Works, April 17, 2017, amounts to $174,000.00.

Condition 11 of CUP 00-194 also requires BFI/Republic, as the permittee, to deposit $30,000.00 to an interest bearing account from which penalty fees may be deducted. The Department of Regional Planning has deducted $30,000.00 from this account. As set forth in Condition 11 of the CUP, the permittee is required to replenish the account to the amount of initial deposit ($30,000.00) within 10 calendar days of the date of this notice.

Pursuant with the Hearing Officer's determination, please provide payment of the balance of the penalty, **$144,000.00**, payable to the County of Los Angeles, to the Department of Regional Planning by 5 p.m. May 11, 2017.

Failure to timely make payment in full may result in a hold or delay of Department of Regional Planning's processing and review of your pending plans or projects.

Any inquiry regarding this matter may be addressed to the Department of Regional Planning, 320 W. Temple Street, Los Angeles, CA 90012, Attention: Zoning Enforcement. To speak directly with the investigator, **Timothy Stapleton**, please call at (213) 974-6453 Monday through Thursday before 10:00 a.m., or send an email at

tstapleton@planning.lacounty.gov. Our offices are closed on Fridays.

Sincerely,

DEPARTMENT OF REGIONAL PLANNING
Richard J. Bruckner
Director

David Muñoz
Acting Supervising Regional Planner
Zoning Enforcement West

c. Thomas Bruen

REPUBLIC SERVICES, INC.

No. 7250016
Check Date: 5/10/17

COUNTY OF LOS ANGELES, RGNL PLANNING & ACCTG SVCS, 320 WEST TEMPLE ST ROOM 1383, LOS ANGELES CA 90012 **Vendor Number: 214207**

INVOICE	DATE	DESCRIPTION	GROSS AMOUNT	DISCOUNT	NET AMOUNT
COND #11-05-08-17 URGENT RTD Exception 5123	05/08/2017	3708774 PO6565556	$30,000.00	$0.00	$30,000.00
		TOTALS:	**$30,000.00**	**$0.00**	**$30,000.00**

Detach at Perforation Before Depositing Check

THIS IS A WATERMARKED PAPER - DO NOT ACCEPT WITHOUT NOTING WATERMARK - HOLD TO LIGHT TO VERIFY WATERMARK

REPUBLIC SERVICES, INC.
C/O AWIN MGMT INC
C/O ALLIED WASTE SERVICES
18500 N. ALLIED WAY
PHOENIX, AZ 85054

BANK OF AMERICA
52-153-112

Check Date 05/10/2017

Number 7250016

PAY *Thirty Thousand and 00/100 Dollars*

Amount
$ ****30,000.00
Void After 180 Days

PAY TO THE ORDER OF
COUNTY OF LOS ANGELES
RGNL PLANNING & ACCTG SVCS
320 WEST TEMPLE ST ROOM 1383
LOS ANGELES CA 90012

Marsha A. Lacy
VP, Treasurer

See ATTACHED LETTER DATED 5/11/17

⑈0007250016⑈ ⑆011201539⑆ 8023 1000⑈

REPUBLIC SERVICES, INC.

No. 7250017
Check Date: 5/10/17

COUNTY OF LOS ANGELES, RGNL PLANNING & ACCTG SVCS, 320 WEST TEMPLE ST ROOM 1383, LOS ANGELES CA 90012 **Vendor Number: 214207**

INVOICE	DATE	DESCRIPTION	GROSS AMOUNT	DISCOUNT	NET AMOUNT
RPZPE2016002500 URGENT RTD Exception 5123	05/04/2017	3708775 PO6565556	$144,000.00	$0.00	$144,000.00
		TOTALS:	**$144,000.00**	**$0.00**	**$144,000.00**

Detach at Perforation Before Depositing Check

THIS IS A WATERMARKED PAPER - DO NOT ACCEPT WITHOUT NOTING WATERMARK - HOLD TO LIGHT TO VERIFY WATERMARK

REPUBLIC SERVICES, INC.
C/O AWIN MGMT INC
C/O ALLIED WASTE SERVICES
18500 N. ALLIED WAY
PHOENIX, AZ 85054

BANK OF AMERICA
52-153-112

Check Date 05/10/2017

Number 7250017

PAY *One Hundred Forty Four Thousand and 00/100 Dollars*

Amount
$ ***144,000.00
Void After 180 Days

PAY TO THE ORDER OF
COUNTY OF LOS ANGELES
RGNL PLANNING & ACCTG SVCS
320 WEST TEMPLE ST ROOM 1383
LOS ANGELES CA 90012

Marsha A. Lacy
VP, Treasurer

See Attached Letter Dated 5/11/17

⑈0007250017⑈ ⑆011201539⑆ 8023 1000⑈

ATTACHMENT P

COUNTY OF LOS ANGELES
Public Health

BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

ANGELO J. BELLOMO, REHS, QEP
Deputy Director for Health Protection

TERRI S. WILLIAMS, REHS
Director of Environmental Health

BRENDA J. LOPEZ, REHS
Assistant Director of Environmental Health

5050 Commerce Drive
Baldwin Park, California 91706
TEL (626) 430-5374 • FAX (626) 813-3000

BOARD OF SUPERVISORS

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First District

Mark Ridley-Thomas
Second District

Sheila Kuehl
Third District

Janice Hahn
Fourth District

Kathryn Barger
Fifth District

May 9, 2017

Browning-Ferris Industries of California, Inc.
Mr. Rob Sherman, General Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342-1021

SUBJECT: SUNSHINE CANYON LANDFILL ORDER TO ABATE – STATUS OF COMPLIANCE

Dear Mr. Sherman,

On November 9, 2016 the Department of Public Health (DPH) issued Brown-Ferris Industries of California, Inc. an Order to Abate regarding the odor problems at Sunshine Canyon Landfill. This letter will serve to notify you that the odor problems persist, despite the mitigation measures you have implemented and as of the March 30, 2017 compliance date, the number of odor complaints were not reduced to levels consistent with other landfills of similar size and capacity adjacent to Los Angeles County (see attachment). Therefore, DPH has determined the landfill is not in compliance with the Order to Abate.

If you have any questions, please contact me a 626-430-5595 or via email at mpantoja@ph.lacounty.gov.

Sincerely,

Maurice L. Pantoja
Environmental Health Services Manager
Environmental Protection Branch

COUNTY OF LOS ANGELES
Public Health

CYNTHIA A. HARDING, M.P.H.
Interim Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

ANGELO J. BELLOMO, REHS, QEP
Deputy Director for Health Protection

TERRI S. WILLIAMS, REHS
Director of Environmental Health
5050 Commerce Drive
Baldwin Park, California 91706
TEL (626) 430-5374 • FAX (626) 813-3000

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

Hilda L. Solis
First District

Mark Ridley-Thomas
Second District

Sheila Kuehl
Third District

Don Knabe
Fourth District

Michael D. Antonovich
Fifth District

November 9, 2016

Republic Services, Inc.
Mr. Rob Sherman, General Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342-1021

SUBJECT: SUNSHINE CANYON LANDFILL ORDER TO ABATE PURSUANT TO CONDITIONAL USE PERMIT NO. 00-194-(5).

Dear Mr. Sherman,

The Department of Public Health (DPH) has determined that the persistent and ongoing odor problem at Sunshine Canyon Landfill (Landfill) which is associated with the transport, processing and disposal of solid waste, as well as the Landfill's gas collection system, presents a nuisance affecting the health and well-being of residents in the surrounding community. Under the authority of Condition 45N within the Conditional Use Permit, the DPH Solid Waste Management Program ("SWMP") is requiring the Landfill to implement additional corrective measures to abate the odor conditions and to protect public health.

"**Nuisance**" means and includes the following:

> *Any public nuisance known to common law or equity jurisprudence, and whatever is dangerous to human life or detrimental to health... Uncleanliness, or anything that renders air, food and drink detrimental to the health of human beings.*
>
> (Los Angeles County Code of Ordinance, Title 11- Health and Safety, Division 1, Chapter 11.02, Part 2, Article 2, Definitions, 11.02.300)

VIOLATION

From January 2016 to September 30, 2016 approximately 1100 odor complaints have been filed with the South Coast Air Quality Management District (AQMD) regarding foul odors emanating from the Landfill. As a result, to date, 22 Notices of Violation have been issued to Republic Services Inc. by AQMD.

Due to the ongoing odor complaints at the Landfill, DPH has determined that the Landfill has not taken adequate measures to sufficiently address these complaints pursuant to Condition 45N.

ABATEMENT

DPH SWMP hereby issues this Order to Abate (Order) directing Republic Services, Inc. to abate the conditions at the Landfill which have been the cause of the repeated air quality violations and persistent odors which constitute the nuisance by March 30, 2017. This shall include, but not be limited to, employing best management practices, adjusting its operations (e.g., hours, tonnage, etc.) as needed, and ensuring adequate site maintenance to reduce the emission of landfill gas and trash odors to levels consistent with other landfills of similar size and capacity adjacent to Los Angeles County. Additionally, Republic Services, Inc. is required to submit a compliance schedule to DPH SWMP by January 15, 2017, that shall include the Landfill's corrective action plan, interim milestones for correcting the conditions at the Landfill that have been the cause of the repeated air quality violations or odor emissions, and the timeline for when each mitigation effort will be implemented.

The requirements of this Order shall be read in a manner not inconsistent with orders and directives issued by AQMD, the Los Angeles County Departments of Regional Planning and Public Works, and other agencies with regulatory jurisdiction and oversight over the Landfill. Nothing herein shall be construed to exempt Republic Services Inc. from complying with all applicable laws and regulations, including orders and directives issued by any and all other regulatory agencies or limit in any way other regulatory agency's ability to impose additional requirements or mitigation measures to address the odor nuisance being created by the Landfill.

Failure to comply with this Order may result in a recommendation to DRP to issue a NOV under Condition 11 of the CUP, or result in other legal remedies.

If you have any questions regarding this Notice, please contact Maurice Pantoja, Environmental Health Services Manager at 626.430.5595 or mpantoja@ph.lacounty.gov.

Gerardo Villalobos

Gerardo Villalobos, Chief EHS/November 9, 2016

DPH SWMP Authorized Representative/Date

ATTACHMENT Q

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

EDMUND G. BROWN, Jr., *Governor*
CHARLTON H. BONHAM, Director

November 27, 2017

Chris Coyle
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342
CCoyle@republicservices.com

Dear Mr. Coyle:

Complete Notification of Lake or Streambed Alteration
Notification No. 1600-2017-0220-R5
Chatsworth Reservoir Wetland/Riparian Mitigation Program

On October 26, 2017, the California Department of Fish and Wildlife (CDFW) received your Notification of Lake or Streambed Alteration (Notification). On November 27, 2017, your Notification was deemed complete.

CDFW is required to submit a draft Lake or Streambed Alteration Agreement (Agreement) to you within 60 calendar days from the date the Notification is complete, if CDFW determines that an Agreement is required for the project. An Agreement will be required if CDFW determines that your project could substantially adversely affect an existing fish or wildlife resource. Therefore, CDFW has until January 26, 2018, to issue you a draft Agreement or inform you that an Agreement is not required.

Please be advised that you may not proceed with any work until CDFW executes an Agreement, informs you that an Agreement is not needed, or does not provide you with a draft Agreement within 60 days of the date your notification was deemed complete.

If you have questions regarding this letter, please contact Brock Warmuth, Environmental Scientist, at 805-962-4698 or by email at brock.warmuth@wildlife.ca.gov.

Sincerely,

Erinn Wilson
Senior Environmental Scientist (Supervisory)

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region/Region 5
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

EDMUND G. BROWN, Jr., *Governor*
CHARLTON H. BONHAM, Director

January 26, 2018

Chris Coyle
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342
CCoyle@republicservices.com

Subject: Notification of Lake or Streambed Alteration No. 1600-2017-0220-R5
Chatsworth Reservoir Wetland/Riparian Mitigation Program Project

Dear Mr. Chris Coyle:

As the California Department of Fish and Wildlife (Department) explained in a previous letter to you dated November 27, 2017, the Department had until January 26, 2018 to submit a draft Lake or Streambed Alteration Agreement (Agreement) to you or inform you that an Agreement is not required. The Department did not meet that date. As a result, by law, you may now complete the project described in your notification without an Agreement.

Please note that pursuant to Fish and Game Code section 1602(a)(4)(D), if you proceed with this project, it must be the same as described and conducted in the same manner as specified in the notification and any modifications to that notification received by the Department in writing prior to November 27, 2017. This includes completing the project within the proposed term and seasonal work period and implementing all avoidance and mitigation measures to protect fish and wildlife resources specified in the notification. If the term proposed in your notification has expired, you will need to re-notify the Department before you may begin your project. Beginning or completing a project that differs in any way from the one described in the notification may constitute a violation of Fish and Game Code section 1602.

Also note that while you are entitled to complete the project without an Agreement, you are still responsible for complying with other applicable local, state, and federal laws. These include, but are not limited to, the state and federal Endangered Species Acts and Fish and Game Code sections 5650 (water pollution) and 5901 (fish passage).

Finally, if you decide to proceed with your project without an Agreement, you must have a copy of this letter and your notification with all attachments available at all times at the work site. If you have any questions regarding this matter, please contact Erinn Wilson at (562) 342-7172 or Erinn.Wilson@wildlife.ca.gov

Sincerely,

Erinn Wilson
Senior Environmental Scientist (Supervisory)

ATTACHMENT R

Los Angeles Department of Water & Power

ERIC GARCETTI
Mayor

Commission
MEL LEVINE, *President*
WILLIAM W. FUNDERBURK JR., *Vice President*
JILL BANKS BARAD
CHRISTINA E. NOONAN
AURA VASQUEZ
BARBARA E. MOSCHOS, *Secretary*

DAVID H. WRIGHT
General Manager

June 13, 2017

Ms. Patti K. Costa, P.E.
Environmental Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342

Dear Ms. Costa:

This letter is to request that Republic authorize its consultant, JMA, to conduct additional studies as requested by the Native American Consultation survey findings. As discussed in our conference call on May 31, 2017, due to the request from some Tribes for additional studies, Republic/JMA will perform the requested additional studies, with permission from the Los Angeles Department of Water and Power (LADWP).

JMA will conduct additional studies on some or all of the archaeological sites in the Chatsworth Mitigation Project Area (Project Area), including additional survey, testing, and data recovery. There should be monitoring during of all ground-disturbing activity related to the project, and, to the extent possible, Native American tribes that specifically requested that their Tribe be involved with the monitoring should be included in the plan.

LADWP gives Republic permission to perform additional archaeological studies to include Tribes that request to be involved in the monitoring. Additionally, LADWP will allow tribal members who request to collect plants from the Project Area, to do so, subject to the scheduling of appointments and the availability of resources to provide access to the site.

If you have any questions regarding this matter, please contact Ms. Julie Van Wagner, Environmental Supervisor at julie.vanwagner@ladwp.com or me at heidi.hiraoka@ladwp.com.

We look forward to continue working with you on this project.

Sincerely,

Heidi HK Hiraoka
Manager of Property Management

bc: Julie Van Wagner
Chuck Holloway
Mark Sedleck

June 13, 2017

Ms. Patti K. Costa, P.E.
Environmental Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342

Dear Ms. Costa:

This letter is to request that Republic authorize its consultant, JMA, to conduct additional studies as requested by the Native American Consultation survey findings. As discussed in our conference call on May 31, 2017, due to the request from some Tribes for additional studies, Republic/JMA will perform the requested additional studies, with permission from the Los Angeles Department of Water and Power (LADWP).

JMA will conduct additional studies on some or all of the archaeological sites in the Chatsworth Mitigation Project Area (Project Area), including additional survey, testing, and data recovery. There should be monitoring during of all ground-disturbing activity related to the project, and, to the extent possible, Native American tribes that specifically requested that their Tribe be involved with the monitoring should be included in the plan.

LADWP gives Republic permission to perform additional archaeological studies to include Tribes that request to be involved in the monitoring. Additionally, LADWP will allow tribal members who request to collect plants from the Project Area, to do so, subject to the scheduling of appointments and the availability of resources to provide access to the site.

If you have any questions regarding this matter, please contact Ms. Julie Van Wagner, Environmental Supervisor at julie.vanwagner@ladwp.com or me at heidi.hiraoka@ladwp.com.

We look forward to continue working with you on this project.

Sincerely,

Heidi HK Hiraoka
Manager of Property Management

January 31, 2018

Dear Tribal Chairperson,

As the Archaeological Principal Investigator on the Chatsworth Reservoir Wetland and Riparian Mitigation Project, I am following up with an update regarding the results of Native American Consultation and the subsequent Phase II investigation for the sites in the project APE. In March 2017, I sent to Tribes the document titled *Initial Study and Draft Mitigated Negative Declaration for Chatsworth Reservoir Wetland and Riparian Mitigation Program* as well as the draft of our report documenting the archival research and the results of our pedestrian survey titled, *Phase I Cultural Resources Survey for the Chatsworth Reservoir Wetland Riparian Restoration Project, Los Angeles County, California.* My accompanying letter requested consultation, solicited input and welcomed any comments or questions from Tribes regarding cultural resources on this project. In April I followed up with phone calls and emails to tribes.

Gratefully, I received substantive comments and input from a number of Tribes which I compiled and forwarded to the property owner, the Los Angeles Department of Water and Power (LADWP). Summarizing the responses, the substantive comments primarily concerned three issues. 1) A number of Tribes requested that additional studies be conducted on some or all of the archaeological sites in the Chatsworth Area of Potential Effect (APE). Comments specifically mentioned additional survey, testing, and data recovery. 2) Virtually all Tribes commented that there should be Native American monitoring of all ground-disturbing activity related to the project and a few Tribes specifically requested that their Tribe be involved with the monitoring. 3) One Tribe requested that tribal members be allowed to gather plants from the Chatsworth Reservoir site for traditional purposes.

In the subsequent discussions in response to the Native American comments, The LADWP authorized the mitigation contractor, Republic Services, to commission additional investigation of the archaeological sites, Tribal monitoring of ground disturbing activity, and for tribal members to collect traditional plants. In August-September 2017, John Minch and Associates Inc. (JMA) conducted the Phase II investigations with the assistance and participation of tribal members. Attached is the recently-completed report on these investigations. Please review the draft report and I welcome and appreciate any comments or feedback. And if I can answer any questions please let me know.

Sincerely,

Ray Corbett, Ph.D., RPA
Principal Archaeologist
JMA

2620 Yucca Dr.
Camarillo, CA 93012
805-491-3062
rcorbett@jma-ca.com

November 29, 2016

Patti Costa
Sunshine Canyon Landfill
Republic Services, Inc.
14747 San Fernando Road
Sylmar, CA 91342

Subject: Update on Archaeological Services Performed for Chatsworth Reservoir Mitigation MND Addendum.

Dear Patti Costa,

As requested, John Minch and Associates, Inc. (JMA) is conducting an investigation to identify and document cultural resources in the proposed project area for the Chatsworth Reservoir Mitigation Project and prepare a report to satisfy requirements in compliance with the California Environmental Quality Act (CEQA). JMA staff performed the proposed archaeological services Tasks 1-3 on November 17th-18th. The tasks included: **Task 1)** a comprehensive archaeological records and literature search of a One-mile radius of the project area in order to identify known cultural resources and the potential impacts that may result from construction activities; **Task 2)** a pedestrian survey of the project area; **Task 3)** the recordation two newly discovered archaeological site locations that were located during the original 2010 field survey, and the recordation of a new site that was located during the November 2016 survey.

The results of the pedestrian survey include the identification of a new site location, and three isolated artifacts. All of the identified site locations are outside of the footprint of the mitigation area and can be avoided. However, the results of the Sacred Lands File check performed for Task 1 indicated a change in status of Sacred Lands within the Chatsworth Reservoir Mitigation Project area. The Native American Heritage Commission has informed us that the "Sacred Lands Inventory has records of sacred sites within the Chatsworth Reservoir APE". The items contained therein are confidential and exempt from the California Public Records Act pursuant to California Government Code Section 6254.10. Therefore information regarding the nature and location of these sacred sites must be obtained through direct consultation with Native Americans. Such information would then be used to assess the potential effects of the mitigation project on these sacred sites pursuant to CEQA and California Assembly Bill No. 52. In our opinion, due diligence addressing this issue would need to be exercised before a Mitigated Negative Declaration regarding cultural resources could be asserted.

JMA will continue progress on the additional two Tasks: **Task 4)** production of a comprehensive narrative report for review, and provide final revisions for the

Orange County
26623 Sierra Vista
Mission Viejo, CA 92692
Phone: 949-367-1000
www.jma-ca.com

Addendum; and as needed, **Task 5)** participation in any necessary meetings and/or conference calls during the remaining course of the project.

Respectfully submitted,

Edwin Minch
Managing Principal

Orange County
26623 Sierra Vista
Mission Viejo, CA 92692
Phone: 949-367-1000
www.jma-ca.com

To: Republic Services and LADWP

From: Ray Corbett, JMA

Date: March 17, 2018

Subject: Native American Consultation regarding Chatsworth Reservoir project

After completion of the draft report on the results of Phase II Investigations at the Chatsworth Reservoir APE, I circulated the draft report (attached) along with the consultation letter (attached) among our consulting Native American Tribes for this project. Subsequently I followed up with phone calls to the respective Tribal representatives. All of the comments were positive and each tribe expressed satisfaction with the Phase II Investigation program and the ensuing draft report. All of the comments except one came through phone conversations. The single written response is attached.

I will finalize the Phase II Investigation report and submit it to the South Central Coastal Information Center of the California Historical Resource Information System located at California State University, Fullerton.

This completes the Native American consultation process for this phase of the project. In light of this, it would be appropriate to resurrect work on the MND Addendum.

If I can answer any questions please let me know.

Sincerely,

Ray Corbett

Ray Corbett, Ph.D., RPA
Principal Archaeologist
JMA

2620 Yucca Dr.
Camarillo, CA 93012
805-491-3062
rcorbett@jma-ca.com

February 27, 2018

Dear Dr. Corbett,

Thank you for providing the draft report on the Chatsworth Reservoir Phase II Investigations. After review of the document provided by your office I would like to commend John Minch & Associates for generating an excellent report on the project. I am satisfied with the results of the Phase II archaeological field work performed in response to Tribal concerns surrounding the proximity of known prehistoric archaeological sites and the project's APE.

The Gabrielino Tongva Nation will look forward to continuing consultation and participation as the Chatsworth Reservoir Wetland and Riparian Mitigation Project progresses. As discussed in previous conversations, we look forward in providing tribal cultural resource monitoring when the need arises.

Sincerely,

Sam Dunlap
Cultural Resource Director
Gabrielino Tongva Nation
(909) 262-9351 cell

Tribal responses to a request for Native American Consultation regarding the *Initial Study and Draft Mitigated Negative Declaration for Chatsworth Reservoir Wetland and Riparian Mitigation Program* and *Phase I Cultural Resources Survey for the Chatsworth Reservoir Wetland Riparian Restoration Project.*

Dear Dr. Corbett,

In response to the Chatsworth Reservoir Wetland and Riparian Mitigation Project. After reading the Phase 1 Cultural Resource Survey, I strongly feel that the disturbance to this area would affect cultural resources along with various plant communities. As documented, there are sensitive sites, the water that has pushed through at one time could have very well carried any items of significance.

Thank you for you conscious effort in supporting Cultural Resources.

Sincerely,

Eleanor Arellanes Fishburn
Barbareno/Ventureno Band of Mission Indians
PO Box 5687
Ventura, CA 93005

Notes from phone conversation with Mr. Anthony Morales, Chairperson, Gabrielino/Tongva San Gabriel Band of Mission Indians.

The fact that there was a reservoir there indicates there was water and this means there would be villages in the area, so we consider this to be important to our tribe and we, (the Gabrielino/Tongva San Gabriel Band of Mission Indians) want to be involved with any monitoring regarding this project.

Dr. Corbett,

The SYBCI Elders will not be getting involved in this project, but would like to make some comments about the protection and preservation of cultural resources;

1. They agree that additional survey and studies need to take place in and around the area are in order to better categorize the sites that do exist within the APE;

2. The survey plan for this project needs to be completed in consultation with tribes and agreed to by those involved;

3. Native American advisor/consultant need to be present during the surveys, as well as during any ground disturbing activities;

4. A plan needs to be created for long term preservation, in consultation with tribes. because once completed, this will more than likely become a refuge for wildlife and with that comes folks that interested in nature, i.e. bird watching, walking, plant viewing, etc.;

5. If at all possible, it would be nice to have available for tribes to possibly gather in the area plants that they would traditionally use.

These would be the comments and suggestions for this area. If there is no response from any of tribes, please advise and I will inform the Elders to see if they may want me to participate based on non-involvement by the tribes.

I look forward to hearing from you.

Freddie Romero
Cultural Resources Coordinator
SYBCI Elders Council
805-688-7997 X4109
805-403-2873

Notes from phone conversation with Mr. Robert Dorame, Chairperson, Gabrielino Tongva Indians of California Tribal Council. In the course of our phone conversation he said that he believed that the area was "highly sensitive" and that any ground disturbing activity be monitored by Native Americans. He went on to say that the monitoring should be rotated among Tribes. He informed me that he would not submit written comments (because of his busy schedule), but that he wanted what he conveyed to me by phone to serve as his Tribe's comments.

Dear Dr. Corbett,

Thank you for contacting the Gabrielino Tongva Nation for the purpose of Native American consultation regarding the Chatsworth Reservoir Project. The project area lies within the traditional tribal territory of the Gabrielino Tongva Nation and the following comments are intended to express the concerns of our Tribe.

After review of the material provided by your office I am of the opinion that further archaeological investigation is needed to properly assess the recent discovery of the archaeological sites found within the project area by JMA during their site survey. I believe archaeological data recovery is warranted given the history of the project area.

As the project area is within our tribal territory the Gabrielino Tongva Nation is culturally affiliated to any prehistoric cultural items that may be discovered during new archaeological testing as well as any archaeological items already recorded within the project area and its vicinity.

The Gabrielino Tongva Nation also requests that a Native American monitor from our tribal group be present during all phases of archaeological testing and future subsurface construction activity associated with the Chatsworth Reservoir project. The Native American monitor will be a documented tribal member of the Gabrielino Tongva Nation.

I hope that my comments and concerns are helpful to this consultation process. Please feel free to contact me as this project moves forward.

Sincerely,

Sam Dunlap
Cultural Resource Director
Gabrielino Tongva Nation
909-262-9351 cell

Attn: Dr. Corbett, JMA
Thank you for providing the Torres Martinez Desert Cahuilla Indians with the notifications of your projects. However after having reviewed the information you have been providing and the locations of your projects it is apparent that you are out of our traditional use area. Therefore we wish to defer projects to other tribes closer to the area.

Respectfully,
Michael Miralez
Cultural Resource Coordinator
Torres-Martinez DCI
Office: 760-397-0300 Ext: 1213
Email: mmirelez@tmdci.org

The Gabrielino Band of Mission Indians – Kizh Nation communicated through a phone conversation that they wanted subsurface testing of the archaeological sites within the APE and that all ground disturbing activity be monitored by a Native American representative. Furthermore, by email the Tribe provided the following:

“The Chatsworth Reservoir area is definitely in Kizh Tribal Territory.
Bernice Johnston (1962) identifies the Chatsworth area as in Gabrielino (Kizh) territory and states as to its sensitivity:

> "Many a modern community in the San Fernando Valley can boast of an Indian predecessor. From Tujunga to Chatsworth archeological sites (i.e. village sites) abound. . ."(Johnston 1962:125).

McCawley (1996) also includes the Chatsworth area as Gabrielino (Kizh) territory and specifically about Chatsworth Reservoir:

> "Melendrez (Kizh informant) reported to Harrington that a rancheria, or Indian community, existed near Chatsworth Reservoir. 'Melendrez v'd [volunteered]. . . that one long rancheria extended from where we were [probably northwest of Chatsworth Reservoir] a couple of miles to the

Triunfo ward [southwestward] of where we were and that fragments of shell, etc., are picked up in this whole stretch.' According to Harrington, Melendrez implied that 'the name of that rancheria was El Escurpion de las Salinas'. . .'"”

Respectfully submitted,

Ray Corbett, Ph.D., RPA
Principal Archaeologist
JMA
April 28, 2017

ATTACHMENT S

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: EP-5

May 4, 2016

Mr. Rob Sherman, General Manager
Republic Services, Inc.
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342-1021

SUNSHINE CANYON CITY/COUNTY LANDFILL
CONDITIONAL USE PERMIT NO. 00-194-(5)
AUTHORIZATION TO IMPORT CLEAN DIRT FROM THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Dear Mr. Sherman:

We have reviewed your request dated July 28, 2015, and subsequent revision dated October 9, 2015, to import clean dirt from the Los Angeles County Flood Control District (District), beginning on April 2017, and ending on December 2021. Your request for importation of clean dirt for beneficial use at the Sunshine Canyon Landfill is hereby approved pursuant to Conditional Use Permit 00-194-(5), Conditions 1.D and 23.E, which requires Republic Services to obtain prior authorization from the Department of Public Works prior to importation and acceptance of clean dirt material for beneficial use and disposal at the site.

This authorization is being granted in order to allow the landfill to import soil for the site's daily and intermediate soil cover needs and other beneficial uses. Based on your submittal, the volume of on-site soil stockpile will be exhausted by October 2019 and importation of soil is necessary for effective landfilling operations at the site. This approval is subject to the following conditions:

1. The quantity of soil to be imported shall not exceed the following:

    - 2,200 tons per day average or 13,200 tons per week and
    - 2.5 million tons total for a 5-year duration of the project

2. The quantity of soil imported (tonnage) shall be included in the total permitted weekly tonnage capacity of materials (Solid Waste, Inert Debris and Beneficial Use Materials), which is limited to 72,600 tons per week. Pursuant to the CUP, in no event shall the daily tonnage of all materials received by the Landfill exceed 12,100 tons on any given day, six working days per week.

3. Limited only to Clean Dirt and sediments from the District

4. The soil importation schedule shall be from Monday to Friday, between the hours of 7:00 am to 6:00 pm.

5. The imported soil shall only be used for on-site daily and intermediate soil cover needs and other beneficial uses at the site.

6. All incoming and departing truck routes associated with this soil importation project shall be limited to Roxford Street, Sepulveda Boulevard and San Fernando Road.

7. The imported soil shall be placed adjacent to the working face area for immediate usage in a designated location, or, if soil is not needed at the working face, it will be taken to a designated stockpile location as defined in the Joint Technical Document. Additionally, all stockpile areas shall be vegetated if left unused longer than 180 days.

8. The operator shall comply with the currently approved Fugitive Dust Control Program to minimize dust resulting from the importation project

9. The operator shall follow the approved Waste Load Checking Program and the Waste Discharge Requirements issued by the California Regional Water Quality Control Board to ensure the imported soil's quality is acceptable under this program and permit.

10. Republic shall keep records of all materials received from the District including quantities accepted, stockpiled, beneficially used, and disposed of.

11. The operator shall submit a monthly summary of these records on an annual basis, including a stockpile location map, to Public Works' Environmental Programs Division at the end of each calendar year for the duration of this project.

12. The Director of Public Works, at his/her sole discretion may rescind or terminate this approval if the Department determines that any of the conditions of approval has been violated and/or that such termination is necessary to protect public health, safety, welfare, and/or the environment.

If you have any questions, please contact me at (626) 458-3553, Monday to Thursday, 7:00 a.m. to 5:30 p.m.

Very truly yours,

GAIL FARBER
Director of Public Works

MARTIN AIYETIWA
Senior Civil Engineer
Environmental Programs Division

DN:jl
P:\Sec\Sunshine Canyon Landfill Importation of Soil from FCD

cc: Sunshine Canyon Landfill Local Enforcement Agency (Gerry Villalobos, David Thompson)
Department of Regional Planning (Maria Masis, Tim Stapleton)
Department of Public Health (Gerry Villalobos)
City of Los Angeles Department of City Planning (Nicholas Hendricks, Ly Lam)
Sunshine Canyon Landfill Technical Advisory Committee (Lisa Webber, Jon Sanabria)
Sunshine Canyon Landfill Community Advisory Committee (Wayde Hunter, Gale Gunderson, Joe Vitti)
Members of the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force
County of Los Angeles Public Works, Water Resources Division (Chris Stone, Ken Zimmer)

ATTACHMENT T

SAN FERNANDO ROAD RETAINING WALL CLEANUP PROJECT

ATTACHMENT U

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

MARK PESTRELLA, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: EP-5

February 7, 2018

Mr. Chris Coyle, General Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342-1021

Dear Mr. Coyle:

SUNSHINE CANYON CITY/COUNTY LANDFILL
CONDITIONAL USE PERMIT NO. 00-194-(5)
PROPOSED SURVEY MONUMENT AND GRADING LIMITS

We have completed our review of Republic Services' request for approval of proposed survey monument and grading limits for the Sunshine Canyon Landfill submitted on September 12, 2017. The Proposed Survey Monument Plan and Grading Limit is in alignment with Revised Exhibit A-2 approved by the Department of Regional Planning on December 5, 2017, and is associated with the SCE Power Pole Realignment Project and CC4 Stability Buttress Grading Project at the Sunshine Canyon Landfill.

The following drawings are hereby approved:

- Sunshine Canyon Landfill Drainage and Grading Limits – Revision Number 4 (see enclosed) approved on February 1, 2018. This plan is also referred to as Survey Monument Plan and Grading Limits.

If you have any questions, please contact Mr. Martin Aiyetiwa at (626) 458-3553, Monday to Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

MARK PESTRELLA
Director of Public Works

MARTIN AIYETIWA
Senior Civil Engineer
Environmental Programs Division

VT:jl
P:\Sec\DPW Approval Letter - Proposed Survey Monument and Grading Limit for CC4 Stability Buttress.docx

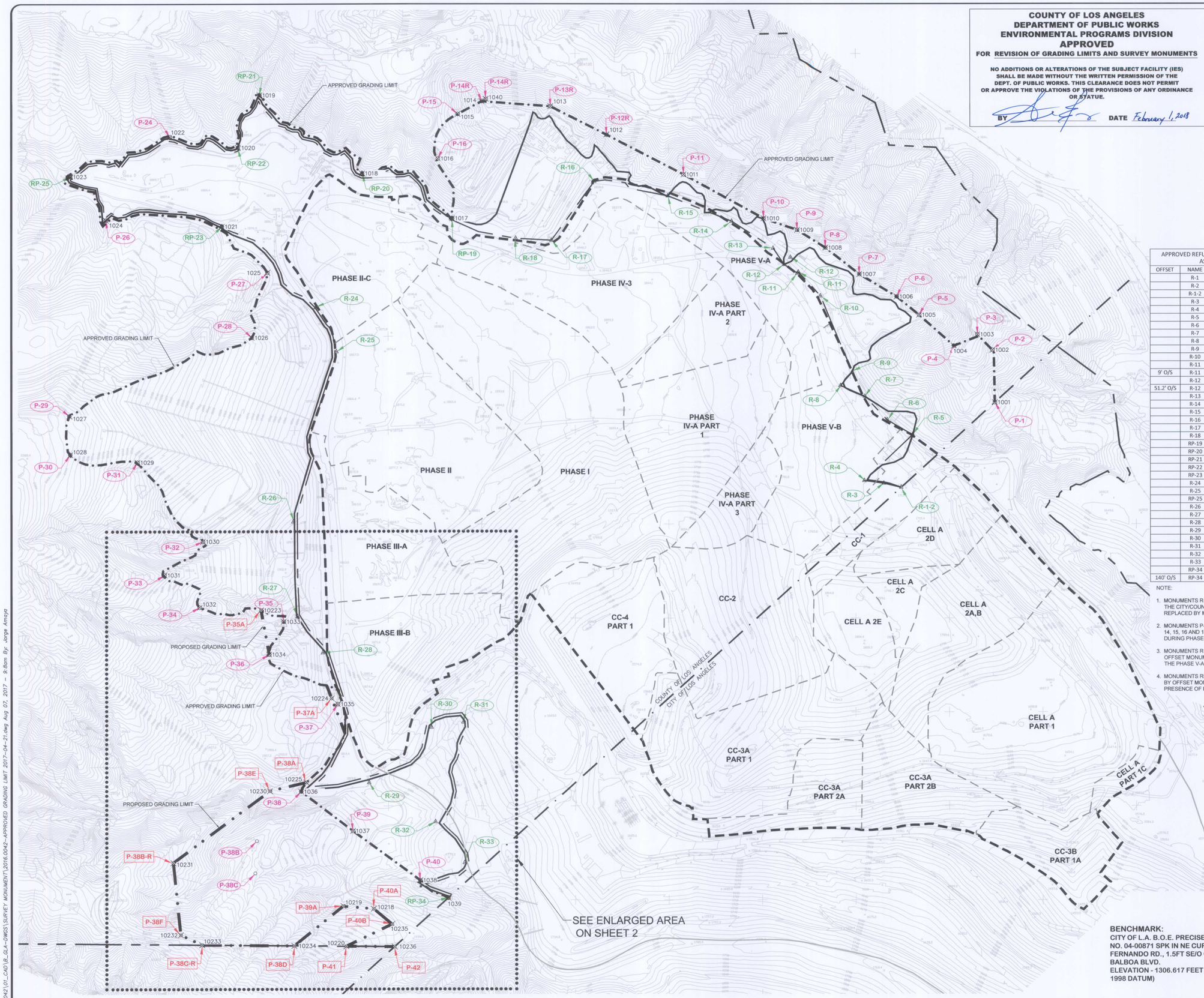
Enc.

cc: Sunshine Canyon Landfill Local Enforcement Agency (Maurice Pantoja, Dorcas Hanson-Lugo, David Thompson)
Department of Regional Planning (Maria Masis, Tim Stapleton)

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
APPROVED
FOR REVISION OF GRADING LIMITS AND SURVEY MONUMENTS

NO ADDITIONS OR ALTERATIONS OF THE SUBJECT FACILITY (IES) SHALL BE MADE WITHOUT THE WRITTEN PERMISSION OF THE DEPT. OF PUBLIC WORKS. THIS CLEARANCE DOES NOT PERMIT OR APPROVE THE VIOLATIONS OF THE PROVISIONS OF ANY ORDINANCE OR STATUTE.

BY _____ DATE February 1, 2018



LEGEND:

- COUNTY LINE
- PROPERTY BOUNDARY
- (100) EXISTING GROUND SURFACE CONTOUR EL, FEET
- PROPOSED GRADING LIMIT
- APPROVED GRADING LIMIT
- APPROVED LIMITS OF REFUSE PER 2002 JTD
- LIMITS OF LANDFILL PER EXHIBIT "A" (ALTERNATE) OF CUP EIR-SEQUENCE 2, DRAWING 3A FEB 1991
- EXISTING LINER
- SUB-UNIT LINER BOUNDARY
- PERMIT LINER LIMIT
- P-XX APPROVED GRADING LIMIT SURVEY MONUMENT OF AUGUST 20, 2012
- P-XX PROPOSED GRADING LIMIT SURVEY MONUMENT
- R-XX APPROVED REFUSE LIMITS SURVEYING MONUMENTS AS-BUILT

APPROVED REFUSE LIMITS SURVEYING MONUMENTS AS-BUILT INFORMATION

OFFSET	NAME	NORTHING	EASTING	NOTE
	R-1			1
	R-2			1
	R-1-2	4232695.76	4132743.54	
	R-3	4232717.91	4132650.77	
	R-4	4232732.24	4132546.26	
	R-5	4232975.52	4132804.66	
	R-6	4233054.64	4132668.48	
	R-7	4233180.08	4132549.41	
	R-8	4233237.33	4132419.73	
	R-9	4233309.56	4132481.98	
	R-10	4233714.90	4132312.00	2
	R-11	4233834.76	4132188.93	3
9' O/S	R-11	4233841.47	4132194.77	
	R-12	4233882.20	4132118.16	3
51.2' O/S	R-12	4233920.15	4132152.55	
	R-13	4233968.27	4132059.72	2
	R-14	4234112.10	4131837.12	2
	R-15	4234247.72	4131496.20	2
	R-16	4234324.90	4131103.21	2
	R-17	4234009.93	4130874.15	2
	R-18	4234021.53	4130682.83	
	RP-19	4234127.83	4130342.94	
	RP-20	4234367.56	4129861.53	
	RP-21	4234785.04	4129313.20	
	RP-22	4234505.64	4129196.76	
	RP-23	4234085.89	4129111.85	
	R-24	4233654.74	4129614.13	
	R-25	4233418.77	4129724.03	
	RP-25	4234352.20	4128301.02	
	R-26	4232513.97	4129493.04	
	R-27	4232009.20	4129516.04	
	R-28	4231817.21	4129650.61	
	R-29	4231124.82	4129897.13	
	R-30	4231419.27	4130231.68	
	R-31	4231446.86	4130402.09	
	R-32	4230916.16	4130252.46	
	R-33	4230698.39	4130408.08	
	RP-34	4230510.52	4130320.44	4
140' O/S	RP-34	4230650.55	4130320.45	

NOTE:

1. MONUMENTS R-1 AND R-2 ARE NOT APPLICABLE TO THE CITY/COUNTY LANDFILL. THEY HAVE BEEN REPLACED BY MONUMENT R-1-2.
2. MONUMENTS P-5, 10 AND 11 AND MONUMENTS R-10, 13, 14, 15, 16 AND 17 WERE RESET DUE TO DISTURBANCE DURING PHASE V-A CONSTRUCTION ACTIVITIES.
3. MONUMENTS R-11 AND R-12 ARE IDENTIFIED BY OFFSET MONUMENTS, SINCE THEY ARE LOCATED ON THE PHASE V-A LINER.
4. MONUMENTS RP-34, P-40, AND P-14R ARE IDENTIFIED BY OFFSET MONUMENTS, DUE TO TERRAIN AND PRESENCE OF POISON OAK IN THE AREA.

APPROVED GRADING LIMIT SURVEY MONUMENTS AS OF AUGUST 20, 2012. APPROVED BY LACDPW ENV PROGRAMS DIV.

OFFSET	POINT NO.	NORTHING	EASTING	NAME	NOTE
	1001	4233147.08	4133244.43	P-1	
	1002	4233417.57	4133239.26	P-2	
	1003	4233500.41	4133158.76	P-3	
	1004	4233448.78	4133025.59	P-4	
	1005	4233613.36	4132839.61	P-5	2
	1006	4233711.09	4132719.67	P-6	
	1007	4233830.47	4132520.36	P-7	
	1008	4233971.68	4132338.85	P-8	
	1009	4234065.71	4132187.65	P-9	
	1010	4234127.35	4132008.20	P-10	2
	1011	4234361.69	4131580.44	P-11	2
	1012	4234573.63	4131168.28	P-12R	
	1013	4234724.10	4130868.46	P-13R	
	1040	4234751.15	4130501.62	P-14R	4
25' O/S	1014	4234763.66	4130523.35	P-14R	
	1015	4234683.40	4130372.79	P-15	
	1016	4234445.86	4130266.91	P-16	
	1017	4234127.83	4130342.94	RP-19	
	1018	4234367.56	4129861.53	RP-20	
	1019	4234785.04	4129313.20	RP-21	
	1020	4234505.64	4129196.76	RP-22	
	1021	4234085.89	4129111.85	RP-23	
	1022	4234563.47	4128834.22	P-24	
	1023	4234352.20	4128301.02	RP-25	
	1024	4234119.82	4128491.36	P-26	
	1025	4233840.15	4129355.03	P-27	
	1026	4233494.16	4129271.72	P-28	
	1027	4233078.19	4128295.46	P-29	
	1028	4232872.78	4128300.13	P-30	
	1029	4232831.51	4128659.85	P-31	
	1030	4232409.34	4129009.32	P-32	
	1031	4232230.74	4128804.15	P-33	
	1032	4232058.70	4128992.14	P-34	
	~~1033~~	~~4231982.31~~	~~4129441.00~~	~~P-35~~	
	1034	4231808.42	4129363.6	P-36	
	~~1035~~	~~4231542.52~~	~~4129729.96~~	~~P-37~~	
	~~1036~~	~~4231077.89~~	~~4129533.57~~	~~P-38~~	
	~~1037~~	~~4230867.94~~	~~4129810.49~~	~~P-39~~	
~~80' O/S~~	~~1038~~	~~4230684.71~~	~~4130170.52~~	~~P-40~~	~~4~~
140' O/S	1039	4230650.55	4130320.45	RP-34	

NOTE: MONUMENTS P-35, P-37, P-38, P-39 AND P-40 WERE REMOVED DURING THE CONSTRUCTION OF THE SOUTHERN CALIFORNIA EDISON CONSTRUCTION PROJECT AND REPLACED BY MONUMENTS P-35A, P-37A, P-38A, P-38B, P-38C, P-39A AND P-40A.

PROPOSED GRADING LIMIT SURVEY MONUMENTS AS OF MARCH 28, 2016.

OFFSET	POINT NO.	NORTHING	EASTING	NAME
	10223	4232025.09	4129323.34	P-35A
	10224	4231571.73	4129688.19	P-37A
	10225	4231126.92	4129561.30	P-38A
	~~10226~~	~~4230814.67~~	~~4129309.19~~	~~P-38B~~
	~~10221~~	~~4230644.24~~	~~4129288.09~~	~~P-38C~~
	10219	4230468.71	4129758.66	P-39A
	10218	4230453.48	4129921.05	P-40A
	10220	4230254.98	4129774.77	P-41

NOTE: MONUMENTS P-38B AND P-38C WERE SET ON MARCH 29, 2016. THESE MONUMENTS WILL BE REMOVED DURING CONSTRUCTION OF THE CC-4 STABILITY BUTTRESS.

PROPOSED GRADING LIMIT SURVEY MONUMENTS AS OF MAY 25, 2017.

OFFSET	POINT NO.	NORTHING	EASTING	NAME
	10230	4231081.18	4129366.48	P-38E
	10231	4230699.99	4128850.01	P-38B-R
	10232	4230315.8	4128889.98	P-38F
	10233	4230262.78	4129003.58	P-38C-R
	10234	4230257.81	4129495.81	P-38D
	10235	4230371.64	4130019.5	P-40B
	10236	4230252.18	4130032.73	P-42

N

200' 0' 100' 200'
SCALE: 1" = 200'

BENCHMARK:
CITY OF L.A. B.O.E. PRECISE BENCHMARK NO. 04-00871 SPK IN NE CURVE SAN FERNANDO RD., 1.5FT SE/O C/L PROD BALBOA BLVD.
ELEVATION - 1306.617 FEET (2000 ADJ, NAVD 1998 DATUM)

SURVEYOR'S STATEMENT OF COMPLIANCE UPON SETTING OF MONUMENTS

ON May 23 2017 OUR FIELD SURVEYORS SET PERMANENT SURVEY MONUMENTS AT THE SUNSHINE CANYON LANDFILL FOR THE PURPOSE OF MONITORING BY LOS ANGELES COUNTY DPW. MONUMENT LOCATIONS WERE DETERMINED ACCORDING TO THE HARD COPY PROVIDED BY GEO-LOGIC ASSOCIATES PER THEIR DRAWING ENTITLED "SUNSHINE CANYON LANDFILL, SYLMAR, CALIFORNIA, PROPOSED SURVEY MONUMENT PLAN" DATED NOVEMBER 16, 2016.

MONUMENTS SET ACCORDING TO THE ABOVE REFERENCED DOCUMENTS ARE AS FOLLOWS:

- FIFTEEN (15) TWO-INCH IRON PIPES WITH BRASS CAPS EMBEDDED IN FAST CURE CONCRETE
- EACH CAP IS STAMPED WITH THE FOLLOWING MARKINGS: "SCCEL" WITH A "P" OR "RP" FOLLOWED BY NUMERICAL VALUES PER THE DRAWING SHOWN HEREON.

MIKE LOPEZ
PLS 8995
VERTEX SURVEYING, INC.

May 25, 2017
DATED

PROFESSIONAL LAND SURVEYOR MIKE LOPEZ No. PLS 8995 STATE OF CALIFORNIA

EXISTING TOPOGRAPHY BASED ON MARCH 1, 2017 AERIAL SURVEY BY COOPER AERIAL

This drawing has not been published but rather has been prepared by Geo-Logic Associates, Inc. for use by the client named in the title block, solely in respect of the construction operation, and maintenance of the facility named in the title block. Geo-Logic Associates, Inc. shall not be liable for the use of this drawing on any other facility or for any other purpose.

REV. NO.	DATE	DESCRIPTION	APPROVED BY
REV 1	08/14/15	ORIGINAL	R JOHNSON
REV 2	03/30/16	SET POINTS	R JOHNSON
REV 3	11/16/16	PROPOSED MONUMENTS FOR CC-4	R JOHNSON
REV 4	05/02/17	ADDRESSING COMMENTS FROM COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS	R JOHNSON
REV 5	08/01/17	ADDRESSING COMMENTS FROM COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS	R JOHNSON

DATE OF ISSUE: AUGUST 2017
DESIGNED BY: R JOHNSON
DRAWN BY: J AMAYA
CHECKED BY: C BARRETT
APPROVED BY: R JOHNSON

DIGALERT 811

Geo-Logic ASSOCIATES
2777 EAST GUASTI ROAD
SUITE 1
ONTARIO, CA 91761
(909) 626-2282
www.geo-logic.com

REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER A. BARRETT C 78076 EXP. 9/30/17 CIVIL STATE OF CALIFORNIA
8/7/17

REPUBLIC SERVICES

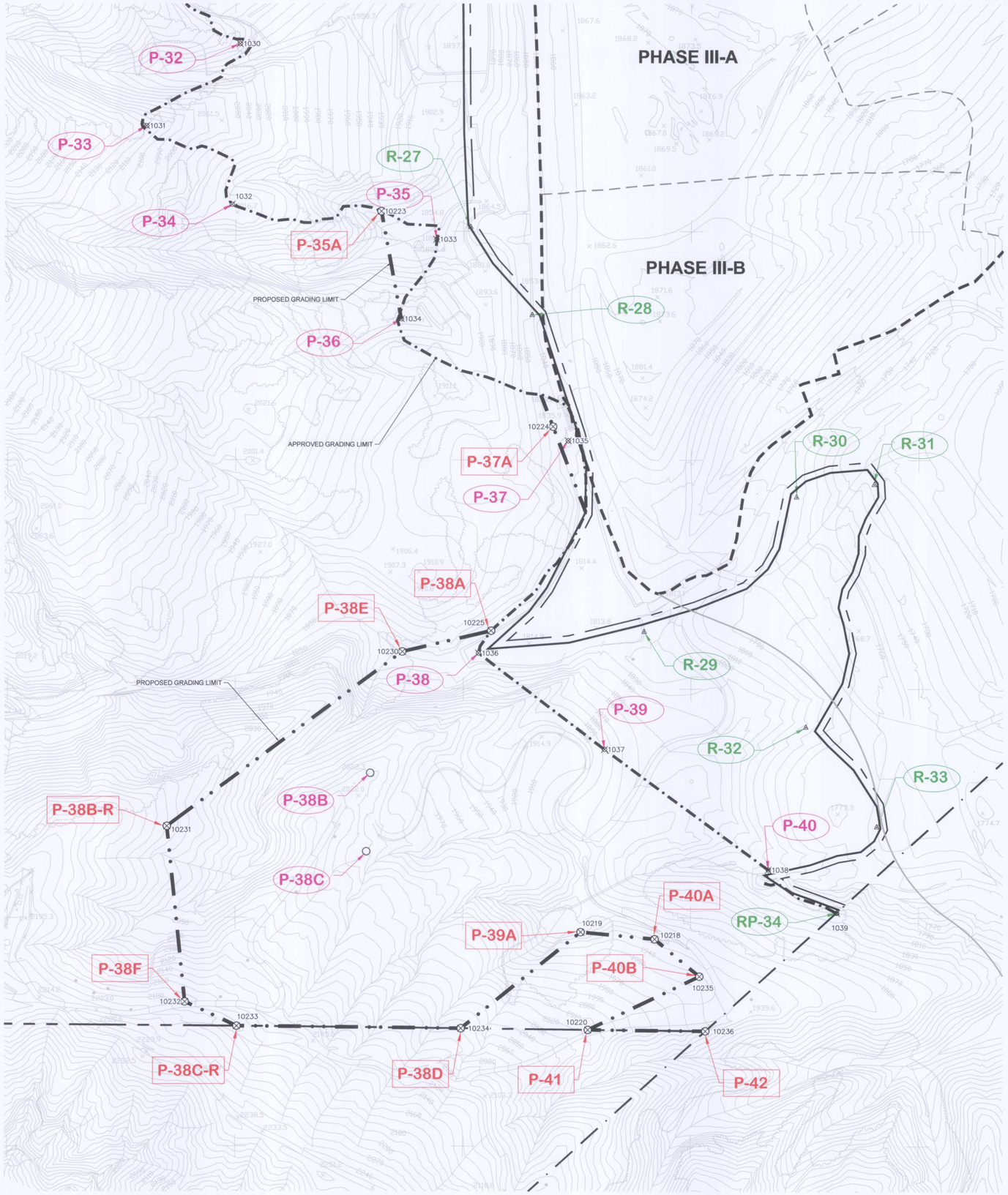
SUNSHINE CANYON LANDFILL
14747 SAN FERNANDO ROAD
SYLMAR,CA. 91342

SUNSHINE CANYON LANDFILL
DRAINAGE & GRADING LIMITS
REVISION NUMBER 4

TOPOGRAPHY GRADES AS OF MARCH 1, 2017

DWG NO.
1 of 2
PROJECT NO.
2016.0042

D:\Projects\2016\2016.0042\01_CAD\B_GLA-DWGS\SURVEY MONUMENT\2016.0042-APPROVED GRADING LIMIT 2017-04-21.dwg Aug 07, 2017 - 9:8am By: Jorge Amaya



LEGEND:

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- PROPOSED GRADING LIMIT
- APPROVED GRADING LIMIT
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COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
APPROVED
FOR REVISION OF GRADING LIMITS AND SURVEY MONUMENTS

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BY _____ DATE February 1, 2018

N

100' 0' 50' 100' 200'

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MIKE LOPEZ
PLS 8995
VERTEX SURVEYING, INC.

May 25, 2017
DATED

PROFESSIONAL LAND SURVEYOR MIKE LOPEZ PLS 8995 STATE OF CALIFORNIA

EXISTING TOPOGRAPHY BASED ON MARCH 1, 2017 AERIAL SURVEY BY COOPER AERIAL

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REV 3	11/16/16	PROPOSED MONUMENTS FOR CC-4	R JOHNSON
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DATE OF ISSUE: AUGUST 2017
DESIGNED BY: R JOHNSON
DRAWN BY: J AMAYA
CHECKED BY: C BARRETT
APPROVED BY: R JOHNSON

DIGALERT 811

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REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER A. BARRETT C 78076 Exp. 3/30/17 CIVIL STATE OF CALIFORNIA
8/7/17

REPUBLIC SERVICES

SUNSHINE CANYON LANDFILL
14747 SAN FERNANDO ROAD
SYLMAR, CA. 91342

SUNSHINE CANYON LANDFILL DRAINAGE & GRADING LIMITS REVISION NUMBER 4

DETAILS

DWG NO. 2 of 2

PROJECT NO. 2016.0042

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COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

MARK PESTRELLA, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: EP-5

March 13, 2018

Mr. Chris Coyle, General Manager
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, CA 91342-1021

Dear Mr. Coyle:

SUNSHINE CANYON CITY/COUNTY LANDFILL
CONDITIONAL USE PERMIT NO. 00-194-(5)
CELL CC-4 STABILITY BUTTRESS GRADING AND DRAINAGE PROJECT

We have completed our review of your request for approval of grading and drainage for the Cell CC-4 Stability Buttress Project (Project) at the Sunshine Canyon Landfill (Landfill) for compliance with Conditions 37 and 38 of the Conditional Use Permit No. 00-194-(5). The Project involves the construction of a stability buttress and associated excavation, which will construct a foundation for the Landfill liner, perimeter drainage channel, and related containment systems. The Project will also require grading inside the Landfill's grading limits as shown in the Drainage & Grading Limits Plans – Revision Number 4 approved by the Los Angeles County Department of Public Works
(Public Works) dated February 1, 2018, for the Revision of Grading Limits and Survey Monuments for the Sunshine Canyon Landfill. The documents reviewed in support of your request are listed in Enclosure A.

The reports and accompanied drawings meet our requirements for grading and drainage and are hereby <u>conditionally</u> approved. The conditions associated with this approval are specified in Enclosure B and describe that the mass excavation plan is conditionally approved and filling activities are conceptually approved pending the approval of the final mass excavation configuration. Please note that this conditional and conceptual approval is for mass excavation and filling activities respectively, associated with Cell CC-4 Stability Buttress only, which is within the approved Landfill

boundary as shown in Exhibit A-2 of the Conditional Use Permit No. 00-194-(5) dated December 5, 2017.

As described in Enclosure B – Sunshine Canyon Landfill Cell CC-4 Stability Buttress Required Conditions of Approval and Comments, Sunshine Canyon Landfill is required to meet the respective requirements prior to receiving the conceptual approval. In order for us to expedite the review of subsequent submittals, please provide a project schedule timeline, which includes estimated dates of commencement of each phase of this project, to this office within 30 days of the date of this letter. Also, provide routine monthly progress reports for the duration of the project. All documents and reports required by the conditions of approval shall be submitted digitally as well as to the following address:

County of Los Angeles
Department of Public Works
Environmental Programs Division
P.O. Box 1460
Alhambra, CA 91802-1460
Attention: Martins Aiyetiwa, Landfills Section

Additionally, any deviation from the information submitted, presented and/or proposed for the Cell CC-4 Stability Buttress Project will require updated plans, reports, and supporting information to be submitted to this office for prior review and approval.

Failure to comply with any of the requirements of this conditional approval letter may constitute a violation of the Conditional Use Permit No. 00-194-(5) and be subject to the penalty provision described in Condition No. 11 of the Conditional Use Permit No. 00-194-(5).

This approval and its requirements does not exempt Republic Services from the responsibility of complying with any other laws, regulations or requirements enforced by the Los Angeles Regional Water Quality Control Board or other regulatory agencies.

For questions or inquiries, please contact Mr. Martin Aiyetiwa at (626) 458-3553, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

MARK PESTRELLA
Director of Public Works

PHIL K. DOUDAR
Assistant Deputy Director
Environmental Programs Division

VT:jl
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Enc.

cc: City of Los Angeles Planning Department (Ly Lam, Nicholas Hendrix)
Department of Regional Planning (Maria Masis, Tim Stapleton)
Sunshine Canyon Landfill – Local Enforcement Agency (David Thompson, Maurice Pantoja, Dorcas Hanson-Lugo)
Los Angeles Regional Water Quality Control Board (Wen Yang)

Enclosure A

Sunshine Canyon Landfill Cell CC-4 Stability Buttress
Documents Reviewed in Support of Republic Services Request

- Geotechnical Report for Cell CC-4 Subgrade Slope Stability for Sunshine Canyon City/County Landfill, prepared by Geo-Logic Associates, dated March 5, 2015
- Response to Comments for Addendum to Geotechnical Report for Sunshine Canyon City/County Landfill Cell CC-4 Subgrade Slope Stability, prepared by Geo-Logic Associates, and dated April 4, 2016 (submitted April 7, 2016)
- Revised Sunshine Canyon Landfill CC-4 Stability Buttress Excavation and Fill Plans (Mass Excavation Plan; Phase I Fill Plan; Phase 2 Fill Plan; and Phase 3 (Final) Fill Plan) for Sunshine Canyon City/County Landfill CC-4 Stability Buttress Project, prepared by Geo-Logic Associates, and dated April 4, 2016 (submitted April 7, 2016)
- Response to Comments (only addressing Geotechnical and Materials Engineering Division's Comments) for Sunshine Canyon City/County Landfill CC-4 Stability Buttress Project, prepared by Geo-Logic Associates, and dated July 10, 2016 (submitted July 11, 2016)
- Storm Hydrology Design Report for Sunshine Canyon City/County Landfill CC-4 Stability Buttress Project, prepared by Geo-Logic Associates, dated August 24, 2016 (re-submitted December 28, 2017)
- Hydraulic Calculations for Sunshine Canyon City/County Landfill CC-4 Stability Buttress Project, prepared by Geo-Logic Associates, dated August 5, 2016 and July 21, 2016 (re-submitted December 28, 2017)
- Revised Water Surface Profile Gradient (WSPG) Input Model and WSPG Output File for Sunshine Canyon City/County Landfill CC-4 Stability Buttress Project, prepared by Geo-Logic Associates, dated December 1, 2017 (re-submitted December 28, 2017)
- Revised Soils and Geotechnical Report for Sunshine Canyon City/County Landfill CC-4 Stability Buttress Project, prepared by Geo-Logic Associates, dated December 22, 2017 (re-submitted December 28, 2017)
- Revised CC-4 Stability Buttress Grading and Drainage Plans (9 sheets) for Sunshine Canyon City/County Landfill CC-4 Stability Buttress Project, prepared by Geo-Logic Associates, dated December 8, 2017 (re-submitted December 28, 2017 and January 31, 2018)

* NOTE: Document submittal dates referenced denote most recent submittal dates of information provided by Republic Services to Public Works. Intermittent submittal and re-submittals occurred throughout review process.

Enclosure B

Sunshine Canyon Landfill Cell CC-4 Stability Buttress
Required Conditions of Approval and Comments

Geotechnical Materials and Engineering Division

1. Geotechnical Materials and Engineering Division (GMED) takes no exception with the geotechnical reports submitted to date for Cell CC-4, referenced above.
2. GMED recommends approval of the Mass Excavation Plan from a geotechnical standpoint with the following conditions of approval:
   a) Provide an as-graded survey of the completed mass excavation grading.
   b) Provide a geologic/geotechnical sub-grade map that utilizes the as-graded survey in (2a).

   The final geologic map shall include all geologic data collected prior to and during the grading of the site, including geologic information obtained from inspections of excavations. The map shall also depict sufficient geologic symbols to clearly depict the geologic units and structure, and seeps or springs, if encountered.
3. GMED recommends conceptual approval of the [Stability Buttress] Phase 1 Fill Plan when the conditions of approval for the Mass Excavation have been met.
4. GMED recommends conceptual approval of the [Stability Buttress] Phase 2 Fill Plan. Approval will be recommended when conditions of approval for the Mass Excavation and Phase 1 Fill Plans have been met.
5. GMED recommends conceptual approval of the temporary West Drainage Channel. Approval will be recommended when conditions of approval for the Mass Excavation and Phase 1-3 Fill Plans have been met.
6. Based on the as-graded survey for the Mass Excavation Plan, provide final design plans for the Phase 1-3 Fill Plans within two months of completion.

** NOTE: a) This review does not constitute a review or approval of the following projects: revised grading limits, the proposed West Drainage Channel "Line C", or grading associated with the Pole Realignment Project for Pole 15.

b) The plans submitted for the subject review, entitled Stability Buttress for CC-4, and referenced above, appear to be the precise grading plans with focus on surface drainage improvements for the cut slope above the stability buttress.