DOCKETED	
Docket Number:	24-OPT-02
Project Title:	Compass Battery Energy Storage
TN #:	255580
Document Title:	Appendix 4-15B_Water Quality Management Plan Part 2
Description:	The Water Quality Management Plan has been prepared to comply with the requirements of the local NPDES Stormwater Program.
Filer:	Erin Phillips
Organization:	Dudek
Submitter Role:	Applicant Consultant
Submission Date:	4/8/2024 4:30:51 PM
Docketed Date:	4/8/2024

Boring ID	Depth to Groundwater (feet, bgs)	Groundwater Elevation (feet, MSL)
B-3	70.4	139
B-10	47.3	162
B-17	47.0	161
B-19	47.5	170

Groundwater level fluctuations occur due to seasonal variations in the amount of rainfall, runoff and other factors not evident at the time the borings were performed. Therefore, groundwater levels during construction or at other times in the life of the structures may be higher or lower than the levels indicated on the boring logs. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

In clayey soils with low permeability, the accurate determination of groundwater level may not be possible without long term observation. Long term observation after drilling could not be performed as borings were backfilled immediately upon completion due to safety concerns. Groundwater levels can best be determined by implementation of a groundwater monitoring plan.

Based on review of Plate 1.2 of the Seismic Hazard Zone Report (SHZP) for the San Juan Capistrano 7.5-Minute Quadrangle (CDMG)[1], historic shallow groundwater depth in the vicinity of the project site is reported at approximately 5 feet bgs in the area of the creek on the east side of the site. However, the creek level is approximately 40 feet below the elevation of the site.

SEISMIC CONSIDERATIONS

The 2019 California Building Code (CBC) Seismic Design Parameters have been generated using the SEAOC/OSHPD Seismic Design Maps Tool. This web-based software application calculates seismic design parameters in accordance with ASCE 7-16 and 2019 CBC. The 2019 CBC requires that a site-specific ground motion study be performed in accordance with Section 11.4.8 of ASCE 7-16 for Site Class D sites with a mapped S_1 value greater than or equal 0.2.

However, Section 11.4.8 of ASCE 7-16 includes an exception from such analysis for specific structures on Site Class D sites. The commentary for Section 11 of ASCE 7-16 (Page 534 of Section C11 of ASCE 7-16) states that “In general, this exception effectively limits the requirements for site-specific hazard analysis to very tall and or flexible structures at Site Class D sites.” Based on our understanding of the proposed structures, it is our assumption that the

[1] California Department of Conservation Division of Mines and Geology (CDMG), *“Seismic Hazard Zone Report for the San Juan Capistrano 7.5 Minute Quadrangle, Orange County, California”*, 2001.

exception in Section 11.4.8 applies to the proposed structures for this project. However, the structural engineer should verify the applicability of this exception.

Based on this exception, the spectral response accelerations presented below were calculated using the site coefficients (F_a and F_v) from Tables 1613.2.3(1) and 1613.2.3(2) presented in Section 1613 of the 2019 CBC.

Description	Value
2019 California Building Code Site Classification (CBC) [1]	D
Site Latitude (°N)	33.53205
Site Longitude (°W)	117.67753
S_s Spectral Acceleration for a 0.2-Second Period	1.2
S_1 Spectral Acceleration for a 1-Second Period	0.431
F_a Site Coefficient for a 0.2-Second Period	1.02
F_v Site Coefficient for a 1-Second Period	1.872

1. Seismic site classification in general accordance with the *2019 California Building Code*.

Typically, a site-specific ground motion study may generate less conservative coefficients and acceleration values which may reduce construction costs. We recommend consulting with a structural engineer to evaluate the need for such study and its potential impact on construction costs. Terracon should be contacted if a site-specific ground motion study is desired.

Faulting and Estimated Ground Motions

The site is located in southern California, which is a seismically active area. The type and magnitude of seismic hazards affecting the site are dependent on the distance to causative faults, the intensity, and the magnitude of the seismic event. As calculated using the USGS Unified Hazard Tool, the San Joaquin Hills Fault, which is considered to have the most significant effect at the site from a design standpoint has a modelled earthquake magnitude of 7.53 and is located approximately 5 kilometers from the site.

Based on the SEAOC/OSHPD Seismic Design Maps Tool, using the American Society of Civil Engineers (ASCE 7-16) standard, the modified peak ground acceleration (PGA_M) at the project site is expected to be 0.563g. Based on the USGS Unified Hazard Tool, the project site has a deaggregated modal magnitude of 7.69. Furthermore, the site is not located within an Alquist-Priolo Earthquake Fault Zone based on our review of the State Fault Hazard Maps.[2]

[2] https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/.

LIQUEFACTION

Liquefaction is a mode of ground failure that results from the generation of high pore water pressures during earthquake ground shaking, causing loss of shear strength. Liquefaction is typically a hazard where loose sandy soils exist below groundwater. The California Geological Survey (CGS) has designated certain areas as potential liquefaction hazard zones. These are areas considered at a risk of liquefaction-related ground failure during a seismic event, based upon mapped surficial deposits and the presence of a relatively shallow water table.

The site is located within a State-designated Seismic Hazard Zone for liquefaction potential. A seismic hazard map is included in the **Site Location** section.

Subsurface soils generally consisted of interbedded layers of soft to hard lean clay, silt with varying amounts of sand, and silty clay. An interbedded layer of loose silty sand was encountered in borings B-2 from a depth of approximately 31½ to 40 feet bgs, respectively. Materials encountered from the Capistrano Formation were generally recovered as interbedded layers of very stiff to hard elastic silt with trace sand, lean clay with varying amounts of sand and silt, and silty clay with varying amounts of sand.

We understand that liquefaction analysis for the project will be performed by Sargent & Lundy. Terracon performed a preliminary liquefaction analysis for the site in general accordance with the DMG Special Publication 117. The liquefaction study utilized the software "LiquefyPro" by CivilTech Software. This analysis was based on soil data from the borings B-2, B-3, B-7, and B-15. A PGA_M of 0.563 g and a modal magnitude of 7.69 for the project site were used. Calculations utilized a depth to groundwater of 45 feet bgs based on review of available data and the depth to groundwater encountered in our borings. Settlement analysis used the Tokimatsu, M-correction method and the fines percentage were corrected for liquefaction using the Stark/Olson method.

Based on calculation results, seismically induced settlement of saturated and unsaturated sands was found to occur in one of the four borings (B-2). Settlement at the location of boring B-2 is estimated to be approximately ½ inch or less. The detailed liquefaction potential analysis results are attached to this report in **Supporting Documents** section of the **Appendix**.

LANDSLIDE

Based on our review of a geologic hazards map designated by the California Geologic Survey, the battery and equipment pads do not appear to be located within a mapped seismically-induced landslide zone. However, landslide deposits are mapped directly west of the proposed pads. Landslide deposits were encountered in boring B-4, B-5, B-6, and B-11 extending to approximate depths of 10 to 50 feet bgs. A seismic hazard map is included in the **Site Location** section.

It is our understanding that stability assessment of the surrounding slopes is excluded from our scope of work and is being evaluated by Sargent & Lundy (S&L) based on data provided by Terracon.

CORROSIVITY

Results of laboratory soluble sulfate, soluble chloride, electrical resistivity, and pH testing are included in the **Exploration Results** section of this report. The values may be used to estimate potential corrosive characteristics of the on-site soils with respect to contact with the various underground materials which will be used for project construction.

Corrosivity Test Results Summary						
Boring	**Sample Depth (ft)**	**USCS Material Type**	**Soluble Sulfate (ppm)**	**Chlorides (ppm)**	**Electrical Resistivity (Ω-cm)**	**pH**
B-1	0-5	CL	50	27	1,867	8.0
B-3	0-5	CL/ML	46	40	2,215	8.0
B-12	0-5	CL	64	23	1,461	8.0
B-25	0-5	CL	91	36	1,313	8.1

Results of soluble sulfate testing indicate samples of the on-site soils tested possess negligible sulfate concentrations when classified in accordance with Table 19.3.1.1 of the ACI Design Manual. Concrete should be designed in accordance with the exposure class S0 provisions of the ACI Design Manual, Section 318, Chapter 19.

STORMWATER MANAGEMENT

Eight (8) in-situ percolation tests were performed from approximate depths of 0 to 5 and 5 to 10 feet bgs. A 2-inch thick layer of gravel was placed in the bottom of each boring after the borings were drilled to investigate the soil profile. A 3-inch diameter perforated pipe was installed on top of the gravel layer in each boring. Gravel was used to backfill between the perforated pipes and the boring sidewall. The borings were then filled with water for a pre-soak period of 24 hours. Testing began after a pre-soak period. At the beginning of the test, the pipes were refilled with water and readings were taken at standardized time intervals. Percolation rates are provided in the following table:

TEST RESULTS				
Test Location (depth, feet bgs)	**Soil Classification**	**Final Measured Percolation Rate (in/hr.)**	**Correlated Infiltration Rate[1] (in/hr.)**	**Water Head (in)**
P-1 (5 – 10)	Silty clay	1.4	0.03	97
P-2 (5 – 10)	Lean clay with sand	1.2	0.04	63
P-3 (0 – 5)	Silty clay with sand	3.1	0.41	14
P-4 (5 – 10)	Silty clay with sand	3.4	0.18	36
P-5 (0 – 5)	Silty clay	5.0	0.63	14
P-6 (5 – 10)	Silty clay	1.2	0.05	44
P-7 (0 – 5)	Silty clay with sand	7.2	0.97	31
P-8 (5 – 10)	Lean clay	1.4	0.04	66

[1]If proposed infiltration system will mainly rely on vertical downward seepage, the correlated infiltration rates should be used. The infiltration rates were correlated using the Porchet method.

It is apparent that percolation rates were relatively higher in near surface soils within the upper 5 feet than the deeper soils. Infiltration within shallow systems will likely create perched water conditions on top on the underlying less permeable soils. Therefore, perched water could move laterally and manifest at the face of the descending slopes east of the site, which may cause scour and ultimately slope failures. We recommend that measures be taken to mitigate this type of occurrence, if onsite infiltration is implemented. In the event infiltration systems onsite will be utilized, the following paragraphs include design and construction considerations.

With time, the bottoms of infiltration systems tend to plug with organics, sediments, and other debris. Long term maintenance will likely be required to remove these deleterious materials to help reduce decreases in actual percolation rates.

The percolation tests were performed with clear water, whereas the storm water will likely not be clear, but may contain organics, fines, and grease/oil. The presence of these deleterious materials will tend to decrease the rate that water percolates from the infiltration systems. Design of the stormwater infiltration systems should account for the presence of these materials and should incorporate structures/devices to remove these deleterious materials. A safety factor should be applied to these measured rates.

Based on the soils encountered in our borings, we expect the percolation rates of the soils could be different than measured in the field due to variations in fines and gravel content. The design elevation and size of the proposed infiltration system should account for this expected variability in infiltration rates.

Infiltration testing should be performed after construction of the infiltration system to verify the design infiltration rates. It should be noted that siltation and vegetation growth along with other factors may affect the infiltration rates of the infiltration areas. The actual infiltration rate may vary from the values reported here. Infiltration systems should be located a minimum of 10 feet from any existing or proposed foundation system.

GEOTECHNICAL OVERVIEW

The site appears suitable for the proposed construction based upon geotechnical conditions encountered in the test borings, provided that the findings and recommendations presented in this report are incorporated into project design and construction.

The site is bounded from the east and west by steep slopes and mapped landslide potential areas. Stability assessment of the eastern and western surrounding slopes is not included in our scope of work and is being evaluated by Sargent & Lundy (S&L) based on the findings of this report.

Expansive soils are present on this site. This report provides recommendations to help mitigate the effects of soil shrinkage and expansion; however, even if these procedures are followed, some movement and at least minor cracking in the structures should be anticipated. The severity of cracking and other cosmetic damage such as uneven floor slabs will probably increase if any modification of the site results in excessive wetting or drying of the expansive soils. Eliminating the risk of movement and cosmetic distress may not be feasible, but it may be possible to further reduce the risk of movement if significantly more expensive measures are used during construction. We would be pleased to discuss other construction alternatives with you upon request.

Based on our explorations, review of geologic maps, and areas designated by the California Geologic Survey, landslide deposits were encountered in multiple borings extending to approximate depths of 10 to 50 feet bgs. Based on the provided outline of the proposed project, the landslide deposits were encountered outside the outline of the proposed structures. In the event additional structures will be constructed west of the outline of the project and within the landslide deposits area, these deposits should be removed and the excavation thoroughly cleaned prior to backfill placement and/or construction.

Batteries, transformers, and associated equipment should be supported on a mat foundation system. Mat foundations should bear on a minimum of 2 foot of engineered fill beneath the bottom of the foundations, or 4 feet below existing grades, whichever is greater. Engineered fill supporting mat foundations should comprise of low volume change materials conforming to the specifications of our ***Fill Materials and Placement*** section of this report.

It is our understanding that a proposed 138kV transmission line pole will be supported on a drilled pier.

Estimated movements described in this report are based on effective drainage for the life of the structures and cannot be relied upon if effective drainage is not maintained. Exposed ground, extending at least 10 feet from the perimeter, should be sloped a minimum of 5% away from the structures to provide positive drainage away from the structures. Grades around the structures should be periodically inspected and adjusted as part of the structure's maintenance program.

Geotechnical engineering recommendations for foundation systems and other earth connected phases of the project are outlined below. The recommendations contained in this report are based upon the results of test borings, laboratory testing, engineering analyses, and our current understanding of the proposed project. The **General Comments** section provides an understanding of the report limitations.

EARTHWORK

The following presents recommendations for site preparation, excavation, subgrade preparation, and placement of engineered fills on the project. The recommendations presented are for the design and construction of foundations and are contingent upon following the recommendations outlined in this section.

Earthwork on the project should be observed and evaluated by Terracon. The evaluation of earthwork should include observation and testing of engineered fill, subgrade preparation, foundation bearing soils, and other geotechnical conditions exposed during the construction of the project.

Site Preparation

Strip and remove existing vegetation, debris, pavements and other deleterious materials from proposed building and roadway areas. Exposed surfaces should be free of mounds and depressions which could prevent uniform compaction. The site should be initially graded to create a relatively level surface to receive fill and provide for a relatively uniform thickness of fill beneath proposed building structures.

Demolition of the existing structures should include complete removal of all foundation systems and remaining underground utilities within the proposed construction area. This should include removal of any loose backfill found adjacent to existing foundations. All materials derived from the demolition of existing structures and pavements should be removed from the site and not be allowed for use as on-site fill, unless processed in accordance with the fill requirements included in this report.

Based on our explorations, review of geologic maps, and areas designated by the California Geologic Survey, landslide deposits were encountered in multiple borings extending to approximate depths of 10 to 50 feet bgs. Based on the provided outline of the proposed project, the landslide deposits were encountered outside the outline of the proposed structures. In the event additional structures will be constructed west of the outline of the project and within the landslide deposits area, these deposits should be removed and the excavation thoroughly cleaned prior to backfill placement and/or construction.

Although no evidence of fills, utilities, or underground facilities such as septic tanks, cesspools, basements, and utilities was observed during the site reconnaissance, such features could be encountered during construction. If unexpected fills, utilities, or underground facilities are encountered, such features should be removed, and the excavation thoroughly cleaned prior to backfill placement and/or construction.

Subgrade Preparation

Strip and remove existing vegetation, debris, and other deleterious materials from proposed foundation areas.

Mat foundations should be supported on engineered fill extending 2 feet beneath the bottom of the foundations, or 4 feet below existing grades, whichever is greater. Engineered fill supporting mat foundations should consist of low volume change materials conforming to the specifications of our **Fill Materials and Placement** section of this report. The lateral extent of the overexcavation should extend a minimum of 2 foot beyond the edge of the foundation. Subsequent to the surface clearing and over-excavation efforts, the exposed subgrade soils which will support engineered fill areas constructed at grade, should be prepared to a minimum depth of 10 inches. Subgrade preparation should generally include scarification, moisture conditioning, and compaction. The moisture content and compaction of subgrade soils should be maintained until construction.

Based upon the subsurface conditions determined from the geotechnical exploration, subgrade soils exposed during construction are anticipated to be relatively workable. However, the workability of the subgrade may be affected by precipitation, repetitive construction traffic or other factors. If unworkable conditions develop, workability may be improved by scarifying and drying.

Excavation

It is anticipated that excavations for the proposed construction can be accomplished with conventional earthmoving equipment.

The bottom of excavations should be thoroughly cleaned of loose soils and disturbed materials prior to backfill placement and/or construction.

We recommend that the walls of the proposed excavations for the trenches be shored or sloped in conformance with OSHA excavation and trench safety standards. Based on the soils encountered onsite, it is our opinion that these soils can be classified as OSHA Type B or C, depending on the materials exposed during grading. If any excavation is extended to a depth of more than 20 feet, it will be necessary to have the side slopes designed by a professional engineer.

Soils from the excavation should not be stockpiled higher than six 6 feet or within ten 10 feet of the edge of an open trench. Construction of open cuts adjacent to existing structures, including underground pipes, is not recommended within a 1½ H:1V plane extending beyond and down from the perimeter of the structure.

It may be necessary for the contractor to retain a geotechnical engineer to monitor the soils exposed in all excavations and provide engineering services for slopes. This will provide an opportunity to monitor the soils encountered and to modify the excavation slopes as necessary. It also offers an opportunity to verify the stability of the excavation slopes during construction.

Individual contractors are responsible for designing and constructing stable, temporary excavations. Excavations should be sloped or shored in the interest of safety following local, and federal regulations, including current OSHA excavation and trench safety standards.

Fill Materials and Placement

All fill materials should be inorganic soils free of vegetation, debris, and fragments larger than three inches in size. Pea gravel or other open-graded materials should not be used as fill or backfill without the prior approval of the geotechnical engineer.

Due to the on-site soil's expansion potential, they are not recommended for use as engineered fill beneath foundations. Such soils may be used as fill materials for the following:

- general site grading
- exterior slabs
- roadway areas

Imported low volume change soils should be used as engineered fill supporting shallow foundations.

Imported soils for use as fill material within proposed structure areas should conform to low volume change materials as indicated in the following specifications:

Gradation	Percent Finer by Weight (ASTM C 136)
3"	100
No. 4 Sieve	50-100
No. 200 Sieve	10-30

- Liquid Limit .... 30 (max)
- Plasticity Index .... 15 (max)
- Maximum Expansion Index* .... 20 (max)

*ASTM D4829

The contractor shall notify the Geotechnical Engineer of import sources sufficiently ahead of their use so that the sources can be observed and approved as to the physical characteristic of the import material. For all import material, the contractor shall also submit current verified reports from a recognized analytical laboratory indicating that the import has a "not applicable" (Class S0) potential for sulfate attack based upon current ACI criteria and is "mildly corrosive" to ferrous metal and copper. The reports shall be accompanied by a written statement from the contractor that the laboratory test results are representative of all import material that will be brought to the job.

Engineered fill should be placed and compacted in horizontal lifts, using equipment and procedures that will produce recommended moisture contents and densities throughout the lift. Fill lifts should not exceed 10 inches loose thickness.

Compaction Requirements

Recommended compaction and moisture content criteria for engineered fill materials are as follows:

Material Type and Location	Per the Modified Proctor Test (ASTM D 1557)		
	Minimum Compaction Requirement	Range of Moisture Contents for Compaction Above Optimum	
		Minimum	Maximum
Approved imported low volume change fill soils:			
Beneath foundations:	90%	-2%	+2%
Utility trenches (structural areas)*:	90%	-2%	+2%
On-site native soils			
Beneath access roads:	95%	+1%	+4%
Utility trenches (Landscape areas):	90%	+1%	+4%
Exterior slabs:	90%	+1%	+4%
Miscellaneous backfill:	90%	+1%	+4%
* Upper 12 inches should be compacted to 95% within structural areas.			

Grading and Drainage

Positive drainage should be provided during construction and maintained throughout the life of the development. Infiltration of water into utility trenches or foundation excavations should be prevented during construction. Backfill against foundations and in utility line trenches should be well compacted and free of all construction debris to reduce the possibility of moisture infiltration.

We recommend a minimum horizontal setback distance of 10 feet from the perimeter of any building and the high-water elevation of the nearest storm-water retention basin.

Utility Trenches

It is anticipated that the on-site soils will provide suitable support for underground utilities and piping that may be installed. Any soft and/or unsuitable material encountered at the bottom of excavations should be removed and be replaced with an adequate bedding material. A non-expansive granular material with a sand equivalent greater than 30 should be used for bedding and shading of utilities, unless allowed or specified otherwise by the utility manufacturer.

On-site materials are considered suitable for backfill of utility and pipe trenches from one foot above the top of the pipe to the final ground surface, provided the material is free of organic matter and deleterious substances. Imported low volume change soils should be used for trench backfill in structural areas.

Trench backfill should be mechanically placed and compacted as discussed earlier in this report. Compaction of initial lifts should be accomplished with hand-operated tampers or other lightweight compactors. If trenches are placed beneath footings, the backfill should satisfy the gradation and expansion index requirements of engineered fill discussed in this report. Flooding or jetting for placement and compaction of backfill is not recommended.

Construction Considerations

Upon completion of filling and grading, care should be taken to maintain the subgrade moisture content prior to construction. Construction traffic over the completed subgrade should be avoided to the extent practical. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. If the subgrade should become desiccated, saturated, or disturbed, the affected material should be removed, or these materials should be scarified, moisture conditioned, and recompacted prior to construction.

On-site clay and silt soils may pump and unstable subgrade conditions could develop during general construction operations, particularly if the soils are wetted and/or subjected to repetitive construction traffic. The use of light construction equipment would aid in reducing subgrade disturbance. The use of remotely operated equipment, such as a backhoe, would be beneficial to perform cuts and reduce subgrade disturbance.

Should unstable subgrade conditions develop stabilization measures will need to be employed. Stabilization measures may include placement of aggregate base and multi-axial geogrid. Use of lime, fly ash, kiln dust or cement could also be considered as a stabilization technique. Laboratory evaluation is recommended to determine the effect of chemical stabilization on subgrade soils prior to construction.

We recommend that the earthwork portion of this project be completed during extended periods of dry weather if possible. If earthwork is completed during the wet season (typically November through April) it may be necessary to take extra precautionary measures to protect subgrade soils. Wet season earthwork operations may require additional mitigative measures beyond that which would be expected during the drier summer and fall months. This could include diversion of surface runoff around exposed soils and draining of ponded water on the site. Once subgrades are established, it may be necessary to protect the exposed subgrade soils from construction traffic.

Construction Observation and Testing

The exposed subgrade and each lift of compacted fill should be tested, evaluated, and reworked, as necessary, until approved by the geotechnical engineer's representative prior to placement of additional lifts. We recommend that each lift of fill be tested for density and moisture content at a frequency of one test for every 2,500 square feet of compacted fill in the structural areas. We recommend one density and moisture content test for every 50 linear feet of compacted utility trench backfill. This testing frequency criteria may be adjusted during construction as allowed by the geotechnical engineer of record.

Construction site safety is the sole responsibility of the contractor who controls the means, methods, and sequencing of construction operations. Under no circumstances shall the information provided herein be interpreted to mean Terracon is assuming responsibility for construction site safety, or the contractor's activities; such responsibility shall neither be implied nor inferred.

The geotechnical engineer should be retained during the construction phase of the project to observe earthwork and to perform necessary tests and observations during subgrade preparation; proof-rolling; placement and compaction of controlled compacted fills; backfilling of excavations to the completed subgrade.

FOUNDATIONS

The proposed batteries, transformers, and associated equipment may be supported on mat foundations bearing on engineered fill. Recommendations for foundations for the proposed structures and related structural elements are presented in the following paragraphs.

If the site has been prepared in accordance with the requirements noted in **Earthwork**, the following design parameters are applicable for shallow foundations.

Mat Foundation Design Recommendations

DESCRIPTION	RECOMENDATION
Foundation Type	Mat foundations
Bearing Material[3]	A minimum 2-foot of engineered fill beneath the bottom of the foundations, or 4 feet below existing grades, whichever is greater. Low volume change materials should be used as engineered fill for support of proposed mat.
Allowable Bearing Pressure[1,7]	1-inch settlement ■ 1,800 psf for mat foundation (Up to 10 feet wide) ■ 1,000 psf for mat foundation (Up to 20 feet wide) ■ 800 psf for mat foundation (Up to 30 feet wide) 2-inch settlement ■ 4,000 psf for mat foundation (Up to 10 feet wide) ■ 2,700 psf for mat foundation (Up to 20 feet wide) ■ 1,900 psf for mat foundation (Up to 30 feet wide)
Minimum Foundation Width	2 feet
Ultimate Coefficient of Sliding Friction [4]	0.30
Minimum Embedment Depth Below Finished Grade	12 inches
Estimated Total Settlement from Structural Loads [2]	See **Allowable Bearing Pressure**
Estimated Differential Settlement[2,6]	½ of total settlement

1. The maximum net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation. An appropriate factor of safety has been applied.
2. Unsuitable or loose/soft, dry, and low-density soils should be removed and replaced per the recommendations presented in the **Earthwork**.
3. Use of passive earth pressures require the sides of the excavation for the spread footing foundation to be nearly vertical and the concrete placed neat against these vertical faces or that the footing forms be removed and compacted structural fill be placed against the vertical footing face.
4. Can be used to compute sliding resistance where foundations are placed on suitable soil/materials. Should be neglected for foundations subject to net uplift conditions.
5. For sloping ground, maintain depth below the lowest adjacent exterior grade within 5 horizontal feet of the structure. The designer should select an appropriate factor of safety during design.
6. Differential settlements are as measured over a span of 40 feet.
7. Maximum width is based on settlement analysis with allowable settlement of 1 and 2 inches.

Settlement calculations were performed utilizing Westergaard and Hough's methods[5] to estimate the static settlement for various foundation widths with an allowable settlement of 1 and 2 inches.

[5] FHWA Geotechnical Engineering Circular No. 6 – Shallow Foundations, FHWA-SA-02-054.

Since there are several factors that will control the design of mat foundations besides vertical load, Terracon should be consulted when the final foundation depth and width are determined to assist the structural designer in the evaluation of anticipated settlement.

For structural design of mat foundations, a modulus of subgrade reaction (Kv_1) of 120 pounds per cubic inch (pci) may be used. Other details including treatment of loose foundation soils, superstructure reinforcement and observation of foundation excavations as outlined in the Earthwork section of this report are applicable for the design and construction of a mat foundation at the site.

The subgrade modulus (K_v) for the mat is affected by the size of the mat foundation and would vary according the following equation:

$$K_v = K_{v1}/B$$

Where: K_v is the modulus for the size footing being analyzed
B is the width of the mat foundation.

Shallow Foundation Design Considerations

Finished grade is defined as the lowest adjacent grade within five feet of the foundation for perimeter (or exterior) footings.

The allowable foundation bearing pressure applies to dead loads plus design live load conditions. The design bearing pressure may be increased by one-third when considering total loads that include wind or seismic conditions. The weight of the foundation concrete below grade may be neglected in dead load computations.

Foundations should be reinforced as necessary to reduce the potential for distress caused by differential foundation movement. The use of joints at openings or other discontinuities in masonry walls is recommended.

Foundation excavations should be observed by the geotechnical engineer. If the soil conditions encountered differ significantly from those presented in this report, supplemental recommendations will be required.

DEEP FOUNDATIONS

The proposed transmission tower can be supported on drilled shafts. The location of the proposed transmission tower was not available at the time of preparation of this report. Based on correspondence with S&L, we understand that the transmission tower may be situated within the central area of the site. Design recommendations for foundations for the proposed structures and related structural elements are presented in the following paragraphs.

Total required embedment of the drilled shafts should be determined by the structural engineer based on structural loading and parameters provided in this report.

Drilled Shaft Axial Capacity

The allowable axial capacity for a range of drilled shafts diameters was evaluated and is presented in the graph provided in the **Supporting Documents** section of this report. The allowable total downward (compressive) capacity is based on a factor of safety of 2.5 for side resistance and 3.0 for end bearing. The analysis considered the depth to top of shaft to be 2 feet below existing ground surface. The depth below ground surface indicated in the graphs is referenced from the existing ground surface at the site at the time of the field exploration. The capacity presented is based on a minimum shaft spacing of 3 shaft diameters. Allowable tension capacity may be taken as 60 percent of the allowable compressive capacity, plus the weight of the shaft. Tensile reinforcement should extend to the bottom of shafts subjected to uplift loading.

Drilled Shaft Lateral Capacity

The required depths of shaft embedment should also be determined for design axial loads, lateral loads, and overturning moments to determine the most critical design condition. To support the designer, parameters for use in MFAD software have been tabulated and are presented in the following table.

MFAD 5.0 Recommended Engineering Properties of Soils				
Top Depth **Bottom Depth**	**Effective Unit Weight (pcf)**	**MFAD Soil Group**	**Cohesion (psf)**	**MFAD Modulus of deformation (ksi)**
2 10	115	CLAY	1,000	0.65
10 30	120	CLAY	1,000	0.65
30 45	120	CLAY	2,000	1.30
45 50	63	CLAY	3,000	1.95

It should be noted that the load capacities provided herein are based on the stresses induced in the supporting soils. The structural capacity of the shafts should be checked to assure that they can safely accommodate the combined stresses induced by axial and lateral forces. Furthermore, the response of the drilled shaft foundations to lateral loads is dependent upon the soil/structure interaction as well as the shaft's actual diameter, length, stiffness and "fixity" (fixed or free-head condition).

Lateral and axial capacity of soils within the upper 2 feet should be neglected due to utilities and disturbance around piers. We recommend that Terracon review the final drilled shaft design to verify that sufficient embedment is achieved.

Drilled Shaft Construction Considerations

All shafts should be reinforced full-depth for the applied axial, lateral and uplift stresses imposed. If multiple shafts are proposed at the transmission tower location, special sequencing of drilled shaft construction should be specified when the center to center spacing between adjacent shafts is less than three diameters. A minimum of 24 hours should be allowed between placement of concrete and initiation of drilling in shafts less than five diameters (center to center spacing) apart from each other.

Drilling to design depths should be possible with conventional single flight power augers. Formation of mushrooms or enlargements at the tops of shafts should be avoided during shaft drilling. If mushrooms develop at the tops of the shafts during drilling, sono-tubes should be placed at the shaft tops to help isolate the shafts.

Groundwater was encountered in some of the exploratory borings. Therefore, seepage or groundwater may be encountered during drilling for the shafts. To control groundwater seepage, the use of temporary steel casing and/or slurry drilling procedures may be required for construction of the drilled shaft foundations. The drilled shaft contractor and foundation design engineer should be informed of these risks.

If shafts are constructed below the groundwater level, the “Wet” shafts should be constructed by slurry displacement techniques. In this process, the shaft excavation is filled with approved polymer-based slurry to counter-balance the hydraulic forces below the water level and stabilize the wall of the shaft. Concrete would then be placed using a tremie extending to within 6 inches of the shaft base of the slurry-filled excavation. The tremie remains inserted several feet into the fresh concrete as it displaces the slurry upward and until placement is complete. The slurry should have a sand content no greater than 1% at the time concrete placement commences. The maximum unit weight of the slurry should be established in consultation with Terracon.

For drilled shaft depths above the depth of groundwater, temporary steel casing may be required to properly drill and clean shafts prior to concrete placement. If disturbed soils are present at the bottom of the drilled shafts, the sloughed materials must be removed, and bottom should be cleaned.

If casing is used for foundation construction, it should be withdrawn in a slow continuous manner maintaining a sufficient head of concrete to prevent caving or the creation of voids in pier concrete. Foundation concrete should have a relatively high fluidity when placed in cased pier holes or through a tremie. Foundation concrete with slump in the range of 6 to 8 inches is recommended when temporary casing is utilized.

Foundation concrete should be placed immediately after completion of drilling and cleaning. If foundation concrete cannot be placed in dry conditions, a tremie should be used for concrete placement. Due to potential sloughing and raveling, foundation concrete quantities may exceed calculated geometric volumes.

Free-fall concrete placement in drilled shafts will only be acceptable if provisions are taken to avoid striking the concrete on the sides of the hole or reinforcing steel. The use of a bottom-dump hopper, or an elephant's trunk discharging near the bottom of the hole where concrete segregation will be minimized, is recommended.

Drilled shaft bearing surfaces must be cleaned prior to concrete placement. A representative of the geotechnical engineer should observe the bearing surface and foundation shaft configuration. If the subsurface soil conditions encountered differ significantly from those presented in this report, supplemental recommendations may be required.

We recommend that all drilled shaft installations be observed on a full-time basis by an experienced geotechnical engineer in order to evaluate that the soils encountered are consistent with the recommended design parameters.

The contractor should check for gas and/or oxygen deficiency prior to any workers entering the excavation for observation and manual cleanup. All necessary monitoring and safety precautions as required by OSHA, State or local codes should be strictly enforced.

LATERAL EARTH PRESSURES

Design Parameters

For engineered fill comprised of on-site soils or imported low volume change materials (required behind retaining walls) above any free water surface, recommended equivalent fluid pressures for unrestrained foundation elements are:

ITEM	VALUE[a, b]
Active Case	38 psf/ft[c]
Passive Case	375 psf/ft
At-Rest Case	58 psf/ft
Surcharge Pressure	0.32 x (Surcharge)
Coefficient of Friction	0.35

[a]Note: The values are based on low volume change engineered fill materials used as backfill behind retaining walls.
[b]Note: Uniform, horizontal backfill, compacted to at least 90% of the ASTM D 1557 maximum dry density, rendering a maximum unit weight of 120 pcf.
[c]Note: Earth pressures should be increased by 40 percent for a slope of 2H:1V behind walls and should be increased by 120 percent for a slope of 1.5H:1V.

The lateral earth pressures herein do not include any factor of safety and are not applicable for submerged soils/hydrostatic loading. Additional recommendations may be necessary if such conditions are to be included in the design.

Total lateral earth pressures acting on the wall, where it is retaining greater than 6 feet, during a seismic event should include the active static forces and a dynamic increment. The active dynamic increment should be applied to unrestrained walls as a resultant force acting at 0.6H height from the base of the wall. Such increment should be added to the static earth pressures. The dynamic lateral earth resultant force (for a 0.56g peak ground acceleration estimated based on the current 2019 California Building Code) is $13H^2$ (in units of pounds per linear foot (plf), where H (in units of feet) is the height of the soil behind the wall.

Adequate drainage should be provided behind the retaining walls to collect water from irrigation, landscaping, surface runoff, or other sources, to achieve a free-draining backfill condition. The wall back drain should consist of Class 2 permeable materials[3] that are placed behind the entire wall height to within 18 inches of ground surface at the top of the wall. As a minimum, the width of Class 2 permeable materials behind the wall should be two feet. As an alternative, drainage panels/mats may be used in lieu of the Class 2 permeable materials. Water collected by the back drain should be directed to an appropriate outlet, such as perforated pipes or weep holes, for disposal.

Fill against foundation and retaining walls should be compacted to densities specified in the Earthwork section of this report. Compaction of each lift adjacent to walls should be accomplished with hand-operated tampers or other lightweight compactors.

[3] In accordance with the requirements and specifications of the State of California Department of Transportation.

The design of any shoring system should consider surcharge loads imposed by the existing structures and vehicular loads in the vicinity of the shoring. In general, surcharge loads should be considered where they are located within a horizontal distance behind the shoring equal to the height of the shoring.

Surcharge loads acting at the top of the shoring should be applied to the shoring over the backfill as a uniform pressure over the entire shoring height and should be added to the static earth pressures. Surcharge stresses due to point loads, line loads, and those of limited extent, such as compaction equipment, should be evaluated using elastic theory.

The design of the shored excavation should be performed by an engineer knowledgeable and experienced with the on-site soil conditions. The contractor should be aware that slope height, slope inclination or excavation depths should in no case exceed those specified in local, state or federal safety regulations, e.g. OSHA Health and Safety Standards for Excavation, 29 CFR Part 1926, or successor regulations. Such regulations are strictly enforced and, if not followed, the owner or the contractor could be liable for substantial penalties.

ACCESS ROADWAYS

Compacted Native Soils Access Road Design Recommendations

Based upon the soil conditions encountered in the test borings, the use of on-site soils for construction of on-site roads is considered acceptable. Without the use of asphalt concrete or other hardened material to surface the roadways, there is an increased potential for erosion and deep rutting of the roadway to occur, however, post construction traffic is anticipated to only consist of pickup trucks for operations and maintenance personnel. Therefore, construction of the un-surfaced native roadways should consist of a minimum of 10-inches of compacted on-site soils.

It is our understanding that proposed compacted native roadway grades will match adjacent existing grades so that the existing natural drainage patterns are generally unchanged. The un-surfaced roads are expected to function with periodic maintenance.

Aggregate Surface Roadway Design Recommendations

Aggregate surface roadway design was conducted in general accordance with the Army Corps of Engineers (ACOE) Technical Manual TM-5-822, Design of Aggregate Surface Roads and Airfields (1990). The design was based on Category III, traffic containing as much as 15% trucks, but with not more than 1% of the total traffic composed of trucks having three or more axles (Group 3 vehicles), and Road Class G (Under 70 vehicles per day). This assumed traffic loading is for the operations of the proposed facility but not for construction traffic. Based on the Category and Road Class, a Design Index of 1 was utilized, along with a correlated CBR of 5. Terracon should be contacted if significant changes in traffic loads or in the characteristics described are anticipated.

As a minimum, the aggregate surface course should have a minimum thickness of 6 inches and should be constructed over a minimum of 10 inches of scarified, moisture conditioned, and compacted native soils to 90% of the maximum dry density using ASTM D 1557. The recommended thicknesses should be measured after full compaction. The width of the roadway should extend a minimum distance of 1 foot on each side of the desired surface width.

It is our understanding that aggregate surfaced roads and parking areas will be utilized during the construction of this project. Aggregate materials should conform to the specifications of Class II aggregate base in accordance with the requirements and specifications of the State of California Department of Transportation (Caltrans), or other approved local governing specifications.

Positive drainage should be provided during construction and maintained throughout the life of the roadways. Proposed roadway design should maintain the integrity of the road and eliminate ponding.

Roadway Design and Construction Considerations

Regardless of the design, un-surfaced roadways will display varying levels of wear and deterioration. We recommend an implementation of a site inspection program at a frequency of at least once per year to verify the adequacy of the roadways. Preventative measures should be applied as needed for erosion control and re-grading. An initial site inspection should be completed approximately three months following construction.

Preventative maintenance should be planned and provided for through an on-going management program to enhance future roadway performance. Preventative maintenance activities are intended to slow the rate of deterioration, and to preserve the roadway investment.

Surfacing materials should not be placed when the surface is wet. Surface drainage should be provided away from the edge of roadways to reduce lateral moisture transmission into the subgrade.

If rut depths become excessive as construction work progresses, re-grading and re-compaction should be performed as necessary. Care should be taken to reduce or eliminate trafficking of the unpaved access road when the subgrade is wet as this will result in accelerated rutting conditions. Scarification, moisture treatment as necessary, and re-compaction of the roadways will likely be necessary as the roadways deteriorate.

Materials and construction of roadways for the project should be in accordance with the requirements and specifications of the California Department of Transportation or the applicable local governing body.

GENERAL COMMENTS

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Natural variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Terracon should be retained as the Geotechnical Engineer, where noted in this report, to provide observation and testing services during pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence or collaboration through this system are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. The findings and recommendations presented in this report were prepared in a manner consistent with the standards of care and skill ordinarily exercised by members of its profession completing similar studies and practicing under similar conditions in the geographic vicinity and at the time these services have been performed. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly impact excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety, and cost estimating including, excavation support, and dewatering requirements/design are the responsibility of others. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing.

ATTACHMENTS

EXPLORATION AND TESTING PROCEDURES

Field Exploration

Boring ID	Depth (feet)	Location
B-1 to B-3, B-7 to B-10, B-15 to B-17, B-20, B-21, B-25	41½ to 101½	Battery storage and transformer areas
P-1 to P-8	5 to 10	Potential infiltration areas
B-4 to B-6, B-11 to B-14, B-19, B-24	51 to 91½	On or along existing hillside
Note: Proposed borings B-18, B-22, B-23, and B-26 were not drilled based on direction from the client.		

Boring Layout and Elevations: Boring layout was provided by S&L. Several locations were shifted by Terracon during site reconnaissance based on drill rig accessibility. Coordinates were obtained with a handheld GPS unit (estimated horizontal accuracy of about ±10 feet) and elevations are based on a site topographic KMZ file (1-foot contours) provided by S&L. If a more precise boring layout is desired, we recommend borings be surveyed following completion of fieldwork.

Subsurface Exploration Procedures: We advanced the borings with a truck-mounted drill rig using hollow stem augers. Four samples were generally obtained in the upper 10 feet of the borings and at intervals of 5 feet thereafter. A standard 2-inch outer diameter split-barrel sampling spoon is driven into the ground by a 140-pound automatic hammer falling a distance of 30 inches. The number of blows required to advance the sampling spoon the last 12 inches of a normal 18-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values, are indicated on the boring logs at the test depths. A 3-inch O.D. split-barrel sampling spoon with 2.5-inch I.D. ring lined sampler was also used for sampling. Ring-lined, split-barrel sampling procedures are similar to standard split spoon sampling procedure; however, blow counts are typically recorded for 6-inch intervals for a total of 18 inches of penetration. We observed and recorded groundwater levels during drilling and sampling.

In accordance with Orange County well permit requirements, all borings extending beyond 50 feet or into groundwater regardless of depth were backfilled cement grout slurry. All other borings were backfilled with auger cuttings. The samples were placed in appropriate containers and taken to our soil laboratory for testing and classification by a Geotechnical Engineer. Our field geologist prepared field boring logs as part of the excavation operations. These field logs include visual classifications of the materials encountered during drilling and our interpretation of the subsurface conditions between samples. Final boring logs were prepared from the field logs. The final logs represent the Geotechnical Engineer's interpretation of the field logs and include modifications based on observations and tests of the samples in our laboratory.

Laboratory Testing

The project engineer reviewed the field data and assigned laboratory tests to understand the engineering properties of the various soil and rock strata, as necessary, for this project. Procedural standards noted below are for reference to methodology in general. In some cases, variations to methods were applied because of local practice or professional judgment. Standards noted below include reference to other, related standards. Such references are not necessarily applicable to describe the specific test performed.

- ASTM D2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- ASTM D4318 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- ASTM D1140 Standard Test Methods for Determining the Amount of Material Finer than 75-µm (No. 200) Sieve in Soils by Washing
- ASTM D3080 Standard Test Method for Direct Shear Test of Soils Under Consolidated Drained Conditions
- ASTM D1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
- ASTM D4829 Standard Test Method for Expansion Index of Soils
- ASTM D2844 Standard Test Method for Resistance R-Value and Expansion Pressure of Compacted Soils
- ASTM D2850 Standard Test Method for Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils
- Corrosivity testing included pH, chlorides, sulfates, and electrical lab resistivity

The laboratory testing program often included examination of soil samples by an engineer. Based on the material's texture and plasticity, we described and classified the soil samples in accordance with the Unified Soil Classification System.

SITE LOCATION AND EXPLORATION PLANS

SITE LOCATION

Broad Reach Power Compass BESS ■ San Juan Capistrano, CA

November 3, 2021 ■ Terracon Project No. 60215170

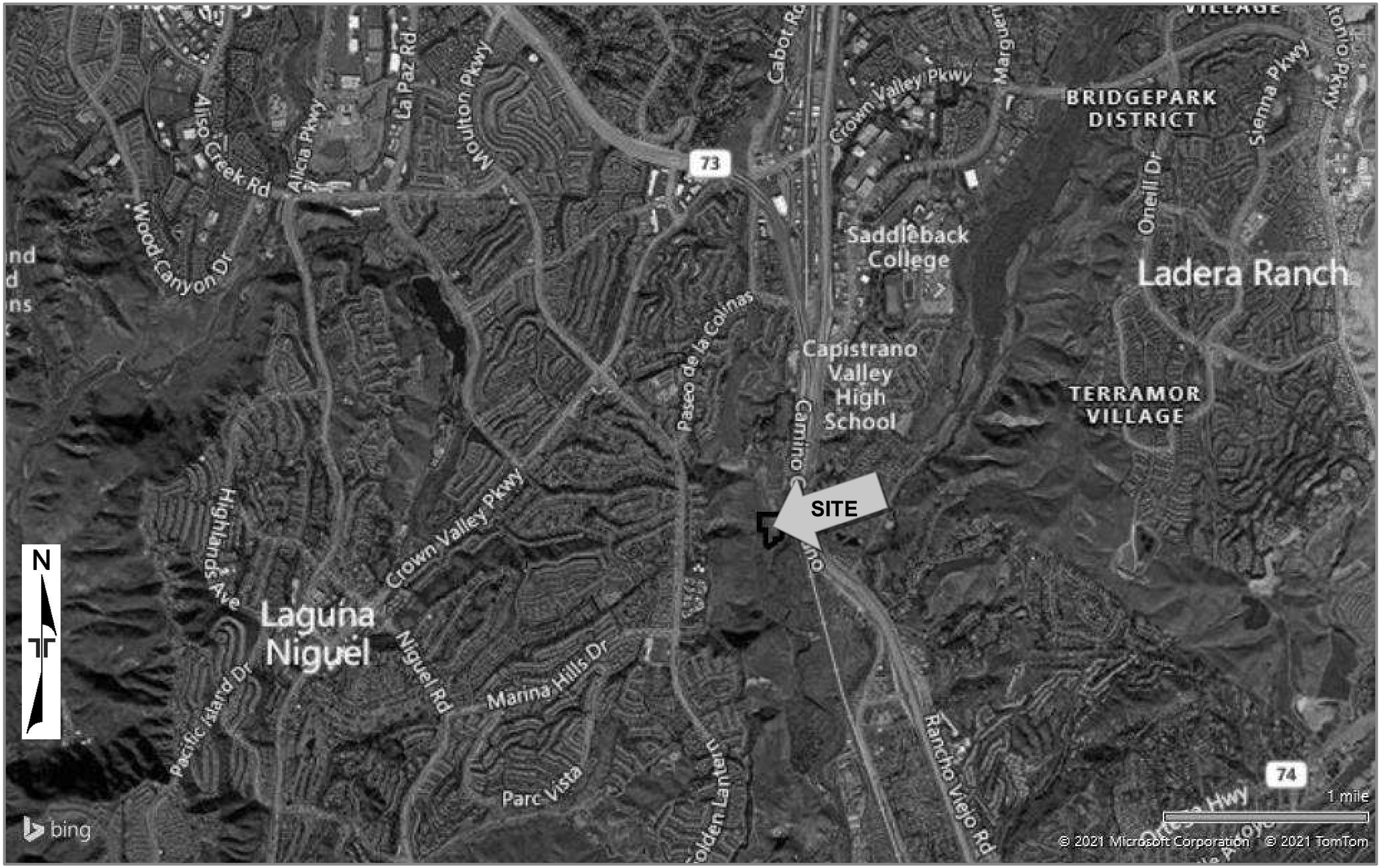
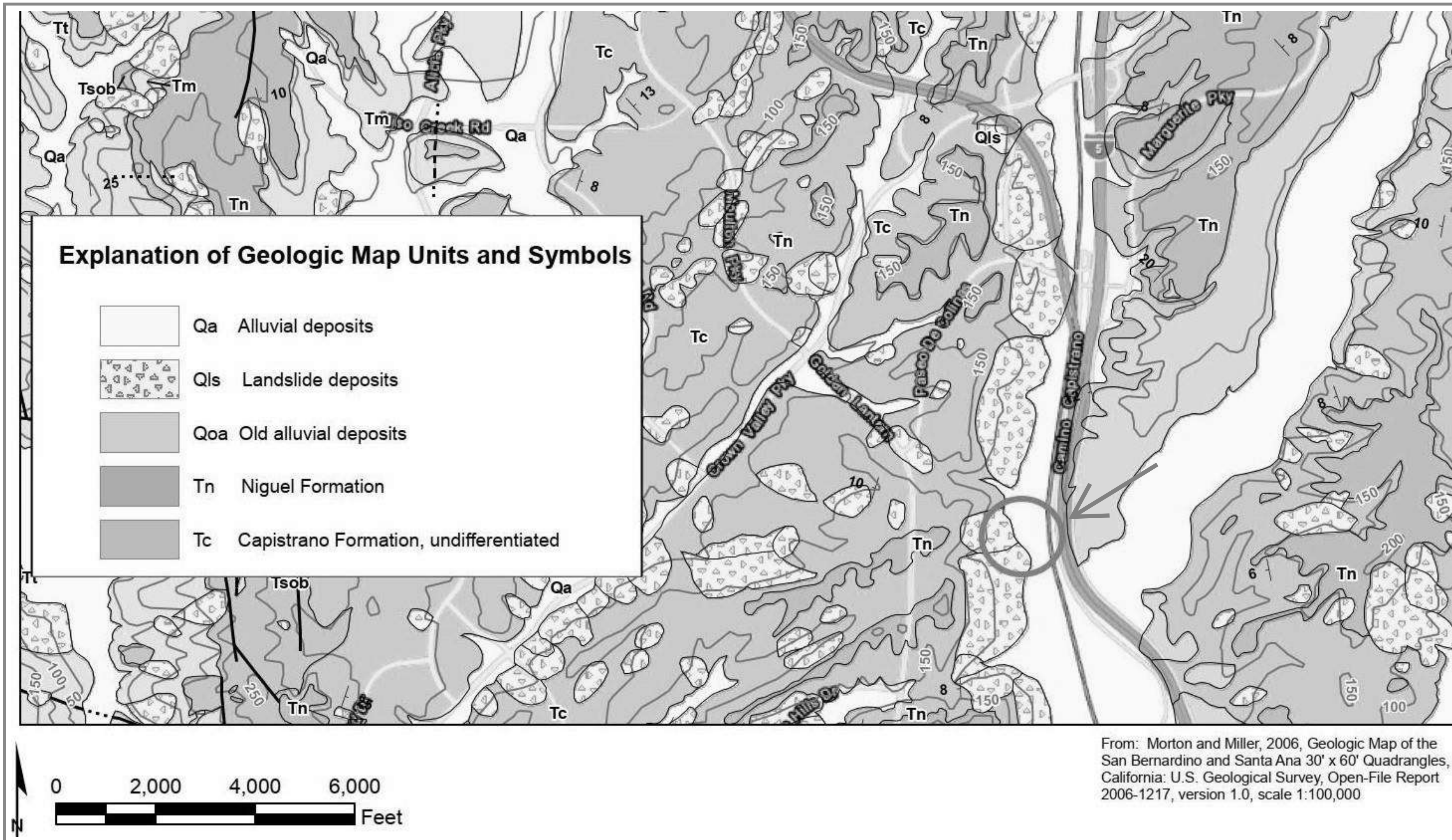


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY QUADRANGLES INCLUDE: SAN JUAN CAPISTRANO, CA (1/1/1981).



From: Morton and Miller, 2006, Geologic Map of the San Bernardino and Santa Ana 30' x 60' Quadrangles, California: U.S. Geological Survey, Open-File Report 2006-1217, version 1.0, scale 1:100,000

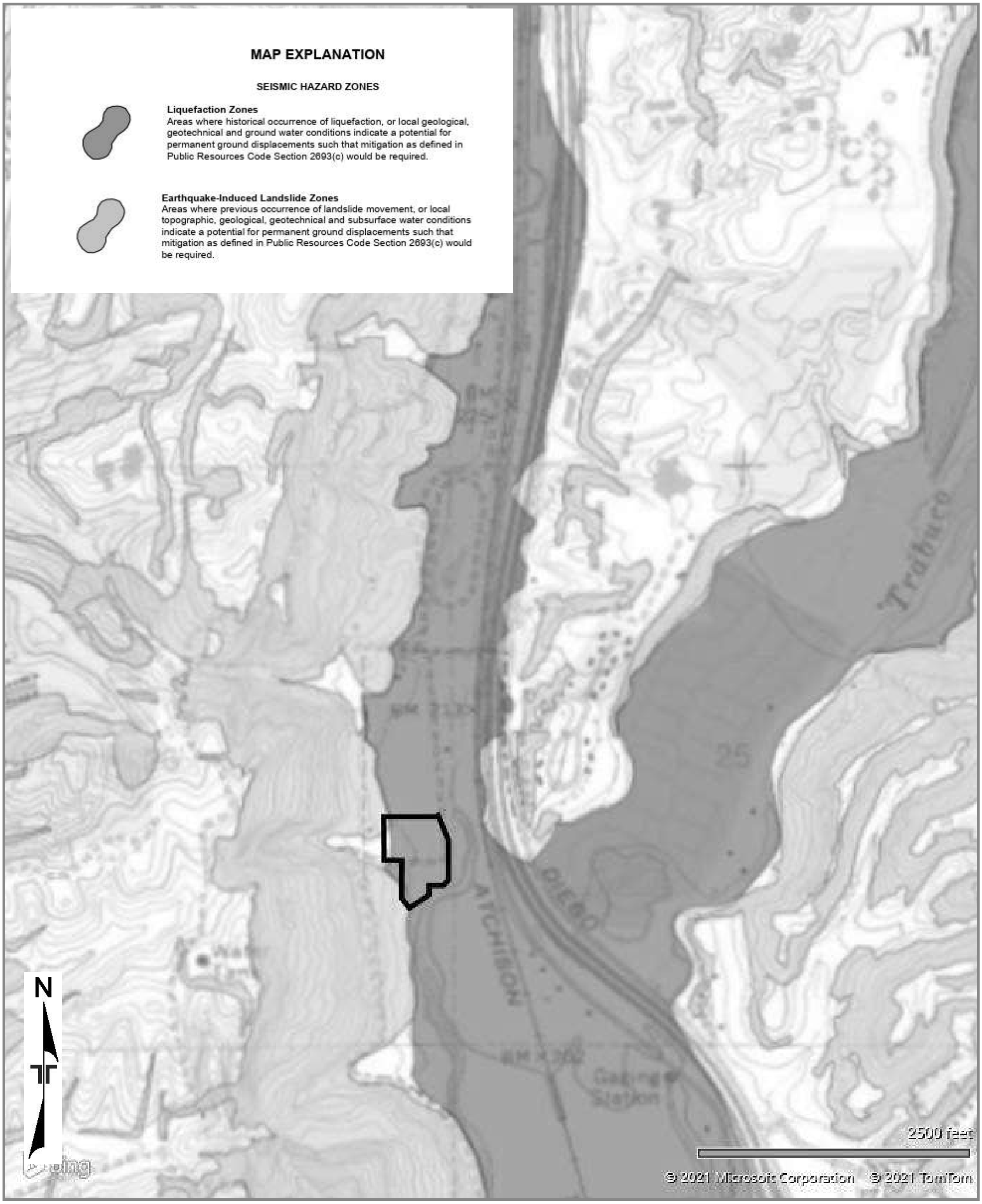


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

EXPLORATION PLAN
Broad Reach Power Compass BESS ■ San Juan Capistrano, CA
November 3, 2021 ■ Terracon Project No. 60215170

Terracon GeoReport

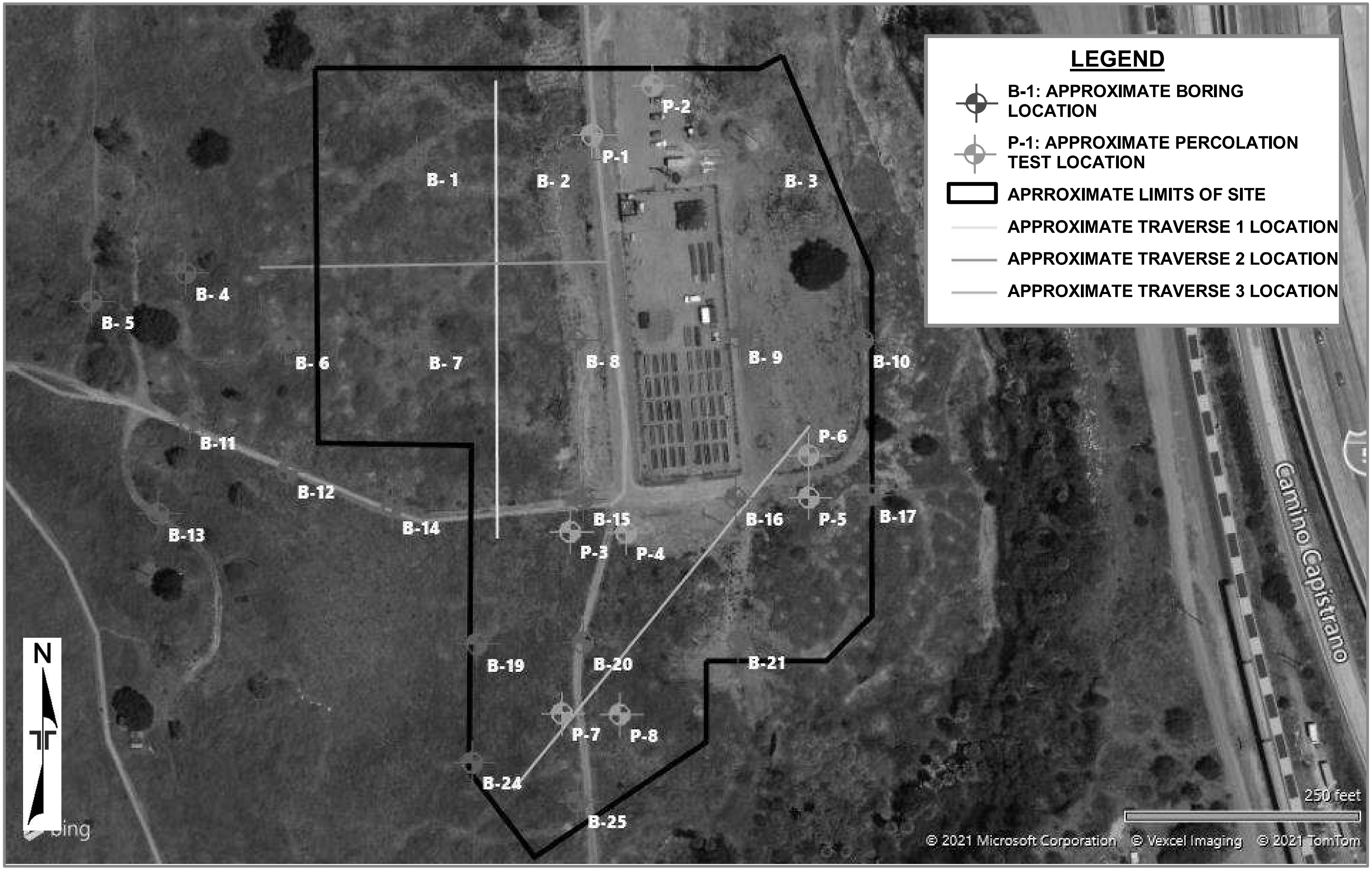


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

EXPLORATION RESULTS

BORING LOG NO. B- 1

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5328° Longitude: -117.6781°

Surface Elev.: 217 (Ft.)

DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
LEAN CLAY WITH SAND (CL), olive-brown to brown					64						37-22-15	85
stiff				7-5-5								
trace silt, olive-brown to gray-brown	5			3-5-6					18.7	100		
white mottling				4-6-7								
	10			6-8-8								
	15			4-5-6								
soft to medium stiff	20			2-2-2 N=4								
	25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-17-2021	Boring Completed: 09-17-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 1

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5328° Longitude: -117.6781°

Surface Elev.: 217 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY WITH SAND (CL), olive-brown to brown *(continued)* medium stiff to stiff				2-2-6 N=8								
	wet, stiff	30			2-4-6 N=10								
	medium stiff	35			1-3-4 N=7								
	stiff	40			2-4-5 N=9								
	41.5 / 175.5												
	Boring Terminated at 41.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-17-2021	Boring Completed: 09-17-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 2

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5328° Longitude: -117.6776°

Surface Elev.: 210 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SILTY CLAY (CL-ML), trace sand, olive-brown to brown													
	olive-brown to gray-brown, very stiff					15-14-14					13.4	110		
	stiff		5			5-7-7							27-20-7	
7.5	**LEAN CLAY (CL)** trace silt and sand, olive-brown to gray-brown, stiff	202.5				3-5-7								
			10			4-5-8					26.7	98		
	medium stiff		15			3-4-4					33.9	88		
			20			2-4-4								
			25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-17-2021	Boring Completed: 09-17-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 2

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5328° Longitude: -117.6776°

Surface Elev.: 210 (Ft.)

GRAPHIC LOG	DEPTH / Description / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL) *(continued)* medium stiff			X	2-3-4 N=7								
		30		X	2-3-3 N=6								
	31.5 — 178.5												
	SILTY SAND (SM), gray-brown												
	loose	35		X	2-3-4 N=7								25
	40.0 — 170	40											
	LEAN CLAY (CL), trace sand, olive-brown to gray-brown, stiff			X	3-4-6 N=10								
	41.5 — 168.5												
	Boring Terminated at 41.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-17-2021	Boring Completed: 09-17-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 3

PROJECT: Broad Reach Power Compass BESS

**CLIENT: Sargent & Lundy LLC
Chicago, IL**

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5328° Longitude: -117.6769°

Surface Elev.: 209 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SILT WITH SAND (ML), trace clay, olive-brown to light-brown													
2.5		206.5												
	LEAN CLAY WITH SAND (CL), olive-brown to dark-brown, very stiff					9-16-16								
			5			5-8-12					17.4	103		
7.5		201.5												
	LEAN CLAY (CL), white mottling trace silt and sand, olive-brown to dark-brown, very stiff					10-13-15							34-22-12	
			10			8-13-20					22.5	101		
			15			5-8-10 N=18								
			20			9-7-12								
			25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

At completion of drilling

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-17-2021	Boring Completed: 09-17-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 3

PROJECT: Broad Reach Power Compass BESS

**CLIENT: Sargent & Lundy LLC
Chicago, IL**

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5328° Longitude: -117.6769°

Surface Elev.: 209 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL), white mottling *(continued)* stiff				4-5-7 N=12								
		30			4-6-8					33.6	88		
	and gray-brown, medium stiff	35			2-2-3 N=5								
	stiff	40			4-6-6								
	wet, medium stiff	45			2-2-5 N=7								
	50.0 / 159	50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

At completion of drilling

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-17-2021	Boring Completed: 09-17-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 3

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5328° Longitude: -117.6769°

Surface Elev.: 209 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	TEST TYPE	COMPRESSIVE STRENGTH (tsf)	STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SANDY LEAN CLAY (CL), gray-brown, stiff					5-8-8								
51.5	**POORLY GRADED SAND WITH SILT (SP-SM)**, gray-brown	157.5												
	medium dense		55			7-7-4 N=11								10
	trace clay		60			9-14-15								
65.0	**SANDY LEAN CLAY (CL)**, dark-brown to gray-brown, medium stiff	144	65			1-2-3 N=5								
	stiff		70	▽		4-7-9								
			75											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ *At completion of drilling*

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-17-2021	Boring Completed: 09-17-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 3

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 33.5328° Longitude: -117.6769° Surface Elev.: 209 (Ft.) DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SANDY LEAN CLAY (CL), dark-brown to gray-brown, medium stiff *(continued)* 76.5 / 132.5				2-5-5 N=10								
	Boring Terminated at 76.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

At completion of drilling

1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-17-2021	Boring Completed: 09-17-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 4

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5325° Longitude: -117.6789°

Surface Elev.: 247 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LANDSLIDE DEPOSITS (Qls), SILTY CLAYEY SAND, trace gravel, light brown, loose					4-5-7					5.3			
5.0	**LANDSLIDE DEPOSITS (Qls), SILT**, trace sand, olive-brown to gray-brown, very stiff	242	5			5-15-15							39-26-13	
						11-16-24								90
	white mottling and orange rust staining		10			9-14-21					16.7	99		
15.0	**LANDSLIDE DEPOSITS (Qls), SILTY CLAY (CL-ML)**, trace sand, olive-brown with white mottling and orange rust staining, very stiff	232	15			9-15-22								
20.0	**LEAN CLAY (CL)**, trace silt and sand, olive-brown to gray-brown, stiff	227	20			2-3-8 N=11								
25.0		222	25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-10-2021	Boring Completed: 09-10-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 4

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5325° Longitude: -117.6789°

Surface Elev.: 247 (Ft.)

DEPTH / DESCRIPTION	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
SILTY CLAY (CL-ML), olive-brown, very stiff					8-14-21								
30.0	217	30			4-10-11 N=21								
LEAN CLAY (CL), trace sand, light-gray to gray-brown with white mottling, very stiff		35			9-16-25								
		40			2-6-11 N=17								
		45			11-17-23					22.8	104		
50.0	197	50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-10-2021	Boring Completed: 09-10-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 60215170 COMPASS BESS.GPJ TERRACON_DATATEMPLATE.GDT 10/19/21

BORING LOG NO. B- 4

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5325° Longitude: -117.6789°

Surface Elev.: 247 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	CAPISTRANO FORMATION (Tc) recovered as SILTY CLAY with trace SAND, dark-brown to dark-gray very stiff				3-10-20 N=30								
	hard	55			35-50/4"								
		60			9-19-27 N=46								
		65			42-50/3"								
		70			10-20-29 N=49								
		75											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-10-2021	Boring Completed: 09-10-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 4

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC, Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5325° Longitude: -117.6789°

Surface Elev.: 247 (Ft.)

GRAPHIC LOG	DEPTH / DESCRIPTION	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	CAPISTRANO FORMATION (Tc) recovered as SILTY CLAY with trace SAND, dark-brown to dark-gray *(continued)* hard					27-50/5"								
			80			15-19-29 N=48								
			85			30-50/5"								
			90			17-23-35 N=58								
	91.5	155.5												

Boring Terminated at 91.5 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-10-2021	Boring Completed: 09-10-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 5

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5324° Longitude: -117.6793°

Surface Elev.: 254 (Ft.)

DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
LANDSLIDE DEPOSITS (Qls), LEAN CLAY trace silt and sand, gray-brown to olive-brown												
very stiff				5-8-11								
	5			8-13-16					10.9	103		
				9-12-14								
light-brown to olive-brown with white mottling	10			5-8-12					12.4	97		
medium stiff	15			1-2-4 N=6							42-23-19	
very stiff	20			4-9-12					20.2	97		
	25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-08-2021	Boring Completed: 09-08-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 5

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5324° Longitude: -117.6793°

Surface Elev.: 254 (Ft.)

DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
LANDSLIDE DEPOSITS (Qls), LEAN CLAY *(continued)* olive-brown with white mottling, medium stiff					1-2-4 N=6								
stiff		30			4-7-9								
medium stiff		35			1-2-3 N=5								
very stiff		40			3-8-14								
45.0	209	45											
LANDSLIDE DEPOSITS (Qls), SILTY CLAY, trace sand, olive-brown to light-gray with white mottling and orange rust stains, stiff					2-3-8 N=11								
50.0	204	50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-08-2021	Boring Completed: 09-08-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 5

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5324° Longitude: -117.6793°

Surface Elev.: 254 (Ft.)

DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
SILTY CLAY (CL-ML), trace sand, dark-gray to dark-brown with white mottling and orange rust stains, very stiff				9-14-22								
stiff to very stiff	55			2-5-10 N=15								
gray-brown, hard	60			13-27-45		UU						
62.0 / 192												
CAPISTRANO FORMATION (Tc) recovered as SILTY CLAY with trace SAND, dark-gray to dark-brown with white mottling, very stiff												
	65			4-9-16 N=25								
dark-gray to dark-brown, hard	70			40-50/4"								
	75											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-08-2021	Boring Completed: 09-08-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 5

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 33.5324° Longitude: -117.6793° Surface Elev.: 254 (Ft.) DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	76.5 / 177.5				11-21-43 N=64								
	Boring Terminated at 76.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-08-2021	Boring Completed: 09-08-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 6

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5323° Longitude: -117.6786°

Surface Elev.: 234 (Ft.)

DEPTH / Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
LANDSLIDE DEPOSITS (Qls), LEAN CLAY, trace silt and sand, olive-brown													
orange rust staining, stiff					2-4-6					13.2	97		
very stiff		5			8-8-12					15.1	101		
					9-13-16								
10.0	224	10											
SILTY CLAY (CL-ML) trace sand, olive-brown, very stiff					7-11-18								
medium stiff to stiff		15			2-4-4 N=8								
white mottling, very stiff		20			6-12-13								
		25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-10-2021	Boring Completed: 09-10-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 6

PROJECT: Broad Reach Power Compass BESS

**CLIENT: Sargent & Lundy LLC
Chicago, IL**

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5323° Longitude: -117.6786°

Surface Elev.: 234 (Ft.)

DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
SILTY CLAY (CL-ML) *(continued)* medium stiff to stiff				X	1-3-5 N=8								
30.0	204	30											
LEAN CLAY (CL), trace silt and sand, olive-brown to gray-brown with white mottling and orange rust staining, very stiff					10-15-20								
stiff		35		X	2-3-6 N=9								
40.0	194	40											
CAPISTRANO FORMATION (Tc) recovered as SILTY CLAY with trace SAND, dark-brown to dark-gray, hard					20-50/5"								
		45		X	11-13-19 N=32								
		50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-10-2021	Boring Completed: 09-10-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 6

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 33.5323° Longitude: -117.6786° Surface Elev.: 234 (Ft.) DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	50.9 / 183				15-50/5"								
	Boring Terminated at 50.9 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-10-2021	Boring Completed: 09-10-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 7

PROJECT: Broad Reach Power Compass BESS

**CLIENT: Sargent & Lundy LLC
Chicago, IL**

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5323° Longitude: -117.6781°

Surface Elev.: 222 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	TEST TYPE	COMPRESSIVE STRENGTH (tsf)	STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SILTY CLAYEY SAND (SC-SM), olive-brown													
2.5		219.5												
	LEAN CLAY (CL), trace silt and sand, olive-brown with orange rust staining, stiff					3-4-6					11.8	91		
			5			3-4-6					16.5	99		
						4-8-9					14.7	104		
			10			5-8-9					13.4	104		
	white mottling		15			3-6-9								
20.0		202												
	SILTY CLAY (CL-ML) trace sand, olive-brown to gray-brown with white mottling and orange rust staining, soft to medium stiff		20			1-2-2 N=4								
			25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-10-2021	Boring Completed: 09-10-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 7

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5323° Longitude: -117.6781°

Surface Elev.: 222 (Ft.)

GRAPHIC LOG	DEPTH / MATERIAL DESCRIPTION / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SILTY CLAY (CL-ML) *(continued)* soft			X	1-1-2 N=3								
	soft to medium stiff	30		X	1-2-2 N=4								
	35.0 — 187												
	LEAN CLAY (CL), trace silt and sand, olive-brown with white mottling and orange rust staining, soft to medium stiff	35		X	1-2-2 N=4								
	medium stiff	40		X	1-2-3 N=5								
	stiff	45		X	1-3-5 N=8								
		50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-10-2021	Boring Completed: 09-10-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 7

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5323° Longitude: -117.6781°

Surface Elev.: 222 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	medium stiff 51.5 / 170.5				1-2-4 N=6								
	Boring Terminated at 51.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-10-2021	Boring Completed: 09-10-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 8

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5323° Longitude: -117.6776°

Surface Elev.: 211 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SILT (ML), with clay, trace sand, light-brown to olive-brown													
2.5		208.5												
	LEAN CLAY (CL) trace sand, light-brown to olive-brown, stiff					5-7-8							37-22-15	
	trace silt, olive-brown to gray-brown		5			6-6-6					17.8	105		
						4-5-6					19.6	99		
	white mottling		10			3-5-5								
	medium stiff		15			3-3-3								
	soft		20			1-1-2 N=3								
			25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-17-2021	Boring Completed: 09-17-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 8

PROJECT: Broad Reach Power Compass BESS

SITE: San Juan Capistrano, CA

CLIENT: Sargent & Lundy LLC Chicago, IL

LOCATION See Exploration Plan

Latitude: 33.5323° Longitude: -117.6776°

Surface Elev.: 211 (Ft.)

GRAPHIC LOG	DEPTH / DESCRIPTION / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL) *(continued)* medium stiff				1-2-3 N=5								
		30			1-2-3 N=5								
	stiff	35			3-4-5 N=9								
		40			2-4-6 N=10								
	41.5 — 169.5												
	Boring Terminated at 41.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon

1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-17-2021	Boring Completed: 09-17-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 9

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5323° Longitude: -117.6770°

Surface Elev.: 208 (Ft.)

DEPTH / Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	TEST TYPE	COMPRESSIVE STRENGTH (tsf)	STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
SILT (ML), with clay, olive-brown to brown													
very stiff					7-8-12					18.0	93		
4.0	204												
LEAN CLAY (CL) trace silt and sand, olive-brown to dark-brown very stiff		5			8-11-11					17.9	104		
					10-13-16								
olive-brown to gray-brown		10			6-10-12								
orange rust staining, stiff		15			3-6-6								
medium stiff to stiff		20			3-3-5 N=8								
		25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-15-2021	Boring Completed: 09-15-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B- 9

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5323° Longitude: -117.6770°

Surface Elev.: 208 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL) *(continued)* white mottling, stiff			X	2-4-5 N=9								
	medium stiff	30		X	2-3-4 N=7								
	stiff	35		X	2-4-6 N=10								
	medium stiff	40		X	2-3-4 N=7								
	41.5 / 166.5												
	Boring Terminated at 41.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-15-2021	Boring Completed: 09-15-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-10

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5323° Longitude: -117.6766°

Surface Elev.: 209 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY WITH SAND (CL), olive-brown													
	very stiff					9-11-10							35-21-14	
	olive-brown to gray-brown, stiff		5			5-7-7					8.8	97		
						5-5-6								
10.0		199	10											
	LEAN CLAY (CL) trace silt and sand, olive-brown to gray-brown to dark-brown, stiff					4-8-9					36.3	79		
			15			5-7-9								
	white mottling		20			3-6-8 N=14								
			25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ *While drilling*

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-15-2021	Boring Completed: 09-15-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-10

PROJECT: Broad Reach Power Compass BESS

**CLIENT: Sargent & Lundy LLC
Chicago, IL**

SITE: San Juan Capistrano, CA

GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 33.5323° Longitude: -117.6766° Surface Elev.: 209 (Ft.) DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL) *(continued)* very stiff				10-10-13								
	stiff	30			3-3-6 N=9								
		35			3-6-7								
	medium stiff	40			3-3-3 N=6								
	and light-gray, very stiff	45			4-9-11								
			▽										
		50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ *While drilling*

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-15-2021	Boring Completed: 09-15-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-10

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5323° Longitude: -117.6766°

Surface Elev.: 209 (Ft.)

DEPTH	DESCRIPTION	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL) *(continued)* medium stiff					3-3-4 N=7								
51.5		157.5												
	SILTY SAND (SM), gray-brown													
	medium dense		55			5-13-33					19.4	105		
			60			9-12-15 N=27								16
	very dense		65			9-32-50/4"								
	medium dense		70			7-8-11 N=19								
			75											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

While drilling

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-15-2021	Boring Completed: 09-15-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-10

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5323° Longitude: -117.6766°

Surface Elev.: 209 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SILTY SAND (SM), gray-brown *(continued)* medium dense 76.5 / 132.5				13-15-23								
	Boring Terminated at 76.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

While drilling

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-15-2021	Boring Completed: 09-15-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-11

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5321° Longitude: -117.6789°

Surface Elev.: 240 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LANDSLIDE DEPOSITS (Qls), LEAN CLAY (CL), trace silt and sand, gray-brown to olive-brown													
	very stiff					7-16-16								
			5			6-9-14					12.7	96		
						7-11-14							38-22-16	
10.0		230	10											
	LANDSLIDE DEPOSITS (Qls), SILTY CLAY, trace sand, light-brown to olive-brown with white mottling, very stiff					7-10-14					13.0	105		
	stiff		15			5-8-9								
	olive-brown, medium stiff		20			2-3-4 N=7								
25.0		215	25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-08-2021	Boring Completed: 09-08-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-11

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5321° Longitude: -117.6789°

Surface Elev.: 240 (Ft.)

DEPTH / Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	TEST TYPE	COMPRESSIVE STRENGTH (tsf)	STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
LANDSLIDE DEPOSITS (Qls), LEAN CLAY, trace silt and sand, olive-brown, very stiff					4-8-11								
soft		30			1-1-2 N=3								
stiff		35			4-7-9								
medium stiff		40			1-2-4 N=6							45-24-21	
45.0	195	45											
SILTY CLAY (CL-ML) trace sand, olive-brown to gray-brown with white mottling and orange rust staining, very stiff					4-9-15								
		50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-08-2021	Boring Completed: 09-08-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-11

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5321° Longitude: -117.6789°

Surface Elev.: 240 (Ft.)

GRAPHIC LOG	DEPTH / DESCRIPTION / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SILTY CLAY (CL-ML) *(continued)* stiff				2-4-9 N=13								
	55.0 — 185	55											
	CAPISTRANO FORMATION (Tc) recovered as LEAN CLAY with trace SAND, dark-gray to dark-brown, hard				26-50/5"								
		60			11-21-36 N=57								
		65			49-50/3"								
		70			9-18-36 N=54								
		75											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-08-2021	Boring Completed: 09-08-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-11

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5321° Longitude: -117.6789°

Surface Elev.: 240 (Ft.)

DEPTH	MATERIAL DESCRIPTION	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	CAPISTRANO FORMATION (Tc) recovered as LEAN CLAY with trace SAND, dark-gray to dark-brown, hard *(continued)*					33-50/5"								
			80			7-22-31 N=53								
			85			17-50/5"								
			90			16-22-36 N=58								
91.5		148.5												
	Boring Terminated at 91.5 Feet													

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-08-2021	Boring Completed: 09-08-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-12

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5319° Longitude: -117.6786°

Surface Elev.: 232 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL), trace silt and sand, olive-brown													
	very stiff					9-15-20								
	orange rust staining, hard		5			15-20-31					13.7	114		
						15-20-25								
	olive-brown to gray-brown		10			15-22-26					15.9	110		
	very stiff		15			4-9-12 N=21								
20.0	**SILT (ML)** trace clay and sand, olive-brown to gray-brown, very stiff	212	20			5-11-15								
			25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-09-2021	Boring Completed: 09-09-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-12

PROJECT: Broad Reach Power Compass BESS

SITE: San Juan Capistrano, CA

CLIENT: Sargent & Lundy LLC Chicago, IL

LOCATION See Exploration Plan

Latitude: 33.5319° Longitude: -117.6786°

Surface Elev.: 232 (Ft.)

GRAPHIC LOG	DEPTH	DESCRIPTION	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		SILT (ML) *(continued)* medium stiff					1-3-4 N=7								
	30.0	**LEAN CLAY (CL)**, trace silt and sand, olive-brown to gray-brown with orange rust staining, very stiff	202	30			8-11-14								
		white mottling, stiff		35			3-5-8 N=13								
	40.0	**CAPISTRANO FORMATION (Tc) recovered as ELASTIC SILT with trace SAND**, dark-brown to dark-gray, hard	192	40			25-47-50/4"								
				45			10-15-30 N=45								
				50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-09-2021	Boring Completed: 09-09-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-12

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5319° Longitude: -117.6786°

Surface Elev.: 232 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	CAPISTRANO FORMATION (Tc) recovered as ELASTIC SILT with trace SAND, dark-brown to dark-gray, hard *(continued)*				30-50/4"								
		55			12-17-34 N=51								
		60			39-50/4"								
		65			9-17-32 N=49							53-34-19	
		70			30-50/5"								
		75											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-09-2021	Boring Completed: 09-09-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-12

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 33.5319° Longitude: -117.6786° Surface Elev.: 232 (Ft.) DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	76.5 / 155.5				10-19-32 N=51								
	Boring Terminated at 76.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-09-2021	Boring Completed: 09-09-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-13

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5318° Longitude: -117.6790°

Surface Elev.: 249 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL), trace silt and sand, olive-brown to gray-brown													
	white mottling, very stiff					12-14-15								
	hard		5			13-18-24					16.4	112		
						12-18-27								
10.0	**SILT (ML)**, trace sand, olive-brown with white mottling, hard	239	10			12-21-26					21.6	105		
	orange rust staining, stiff		15			2-4-6 N=10							43-27-16	
	olive-brown to gray-brown, very stiff		20			12-16-21								
25.0		224	25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-09-2021	Boring Completed: 09-09-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-13

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5318° Longitude: -117.6790°

Surface Elev.: 249 (Ft.)

DEPTH / ELEVATION (Ft.)	Description	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	TEST TYPE	COMPRESSIVE STRENGTH (tsf)	STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL), trace silt, olive-brown to gray-brown with white mottling, very stiff				4-6-12 N=18								
	and light-gray, hard	30			10-20-25		UU						
	very stiff, thin interbedded layers of silty sand	35			10-11-11 N=22								
40.0 / 209	**SILTY CLAY (CL-ML)**, white mottling trace sand, gray-brown to light-gray, hard	40			8-17-26								
	very stiff	45			4-7-12 N=19								
		50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-09-2021	Boring Completed: 09-09-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-13

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5318° Longitude: -117.6790°

Surface Elev.: 249 (Ft.)

DEPTH / DESCRIPTION	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	TEST TYPE	COMPRESSIVE STRENGTH (tsf)	STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
SILTY CLAY (CL-ML), white mottling *(continued)* hard					11-19-25								
very stiff		55			3-6-11 N=17								
60.0	189	60											
CAPISTRANO FORMATION (Tc) recovered as LEAN CLAY with trace SILT and SAND, dark-brown to dark-gray, hard					13-26-33								
very stiff		65			4-10-19 N=29								
hard		70			38-50/4"								
		75											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-09-2021	Boring Completed: 09-09-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-13

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 33.5318° Longitude: -117.6790° Surface Elev.: 249 (Ft.) DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	hard 76.4 — 172.5				10-20-50/5"								
	Boring Terminated at 76.4 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-09-2021	Boring Completed: 09-09-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-14

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5318° Longitude: -117.6782°

Surface Elev.: 224 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL), trace silt and sand, light-brown to olive-brown													
	light-brown to light-gray with white mottling and orange rust staining, stiff					5-6-8							47-27-20	
	very stiff		5			7-13-18					27.8	95		
						6-13-18					25.5	95		
			10			8-13-16								
	thin interbedded layers of silty sand		15			5-9-13								
20.0		204												
	SILTY CLAY (CL-ML), trace sand, gray-brown to olive-brown with white mottling and orange rust staining, stiff, thin silty sand lens present		20			3-4-10 N=14								
25.0		199	25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-09-2021	Boring Completed: 09-09-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-14

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5318° Longitude: -117.6782°

Surface Elev.: 224 (Ft.)

GRAPHIC LOG	DEPTH / DESCRIPTION / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL), trace silt and sand, olive-brown to gray-brown with white mottling, stiff			X	2-3-6 N=9								
	30.0 — 194	30											
	CAPISTRANO FORMATION (Tc) recovered as SILTY CLAY with trace SAND, dark-brown to dark-gray, very stiff			X	4-8-16 N=24								
	hard	35		X	9-14-21 N=35								
		40		X	9-16-32 N=48								
		45		X	10-19-26 N=45								
		50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-09-2021	Boring Completed: 09-09-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-14

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 33.5318° Longitude: -117.6782° Surface Elev.: 224 (Ft.) DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	hard 51.5 / 172.5				9-18-32 N=50								
	Boring Terminated at 51.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-09-2021	Boring Completed: 09-09-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-15

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5319° Longitude: -117.6775°

Surface Elev.: 213 (Ft.)

DEPTH / ELEVATION (Ft.) — Material Description	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
SANDY SILTY CLAY (CL-ML), olive-brown to brown												
stiff				6-8-8					11.6	93		
5.0 — 208	5											
LEAN CLAY (CL) trace silt, olive-brown to gray-brown, stiff				4-7-10								
orange rust staining, very stiff				7-10-12								
	10			6-8-12								
white mottling, stiff	15			4-7-8								
medium stiff	20			1-2-3 N=5								
	25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon

1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-16-2021	Boring Completed: 09-16-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-15

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5319° Longitude: -117.6775°

Surface Elev.: 213 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL) *(continued)* medium stiff				1-2-3 N=5								
		30			2-3-3 N=6								
		35			1-3-4 N=7								
	medium stiff to stiff	40			3-4-4 N=8								
	stiff	45			3-4-5 N=9								
		50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-16-2021	Boring Completed: 09-16-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-15

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5319° Longitude: -117.6775°

Surface Elev.: 213 (Ft.)

DEPTH	DESCRIPTION	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	TEST TYPE	COMPRESSIVE STRENGTH (tsf)	STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL) *(continued)*				X	4-6-8 N=14								
	very stiff, thin interbedded layers of silty sand		55		X	5-7-9 N=16								
60.0	**CAPISTRANO FORMATION (Tc) recovered as SILTY CLAY with trace SAND**, dark-brown to dark-gray with white mottling, very stiff	153	60		X	6-8-13 N=21								
			65		X	6-10-13 N=23								
	white mottling no longer apparent		70		X	7-13-17 N=30								
			75											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-16-2021	Boring Completed: 09-16-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-15

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5319° Longitude: -117.6775°

Surface Elev.: 213 (Ft.)

DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
CAPISTRANO FORMATION (Tc) recovered as SILTY CLAY with trace SAND, dark-brown to dark-gray with white mottling, very stiff *(continued)*			X	8-12-18 N=30								
hard	80		X	13-19-23 N=42								
	85		X	17-21-30 N=51								
	90		X	16-26-28 N=54								
	95		X	12-19-31 N=50								
	100											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-16-2021	Boring Completed: 09-16-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-15

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 33.5319° Longitude: -117.6775° Surface Elev.: 213 (Ft.) DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	101.5 / 111.5				11-17-25 N=42								
	Boring Terminated at 101.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-16-2021	Boring Completed: 09-16-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-16

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5319° Longitude: -117.6770°

Surface Elev.: 209 (Ft.)

DEPTH / Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	COMPRESSIVE STRENGTH (tsf)	STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
SILTY CLAY (CL-ML), olive-brown to brown													
stiff					6-8-8					8.2	96		
orange rust staining		5			6-8-9					22.2	94		
7.5	201.5												
LEAN CLAY (CL) trace silt, olive-brown to gray-brown, very stiff					7-12-15					15.8	105		
white mottling		10			9-12-15					15.3	108		
stiff		15			5-7-9								
medium stiff		20			2-3-4 N=7								
		25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-14-2021	Boring Completed: 09-14-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-16

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5319° Longitude: -117.6770°

Surface Elev.: 209 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL) *(continued)* medium stiff to stiff				3-4-4 N=8								
	medium stiff	30			2-3-4 N=7								
	thin lens of silty sand present	35			1-2-3 N=5								
	thin lens of silty sand present	40			2-3-4 N=7								
	41.5 / 167.5												
	Boring Terminated at 41.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-14-2021	Boring Completed: 09-14-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-17

PROJECT: Broad Reach Power Compass BESS

**CLIENT: Sargent & Lundy LLC
Chicago, IL**

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5319° Longitude: -117.6765°

Surface Elev.: 208 (Ft.)

GRAPHIC LOG	DEPTH / MATERIAL DESCRIPTION / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY WITH SAND (CL), trace gravel, olive-brown to brown												
	light brown, very stiff				5-10-10	39				19.2	88	30-20-10	
		5			6-9-11					22.2	95		
	olive-brown to gray-brown, stiff				5-5-7					20.4	93		
	10.0 — 198	10											
	LEAN CLAY (CL) trace silt and sand, olive-brown to gray-brown, very stiff				5-9-10								
		15			4-8-11 N=19								
	orange rust staining	20			9-12-15								
		25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

∇ *While drilling*

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-15-2021	Boring Completed: 09-15-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-17

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5319° Longitude: -117.6765°

Surface Elev.: 208 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL) *(continued)* stiff				3-6-7 N=13								
	very stiff	30			7-10-12					32.1	88		
	stiff	35			2-4-7 N=11								
		40			6-6-8								
	45.0 / 163												
	LEAN CLAY WITH SAND (CL), wet, stiff	45	▽		3-7-7 N=14								
	50.0 / 158	50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ *While drilling*

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-15-2021	Boring Completed: 09-15-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-17

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5319° Longitude: -117.6765°

Surface Elev.: 208 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	COMPRESSIVE STRENGTH (tsf)	STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	POORLY GRADED SAND WITH CLAY (SP-SC), gray-brown, wet, medium dense				5-12-21								
	very dense	55			10-31-50/5"								9
	60.0 / 148	60											
	CLAYEY SAND (SC), gray-brown, wet, medium dense				10-13-11								
	65.0 / 143	65											
	POORLY GRADED SAND WITH CLAY (SP-SC) gray-brown, wet, medium dense				4-9-12 N=21								
	very dense	70			14-29-50/2"								
		75											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

While drilling

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-15-2021	Boring Completed: 09-15-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-17

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 33.5319° Longitude: -117.6765° Surface Elev.: 208 (Ft.) DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	POORLY GRADED SAND WITH CLAY (SP-SC) *(continued)* 76.5 dense 131.5				8-17-29 N=46								
	Boring Terminated at 76.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ *While drilling*

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-15-2021	Boring Completed: 09-15-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-19

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5314° Longitude: -117.6779°

Surface Elev.: 217 (Ft.)

DEPTH	MATERIAL DESCRIPTION	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL), trace silt and sand, olive-brown													
	very stiff					5-9-13								
	gray-brown to light-gray with orange rust staining		5			2-10-10					19.3	108		
7.5	**SILT (ML)**, with clay, light olive to light gray-brown with white mottling, hard	209.5				12-24-29							37-27-10	
10.0	**SILTY CLAY WITH SAND (CL-ML)**, light olive to light gray-brown, hard, thin interbedded layers of silty sand	207	10			14-25-31					14.9	109		
15.0	**LEAN CLAY (CL)** trace silt and sand, olive-brown with white mottling and orange rust staining, very stiff	202	15			12-14-20								
	stiff		20			5-5-9 N=14								
			25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

While drilling

At completion of drilling

Terracon

1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-13-2021	Boring Completed: 09-13-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-19

PROJECT: Broad Reach Power Compass BESS

**CLIENT: Sargent & Lundy LLC
Chicago, IL**

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5314° Longitude: -117.6779°

Surface Elev.: 217 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	FIELD TEST RESULTS	EXPANSION INDEX	TEST TYPE	COMPRESSIVE STRENGTH (tsf)	STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL) *(continued)* hard				13-22-50/6"								
26.5		190.5											
	CAPISTRANO FORMATION (Tc) recovered as SILTY CLAY with trace SAND (CL-ML), dark-gray to dark-brown with white mottling, very stiff												
			30		9-13-16 N=29								
	hard, white mottling no longer apparent		35		23-50/6"								
			40		10-19-25 N=44								
			45		26-40-40		UU						
				▽									
				▽									
			50										

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ *While drilling*

▽ *At completion of drilling*

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-13-2021	Boring Completed: 09-13-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-19

PROJECT: Broad Reach Power Compass BESS

**CLIENT: Sargent & Lundy LLC
Chicago, IL**

SITE: San Juan Capistrano, CA

GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 33.5314° Longitude: -117.6779° Surface Elev.: 217 (Ft.) DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	hard 51.5 / 165.5				12-20-30 N=50								
	Boring Terminated at 51.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

While drilling

At completion of drilling

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-13-2021	Boring Completed: 09-13-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-20

PROJECT: Broad Reach Power Compass BESS

**CLIENT: Sargent & Lundy LLC
Chicago, IL**

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5314° Longitude: -117.6775°

Surface Elev.: 211 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SANDY SILT (ML), with clay, light gray-brown													
	stiff					5-6-9					11.6	92		
5.0		206	5											
	LEAN CLAY (CL), trace silt and sand, olive-brown to gray-brown, stiff					4-6-6							37-22-15	
	white mottling and orange rust staining, very stiff					7-8-11					17.6	98		
			10			6-12-15								
15.0		196	15											
	SILTY CLAY (CL-ML) trace sand, olive-brown to gray-brown with white mottling, stiff					4-6-9								
	medium stiff to stiff		20			3-3-5 N=8								
			25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-13-2021	Boring Completed: 09-13-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-20

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5314° Longitude: -117.6775°

Surface Elev.: 211 (Ft.)

DEPTH	Material Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SILTY CLAY (CL-ML) *(continued)* medium stiff				X	2-3-4 N=7								
30.0		181	30											
	LEAN CLAY (CL), trace silt and sand, olive-brown to gray-brown with white mottling, medium stiff				X	2-3-4 N=7								
	stiff		35		X	4-4-5 N=9								
			40		X	3-4-5 N=9								
41.5		169.5												
	Boring Terminated at 41.5 Feet													

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with auger cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-13-2021	Boring Completed: 09-13-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-21

PROJECT: Broad Reach Power Compass BESS

**CLIENT: Sargent & Lundy LLC
Chicago, IL**

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5314° Longitude: -117.6770°

Surface Elev.: 206 (Ft.)

DEPTH / Description / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
SILTY CLAY (CL-ML), trace sand, olive-brown to brown												
white mottling, very stiff				8-11-15								
5.0 — 201	5			8-10-11					9.5	105		
LEAN CLAY (CL) trace silt and sand, olive-brown to gray-brown, very stiff				12-16-18								
	10			11-16-16					17.6	105		
white mottling	15			6-9-11								
medium stiff	20			2-3-4 N=7								
	25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-14-2021	Boring Completed: 09-14-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-21

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5314° Longitude: -117.6770°

Surface Elev.: 206 (Ft.)

DEPTH	Material Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL) *(continued)* medium stiff to stiff				X	3-4-4 N=8								
30.0		176	30											
	SILTY CLAY (CL-ML), trace sand, olive-brown to gray-brown, wet, medium stiff, thin silty sand lens present				X	3-3-4 N=7								
			35		X	2-3-3 N=6								
	medium stiff to stiff		40		X	3-4-4 N=8								
45.0		161	45											
	LEAN CLAY (CL), trace silt and sand, olive-brown to gray-brown with white mottling, wet, stiff				X	2-4-5 N=9								
50.0		156	50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-14-2021	Boring Completed: 09-14-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-21

PROJECT: Broad Reach Power Compass BESS

**CLIENT: Sargent & Lundy LLC
Chicago, IL**

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5314° Longitude: -117.6770°

Surface Elev.: 206 (Ft.)

DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
SANDY LEAN CLAY (CL), gray-brown, wet, very stiff				X	6-10-16 N=26								
medium stiff		55		X	2-3-4 N=7								
60.0	146	60											
LEAN CLAY (CL) trace silt and sand, olive-brown to gray-brown with white mottling, wet, stiff to very stiff				X	4-7-8 N=15								
very stiff		65		X	5-8-11 N=19								
		70		X	6-9-11 N=20								
		75											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-14-2021	Boring Completed: 09-14-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-21

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 33.5314° Longitude: -117.6770° Surface Elev.: 206 (Ft.) DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL) *(continued)* dark-gray to dark-brown, very stiff 76.5 / 129.5				4-8-9 N=17								
	Boring Terminated at 76.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-14-2021	Boring Completed: 09-14-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-24

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5311° Longitude: -117.6779°

Surface Elev.: 216 (Ft.)

DEPTH	Description	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	LEAN CLAY (CL), trace silt and sand, olive-brown to gray-brown													
	hard					13-25-27								
			5			17-28-30					11.1	120		
	very stiff					13-17-16								
	white mottling and orange rust staining		10			10-13-16					13.2	110		
15.0		201												
	SILTY CLAY (CL-ML) olive-brown to light-gray with white mottling and orange rust staining, very stiff		15			6-8-9 N=17								
	thin lens of silty sand		20			11-15-20								
			25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-13-2021	Boring Completed: 09-13-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-24

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5311° Longitude: -117.6779°

Surface Elev.: 216 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SILTY CLAY (CL-ML) *(continued)*				5-10-11 N=21								
	wet, stiff	30			6-8-10								
	35.0 / 181												
	CAPISTRANO FORMATION (Tc) recovered as ELASTIC SILT with trace SAND, dark-gray to dark-brown, stiff	35			5-5-8 N=13								
	hard	40			28-50/5"								
		45			12-18-25 N=43								
		50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS
Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-13-2021	Boring Completed: 09-13-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-24

PROJECT: Broad Reach Power Compass BESS

**CLIENT: Sargent & Lundy LLC
Chicago, IL**

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5311° Longitude: -117.6779°

Surface Elev.: 216 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	CAPISTRANO FORMATION (Tc) recovered as ELASTIC SILT with trace SAND, dark-gray to dark-brown, stiff *(continued)*				33-50/3"								
		55			14-22-27 N=49								
		60			17-50/5"								
		65			12-20-25 N=45							56-36-20	
		70			17-50/6"								
		75											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon

1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-13-2021	Boring Completed: 09-13-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-24

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5311° Longitude: -117.6779°

Surface Elev.: 216 (Ft.)

GRAPHIC LOG	DEPTH / ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	hard 76.5 — 139.5				13-21-28 N=49								
	Boring Terminated at 76.5 Feet												

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-13-2021	Boring Completed: 09-13-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-25

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC
Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5310° Longitude: -117.6776°

Surface Elev.: 209 (Ft.)

DEPTH	MATERIAL DESCRIPTION	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	TEST TYPE	COMPRESSIVE STRENGTH (tsf)	STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SANDY LEAN CLAY (CL), trace silt, olive-brown													
	stiff					6-9-9					14.0	96		
5.0		204	5											
	LEAN CLAY (CL), trace silt and sand, olive-brown to gray-brown with white mottling, stiff					5-7-11					17.6	109		
	very stiff					7-12-16								
			10			10-16-17								
			15			8-11-15								
	stiff		20			3-4-5 N=9								
25.0		184	25											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-14-2021	Boring Completed: 09-14-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	

BORING LOG NO. B-25

PROJECT: Broad Reach Power Compass BESS

CLIENT: Sargent & Lundy LLC Chicago, IL

SITE: San Juan Capistrano, CA

LOCATION See Exploration Plan

Latitude: 33.5310° Longitude: -117.6776°

Surface Elev.: 209 (Ft.)

DEPTH	DESCRIPTION	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	EXPANSION INDEX	STRENGTH TEST: TEST TYPE	STRENGTH TEST: COMPRESSIVE STRENGTH (tsf)	STRENGTH TEST: STRAIN (%)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	SILTY CLAY (CL-ML), trace sand, olive-brown to gray-brown with white mottling and orange rust staining, stiff				X	3-5-6 N=11								
			30		X	4-6-8 N=14								
	trace gravel													
35.0		174	35											
	LEAN CLAY (CL), trace silt and sand, olive-brown to gray-brown with white mottling, stiff				X	4-5-7 N=12								
	very stiff		40		X	5-10-12 N=22								
41.5		167.5												
	CAPISTRANO FORMATION (Tc) recovered as SILTY CLAY with trace SAND dark-brown to dark-gray, very stiff													
			45		X	8-13-16 N=29								
			50											

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
Hollow Stem Auger

Abandonment Method:
Boring backfilled with cement-grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
1421 Edinger Ave, Ste C
Tustin, CA

Boring Started: 09-14-2021	Boring Completed: 09-14-2021
Drill Rig: CME-75	Driller: 2R Drilling
Project No.: 60215170	