



CHIQUITA CANYON
A Waste Connections Company

July 27, 2026

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Re: Investigative Order No. R4-2026-0156 Groundwater Well Workplan

Dear Ms. Vitale and Ms. Lin:

The enclosed submittal has been prepared for the Los Angeles Regional Water Quality Control Board (“Regional Board”) by Chiquita Canyon, LLC (“Chiquita”) as required by the Investigative Order No. R4-2026-0156 (the “Order”), issued by the Regional Board on June 12, 2026. The Order requires a workplan for three new groundwater monitoring wells to be co-located with existing landfill gas (“LFG”) probes GP-14, GP-15, and GP-16, which are located in the vicinity of the west slope of the Chiquita Canyon Landfill (the “Landfill”).

While Chiquita maintains that no new groundwater monitoring well is technically or legally appropriate for the numerous reasons discussed during our July 2, 2026 video conference, as well as those set out in Chiquita’s July 10, 2026 Comments and Requested Modifications letter (“Comment Letter”) and July 13, 2026 Petition for Review and Request for Stay of Order and Hearing (“Petition”) to the State Water Resources Control Board, Chiquita proposes the enclosed groundwater well installation workplan (“Workplan”), attached hereto as Attachment A, consistent with the terms of the Order. Chiquita submits the enclosed Workplan while also reiterating the below technical concerns.¹

There is no evidence of liner failure or groundwater impacts.

The Order’s technical basis for requiring three new groundwater monitoring wells is based on unjustified and unsupported assumptions that the Landfill is experiencing liner failure at the west slope. The technical justification by the Regional Board for the new groundwater monitoring wells is in Finding 9 of the Order, which states that LFG exceedances, which Chiquita understands to mean methane exceedances, in perimeter monitoring probes GP-13 and GP-15 “demonstrate[] a failed liner” and therefore pose a substantial threat to groundwater. Instead,

¹ Chiquita reserves its right to amend the enclosed Workplan pending any revisions to the Order.

data received from the Landfill to date show the liner is stable and that there have been no impacts to groundwater.

First, methane exceedances in perimeter gas probes do not, by themselves, indicate that the liner system has failed or that there is a threat to groundwater. The methane detections referenced by the Regional Board were isolated to GP-13 and GP-15. Monitoring wells GP-12, which is adjacent to GP-13 to the north, and GP-14, which is adjacent to GP-15 to the south, have no detections of methane at all depth intervals. Methane detections at GP-13 and GP-15 instead suggest that localized gas migration is occurring rather than widespread migration resulting from failure of the liner system. Although leachate typically moves in a downgradient direction, LFG can move upgradient due to positive pressure within the Landfill, which can result in localized gas migration like that observed at GP-13 and GP-15. Treating any detection of LFG in perimeter monitoring probes as evidence of liner failure conflates the functions of two Landfill engineering systems, the gas collection and control system, which manages LFG generation and maintains inward pressure gradients, and the composite liner system, which minimizes liquid leakage and protects groundwater.

Second, any exceedances identified at gas perimeter monitoring probes, particularly where there are no indicators of groundwater impacts, are already being addressed by the agency with primary jurisdiction—the Los Angeles County Department of Public Health acting as the Local Enforcement Agency (“LEA”). Chiquita has already successfully taken effective corrective actions to address the methane exceedances at GP-13 and GP-15, including monitoring both wells weekly for compliance with regulatory limits and any potential negative pressure generated from the also-required soil vapor extraction wells in accordance with the Revised Remediation Plan approved by the LEA on August 5, 2025.

Third, as summarized in Chiquita’s Leachate Collection and Removal System/liner integrity quarterly reporting, there are no indications that the liner has failed or that elevated temperatures at the Landfill are affecting the underlying liner system. In fact, data from the deepest temperature monitoring probes shows cooling occurring in the deep waste due to the underlying cooling of the Landfill. This is specifically demonstrated in the temperatures recorded in the deepest intervals at TP-24, TP-27, TP-31, TP-32, TP-36, TP 38, and TP-40. Further, the temperature profiles of the seven (7) probes within 25 feet of the bottom liner (TP-24, TP-27, TP-31, TP-32, TP-36, TP-38, and TP-40) show temperature reductions rather than increases. Even if that was not the case, liner exposure to high temperatures does not pose any immediate threat to its integrity. While sustained elevated temperatures are expected to reduce the longevity of the liner, the suggestion that high temperatures will create tears or punctures in the liner is simply not accurate.

Finally, there is no evidence of existing impacts to groundwater at the west slope or elsewhere at the Landfill. Chiquita collects groundwater quality data from multiple monitoring wells around the perimeter of the Landfill on a quarterly basis. Volatile organic compounds (“VOCs”), the primary indicator of groundwater impacts associated with LFG migration, have not been detected above the practical quantitation limit (“PQL”) since the onset of the reaction in the two existing groundwater monitoring wells capable of detecting impacts to groundwater in the vicinity of the west slope, DW-8 and DW-9, and inorganic constituents have not shown a

measurably significant exceedance of the concentration limits. In fact, other than historical, pre-reaction impacts identified at DW-1, DW-3, and DW-16, there have never been impacts to groundwater detected at any of the groundwater monitoring wells at the Landfill. Therefore, there is no evidence of liner failure or groundwater impacts at the Landfill justifying further installation of any wells.

The cost of three new wells greatly exceeds any benefit.

The requirement to install three new groundwater monitoring wells in close proximity to one another, in combination with no indication of existing impacts to groundwater, imposes substantial operational burdens and costs without a proportional benefit. As explained below, there are serious timing and feasibility limitations associated with these wells due to ongoing west slope work. In addition, the benefit of the wells is limited because Chiquita already has an existing groundwater monitoring well, DW-8, co-located with GP-13 and in close proximity to the west slope area, where one of the two relevant methane detections has occurred, and is in the Pico Formation. Existing well DW-9 is also downgradient of the west slope area, downgradient of GP-14 and GP-16, and is located within the Saugus Formation. As stated above, VOCs have not been detected above the PQL since the onset of the reaction in DW-8 or DW-9, and inorganic constituents have not shown a measurably significant exceedance of applicable concentration limits.

Finally, the cost of installing three additional groundwater monitoring wells greatly exceeds the Regional Board's estimated costs of less than \$300,000. The total cost to permit, install, develop, sample, run initial analyses, and prepare an installation report for three wells, is instead estimated to be between \$325,000 and \$425,000, depending on drilling method, location, and depth. Again, this imposes substantial burdens and costs without any proportional benefit, especially when there are no indications of existing impacts to groundwater.

Ongoing construction presents timing and feasibility limitations.

As the Regional Board is aware, there is ongoing construction in and along the west slope of the Landfill that will interfere with any installation of new groundwater monitoring wells in this area. The Regional Board acknowledged these concerns and limitations during the July 2, 2026 video conference, and offered that Chiquita propose alternative well installation locations and timing accordingly, which are reflected in the enclosed Workplan. Chiquita likewise requested an extension of the July 27, 2026 deadline to provide the Workplan in its July 10 letter, though the Regional Board has not responded to this request to date.

Phased well installation is more technically appropriate under the terms of the Order.

While Chiquita maintains that no new groundwater monitoring well is technically or legally appropriate, based on the required terms of the Order, available data, and Landfill conditions, a phased groundwater monitoring well installation is the most technically appropriate approach consistent with the intent of the Order. Accordingly, Chiquita proposes a phased approach, whereby Chiquita will install a new groundwater monitoring well co-located with GP-14 and downgradient of GP-15. If there is measurably significant evidence of a release from that well,

consistent with the detection monitoring provisions of California Code of Regulations Title 27, Chiquita will install additional wells to be co-located with GP-15 and GP-16.

During the June 2, 2026 video conference, the Regional Board stated its interest in installing a well downgradient of the west slope area of the Landfill that is also located within the Saugus Formation. The enclosed Workplan accomplishes this by proposing to install a well co-located with GP-14 and downgradient of, and thus able to detect impacts to groundwater from, the other probe that has experienced methane detections—GP-15. This new well would be completed within the Saugus Formation and in close proximity to the west slope area. The already-existing groundwater monitoring well, DW-8, which is co-located with GP-13, is both cross-gradient of and in close proximity to the west slope area, as well as located within the Pico Formation. Therefore, the addition of a new well co-located with GP-14 would provide greater groundwater monitoring coverage within the Landfill and fulfill the Regional Board's goal of monitoring the Saugus Formation and detecting any impacts to groundwater from the west slope area.

Pursuant to Items 1(c) & (d) of the Order, monitoring at the new well will begin within 30 days of installation and the new well will also be placed in the quarterly evaluation monitoring program. Consistent with the detection monitoring provisions of California Code of Regulations Title 27, if measurably significant evidence of a release is detected from that well, then Chiquita will install additional wells to be co-located with GP-15 and GP-16.

Chiquita requests additional input from the Regional Board.

Based on the above and the request for modifications outlined in its prior Comment Letter, Chiquita respectfully requests a written response to this submittal and the Comment letter by the Regional Board. Pending a response from the Regional Board, Chiquita submits the enclosed Workplan consistent with the Order.

Regards,



Kevin Green
District Manager
Chiquita Canyon Landfill

Attachment A – Groundwater Well Installation Workplan

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GROUNDWATER MONITORING WELL INSTALLATION WORKPLAN

CHIQUITA CANYON LANDFILL CASTAIC, CALIFORNIA

**JULY 2026
PROJECT NO. RM22.1077.00**

PREPARED FOR:

**Chiquita Canyon Landfill
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- Figure 1 Proposed Groundwater Monitoring Well Locations
Figure 2 Typical Well Completion Detail

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- Appendix A LARWQCB Order
Appendix B Site Geologic Maps

Acronyms

CCL	Chiquita Canyon Landfill
CCR	California Code of Regulations
DMP	Detection Monitoring Program
CGS	California Geological Survey
DTSC	Department of Toxic Substances Control
GLA	Geo-Logic Associates
LARWQCB	Los Angeles Regional Water Quality Control Board
LEA	Local Enforcement Agency (Los Angeles County Department of Public Health)
MPars	Monitoring Parameters
MRP	Monitoring and Reporting Program
RTFA	RT Frankian and Associates
WDRs	Waste Discharge Requirements

1 INTRODUCTION

1.1 PURPOSE OF WORKPLAN

This Groundwater Monitoring Well Installation Workplan (Workplan) was prepared by Geo-Logic Associates, Inc. (GLA) to address the requirements of the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) Investigative Order (IO) No. R4-2026-0156 and California Water Code Section 13267 and 13383 Order (collectively, the 2026 LARWQCB IO) to provide a Technical Report for Surface and Subsurface Investigation at the Chiquita Canyon Landfill (Chiquita). The 2026 LARWQCB IO is in Appendix A. This Workplan addresses Item 1a of the 2026 LARWQCB IO that requires:

1. A Workplan to install three groundwater wells west of the Main Canyon portion of the Landfill in the area of the West Slope by July 27, 2026.
 - a. The wells shall be placed to monitor for possible impacts from a compromised liner in the area of the West Slope. The wells should be co-located with the existing probes GP-14, GP-15, and GP-16.

1.2 OBSERVED CONDITIONS

Landfill gas (LFG) migration along the western boundary of the Landfill is monitored using a series of multi-depth perimeter gas probes installed immediately west of the waste footprint at the locations shown in Figure 1. From north to south, the principal monitoring locations are GP-12, GP-13, GP-15, GP-14, and GP-16. Historical monitoring indicates methane has been detected only at GP-13 and GP-15, while GP-12, GP-14, and GP-16 have consistently reported non-detectable methane concentrations at all monitored depths.

The two affected probes are separated by approximately 700 feet and are completed in different geologic units. GP-13 is completed within the Pico Formation, whereas GP-15 is completed within the Saugus Formation. The isolated nature of the detections, together with the absence of methane at the intervening and adjacent probes, suggests localized preferential gas migration pathways rather than a continuous zone of lateral migration from the Landfill.

Groundwater beneath the western slope of the Landfill occurs approximately 200 feet below ground surface, resulting in a substantial unsaturated interval between the detected LFG and the underlying groundwater system. Groundwater monitoring well DW-8 is located adjacent to GP-13 and is screened approximately 253 to 290 feet below ground surface. Despite its proximity to the affected LFG probe, historical groundwater monitoring results from DW-8 have not detected volatile organic compounds (VOCs) above the practical quantitation limit (PQL) since the onset of the reaction, and inorganic constituents have not shown a measurably significant exceedance of the concentration limits. Consequently,

there is currently no evidence that the LFG detected at GP-13 has adversely affected groundwater quality.

The next downgradient groundwater monitoring location is DW-9, which is co-located with perimeter probe GP-17 more than 2,500 feet downgradient of DW-8. Groundwater monitoring at DW-9 likewise has not identified impacts attributable to LFG migration.

1.3 RELEVANT CHIQUITA CORRESPONDENCE

As described in the July 10, 2026 Comments and Requested Modifications to Investigative Order R4-2026-0156, Chiquita requested that the LARWQCB revise Paragraph 1 to require installation of only one new groundwater monitoring well co-located with GP-14 based on the technically supported groundwater gradients. Additionally, Chiquita requested the July 27, 2026 deadline for a workplan be extended to 30 days following the date of issuance of an amended order, and that the Workplan provide for installation of wells after October 31, 2026 given the access, safety, and construction constraints related to the ongoing construction at the west slope area.

The July 13, 2026 Chiquita Petition to the State Water Resources Control Board for Review and Request for Stay of Order and Hearing noted that a more technically justified approach would be for Chiquita to install one groundwater monitoring well in the location where any early impacts to groundwater would most likely be detected. Chiquita would then evaluate the data from that well and, if warranted, assess whether additional wells are necessary to provide broader groundwater monitoring coverage. This phased approach would allow the LARWQCB to obtain meaningful groundwater data while avoiding unnecessary cost and operational burden associated with installing multiple wells before the need for them is demonstrated.

2 SITE HYDROGEOLOGIC CHARACTERISTICS

2.1 GEOLOGY

CCL is located at the eastern end of the Ventura Basin within the Transverse Ranges geomorphic province. Sedimentary rock units at and near the site are the Pliocene age Pico Formation and the Plio-Pleistocene age Saugus Formation. The marine sediments of the Pico Formation outcrop in the northwest portion of the site. The Saugus Formation overlies the Pico Formation at CCL, and Saugus Formation units extend south and east to the Castaic-Newhall area. The Saugus Formation is composed of interbedded shallow-water marine, brackish water, and nonmarine units. Other geologic materials exposed nearby include terrace deposits of Pleistocene age and Holocene alluvium mantling the valley floor.

Geologic units mapped at the site are shown in Appendix B and include (RTFA, 2012, 2020; 2022):

- **Alluvial Deposits.** Holocene alluvial deposits are associated with ephemeral-stream drainages that transect the site and consist of poorly stratified and unconsolidated gravel, sand, silt, and clay occurring within channels and on floodplains of active streams. Older alluvial deposits have soil types similar to the younger Holocene alluvium but occur as isolated terraces along the southern and eastern margins of the Landfill. These units are not water-bearing within the limits of the landfill.
- **Slope Failure Deposits.** Slope failure deposits identified at the site include debris flow deposits, recent landslides, and older landslides. The debris flow deposits are a mixture of rock fragments within a matrix of unconsolidated sand, silt, and clay and generally occur within ravines and on slopes steeper than approximately 2H:1V (horizontal:vertical). Recent landslide deposits occur throughout the landfill property and appear to be primarily associated with poorly indurated stratigraphic intervals of the Saugus and Pico Formations. These deposits range from about 5 to 120 feet thick and are usually identified by relatively well-defined scarps, hummocky topography, or fissures within the slump mass. Older landslide deposits typically occur near the base of slopes and are similar to recent landslides, with the exception of being more deeply weathered.
- **Saugus Formation.** The upper Pliocene to Pleistocene Saugus Formation comprises approximately 80 percent of the bedrock exposures at the site. The formation is characterized by rolling hills in the west, to steep cliffs in the southeast portion of the study area. Upper portions of the formation have been removed by erosion throughout the area, with a maximum remaining thickness of approximately 1,800 feet. The formation consists of poorly to moderately indurated, interbedded

sandstone, conglomerate, siltstone, and mudstone. Sandstone strata are principally planar-bedded to cross-bedded, fine- to medium-grained, and contain 10 to 50 percent fines. These beds have a low hardness or are friable, yet local calcite-cemented strata produce hard, well-defined ledges. Conglomerate strata occur primarily in the southern half of the site as lenticular, discontinuous beds encapsulated within fine- to medium-grained sandstone. Mudstone intervals typically have soft to low hardness, are locally highly plastic, and individual beds are massively to finely laminated. LFG probes GP-15, GP-14, GP-16, and GP-17, and monitoring well DW-9 are completed in the Saugus Formation.

- **Pico Formation.** The Pliocene Pico Formation is exposed in the northern portion of the site as steep, resistant dip slopes and cliffs. Soft, interbedded offshore-marine siltstone and mudstone, which locally contain thin stringers of sandstone, characterize the upper 200 to 300 feet of the formation. Three laterally continuous beds of coquina (fossil-rich limestone), containing abundant bivalve and echinoid fossils, form ridge capping ledges beneath the siltstone and mudstone interval. Fine- to coarse-grained sandstone is interbedded with the coquina limestone ledges and characterizes the lower half of the exposed Pico Formation stratigraphy. These sandstone beds, which contain some mudstone and siltstone intervals, are of low to moderate hardness and represent nearshore marine to nonmarine depositional settings. Laterally discontinuous boulder and cobble conglomerate lenses are found locally near the top of the sandstone units. LFG probes GP-12 and GP-13, and monitoring well DW-8 are completed in the Pico Formation.

2.2 HYDROLOGY

Groundwater is found beneath the site in the sedimentary bedrock of the Saugus and Pico formations but is not present in the relatively thin alluvial deposits that are restricted to canyon floors (RTFA, 2016). The Pico Formation lies stratigraphically beneath the Saugus Formation, and the Pico Formation groundwater is under confined conditions due to the low permeability of the overlying mudstone and siltstone sequences. Beneath most of the site, the uppermost water-bearing unit is the Saugus Formation, and the depths to groundwater range from approximately 33 feet to 345 feet below the ground surface in site monitoring wells. Groundwater in the Pico Formation ranges from about 72 feet to 335 feet below the ground surface on the slope of the northwest ridgeline (RTFA, 2016).

Outside the limits of the Landfill, the alluvial aquifer system is present in the lower portion of the Santa Clara River channel alluvium. The uppermost portion of the Santa Clara River channel alluvium is unsaturated, and this alluvium extends from the river valley onto the site along the floor of three canyons: the Main Canyon that extends from the site entrance to its terminus in the North Canyon, a small canyon north of Wolcott Way, and the East Canyon,

which flows into Castaic Creek before reaching the Santa Clara River. The limited extents of these alluvial deposits are shown on the site Geologic Map in Appendix B. Alluvial deposits are not present along the western side of the Landfill and are not relevant to the wells described in this Workplan.

3 MONITORING APPROACH

3.1 PROPOSED INSTALLATION

Consistent with the technical considerations and requests presented in the July 10, 2026 correspondence and Chiquita's Petition to the State Water Resources Control Board, this Workplan proposes installation of a groundwater monitoring well that will be co-located with GP-14. This location was selected because it is hydraulically downgradient of two LFG probes that have methane detections and is completed within the Saugus Formation immediately downgradient of the area of interest, while remaining outside the area where methane has historically been detected. Data collected from this well will provide a direct assessment of groundwater quality adjacent to the western slope and will establish the technical basis for determining whether LFG is impacting groundwater, as well as whether the contingent, additional monitoring wells adjacent to GP-15 and/or GP-16 are warranted.

3.2 CONTINGENT WELL INSTALLATION

Under this approach, groundwater monitoring well (DW-32) will be co-located with LFG Probe GP-14 and will be screened within the Saugus Formation (see Figure 1). Two contingent monitoring wells shown in Figure 1 (DW-33 co-located with LFG probe GP-15 and DW-34 co-located with GP-16) would be triggered if monitoring results from new well DW-32 show measurably significant evidence of a release from the Landfill, consistent with the detection monitoring provisions of California Code of Regulations (CCR) Title 27.

This determination would be based on the applicable statistical or nonstatistical evaluation and verification procedures specified in the approved monitoring program and would consider whether the observed results could reasonably be attributed to a source other than the Landfill, sampling or analytical error, evaluation error, or natural variation in groundwater quality. Accordingly, an isolated detection or anomalous analytical result would not, by itself, constitute a trigger for installation of additional wells unless the result is verified and determined to represent measurably significant evidence of a release from the Landfill. If such evidence is confirmed, the contingent monitoring wells shown in Figure 1 would be installed consistent with this Workplan to further evaluate the nature and extent of any impacts.

4 GROUNDWATER WELL INSTALLATION

4.1 WELL LOCATIONS

The locations of DW-32 (proposed) and contingent wells DW-33 and DW-34 are shown in Figure 1. These wells are hydraulically downgradient of the two LFG probes (GP-13 and GP-15) that have been affected by methane. The primary purposes of the new monitoring wells are to characterize the depth to groundwater, assess the geology of the first encountered water-bearing zones, determine groundwater flow directions, and assess groundwater quality. The proposed locations for the new CCL monitoring wells are as specified in the 2026 LARWQCB IO and are shown in Figure 1. The locations shown in Figure 1 may need to be modified based on conditions encountered in the field at the time of installation. The LRWQCB will be notified if significant deviations from these locations are necessary.

4.2 MONITORING WELL DRILLING METHODS

Borings for the proposed wells will be advanced by a licensed C-57 contractor using air rotary casing hammer drilling methods. Prior to starting the work, drilling permits will be obtained from the Los Angeles County Department of Public Health. The drilling locations will be reviewed with Chiquita representatives, and if necessary, a subsurface utility locating contractor will be retained to clear the drilling locations.

The drilling contractor will be required to steam clean all drilling equipment that may contact subsurface materials (e.g. drill casing, bits, and tools) before advancing the first boring. Once on site, used drill casing, bits, and tools will be steam-cleaned between borings. The drilling procedure will include:

- Installing a temporary 9-5/8-inch diameter steel casing to stabilize the upper portion of the boring to a depth of about 20 feet using air rotary casing hammer methods.
- Advancing an 8.5-inch diameter exploratory boring through the steel casing to approximately 20 feet below first encountered groundwater using air rotary drilling equipment.

The borings will be logged in the field from grab samples of the drill cuttings that will be collected every 5 feet by a qualified geologist in general accordance with American Society for Testing and Materials (ASTM) Method D2488-06 (Standard Practice for Description and Identification of Soils, Visual-Manual Procedure). The field geologist will work under the supervision of a California licensed professional geologist or certified engineering geologist. Soil cuttings from the drilling process will be dispersed on the ground near the boring locations or at alternative locations within the site as designated by Chiquita. A final log of borings and well completion diagram for each well will be prepared at the completion of the work and included in the Monitoring Well Installation Report.

4.3 MONITORING WELL INSTALLATION

Following completion of the borings, monitoring wells will be installed in general accordance with the intervals and materials shown in Figure 2 (completion details will depend on conditions encountered during drilling and may vary from those shown in Figure 2). The target screen lengths for each well will be 20 feet below to 10 feet above first encountered groundwater.

The wells will be constructed using 4-in diameter Schedule 40 PVC blank casing and prefabricated Schedule 40 PVC screen with 0.020-in slots. The well casing and screen sections will connect with flush threads; PVC couplings and cement will not be permitted to be used in any well. The filter pack for each well will be constructed using washed #3 or #2/12 silica sand and the monitoring zones will be isolated by bentonite seals. The annular space above the bentonite seals will be sealed using cement-bentonite grout and the wells will be completed at the ground surface with a flush traffic-rated well box or a locking steel monument. Protective bollards may be installed at locations where vehicles or equipment could damage the wells. The general well installation procedure for the wells will include:

- The borings will be advanced to the target depths (about 20 feet below first encountered groundwater) and sounded to confirm the final depth of each boring.
- About 6-in of washed silica sand will be tremied into the open boring. The depth of the boring will be sounded to confirm the sand has not bridged and that about 6-in of sand is present at the bottom of the boring.
- The PVC casing and screen will be assembled and lowered into the well. A bottom cap will be placed on the bottom of the screen section prior to placing the casing in the well. The bottom cap may be threaded (preferred) or secured with stainless steel screws. Centralizers will be used in each well a minimum of every 30 feet.
- Washed filter pack silica sand will be tremied into the annular space around the well casing. The sand pack will extend a minimum of 1 foot to a maximum of 3 feet above the top of the screen and the amount of sand used for this procedure will be recorded. The final thickness of the sand pack will be measured and recorded to confirm that the sand has not bridged during installation.
- A bentonite seal will be constructed using dry bentonite chips or pellets on top of the filter pack. The bentonite will be carefully poured or tremied into the annular space around the well casing. The thickness of each bentonite seal will be approximately 5 feet and the amount of bentonite used at each well will be recorded. The top of each bentonite seal will be measured and recorded to confirm that the bentonite has not

bridged during installation. The bentonite will be allowed to hydrate for 40 minutes before placing the overlying cement-bentonite grout.

- The upper portion of each boring will be sealed to the ground surface using cement-bentonite grout that will consist of a 5 to 7 sack mix of powdered Wyoming bentonite, Portland Type I/II cement, and potable water. The cement-bentonite grout will be tremied within a drop pipe with a deflection bottom or other device to minimize downward erosion into the bentonite seal.
- The wells will be completed at the ground surface with a concrete pad that is sloped to drain, and a flush traffic-rated well box or a locking steel or HDPE standpipe surrounded by protective bollards.

4.4 MONITORING WELL DEVELOPMENT

At least 48 hours following placement of the surface seal, the wells will be developed by a combination of surging, bailing, and/or pumping to remove suspended sediment from the well casings. Field water quality parameters (temperature, pH, electrical conductivity, and turbidity) will be monitored and recorded on field forms before and during development. The well development work will be completed when the well water is relatively free of suspended solids and the monitoring parameters have stabilized. The well development records will be included in the Monitoring Well Installation Report.

4.5 SURVEYING

The replacement wells will be surveyed by a California-licensed surveyor following completion of well development. Information to be surveyed at each well will include: (i) horizontal well coordinates in both State Plane and latitude and longitude; (ii) ground surface elevation; and (ii) elevation of the reference point on the top of the PVC casing with the cap removed. Horizontal coordinates will be surveyed to the nearest 0.1 foot and elevations will be surveyed to the closest 0.01 foot.

4.6 DOCUMENTATION

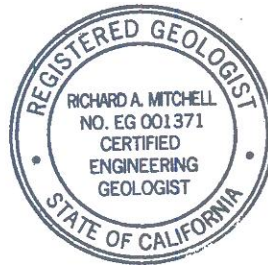
At the completion of the work, final boring and well completion logs will be prepared, and a Monitoring Well Installation Report will be submitted to the LARWQCB. The Monitoring Well Installation Report will be signed and stamped by a California licensed Certified Engineering Geologist, Geologist, or Engineer. The applicable replacement well and survey information will be uploaded to the State of California Geotracker system.

5 CERTIFICATION

Geo-Logic Associates prepared this Workplan under the direction of the undersigned. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



Richard A. Mitchell, PG 4380, CEG 1371
Principal Engineering Geologist



6 REFERENCES

Chang Environmental, 2024, Semiannual Groundwater Monitoring Report, Third and Fourth Quarters 2023 Annual Summary, Chiquita Canyon Landfill, Compliance File No. CI-6231, Castaic, California, for Chiquita Canyon Landfill, January 31, 2024.

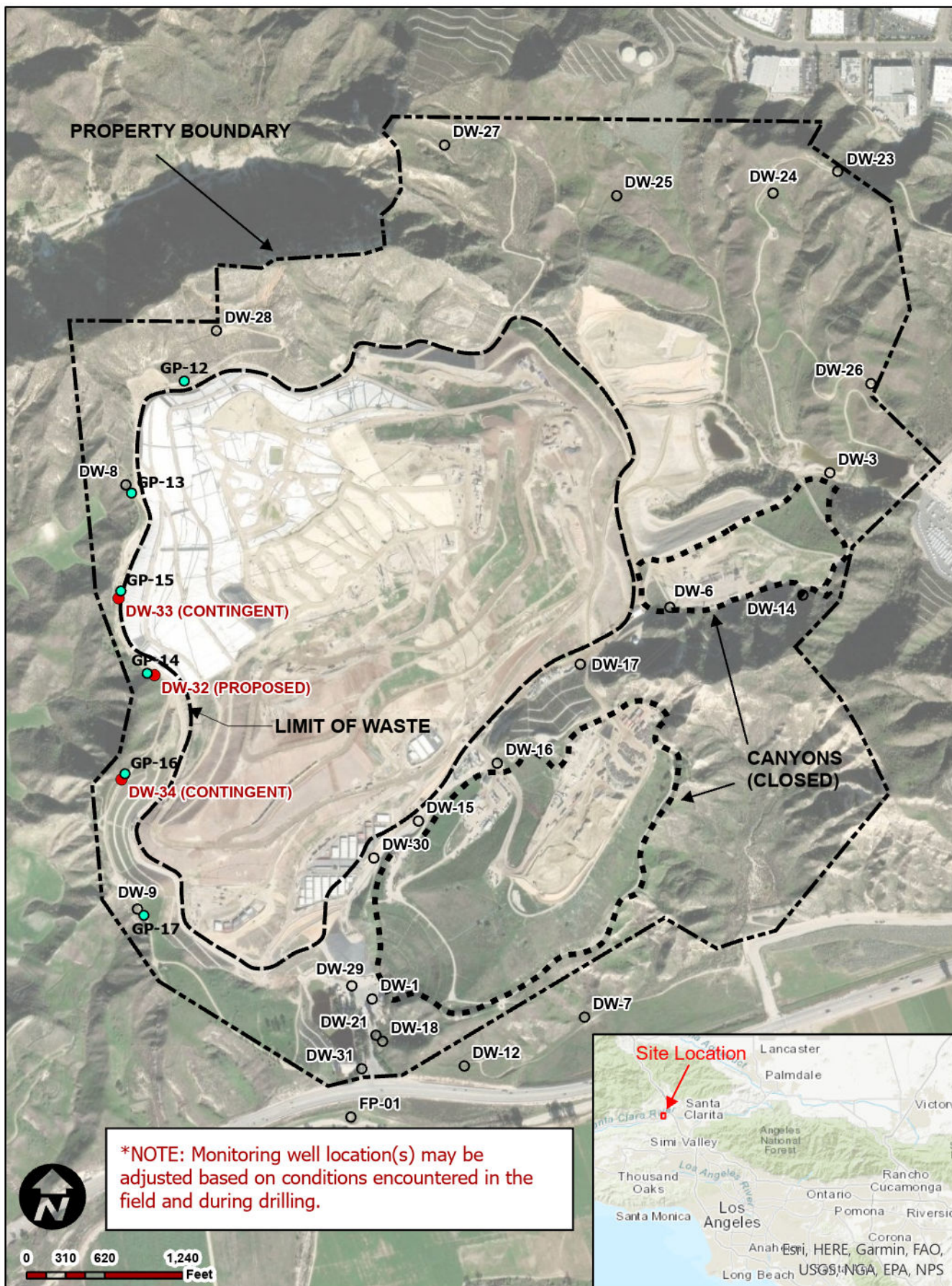
R.T. Frankian & Associates, 2012, Hydrogeologic Report, Chiquita Canyon Landfill, Castaic, California for Chiquita Canyon Landfill, January 2012

R.T. Frankian & Associates, 2016, Water Release Corrective Action Cost Estimate, Chiquita Canyon Landfill, Compliance File No. CI-6231, Castaic, California for Chiquita Canyon Landfill, May 5, 2016.

R.T. Frankian & Associates, 2017, Semi-Annual Groundwater Monitoring Report, First and Second Quarters 2017, Chiquita Canyon Landfill, Compliance File No. CI-6231, Castaic, California for Chiquita Canyon Landfill, June 28, 2017.

SWT Engineering, 2024, Storm Water Pollution Prevention Plan for the Chiquita Canyon Landfill; February 2024.

United States Environmental Protection Agency Region IX, undated, Unilateral Administrative Order EPA Docket No. RCRA 7003-09-2024-001 and CERCLA 106-09-2024-05.



EXPLANATION:

- Existing Monitoring Wells
- New Monitoring Wells
- Landfill Gas Probes

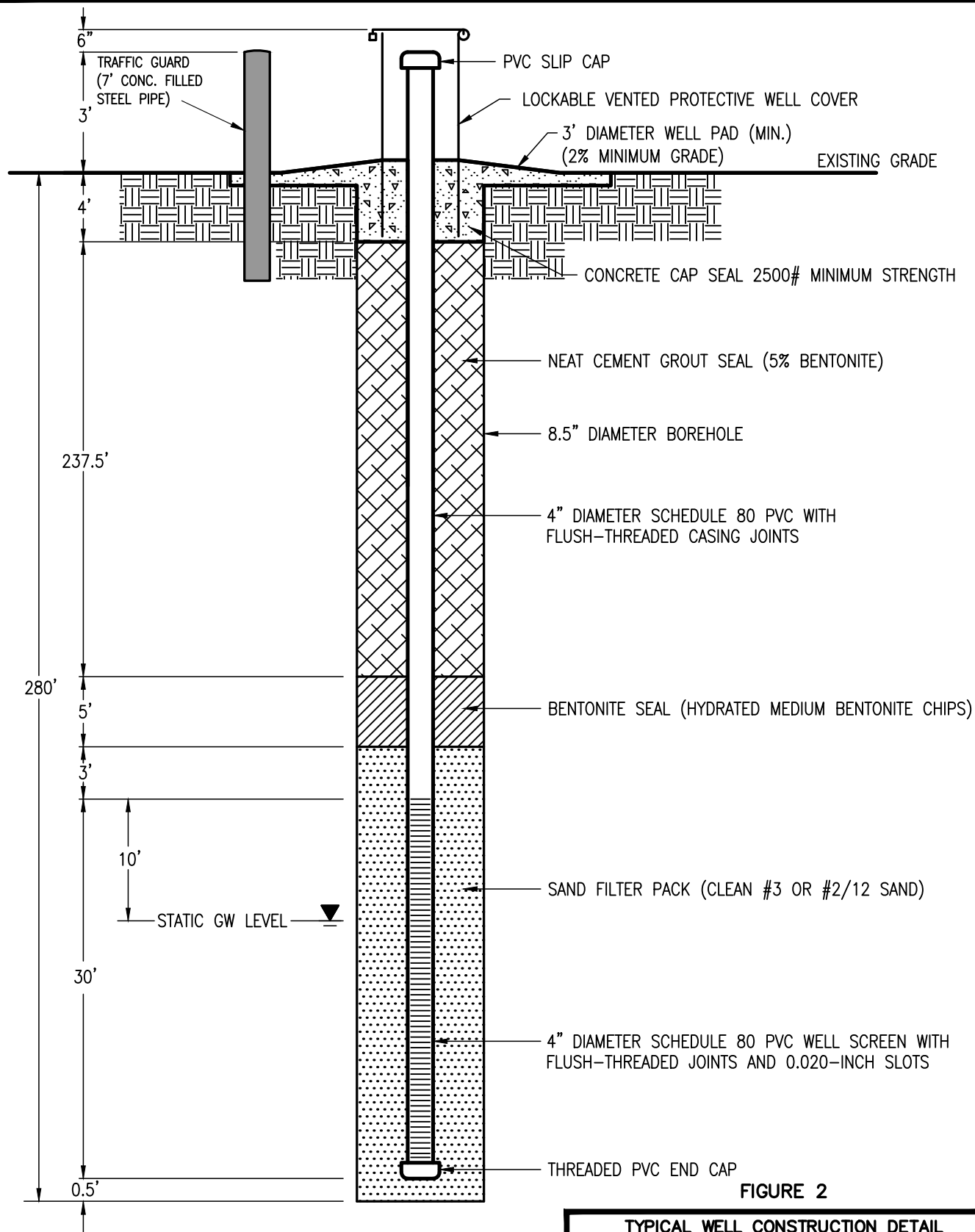
Drawn/Reviewed by: LAS/AT

Date: July 2026

Figure 1

PROPOSED GROUNDWATER MONITORING WELL LOCATIONS

Chiquita Canyon Landfill
Castaic, California



NOT TO SCALE
DIMENSIONS SUBJECT TO CHANGE
BASED ON FIELD CONDITIONS

FIGURE 2

TYPICAL WELL CONSTRUCTION DETAIL		
TECHNICAL REPORT AND WORK PLAN GROUNDWATER MONITORING WELL INSTALLATION CHIQUITA CANYON LANDFILL, CASTAIC, CA		
		
DRAFTER/PM: VL/LP	DATE: JULY 2026	JOB NO. RM22.1077

Appendix A
LARWQCB ORDER

INVESTIGATIVE ORDER NO. R4-2026-0156

**CALIFORNIA WATER CODE SECTION 13267 AND 13383
ORDER TO PROVIDE A TECHNICAL REPORT FOR
SURFACE AND SUBSURFACE INVESTIGATION**

**DIRECTED TO
WASTE CONNECTIONS, INC. AND CHIQUITA CANYON, LLC**

**CHIQUITA CANYON LANDFILL
CASTAIC, CALIFORNIA
(FILE NO. 67-020, ORDER NO. R4-2018-0172, GEOTRACKER GLOBAL ID.
L10003464243, WASTE DISCHARGE ID. 4 191022488)
June 12, 2026**

The California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board) makes the following findings and issues this order to provide a technical report pursuant to California Water Code (Water Code) Sections 13267 and 13383 (Order). The Order requires Waste Connections, Inc., and Chiquita Canyon, LLC (hereinafter together as the Discharger), to submit additional information for an investigation of potential surface water and groundwater impacts due to current conditions at the Chiquita Canyon Landfill (Landfill), located at 29201 Henry Mayo Drive, Castaic, California.

1. The Landfill is a Class III municipal solid waste (MSW) Landfill and is owned and operated by Chiquita Canyon, LLC, which is a wholly-owned subsidiary of Waste Connections, Inc. The Landfill is a 639-acre waste management facility, of which 400 acres are designated for Landfill operations. It is roughly divided into six fill areas: Primary Canyon, Canyons A, B, C, and D, and the Main Canyon. Primary Canyon (54 acres) is unlined, and Canyon A (20 acres), Canyon B (15 acres), and Canyon D (11 acres) are lined with a clay bottom and a high density polyethylene (HDPE) geomembrane liner on the side slopes; all have been filled to capacity. The remaining fill areas are equipped with HDPE liners on the bottom and side slopes and leachate collection and removal systems (LCRS).
2. The Landfill began receiving waste in 1974. Following several ownership transitions, Chiquita Canyon Landfill, LLC, acquired the site in April 2009. The Landfill is currently regulated under the Waste Discharge Requirements (WDRs) contained in Order No. R4-2018-0172, which was adopted by the Los Angeles Water Board on December 13, 2018, and includes a Monitoring and Reporting Program (CI 6231). Order No. R4-2018-0172 superseded Order No. 98-086 and updated requirements for operational, maintenance, and corrective action activities at the Landfill, including expansion of the Landfill as approved by the Los Angeles

County Board of Supervisors in the Conditional Use Permit (CUP) No. 200400042 in 2017.

3. Stormwater runoff from the Landfill is separately regulated under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Industrial Activities, NPDES No. CAS000001 (Industrial General Permit, WDID No. 4 19I022488, Notice of Intent (NOI) dated January 26, 2015). Stormwater discharges are directed to on-site sedimentation basins to reduce the levels of sediment and other pollutants in the discharge.
4. The Landfill is located within the Santa Clara River Hydrologic Subarea, which is part of the Santa Clara-Calleguas Hydrologic Unit. It is surrounded on three sides by ridges that restrict inflow to seasonal precipitation. The resultant groundwater flows in alluvium and in the sedimentary bedrock of the Saugus and the Pico formations, generally following the surface topography and exiting the canyon to the south. Most of the site drains south toward the Santa Clara River flood plain, which flows along the south side of State Route 126. The northeast portion of the site drains eastward into Castaic Creek, approximately 3,000 feet from the site boundary, which then flows south toward the Santa Clara River. Beneficial uses for Reach 5 of the Santa Clara River and Castaic Creek include Municipal and Domestic Supply (MUN); Industrial Service Supply (IND); Industrial Process Supply (PROC); Agricultural Supply (AGR); Ground Water Recharge (GWR); Freshwater Replenishment (FRSH); Warm Freshwater Habitat (WARM); Wildlife Habitat (WILD); Rare, Threatened, or Endangered Species (RARE); Water Contact Recreation (REC-1); and Non-contact Water Recreation (REC-2). Beneficial uses for the underlying groundwater basins include MUN, IND, PROC, and AGR.
5. Land uses surrounding the Landfill include primarily open space to the north and rural residential development to the west and northwest. The closest residential area is located approximately 500 feet from the northwest property boundary and 1,200 feet from the Landfill footprint. The property immediately west and south of the Landfill is either vacant or used for agricultural activities. The property immediately across State Route 126 from the Landfill has been permitted for residential development, including an elementary school.
6. The Landfill is currently under a corrective action program (CAP) as required under the WDRs. The CAP began in 1998 in response to the detection of volatile organic compounds (VOCs) at three groundwater monitoring wells: DW-1 near Primary Canyon, DW-3 at Canyon B, and DW-20 near Canyon D. VOCs detected in

groundwater at the impacted monitoring wells include 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethane, 1,4-dichlorobenzene, benzene, cis-1,2-dichloroethene, dichlorofluoromethane, methylene chloride, trichloroethylene (TCE), perchloroethylene (PCE), and vinyl chloride. TCE, PCE, and 1,1-DCA are the constituents most frequently detected. DW-20 was added to the list of CAP wells in 2016 and was abandoned and replaced with well DW-29 in 2018 due to an expansion of the Landfill. In 2005, well DW-16, which is located at the northern edge of Primary Canyon, was enrolled under an evaluation monitoring program for the detection of VOCs (TCE and PCE) in the well. It was determined that VOC pollution at the Landfill was caused by the migration of Landfill gas (LFG) to groundwater. The CAP includes an enhanced LFG collection and control system aimed at reducing subsurface gas migration to groundwater. The CAP measures appear to be effective since VOC concentrations at the impacted wells have been declining over time, most to below detection limits. Data from the 2023 annual report submitted in January 2024 reported that VOCs were not detected in wells DW-1 and DW-29, some VOCs detected at trace concentration in DW-16, and dichlorodifluoromethane was detected in well DW-3 at 2.1 parts per billion.

7. In early July 2023, Los Angeles Water Board staff was notified by the Los Angeles County Local Enforcement Agency (LEA) of a potential LFG problem at the Landfill due to an ongoing subsurface elevated temperature (SET) event. On July 21, 2023, Los Angeles Water Board staff contacted the Discharger via email concerning the SET event, who then provided information on reaction Landfills in the County. Multiple odor complaints from the public were received by the South Coast Air Quality Management District (SCAQMD). The LEA and other regulatory agencies had been working with the Discharger to understand the cause of increased LFG levels and to bring the Landfill into compliance with regulatory requirements. The reported odors appeared to be coming from the northwestern portion of the Main Canyon of the Landfill, where the LFG was measured to be unusually hot and to contain larger amounts of condensate than normal. The Discharger's representative, in a telephone conversation, indicated to Los Angeles Water Board staff that a portion of the Landfill was producing large amounts of gas containing a large amount of water and dimethyl sulfide and that the hot wet gas was harmful to Landfill flares, which operate optimally when the gas is dry. Additionally, an area of approximately 20 acres had experienced subsidence of up to 16 to 18 feet, giving an appearance of a crater. This portion of the Landfill is now being referred to as the "Reaction Area." During a telephone conversation in July 2023, the Discharger also indicated that leachate production increased from about 30,000 gallons per day (GPD) to around 100,000 GPD.

8. On September 28, 2023, the Los Angeles County LEA informed Los Angeles Water Board staff of leachate seepage observed at the Landfill during the LEA's September 19, 2023 inspection. The Discharger indicated to the LEA that the leachate seepage was caused by the SET event in the Reaction Area and that the leachate was being collected in onsite leachate storage tanks and disposed of offsite.
9. Since September 2023, LFG has been consistently detected in boundary probes GP-13 and GP-15. These probes are located outside the western boundary of the Reaction Area. The detection of LFG outside the waste boundary demonstrates a failed liner that has allowed LFG to breach existing containment systems, posing a substantial threat to groundwater.
10. On October 3, 2023, Los Angeles Water Board staff conducted an inspection of the Landfill during which staff observed a leachate seep at the north-western portion of the Main Canyon that flowed from the edge of the Landfill to an onsite concrete drainage channel that leads to the stormwater sedimentation basin at the southern border of the Landfill. The Discharger had placed several soil berms along the onsite concrete channel to capture and pump off the leachate before it reached the sedimentation basin. The leachate seepage had not been previously reported to the Los Angeles Water Board by the Discharger.
11. On October 17, 2023, Los Angeles Water Board staff received an email from the public stating leachate had been leaking out of the northwest side of the Landfill.
12. On November 2, 2023, a joint inspection of the Landfill was conducted by multiple regulatory agencies, including SCAQMD, the LEA, and Los Angeles Water Board staff. Los Angeles Water Board staff observed that the leachate seep observed during the October 3, 2023 inspection was still occurring.
13. On November 22, 2023, the Los Angeles Water Board issued a Notice of Violation (NOV) to the Discharger for violations of the WDRs observed during the October 3, 2023 inspection. The NOV cited violations of Sections F.6 and B.3 of Order No. R4-2018-0172 for the operation of a leachate and LFG condensate containment system that is inadequate to prevent commingling of leachate and gas condensate with surface water run-on and runoff during a rain event and the failure to report within 24 hours of discovery the leachate seep that was observed at the Landfill during the inspection. The NOV required the Discharger to submit a written response to the Los Angeles Water Board detailing the corrective actions taken and the actions planned to mitigate conditions of the Landfill in violation of the WDRs by December 22, 2023. Additionally, the NOV required the Discharger to

submit a final report to the Los Angeles Water Board by February 20, 2024, demonstrating that the Landfill is in compliance with the WDRs.

14. On December 22, 2023, the Discharger submitted a response to the NOV. The response provided the following information:

- a. The Discharger was installing extraction wells in the Reaction Area to remove leachate.
- b. The Discharger was installing a French drain along the outer edge of the liner in the Reaction Area to capture leachate before it exits the Landfill cell.
- c. The Discharger was increasing the Landfill's leachate storage capacity.
- d. The Discharger was performing regular inspections of the slopes west and north of the Reaction Area.

15. The final report in response to the NOV, received on February 20, 2024, described the difficulties posed by the SET event and how the Discharger was managing leachate and seeps, dewatering the Reaction Area with pumps and a French drain, placing a geosynthetic cover over the entire Reaction Area, continuing to add gas extraction wells, and conducting a minimum of two inspections a day of the Reaction Area.

16. On December 29, 2023, the Discharger submitted a notification to Los Angeles Water Board staff regarding a leachate seep discovered to have reached an onsite concrete channel at the west perimeter road on December 22, 2023, following a heavy rain event. The Discharger indicated that pooling of water on top of a scrim (a temporary cover over the Reaction Area) pushed aside sandbags used to weigh down the scrim at the bottom of the Landfill slope, washed out sections of the perimeter road, and caused the leachate underneath to be forced out of the scrim instead of flowing along its normal path downhill towards a collection sump. As a result, portions of the leachate reached the onsite concrete-drainage channel. Following the discovery, the Discharger installed a check dam on the onsite concrete drainage channel to contain and pump out leachate from the onsite concrete drainage channel using a vacuum truck, as well as rainwater off the scrim to prevent further pooling. The Discharger subsequently implemented additional corrective measures, including repair of the perimeter road and replacement of sandbags, pressure-washing of the onsite concrete channel, and installation of a 10-foot berm at the base of the western slope to assist with directing rainwater off the scrim. The Discharger took samples on December 28, 2023 from the south

stormwater sedimentation basin to test for leachate parameters; the analytical data showed ammonia (as N) at 4.7 milligrams per liter (mg/L), p-cresol and phenol at 0.016 and 0.015 mg/L, respectively, and arsenic, chromium, iron, and zinc at 0.021, 0.015, and 0.14 mg/L, respectively. Stormwater samples collected by the Discharger on December 22 and December 28, 2023 showed detections of iron, biochemical oxygen demand, total suspended solids, oil and grease, and E. Coli above benchmarks, with E. Coli detected at 650,000 MPN/100 mL.

17. On January 29, 2024, Los Angeles Water Board staff from the Stormwater Unit conducted an inspection at the Landfill to evaluate compliance with the Industrial General Permit. Los Angeles Water Board staff observed a leachate seepage area located across an onsite concrete drainage channel. Landfill personnel were pressure-washing the channel and had placed a soil check dam downgradient of the channel to capture wastewater from the pressure washing activities; a vacuum truck was removing the wastewater from the channel. The onsite concrete drainage channel activities occurred upgradient and in close proximity to the sedimentation basin and where the channel discharges into the basin. Implementation of best management practices (BMPs) to prevent migration of leachate and runoff into the channel was inadequate.
18. On February 4, 2024, heavy rain events occurred at the Landfill. Los Angeles Water Board staff requested information and photographs of additional BMPs implemented onsite to prevent leachate migration; however, the Discharger did not provide this information.
19. On February 20, 2024, Los Angeles Water Board staff conducted a joint inspection with multiple regulatory agencies; leachate seepage was still occurring in the same area as observed during the January 29, 2024 inspection. In addition, no additional measures or adequate BMPs were observed in place between the drainage channel and leachate seepage area to prevent leachate migration; muddy water was observed in the channel. The outfall of the south sedimentation basin was also observed discharging water.
20. On March 20, 2024, the Los Angeles Water Board issued R4-2024-0010 to the Landfill pursuant to Water Code sections 13267 and 13383. This order identified a list of additional information and documents that the Los Angeles Water Board needed to further investigate and assess potential impacts to groundwater and surface water due to the current conditions at the Landfill. Since the implementation of Order No R4-2024-0010, the Landfill has been submitting groundwater and stormwater monitoring data for the specified monitoring

parameters.

21. On June 27, 2024, the Los Angeles Water Board issued an NOV to the Landfill for failure to fully comply with Order No. R4-2024-0010.
22. On January 1, 2025, the Landfill stopped accepting waste and ceased active waste disposal operations.
23. On January 7, 2026, the Los Angeles Water Board issued an NOV to the Discharger, for the unauthorized discharge of stormwater commingled with leachate in violation of the requirements established in the Industrial General Permit.
24. On February 11, 2026, the Los Angeles Water Board issued amended Order No. R4-2024-0010-A01 pursuant to Water Code sections 13267 and 13383. This amendment was necessary because high laboratory dilution factors made previously collected data unreliable for detecting the monitored parameters.
25. Specifically, Order No. R4-2024-0010-A01 stipulated reporting limits for laboratory analysis from stormwater monitoring, groundwater monitoring, and from monitoring of discharges into and out of the south sedimentation basin and east sedimentation basin for all purposes under the amended Order or other Water Boards orders, including, but not limited to, R4-2018-0172 and Industrial General Permit, WDID No. 4 19I022488, Notice of Intent (NOI) dated January 26, 2015.
26. Between January 2026 and March 2026, the Discharger reported a series of leachate seeps from beneath the geomembrane liner in the area of the West Slope. The Discharger is actively collecting leachate seepage.
27. On March 5, 2026, U.S. EPA documented “bulging” beneath the geomembrane cover at the West Slope as well as approximately 10-feet of lateral movement of the slope of the Landfill to the west from saturated leachate under the geomembrane cover. These conditions were confirmed when Los Angeles Water Board staff visited the Landfill on March 10, 2026.
28. On June 1, 2026, the Discharger notified the Regional Board that it could not achieve the reporting limits required by Amended Order No. R4-2024-0010-A01, based on a survey of eleven laboratories, and urged the Board to revise the Order.
29. Water Code section 13267, subdivision (b)(1), states, in part:
 - a. “In conducting an investigation specified in subdivision (a), the regional

board may require that any person who has discharged, discharges, or is suspected of having discharged or, discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.”

30. Water Code section 13383, subdivision (a), states, in part:

- b. “The state board or a regional board may establish monitoring, inspection, entry, reporting, and recordkeeping requirements ... for any person who discharges, or proposes to discharge, to navigable waters...”

31. This Order requires the Discharger to submit a technical report to provide information necessary to evaluate the Landfill's compliance with its WDRs and NPDES permits. This information is also required for the Los Angeles Water Board's investigation of potential impacts to surface waters and groundwaters from the Landfill's SET event and associated excess leachate production. Landfill leachate contains a complex mixture of toxic chemical compounds in concentrated amounts that are harmful to human health and the environment. If released, these pollutants can degrade water quality and severely impact beneficial uses. Of particular concern are the LFG breaches and leachate seeps beneath the geomembrane liner near the West Slope, as well as the lateral movement of the West Slope described in Finding 27. Therefore, new groundwater monitoring wells in the West Slope area are needed. Further, if seeps remain uncontrolled, then leachate could commingle with stormwater and enter surface waters as well as groundwater since the stormwater sedimentation basins are unlined. Therefore, detailed information regarding potential leachate discharges is required. The Discharger must submit a complete report; the Los Angeles Water Board may reject the submittal if it is incomplete or requires revisions. As set forth below, the burden and cost of preparing this report bear a reasonable relationship to its compelling need and environmental benefits.

32. The technical report required by this Order pursuant to Water Code section 13267 expands upon the monitoring program established under Order Nos. R4-2024-0010 and R4-2024-0010-A01 to include additional monitoring in the vicinity of the West Slope. The Los Angeles Water Board estimates that the cost for the Discharger to comply with this Order—including the installation of three additional groundwater monitoring wells and quarterly monitoring for the specified constituents for two years—is expected to be less than \$300,000. The additional analytical testing required under Water Code section 13383 is estimated to cost approximately \$3,670 per location. Assuming 20 samples are collected per storm year from the inlets and outlets of the south and east sedimentation basins, the estimated sampling cost is \$73,400 per year. Additional administrative and operational burdens under section 13383—including tracking storm volumes and conducting post-storm geosynthetic cover assessments—are standard industrial BMPs necessary to document compliance. To update the stormwater pollution prevention plan (SWPPP), it is assumed that a consultant who is an environmental scientist would conduct the work. Assuming an hourly burdened wage of \$200 per hour, and 20 hours to conduct the work, the estimated cost to update the SWWP is \$4,000.
33. Given the ongoing SET event and the critical threat of concentrated leachate discharging into groundwater or commingling with stormwater runoff, the burdens, including costs, of producing these reports bear a reasonable relationship to the compelling need for the data and the environmental benefits to be gained. The required data is essential for the Los Angeles Water Board to evaluate compliance, assess liner, LCRS, and LFG collection and control system integrity, and ensure the protection of the ground and surface waters of the State and the United States.
34. The issuance of this Order is an enforcement action by a regulatory agency and is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to California Code of Regulations, title 14, section 15321, subdivision (a)(2). This Order requires submittal of a technical report. It is unlikely that compliance with this Order could result in physical changes to the environment. If the implementation of this Order may result in significant impacts on the environment, the appropriate lead agency will address the CEQA requirements prior to approval of any such action.
35. Any person aggrieved by this action of the Los Angeles Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050, et seq. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on

a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

THEREFORE, IT IS HEREBY ORDERED that the Discharger, pursuant to Water Code section 13267, subdivision (b), is required to submit the following:

1. A workplan to install three groundwater wells west of the Main Canyon portion of the Landfill in the area of the West Slope by July 27, 2026.
 - a. The wells shall be placed to monitor for possible impacts from a compromised liner in the area of the West Slope. The wells should be co-located with the existing gas probes GP-14, GP-15, and GP-16.
 - b. Monitoring at the three new groundwater monitoring wells shall begin within thirty days of installation.
 - c. The three new wells and the existing wells DW-9, DW-15, DW-16, DW 17, DW-29, DW-30, DW-31, and FP-01 shall be placed in the evaluation monitoring program (EMP) under Order R4-2028-0172, which means that the monitoring frequency shall be quarterly.

Quarterly Monitoring, Reporting Period and Report Due Dates

Monitoring Report	Reporting Period	Report Due Date
1 st Quarter	January 1 – March 31	April 15
2 nd Quarter	April 1 – June 30	July 15
3 rd Quarter	July 1 – September 30	October 15
4 th Quarter	October 1 – December 31	January 15

If after two years following resolution of the SET event the wells have not had any detections, then the Discharger may request that wells be placed into a detection monitoring program (DMP) under Order R4-2028-0172, which means that the frequency would be reduced to semiannually, as approved by the Los Angeles Water Board Executive Officer or their delegate.

- d. The three new wells and the existing wells DW-9, DW-15, DW-16, DW 17, DW-29, DW-30, DW-31, and FP-01 shall be monitored for the Constituents of Concern in Table T-2 of the Monitoring and Reporting Program for Order No. R4-2018-0172.
2. A one-time full scan of Appendix II Constituents in 40 CFR, part 258 shall be performed at the three new groundwater monitoring wells within thirty days of installation.
3. All analysis conducted to comply with this Order shall utilize the reporting limits for each applicable analyte included in Appendix 1 to this Order.
4. A quarterly report containing an assessment of the integrity of the bottom liner and LCRS and within the Reaction Area. The first quarterly report shall be submitted by July 27, 2026.
 - a. For the initial analysis, the Discharger shall review as-built information for all exploratory borings, gas wells, and temperature probes in the Main Canyon area of the Landfill to identify those that were constructed to a depth within 40 feet above the composite liner system (i.e., the bottom of the operations layer component). All borings, wells, or probes identified shall be presented in map view and as-built details shall be summarized in a spreadsheet format. For the borings, wells, or probes identified, as well as all sumps in the Main Canyon area, the Discharger shall collect all temperature related information available. The data shall include temperature information measured for wastes, liquids, and gases and shall be plotted as applicable. Temperature profiles shall be presented with depth of refuse and/or time series plots starting three months prior to the earliest indication of the start of the SET event.
 - b. In addition to defining where the liner is experiencing elevated temperatures associated with the SET event, the liner integrity evaluation shall quantify the direction and rate of travel of the reaction based on all available parameters including temperature monitoring, LFG speciation and generation rates, leachate generation rates, subsidence rates, and evidence of distress to the existing intermediate cover.
 - c. As a component of the LCRS integrity assessment, the report shall include time series plots, correlated spatially for each cell to the degree possible, of leachate temperature measurements and leachate generation/removal rates.

Pursuant to Water Code section 13383, the Discharger is required to submit the following:

5. For storms that produce a discharge into the south sedimentation basin, a post-storm event assessment and report on the effectiveness of the geosynthetic cover installed over the Reaction Area to prevent leachate from commingling with stormwater until the SET event has resolved. This report is due 30 days after the first day of the storm event that produces a discharge.
6. A report documenting implementation, operation and maintenance of BMPs and any other measures preventing leachate migration with stormwater runoff into onsite drainage channels, drain inlets, and inlets to the south and east sedimentation basins. This report is due 30 days after the first day of the storm event that produces a discharge.
7. The Discharger shall update its SWPPP as required by Industrial General Permit to enhanced discharge monitoring as required by this Order. An updated SWPPP shall be uploaded to SMARTs no later than July 27, 2026.
8. The Discharger shall sample and submit analyses of any and all discharges into and out of the south sedimentation basin and the east sedimentation basin. The discharges must be sampled for all of the constituents listed in Appendix 1, attached. All samples shall comport with the associated reporting limits included in Appendix 1. All results shall be submitted to the Los Angeles Water Board within 45 days of the first day of the discharge event. Where analytes overlap or are otherwise duplicative, only a single analysis is required to satisfy the requirements of this Order. The laboratory reports shall be submitted in pdf and csv format to the Los Angeles Water Board.
9. The Discharger shall also provide, for each storm event that results in a discharge into any sedimentation basin: (1) the date of the storm event and the storm intensity in inches of precipitation; (2) the estimated volume of discharge into each basin, in gallons; (3) the estimated volume discharged out of each basin, in gallons; (4) the estimated volume of water contained in each basin prior to the storm event, in gallons; and (5) the combined estimated volume in each basin following the discharge event, in gallons. The Discharger shall also identify and describe any treatment applied to water contained in or discharged from the basins. This analysis must be submitted to the Los Angeles Water Board within 45 days of the first day of a storm event which produced a discharge into any of the basins.
10. In addition, the Discharger shall report any leachate spill, seep, or leak that

occurred prior to the stormwater discharge event, including: (1) the date of the spill, seep, or leak; (2) the estimated volume released in gallons; (3) the number of days between the spill, seep, or leak and the stormwater discharge event; and (4) the location of the spill, seep, or leak, including identification of the nearest sedimentation basin.

11. The Discharger shall ensure that all laboratory analyses of all monitoring of stormwater, surface water, groundwater, and discharges into and out of the south sedimentation basin and east sedimentation basin for all purposes under this Order or other Water Boards orders, are performed by an Environmental Laboratory Accreditation Program (ELAP) certified laboratory¹ according to sufficiently sensitive test procedures and conducted according to test procedures under 40 Code of Federal Regulations Part 136, including the observation of holding times, unless other test procedures have been specified by the Los Angeles Water Board or are required under 40 Code of Federal Regulations Chapter I Subchapter N. At a minimum, the reporting limits listed in Appendix 1 of this Order shall be met.
 - i. The Discharger shall collect sufficient sample volume to allow the lab to re-run the analyses undiluted if diluted analyses are non-detect.
 - ii. Dilution of samples is permitted when required by the sample conditions and the sample conditions shall be described in a case narrative or data qualifier. If a sample is diluted and a target analyte is not detected, the sample shall be re-run at lesser dilutions until a detection without J flag is obtained or the reporting limit is met.
12. The above items shall be electronically submitted to the Los Angeles Water Board by uploading the items required by Paragraphs 1-4 to Geotracker and Paragraphs 5-11 to SMARTS, and by providing e-mail notification to:

Pavlova Vitale
Los Angeles Regional Water Quality Control Board
Email: Pavlova.Vitale@waterboards.ca.gov

Jessica Lin
Los Angeles Regional Water Quality Control Board
Email: Jessica.Lin@waterboards.ca.gov

¹ The Environmental Laboratory Accreditation Program (ELAP) has certified laboratory methods for all subchapter N parameters required to be monitored by this Order.

13. Pursuant to Water Code section 13268, subdivision (a), any person who fails to submit reports in accordance with the Order is guilty of a misdemeanor. Pursuant to Water Code section 13268, subdivision (b)(1), failure to submit the required technical report described above by the specified due date(s) may result in the imposition of administrative civil liability by the Los Angeles Water Board in an amount up to one thousand dollars (\$1,000) per day for each day the technical report is not received after the above due date.
14. Pursuant to Water Code section 13385, subdivision (a)(3), a violation of a requirement established by Water Code section 13383, may result in the imposition of administrative civil liability by the Los Angeles Water Board in an amount up to ten thousand dollars (\$10,000) per day for each day the technical report is not received after the above due date. These civil liabilities may be assessed by the Los Angeles Water Board for failure to comply, beginning with the date that the violations first occurred, and without further warning.
15. The Los Angeles Water Board, under the authority given by Water Code section 13267, subdivision (b)(1), requires the Discharger to include a perjury statement in all reports required by this Order. The perjury statement shall be signed by a senior authorized representative of the Discharger (not by a consultant). The perjury statement shall be in the following format:

“I, [NAME], certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision, in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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.”

SO ORDERED.

Jenny Newman
Assistant Executive Officer

June 12, 2026
Date

Attachments: Appendix 1: Reporting Limits Table

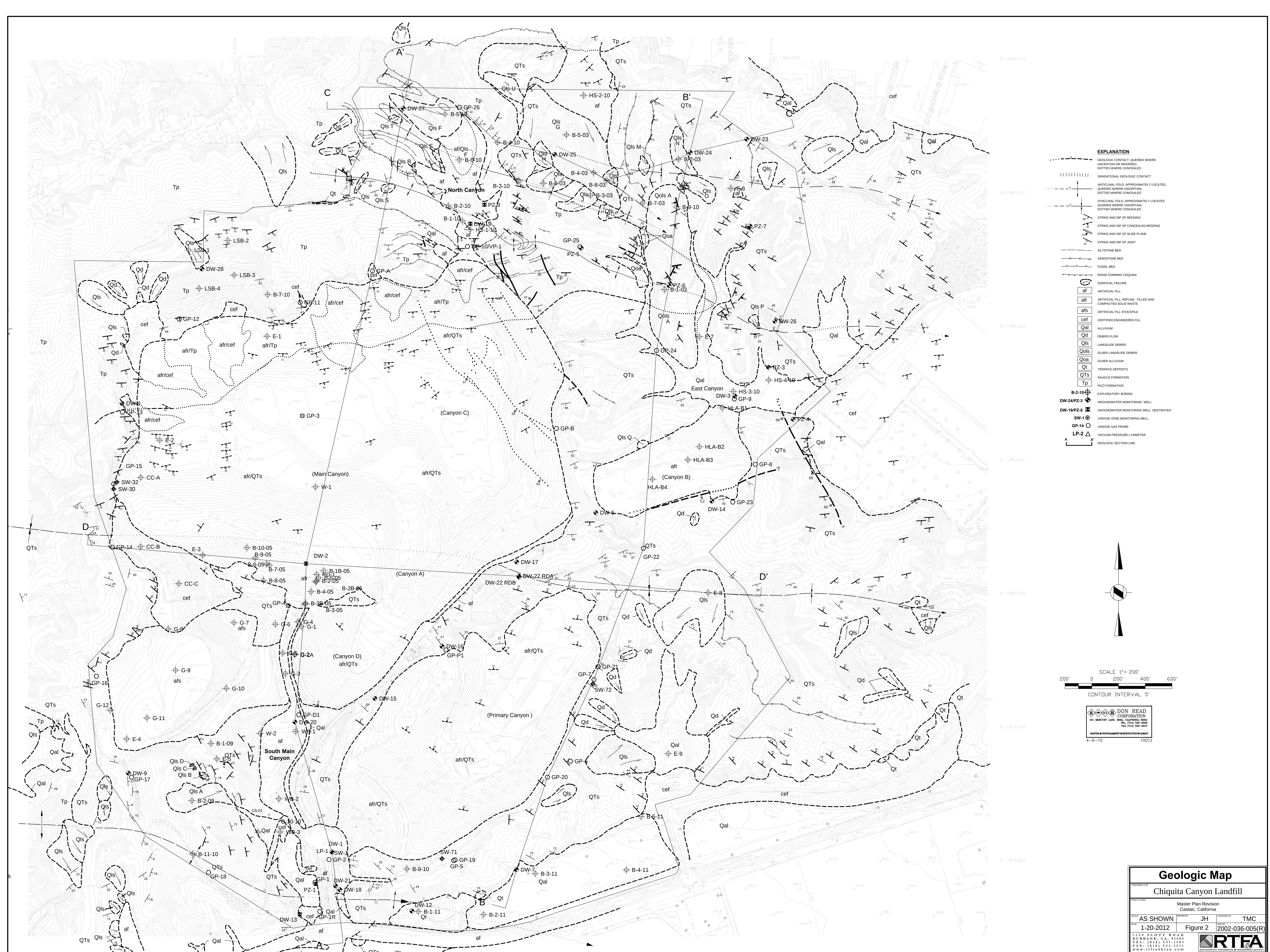
Appendix 1: List of Analytes and Associated Reporting Limits

Analyte	Method Reporting Limit	Units
Total Alkalinity	5	mg/L as CaCO ₃
Ammonia Nitrogen	0.01	mg/L
COD	10	mg/L
Chloride	1	mg/L
Nitrate-Nitrogen	0.2	mg/L
Total Sodium	1	mg/L
Sulfate	0.5	mg/L
Total Potassium	1	mg/L
TDS	10	mg/L
TOC	0.3	mg/L
1,1-Dichloroethane	0.5	ug/L
1,2-Dichloroethane	0.3	ug/L
1,4-Dichlorobenzene	0.5	ug/L
Benzene	0.5	ug/L
Chloromethane	0.5	ug/L
cis-1,2-Dichloroethene	0.5	ug/L
Dichlorodifluoromethane	0.5	ug/L
Methylene chloride	3	ug/L
Tetrachloroethene	0.5	ug/L
Trichloroethene	0.5	ug/L
Vinyl chloride	0.5	ug/L
1,4-Dioxane	0.2	ug/L
Bicarbonate (as CaCO ₃)	5	mg/L
Total Boron	100	ug/L
Bromide	10	ug/L
Total Calcium	1	mg/L
Carbon Dioxide	0.1	mg/L
Fluoride	0.05	mg/L
Total Iron	50	ug/L
Total Magnesium	1	mg/L
Total Manganese	1	ug/L
pH (field)	1	pH units

Sulfide	0.1	mg/L
Specific Conductance	10	umho/cm
Temperature (field)	1	C
Turbidity (field)	0.1	NTU
BOD	2.5	mg/L
TSS	0.5	mg/L
Alpha Terpineol	1	ug/L
Benzoic Acid	50	ug/L
Para Cresol	10	ug/L
Phenol	10	ug/L
NH3 Unionized	0.01	mg/L
Total Antimony	10	ug/L
Total Arsenic	5	ug/L
Barium	20	ug/L
Total Beryllium	10	ug/L
Total Cadmium	1	ug/L
Total Chromium	20	ug/L
Cobalt	10	ug/L
Total Copper	4.5	ug/L
Total Lead	10	ug/L
Total Mercury	0.2	ug/L
Total Nickel	10	ug/L
Total Selenium	5	ug/L
Total Silver	10	ug/L
Total Thallium	1	ug/L
Total Vanadium	10	ug/L
Total Zinc	1	ug/L
4-Isopropyltoluene	0.5	ug/L
Aluminum	0.05	ug/L
Aniline	1	ug/L
Total Cyanide	5	ug/L
Isobutanol	100	ug/L
Isopropanol	1000	ug/L
Methyl-tert-butyl ether (MTBE)	5	ug/L
Naphthalene	0.5	ug/L
N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	0.008	ug/L
N-Methyl Perfluorooctane Sulfonamidoacetic Acid	0.008	ug/L
Perfluorobutane Sulfonic Acid	0.005	ug/L

Perfluorobutyric Acid	0.005	ug/L
Perfluorodecanoic Acid	0.005	ug/L
Perfluoroheptanoic Acid	0.005	ug/L
Perfluorohexanesulfonic Acid	0.005	ug/L
Perfluorohexanoic Acid	0.005	ug/L
Perfluorooctane Sulfonic Acid	0.005	ug/L
Perfluorooctanoic Acid	0.005	ug/L
Perfluoropentanoic Acid	0.005	ug/L
Pyridine	10	ug/L
Strontium	0.1	ug/L
Tin	20	ug/L
Toluene	0.5	ug/L
bis-(2-Ethylhexyl)phthalate	5	ug/L
m-Cresol	0.19	ug/L
o-Xylene	10	ug/L
Butyl Benzyl Phthalate; Benzyl Butyl Phthalate	10	ug/L
Carbon Disulfide	0.5	ug/L
p-Chloroaniline	29	ug/L
p-Chloro-m-cresol; 4-Chloro-3-methylphenol	10	ug/L
o-Cresol; 2-Methylphenol	10	ug/L
Diethyl Phthalate	10	ug/L
2,4-Dimethylphenol; m-Xylenol	10	ug/L
Ethylbenzene	0.5	ug/L
2-Hexanone; Methyl Butyl Ketone	0.5	ug/L
Methoxychlor	10	ug/L
Methyl ethyl ketone; MEK; 2-Butanone	3	ug/L
2-Methylnaphthalene	0.01	ug/L
4-Methyl-2-pentanone; Methyl isobutyl ketone	0.5	ug/L
Pentachlorophenol	0.25	ug/L
Phenanthrene	0.005	ug/L
Propionitrile; Ethyl Cyanide	200	ug/L
Silvex; 2,4,5-TP	1	ug/L
Styrene	0.5	ug/L
1,2,4-Trichlorobenzene	0.5	ug/L
Xylene (total)	0.5	ug/L
Dacthal (DCPA)	1	ug/L
Acenaphthene	10	ug/L

Appendix B
SITE GEOLOGIC MAP AND CROSS SECTIONS



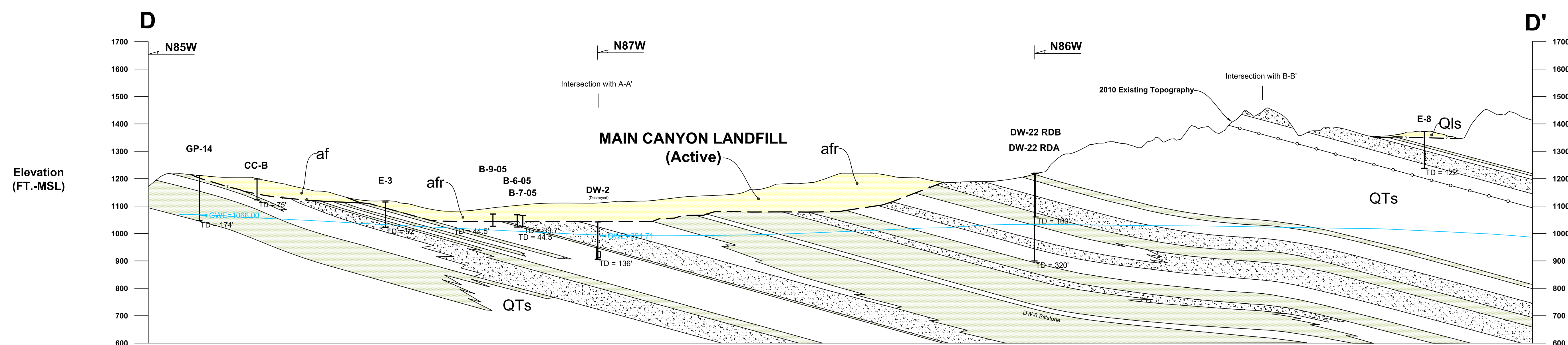
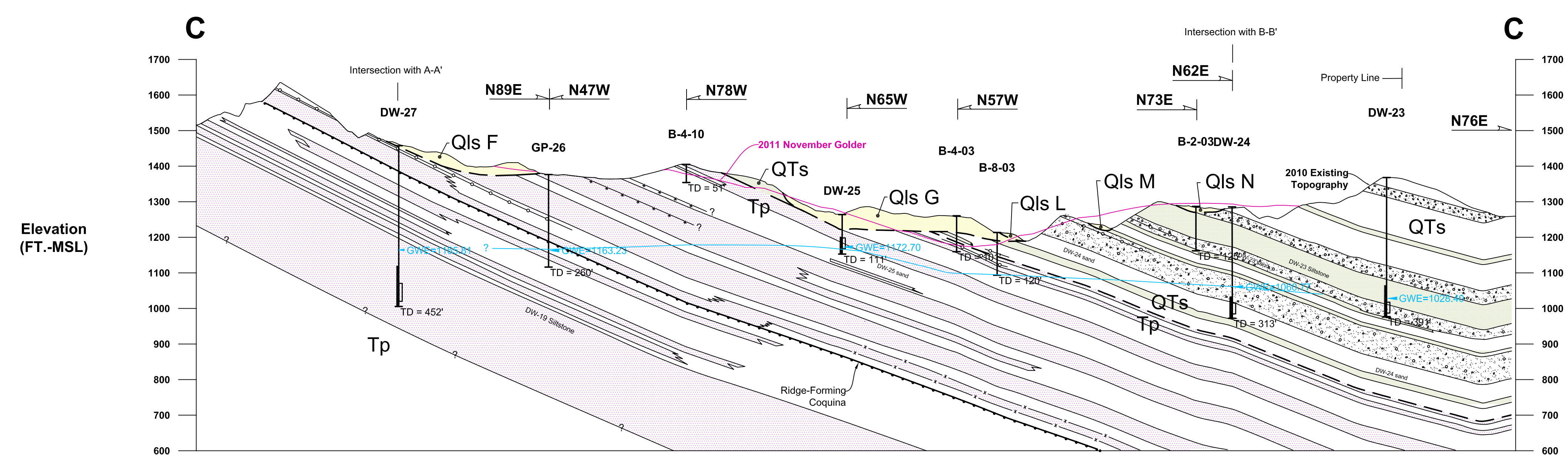
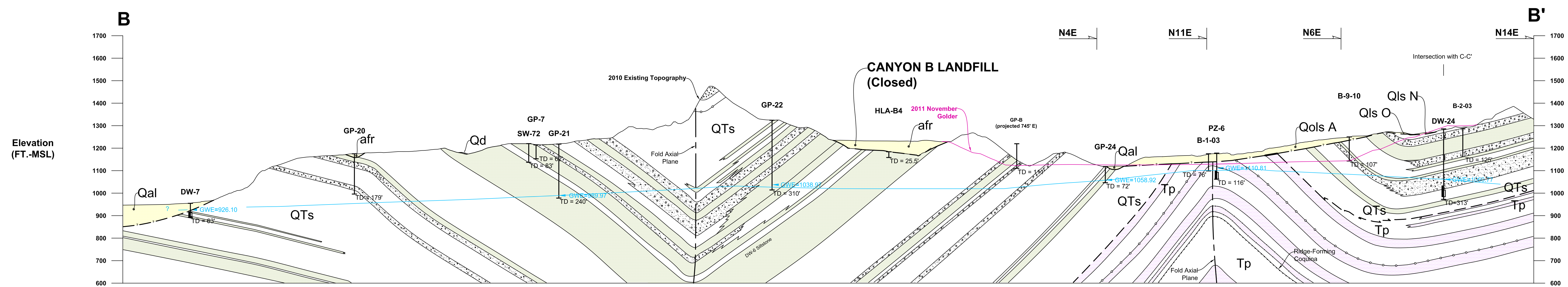
EXPLANATION

- GEOLOGIC CONTACT: QUERIED WHERE UNCERTAIN OR INFERRED; DOTTED WHERE CONCEALED
- GRADATIONAL GEOLOGIC CONTACT
- ANTICLINAL FOLD: APPROXIMATELY LOCATED, QUERIED WHERE UNCERTAIN, DOTTED WHERE CONCEALED
- SYNCLINAL FOLD: APPROXIMATELY LOCATED, QUERIED WHERE UNCERTAIN, DOTTED WHERE CONCEALED
- STRIKE AND DIP OF BEDDING
- STRIKE AND DIP OF CONCEALED BEDDING
- STRIKE AND DIP OF SLIDE PLANE
- STRIKE AND DIP OF JOINT
- SILTSTONE BED
- SANDSTONE BED
- FOSSIL BED
- RIDGE-FORMING COQUINA
- SURFICIAL FAILURE
- af
- afr
- afs
- cef
- Qal
- Qd
- Qls
- Qoa
- Qt
- Qts
- TP
- B-2-10
- DW-34/PZ-3
- DW-19/PZ-8
- SW-1
- GP-14
- LP-2
- GEOLOGIC SECTION LINE

SCALE 1" = 200'
0 200' 400' 600'
CONTOUR INTERVAL 5'

DON READ CORPORATION
500 MONTEREY LANE, SUITE 200, CAUSTIC, CALIFORNIA 95521
TEL: (714) 288-5555 FAX: (714) 288-5557
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Geologic Map			
Chiquita Canyon Landfill			
Master Plan Revision Castaic, California			
SCALE AS SHOWN	DATE 1-20-2012	DESIGNED BY JH	CHECKED BY TMC
FIGURE 1-20-2012		FIGURE 2 2002-036-005(R)	
1329 SCOTT ROAD RUBEN, CA 91584 TEL: (818) 531-1501 FAX: (818) 531-1511 WWW.RFRANKLIN.COM			
RTEA REGISTERED TECHNICAL ENGINEERING & ENGINEERING GEOLOGIST			



af	Artificial Fill
afR	Artificial Fill Refuse
Qal	Quaternary Alluvium
Qs	Saugus Formation Coarse-grained: sandstone with gravel
QTS	Saugus Formation Coarse-grained: primarily sandstone
QTS	Saugus Formation Fine-grained: primarily siltstone, mudstone or claystone
TP	Pico Formation Coarse-grained: primarily sandstone
TP	Pico Formation Fine-grained: primarily siltstone, mudstone or claystone
TP₂	Fossil rich; Primarily Sandstone

DW-15 — Monitoring Well or Piezometer