

APPENDIX F

Geology Reports

APPENDIX F.1

Geologic and Seismic Hazards Report

EC Rancho Mirage Holdings, LP
1075 West Georgia Street, Suite 2010
Vancouver, British Columbia V6E3C9

**GEOLOGIC AND SEISMIC HAZARDS REPORT
EAGLE PROPERTY
SECTION 31, T4S, R6E, SBBM
NORTHEAST CORNER OF BOB HOPE DRIVE
& FRANK SINATRA DRIVE
RANCHO MIRAGE, RIVERSIDE COUNTY
CALIFORNIA**

Revised March 7, 2018



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Doc. No.: 18-03-701R



March 7, 2018

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EC Rancho Mirage Holdings, LP
1075 West Georgia Street, Suite 2010
Vancouver, British Columbia V6E3C9

Attention: Mr. Russell Holmes

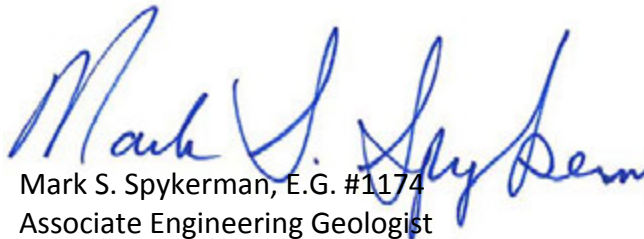
Project **Eagle Property**
Section 31, T4S, R6E, SBBM
Northeast Corner of Bob Hope Drive & Frank Sinatra Drive
Rancho Mirage, Riverside County, California

Subject: Geologic and Seismic Hazards Report

Presented herewith is Earth Systems Geologic and Seismic Hazards Report prepared, as authorized, for the vacant 618 acres located at the northeast corner of Bob Hope Drive and Frank Sinatra Drive in Rancho Mirage, Riverside County, California. In summary the primary geologic hazard to significantly affect the property and assumed future residential development is anticipated to be severe ground shaking from large earthquakes occurring on local faults, including the Banning and Mission Creek segments of the San Andreas fault system.

This report completes our authorized geologic scope of services in accordance with our Work Order dated January 26, 2018. We appreciate this opportunity to provide professional geologic services. If you need clarification of the information contained in this report, or if we can be of additional service, please contact the undersigned.

Respectfully submitted,
EARTH SYSTEMS


Mark S. Spykerman, E.G. #1174
Associate Engineering Geologist



GHR/mss/mr

Distribution: 6/EC Rancho Mirage Holdings, LP
1/BD File

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EXECUTIVE SUMMARY

Earth Systems Pacific has prepared this executive summary solely to provide a general overview of the report. The report itself should be relied upon for information about the findings, conclusions, recommendations and other concerns. **This report is an update of the previous Geologic and Seismic Hazards Report prepared by Earth Systems in 2006. No significant changes with respect to findings in the 2006 report are noted, except the revised seismic design parameters, which are governed by changes in the standard of care and Building Code revisions.**

The Eagle Property, encompassing approximately 618 acres, is located east of Bob Hope Drive and north of Frank Sinatra Drive in Rancho Mirage, Riverside County, California. **Geologic hazards typical to the local area include earthquakes and earthquake related effects, moderate to severe intensity ground shaking, seismic induced settlement of soil profiles, and wind-driven sand.** Key aspects of the site relative to potential geologic hazards are as follows:

- The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone or Riverside County designated fault zone. No known active or potentially active faults exist within the project limits.
- The nearest major active fault to the site is the Banning branch of the San Andreas fault system, located approximately 4 miles northeast of the property. The Mission Creek branch of the San Andreas fault system is located approximately 5.7 miles northeast of the site.
- The site is underlain predominantly by Holocene dune sand and younger alluvium. Wind blown sand dunes extend in a northwest to southeast direction across the site, parallel to the prevailing wind. The site is seismically characterized with a Site Class D soil profile.
- The primary geologic hazard is strong ground shaking resulting from earthquakes originating from nearby regional faults. The USGS Design Maps peak ground acceleration value is estimated to be approximately 0.68 g (PGA). Per the California Geologic Survey PSHA Interpolator (2008), the 2% probability of exceedance horizontal ground acceleration is approximately 0.85g.
- The County of Riverside Seismic Hazards safety element suggests a 22% chance of occurrence by 2030 of a magnitude 7.1 to 7.9 earthquake on the Coachella segments of the San Andreas fault.
- The site is located within the currently designated “Moderate” Liquefaction Susceptibility zone for deep groundwater susceptible sediments per the Riverside County Environmental Hazards Map. Per the City of Rancho Mirage General Plan Safety Element, the site is in a “Low” liquefaction susceptibility area. Groundwater depths in the vicinity of the site are historically greater than 100 feet below the ground surface. Therefore, liquefaction potentials are considered “very low”.

- The site is not located within a currently designated City of Rancho Mirage General Plan Safety Element 100 year or 500-year flood zone. The site is susceptible to sheet flooding and erosion during seasonal rainfall events.
- As the site is generally flat, hazards from landslides or debris flows are considered nil.
- Other hazards, including tsunamis and seiches are considered nil. The site is not located within an inundation area of any regional reservoir.
- The site is relatively flat such that the potential for slope instability or debris flows is considered low.
- Shallow soils may exhibit variable potentials for settlement and seismic induced subsidence. The site is within a “high susceptibility” area for seismically induced settlement per the City of Rancho Mirage General Plan Safety Element.
- Per the City of Rancho Mirage General Plan Safety Element, the project is within a “Very Severe” wind erosion hazards area.

**GEOLOGIC AND SEISMIC HAZARDS REPORT
EAGLE PROPERTY
SECTION 31, T4S, R6E, SBBN
NORTHEAST CORNER OF BOB HOPE DRIVE & FRANK SINATRA DRIVE
RANCHO MIRAGE, RIVERSIDE COUNTY, CALIFORNIA**

1.0 INTRODUCTION

1.1 Project Description

This report presents the updated results of Earth Systems Pacific's (Earth Systems) evaluation of potential geologic hazards for the approximate 618-acre property located at the northeast corner of Bob Hope Drive and Frank Sinatra Drive in Rancho Mirage, Riverside County, California (see Figure 1). The property is comprised of Assessor Parcel Numbers 618-410-007 and 674-430-007. The purpose of this report is to provide a summary of potential geologic hazards that might significantly affect the property and assumed residential-type future development. The proposed property is currently vacant desert land.

1.2 Purpose and Scope of Services

Our services for this report were performed as authorized by Mr. Russell Holmes for EC Rancho Mirage Holdings, LP on February 21, 2018. The scope of services included:

- A brief geologic reconnaissance of the property
- Review of selected geological literature and aerial photographs.
- A seismic hazards analysis.
- A summary of the findings and conclusions in this written report.

The conclusions and recommendations included in this report are based upon the data collected for this commission and past professional experience with similar projects in southern California. This report contains the following:

- General discussions on subsurface soil and groundwater conditions.
- Discussions on regional and local geologic conditions, including proximity of the site to regional and local active faults.
- Discussions on geologic and seismic hazards.

2.0 SITE DESCRIPTION

The property consists of approximately 618 acres situated east of Bob Hope Drive and north of Frank Sinatra Drive in Rancho Mirage, Riverside County, California (see Figure 1). The latitude near the center of the site is approximately 33.7801°N and the longitude is approximately -116.3971°W. The site is described as essentially all of Section 31, Township 4 South, Range 6 East, and a portion of the southeast quarter of the southeast quarter of Section 36, Township 4 South, Range 5 East, SBBM (see Figure 1). The site is bounded on the west by Bob Hope Drive, on the north by Gerald Ford Drive, on the east by Monterey Avenue, and on the south by Frank Sinatra Drive, all paved arterial streets. Access to the interior of the site is from two dirt roads which extend roughly south-southeast from Gerald Ford Drive towards the center of the site and Frank Sinatra Drive (see Figure 2).

Topographically, the site is generally flat. Elevations vary from approximately 280 feet above mean sea level at the southern property line to approximately 320 feet near the northeast corner. Dunes heights range up to approximately 15 feet. Current drainage for most of the site is by sheetflow internally within the site boundaries.

At the time of our field reconnaissance, the site was vacant. Vegetation includes typical desert vegetation, including sparse grasses, weeds, scrub, creosote, and mesquite common to local dune fields. Improvements include the previously described bounding streets, and two shallow retention basins within the northern portion of the property adjacent to Gerald Ford Drive. Buried utilities are common adjacent to the major streets.

3.0 REGIONAL GEOLOGY

The site lies within the Coachella Valley, a part of the Colorado Desert geomorphic province. A significant feature within the Colorado Desert geomorphic province is the Salton Trough, a large northwest-trending structural depression that extends approximately 180 miles from the San Gorgonio Pass to the Gulf of California (see Figure 3). Much of this depression in the area of the Salton Sea is below sea level.

The Coachella Valley forms the northerly part of the Salton Trough and contains a thick sequence of Miocene to Holocene sedimentary deposits. Mountains surrounding the upper Coachella Valley include the Little San Bernardino Mountains on the northeast, foothills of the San Bernardino Mountains on the west and northwest, and the San Jacinto and Santa Rosa Mountains on the southwest. These mountains expose primarily Precambrian metamorphic and Mesozoic granitic rocks. The San Andreas fault zone within the Coachella Valley, traversing along the northeast margin of the valley, consists of the Garnet Hill, Banning, and the Mission Creek faults.

Locally, the site is situated in the central portion of the Coachella Valley (see Figure 4). The Whitewater River alluvial plain extends along the axis and southern portion of the valley, with Quaternary alluvial and eolian deposits composing the valley floor. Igneous and metamorphic bedrock are the predominant rock types in the surrounding mountains.

4.0 LOCAL GEOLOGIC CONDITIONS

The Eagle property is located in the central portion of the Coachella Valley approximately two miles northeast of the San Jacinto and Santa Rosa Mountains. The project site is located upon the Whitewater River alluvial plain with the main Whitewater River channel located approximately 1.6 miles southwest of the property. Holocene alluvial sediments and wind-blown dune sand compose the surficial sediments.

Local faults associated with the San Andreas fault system in the upper Coachella Valley include the Mission Creek fault located along the southwestern front of the Little San Bernardino Mountains and the Banning fault along the southern margin of the Indio Hills. Local geologic units consist predominantly of Holocene sediments and dune sand.

Per Rogers (1986) the site is underlain by Holocene eolian or wind-blown dune sand. Minor deposits of artificial fill, resulting from road construction and maintenance are present along the immediate margins of the property.

4.1 Descriptive Geology

Lithologic materials underlying the site consist of artificial fill and Quaternary dune sand deposits. Barchan dunes are oriented in a northwest to southeast direction indicating the prevailing wind patterns. Surface soils consist predominantly of eolian sand composed of clean to slightly silty fine to medium sand (SP and SP-SM soil types per the Unified Soil Classification System). Shallow soils encountered in a soil boring (Earth Systems Southwest, 2001) drilled in the general vicinity of the site are composed of interbedded loose to medium dense slightly silty sand (SP-SM soil type per the Unified Soil Classification Systems) to the maximum depth of exploration of approximately 26 feet below existing grades.

Artificial fill soils, derived from on-site native sands and imported aggregate base have been used to grade the bounding roadways. Thicknesses of existing fill are estimated to be less than 2 feet. Shallow native soils appear to range from loose to medium dense and appear to have “very low” expansion potentials.

4.2 Faults

No Holocene-active faults are known to exist within the limits of the property. An Holocene-active fault is defined by the State of California as a “sufficiently active and well defined fault” that has exhibited surface displacement within the Holocene (about the last 11,700 years). The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone (CGS 2018).

The closest known significant active faults to the site include the Banning fault zone located approximately 4.1 miles (6.5 km) northeast of the site and the Mission Creek fault zone located approximately 5.7 miles (9.1 kilometers) northeast of the property (see Figure 3).

Other nearby active regional faults within approximately 30 miles of the site include the Burnt Mountain, Blue Cut, Eureka Peak, San Jacinto, Morongo and Pinto Mountain faults. Table A-1, in Appendix A lists local and regional faults located within approximately 75 miles of the site.

In addition, there are abundant active or potentially active faults located in southern California that are capable of generating earthquakes that could affect the Rancho Mirage area. These include the Mojave segment of the San Andreas fault, the many faults within the Mojave Desert located northeast of the San Bernardino Mountains and numerous faults located in the vicinity of the Los Angeles basin and coastal southern California (see Figure 3).

We consider the most significant geologic hazard to the project that is likely to occur during the design life of assumed residential development to be the potential for moderate to severe seismic shaking. The site is located in the highly seismic Southern California region within the influence of several fault systems that are considered to be active or potentially active. These active and potentially active faults are capable of producing potentially damaging seismic shaking at the site. It is anticipated that the property will periodically experience strong ground acceleration as the result of moderate to large magnitude earthquakes.

4.3 Groundwater

The Banning, Mission Creek, and Garnet Hill faults, which are part of the San Andreas fault system, divide the Coachella Valley into four distinct hydrogeologic subbasins. Each subbasin is further divided into subareas, based on either the type of water-bearing formation, water quality, areas of confined groundwater, forebay areas, groundwater divides, or surface water divides. The site is located within the Thermal subarea of the Indio subbasin. This subarea consists of the confined portion of the Indio subbasin, where water from the up-gradient Palm Springs subarea moves into the interbedded sands, silts, and clays underlying the central portion of the valley. Groundwater in this subarea generally flows in a southeasterly direction toward the Salton Sea. The water-bearing materials in this area have been divided into four units: a semi-perched zone at the ground surface and extending to a depth of up to 100 feet; an upper aquifer that is 150 to 300 feet thick; a lower aquifer in excess of 500 feet thick; and an aquitard between these two aquifers that is 100 to 200 feet thick. The semi-perched zone may be the uppermost water-bearing zone under the site. Water quality within this zone is generally poor. The deeper and upper aquifers are typically used for water supply. Throughout the Thermal subarea, the horizontal permeability is several times the vertical permeability, resulting in a predominantly lateral flow of groundwater (DWR, 1964).

Using the California Department of Water Resources data base, there are three wells in the vicinity of the project; one well 1.5 miles west of the site, a well one mile south of the site, and one well about 2 miles east of the site. In 2017 all three wells had ground surface to water surface depths of 193 to 210 feet. Data is typically from water supply wells which tend to tap deeper aquifers and therefore may not reflect the depth to the shallowest water table.

Fluctuations of the groundwater level, localized zones of perched water, and soil moisture content should be anticipated during and following the rainy season. Irrigation of landscaped areas can also cause a fluctuation of local groundwater levels.

5.0 GEOLOGIC HAZARDS

Geologic hazards that may affect the property include seismic shaking and other earthquake-related hazards, flooding, and erosion.

5.1 Fault Rupture

The site is not located within a currently delineated State of California Alquist-Priolo Earthquake Fault Zone (CGS 2018) or County of Riverside Earthquake Fault Zones (County GIS data base, 2018). No known active faults have been identified on the site.

The potential for future surface fault rupture at the site is considered to be nil. While fault rupture would most likely occur along previously established fault traces, future fault rupture could occur at other locations.

5.2 Seismic Shaking

Our research of regional faulting indicates that at least 32 active faults or seismic zones lie within 62 miles (100 kilometers) of the project site as shown on Table A-1 in Appendix A. The primary seismic hazard to the site is strong ground shaking from earthquakes along the San

Andreas and San Jacinto faults. The Maximum Magnitude Earthquake (M_{\max}) listed is from published geologic information available for each fault (CDMG, 1996). The M_{\max} corresponds to the maximum earthquake believed to be tectonically possible.

The site is located within an active seismic area in southern California where large numbers of earthquakes are recorded each year. Figure 5, Earthquake Epicenter Map, depicts epicenters of significant seismic events greater than magnitude 4.5 that have occurred in southern California between 1812 and 2000. Magnitudes that are above 6 and post date accurate instrumental measurements (after 1933) are based on moment magnitudes (M_w). Magnitudes that are below 6 or earthquakes prior to 1933 are based on local magnitudes (M_L).

Many of the major historic earthquakes felt in the vicinity of Rancho Mirage have originated from faults located outside the area. These include the 1857 Fort Tejon, 1933 Long Beach, 1952 Arvin-Tehachapi, 1971 San Fernando, 1987 Whittier Narrows, 1992 Landers, 1994 Northridge, and 1999 Hector Mine earthquakes.

Six historic seismic events (5.9 M or greater) have significantly affected the Coachella Valley this century. They are as follows:

- *Desert Hot Springs Earthquake* - On December 4, 1948, a magnitude 6.5 M_L (6.0 M_w) earthquake occurred east of Desert Hot Springs. This event was strongly felt in the Rancho Mirage area.
- *North Palm Springs Earthquake* - A magnitude 5.9 M_L (6.2 M_w) earthquake occurred on July 8, 1986 in the Painted Hills causing minor surface creep of the Banning and Mission Creek segments of the San Andreas fault. This event was strongly felt in the Coachella Valley and caused structural damage, as well as injuries. The epicenter of this earthquake was approximately 19 miles northwest of the project site.
- *Joshua Tree Earthquake* - On April 22, 1992, a magnitude 6.1 M_L (6.1 M_w) earthquake occurred in the mountains 9 miles east of Desert Hot Springs. Structural damage and minor injuries occurred in the Indio area as a result of this earthquake.
- *Landers & Big Bear Earthquakes* - Early on June 28, 1992, a magnitude 7.5 M_S (7.3 M_w) earthquake occurred near Landers, the largest seismic event in Southern California for 40 years. Surface rupture occurred just south of the town of Yucca Valley and extended some 43 miles toward Barstow. About three hours later, a magnitude 6.6 M_S (6.4 M_w) earthquake occurred near Big Bear Lake.
- *Hector Mine Earthquake* - On October 16, 1999, a magnitude 7.1 M_w earthquake occurred on the Lavic Lake and Bullion Mountain faults north of 29 Palms. This event while widely felt, no significant structural damage has been reported in the Coachella Valley.

The most significant recent earthquakes with respect to proximity to the project site include the 1948 6.0 magnitude Desert Hot Springs earthquake and 1992 6.2 Joshua Tree earthquake with epicenters 11 and 13 miles respectively from the site. While these earthquakes were generated by minor fault rupture along regional faults, they were well below the maximum magnitude earthquakes of approximately 7.9 anticipated for either the Banning or Mission Creek segments of the San Andreas fault zone. The last major fault rupture along the local segments of the San Andreas fault is thought to be approximately 1690.

Table I lists select significant recorded earthquakes (SCEC, 2018) felt in the Rancho Mirage area and the estimated intensity of ground shaking near the site based on the Modified Mercalli Scale. The Table is organized by epicenter distance from the site. A description of damage based on the Modified Mercalli Scale is included as Table 3 of this report.

Table I
Significant Historical Earthquakes

| Earthquake | ~ Distance to Epicenter Miles | Earthquake Magnitude* | Estimated Intensity** | Date |
|--------------------|--------------------------------------|------------------------------|------------------------------|-------------|
| Desert Hot Springs | 11 | ≈6.0 | VII-VIII | 1948 |
| Joshua Tree | 13 | 6.1 | VI | 1992 |
| N. Palm Springs | 19 | 6.2 | VII | 1986 |
| Terwililger Valley | 19 | ≈6.0 | VI | 1937 |
| San Jacinto | 27 | 6.8 | VI | 1890 |
| Landers | 29 | 7.3 | VI-VII | 1992 |
| San Jacinto | 35 | 6.4 | VI | 1899 |
| San Jacinto | 35 | 6.8 | VI | 1918 |
| Arroyo Salada | 36 | 6.3 | VI | 1954 |
| Pinto Mountain | 44 | 5.9 | V | 1949 |
| Borrego Mountain | 44 | 6.6 | V | 1968 |
| Hector Mine | 46 | 7.1 | V-VI | 1999 |
| Glen Ivy Hot Spr. | 58 | 6.0 | V | 1910 |

* Moment Magnitude after 1933 or above 6, or Local Magnitude prior to 1933 or below 6 (S.C.E.C.)

** Modified Mercalli Scale

From this analysis, it appears that the past maximum intensity in the Rancho Mirage area from historical earthquakes due to regional faults is on the order of VII to VIII on the Modified Mercalli Scale. Table 2 summarizes select significant regional faults that represent potential earthquake sources for this site.

Table 2 - Significant Regional Faults

| Fault | Maximum Moment Magnitude | Approximate Distance to Site* |
|--------------------------------|---------------------------------|--------------------------------------|
| San Andreas – Banning Branch | 7.2 | 4 |
| San Andreas –Mission Creek | 7.2 | 6 |
| Burnt Mountain | 6.5 | 11 |
| San Jacinto-Hot Springs | 6.5 | 19 |
| Morongo | 6.5 | 21 |
| Pinto Mountain | 7.2 | 22 |
| San Jacinto-Anza | 7.2 | 22 |
| Emerson-Copper Mtn | 7.0 | 28 |
| North Frontal Fault Zone-East | 6.7 | 31 |
| San Jacinto-San Jacinto Valley | 6.9 | 31 |
| Elsinore - Julian | 7.1 | 45 |
| Cucamonga | 7.0 | 66 |
| San Andreas - Mojave | 7.8 | 75 |

* Approximate closest distance to fault in miles.

Note: Fault parameters are presented in Appendix A.

Table 3
Modified Mercalli Intensity Scale of 1931¹, (1956 version)²

Masonry A, B, C, D. To avoid ambiguity of language, the quality of masonry, brick or otherwise, is specified by the following lettering.

- Masonry A* Good workmanship, mortar, and design; reinforced, especially laterally and bound together by using steel, concrete, etc.; designed to resist lateral forces.
- Masonry B* Good workmanship and mortar; reinforced, but no designed in detail to resist lateral forces.
- Masonry C* Ordinary workmanship and mortar; no extreme weaknesses like failing to tie in at corners, but neither reinforced nor designed against horizontal forces.
- Masonry D* Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.

| | |
|-------|--|
| I. | Not felt. Marginal and long-period effects of large earthquakes. |
| II. | Felt by persons at rest, on upper floors, or favorably placed. |
| III. | Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake. |
| IV. | Hanging objects swing. Vibrations like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frame creak. |
| V. | Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate. |
| VI. | Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (church, school). Trees, bushes shaken visibly, or heard to rustle. |
| VII. | Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices also unbraced parapets and architectural ornaments. Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged. |
| VIII. | Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes. |
| IX. | General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. General damage to foundations. Frame structures, if not bolted, shifted off foundations Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluviated areas sand and mud ejected, earthquake fountains, sand craters. |
| X. | Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly. |
| XI. | Rails bent greatly. Underground pipelines completely out of service. |
| XII. | Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air. |

¹Original 1931 version in Wood, H.O., and Neumann, F., 1931, Modified Mercalli intensity scale of 1931: Seismological Society of America Bulletin, v. 53, no. 5, p. 979-987.

²1956 version prepared by Charles F. Richter, in Elementary Seismology, 1958, p. 137-138, W. H. Freeman & Co.

5.2.1 Site Characterization

In developing site specific seismic design criteria, the characteristics of the earth units underlying the site are an important input to evaluate the site response. Based on past experience in the area, the project site is underlain by medium dense sediments. Based on this information, we classify the geologic subgrade for site response as Site Class D according to ASCE 7, Chapter 20. Site Class D is defined as a soil profile consisting of stiff soil with shear wave velocities between 600 and 1200 feet/second or SPT N =15 to 50 in the top 100 feet.

5.2.2 Probabilistic Analysis

Probabilistic modeling procedure was used to estimate the peak ground motion. The probabilistic analysis approach is based on the characteristics of the earthquake and of the causative fault associated with the earthquake. These characteristics include such items as magnitude of the earthquake, distance from the site to the causative fault, maximum earthquake magnitude, length, and activity of the fault. The effects of site soil conditions and mechanism of faulting are accounted for in the attenuation relationships.

A Probabilistic Seismic Hazard Analysis (PSHA) using the California Geologic Survey Probabilistic Seismic Hazards Ground Motion Interpolator website (2008) was conducted to estimate potential ground motions at the proposed site. Based on this analysis, the estimated Maximum Considered Earthquake mean peak horizontal ground acceleration, which has a 2% probability of being exceeded in 50 years, is approximately 0.85 g. The primary seismic risks are from earthquakes generated primarily by the local segments of the San Andreas fault, and to a lesser extent the San Jacinto, and Pinto Mountain fault zones.

Acceleration values provided are estimates only. Actual acceleration values may be more or less than those provided and could exceed 1 g assuming a maximum credible earthquake event occurs on the nearby Banning or Mission Creek faults. Vertical accelerations are typically 1/3 to 2/3 of the horizontal accelerations, but can equal or exceed the horizontal accelerations depending upon the local site effects and amplification. Estimated maximum Mercalli intensities at the site from locally occurring earthquakes are approximately VIII-IX. The County of Riverside Seismic Hazards safety element suggests a 22% chance of occurrence by 2030 of a magnitude 7.1 to 7.9 earthquake on the southern and Coachella segments of the San Andreas fault.

This site is subject to strong ground shaking due to potential fault movements along the San Andreas and San Jacinto or other regional faults. The underlying geologic condition for seismic design is Site Class D. The site soils are not subject to liquefaction-induced bearing failure. The minimum seismic design should comply with the 2016 edition of the California Building Code [CBC] and ASCE 7-10 (with July 2013 errata) using the seismic coefficients given in the table below.

Based on the above information, we classify the site soil profile for site response as D according to Table 20.3-1 of ASCE7-10. The D characterization is defined as a soil profile consisting of stiff soil with shear wave velocities between 600 and 1,200 ft/s. Seismic parameters are based upon computation by the Ground Motion Parameter Calculator provided by the United States

Geological Survey [USGS] at: <http://earthquake.usgs.gov/designmaps/us/application.php> (February 2018). Structure periods greater than 0.5 seconds will require a site-specific evaluation as the parameters presented below would not be valid for design.

Table 4 includes a summary of the estimated seismic parameters typically used for structural design per the 2016 CBC.

| Table 4 | |
|--|-----------------------|
| 2016 CBC (ASCE 7-10 w/ July 2013 errata) Seismic Parameters | |
| Site Location: | 33.7801°N/-116.3971°W |
| Site Class: | D |
| Maximum Considered Earthquake [MCE] Ground Motion | |
| Short Period Spectral Response S_s : | 1.699 g |
| 1 second Spectral Response, S_1 : | 0.807 g |
| Design Earthquake Ground Motion | |
| Short Period Spectral Response, S_{DS} | 1.132 g |
| 1 second Spectral Response, S_{D1} | 0.807 g |
| PGA_M | 0.68 g |

The intent of the CBC lateral force requirements is to provide a structural design that will resist collapse to provide reasonable life safety from a major earthquake, but may experience some structural and nonstructural damage. A fundamental tenet of seismic design is inelastic yielding is allowed to adapt to the seismic demand on the structure. In other words, *damage is allowed*. The CBC lateral force requirements should be considered a *minimum* design. The owner and the designer may evaluate the level of risk and performance that is acceptable. Performance based criteria could be set in the design. The design engineer should exercise special care so that all components of the design are fully met with attention to providing a continuous load path. An adequate quality assurance and control program is urged during project construction to verify the design plans and good construction practices are followed. This is especially important for sites lying close to major seismic sources. Design peak horizontal ground accelerations are estimated to be approximately 0.85 g. Vertical accelerations are typically 1/3 to 2/3 of the horizontal acceleration, but can equal or exceed horizontal accelerations depending upon underlying geologic conditions and basin effects.

5.3 Secondary Seismic Hazards

Secondary seismic hazards related to ground shaking include liquefaction, ground deformation, areal subsidence, tsunamis, and seiches. Due to the inland location of the site and its elevation, hazards from tsunamis are considered nil. There are no water storage tanks in the immediate vicinity of the site that may pose a flood hazard. Thus, seiche potentials are considered nil.

5.3.1 Fissuring and Ground Subsidence

The project site is not located within an area where previous ground fissuring from areal subsidence or groundwater withdrawal has been documented (Sneed, et al 2014). Per the 2017 City of Rancho Mirage General Plan, the project area is within a designated “susceptible” area for subsidence. In areas of fairly uniform thickness of alluvium, fissures are thought to be the result of tensional stress near the ground surface and generally occur near the margins of the areas of maximum subsidence. Surface runoff and erosion of the incipient fissures augment the appearance and size of the fissures.

Changes in pumping regimes can affect localized groundwater depths, related cones of depression, and associated subsidence such that the prediction of where fissures might occur in the future is difficult. In the event of future nearby aggressive groundwater pumping and utilization, the occurrence of deep subsidence cannot be ruled out, although, subsidence would most likely occur on an areal basis with the effects to individual structures anticipated to be minimal.

Dry sands tend to settle and densify when subjected to strong earthquake shaking. The amount of subsidence is dependent on relative density of the soil, ground motion, and earthquake duration. Due to relatively deep groundwater conditions of about 200 feet deep, it is anticipated that the deeper sediments underlying the site have been present for multiple San Andreas earthquakes and thus have experienced most dry settlement. Reduction of the groundwater table will expose soils that will be susceptible to further seismic induced settlement. Shallower soils in the upper 50 feet are much younger and may exhibit significant settlement in the event of future local earthquakes. Thus, the potential for seismically induced ground subsidence is considered to be moderate at the site and could be on the order of 2 to 3 inches. The potential for differential settlements of native soils and artificial fill should be addressed in site specific geotechnical reports for future development.

5.3.2 Soil Liquefaction

Liquefaction is the loss of soil strength due to sudden shock (usually due to earthquake shaking), causing the soil to become a fluid mass. In general, for the effects of liquefaction to be manifested at the surface, groundwater levels must be within 50 feet of the ground surface and the soils within the saturated zone must also be susceptible to liquefaction.

The site lies within a “low” liquefaction hazard area established in the City of Rancho Mirage General Plan Safety Element.

The liquefaction potential at the site is currently considered very low as current groundwater depths are near 200 feet. Due to coarseness of the native soils and general lack of shallow silts and clays, the potential for mounding or perched groundwater conditions from anthropic applied water is considered low.

Non-tectonic ground deformation consists of surface cracking of the ground with little to no displacement. This type of deformation is not caused by fault rupture. Rather it is generally associated with differential shaking of two or more geologic units with differing physical characteristics. Liquefaction or settlement related to liquefaction may also cause ground

deformation. As the site is relative flat with consistent geologic material (alluvium), the potential for ground deformation is considered very low under current conditions.

5.4 Landslides

As the site is relatively flat and level, hazards from landslides are considered low. Over-steepened dune slopes or cut slopes excavated into dunes sands will pose slope stability issues. In general, graded slopes at 3:1 (horizontal to vertical) finished grades are anticipated to be stable from gross or surficial landslide failures. Potentials for debris flow hazards within or adjacent to the site is considered nil.

5.5 Flooding

The project site is in an area where sheet flooding and erosion could occur. The site is not located within a 100 or 500-year FEMA flood hazard zone. Appropriate project design, construction, and maintenance can reduce flooding potentials. Due to the inland location of the project site, hazards from tsunamis or seiches are considered nil.

5.6 Settlement

Based upon previous studies and geotechnical experience in the area, the shallow native soils may have minor settlement potentials due to low relative compaction or non-uniformity. The potential for seismic induces settlement is considered "moderate".

5.7 Expansive Soil

Shallow native soils in the site vicinity are reported to have "very low" expansion potentials. Direct observation of comparable on-site surficial soils confirms the presence of non-expansive slightly silty sands.

6.0 DISCUSSIONS AND CONCLUSIONS

The following is a summary of our conclusions and professional opinions based on the data collected.

1. The site does not lie within a State of California Alquist-Priolo Earthquake Fault Zone as currently delineated. No Holocene-active faults are known to exist within the project limits. The potential for future fault rupture at this site is considered nil.
2. The primary geologic hazard relative to site development is severe ground shaking from earthquakes originating on nearby or regional faults. In our opinion, a major seismic event originating on any of the many local faults would be the most likely cause of significant earthquake activity at the site within the estimated design life of the proposed development. Maximum Modified Mercalli scale intensities of approximately VIII-IX and mean peak horizontal ground accelerations of approximately 0.8+ g should be anticipated. Vertical accelerations are typically 1/3 to 2/3 of the horizontal accelerations, but can equal or exceed the horizontal accelerations depending upon the local site effects and amplification.

3. Due to the inland location of the site and its relative elevation, the potential for damaging effects from a tsunamis or seiche are considered nil. The site is not within a 100 or 500-year FEMA flood zone.
4. Hazards from slope instability, landslides, or debris flows are considered nil to low under current conditions.
5. The potential for liquefaction under the site is currently considered low due to relatively deep groundwater elevations.
6. The project site is in an area susceptible to regional subsidence. Due to historic over-draft of groundwater in the Coachella Valley, accelerated subsidence has locally occurred in the Palm Desert, Indian Wells, and La Quinta areas. The site is not in an area where excessive subsidence and ground fissuring has occurred, although properties approximately two miles south of the site are within known settlement and fissuring areas.
7. Exposed soils on the site are susceptible to sheet flooding and erosion. Preventative measures to minimize seasonal flooding and erosion should be incorporated into site design, construction and maintenance. The site is within a severe wind erosion/dune field area.
8. Based on our previous geotechnical experience, native soils typically exhibit some settlement potential relating to low densities, non-uniformity, and seismic-induced subsidence. Shallow soils may exhibit "very low" expansion potentials.

7.0 RECOMMENDATIONS

Based upon the data collected to date, the following recommendations are provided relative to the assumed residential development and noted geologic hazards.

1. All proposed new structures should be designed in accordance with at least minimum building code standards as described in the 2016 California Building Code. Construction should allow for all plumbing and utility services to be connected with flexible connections and provided with convenient shutoffs.
2. The site should be designed and/or maintained to accommodate seasonal flooding.
3. The on-site earth materials are susceptible to wind and water erosion. Measures to minimize erosion should be incorporated into the overall project design.
4. Project specific geotechnical recommendations for future site grading, remedial grading, foundation design, differential settlement, and other geotechnical considerations should be incorporated into site development and construction.

8.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

The conclusions and recommendations submitted in this report are based, in part, upon the data obtained from the field reconnaissance, review of pertinent geologic/geotechnical reports,

and past experience. The nature and extent of variations from observed conditions may not become evident until detailed geotechnical studies of the site are performed or during construction. If variations then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

In the event of any change in the assumed nature of the proposed project planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusions of this report modified or verified in writing. This report is issued with the understanding that it is the responsibility of the Client, or their representatives, to ensure that the information and recommendations contained in this report are called to the attention of architects and engineers for the project and incorporated into the plan, and that the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.

Earth Systems has prepared this report for the exclusive use of the EC Rancho Mirage Holdings, LP and its authorized agents. As the geologic consultant for this project, Earth Systems has striven to prepare this report in accordance with generally accepted geologic practices in this community at this time. No warranty or guarantee is expressed or implied.

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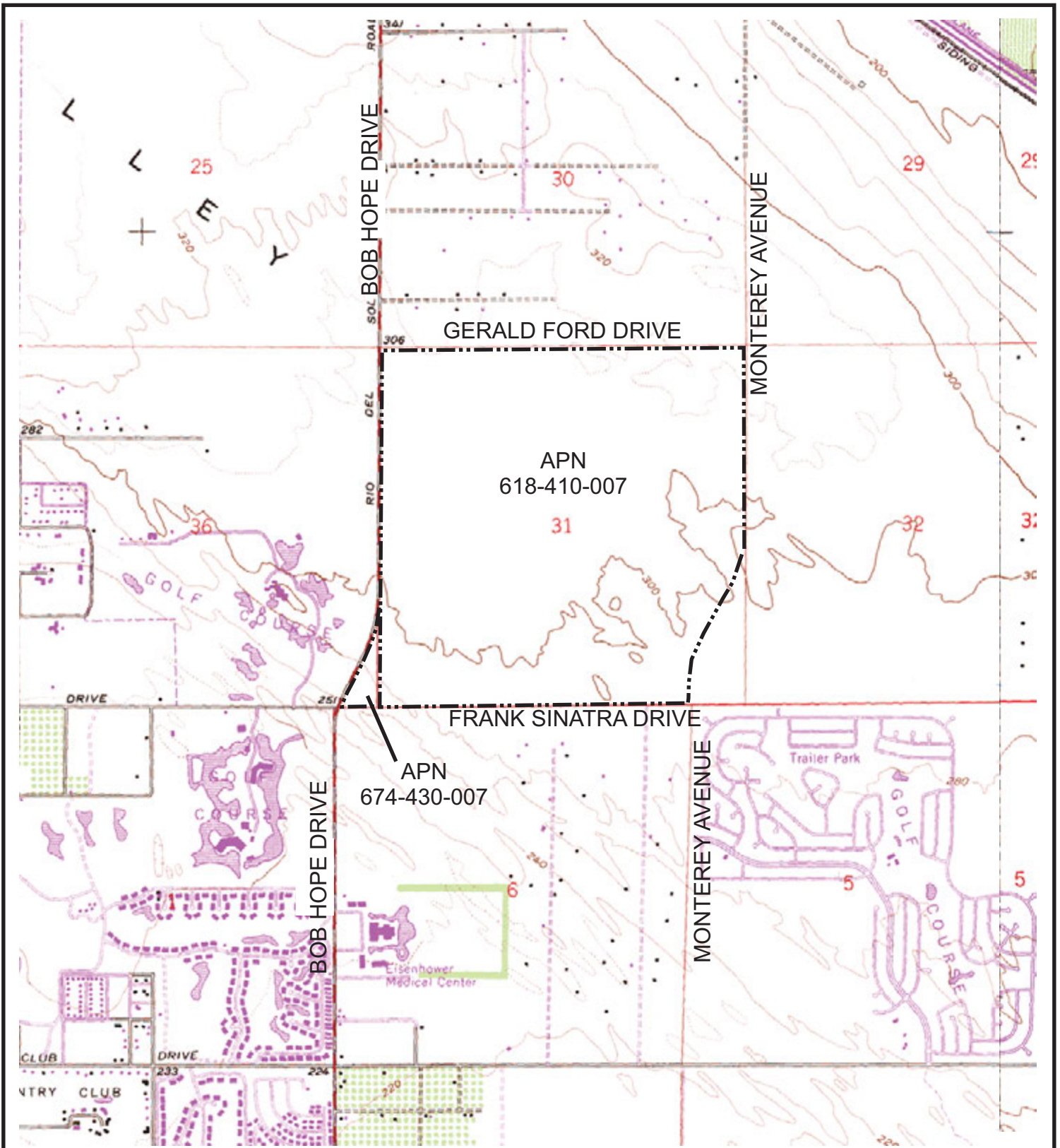
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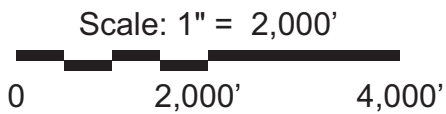
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FIGURES

- Figure 1 – Site Plan & Vicinity Map
- Figure 2 – Aerial Photograph
- Figure 3 – Geomorphic Map
- Figure 4 – Regional Geologic Map
- Figure 5 – Earthquake Epicenter Map



Base MapS: U.S.G.S. 7.5 Minute Quadrangle, Cathedra City, Calif. (1958, photorevised 1981); U.S.G.S. 7.5 Minute Quadrangle, Myoma, Calif. (1958, photorevised 1972, photoinspected 1978).



Site Plan and Vicinity Map

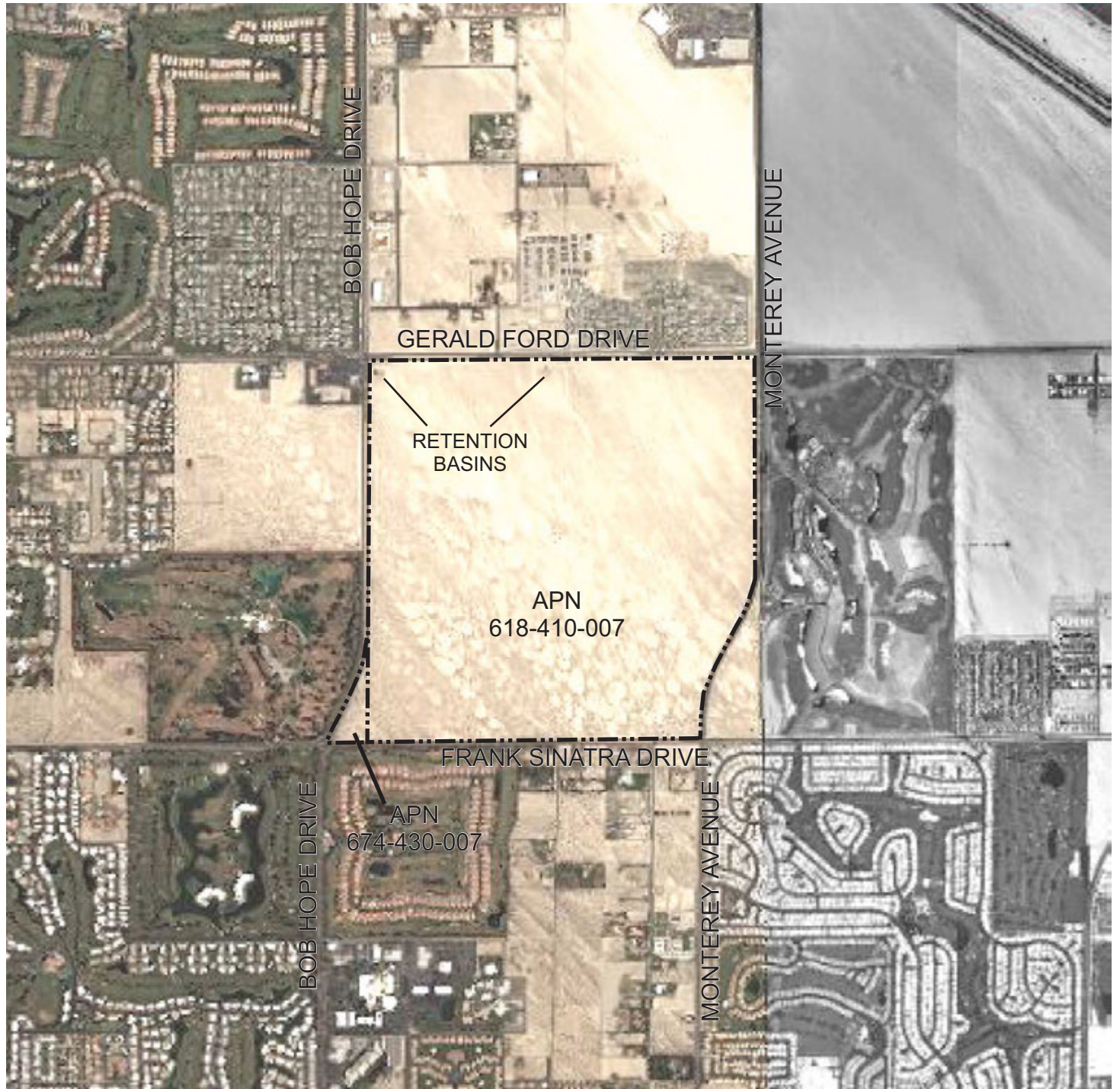
EAGLE PROPERTY
SECTION 31, T4S, R6E, SBBM
RANCHO MIRAGE, RIVERSIDE COUNTY, CALIFORNIA
FIGURE 1



Earth Systems

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Approximate Scale: 1" = 2,000'



Aerial Photograph

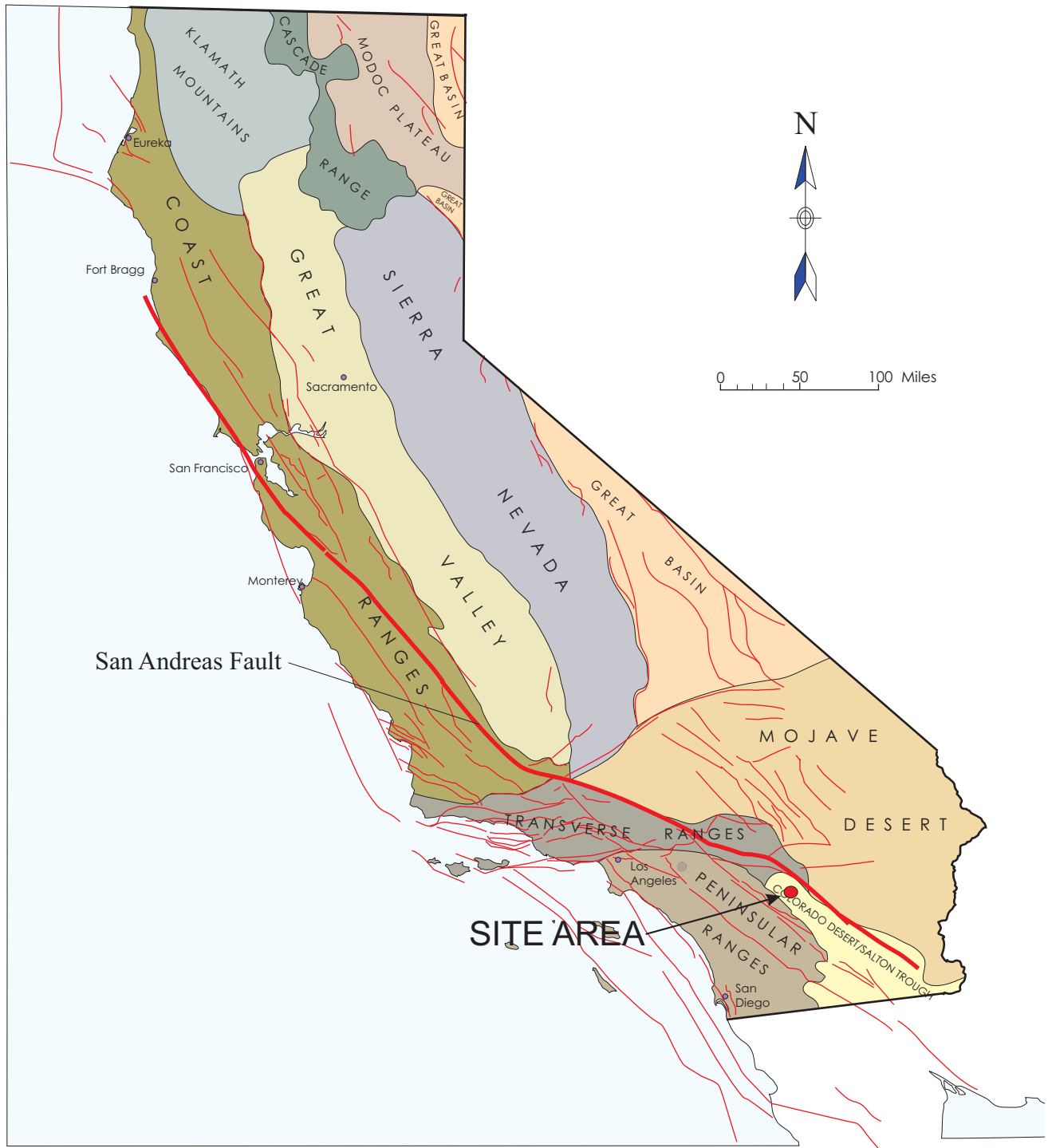
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FIGURE 2




Earth Systems

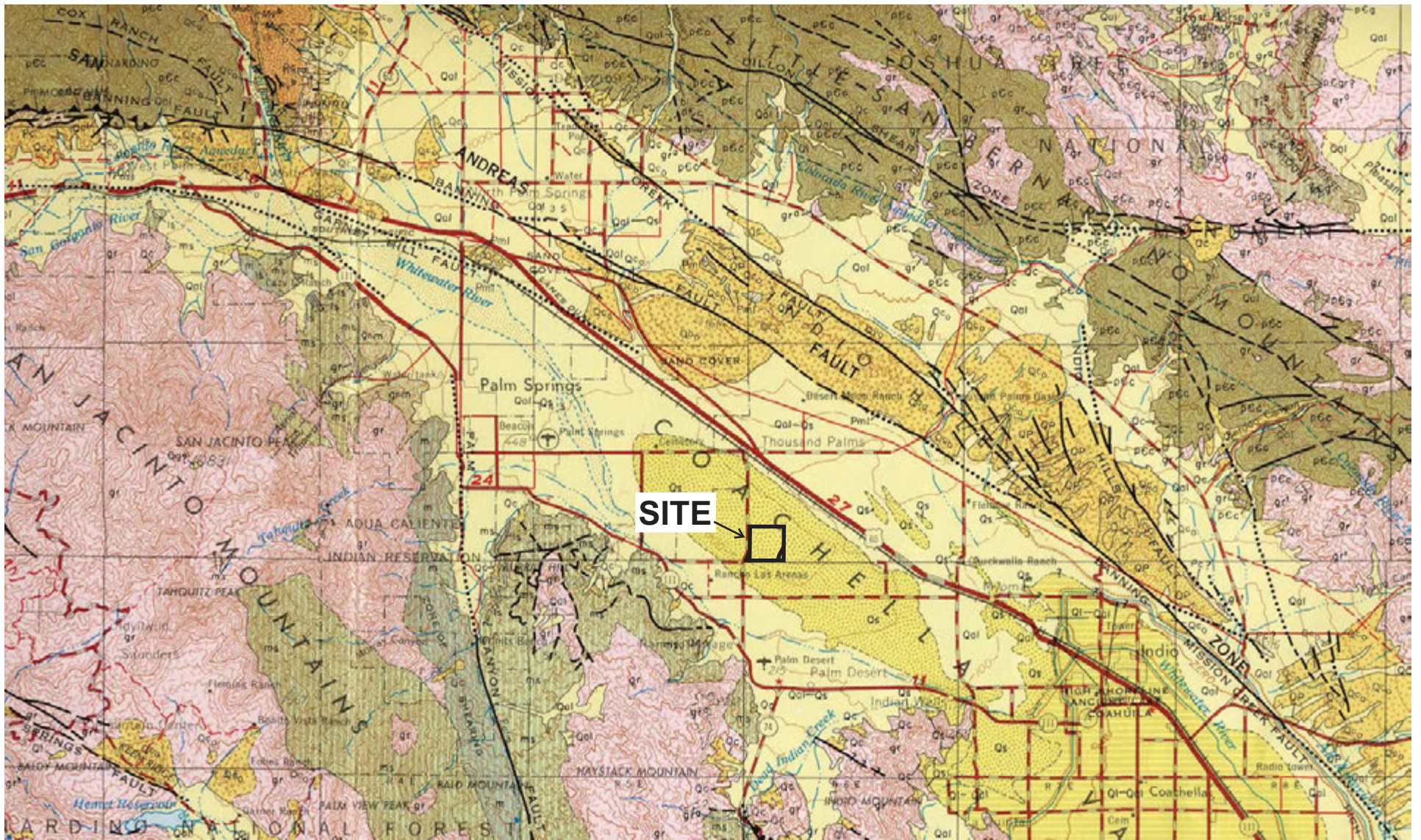
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Map showing geomorphic provinces of California and major active and potentially active faults. Fault locations are based on Jennings (1994) and Blake (2000).


| | |
|--|------------|
| STATE OF CALIFORNIA GEOMORPHIC MAP | |
| EAGLE PROPERTY SECTION 31, T4S, R6E, SBBM RANCHO MIRAGE, RIVERSIDE COUNTY, CALIFORNIA FIGURE 3 | |
|  Earth Systems | |
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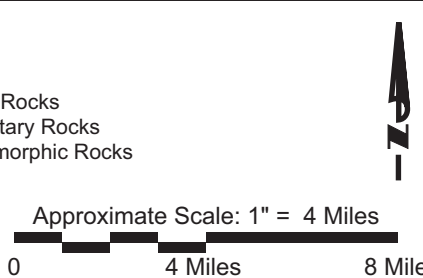


Base Drawing: Geologic Map of California, Santa Ana Sheet, 1965

LEGEND

- Qal - Quaternary Alluvium
- Qs - Quaternary Dune Sand
- Qc/Qc_o - Quaternary Older Alluvium
- Pc - Pliocene Non-Marine Sedimentary Rocks
- Pml - Pliocene Marine Sedimentary Rocks
- Muc - Miocene Non-Marine Sedimentary Rocks
- MV^b - Miocene Basalt
- gr - Mesozoic Granitic Rocks
- m - Pre-Cretaceous Metamorphic Rocks
- ms - Pre-Cretaceous Metasedimentary Rocks
- pEc - Precambrian Igneous & Metamorphic Rocks

 Fault: Dashed where approximate, dotted where concealed.



REGIONAL GEOLOGIC MAP

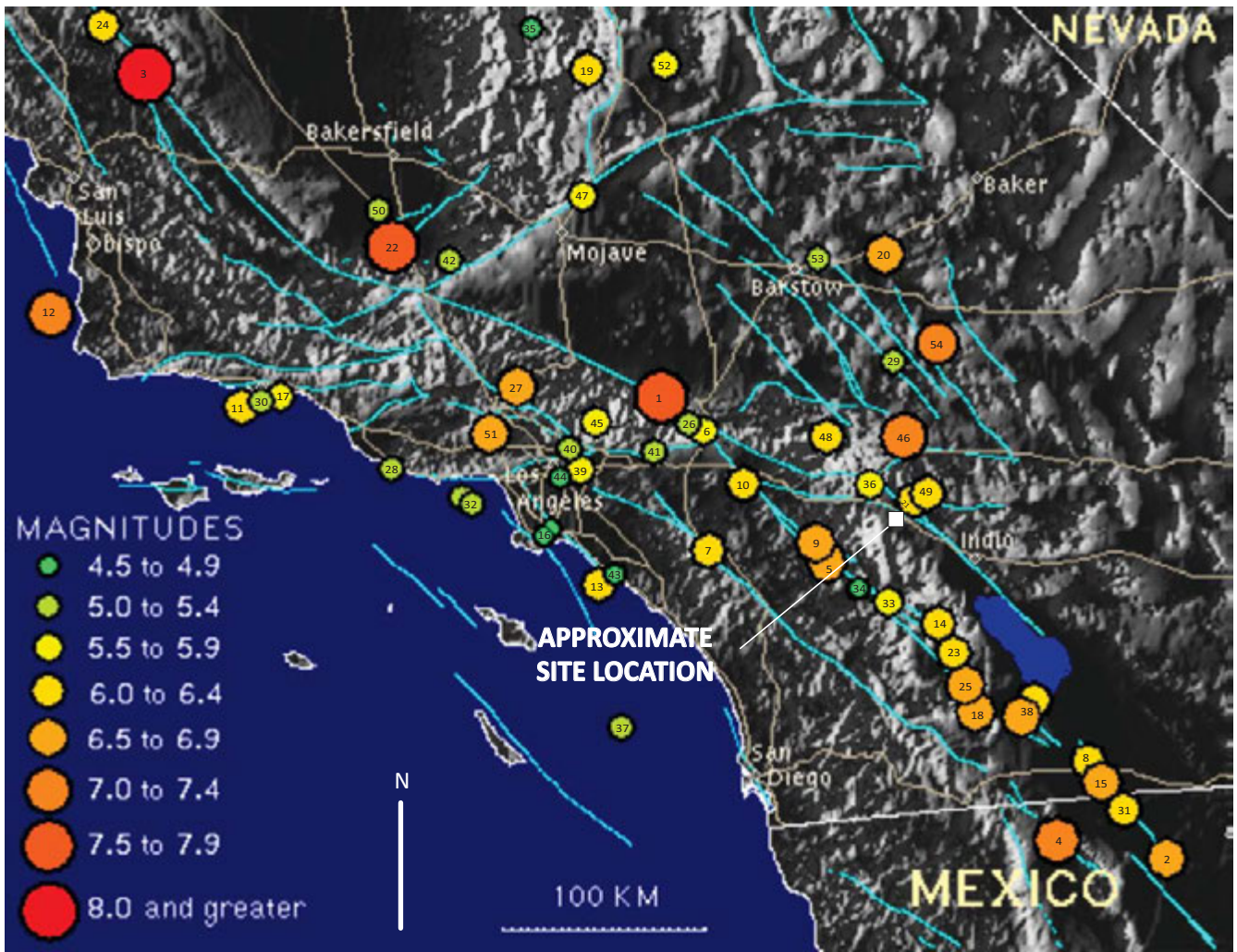
EAGLE PROPERTY
SECTION 31, T4S, R6E, SBBM
RANCHO MIRAGE, RIVERSIDE COUNTY, CALIFORNIA
FIGURE 4



Earth Systems

03/02/18

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HISTORIC EARTHQUAKES AND EPICENTERS

- | | | |
|--------------------------------|----------------------------------|---|
| 1. 1812, WRIGHTWOOD | 19. 1946, WALKER PASS | 37. 1986, OCEANSIDE |
| 2. 1852, VOLCANO LAKE | 20. 1947, MANIX | 38. 1987, ELMORE RANCH & SUPERSTITION HILLS |
| 3. 1857, FORT TEJON | 21. 1948, DESERT HOT SPRINGS | 39. 1987, WHITTIER NARROWS |
| 4. 1892, LAGUNA SALADA | 22. 1952, KERN COUNTY | 40. 1988, PASADENA |
| 5. 1899, SAN JACINTO | 23. 1954, SAN JACINTO | 41. 1988, UPLAND |
| 6. 1899, CAJON PASS | 24. 1966, PARKFIELD | 42. 1988, TEJON RANCH |
| 7. 1910, ELSINORE | 25. 1968, BORREGO MOUNTAINS | 43. 1989, NEWPORT BEACH |
| 8. 1915, IMPERIAL VALLEY | 26. 1970, LYTLE CREEK | 44. 1989, MONTEBELLO |
| 9. 1918, SAN JACINTO | 27. 1971, SAN FERNANDO | 45. 1991, SIERRA MADRE |
| 10. 1923, NORTH SAN JACINTO | 28. 1973, POINT MAGU | 46. 1992, LANDERS |
| 11. 1925, SANTA BARBARA | 29. 1975, GALWAY LAKE | 47. 1992, MOJAVE |
| 12. 1927, LOMPOC | 30. 1978, SANTA BARBARA | 48. 1992, BIG BEAR |
| 13. 1933, LONG BEACH | 31. 1979, IMPERIAL VALLEY | 49. 1992, JOSHUA TREE |
| 14. 1937, SAN JACINTO | 32. 1979, MALIBU | 50. 1993, WHEELER RIDGE |
| 15. 1940, IMPERIAL VALLEY | 33. 1980, WHITE WASH | 51. 1994, NORTHRIDGE |
| 16. 1941, TORRANCE-GARDENA | 34. 1982, ANZA GAP | 52. 1995, RIDGECREST |
| 17. 1941, SANTA BARBARA | 35. 1983, DURRWOOD MEADOWS SWARM | 53. 1997, CALICO |
| 18. 1942, FISH CREEK MOUNTAINS | 36. 1986, NORTH PALM SPRINGS | 54. 1999, HECTOR MINE |

MAP SHOWING LOCATIONS OF SIGNIFICANT HISTORICAL EARTHQUAKES IN SOUTHERN CALIFORNIA FROM 1812 TO 2000

SOURCE: SOUTHERN CALIFORNIA EARTHQUAKE CENTER, WEB PAGE, 2000

EARTHQUAKE EPICENTER MAP

EAGLE PROPERTY
SECTION 31, T4S, R6E, SBBM
RANCHO MIRAGE, RIVERSIDE COUNTY, CALIFORNIA
FIGURE 5



Earth Systems

03/02/18

301790-001

APPENDIX A

Seismic Data

Table A-1 (Fault Parameters)

Table 1
Fault Parameters
& Deterministic Estimates of Mean Peak Ground Acceleration (PGA)

| Fault Name or Seismic Zone | Distance from Site | | Fault Type | | Maximum Magnitude | Avg Slip Rate | Avg Return Period | Fault Length | Mean Site PGA |
|-------------------------------------|--------------------|------|------------|-----|-------------------|---------------|-------------------|--------------|---------------|
| | (mi) | (km) | (2) | (3) | (4) | (2) | (2) | (2) | (5) |
| Reference Notes: (1) | | | | | | | | | |
| San Andreas - Banning Branch | 4.7 | 7.6 | SS | A | 7.2 | 10 | 220 | 98 | 0.41 |
| San Andreas - Southern | 5.6 | 9.0 | SS | A | 7.7 | 24 | 220 | 199 | 0.44 |
| San Andreas - Mission Crk. Branch | 6.4 | 10.3 | SS | A | 7.2 | 25 | 220 | 95 | 0.35 |
| Burnt Mtn. | 11.5 | 18.4 | SS | B | 6.5 | 0.6 | 5000 | 21 | 0.17 |
| Blue Cut | 12.1 | 19.5 | SS | C | 6.8 | 1 | 760 | 30 | 0.19 |
| Eureka Peak | 13.4 | 21.6 | SS | B | 6.4 | 0.6 | 5000 | 19 | 0.14 |
| San Jacinto (Hot Spgs - Buck Ridge) | 17.9 | 28.8 | SS | C | 6.5 | 2 | 354 | 70 | 0.12 |
| Morongo | 20.9 | 33.6 | SS | C | 6.5 | 0.6 | 1170 | 23 | 0.10 |
| San Jacinto-Anza | 21.5 | 34.6 | SS | A | 7.2 | 12 | 250 | 91 | 0.14 |
| Pinto Mountain | 22.7 | 36.5 | SS | B | 7.2 | 2.5 | 499 | 74 | 0.14 |
| San Jacinto-Coyote Creek | 23.2 | 37.3 | SS | B | 6.8 | 4 | 175 | 41 | 0.11 |
| Landers | 26.5 | 42.6 | SS | B | 7.3 | 0.6 | 5000 | 83 | 0.13 |
| Emerson So. - Copper Mtn. | 28.9 | 46.4 | SS | B | 7.0 | 0.6 | 5000 | 54 | 0.10 |
| San Jacinto-San Jacinto Valley | 30.0 | 48.2 | SS | B | 6.9 | 12 | 83 | 43 | 0.09 |
| North Frontal Fault Zone (East) | 31.3 | 50.3 | RV | B | 6.7 | 0.5 | 1727 | 27 | 0.10 |
| Pisgah-Bullion Mtn.-Mesquite Lk | 33.3 | 53.6 | SS | B | 7.3 | 0.6 | 5000 | 89 | 0.10 |
| Johnson Valley (Northern) | 37.2 | 59.9 | SS | B | 6.7 | 0.6 | 5000 | 35 | 0.06 |
| Calico - Hidalgo | 40.6 | 65.4 | SS | B | 7.3 | 0.6 | 5000 | 95 | 0.08 |
| North Frontal Fault Zone (West) | 41.6 | 66.9 | RV | B | 7.2 | 1 | 1314 | 50 | 0.10 |
| San Jacinto - Borrego | 41.7 | 67.2 | SS | B | 6.6 | 4 | 175 | 29 | 0.05 |
| Lenwood-Lockhart-Old Woman Sprgs | 41.9 | 67.4 | SS | B | 7.5 | 0.6 | 5000 | 145 | 0.09 |
| Earthquake Valley | 42.7 | 68.7 | SS | B | 6.5 | 2 | 351 | 20 | 0.05 |
| Elsinore-Julian | 44.2 | 71.1 | SS | A | 7.1 | 5 | 340 | 76 | 0.07 |
| Elsinore-Temecula | 45.1 | 72.5 | SS | B | 6.8 | 5 | 240 | 43 | 0.06 |
| Helendale - S. Lockhardt | 48.9 | 78.7 | SS | B | 7.3 | 0.6 | 5000 | 97 | 0.07 |
| Brawley Seismic Zone | 49.7 | 80.0 | SS | B | 6.4 | 25 | 24 | 42 | 0.04 |
| San Jacinto-San Bernardino | 50.8 | 81.8 | SS | B | 6.7 | 12 | 100 | 36 | 0.05 |
| Elsinore-Glen Ivy | 55.4 | 89.2 | SS | B | 6.8 | 5 | 340 | 36 | 0.05 |
| Elsinore-Coyote Mountain | 56.3 | 90.6 | SS | B | 6.8 | 4 | 625 | 39 | 0.05 |
| Cleghorn | 57.8 | 93.0 | SS | B | 6.5 | 3 | 216 | 25 | 0.04 |
| Elmore Ranch | 58.0 | 93.4 | SS | B | 6.6 | 1 | 225 | 29 | 0.04 |
| Superstition Mtn. (San Jacinto) | 60.9 | 97.9 | SS | B | 6.6 | 5 | 500 | 24 | 0.04 |
| Superstition Hills (San Jacinto) | 62.0 | 99.8 | SS | B | 6.6 | 4 | 250 | 23 | 0.04 |

Notes:

- Jennings (1994) and California Geologic Survey (CGS) (2003)
- CGS (2003), SS = Strike-Slip, RV = Reverse, DS = Dip Slip (normal), BT = Blind Thrust
- 2001 CBC, where Type A faults: Mmax > 7 & slip rate > 5 mm/yr & Type C faults: Mmax < 6.5 & slip rate < 2 mm/yr
- CGS (2003)
- The estimates of the mean Site PGA are based on the following attenuation relationships:
Average of: (1) 1997 Boore, Joyner & Fumal; (2) 1997 Sadigh et al; (3) 1997 Campbell, (4) 1997 Abrahamson & Silva
(mean plus sigma values are about 1.5 to 1.6 times higher)
Based on Site Coordinates: 33.780 N Latitude, 116.397 W Longitude and Site Soil Type D

APPENDIX F.2

Phase I Geotechnical Report

GEOTECHNICAL INVESTIGATION
PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
MONTEREY AVENUE, GERALD FORD DRIVE,
BOB HOPE DRIVE & FRANK SINATRA DRIVE
APN 685-220-006
RANCHO MIRAGE, CALIFORNIA

-Prepared By-

Sladden Engineering

45090 Golf Center Parkway, Suite F
Indio, California 92201
(760) 772-3893



Sladden Engineering

45090 Golf Center Parkway, Suite F, Indio, California 92201 (760) 863-0713 Fax (760) 863-0847
6782 Stanton Avenue, Suite C, Buena Park, CA 90621 (714) 523-0952 Fax (714) 523-1369
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863
800 E. Florida Avenue, Hemet, CA 92543 (951) 766-8777 Fax (951) 766-8778

May 21, 2019

Project No. 544-19101
19-05-207

Ms. Mary S. Alexander
Executive Vice President and General Counsel
EC Rancho Mirage Holdings, Limited Partnership
c/o DBM Development LLC
7600 East Doubletree Ranch Road, Suite 250
Scottsdale, Arizona 85258-2137

Subject: Geotechnical Investigation – Phase I


Project: Proposed Rancho Mirage 31 Development
Monterey Avenue, Gerald Ford Drive,
Bob Hope Drive & Frank Sinatra Drive
APN 685-220-006
Rancho Mirage, California

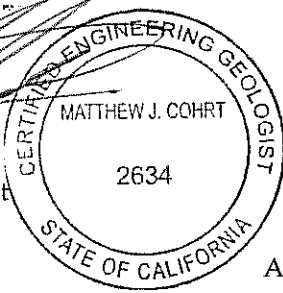
Sladden Engineering is pleased to present the results of the Phase I Geotechnical Investigation performed for the Rancho Mirage 31 mixed-use development proposed for the currently vacant property (identified as APN 685-220-006). The subject property is bounded by Monterey Avenue to the east, Gerald Ford Drive to the north, Bob Hope Drive to the west and Frank Sinatra Drive to the south. The subject property is located within the City of Rancho Mirage, California. Our services were completed in accordance with our proposal for geotechnical engineering services dated March 7, 2019 and your authorization to proceed with the work. The purpose of our investigation was to explore the subsurface conditions at the site in order to provide recommendations for foundation design and the design of the various site improvements. Evaluation of environmental issues and hazardous wastes was not included within the scope of services provided.

The opinions, recommendations and design criteria presented in this report are based on our field exploration program, laboratory testing and engineering analyses. Based on the results of our investigation, it is our professional opinion that the proposed project should be feasible from a geotechnical perspective provided that the recommendations presented in this report are implemented in design and carried out through construction.

We appreciate the opportunity to provide service to you on this project. If you have any questions regarding this report, please contact the undersigned.

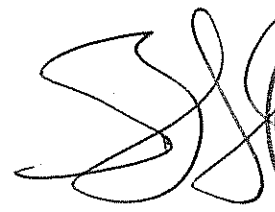
Respectfully submitted,
SLADDEN ENGINEERING

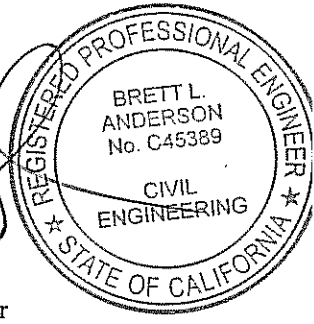

Matthew J. Cohrt
Principal Geologist



CERTIFIED ENGINEERING GEOLOGIST
MATTHEW J. COHRT
2634
STATE OF CALIFORNIA

Arthur Bracamonte III
Project Engineer


Brett L. Anderson
Principal Engineer



REGISTERED PROFESSIONAL ENGINEER
BRETT L. ANDERSON
No. C45389
CIVIL ENGINEERING
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GEOTECHNICAL INVESTIGATION
 PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
 MONTEREY AVENUE, GERALD FORD DRIVE,
 BOB HOPE DRIVE & FRANK SINATRA DRIVE
 APN 685-220-006
 RANCHO MIRAGE, CALIFORNIA

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INTRODUCTION

This report presents the results of the Phase I Geotechnical Investigation performed by Sladden Engineering (Sladden) for the Rancho Mirage 31 mixed-use development proposed for the currently vacant property (identified as APN 685-220-006) bounded by Monterey Avenue, Gerald Ford Drive, Bob Hope Drive and Frank Sinatra Drive in the City of Rancho Mirage, California. The site is located at approximately 33.7799 degrees north latitude and 116.3969 degrees west longitude. The approximate location of the site is indicated on the Site Location Map (Figure 1).

Our investigation was conducted in order to evaluate the engineering properties of the subsurface materials, to evaluate their *in-situ* characteristics, and to provide engineering recommendations and design criteria for site preparation, foundation design and the design of various site improvements. This study also includes a review of published and unpublished geotechnical and geological literature regarding seismicity at and near the subject site.

PROJECT DESCRIPTION

Based on our preliminary review of the preliminary site plan prepared by Hart Howerton (2019), it is our understanding that the proposed project will consist of constructing the new Rancho Mirage 31 mixed-use resort/residential development on the currently vacant property. The preliminary plans indicate that the proposed project will include the construction of various residential structures, up to 3 resort hotels (two-story or higher) and numerous retail structures along with paved roadways and parking areas, landscape areas, and underground utilities. The plans also indicate that a new lagoon will be incorporated into the central portion of the development. The lagoon is proposed to be excavated to a depth of approximately 15 feet and the lagoon bottom and sides will be lined with a geomembrane liner. Retaining walls ranging in height between 3 feet and 8 feet are to be constructed along the perimeter of the lagoon. For our analyses, we expect that the proposed new residential, hotel and retail structures will consist of relatively lightweight wood-frame, steel-frame, reinforced masonry or reinforced concrete structures supported on conventional shallow spread footings and concrete slabs-on-grade.

Sladden expects that grading will include significant cuts and fills in order to accomplish the desired building pad and lagoon elevations and to provide adequate gradients for site drainage. This does not include the removal and re-compaction of the loose surface soil and primary foundation bearing soil within the proposed building pad areas. Upon completion of project grading plans, Sladden should be retained in order to verify that the recommendations presented within in this report are properly incorporated into the design of the proposed project.

Structural foundation loads were not available at the time of this report. Based on our experience with relatively lightweight wood-frame, steel-frame, reinforced masonry and reinforced concrete structures, we expect that isolated column loads will be less than 30 kips and continuous wall loads will be less than 3.0 kips per linear foot for the residential structures. For the hotel and retail structures, we anticipate that isolated column loads may be up to 100 kips and continuous wall loads may be up to 8.0 kips per linear foot. If the actual loads vary significantly from the assumed loads, we should be consulted to verify the applicability of the recommendations provided.

Phase I of the geotechnical investigation consisted of excavating fifteen (15) bores and ten (10) exploratory test pits scattered throughout the project site. The bore holes were excavated to a maximum depth of 51.5 feet bgs and the test pits were generally excavated to depths between approximately 5.0 and 7.0 feet bgs. Due to significant cuts being expected for lagoon construction, Phase II of the geotechnical investigation will be performed subsequent to rough grading. The Phase II site investigation will include the excavation of three (3) bores within the lagoon bottom and six (6) bores along the perimeter of the lagoon.

SCOPE OF SERVICES

The purpose of our investigation was to determine specific engineering characteristics of the surface and near surface soil in order to develop foundation design criteria and recommendations for site preparation. Exploration of the site was achieved by drilling fifteen (15) exploratory bores and excavating ten (10) exploratory test pits to depths between approximately 5.0 and 51.5 feet below the existing ground surface (bgs). Specifically, our site characterization consisted of the following tasks:

- Site reconnaissance to assess the existing surface conditions on and adjacent to the site.
- Advancing fifteen (15) exploratory bores and ten (10) exploratory test pits to depths between approximately 5.0 and 51.5 feet bgs in order to characterize the subsurface soil conditions. Representative samples of the soil were classified in the field and retained for laboratory testing and engineering analyses.
- Performing laboratory testing on selected samples to evaluate their engineering characteristics.
- Reviewing geologic literature and discussing geologic hazards.
- Performing engineering analyses to develop recommendations for foundation design and site preparation.
- The preparation of this report summarizing our work at the site.

SITE CONDITIONS

The project site is situated on a vacant property that is bounded by Monterey Avenue to the east, Gerald Ford Drive to the north, Bob Hope Drive to the west and Frank Sinatra Drive to the south in the City of Rancho Mirage, California. The property is formally identified by the County of Riverside as APN 685-220-006 and occupies a total area of approximately 603.63 acres. Scattered native vegetation is present throughout the site and the surface soil generally consists almost exclusively of eolian (wind-blown) sand deposits. The site consists of undulating topography with overall surface gradients descending gently to the south at inclinations of less than approximately ten horizontal to one vertical (10H:1V).

Based on our review of the Cathedral City 7.5-Minute Quadrangle Map (USGS, 2018), the elevation of the site ranges between approximately 255 and 315 feet above mean sea level (MSL).

No natural ponding of water or surface seeps were observed at or near the site during our investigation conducted between April 3, 2019, April 5, 2019 and April 9, 2019. Site drainage appears to be controlled via sheet flow and surface infiltration. Regional drainage is provided by the Whitewater River that is located approximately 2.5 miles to the south of the project site.

GEOLOGIC SETTING

The project site is located within the Colorado Desert Physiographic Province (also referred to as the Salton Trough) that is characterized as a northwest-southeast trending structural depression extending from the Gulf of California to the Banning Pass. The Salton Trough is dominated by several northwest trending faults, most notably the San Andreas Fault system. The Salton Trough is bounded by the Santa Rosa – San Jacinto Mountains on the southwest, the San Bernardino Mountains on the north, the Little San Bernardino - Chocolate – Orocochia Mountains on the east and extends through the Imperial Valley into the Gulf of California on the south.

A relatively thick sequence (20,000 feet) of sediment has been deposited in the Coachella Valley portion of the Salton Trough from Miocene to present times. These sediments are predominately terrestrial in nature with some lacustrine (lake) and minor marine deposits. The major contributor of these sediments has been the Colorado River. The mountains surrounding the Coachella Valley are composed primarily of Precambrian metamorphic and Mesozoic “granitic” rock.

The Salton Trough is an internally draining area with no readily available outlet to Gulf of California and with portions well below sea level (-253' msl). The region is intermittently blocked from the Gulf of California by the damming effects of the Colorado River delta (current elevation +30' msl). Between about 300AD and 1600 AD (to 1700) the Salton Trough has been inundated by the River's water, forming ancient Lake Cahuilla (max. elevation +58' msl). Since that time the floor of the Trough has been repeatedly flooded with other “fresh” water lakes (1849, 1861, and 1891), the most recent and historically long lived being the current Salton Sea (1905). The sole outlet for these waters is evaporation, leaving behind vast amounts of terrestrial sediment materials and evaporite minerals.

The site has been mapped by Rogers (1965) to be immediately underlain by Quaternary-age dune sand (Qs). The regional geologic setting for the site vicinity is presented on the Regional Geologic Map (Figure 2).

SUBSURFACE CONDITIONS

The subsurface conditions at the site were investigated by drilling fifteen (15) exploratory bores and excavating ten (10) exploratory test pits to depths between approximately 5.0 and 51.5 feet bgs. The approximate locations of the bores and test pits are illustrated on the Exploration Photograph (Figure 3). The bores were advanced using a truck mounted Mobile B—61 drill rig equipped with 8-inch outside diameter hollow stem augers. The test pits were excavated using a John Deere 30 excavator equipped with a 24-inch wide bucket. A representative of Sladden was on-site to log the materials encountered and retrieve samples for laboratory testing and engineering analyses.

During our field investigation, eolian sand consisting of poorly-graded sand (SP/SM) with minor interbedded portions of silty sand (SM) was encountered. The native earth materials appeared gray brown in *in-situ* color, fine-grained, dry to slightly moist, and loose near the surface to dense at depth.

The final logs represent our interpretation of the contents of the field logs, and the results of the laboratory observations and tests of the field samples. The final logs are included in Appendix A of this report. The stratification lines represent the approximate boundaries between soil types although the transitions may be gradual.

Groundwater was not encountered to the maximum explored depth of 51.5 feet bgs during our field investigation. Based upon our review of the groundwater levels in the site vicinity (>50 feet bgs; Tyley, 1974), it is our opinion that groundwater will not be a factor in the design and construction of the proposed project.

SEISMICITY AND FAULTING

The southwestern United States is a tectonically active and structurally complex region, dominated by northwest trending dextral faults. The faults of the region are often part of complex fault systems, composed of numerous subparallel faults which splay or step from main fault traces. Strong seismic shaking could be produced by any of these faults during the design life of the proposed project.

We consider the most significant geologic hazard to the project to be the potential for moderate to strong seismic shaking that is likely to occur during the design life of the project. The proposed project is located in the highly seismic Southern California region within the influence of several fault systems that are considered to be active or potentially active. An active fault is defined by the State of California as a "sufficiently active and well defined fault" that has exhibited surface displacement within the Holocene epoch (about the last 11,000 years). A potentially active fault is defined by the State as a fault with a history of movement within Pleistocene time (between 11,000 and 1.6 million years ago).

As previously stated, the site has been subjected to strong seismic shaking related to active faults that traverse through the region. Some of the more significant seismic events near the subject site within recent times include: M6.0 North Palm Springs (1986), M6.1 Joshua Tree (1992), M7.3 Landers (1992), M6.2 Big Bear (1992) and M7.1 Hector Mine (1999).

Table 1 lists the closest known potentially active faults that was generated in part using the EQFAULT computer program (Blake, 2000), as modified using the fault parameters from The Revised 2002 California Probabilistic Seismic Hazard Maps (Cao et al, 2003). This table does not identify the probability of reactivation or the on-site effects from earthquakes occurring on any of the other faults in the region.

TABLE 1
CLOSEST KNOWN ACTIVE FAULTS

| Fault Name | Distance (Km) | Maximum Event |
|------------------------------|---------------|---------------|
| San Andreas – Coachella | 8.9 | 7.2 |
| San Andreas – Southern | 8.9 | 7.2 |
| San Andreas – San Bernardino | 17.6 | 7.5 |
| Burnt Mountain | 18.5 | 6.5 |
| Eureka Peak | 21.6 | 6.4 |
| San Jacinto – Anza | 34.1 | 7.2 |
| Pinto Mountain | 36.5 | 7.2 |

2016 CBC SEISMIC DESIGN PARAMETERS

Sladden has reviewed the 2016 California Building Code (CBC) and summarized the current seismic design parameters for the proposed structure. The seismic design category for a structure may be determined in accordance with Section 1613 of the 2016 CBC or ASCE7. According to the 2016 CBC, Site Class D may be used to estimate design seismic loading for the proposed structure. The 2016 CBC Seismic Design Parameters are summarized below (SEAC, 2019). The project Design Map Reports are included within Appendix C.

| | |
|--|--------|
| Risk Category (Table 1.5-1) | II |
| Site Class (Table 1613.3.2) | D |
| S_s (Figure 1613.3.1) | 1.698g |
| S_1 (Figure 1613.3.1) | 0.806g |
| F_a (Table 1613.3.3(1)) | 1.0 |
| F_v (Table 1613.5.3(2)) | 1.5 |
| S_{ms} (Equation 16-37 $\{F_a \times S_s\}$) | 1.698g |
| S_{m1} (Equation 16-38 $\{F_v \times S_1\}$) | 1.209g |
| S_{Ds} (Equation 16-39 $\{2/3 \times S_{ms}\}$) | 1.132g |
| S_{D1} (Equation 16-40 $\{2/3 \times S_{m1}\}$) | 0.806g |
| Seismic Design Category | E |

GEOLOGIC HAZARDS

The subject site is located in an active seismic zone and will likely experience strong seismic shaking during the design life of the proposed project. In general, the intensity of ground shaking will depend on several factors including: the distance to the earthquake focus, the earthquake magnitude, the response characteristics of the underlying materials, and the quality and type of construction. Geologic hazards and their relationship to the site are discussed below.

- I. Surface Rupture. Surface rupture is expected to occur along preexisting, known active fault traces. However, surface rupture could potentially splay or step from known active faults or rupture along unidentified traces. Based on our review of Rogers (1965), CDMG (1974), Jennings (1994) and RCPR (2019), known faults are not mapped on or projecting towards the site. In addition, no signs of active surface faulting were observed during our review of non-stereo digitized photographs of the site and site vicinity (Google Earth, 2019). Finally, no signs of active surface fault rupture or secondary seismic effects (lateral spreading, lurching etc.) were identified on-site during our field investigation. Therefore, it is our opinion that risks associated with primary surface ground rupture should be considered "low".

- II. Ground Shaking. The site has been subjected to past ground shaking by faults that traverse through the region. Strong seismic shaking from nearby active faults is expected to produce strong seismic shaking during the design life of the proposed project. A probabilistic approach was employed to estimate the peak ground acceleration (a_{max}) that could be experienced at the site. Based on the USGS Unified Hazard Tool (USGS, 2019) and shear wave velocity (V_{s30}) of 259 m/s, the site could be subjected to ground motions on the order of 0.61g. The peak ground acceleration at the site is judged to have a 475-year return period and a 10 percent chance of exceedance in 50 years.
- III. Liquefaction/Dry Sand Settlement. Liquefaction is the process in which loose, saturated granular soil loses strength as a result of cyclic loading. The strength loss is a result of a decrease in granular sand volume and a positive increase in pore pressures. Generally, liquefaction can occur if all of the following conditions apply: liquefaction-susceptible soil, groundwater within a depth of 50 feet or less, and strong seismic shaking.
- According to the County of Riverside (RCPR, 2019), the site is situated within a "Moderate" liquefaction zone. Historic high groundwater depths were determined to be in excess of 50 feet bgs (Tyley, 1974). Accordingly, we have performed seismic settlement calculations (dry sand) utilizing a magnitude of 7.49 (USGS, 2019) and peak ground acceleration of 0.68g (PGA_m). The seismic settlement calculations are included within Appendix D. Calculations indicate potential total seismic settlements of approximately 0.80 inches and 1.70 inches for BH-1 and from BH-6, respectively. Based on the similarities between bores, differential settlements are estimated to be less than 1 inch over a horizontal distance of 200 feet.
- IV. Tsunamis and Seiches. Because the site is situated at an inland location and is not immediately adjacent to any impounded bodies of water, risks associated with tsunamis are negligible. However, seiches could potentially develop in the new lagoon. Therefore, risks associated with seiches should be considered in the design of the new lagoon and adjacent structures.
- V. Slope Failure, Landsliding, Rock Falls. No signs of slope instability in the form of landslides, rock falls, earthflows or slumps were observed at or near the subject site. The site is situated on relatively flat ground and not immediately adjacent to any slopes or hillsides. As such, risks associated with slope instability should be considered negligible.
- VI. Expansive Soil. Generally, the soil consists of poorly-graded sand (SP/SM) and silty sand (SM). Based on the results of our laboratory testing ($EI=0$), the materials underlying the site are considered to have a "very low" expansion potential.
- VII. Static Settlement. Static settlement resulting from the anticipated foundation loads should be minimal provided that the recommendations included in this report are considered in foundation design and construction. The estimated ultimate static settlement is calculated to be approximately 1 inch when using the recommended bearing pressures. As a practical matter, differential static settlement between footings can be assumed as one-half of the total settlement.

- VIII. Subsidence. Land subsidence can occur in valleys where aquifer systems have been subjected to extensive groundwater pumping, such that groundwater pumping exceeds groundwater recharge. Generally, pore water reduction can result in a rearrangement of skeletal grains and could result in elastic (recoverable) or inelastic (unrecoverable) deformation of an aquifer system.

Although recent investigations have documented significant subsidence within the Coachella Valley area (USGS, 2007), no fissures or other surficial evidence of subsidence were observed at the subject site. With the exception of isolated tension zones typically manifested on the ground surface as fissures and/or ground cracks, subsidence related to groundwater depletion is generally areal in nature with very little differential settlement over short distances such as across individual buildings.

The Coachella Valley Water District has publically acknowledged regional subsidence throughout the southern portion of the Coachella Valley and has indicated a commitment to groundwater replenishment programs that are intended to limit future subsidence. At this time, subsidence is considered a regional problem requiring regional mitigation not specific to the project vicinity.

- IX. Debris Flows. Debris flows are viscous flows consisting of poorly sorted mixtures of sediment and water and are generally initiated on slopes steeper than approximately six horizontal to one vertical (6H:1V) (Boggs, 2001). The site is not situated immediately adjacent to any slopes or hillsides. As such, we judge that risks associated with debris flows should be considered "negligible".
- X. Flooding and Erosion. No signs of flooding or erosion were observed during our field investigation conducted on April 3, 2019, April 5, 2019 and April 9, 2019. Risks associated with flooding and erosion should be evaluated and mitigated by the project design Civil Engineer.

CONCLUSIONS

Based on the results of our investigation, it is our professional opinion that the project should be feasible from a geotechnical perspective provided that the recommendations included in this report are incorporated into design and carried out through construction. The main geotechnical concern regarding the design and construction of the proposed project is the presence of loose and potentially compressible near-surface soil.

We recommend that any remedial work within the proposed residential buildings include over-excavation and re-compaction of the primary foundation bearing soil. Specific recommendations for foundation area preparation are presented in the Earthwork and Grading section of this report.

Caving did occur to varying degrees within each of our exploratory bores and the surface soil may be susceptible to caving within deeper excavations. All excavations should be constructed in accordance with the normal CalOSHA excavation criteria. On the basis of our observations of the materials encountered, we anticipate that the subsoil will conform to that described by CalOSHA as Type C. Soil conditions should be verified in the field by a "Competent person" employed by the Contractor.

The following recommendations present more detailed design criteria that have been developed on the basis of our field and laboratory investigation.

EARTHWORK AND GRADING

All earthwork including excavation, backfill and preparation of the primary foundation and/or slab bearing soil should be performed in accordance with the geotechnical recommendations presented in this report and portions of the local regulatory requirements, as applicable. All earth work should be performed under the observation and testing of a qualified soil engineer. The following geotechnical engineering recommendations for the proposed project are based on observations from the field investigation program, laboratory testing and geotechnical engineering analyses.

- a. Stripping: Areas to be graded and paved should be cleared of any existing surface improvements, vegetation, root systems and debris. All areas scheduled to receive fill should be cleared of old fills and any irreducible matter. The stripping should be removed off site, or stockpiled for later use in landscape areas. Voids left by obstructions should be properly backfilled in accordance with the compaction recommendations of this report.
- b. Preparation of Residential Building Areas: In order to achieve firm and uniform bearing conditions, we recommend over-excavation and re-compaction throughout the proposed building areas. All undocumented artificial fill soil and native low density near surface native soil should be removed to a depth of at least 3 feet below existing grade or 2 feet below bottom of footings, whichever is deeper. Remedial grading should extend laterally, a minimum of five feet beyond the footing limits. The exposed surface should then be scarified, moisture conditioned to near optimum moisture content and compacted to at least 90 percent relative compaction.
- c. Preparation of Hotel and Retail Building Areas: The areas of the proposed hotel and retail structures should be prepared in the exact manner as for the residential structure areas. In this case, all undocumented artificial fill soil and native low density near surface native soil should be removed to a depth of at least 4 feet below existing grade or 4 feet below bottom of footings, whichever is deeper. The exposed surface should then be scarified, moisture conditioned to near optimum moisture content and compacted to at least 90 percent relative compaction.
- d. Compaction: Soil to be used as engineered fill should be free of organic material, debris, and other deleterious substances, and should not contain irreducible matter greater than three inches in maximum dimension. All fill materials should be placed in thin lifts, not exceeding six inches in a loose condition. If import fill is required, the material should be of a low to non-expansive nature and should meet the following criteria:

| | |
|---------------------------------|---------------------|
| Plastic Index | Less than 12 |
| Liquid Limit | Less than 35 |
| Percent Soil Passing #200 Sieve | Between 15% and 35% |
| Maximum Aggregate Size | 3 inches |

The subgrade and all fill should be compacted with acceptable compaction equipment, to at least 90 percent relative compaction. The bottom of the exposed subgrade should be observed by a representative of Sladden Engineering prior to fill placement. Compaction testing should be performed on all lifts in order to ensure proper placement of the fill materials. Table 2 provides a summary of the excavation and compaction recommendations.

**TABLE 2
SUMMARY OF RECOMMENDATIONS**

| | |
|---------------------------------|---|
| *Remedial Grading | <p>For residential areas, over-excavation and re-compaction of all artificial fill and loose native soil should extend to a minimum depth of 3 feet below existing grade or 2 feet beneath bottom of footings, whichever is deeper.</p> <p>For hotel and retail areas, over-excavation and re-compaction of all artificial fill and loose native soil should extend to a minimum depth of 4 feet below existing grade or 4 feet beneath bottom of footings, whichever is deeper.</p> <p>Removals should extend laterally a minimum of 5 feet beyond the footing limits.</p> |
| Native / Import Engineered Fill | Place in thin lifts not exceeding 6 inches in a loose condition, compact to a minimum of 90 percent relative compaction within 2 percent of the optimum moisture content. |
| Asphalt Concrete Sections | Compact the top 12 inches to at least 95 percent compaction within 2 percent of optimum moisture content. |

*Actual depth may vary and should be determined by a representative of Sladden Engineering in the field during construction.

- e. **Shrinkage and Subsidence:** Volumetric shrinkage of the material that is excavated and replaced as controlled compacted fill should be anticipated. We estimate that this shrinkage should be between 10 and 20 percent. Subsidence of the surfaces that are scarified and compacted should be between 1 tenth and 3 tenths of a foot. This will vary depending upon the type of equipment used, the moisture content of the soil at the time of grading and the actual degree of compaction attained.

CONVENTIONAL SHALLOW SPREAD FOOTINGS

Conventional spread footings are expected to provide adequate support for the proposed new residential, resort and retail structures. All footings should be founded upon properly compacted engineered fill soil and should have a minimum embedment depth of 12 inches measured from the lowest adjacent finished grade. Continuous and isolated footings should have minimum widths of 12 inches and 24 inches, respectively. Continuous and isolated footings supported upon properly engineered fill compacted soil may be designed using allowable (net) bearing pressures of 1800 and 2000 pounds per square foot (psf), respectively. Allowable increases of 200 psf for each additional 1 foot of width and 250 psf for each additional 6 inches of depth may be used if desired. The maximum allowable bearing pressure should be 3000 psf. The allowable bearing pressures apply to combined dead and sustained live loads. The allowable bearing pressures may be increased by one-third when considering transient live loads, including seismic and wind forces.

Based on the recommended allowable bearing pressures, the total static settlement of the shallow footings is anticipated to be less than one-inch, provided foundation preparations conform to the recommendations described in this report. Static differential settlement is anticipated to be approximately one-half of the total settlement for similarly loaded footings spaced up to approximately 50 feet apart.

Lateral load resistance for the spread footings will be developed by passive pressure against the sides of the footings below grade and by friction acting at the base of the footings. An allowable passive pressure of 250 psf per foot of depth may be used for design purposes. An allowable coefficient of friction 0.40 may be used for dead and sustained live loads to compute the frictional resistance of the footing placed directly on compacted fill. Under seismic and wind loading conditions, the passive pressure and frictional resistance may be increased by one-third.

All footing excavations should be observed by a representative of the project geotechnical consultant to verify adequate embedment depths prior to placement of forms, steel reinforcement or concrete. The excavations should be trimmed neat, level and square. All loose, disturbed, sloughed or moisture-softened soils and/or any construction debris should be removed prior to concrete placement. All footings should be reinforced in accordance with the project Structural Engineer's recommendations.

RETAINING WALLS

Cantilever retaining walls may be designed using "active" pressures. Active pressures may be estimated using an equivalent fluid weight of 35 pcf for native backfill soil with level drained backfill conditions. For cantilever retaining walls in excess of 6 feet in height seismic forces must be considered in design. Seismic loading for cantilever retaining walls may be estimated using a uniform loading equivalent of approximately $15H$ (where H is the height of the wall in feet), with the seismic pressure being an inverted triangle acting at $0.6H$.

"At rest" pressures should be utilized when considering restrained walls. An equivalent fluid weight of 55 pcf is recommended for restrained walls with level drained backfill conditions. Seismic loading must also be considered in the design of restrained walls greater than 6 feet on height. Seismic loading for restrained walls may be estimated using a uniform loading equivalent of approximately $20H$ (where H is the height of the wall in feet).

SLABS-ON-GRADE

In order to provide uniform and adequate support, concrete slabs-on-grade must be placed on properly compacted engineered fill soil as outlined in the previous sections of this report. The slab subgrade should remain near optimum moisture content and should not be permitted to dry prior to concrete placement. Slab subgrade should be firm and unyielding. Disturbed soil should be removed and replaced with engineered fill soil compacted to a minimum of 90 percent relative compaction.

Slab thickness and reinforcement should be determined by the Structural Engineer. We recommend a minimum slab thickness of 4.0 inches and minimum reinforcement of #3 bar at 24 inches on center in each direction for the various structures. Additional slab thickness and reinforcement may be necessary for resort hotel and retail buildings dependent upon the expected uses. All slab reinforcement should be supported on concrete chairs to ensure that reinforcement is placed at slab mid-height. Final floor slab design and reinforcement should be determined by the Structural Engineer.

Slabs with moisture sensitive surfaces should be underlain with a moisture vapor retarder consisting of a polyvinyl chloride membrane such as 10-mil visqueen, or equivalent. All laps within the membrane should be sealed and at least 2 inches of clean sand should be placed over the membrane to promote uniform curing of the concrete. To reduce the potential for punctures, the membrane should be placed on a pad surface that has been graded smooth without any sharp protrusions. If a smooth surface can not be achieved by grading, consideration should be given to placing a 1-inch thick leveling course of sand across the pad surface prior to placement of the membrane.

PRELIMINARY PAVEMENT DESIGN

Asphalt concrete pavements should be designed in accordance with Topic 608 of the Caltrans Highway Design Manual based on R-Value and Traffic Index. An R-Value of 60 was assumed to develop the on-site roadways. On-site and any imported soil should be tested for R-Value after grading. For pavement design, a Traffic Index (TI) of 6.0 was used for light-duty pavement and 7.5 for heavy-duty pavement. We assumed Asphalt Concrete (AC) over Class II Aggregate Base (AB). The preliminary flexible pavement design is as follows:

| RECOMMENDED ASPHALT PAVEMENT SECTION LAYER THICKNESS | | |
|--|-------------------------|-----------------------|
| Pavement Material | Recommended Thicknesses | |
| | Light-Duty (TI = 6.0) | Heavy-Duty (TI = 7.5) |
| Asphalt Concrete Surface Course | 3.0 inches | 3.0 inches |
| Class II Aggregate Base Course | 4.0 inches | 6.0 inches |
| Compacted Subgrade Soil | 12.0 inches | 12.0 inches |

Asphalt concrete should conform to Sections 203 and 302 of the latest edition of the Standard Specifications for Public Works Construction ("Greenbook") or Caltrans. Aggregate base material should conform to Section 26 of the Caltrans Standard Specifications or Greenbook, latest edition. The aggregate base course should be compacted to at least 95 percent of the maximum dry density as determined by ASTM Method D 1557.

CONCRETE PAVEMENT

Alternatively, concrete pavement may be used for parking and on-site roadway areas. Concrete pavement sections of 5.0 inches for parking areas and 6.0 inches for roadway areas consisting of Portland Cement Concrete (PCC) on compacted native subgrade soil should be adequate for the expected use. The subgrade soil should be firm and unyielding and compacted to a minimum of 95 percent compaction as determined by ASTM Method D1557.

CORROSION SERIES

The soluble sulfate concentrations of the surface soil were determined to be between 80 and 140 parts per million (ppm). The soil is considered to have a "negligible" corrosion potential with respect to concrete. The use of Type V cement and special sulfate resistant concrete mixes may be necessary. Soluble sulfate content of the surface soil should be reevaluated after grading and appropriate concrete mix designs should be established based upon post-grading test results.

The pH levels of the surface soil was determined to be between 9.0 and 9.2. Based on soluble chloride concentration testing (60 ppm) the soil is considered to have a "negligible" corrosion potential with respect to normal grade steel. The minimum resistivity of the surface soil was found to be 17000 to 18000 ohm-cm, which suggests the site soil is considered to have a "negligible" corrosion potential with respect to ferrous metal installations. Accordingly, a corrosion expert should be consulted regarding appropriate corrosion protection measures for any corrosion sensitive installations.

UTILITY TRENCH BACKFILL

All utility trench backfill should be compacted to a minimum relative compaction of 90 percent. Trench backfill materials should be placed in lifts no greater than six inches in a loose condition, moisture conditioned (or air-dried) as necessary to achieve near optimum moisture conditions, and then mechanically compacted in place to a minimum relative compaction of 90 percent. A representative of the project soil engineer should test the backfill to verify adequate compaction.

EXTERIOR CONCRETE FLATWORK

To minimize cracking of concrete flatwork, the subgrade soil below concrete flatwork areas should first be compacted to a minimum relative compaction of 90 percent. A representative of the project geotechnical consultant should observe and verify the density and moisture content of the soil prior to concrete placement.

DRAINAGE

All final grades should be provided with positive gradients away from foundations to provide rapid removal of surface water runoff to an adequate discharge point. No water should be allowed to be pond on or immediately adjacent to foundation elements. In order to reduce water infiltration into the subgrade soil, surface water should be directed away from building foundations to an adequate discharge point. Subgrade drainage should be evaluated upon completion of the precise grading plans and in the field during grading.

LIMITATIONS

The findings and recommendations presented in this report are based upon an interpolation of the soil conditions between the exploratory bore locations and extrapolation of these conditions throughout the proposed building areas. Should conditions encountered during grading appear different than those indicated in this report, this office should be notified.

The use of this report by other parties or for other projects is not authorized. The recommendations of this report are contingent upon monitoring of the grading operation by a representative of Sladden Engineering. All recommendations are considered to be tentative pending our review of the grading operation and additional testing, if indicated. If others are employed to perform any soil testing, this office should be notified prior to such testing in order to coordinate any required site visits by our representative and to assure indemnification of Sladden Engineering.

We recommend that a pre-job conference be held on the site prior to the initiation of site grading. The purpose of this meeting will be to assure a complete understanding of the recommendations presented in this report as they apply to the actual grading performed.

ADDITIONAL SERVICES

Once completed, final project plans and specifications should be reviewed by use prior to construction to confirm that the full intent of the recommendations presented herein have been applied to design and construction. Following review of plans and specifications, observation should be performed by the Soil Engineer during construction to document that foundation elements are founded on/or penetrate into the recommended soil, and that suitable backfill soil is placed upon competent materials and properly compacted at the recommended moisture content.

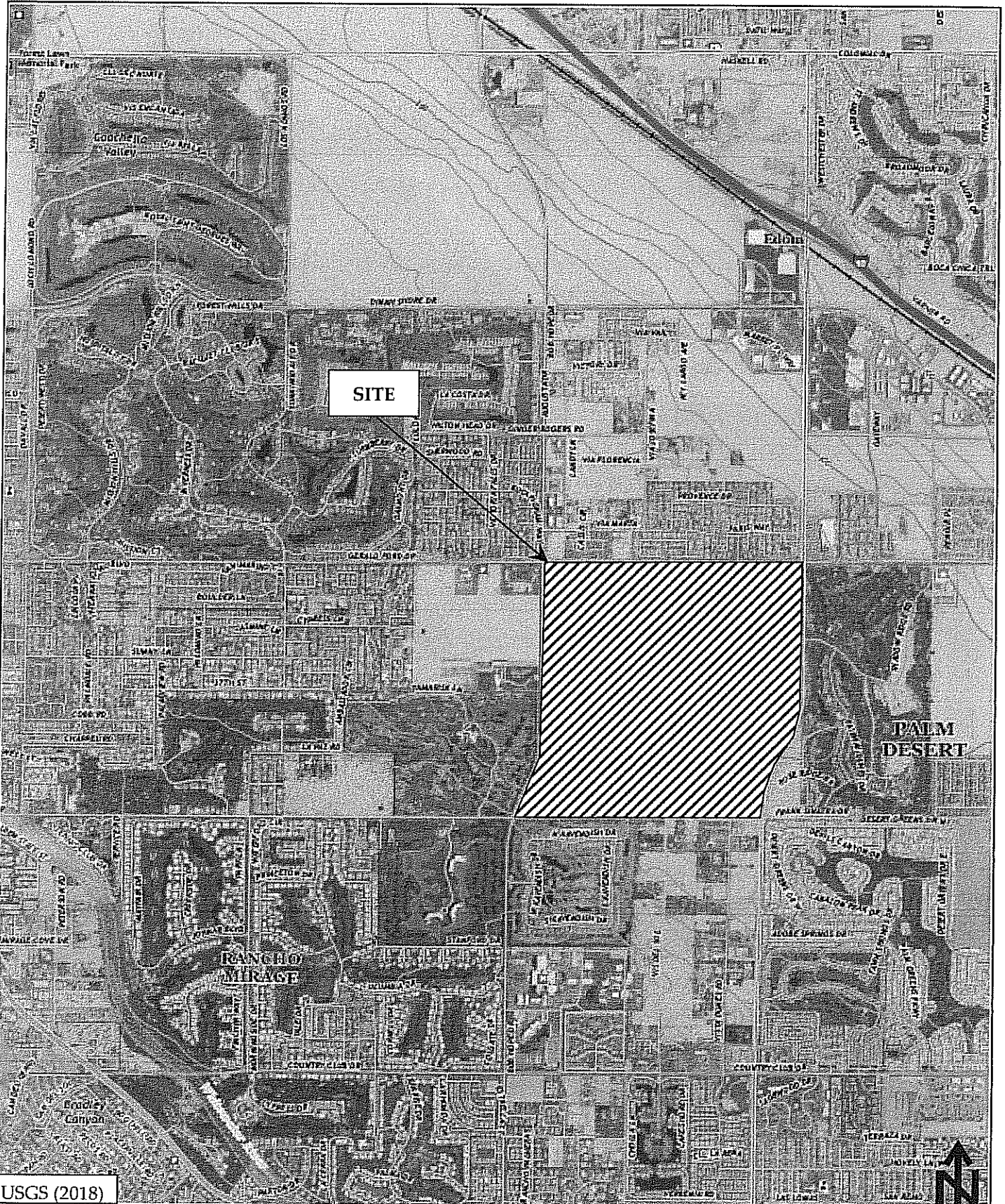
Tests and observations should be performed during grading by the Soil Engineer or his representative in order to verify that the grading is being performed in accordance with the project specifications. Field density testing shall be performed in accordance with acceptable ASTM test methods. The minimum acceptable degree of compaction should be 90 percent for engineered fill soil and 95 percent for Class II aggregate base as obtained by ASTM Test Method D1557. Where testing indicates insufficient density, additional compactive effort shall be applied until retesting indicates satisfactory compaction.

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FIGURES

SITE LOCATION MAP
REGIONAL GEOLOGIC MAP
EXPLORATION PHOTOGRAPH
SITE PLAN
FAULT ZONE MAP



USGS (2018)



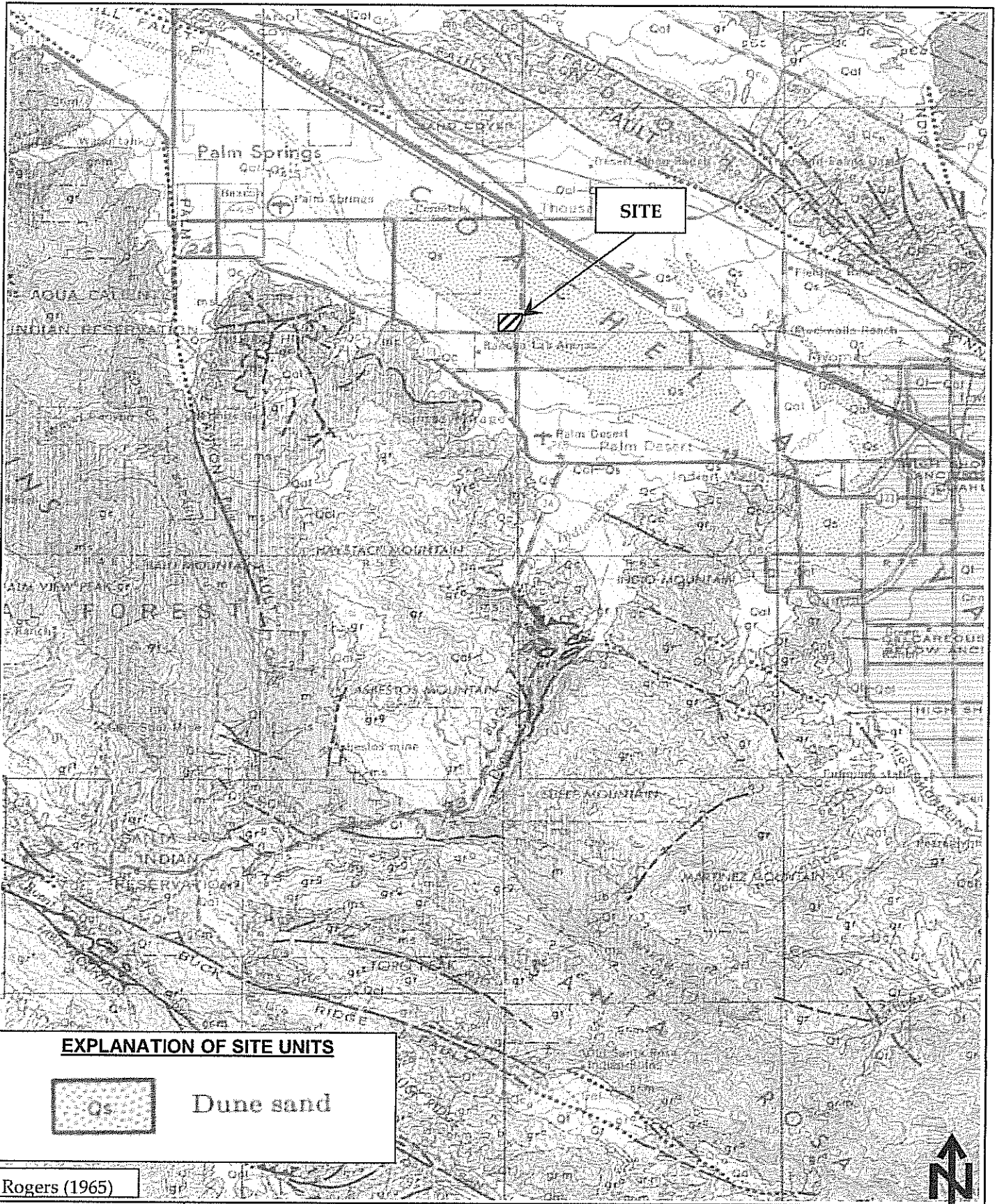
Sladden Engineering

SITE LOCATION MAP

| | |
|-----------------|--------------|
| Project Number: | 544-19101 |
| Report Number: | 19-05-207 |
| Date: | May 13, 2019 |

FIGURE

1



EXPLANATION OF SITE UNITS



Dune sand

Rogers (1965)



REGIONAL GEOLOGIC MAP

FIGURE



2

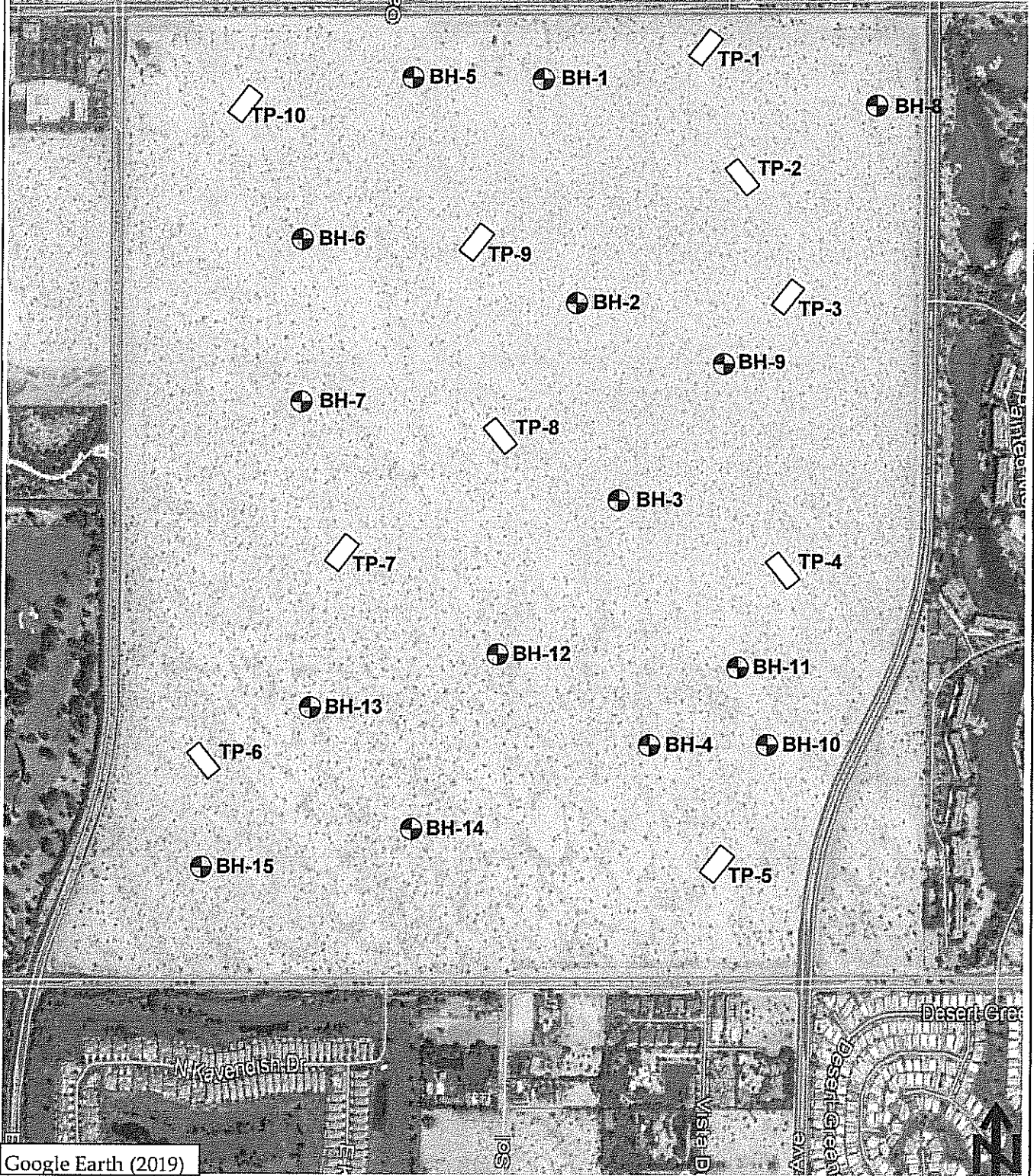


Sladden Engineering

| | |
|-----------------|--------------|
| Project Number: | 544-19101 |
| Report Number: | 19-05-207 |
| Date: | May 13, 2019 |

LEGEND

-  BH-15 Approximate Exploratory Borehole Location
-  TP-10 Approximate Exploratory Test Pit Location



EXPLORATION PHOTOGRAPH

FIGURE

3



Sladden Engineering

Project Number:

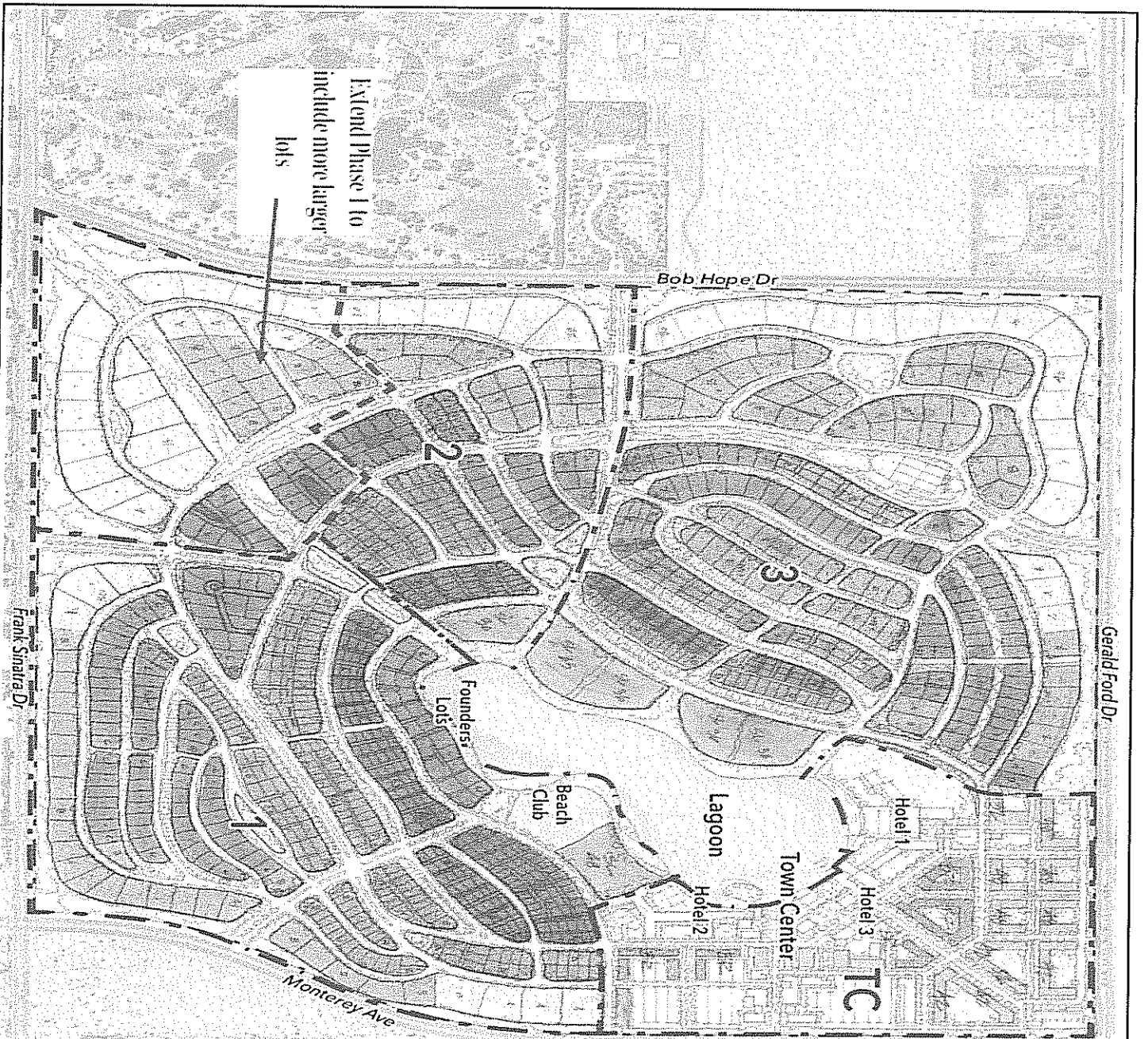
544-19101

Report Number:

19-05-207

Date:

May 13, 2019



| PROGRAM LEGEND | | | |
|----------------|--------------------------|-------------|--------------|
| Key | Residential Type | Total | Plots 1 only |
| | Branded Residential | 230 | |
| | Mixed Use Residential | 501 | |
| | Town Center Total | 731 | |
| | Stacked View Units | 231 | 48 |
| | Small Lot SFD | 242 | 167 |
| | Conventional SFD | 321 | 169 |
| | Large Lot SFD | 225 | 99 |
| | Estate Lot SFD | 132 | 26 |
| | Custom Lot SFD | 51 | 7 |
| | Village Total | 1202 | 516 |
| | Total | 1932 | |



Hart Howerton (2019)

SITE PLAN

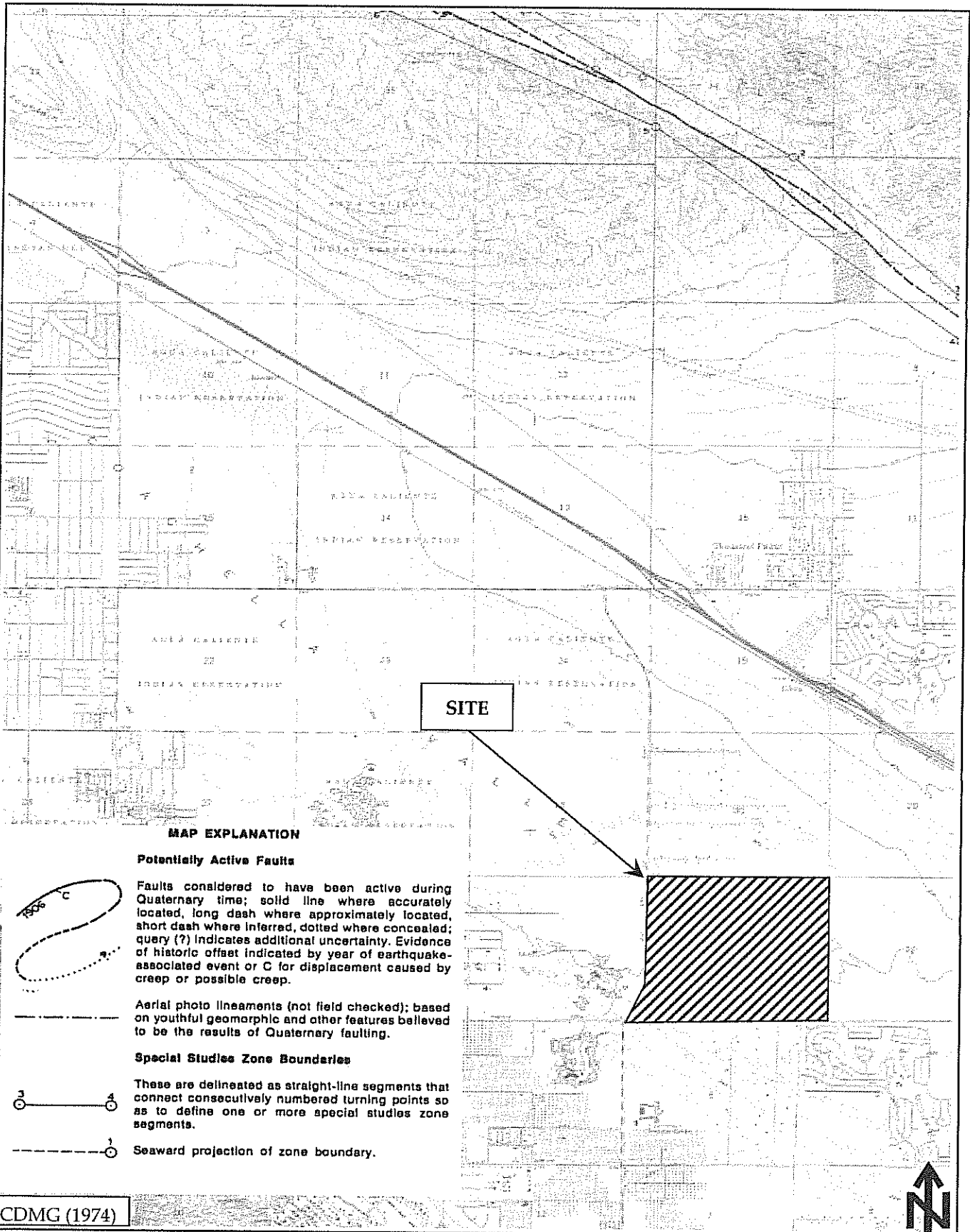
FIGURE

4

| | |
|-----------------|--------------|
| Project Number: | 544-19101 |
| Report Number: | 19-05-207 |
| Date: | May 13, 2019 |



Sladden Engineering



CDMG (1974)



Sladden Engineering

FAULT ZONE MAP

| | |
|-----------------|--------------|
| Project Number: | 544-19101 |
| Report Number: | 19-05-207 |
| Date: | May 13, 2019 |

FIGURE

5

APPENDIX A
FIELD EXPLORATION

APPENDIX A

FIELD EXPLORATION

For our field investigation, fifteen (15) exploratory bore holes were excavated between April 3, 2019 and April 9, 2019 utilizing a Mobile B-61 truck mounted hollow stem auger rig. Ten (10) exploratory test pits were excavated on April 9, 2019 utilizing a John Deere 30 mini-excavator equipped with a 24-inch wide bucket. Continuous logs of the materials encountered were made by a representative of Sladden Engineering. Materials encountered in the boreholes were classified in accordance with the Unified Soil Classification System that is presented in this appendix.





Representative undisturbed samples were obtained within our bores by driving a thin-walled steel penetration sampler (California split spoon sampler) or a Standard Penetration Test (SPT) sampler with a 140 pound automatic-trip hammer dropping approximately 30 inches (ASTM D1586). The number of blows required to drive the samplers 18 inches was recorded in 6-inch increments and blowcounts are indicated on the boring logs.

The California samplers are 3.0 inches in diameter, carrying brass sample rings having inner diameters of 2.5 inches. The standard penetration samplers are 2.0 inches in diameter with an inner diameter of 1.5 inches. Undisturbed samples were removed from the sampler and placed in moisture sealed containers in order to preserve the natural soil moisture content. Bulk samples were obtained from the excavation spoils and samples were then transported to our laboratory for further observations and testing.

UNIFIED SOIL CLASSIFICATION SYSTEM

| MAJOR DIVISIONS | | | TYPICAL NAMES | |
|--|--|---------------------------------------|---|---|
| COARSE GRAINED SOILS MORE THAN HALF IS LARGER THAN No.200 SIEVE | GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN No.4 SIEVE SIZE | CLEAN GRAVELS WITH LITTLE OR NO FINES | GW | WELL GRADED GRAVEL-SAND MIXTURES |
| | | | GP | POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES |
| | | GRAVELS WITH OVER 12% FINES | GM | SILTY GRAVELS, POORLY-GRADED GRAVEL-SAND-SILT MIXTURES |
| | | | GC | CLAYEY GRAVELS, POORLY GRADED GRAVEL-SAND-CLAY MIXTURES |
| | SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN No.4 SIEVE SIZE | CLEAN SANDS WITH LITTLE OR NO FINES | SW | WELL GRADED SANDS, GRAVELLY SANDS |
| | | | SP | POORLY GRADED SANDS, GRAVELLY SANDS |
| | | SANDS WITH OVER 12% FINES | SM | SILTY SANDS, POORLY GRADED SAND-SILT MIXTURES |
| | | | SC | CLAYEY SANDS, POORLY GRADED SAND-CLAY MIXTURES |
| FINE GRAINED SOILS MORE THAN HALF IS SMALLER THAN No.200 SIEVE | SILTS AND CLAYS LIQUID LIMIT LESS THAN 50 | ML | INORGANIC SILTS & VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY | |
| | | CL | INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, CLEAN CLAYS | |
| | | OL | ORGANIC CLAYS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY | |
| | SILTS AND CLAYS: LIQUID LIMIT GREATER THAN 50 | MH | INORGANIC SILTS, MICACEOUS OR DIATOMACIOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS | |
| | | H | INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS | |
| | | OH | ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS | |
| HIGHLY ORGANIC SOILS | | | Pt | PEAT AND OTHER HIGHLY ORGANIC SOILS |

EXPLANATION OF BORE LOG SYMBOLS

-  California Split-spoon Sample
-  Unrecovered Sample
-  Standard Penetration Test Sample
-  Groundwater depth

Note: The stratification lines on the borelogs represent the approximate boundaries between the soil types; the transitions may be gradual.



BORE LOG

| | | | |
|------------|--------------|---------------|----------|
| Drill Rig: | Mobile B-61 | Date Drilled: | 4/3/2019 |
| Elevation: | 305 Ft (MSL) | Boring No: | BH-1 |

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology | |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|-------------------|---|
| | 5/9/11 | 1 | 0 | 6.9 | 3.8 | 107.9 | 2 | | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | 6/9/12 | | | 5.8 | 2.2 | 108.2 | 4 | | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | 7/7/7 | | | | | | 6 | | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | 9/15/23 | | | | 0.4 | | 8 | | No Sample Recovery - Cuttings indicate poorly-graded sand w/ silt (SP/SM); dry, fine-grained, micaceous (Qs). |
| | 11/17/22 | | | | 0.5 | | 10 | | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, dense, fine-grained, micaceous (Qs). |
| | 12/16/19 | | | | 0.3 | | 12 | | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, dense, fine-grained, micaceous (Qs). |
| | 13/15/19 | | | | | | 14 | | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, dense, fine-grained, micaceous (Qs). |
| | 12/16/21 | | | | | | 16 | | No Sample Recovery - Cuttings indicate poorly-graded sand w/ silt (SP/SM); dry, fine-grained, micaceous (Qs). |
| | 16/20/27 | | | | | | 18 | | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, dense, fine-grained, micaceous (Qs). |
| | 17/29/29 | | | | 0.4 | | 20 | | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, very dense, fine-grained, micaceous (Qs). |
| | 20/36/42 | | | | | | 22 | | No Sample Recovery - Cuttings indicate poorly-graded sand w/ silt (SP/SM); dry, fine-grained, micaceous (Qs). |

Completion Notes:
 Terminated @ ~51.5 Feet bgs
 No Groundwater or Seepage Encountered
 No Bedrock Encountered



BORE LOG

| | | | |
|------------|--------------|---------------|----------|
| Drill Rig: | Mobile B-61 | Date Drilled: | 4/3/2019 |
| Elevation: | 302 Ft (MSL) | Boring No: | BH-2 |

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|-------------------|
| | | | | | | | 2 | |
| | 7/7/8 | | | 3.2 | 2.2 | 103.9 | 4 | |
| | | | | | | | 6 | |
| | 6/8/11 | | | | 0.5 | | 8 | |
| | | | | | | | 10 | |
| | | | | | | | 12 | |
| | 10/11/11 | | | | 0.6 | | 14 | |
| | | | | | | | 16 | |
| | | | | | | | 18 | |
| | 9/12/14 | | | | 0.6 | | 20 | |
| | | | | | | | 22 | |
| | | | | | | | 24 | |
| | | | | | | | 26 | |
| | | | | | | | 28 | |
| | | | | | | | 30 | |
| | | | | | | | 32 | |
| | | | | | | | 34 | |
| | | | | | | | 36 | |
| | | | | | | | 38 | |
| | | | | | | | 40 | |
| | | | | | | | 42 | |
| | | | | | | | 44 | |
| | | | | | | | 46 | |
| | | | | | | | 48 | |
| | | | | | | | 50 | |

Poorly-Graded Sand (SP); gray brown, dry, fine-grained, micaceous (Qs).

Poorly-Graded Sand (SP); gray brown, dry, loose, fine-grained, micaceous (Qs).

Poorly-Graded Sand (SP); gray brown, dry, medium dense, fine-grained, micaceous (Qs).

Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).

Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).

Terminated @ ~21.5 Feet bgs
 No Groundwater or Seepage Encountered
 No Bedrock Encountered

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
 APN 685-220-006, RANCHO MIRAGE



BORE LOG

| | | | |
|------------|--------------|---------------|----------|
| Drill Rig: | Mobile B-61 | Date Drilled: | 4/3/2019 |
| Elevation: | 295 Ft (MSL) | Boring No: | BH-3 |

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|-------------------|
| | | | | | | | 2 | |
| | 6/8/10 | | | | 2.2 | | 4 | |
| | 4/6/7 | | | | 0.6 | | 6 | |
| | 8/9/12 | | | | 0.6 | | 8 | |
| | 13/16/20 | | | | 0.6 | | 10 | |
| | | | | | | | 12 | |
| | | | | | | | 14 | |
| | | | | | | | 16 | |
| | | | | | | | 18 | |
| | | | | | | | 20 | |
| | | | | | | | 22 | |
| | | | | | | | 24 | |
| | | | | | | | 26 | |
| | | | | | | | 28 | |
| | | | | | | | 30 | |
| | | | | | | | 32 | |
| | | | | | | | 34 | |
| | | | | | | | 36 | |
| | | | | | | | 38 | |
| | | | | | | | 40 | |
| | | | | | | | 42 | |
| | | | | | | | 44 | |
| | | | | | | | 46 | |
| | | | | | | | 48 | |
| | | | | | | | 50 | |

Poorly-Graded Sand (SP); gray brown, dry, fine-grained, micaceous (Qs).

Poorly-Graded Sand (SP); gray brown, dry, medium dense, fine-grained, micaceous (Qs).

Poorly-Graded Sand (SP); gray brown, dry, medium dense, fine-grained, micaceous (Qs).

Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).

Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, dense, fine-grained, micaceous (Qs).

Terminated @ ~21.5 Feet bgs
 No Groundwater or Seepage Encountered
 No Bedrock Encountered



BORE LOG

| | | | |
|------------|--------------|---------------|----------|
| Drill Rig: | Mobile B-61 | Date Drilled: | 4/3/2019 |
| Elevation: | 290 Ft (MSL) | Boring No: | BH-4 |

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|---|
| | | | | | | | 2 | <p>Poorly-Graded Sand (SP); gray brown, dry, fine-grained, micaceous (Qs).</p> <p>Poorly-Graded Sand (SP); gray brown, dry, loose, fine-grained, micaceous (Qs).</p> <p>Poorly-Graded Sand (SP); gray brown, dry, medium dense, fine-grained, micaceous (Qs).</p> <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).</p> <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).</p> |
| | 3/4/6 | | | | 4.4 | | 4 | |
| | 4/6/8 | | | | 0.9 | | 6 | |
| | 6/8/11 | | | | 0.9 | | 8 | |
| | 10/10/12 | | 8.6 | | 1.0 | | 10 | |
| | | | | | | | 12 | |
| | | | | | | | 14 | |
| | | | | | | | 16 | |
| | | | | | | | 18 | |
| | | | | | | | 20 | |
| | | | | | | | 22 | |
| | | | | | | | 24 | <p>Terminated @ ~21.5 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |
| | | | | | | | 26 | |
| | | | | | | | 28 | |
| | | | | | | | 30 | |
| | | | | | | | 32 | |
| | | | | | | | 34 | |
| | | | | | | | 36 | |
| | | | | | | | 38 | |
| | | | | | | | 40 | |
| | | | | | | | 42 | |
| | | | | | | | 44 | |
| | | | | | | | 46 | |
| | | | | | | | 48 | |
| | | | | | | | 50 | |



BORE LOG

| | | | |
|------------|--------------|---------------|----------|
| Drill Rig: | Mobile B-61 | Date Drilled: | 4/5/2019 |
| Elevation: | 304 Ft (MSL) | Boring No: | BH-5 |

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|--|
| | | | | | | | 2 | <p>Poorly-Graded Sand (SP); gray brown, dry, fine-grained, micaceous (Qs).</p> <p>Poorly-Graded Sand (SP); gray brown, dry, medium dense, fine-grained, micaceous (Qs).</p> <p>Poorly-Graded Sand (SP); gray brown, dry, medium dense, fine-grained, micaceous (Qs).</p> <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).</p> <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).</p> |
| | 6/10/13 | | | | 0.2 | 102.2 | 4 | |
| | 5/5/6 | | | | 0.7 | | 6 | |
| | 6/8/8 | | | | 0.4 | | 8 | |
| | 8/13/15 | | | | 0.5 | | 10 | |
| | | | | | | | 12 | |
| | | | | | | | 14 | |
| | | | | | | | 16 | |
| | | | | | | | 18 | |
| | | | | | | | 20 | |
| | | | | | | | 22 | |
| | | | | | | | 24 | <p>Terminated @ ~21.5 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |
| | | | | | | | 26 | |
| | | | | | | | 28 | |
| | | | | | | | 30 | |
| | | | | | | | 32 | |
| | | | | | | | 34 | |
| | | | | | | | 36 | |
| | | | | | | | 38 | |
| | | | | | | | 40 | |
| | | | | | | | 42 | |
| | | | | | | | 44 | |
| | | | | | | | 46 | |
| | | | | | | | 48 | |
| | | | | | | | 50 | |



BORE LOG

| | | | |
|------------|--------------|---------------|----------|
| Drill Rig: | Mobile B-61 | Date Drilled: | 4/5/2019 |
| Elevation: | 310 Ft (MSL) | Boring No: | BH-6 |

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|---|
| | 5/6/8 | | | | 1.3 | 102.7 | 2 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, loose, fine-grained, micaceous (Qs). |
| | 4/7/8 | | | | | | 4 | |
| | | | | | | | 6 | No Sample Recovery - Cuttings indicate poorly-graded sand w/ silt (SP/SM); dry, fine-grained, micaceous (Qs). |
| | | | | | | | 8 | |
| | 5/7/9 | | | | 0.4 | | 10 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | | | | | | | 12 | |
| | 9/10/9 | | | | 0.4 | | 14 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | | | | | | | 16 | |
| | 6/6/7 | | | | 0.5 | | 18 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | | | | | | | 20 | |
| | 9/11/13 | | | | 0.5 | | 22 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | | | | | | | 24 | |
| | 12/14/18 | | | | 0.3 | | 26 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | | | | | | | 28 | |
| | 13/18/20 | | | | | | 30 | Silty Sand (SM); gray brown, dry, dense, fine-grained, micaceous (Qs). |
| | | | | | | | 32 | |
| | | | | | | | 34 | No Sample Recovery - Cuttings indicate silty sand (SM); dry, fine-grained, micaceous (Qs). |
| | | | | | | | 36 | |
| | 11/19/30 | | | | 0.4 | | 38 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, dense, fine-grained, micaceous (Qs). |
| | | | | | | | 40 | |
| | 13/23/35 | | | | 0.5 | | 42 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, very dense, fine-grained, micaceous (Qs). |
| | | | | | | | 44 | |
| | | | | | | | 46 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, very dense, fine-grained, micaceous (Qs). |
| | | | | | | | 48 | |
| | 18/23/30 | | | | 0.3 | | 50 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, very dense, fine-grained, micaceous (Qs). |

Completion Notes:
 Terminated @ -51.5 Feet bgs
 No Groundwater or Seepage Encountered
 No Bedrock Encountered




PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
 APN 685-220-006, RANCHO MIRAGE



BORE LOG

Drill Rig: Mobile B-61 Date Drilled: 4/5/2019

Elevation: 302 Ft (MSL) Boring No: BH-7

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|---|
| | | 2 | 0 | 4.6 | 1.7 | | 2 |  <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs).</p> |
| | | | | | | | 4 | |
| | | | | | | | 6 | |
| | 7/7/8 | | | | 0.6 | | 8 |  <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs).</p> |
| | | | | | | | 10 | |
| | | | | | | | 12 |  <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).</p> |
| | | | | | | | 14 | |
| | | | | | | | 16 | <p>Terminated @ ~11.5 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |
| | | | | | | | 18 | |
| | | | | | | | 20 | |
| | | | | | | | 22 | |
| | | | | | | | 24 | |
| | | | | | | | 26 | |
| | | | | | | | 28 | |
| | | | | | | | 30 | |
| | | | | | | | 32 | |
| | | | | | | | 34 | |
| | | | | | | | 36 | |
| | | | | | | | 38 | |
| | | | | | | | 40 | |
| | | | | | | | 42 | |
| | | | | | | | 44 | |
| | | | | | | | 46 | |
| | | | | | | | 48 | |
| | | | | | | | 50 | |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207

Page

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BORE LOG

| | | | |
|------------|--------------|---------------|----------|
| Drill Rig: | Mobile B-61 | Date Drilled: | 4/5/2019 |
| Elevation: | 310 Ft (MSL) | Boring No: | BH-8 |

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|---|
| | | | | | | | 2 | Poorly-Graded Sand (SP); gray brown, dry, fine-grained, micaceous (Qs). |
| | 4/5/6 | | | | | | 4 | No Sample Recovery - Cuttings indicate poorly-graded sand w/ silt (SP/SM); dry, fine-grained, micaceous (Qs). |
| | | | | | | | 6 | |
| | 9/10/12 | | | | 0.5 | | 10 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | 8/10/13 | | | | 0.8 | | 16 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | 10/15/18 | | | | 0.7 | | 20 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, dense, fine-grained, micaceous (Qs). |
| | 8/14/17 | | | | 0.6 | | 26 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, dense, fine-grained, micaceous (Qs). |
| | 17/18/23 | | | | 0.6 | | 30 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, dense, fine-grained, micaceous (Qs). |
| | 16/24/31 | | | | 0.5 | | 36 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, very dense, fine-grained, micaceous (Qs). |
| | 22/32/38 | | | | 0.3 | | 40 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, very dense, fine-grained, micaceous (Qs). |
| | 26/36/42 | | | | 0.4 | | 46 | Silty Sand (SM); gray brown, dry, very dense, fine-grained, micaceous (Qs). |
| | 26/33/45 | | | | 0.3 | 12.1 | 50 | Silty Sand (SM); gray brown, dry, very dense, fine-grained, micaceous (Qs). |

Completion Notes:
 Terminated @ ~51.5 Feet bgs
 No Groundwater or Seepage Encountered
 No Bedrock Encountered

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
 APN 685-220-006, RANCHO MIRAGE

| | | |
|-----------------------|------|---|
| Project No: 544-19101 | Page | 8 |
| Report No: 19-05-207 | | |



BORE LOG

Drill Rig: Mobile B-61 Date Drilled: 4/5/2019

Elevation: 294 Ft (MSL) Boring No: BFH-9

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|--|
| | | | | | | | 2 | |
| | 5/5/7 | | | | 0.9 | | 4 | |
| | 8/8/11 | | | | 0.6 | | 6 | |
| | 7/9/12 | | | | 0.5 | | 8 | |
| | | | | | | | 10 | <p>Poorly-Graded Sand (SP); gray brown, dry, fine-grained, micaceous (Qs).</p> <p>Poorly-Graded Sand (SP); gray brown, dry, medium dense, fine-grained, micaceous (Qs).</p> <p>Poorly-Graded Sand (SP); gray brown, dry, medium dense, fine-grained, micaceous (Qs).</p> <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).</p> <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).</p> |
| | 11/13/16 | | | 11.8 | 0.6 | | 12 | |
| | | | | | | | 14 | |
| | | | | | | | 16 | |
| | | | | | | | 18 | <p>Terminated @ ~21.5 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |
| | | | | | | | 20 | |
| | | | | | | | 22 | |
| | | | | | | | 24 | |
| | | | | | | | 26 | |
| | | | | | | | 28 | |
| | | | | | | | 30 | |
| | | | | | | | 32 | |
| | | | | | | | 34 | |
| | | | | | | | 36 | |
| | | | | | | | 38 | |
| | | | | | | | 40 | |
| | | | | | | | 42 | |
| | | | | | | | 44 | |
| | | | | | | | 46 | |
| | | | | | | | 48 | |
| | | | | | | | 50 | |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207



BORE LOG

| | | | |
|------------|--------------|---------------|----------|
| Drill Rig: | Mobile B-61 | Date Drilled: | 4/9/2019 |
| Elevation: | 289 Ft (MSL) | Boring No: | BH-10 |

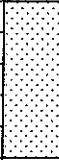
| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|---|
| | | | | | | | 2 | Poorly-Graded Sand (SP); gray brown, dry, fine-grained, micaceous (Qs). |
| | 3/4/4 | | | | 0.1 | | 4 | Poorly-Graded Sand (SP); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | | | | | | | 6 | |
| | 4/5/6 | | | | 0.4 | | 8 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | | | | | | | 10 | |
| | 3/5/7 | | | | | | 12 | No Sample Recovery - Cuttings indicate poorly-graded sand w/ silt (SP/SM); dry, fine-grained, micaceous (Qs). |
| | | | | | | | 14 | |
| | 5/8/9 | | | | 0.3 | | 16 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | | | | | | | 18 | |
| | | | | | | | 20 | <p>Terminated @ -21.5 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |
| | | | | | | | 22 | |
| | | | | | | | 24 | |
| | | | | | | | 26 | |
| | | | | | | | 28 | |
| | | | | | | | 30 | |
| | | | | | | | 32 | |
| | | | | | | | 34 | |
| | | | | | | | 36 | |
| | | | | | | | 38 | |
| | | | | | | | 40 | |
| | | | | | | | 42 | |
| | | | | | | | 44 | |
| | | | | | | | 46 | |
| | | | | | | | 48 | |
| | | | | | | | 50 | |



BORE LOG

Drill Rig: Mobile B-61 Date Drilled: 4/9/2019

Elevation: 290 Ft (MSL) Boring No: BH-11

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|---|-------------|-------------|-----------------|--------------|------------|-------------|--|---|
| | | 3 | 0 | 6.2 | 2.3 | | 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 |  Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs). |
| Terminated @ ~5.0 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered | | | | | | | | |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207



BORE LOG

| | | | |
|------------|--------------|---------------|----------|
| Drill Rig: | Mobile B-61 | Date Drilled: | 4/9/2019 |
| Elevation: | 288 Ft (MSL) | Boring No: | BH-12 |

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|--|
| | | | | | | | 2 | |
| | 3/4/5 | | | | 0.2 | | 4 | |
| | 6/8/10 | | | | 0.5 | | 6 | |
| | 4/6/7 | | | | 0.5 | | 8 | |
| | 5/9/9 | | | | 0.6 | | 10 | |
| | | | | | | | 12 | Poorly-Graded Sand (SP); gray brown, dry, fine-grained, micaceous (Qs). |
| | | | | | | | 14 | Poorly-Graded Sand (SP); gray brown, dry, loose, fine-grained, micaceous (Qs). |
| | | | | | | | 16 | Poorly-Graded Sand (SP); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | | | | | | | 18 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | | | | | | | 20 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | | | | | | | 22 | |
| | | | | | | | 24 | |
| | | | | | | | 26 | |
| | | | | | | | 28 | |
| | | | | | | | 30 | |
| | | | | | | | 32 | |
| | | | | | | | 34 | |
| | | | | | | | 36 | |
| | | | | | | | 38 | |
| | | | | | | | 40 | |
| | | | | | | | 42 | |
| | | | | | | | 44 | |
| | | | | | | | 46 | |
| | | | | | | | 48 | |
| | | | | | | | 50 | |

Terminated @ ~21.5 Feet bgs
 No Groundwater or Seepage Encountered
 No Bedrock Encountered

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
 APN 685-220-006, RANCHO MIRAGE



BORE LOG

| | | | |
|------------|--------------|---------------|----------|
| Drill Rig: | Mobile B-61 | Date Drilled: | 4/9/2019 |
| Elevation: | 295 Ft (MSL) | Boring No: | BH-13 |

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|-------------------|
| | | | | | | | 2 | |
| | 4/6/7 | | | | 0.3 | | 4 | |
| | 4/6/7 | | | | 0.4 | | 6 | |
| | 6/7/8 | | | | 0.5 | | 8 | |
| | 6/9/10 | | 10.1 | | 0.5 | | 10 | |
| | | | | | | | 12 | |
| | | | | | | | 14 | |
| | | | | | | | 16 | |
| | | | | | | | 18 | |
| | | | | | | | 20 | |
| | | | | | | | 22 | |
| | | | | | | | 24 | |
| | | | | | | | 26 | |
| | | | | | | | 28 | |
| | | | | | | | 30 | |
| | | | | | | | 32 | |
| | | | | | | | 34 | |
| | | | | | | | 36 | |
| | | | | | | | 38 | |
| | | | | | | | 40 | |
| | | | | | | | 42 | |
| | | | | | | | 44 | |
| | | | | | | | 46 | |
| | | | | | | | 48 | |
| | | | | | | | 50 | |

Poorly-Graded Sand (SP); gray brown, dry, fine-grained, micaceous (Qs).

Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).

Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, loose, fine-grained, micaceous (Qs).

Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).

Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs).

Terminated @ ~21.5 Feet bgs
 No Groundwater or Seepage Encountered
 No Bedrock Encountered

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
 APN 685-220-006, RANCHO MIRAGE



BORE LOG

| | | | |
|------------|--------------|---------------|----------|
| Drill Rig: | Mobile B-61 | Date Drilled: | 4/9/2019 |
| Elevation: | 288 Ft (MSL) | Boring No: | BH-14 |

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--|--|
| | | 4 | 0 | 5.8 | 3.2 | | 2 4 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs). |
| | | | | | | | 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 | <p>Terminated @ -5.0 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
 APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207



BORE LOG

| | | | |
|------------|--------------|---------------|----------|
| Drill Rig: | Mobile B-61 | Date Drilled: | 4/9/2019 |
| Elevation: | 284 Ft (MSL) | Boring No: | BH-15 |

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology | |
|--|-------------|-------------|-----------------|--------------|------------|-------------|--------------|--|--|
| | | | | | | | 2 | | Poorly-Graded Sand (SP); gray brown, dry, fine-grained, micaceous (Qs). |
| | 3/3/3 | | | | 0.3 | | 4 | | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, loose, fine-grained, micaceous (Qs). |
| | 3/5/7 | | | 6.8 | 0.2 | | 10 | | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | 5/8/9 | | | | 0.3 | | 16 | | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). |
| | 4/6/6 | | | | 0.2 | | 20 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, medium dense, fine-grained, micaceous (Qs). | |
| | | | | | | | 22 | | |
| | | | | | | | 24 | | |
| | | | | | | | 26 | | |
| | | | | | | | 28 | | |
| | | | | | | | 30 | | |
| | | | | | | | 32 | | |
| | | | | | | | 34 | | |
| | | | | | | | 36 | | |
| | | | | | | | 38 | | |
| | | | | | | | 40 | | |
| | | | | | | | 42 | | |
| | | | | | | | 44 | | |
| | | | | | | | 46 | | |
| | | | | | | | 48 | | |
| | | | | | | | 50 | | |
| Terminated @ ~21.5 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered | | | | | | | | | |



EXPLORATORY TEST PIT LOG

Equipment: John Deere 30

Date Excavated: 4/9/2019

Elevation: 307 Ft (MSL)

Test Pit No: TP-1

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology | |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|---|--|
| | | | | | | | 2 | | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs). |
| | | | | | | 4 | | | |
| | | | | | | 6 | | | |
| | | | | | | 8 | | | |
| | | | | | | 10 | | | |
| | | | | | | 12 | | | |
| | | | | | | 14 | | | |
| | | | | | | | 16 | <p>Terminated @ 7.0 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> | |
| | | | | | | 18 | | | |
| | | | | | | 20 | | | |
| | | | | | | 22 | | | |
| | | | | | | 24 | | | |
| | | | | | | 26 | | | |
| | | | | | | 28 | | | |
| | | | | | | 30 | | | |
| | | | | | | 32 | | | |
| | | | | | | 34 | | | |
| | | | | | | 36 | | | |
| | | | | | | 38 | | | |
| | | | | | | 40 | | | |
| | | | | | | 42 | | | |
| | | | | | | 44 | | | |
| | | | | | | 46 | | | |
| | | | | | | 48 | | | |
| | | | | | | 50 | | | |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

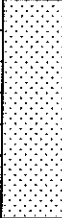
Project No: 544-19101

Report No: 19-05-207



EXPLORATORY TEST PIT LOG

| | | | |
|------------|---------------|-----------------|----------|
| Equipment: | John Deere 30 | Date Excavated: | 4/9/2019 |
| Elevation: | 305 Ft (MSL) | Test Pit No: | TP-2 |

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|---|---|
| | | | | | | | 2 4 6 |  <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs).</p> |
| | | | | | | | 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 | <p>Terminated @ 7.0 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207



EXPLORATORY TEST PIT LOG

Equipment: John Deere 30

Date Excavated: 4/9/2019

Elevation: 295 Ft (MSL)

Test Pit No: TP-3

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--|---|
| | | | | | | | 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 | <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs).</p> <p>Terminated @ 7.0 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207



EXPLORATORY TEST PIT LOG

Equipment: John Deere 30

Date Excavated: 4/9/2019

Elevation: 289 Ft (MSL)

Test Pit No: TP-4

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--|---|
| | | | | | | | 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 | <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs).</p> <p>Terminated @ 7.0 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207

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EXPLORATORY TEST PIT LOG

Equipment: John Deere 30 Date Excavated: 4/9/2019

Elevation: 296 Ft (MSL) Test Pit No: TP-5

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--|---|
| | | | | | | | 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 | <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs).</p> <p>Terminated @ 7.0 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207



EXPLORATORY TEST PIT LOG

Equipment: John Deere 30

Date Excavated: 4/9/2019

Elevation: 299 Ft (MSL)

Test Pit No: TP-6

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|---|
| | | | | | | | 2 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs). |
| | | | | | | | 4 | |
| | | | | | | | 6 | <p style="text-align: center;">Terminated @ 5.0 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |
| | | | | | | | 8 | |
| | | | | | | | 10 | |
| | | | | | | | 12 | |
| | | | | | | | 14 | |
| | | | | | | | 16 | |
| | | | | | | | 18 | |
| | | | | | | | 20 | |
| | | | | | | | 22 | |
| | | | | | | | 24 | |
| | | | | | | | 26 | |
| | | | | | | | 28 | |
| | | | | | | | 30 | |
| | | | | | | | 32 | |
| | | | | | | | 34 | |
| | | | | | | | 36 | |
| | | | | | | | 38 | |
| | | | | | | | 40 | |
| | | | | | | | 42 | |
| | | | | | | | 44 | |
| | | | | | | | 46 | |
| | | | | | | | 48 | |
| | | | | | | | 50 | |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207



EXPLORATORY TEST PIT LOG

Equipment: John Deere 30

Date Excavated: 4/9/2019

Elevation: 296 Ft (MSL)

Test Pit No: TP-7

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|---|
| | | | | | | | 2 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs). |
| | | | | | | | 4 | |
| | | | | | | | 6 | <p style="text-align: center;">Terminated @ 5.0 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |
| | | | | | | | 8 | |
| | | | | | | | 10 | |
| | | | | | | | 12 | |
| | | | | | | | 14 | |
| | | | | | | | 16 | |
| | | | | | | | 18 | |
| | | | | | | | 20 | |
| | | | | | | | 22 | |
| | | | | | | | 24 | |
| | | | | | | | 26 | |
| | | | | | | | 28 | |
| | | | | | | | 30 | |
| | | | | | | | 32 | |
| | | | | | | | 34 | |
| | | | | | | | 36 | |
| | | | | | | | 38 | |
| | | | | | | | 40 | |
| | | | | | | | 42 | |
| | | | | | | | 44 | |
| | | | | | | | 46 | |
| | | | | | | | 48 | |
| | | | | | | | 50 | |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207



EXPLORATORY TEST PIT LOG

Equipment: John Deere 30

Date Excavated: 4/9/2019

Elevation: 296 Ft (MSL)

Test Pit No: TP-8

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--|---|
| | | | | | | | 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 | <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs).</p> <p>Terminated @ 5.0 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207



EXPLORATORY TEST PIT LOG

Equipment: John Deere 30

Date Excavated: 4/9/2019

Elevation: 300 Ft (MSL)

Test Pit No: TP-9

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--|---|
| | | | | | | | 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 | <p>Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs).</p> <p>Terminated @ 5.0 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207



EXPLORATORY TEST PIT LOG

Equipment: John Deere 30 Date Excavated: 4/9/2019

Elevation: 308 Ft (MSL) Test Pit No: TP-10

| Sample | Blow Counts | Bulk Sample | Expansion Index | % Minus #200 | % Moisture | Dry Density | Depth (Feet) | Graphic Lithology |
|--------|-------------|-------------|-----------------|--------------|------------|-------------|--------------|---|
| | | | | | | | 2 | Poorly-Graded Sand w/ Silt (SP/SM); gray brown, dry, fine-grained, micaceous (Qs). |
| | | | | | | | 4 | |
| | | | | | | | 6 | <p style="text-align: center;">Terminated @ 5.0 Feet bgs No Groundwater or Seepage Encountered No Bedrock Encountered</p> |
| | | | | | | | 8 | |
| | | | | | | | 10 | |
| | | | | | | | 12 | |
| | | | | | | | 14 | |
| | | | | | | | 16 | |
| | | | | | | | 18 | |
| | | | | | | | 20 | |
| | | | | | | | 22 | |
| | | | | | | | 24 | |
| | | | | | | | 26 | |
| | | | | | | | 28 | |
| | | | | | | | 30 | |
| | | | | | | | 32 | |
| | | | | | | | 34 | |
| | | | | | | | 36 | |
| | | | | | | | 38 | |
| | | | | | | | 40 | |
| | | | | | | | 42 | |
| | | | | | | | 44 | |
| | | | | | | | 46 | |
| | | | | | | | 48 | |
| | | | | | | | 50 | |

Completion Notes:

PROPOSED RANCHO MIRAGE 31 DEVELOPMENT
APN 685-220-006, RANCHO MIRAGE

Project No: 544-19101

Report No: 19-05-207

APPENDIX B
LABORATORY TESTING

APPENDIX B

LABORATORY TESTING

Representative bulk and relatively undisturbed soil samples were obtained in the field and returned to our laboratory for additional observations and testing. Laboratory testing was generally performed in two phases. The first phase consisted of testing in order to determine the compaction of the existing natural soil and the general engineering classifications of the soils underlying the site. This testing was performed in order to estimate the engineering characteristics of the soil and to serve as a basis for selecting samples for the second phase of testing. The second phase consisted of soil mechanics testing. This testing including consolidation, shear strength and expansion testing was performed in order to provide a means of developing specific design recommendations based on the mechanical properties of the soil.

CLASSIFICATION AND COMPACTION TESTING

Unit Weight and Moisture Content Determinations: Each undisturbed sample was weighed and measured in order to determine its unit weight. A small portion of each sample was then subjected to testing in order to determine its moisture content. This was used in order to determine the dry density of the soil in its natural condition. The results of this testing are shown on the Boring Logs.

Maximum Density-Optimum Moisture Determinations: Representative soil types were selected for maximum density determinations. This testing was performed in accordance with the ASTM Standard D1557-91, Test Method A. Graphic representations of the results of this testing are presented in this appendix. The maximum densities are compared to the field densities of the soil in order to determine the existing relative compaction to the soil.

Classification Testing: Soil samples were selected for classification testing. This testing consists of mechanical grain size analyses. This provides information for developing classifications for the soil in accordance with the Unified Soil Classification System which is presented in the preceding appendix. This classification system categorizes the soil into groups having similar engineering characteristics. The results of this testing is very useful in detecting variations in the soil and in selecting samples for further testing.

SOIL MECHANIC'S TESTING

Expansion Testing: Four (4) bulk samples were selected for Expansion testing. Expansion testing was performed in accordance with the UBC Standard 18-2. This testing consists of remolding 4-inch diameter by 1-inch thick test specimens to a moisture content and dry density corresponding to approximately 50 percent saturation. The samples are subjected to a surcharge of 144 pounds per square foot and allowed to reach equilibrium. At that point the specimens are inundated with distilled water. The linear expansion is then measured until complete.

Direct Shear Testing: Four (4) bulk samples were selected for Direct Shear testing. This test measures the shear strength of the soil under various normal pressures and is used to develop parameters for foundation design and lateral design. Tests were performed using a recompacted test specimen that was saturated prior to tests. Tests were performed using a strain controlled test apparatus with normal pressures ranging from 800 to 2300 pounds per square foot.

Consolidation: Two (2) samples were selected for consolidation testing. For this test, a one-inch thick test specimen was subjected to vertical loads varying from 575 psf to 11520 psf applied progressively. The consolidation at each load increment was recorded prior to placement of each subsequent load. The specimens were saturated at the 4000 psf load increment in accordance with ASTM Test Method D 5333.

Corrosion Series Testing: The soluble sulfate concentrations of the surface soil were determined in accordance with California Test Method Number (CA) 417. The pH and Minimum Resistivity were determined in accordance with CA 643. The soluble chloride concentrations were determined in accordance with CA 422.



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Maximum Density/Optimum Moisture

ASTM D698/D1557

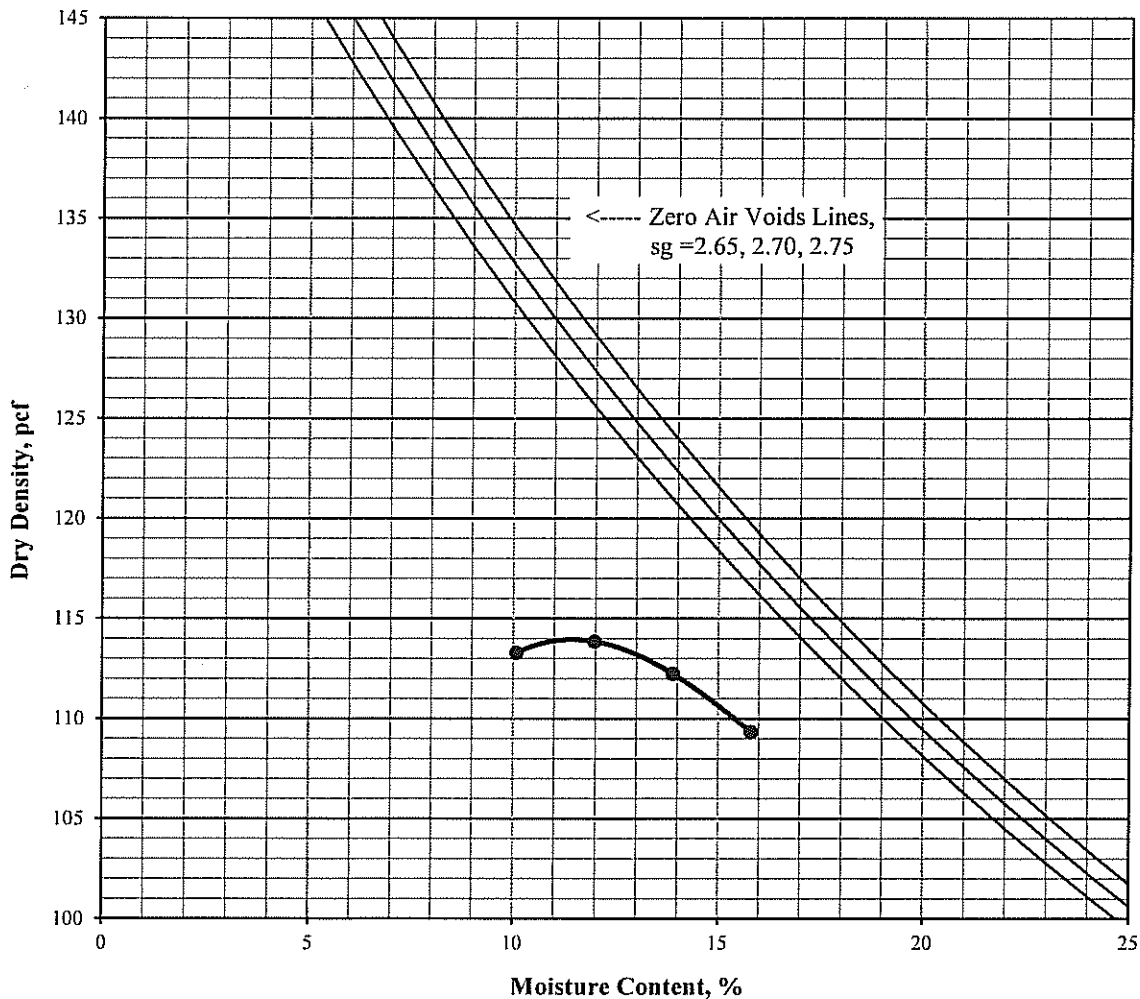
Project Number: 544-19101
 Project Name: Rancho Mirage 31
 Lab ID Number: LN6-19182
 Sample Location: BH-1 Bulk 1 @ 0-5'
 Description: Gray/Brown Sand w/Silt (SP-SM)

May 3, 2019

ASTM D-1557 A
Rammer Type: Machine

Maximum Density: 114 pcf
Optimum Moisture: 12.5%

| Sieve Size | % Retained |
|------------|------------|
| 3/4" | |
| 3/8" | |
| #4 | 0.0 |





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Maximum Density/Optimum Moisture

ASTM D698/D1557

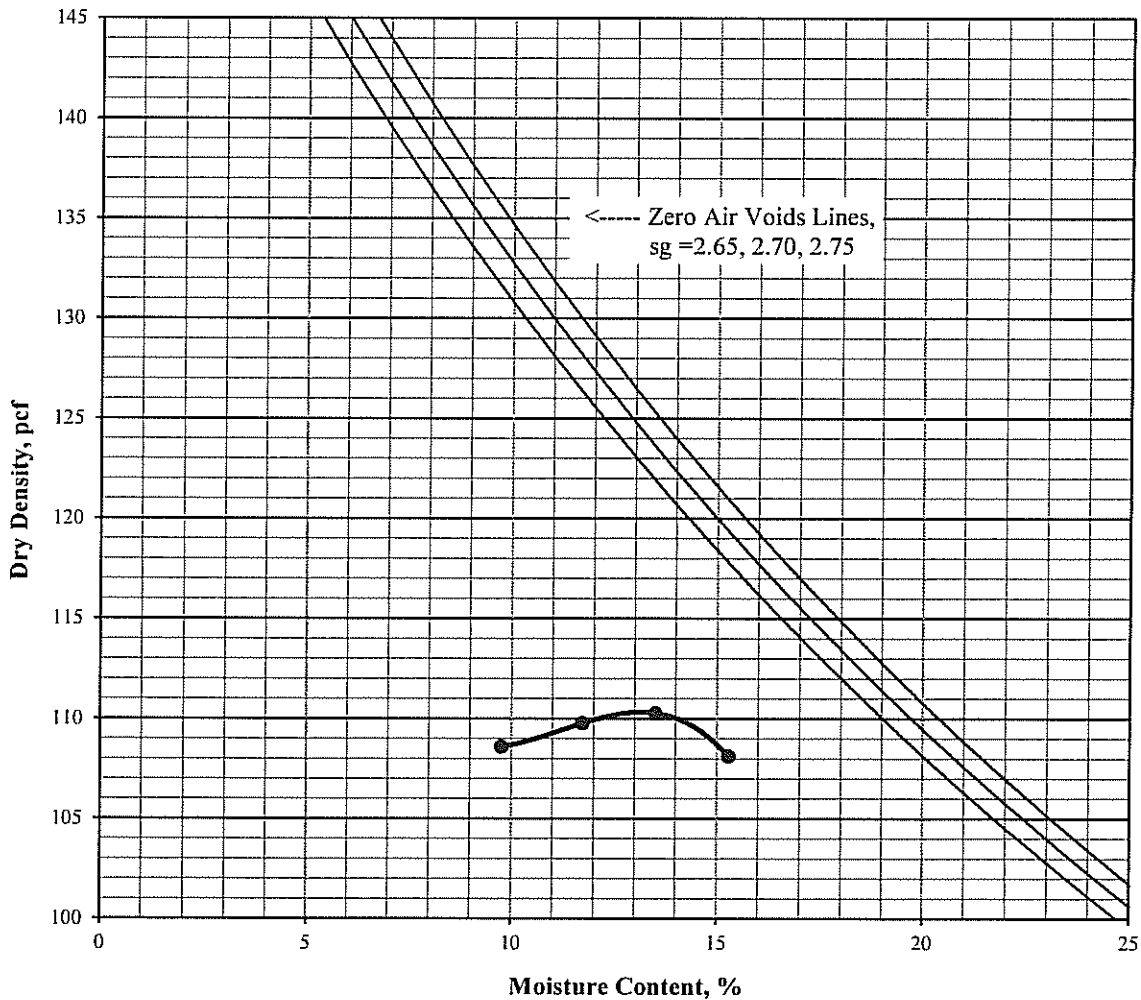
Project Number: 544-19101
 Project Name: Rancho Mirage 31
 Lab ID Number: LN6-19182
 Sample Location: BH-7 Bulk 2 @ 0-5'
 Description: Gray/Brown Sand w/Silt (SP-SM)

May 3, 2019

ASTM D-1557 A
 Rammer Type: Machine

Maximum Density: 110.5 pcf
Optimum Moisture: 13%

| Sieve Size | % Retained |
|------------|------------|
| 3/4" | |
| 3/8" | |
| #4 | 0.0 |





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Maximum Density/Optimum Moisture

ASTM D698/D1557

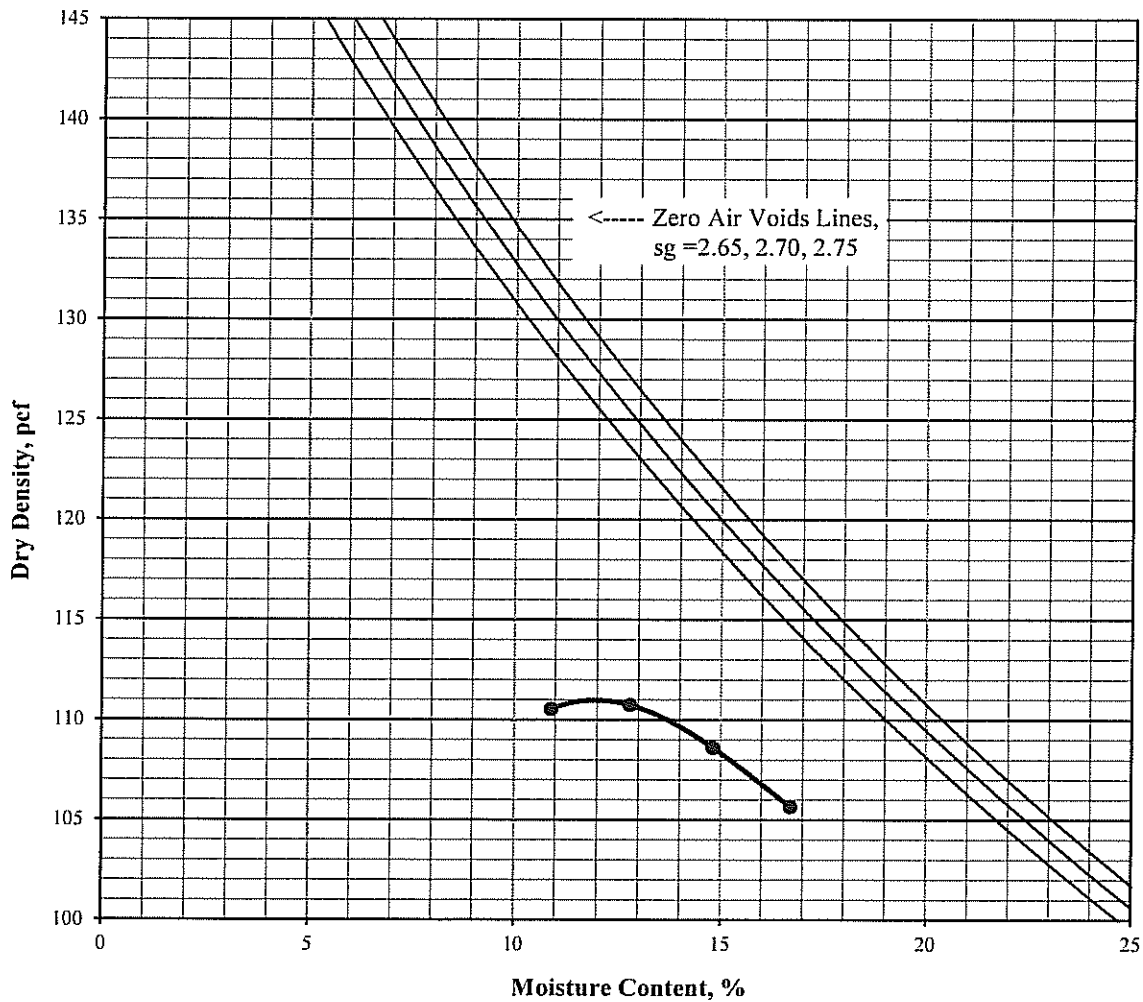
Project Number: 544-19101
 Project Name: Rancho Mirage 31
 Lab ID Number: LN6-19182
 Sample Location: BH-11 Bulk-3 @ 0-5'
 Description: Grey/Brown Sand w/Silt (SP-SM)

May 3, 2019

ASTM D-1557 A
 Rammer Type: Machine

Maximum Density: 111 pcf
Optimum Moisture: 13.5%

| Sieve Size | % Retained |
|------------|------------|
| 3/4" | |
| 3/8" | |
| #4 | 0.0 |





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Maximum Density/Optimum Moisture

ASTM D698/D1557

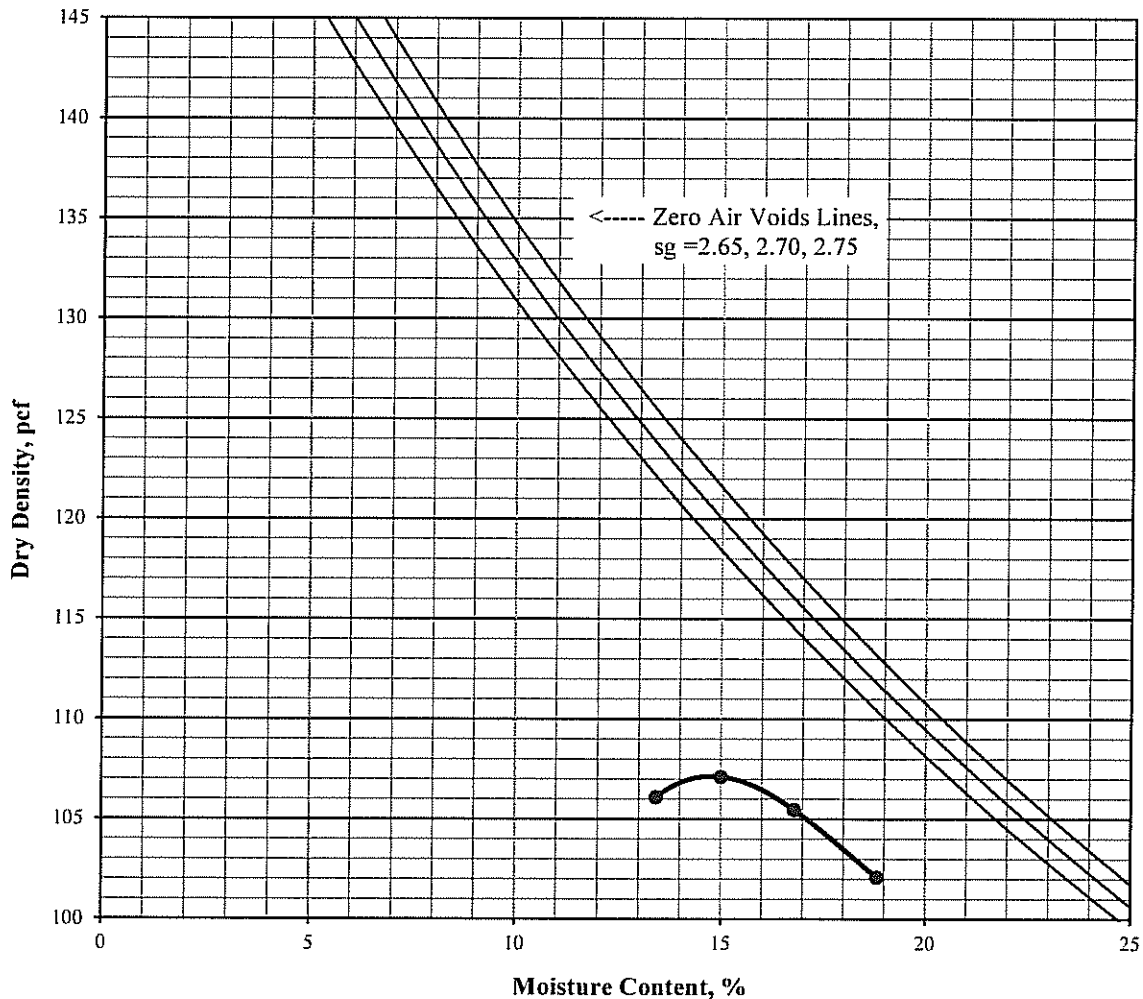
Project Number: 544-19101
 Project Name: Rancho Mirage 31
 Lab ID Number: LN6-19182
 Sample Location: BH-14 Bulk-4 @ 0-5'
 Description: Gray/Brown Sand w/Silt (SP-SM)

May 3, 2019

ASTM D-1557 A
 Rammer Type: Machine

Maximum Density: 107.5 pcf
Optimum Moisture: 15.5%

| Sieve Size | % Retained |
|------------|------------|
| 3/4" | |
| 3/8" | |
| #4 | 0.0 |





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Expansion Index

ASTM D 4829

Job Number: 544-19101
 Job Name: Rancho Mirage 31
 Lab ID Number: LN6-19182
 Sample ID: BH-1 Bulk-1 @ 0-5'
 Soil Description: Gray/Brown Sand w/Silt (SP-SM)

May 3, 2019

| | |
|--------------------|-------|
| Wt of Soil + Ring: | 551.0 |
| Weight of Ring: | 188.7 |
| Wt of Wet Soil: | 362.3 |
| Percent Moisture: | 11.3% |
| Sample Height, in | 0.95 |
| Wet Density, pcf: | 115.6 |
| Dry Density, pcf: | 103.8 |

| | |
|----------------------|------|
| % Saturation: | 49.0 |
|----------------------|------|

Expansion

Rack # 1

| | | |
|-----------------|-----------|---------|
| Date/Time | 4/26/2019 | 2:30 PM |
| Initial Reading | 0.0000 | |
| Final Reading | 0.0000 | |

Expansion Index

0

(Final - Initial) x 1000



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Expansion Index

ASTM D 4829

Job Number: 544-19101
 Job Name: Rancho Mirage 31
 Lab ID Number: LN6-19182
 Sample ID: BH-7 Bulk-2 @ 0-5'
 Soil Description: Gray/Brown Sand w/Silt (SP-SM)

May 3, 2019

| | |
|--------------------|-------|
| Wt of Soil + Ring: | 546.2 |
| Weight of Ring: | 192.1 |
| Wt of Wet Soil: | 354.1 |
| Percent Moisture: | 12.2% |
| Sample Height, in | 0.95 |
| Wet Density, pcf: | 113.0 |
| Dry Density, pcf: | 100.7 |

| | |
|----------------------|------|
| % Saturation: | 48.9 |
|----------------------|------|

Expansion

Rack # 4

| | | |
|-----------------|-----------|---------|
| Date/Time | 4/26/2019 | 2:50 PM |
| Initial Reading | 0.0000 | |
| Final Reading | 0.0000 | |

Expansion Index

0

(Final - Initial) x 1000



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Expansion Index

ASTM D 4829

Job Number: 544-19101
 Job Name: Rancho Mirage 31
 Lab ID Number: LN6-19182
 Sample ID: BH-11 Bulk-3 @ 0-5'
 Soil Description: Gray/Brown Sand w/Silt (SP-SM)

May 3, 2019

| | |
|--------------------|-------|
| Wt of Soil + Ring: | 547.9 |
| Weight of Ring: | 192.0 |
| Wt of Wet Soil: | 355.9 |
| Percent Moisture: | 12.3% |
| Sample Height, in | 0.95 |
| Wet Density, pcf: | 113.5 |
| Dry Density, pcf: | 101.1 |

| | |
|----------------------|------|
| % Saturation: | 49.8 |
|----------------------|------|

Expansion

Rack # 4

| | | |
|-----------------|-----------|---------|
| Date/Time | 4/26/2019 | 2:48 PM |
| Initial Reading | 0.0000 | |
| Final Reading | 0.0000 | |

Expansion Index

0

(Final - Initial) x 1000



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Expansion Index

ASTM D 4829

Job Number: 544-19101
 Job Name: Rancho Mirage 31
 Lab ID Number: LN6-19182
 Sample ID: BH-14 Bulk-4 @ 0-5'
 Soil Description: Gray/Brown Sand w/Silt (SP-SM)

May 3, 2019

| | |
|--------------------|-------|
| Wt of Soil + Ring: | 547.9 |
| Weight of Ring: | 192.0 |
| Wt of Wet Soil: | 355.9 |
| Percent Moisture: | 12.3% |
| Sample Height, in | 0.95 |
| Wet Density, pcf: | 113.5 |
| Dry Density, pcf: | 101.1 |

| | |
|----------------------|------|
| % Saturation: | 49.8 |
|----------------------|------|

Expansion

Rack # 4

| | | |
|-----------------|-----------|---------|
| Date/Time | 4/29/2019 | 2:48 PM |
| Initial Reading | 0.0000 | |
| Final Reading | 0.0000 | |

Expansion Index

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(Final - Initial) x 1000



Sladden Engineering

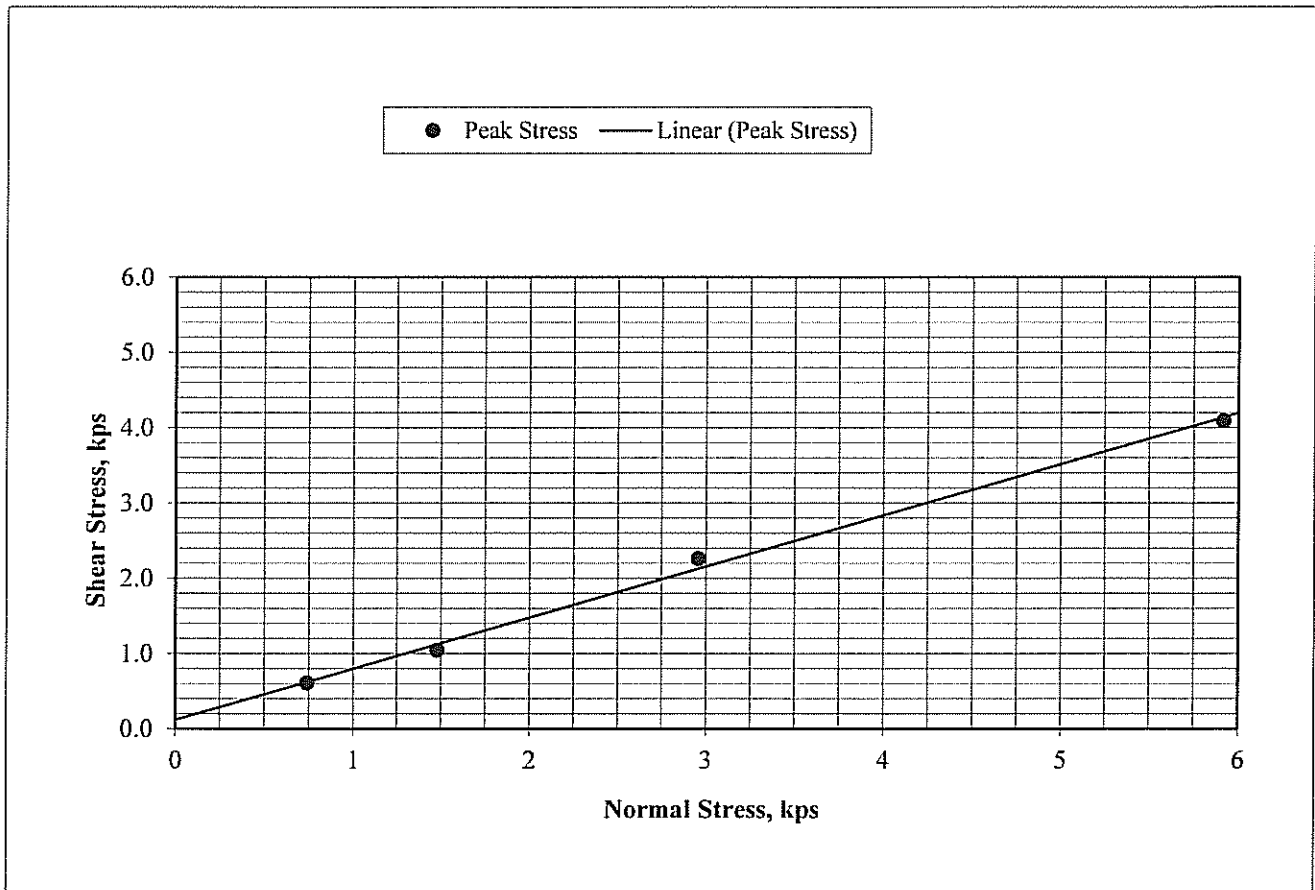
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Direct Shear ASTM D 3080-04 (modified for unconsolidated condition)

Job Number: 544-19101
Job Name Rancho Mirage 31
Lab ID No. LN6-19182
Sample ID BH-1 Bulk-1 @ 0-5'
Classification Gray/Brown Sand w/Silt (SP-SM)
Sample Type Remolded @ 90% of Maximum Density

May 3, 2019
Initial Dry Density: 102.4 pcf
Initial Moisture Content: 12.4 %
Peak Friction Angle (ϕ): 34°
Cohesion (c): 120 psf

| Test Results | 1 | 2 | 3 | 4 | Average |
|---------------------|-------|-------|-------|-------|---------|
| Moisture Content, % | 17.5 | 17.5 | 17.5 | 17.5 | 17.5 |
| Saturation, % | 73.3 | 73.3 | 73.3 | 73.3 | 73.3 |
| Normal Stress, kps | 0.739 | 1.479 | 2.958 | 5.916 | |
| Peak Stress, kps | 0.609 | 1.044 | 2.262 | 4.089 | |





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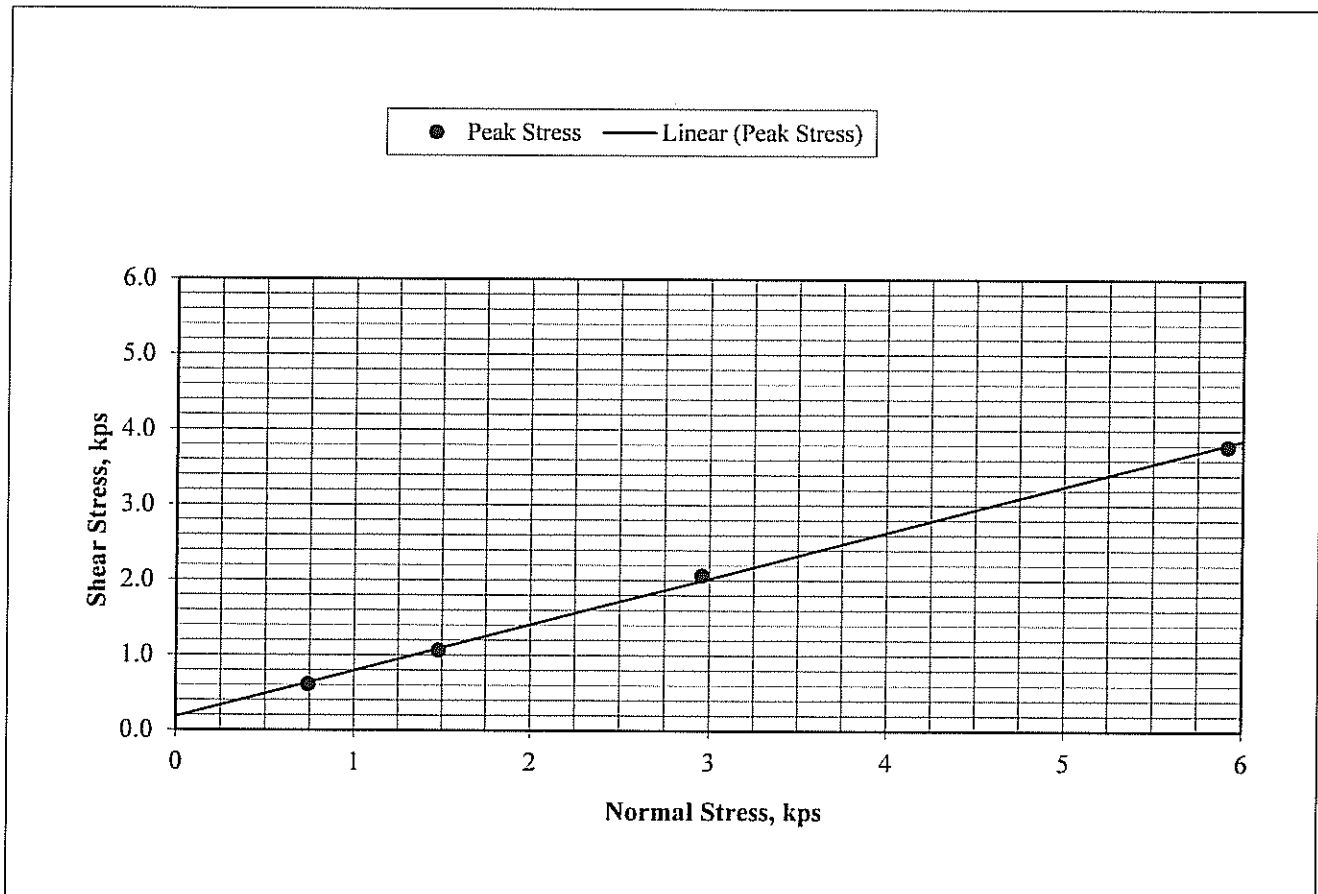
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Direct Shear ASTM D 3080-04 (modified for unconsolidated condition)

Job Number: 544-19101
Job Name Rancho Mirage 31
Lab ID No. LN6-19182
Sample ID BH-7 Bulk-2 @ 0-5'
Classification Gray/Brown Sand w/Silt (SP-SM)
Sample Type Remolded @ 90% of Maximum Density

May 3, 2019
Initial Dry Density: 98.9 pcf
Initial Moisture Content: 12.8 %
Peak Friction Angle (ϕ): 32°
Cohesion (c): 180 psf

| Test Results | 1 | 2 | 3 | 4 | Average |
|---------------------|-------|-------|-------|-------|---------|
| Moisture Content, % | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 |
| Saturation, % | 76.5 | 76.5 | 76.5 | 76.5 | 76.5 |
| Normal Stress, kps | 0.739 | 1.479 | 2.958 | 5.916 | |
| Peak Stress, kps | 0.609 | 1.066 | 2.066 | 3.785 | |





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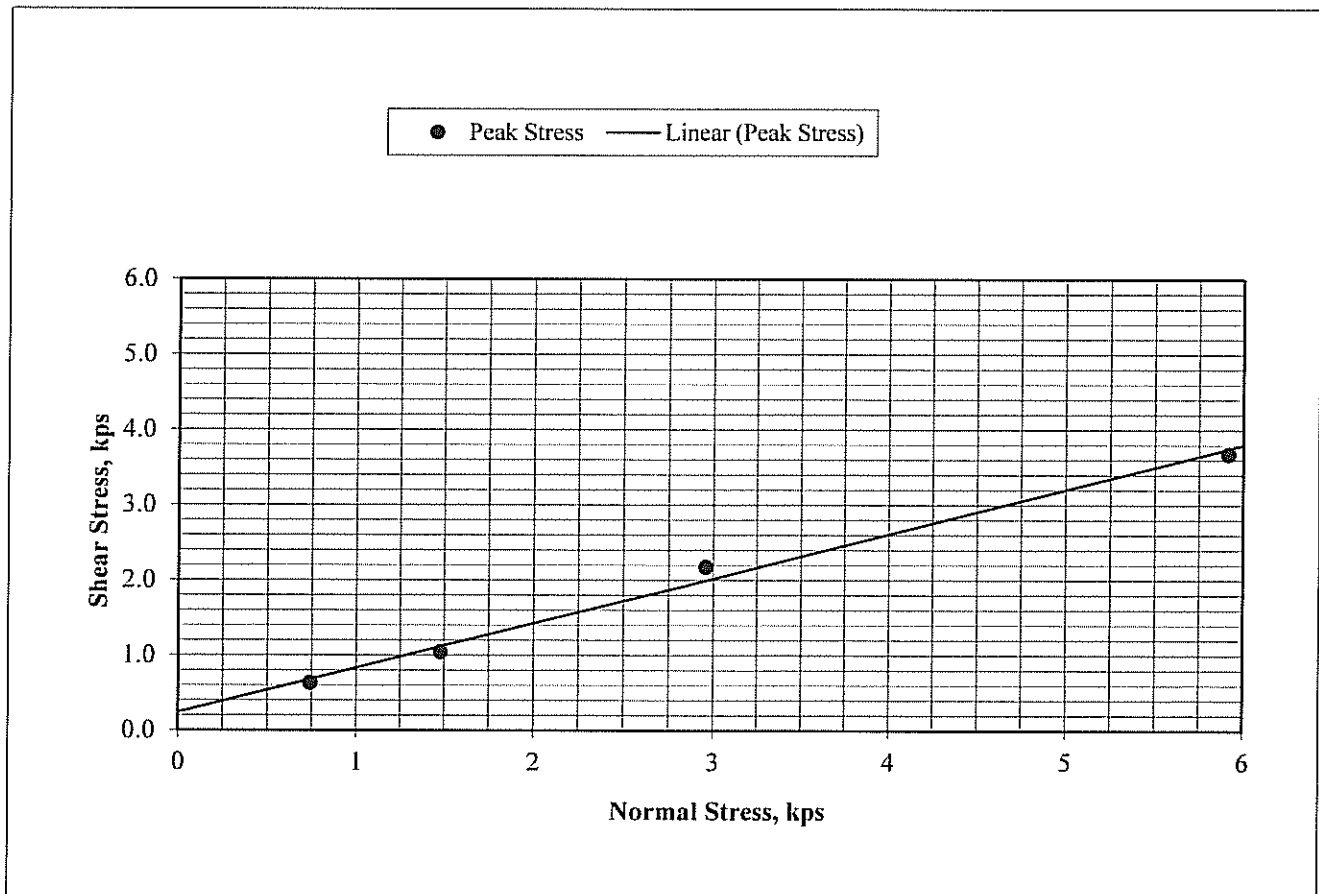
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Direct Shear ASTM D 3080-04 (modified for unconsolidated condition)

Job Number: 544-19101
 Job Name Rancho Mirage 31
 Lab ID No. LN6-19182
 Sample ID BH-11 Bulk-3 @ 0-5'
 Classification Gray/Brown Sand w/Silt (SP-SM)
 Sample Type Remolded @ 90% of Maximum Density

May 3, 2019
 Initial Dry Density: 99.5 pcf
 Initial Moisture Content: 13.5 %
 Peak Friction Angle (ϕ): 31°
 Cohesion (c): 240 psf

| Test Results | 1 | 2 | 3 | 4 | Average |
|---------------------|-------|-------|-------|-------|---------|
| Moisture Content, % | 18.3 | 18.3 | 18.3 | 18.3 | 18.3 |
| Saturation, % | 71.1 | 71.1 | 71.1 | 71.1 | 71.1 |
| Normal Stress, kps | 0.739 | 1.479 | 2.958 | 5.916 | |
| Peak Stress, kps | 0.631 | 1.044 | 2.175 | 3.676 | |





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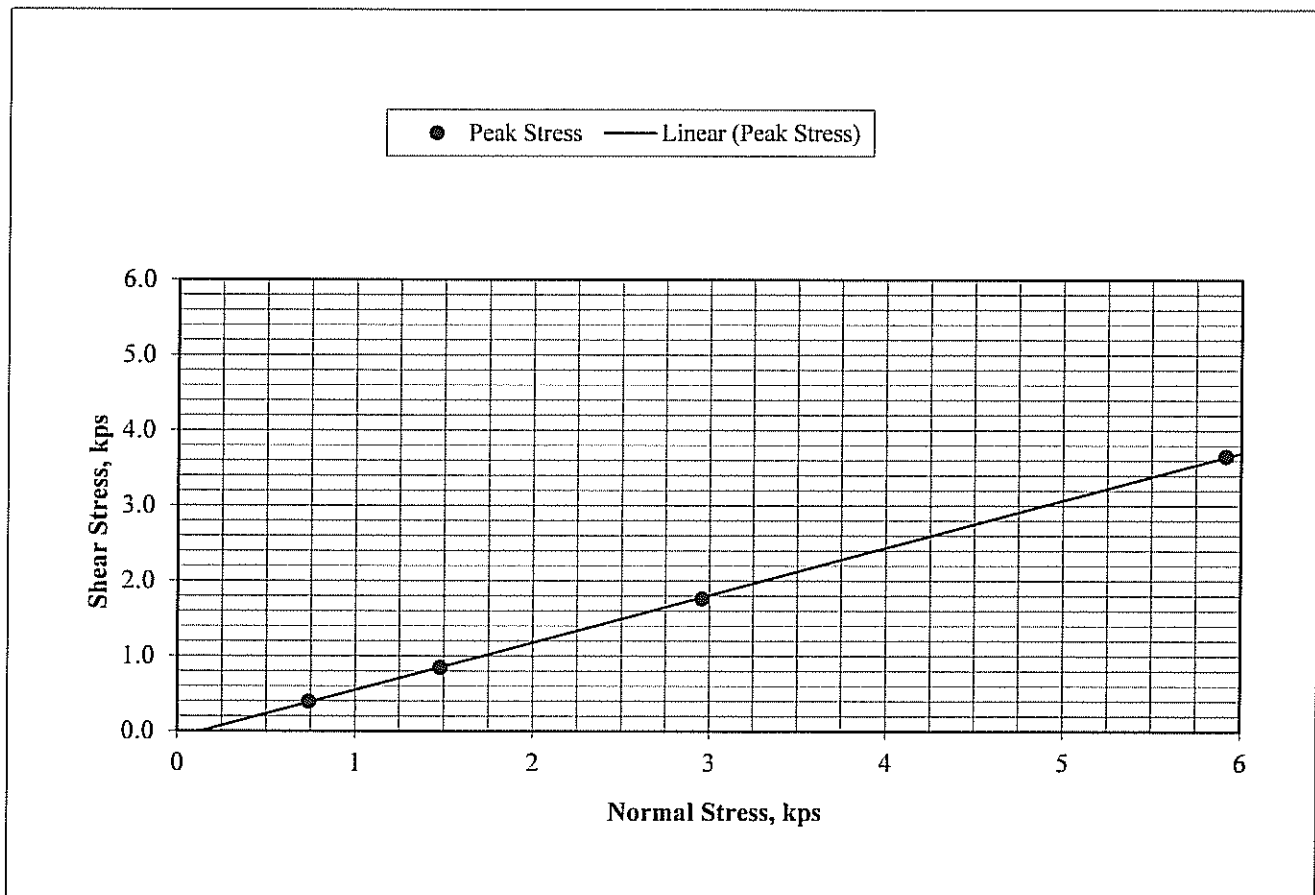
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Direct Shear ASTM D 3080-04 (modified for unconsolidated condition)

Job Number: 544-19101
Job Name Rancho Mirage 31
Lab ID No. LN6-19182
Sample ID BH-14 Bulk-4 @ 0-5'
Classification Gray/Brown Sand w/Silt (SP-SM)
Sample Type Remolded @ 90% of Maximum Density

May 3, 2019
Initial Dry Density: 96.7 pcf
Initial Moisture Content: 16.0 %
Peak Friction Angle (ϕ): 32°
Cohesion (c): -90 psf

| Test Results | 1 | 2 | 3 | 4 | Average |
|---------------------|-------|-------|-------|-------|---------|
| Moisture Content, % | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 |
| Saturation, % | 74.2 | 74.2 | 74.2 | 74.2 | 74.2 |
| Normal Stress, kps | 0.739 | 1.479 | 2.958 | 5.916 | |
| Peak Stress, kps | 0.392 | 0.848 | 1.762 | 3.654 | |



Job Number: 544-19101
Job Name: Rancho Mirage 31
Date: 5/3/2019

Moisture Adjustment

| | |
|---------------|--------------|
| Wt of Soil: | <u>1,000</u> |
| Moist As Is: | <u>2.0</u> |
| Moist Wanted: | <u>12.5</u> |

ml of Water to Add: 102.9

Remolded Shear Weight

| | |
|-------------------|-------|
| Max Dry Density: | 114.0 |
| Optimum Moisture: | 12.5 |

Wt Soil per Ring, g: 138.8

UBC



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Gradation

ASTM C117 & C136

Project Number: 544-19101

May 3, 2019

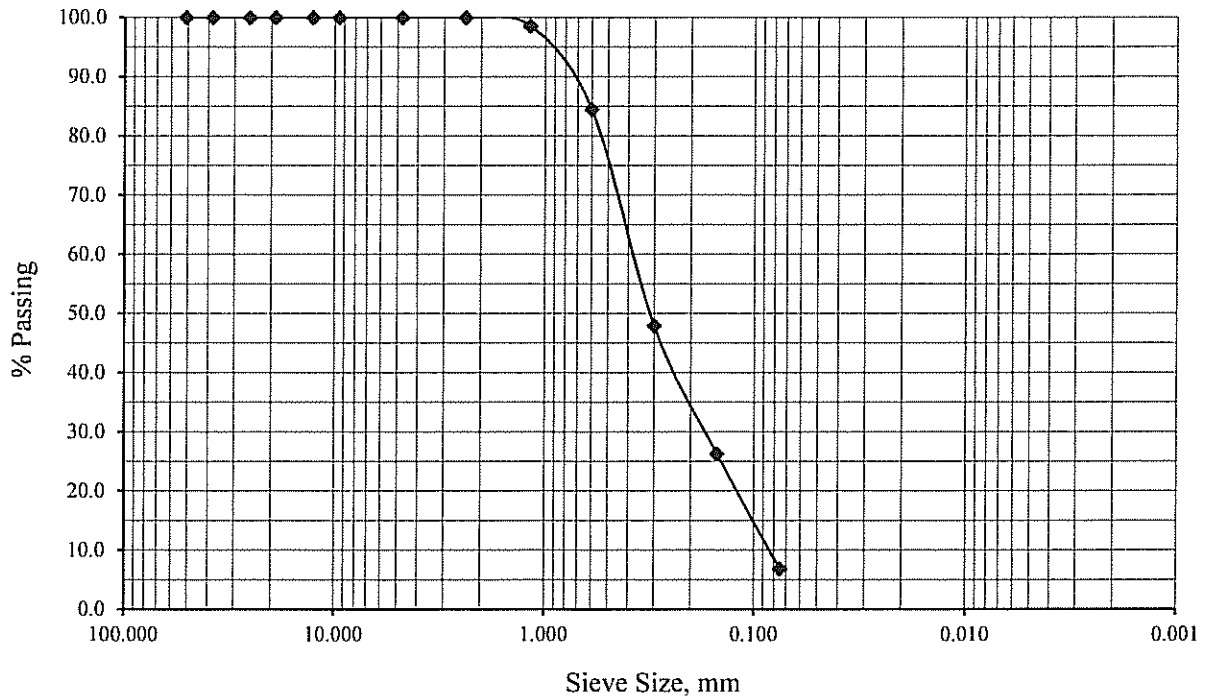
Project Name: Rancho Mirage 31

Lab ID Number: LN6-19182

Sample ID: BH-1 Bulk-1 @ 0-5'

Soil Classification: SP-SM

| Sieve Size, in | Sieve Size, mm | Percent Passing |
|----------------|----------------|-----------------|
| 2" | 50.8 | 100.0 |
| 1 1/2" | 38.1 | 100.0 |
| 1" | 25.4 | 100.0 |
| 3/4" | 19.1 | 100.0 |
| 1/2" | 12.7 | 100.0 |
| 3/8" | 9.53 | 100.0 |
| #4 | 4.75 | 100.0 |
| #8 | 2.36 | 100.0 |
| #16 | 1.18 | 98.6 |
| #30 | 0.60 | 84.4 |
| #50 | 0.30 | 47.9 |
| #100 | 0.15 | 26.2 |
| #200 | 0.075 | 6.9 |





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Gradation

ASTM C117 & C136

Project Number: 544-19101

May 3, 2019

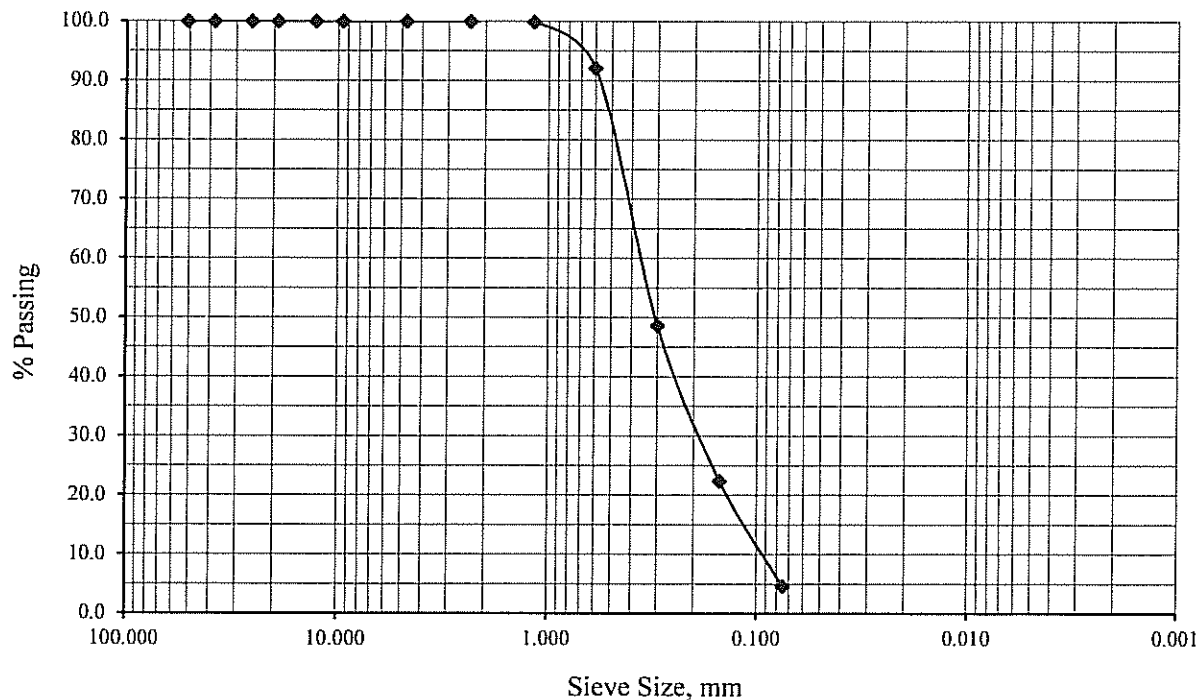
Project Name: Rancho Mirage 31

Lab ID Number: LN6-19182

Sample ID: BH-7 Bulk-2 @0-5'

Soil Classification: SP-SM

| Sieve Size, in | Sieve Size, mm | Percent Passing |
|----------------|----------------|-----------------|
| 2" | 50.8 | 100.0 |
| 1 1/2" | 38.1 | 100.0 |
| 1" | 25.4 | 100.0 |
| 3/4" | 19.1 | 100.0 |
| 1/2" | 12.7 | 100.0 |
| 3/8" | 9.53 | 100.0 |
| #4 | 4.75 | 100.0 |
| #8 | 2.36 | 100.0 |
| #16 | 1.18 | 99.8 |
| #30 | 0.60 | 92.1 |
| #50 | 0.30 | 48.6 |
| #100 | 0.15 | 22.4 |
| #200 | 0.075 | 4.6 |





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Gradation

ASTM C117 & C136

Project Number: 544-19101

May 3, 2019

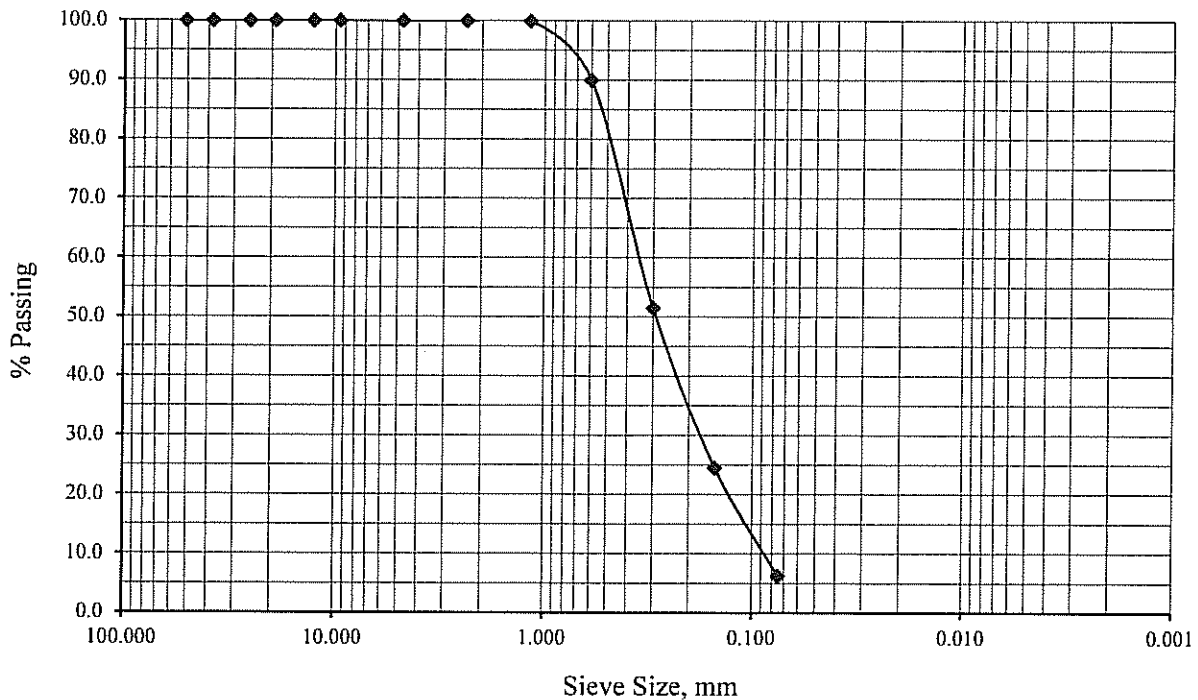
Project Name: Rancho Mirage 31

Lab ID Number: LN6-19182

Sample ID: BH-11 Bulk-3 @ 0-5'

Soil Classification: SP-SM

| Sieve Size, in | Sieve Size, mm | Percent Passing |
|----------------|----------------|-----------------|
| 2" | 50.8 | 100.0 |
| 1 1/2" | 38.1 | 100.0 |
| 1" | 25.4 | 100.0 |
| 3/4" | 19.1 | 100.0 |
| 1/2" | 12.7 | 100.0 |
| 3/8" | 9.53 | 100.0 |
| #4 | 4.75 | 100.0 |
| #8 | 2.36 | 100.0 |
| #16 | 1.18 | 99.9 |
| #30 | 0.60 | 89.9 |
| #50 | 0.30 | 51.5 |
| #100 | 0.15 | 24.5 |
| #200 | 0.075 | 6.2 |





Sladden Engineering

450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Gradation

ASTM C117 & C136

Project Number: 544-19101

May 3, 2019

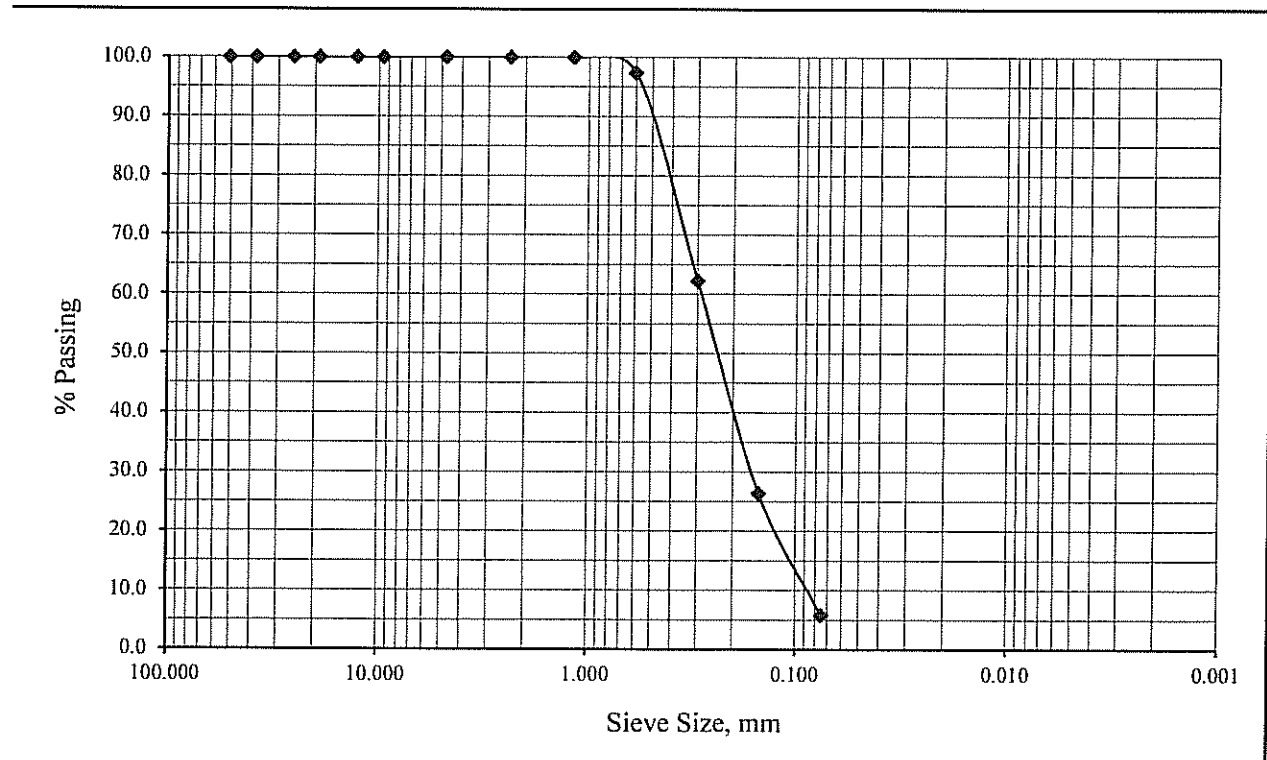
Project Name: Rancho Mirage 31

Lab ID Number: LN6-19182

Sample ID: BH-14 Bulk-4 @ 0-5'

Soil Classification: SP-SM

| Sieve Size, in | Sieve Size, mm | Percent Passing |
|----------------|----------------|-----------------|
| 2" | 50.8 | 100.0 |
| 1 1/2" | 38.1 | 100.0 |
| 1" | 25.4 | 100.0 |
| 3/4" | 19.1 | 100.0 |
| 1/2" | 12.7 | 100.0 |
| 3/8" | 9.53 | 100.0 |
| #4 | 4.75 | 100.0 |
| #8 | 2.36 | 100.0 |
| #16 | 1.18 | 100.0 |
| #30 | 0.60 | 97.4 |
| #50 | 0.30 | 62.3 |
| #100 | 0.15 | 26.4 |
| #200 | 0.075 | 5.8 |





Sladden Engineering

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Gradation

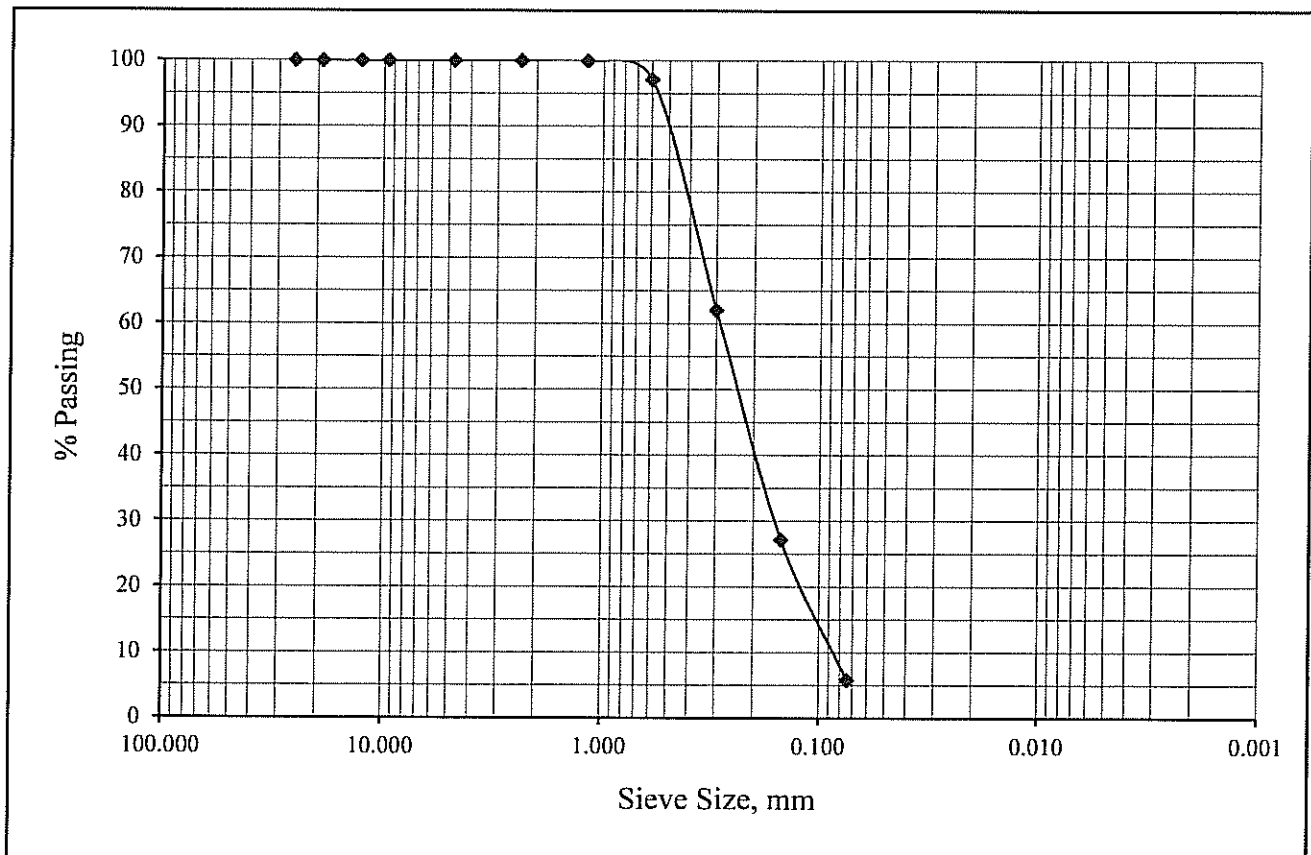
ASTM C117 & C136

Project Number: 544-19101
Project Name: Rancho Mirage 31
Lab ID Number: LN6-19182
Sample ID: BH-1 R-2 @ 5'

May 3, 2019

Soil Classification: SP-SM

| Sieve Size, in | Sieve Size, mm | Percent Passing |
|----------------|----------------|-----------------|
| 1" | 25.4 | 100.0 |
| 3/4" | 19.1 | 100.0 |
| 1/2" | 12.7 | 100.0 |
| 3/8" | 9.53 | 100.0 |
| #4 | 4.75 | 100.0 |
| #8 | 2.36 | 100.0 |
| #16 | 1.18 | 99.9 |
| #30 | 0.60 | 97.1 |
| #50 | 0.30 | 62.1 |
| #100 | 0.15 | 27.2 |
| #200 | 0.074 | 5.8 |





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Gradation

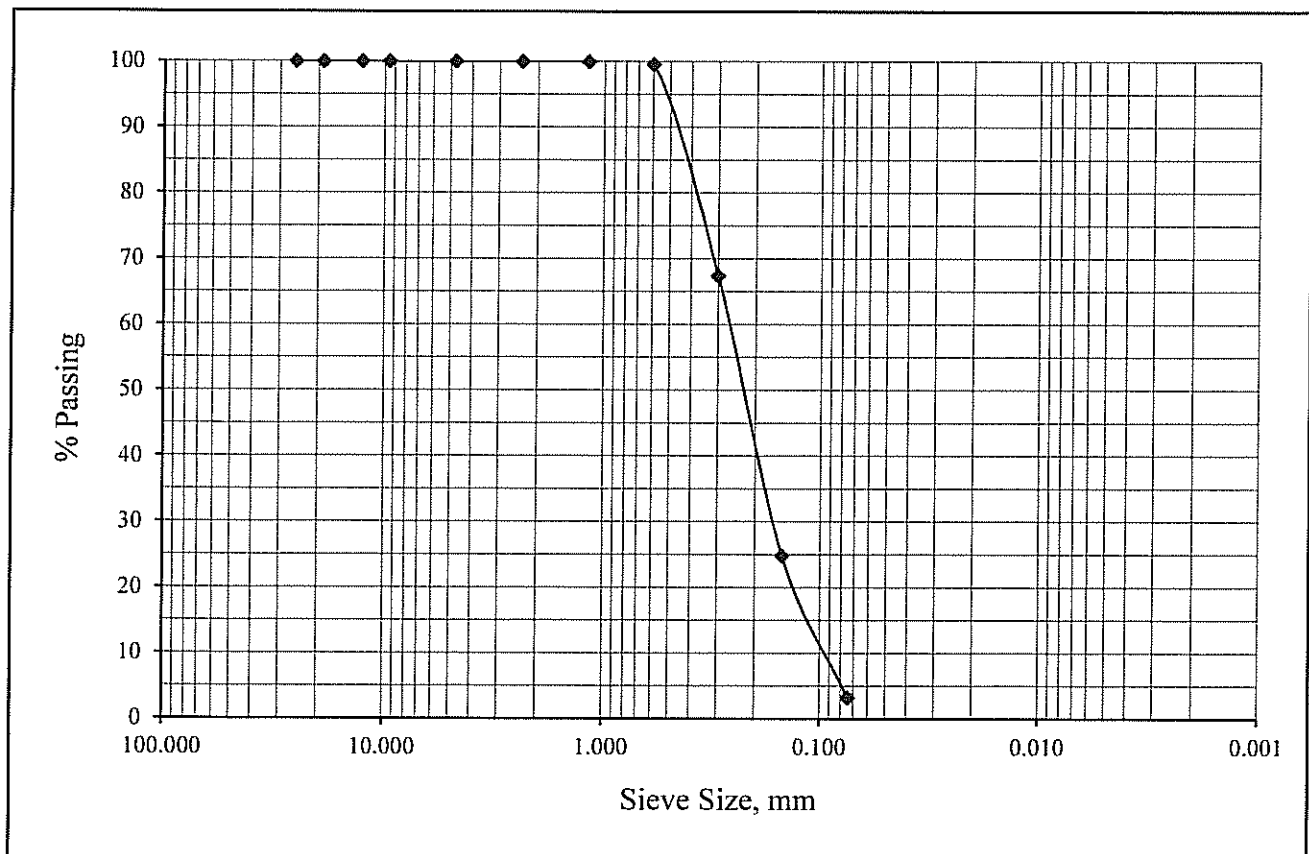
ASTM C117 & C136

Project Number: 544-19101
Project Name: Rancho Mirage 31
Lab ID Number: LN6-19182
Sample ID: BH-2 R-2 @ 5'

May 3, 2019

Soil Classification: SP

| Sieve Size, in | Sieve Size, mm | Percent Passing |
|----------------|----------------|-----------------|
| 1" | 25.4 | 100.0 |
| 3/4" | 19.1 | 100.0 |
| 1/2" | 12.7 | 100.0 |
| 3/8" | 9.53 | 100.0 |
| #4 | 4.75 | 100.0 |
| #8 | 2.36 | 100.0 |
| #16 | 1.18 | 99.9 |
| #30 | 0.60 | 99.5 |
| #50 | 0.30 | 67.4 |
| #100 | 0.15 | 24.9 |
| #200 | 0.074 | 3.2 |





Sladden Engineering

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Gradation

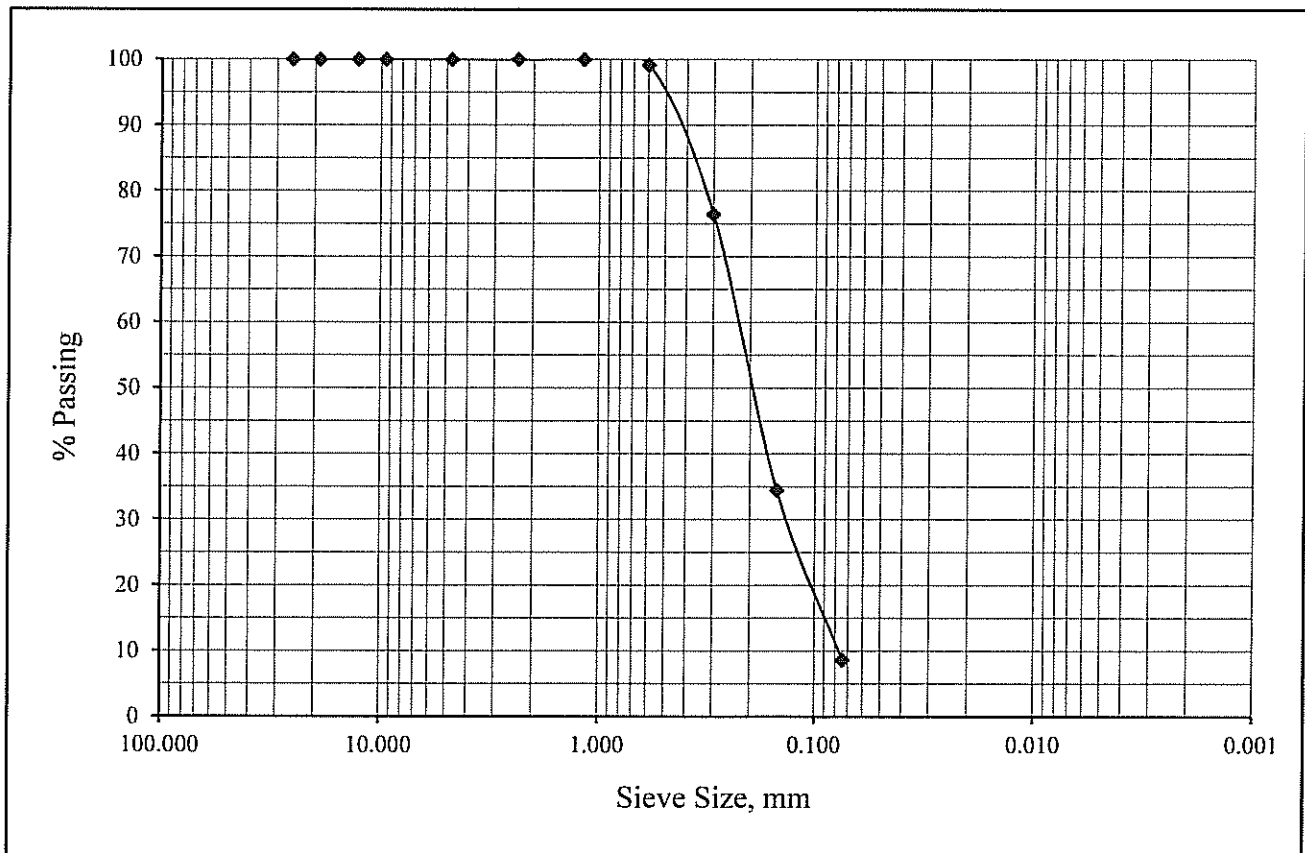
ASTM C117 & C136

Project Number: 544-19101
Project Name: Rancho Mirage 31
Lab ID Number: LN6-19182
Sample ID: BH-4 S-4 @ 20'

May 3, 2019

Soil Classification: SP-SM

| Sieve Size, in | Sieve Size, mm | Percent Passing |
|----------------|----------------|-----------------|
| 1" | 25.4 | 100.0 |
| 3/4" | 19.1 | 100.0 |
| 1/2" | 12.7 | 100.0 |
| 3/8" | 9.53 | 100.0 |
| #4 | 4.75 | 100.0 |
| #8 | 2.36 | 100.0 |
| #16 | 1.18 | 100.0 |
| #30 | 0.60 | 99.1 |
| #50 | 0.30 | 76.4 |
| #100 | 0.15 | 34.5 |
| #200 | 0.074 | 8.6 |





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Gradation

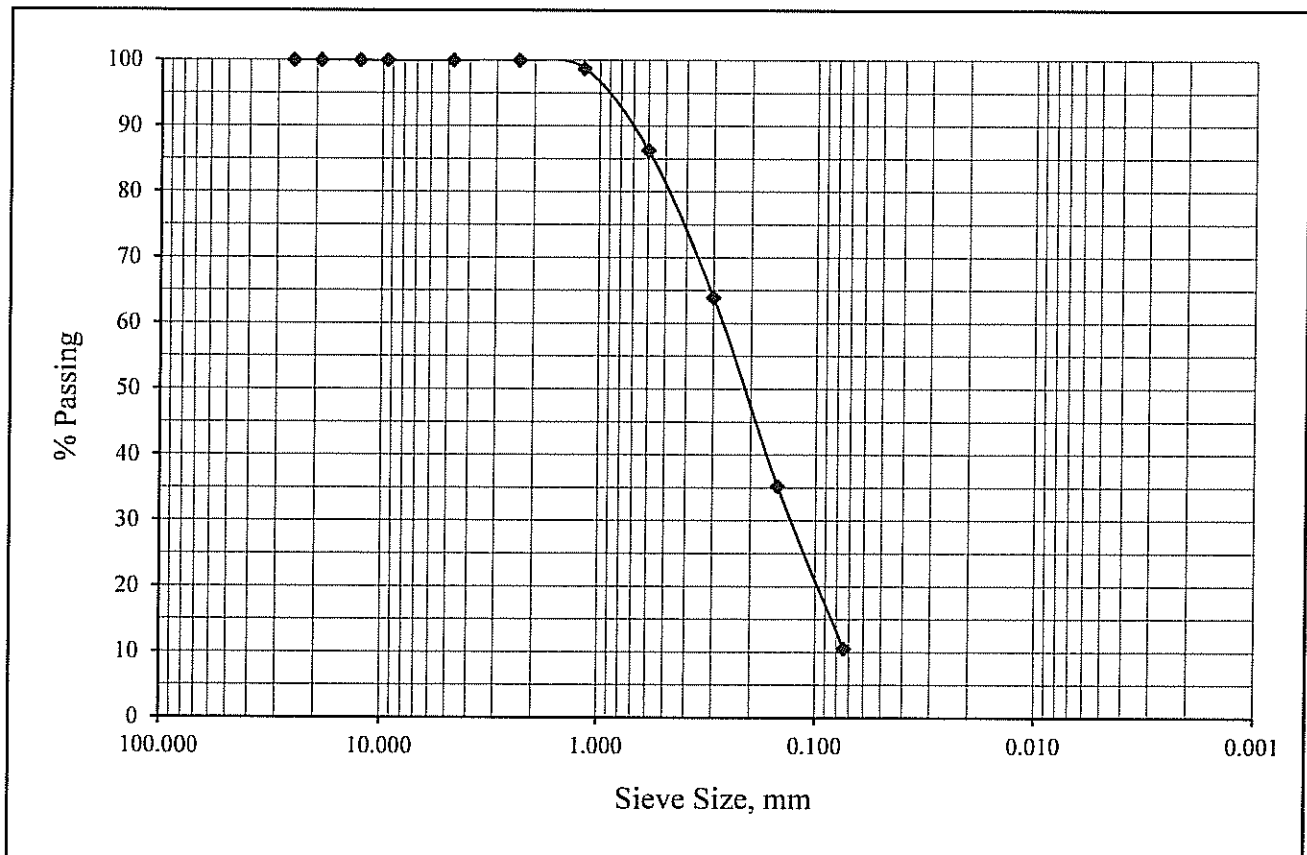
ASTM C117 & C136

Project Number: 544-19101
Project Name: Rancho Mirage 31
Lab ID Number: LN6-19182
Sample ID: BH-6 S-7 @ 30'

May 3, 2019

Soil Classification: SM

| Sieve Size, in | Sieve Size, mm | Percent Passing |
|----------------|----------------|-----------------|
| 1" | 25.4 | 100.0 |
| 3/4" | 19.1 | 100.0 |
| 1/2" | 12.7 | 100.0 |
| 3/8" | 9.53 | 100.0 |
| #4 | 4.75 | 100.0 |
| #8 | 2.36 | 100.0 |
| #16 | 1.18 | 98.7 |
| #30 | 0.60 | 86.3 |
| #50 | 0.30 | 63.9 |
| #100 | 0.15 | 35.3 |
| #200 | 0.074 | 10.5 |





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Gradation

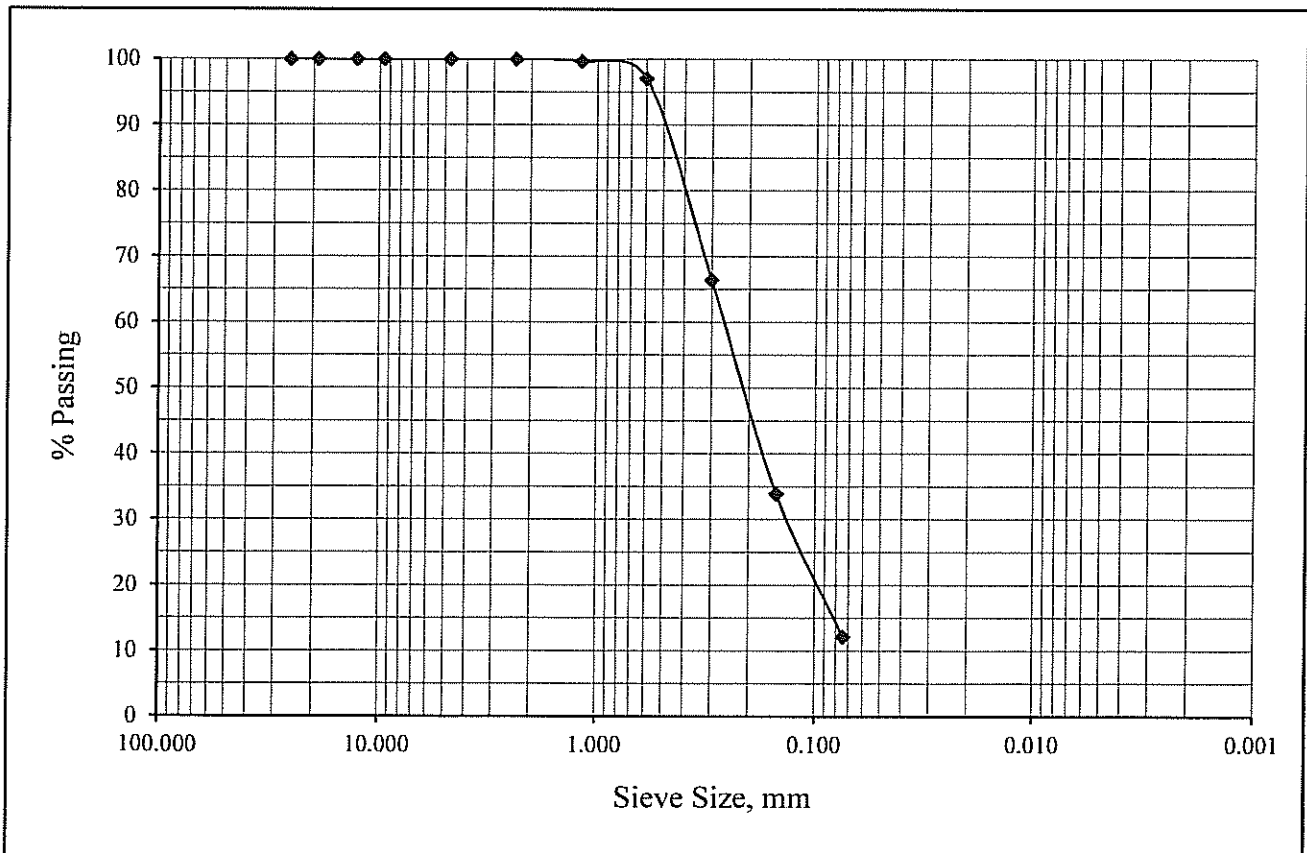
ASTM C117 & C136

Project Number: 544-19101
Project Name: Rancho Mirage 31
Lab ID Number: LN6-19182
Sample ID: BH-8 S-10 @ 50'

May 3, 2019

Soil Classification: SM

| Sieve Size, in | Sieve Size, mm | Percent Passing |
|----------------|----------------|-----------------|
| 1" | 25.4 | 100.0 |
| 3/4" | 19.1 | 100.0 |
| 1/2" | 12.7 | 100.0 |
| 3/8" | 9.53 | 100.0 |
| #4 | 4.75 | 100.0 |
| #8 | 2.36 | 100.0 |
| #16 | 1.18 | 99.7 |
| #30 | 0.60 | 97.0 |
| #50 | 0.30 | 66.4 |
| #100 | 0.15 | 33.9 |
| #200 | 0.074 | 12.1 |





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Gradation

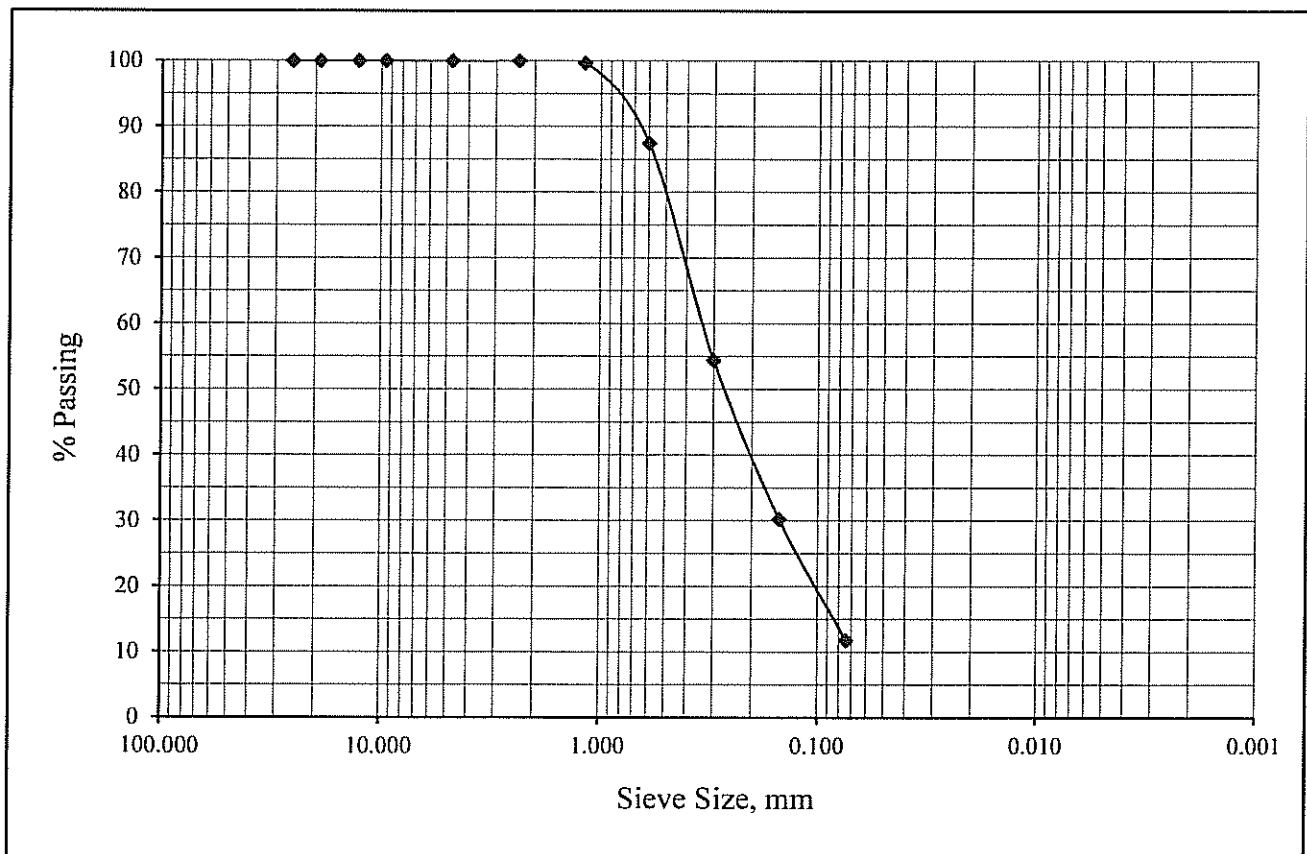
ASTM C117 & C136

Project Number: 544-19101
Project Name: Rancho Mirage 31
Lab ID Number: LN6-19182
Sample ID: BH-9 S-4 @ 20'

May 3, 2019

Soil Classification: SP-SM

| Sieve Size, in | Sieve Size, mm | Percent Passing |
|----------------|----------------|-----------------|
| 1" | 25.4 | 100.0 |
| 3/4" | 19.1 | 100.0 |
| 1/2" | 12.7 | 100.0 |
| 3/8" | 9.53 | 100.0 |
| #4 | 4.75 | 100.0 |
| #8 | 2.36 | 100.0 |
| #16 | 1.18 | 99.6 |
| #30 | 0.60 | 87.5 |
| #50 | 0.30 | 54.4 |
| #100 | 0.15 | 30.2 |
| #200 | 0.074 | 11.8 |





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Gradation

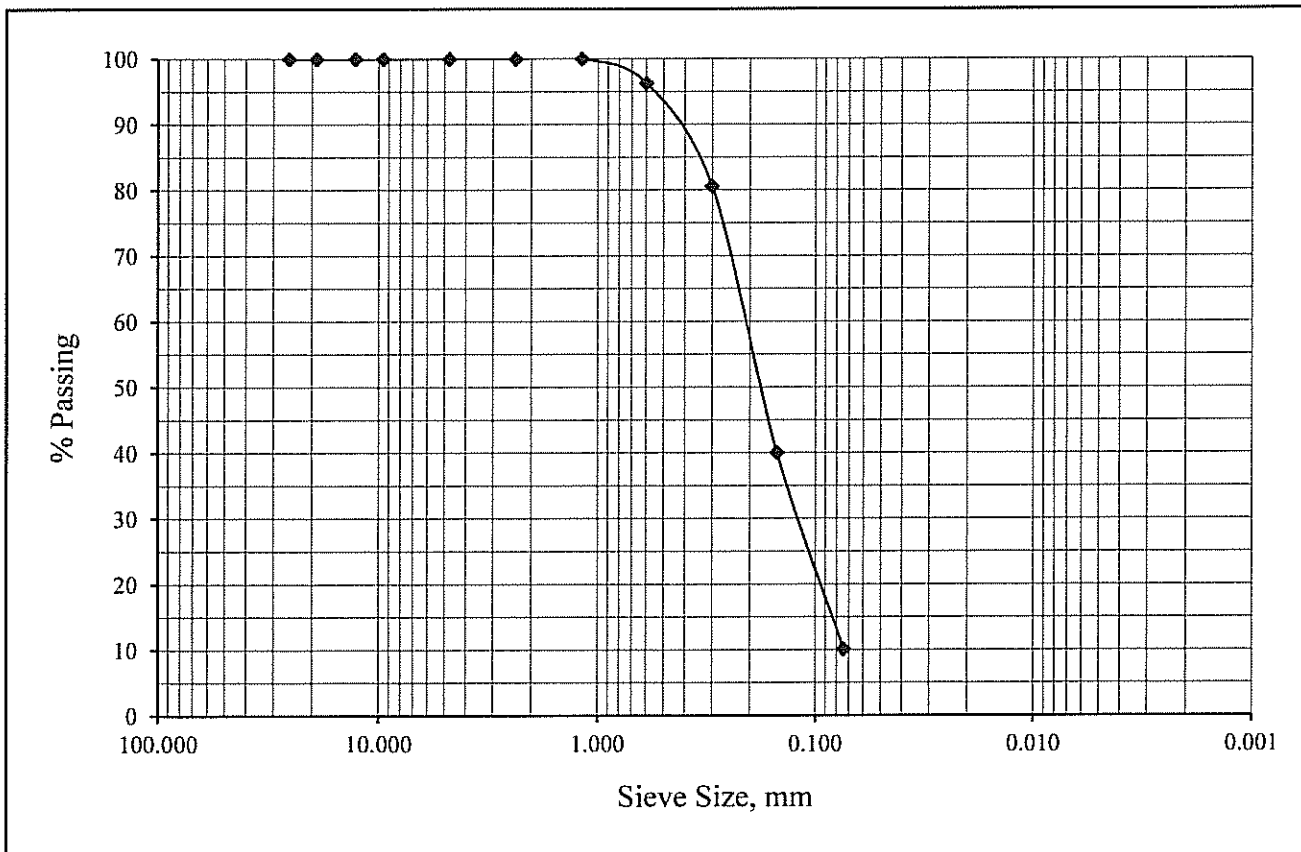
ASTM C117 & C136

Project Number: 544-19101
Project Name: Rancho Mirage 31
Lab ID Number: LN6-19182
Sample ID: BH-13 S-4 @ 20'

May 3, 2019

Soil Classification: SP-SM

| Sieve Size, in | Sieve Size, mm | Percent Passing |
|----------------|----------------|-----------------|
| 1" | 25.4 | 100.0 |
| 3/4" | 19.1 | 100.0 |
| 1/2" | 12.7 | 100.0 |
| 3/8" | 9.53 | 100.0 |
| #4 | 4.75 | 100.0 |
| #8 | 2.36 | 100.0 |
| #16 | 1.18 | 100.0 |
| #30 | 0.60 | 96.3 |
| #50 | 0.30 | 80.6 |
| #100 | 0.15 | 40.0 |
| #200 | 0.074 | 10.1 |





Sladden Engineering

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Gradation

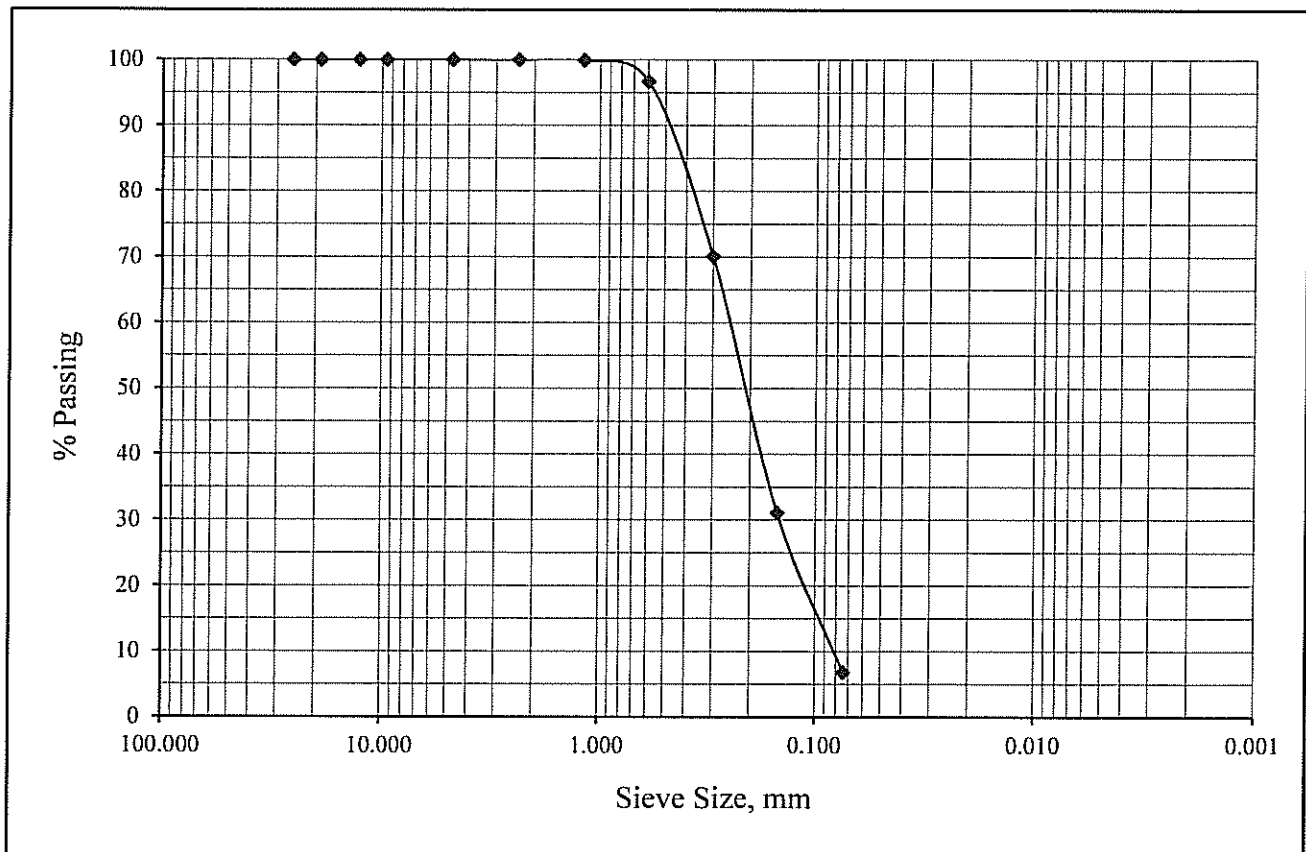
ASTM C117 & C136

Project Number: 544-19101
Project Name: Rancho Mirage 31
Lab ID Number: LN6-19182
Sample ID: BH-15 S-2 @ 10'

May 3, 2019

Soil Classification: SP-SM

| Sieve Size, in | Sieve Size, mm | Percent Passing |
|----------------|----------------|-----------------|
| 1" | 25.4 | 100.0 |
| 3/4" | 19.1 | 100.0 |
| 1/2" | 12.7 | 100.0 |
| 3/8" | 9.53 | 100.0 |
| #4 | 4.75 | 100.0 |
| #8 | 2.36 | 100.0 |
| #16 | 1.18 | 99.9 |
| #30 | 0.60 | 96.7 |
| #50 | 0.30 | 70.1 |
| #100 | 0.15 | 31.1 |
| #200 | 0.074 | 6.8 |





Sladden Engineering

450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

One Dimensional Consolidation

ASTM D2435 & D5333

Job Number: 544-19101
Job Name: Rancho Mirage 31

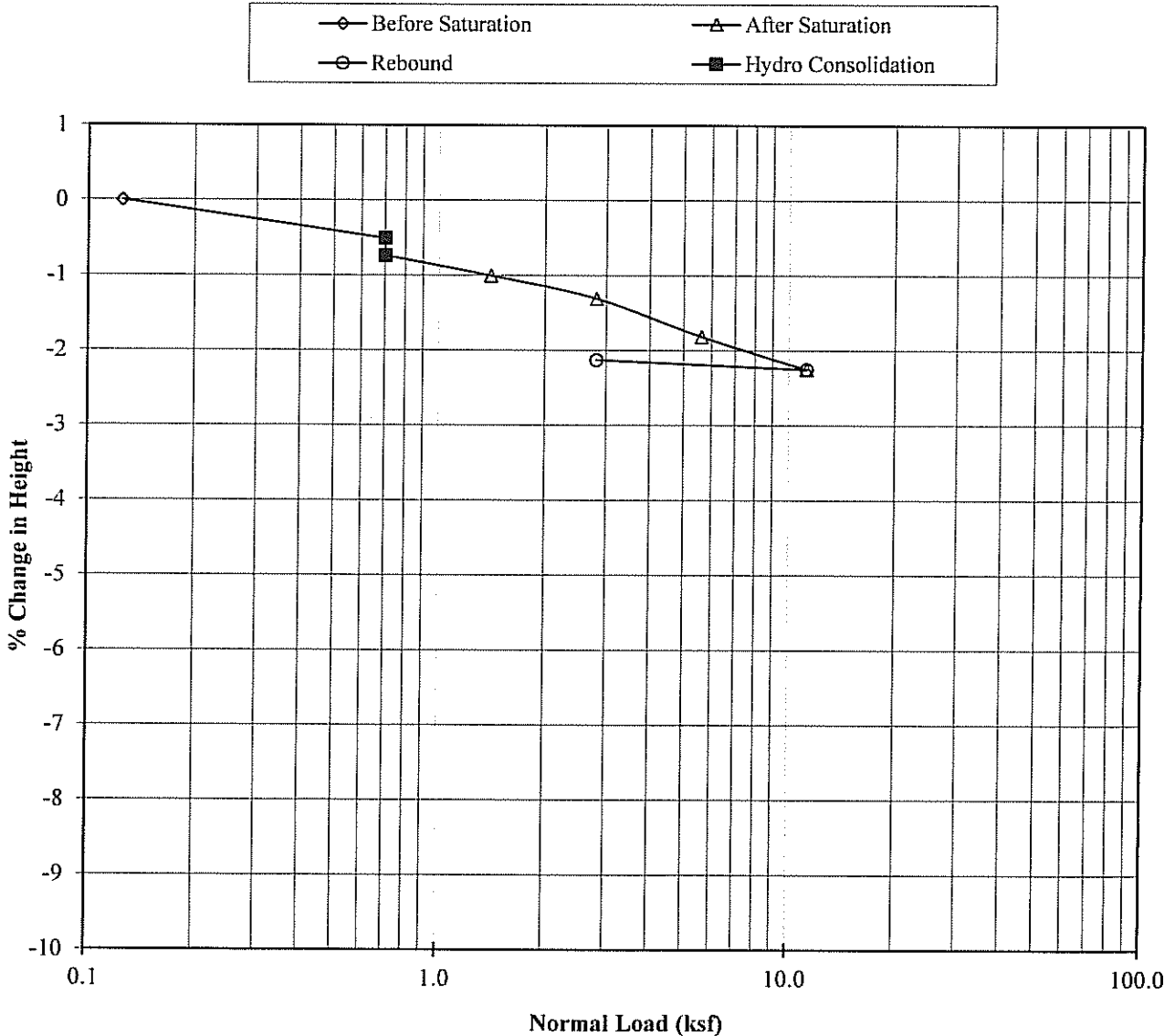
May 3, 2019

Lab ID Number: LN6-19182
Sample ID: BH-1 R-2 @ 5'
Soil Description: Gray/Brown Sand w/Silt (SP-SM)

Initial Dry Density, pcf: 105.2
Initial Moisture, %: 2.2
Initial Void Ratio: 0.584
Specific Gravity: 2.67

Hydrocollapse: 0.2% @ 0.702 ksf

% Change in Height vs Normal Presssure Diagram





Sladden Engineering

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One Dimensional Consolidation

ASTM D2435 & D5333

Job Number: 544-19101
Job Name: Rancho Mirage 31

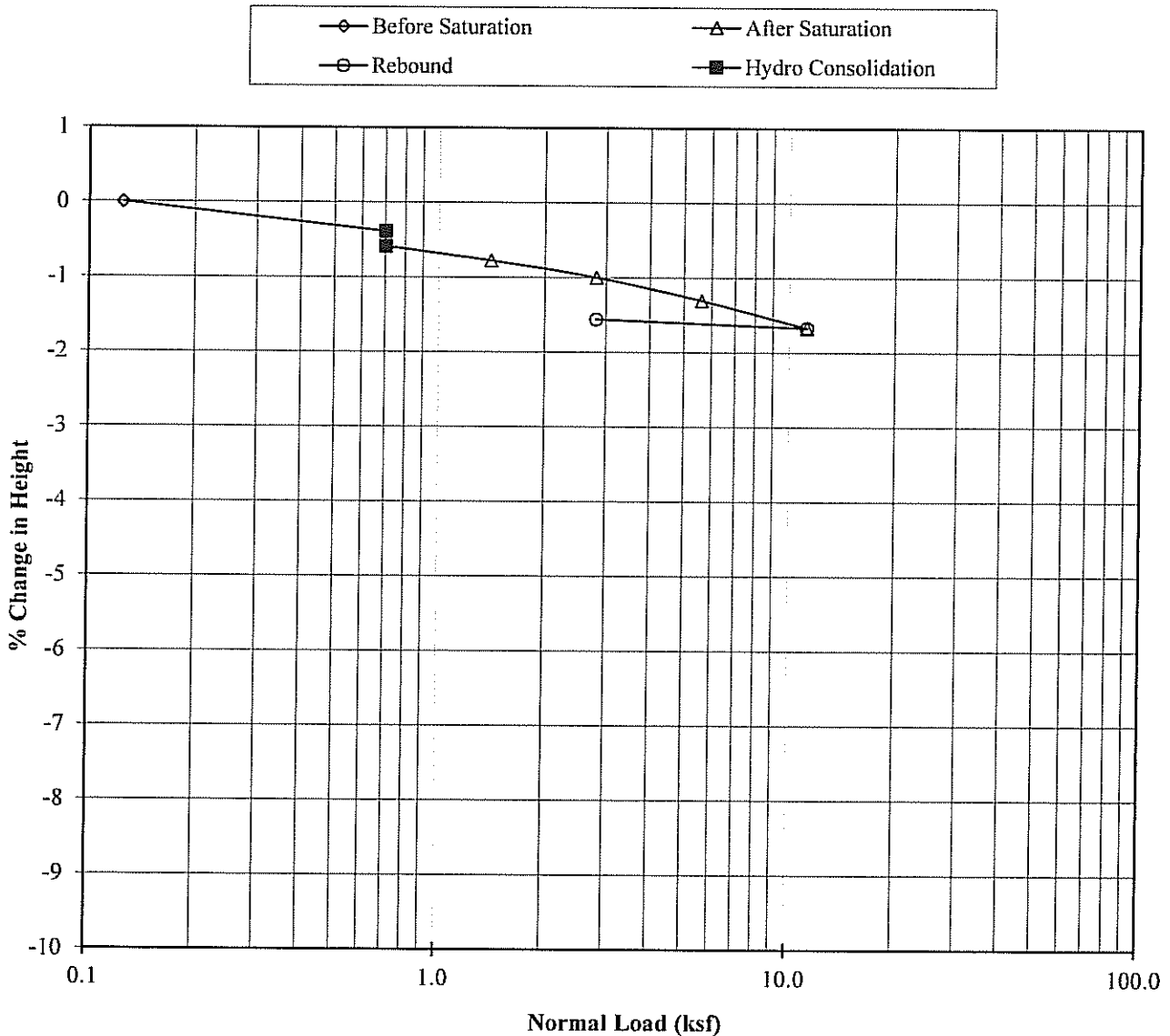
May 3, 2019

Lab ID Number: LN6-19182
Sample ID: BH-2 R-2 @ 5'
Soil Description: Gray/Brown Sand (SP)

Initial Dry Density, pcf: 97.7
Initial Moisture, %: 2.2
Initial Void Ratio: 0.706
Specific Gravity: 2.67

Hydrocollapse: 0.2% @ 0.702 ksf

% Change in Height vs Normal Pressure Diagram





Sladden Engineering

6782 Stanton Ave., Suite C, Buena Park, CA 90621 (714) 523-0952 Fax (714) 523-1369
45090 Golf Center Pkwy, Suite F, Indio, CA 92201 (760) 863-0713 Fax (760) 863-0847
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

Date: May 3, 2019

Account No.: 544-19099

Customer: Mary S. Alexander.

Location: Rancho Mirage 31, Rancho Mirage

Analytical Report

Corrosion Series

| | pH per CA 643 | Soluble Sulfates per CA 417 ppm | Soluble Chloride per CA 422 ppm | Min. Resistivity per CA 643 ohm-cm |
|---------------|------------------|---------------------------------------|---------------------------------------|--|
| Bulk-1 @ 0-5' | 9.2 | 80 | 60 | 18,000 |
| Bulk-2 @ 0-5' | 9.0 | 180 | 60 | 18,000 |
| Bulk-3 @ 0-5' | 9.1 | 180 | 60 | 18,000 |
| Bulk-4 @ 0-5' | 9.1 | 140 | 60 | 17,000 |

APPENDIX C

**SEISMIC DESIGN MAP AND REPORT
DEAGGREGATION OUTPUT**



OSHPD

544-19101

Latitude, Longitude: 33.779958, -116.396978



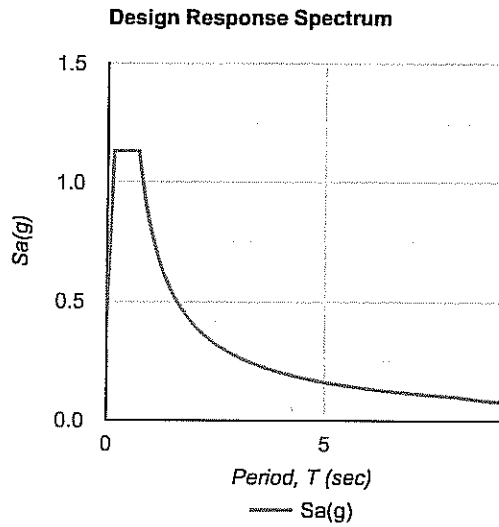
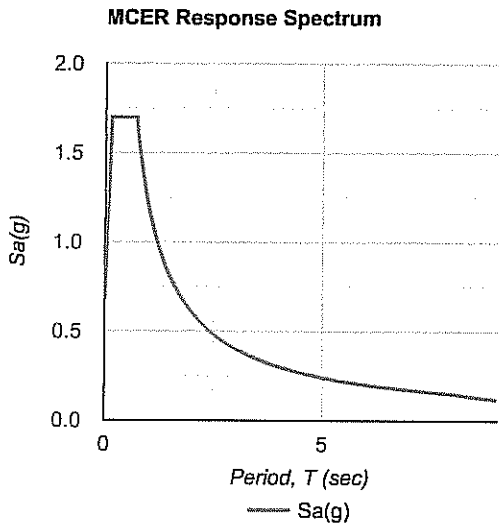
Google

Map data ©2019 Google

| | |
|---------------------------------------|-----------------------|
| Date | 5/22/2019, 8:58:54 AM |
| Design Code Reference Document | ASCE7-10 |
| Risk Category | II |
| Site Class | D - Stiff Soil |

| Type | Value | Description |
|----------|-------|--|
| S_S | 1.698 | MCE_R ground motion. (for 0.2 second period) |
| S_1 | 0.806 | MCE_R ground motion. (for 1.0s period) |
| S_{MS} | 1.698 | Site-modified spectral acceleration value |
| S_{M1} | 1.209 | Site-modified spectral acceleration value |
| S_{DS} | 1.132 | Numeric seismic design value at 0.2 second SA |
| S_{D1} | 0.806 | Numeric seismic design value at 1.0 second SA |

| Type | Value | Description |
|------------------|-------|---|
| SDC | E | Seismic design category |
| F_a | 1 | Site amplification factor at 0.2 second |
| F_v | 1.5 | Site amplification factor at 1.0 second |
| PGA | 0.68 | MCE_G peak ground acceleration |
| F_{PGA} | 1 | Site amplification factor at PGA |
| PGA_M | 0.68 | Site modified peak ground acceleration |
| T_L | 8 | Long-period transition period in seconds |
| S_sRT | 2.337 | Probabilistic risk-targeted ground motion. (0.2 second) |
| S_sUH | 2.296 | Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration |
| S_sD | 1.698 | Factored deterministic acceleration value. (0.2 second) |
| S_1RT | 0.912 | Probabilistic risk-targeted ground motion. (1.0 second) |
| S_1UH | 0.936 | Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration. |
| S_1D | 0.806 | Factored deterministic acceleration value. (1.0 second) |
| PGA _d | 0.68 | Factored deterministic acceleration value. (Peak Ground Acceleration) |
| C_{RS} | 1.018 | Mapped value of the risk coefficient at short periods |
| C_{R1} | 0.974 | Mapped value of the risk coefficient at a period of 1 s |



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U.S. Geological Survey - Earthquake Hazards Program

Unified Hazard Tool

Please do not use this tool to obtain ground motion parameter values for the design code reference documents covered by the [U.S. Seismic Design Maps web tools](#) (e.g., the International Building Code and the ASCE 7 or 41 Standard). The values returned by the two applications are not identical.

^ Input

Edition

Dynamic: Conterminous U.S. 2014 (v4.1.)

Spectral Period

Peak ground acceleration

Latitude

Decimal degrees

33.779958

Time Horizon

Return period in years

475

Longitude

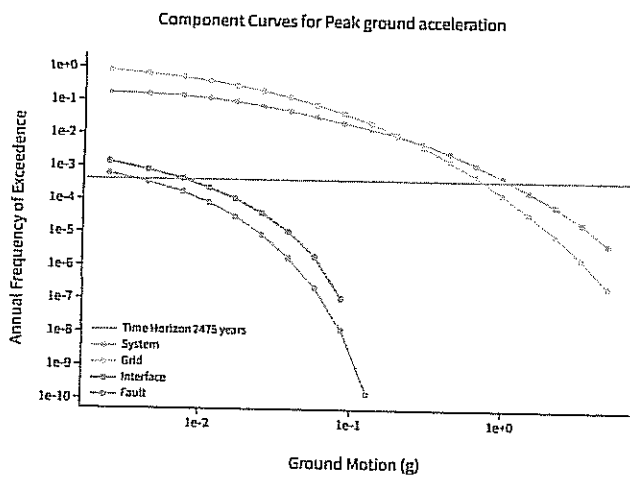
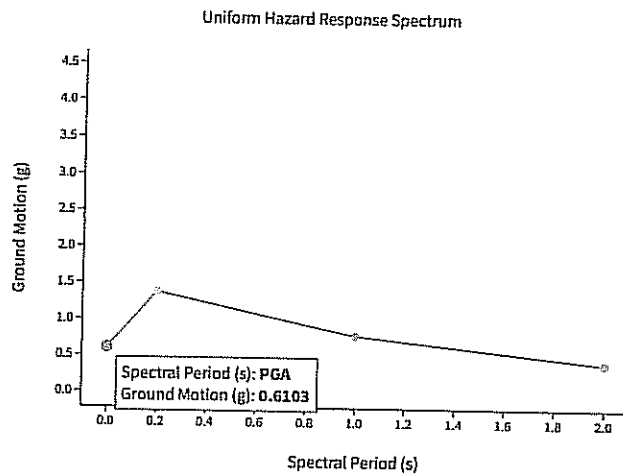
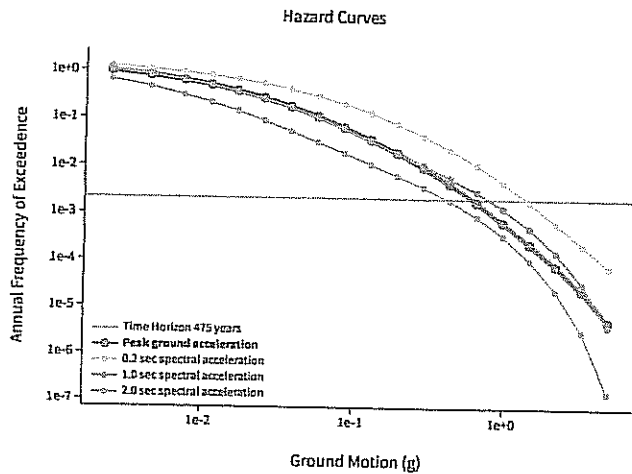
Decimal degrees, negative values for western longitudes

-116.396978

Site Class

259 m/s (Site class D)

^ Hazard Curve

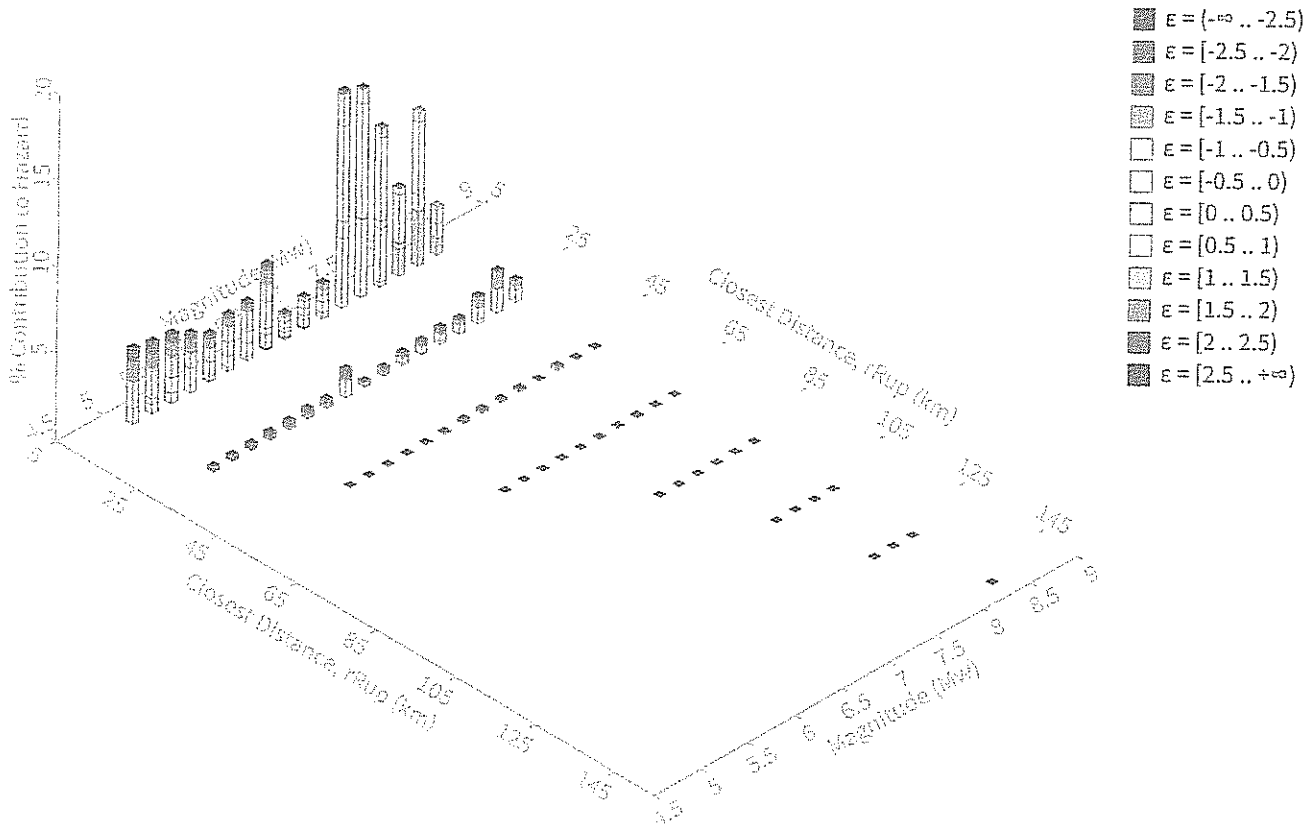


[View Raw Data](#)

Deaggregation

Component

Total



Summary statistics for, Deaggregation: Total

Deaggregation targets

Return period: 475 yrs
Exceedance rate: 0.0021052632 yr⁻¹
PGA ground motion: 0.61025981 g

Recovered targets

Return period: 517.36778 yrs
Exceedance rate: 0.001932861 yr⁻¹

Totals

Binned: 100 %
Residual: 0 %
Trace: 0.2 %

Mean (for all sources)

r: 12.49 km
m: 7.01
ε₀: 0.69 σ

Mode (largest r-m bin)

r: 9.22 km
m: 7.34
ε₀: 0.37 σ
Contribution: 12.45 %

Mode (largest ε₀ bin)

r: 8.3 km
m: 7.49
ε₀: 0.79 σ
Contribution: 6.59 %

Discretization

r: min = 0.0, max = 1000.0, Δ = 20.0 km
m: min = 4.4, max = 9.4, Δ = 0.2
ε: min = -3.0, max = 3.0, Δ = 0.5 σ

Epsilon keys

ε₀: [-∞ .. -2.5)
ε₁: [-2.5 .. -2.0)
ε₂: [-2.0 .. -1.5)
ε₃: [-1.5 .. -1.0)
ε₄: [-1.0 .. -0.5)
ε₅: [-0.5 .. 0.0)
ε₆: [0.0 .. 0.5)
ε₇: [0.5 .. 1.0)
ε₈: [1.0 .. 1.5)
ε₉: [1.5 .. 2.0)
ε₁₀: [2.0 .. 2.5)
ε₁₁: [2.5 .. +∞]

Deaggregation Contributors

| Source Set | Source | Type | r | m | ϵ_0 | lon | lat | az | % |
|----------------------|---|--------|-------|------|--------------|-----------|----------|--------|-------|
| UC33brAvg_FM31 | | System | | | | | | | 34.61 |
| | San Andreas (San Gorgonio Pass-Garnet Hill) [1] | | 8.24 | 7.58 | 0.21 | 116.358°W | 33.846°N | 26.36 | 22.62 |
| | San Jacinto (Anza) rev [4] | | 32.33 | 7.90 | 1.10 | 116.605°W | 33.546°N | 216.59 | 3.22 |
| | San Andreas (North Branch Mill Creek) [10] | | 9.85 | 7.88 | 0.14 | 116.335°W | 33.848°N | 36.89 | 2.58 |
| | San Andreas (Coachella) rev [0] | | 13.96 | 7.18 | 0.76 | 116.246°W | 33.788°N | 86.17 | 1.32 |
| UC33brAvg_FM32 | | System | | | | | | | 34.61 |
| | San Andreas (San Gorgonio Pass-Garnet Hill) [1] | | 8.24 | 7.58 | 0.21 | 116.358°W | 33.846°N | 26.36 | 22.53 |
| | San Jacinto (Anza) rev [4] | | 32.33 | 7.90 | 1.10 | 116.605°W | 33.546°N | 216.59 | 3.21 |
| | San Andreas (North Branch Mill Creek) [10] | | 9.85 | 7.84 | 0.15 | 116.335°W | 33.848°N | 36.89 | 2.73 |
| | San Andreas (Coachella) rev [0] | | 13.96 | 7.14 | 0.78 | 116.246°W | 33.788°N | 86.17 | 1.21 |
| UC33brAvg_FM31 (opt) | | Grid | | | | | | | 15.39 |
| | PointSourceFinite: -116.397, 33.802 | | 5.64 | 5.62 | 0.79 | 116.397°W | 33.802°N | 0.00 | 2.52 |
| | PointSourceFinite: -116.397, 33.802 | | 5.64 | 5.62 | 0.79 | 116.397°W | 33.802°N | 0.00 | 2.52 |
| | PointSourceFinite: -116.397, 33.865 | | 10.11 | 5.76 | 1.23 | 116.397°W | 33.865°N | 0.00 | 1.51 |
| | PointSourceFinite: -116.397, 33.865 | | 10.11 | 5.76 | 1.23 | 116.397°W | 33.865°N | 0.00 | 1.50 |
| UC33brAvg_FM32 (opt) | | Grid | | | | | | | 15.38 |
| | PointSourceFinite: -116.397, 33.802 | | 5.64 | 5.62 | 0.79 | 116.397°W | 33.802°N | 0.00 | 2.52 |
| | PointSourceFinite: -116.397, 33.802 | | 5.64 | 5.62 | 0.79 | 116.397°W | 33.802°N | 0.00 | 2.52 |
| | PointSourceFinite: -116.397, 33.865 | | 10.11 | 5.76 | 1.23 | 116.397°W | 33.865°N | 0.00 | 1.51 |
| | PointSourceFinite: -116.397, 33.865 | | 10.11 | 5.76 | 1.23 | 116.397°W | 33.865°N | 0.00 | 1.50 |

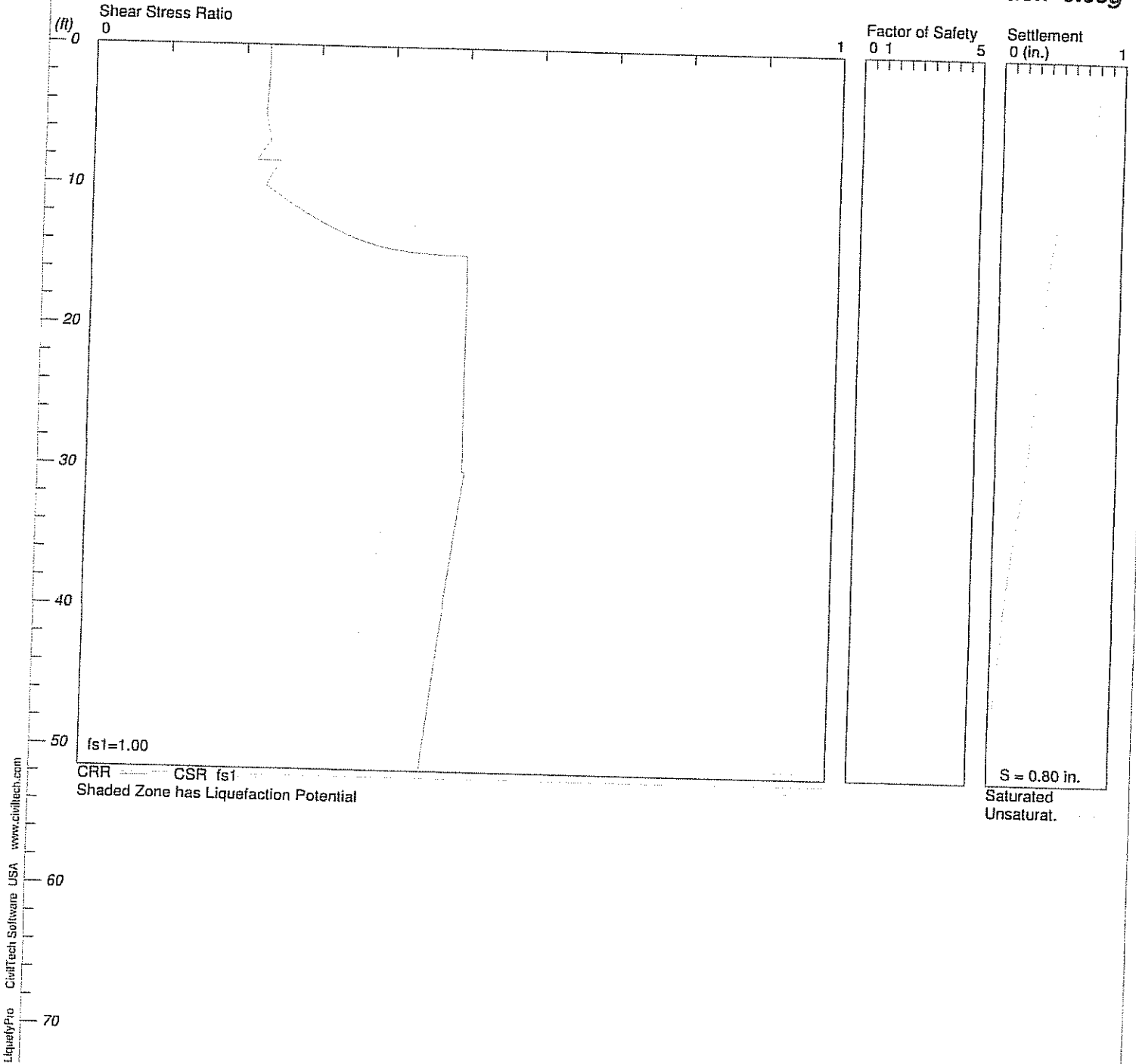
APPENDIX D
DRY SAND SETTLEMENT

SEISMIC SETTLEMENT ANALYSIS

544-19101

Hole No.=BH-1 Water Depth=52.0 ft Surface Elev.=305 ft

Magnitude=7.49
Acceleration=0.68g



LiquefyPro CivilTech Software USA www.civiltch.com



Liquefy.sum

*

LIQUEFACTION ANALYSIS SUMMARY
Copyright by CivilTech Software
www.civiltech.com

*

Font: Courier New, Regular, Size 8 is recommended for this report.
Licensed to , 5/14/2019 11:16:05 AM

Input File Name: F:\Liquefy5\544-19101 Rancho Mirage 31 (BH-1).liq
Title: 544-19101
Subtitle: Rancho Mirage 31

Surface Elev.=305 ft
Hole No.=BH-1
Depth of Hole= 51.50 ft
Water Table during Earthquake= 52.00 ft
Water Table during In-Situ Testing= 52.00 ft
Max. Acceleration= 0.68 g
Earthquake Magnitude= 7.49

Input Data:

Surface Elev.=305 ft
Hole No.=BH-1
Depth of Hole=51.50 ft
Water Table during Earthquake= 52.00 ft
Water Table during In-Situ Testing= 52.00 ft
Max. Acceleration=0.68 g
Earthquake Magnitude=7.49
No-Liquefiable Soils: Based on Analysis

1. SPT or BPT Calculation.
 2. Settlement Analysis Method: Tokimatsu, M-correction
 3. Fines Correction for Liquefaction: Modify Stark/Olson
 4. Fine Correction for Settlement: During Liquefaction*
 5. Settlement Calculation in: All zones*
 6. Hammer Energy Ratio, Ce = 1.25
 7. Borehole Diameter, Cb= 1
 8. Sampling Method, Cs= 1
 9. User request factor of safety (apply to CSR) , User= 1.0
Plot one CSR curve (fs1=User)
 10. Use Curve Smoothing: Yes*
- * Recommended Options

In-Situ Test Data:

| Depth ft | SPT | gamma pcf | Fines % |
|-------------|-------|--------------|------------|
| 0.00 | 13.00 | 107.00 | 6.90 |
| 2.00 | 13.00 | 107.00 | 6.90 |
| 5.00 | 13.00 | 108.20 | 5.80 |
| 10.00 | 14.00 | 108.20 | 5.80 |

| Liquefy.sum | | | |
|-------------|-------|--------|------|
| 15.00 | 25.00 | 108.20 | 5.80 |
| 20.00 | 39.00 | 108.20 | 5.80 |
| 25.00 | 35.00 | 108.20 | 5.80 |
| 30.00 | 34.00 | 108.20 | 5.80 |
| 35.00 | 37.00 | 108.20 | 5.80 |
| 40.00 | 47.00 | 108.20 | 5.80 |
| 45.00 | 58.00 | 108.20 | 5.80 |
| 50.00 | 78.00 | 108.20 | 5.80 |

Output Results:

Settlement of Saturated Sands=0.00 in.
 Settlement of Unsaturated Sands=0.80 in.
 Total Settlement of Saturated and Unsaturated Sands=0.80 in.
 Differential Settlement=0.401 to 0.529 in.

| Depth ft | CRRm | CSRfs | F.S. | S_sat. in. | S_dry in. | S_all in. |
|-------------|------|-------|------|---------------|--------------|--------------|
| 0.00 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.05 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.10 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.15 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.20 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.25 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.30 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.35 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.40 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.45 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.50 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.55 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.60 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.65 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.70 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.75 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.80 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.85 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.90 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 0.95 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.00 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.05 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.10 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.15 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.20 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.25 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.30 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.35 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.40 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.45 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.50 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.55 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.60 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.65 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.70 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.75 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 1.80 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.85 | 0.23 | 0.44 | 5.00 | 0.00 | 0.80 | 0.80 |
| 1.90 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 1.95 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.00 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.05 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.10 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.15 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.20 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.25 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.30 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.35 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.40 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.45 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.50 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.55 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.60 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.65 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.70 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.75 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.80 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.85 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.90 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 2.95 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 3.00 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 3.05 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 3.10 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 3.15 | 0.23 | 0.44 | 5.00 | 0.00 | 0.79 | 0.79 |
| 3.20 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.25 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.30 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.35 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.40 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.45 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.50 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.55 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.60 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.65 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.70 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.75 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.80 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.85 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.90 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 3.95 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 4.00 | 0.23 | 0.44 | 5.00 | 0.00 | 0.78 | 0.78 |
| 4.05 | 0.23 | 0.44 | 5.00 | 0.00 | 0.77 | 0.77 |
| 4.10 | 0.23 | 0.44 | 5.00 | 0.00 | 0.77 | 0.77 |
| 4.15 | 0.23 | 0.44 | 5.00 | 0.00 | 0.77 | 0.77 |
| 4.20 | 0.23 | 0.44 | 5.00 | 0.00 | 0.77 | 0.77 |
| 4.25 | 0.23 | 0.44 | 5.00 | 0.00 | 0.77 | 0.77 |
| 4.30 | 0.23 | 0.44 | 5.00 | 0.00 | 0.77 | 0.77 |
| 4.35 | 0.23 | 0.44 | 5.00 | 0.00 | 0.77 | 0.77 |
| 4.40 | 0.23 | 0.44 | 5.00 | 0.00 | 0.77 | 0.77 |
| 4.45 | 0.23 | 0.44 | 5.00 | 0.00 | 0.77 | 0.77 |
| 4.50 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 4.55 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 4.60 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 4.65 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 4.70 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 4.75 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 4.80 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 4.85 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 4.90 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 4.95 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 5.00 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 5.05 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 5.10 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 5.15 | 0.23 | 0.44 | 5.00 | 0.00 | 0.76 | 0.76 |
| 5.20 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.25 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.30 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.35 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.40 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.45 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.50 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.55 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.60 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.65 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.70 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.75 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.80 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.85 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.90 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 5.95 | 0.23 | 0.44 | 5.00 | 0.00 | 0.75 | 0.75 |
| 6.00 | 0.23 | 0.44 | 5.00 | 0.00 | 0.74 | 0.74 |
| 6.05 | 0.23 | 0.44 | 5.00 | 0.00 | 0.74 | 0.74 |
| 6.10 | 0.23 | 0.44 | 5.00 | 0.00 | 0.74 | 0.74 |
| 6.15 | 0.23 | 0.44 | 5.00 | 0.00 | 0.74 | 0.74 |
| 6.20 | 0.23 | 0.44 | 5.00 | 0.00 | 0.74 | 0.74 |
| 6.25 | 0.23 | 0.44 | 5.00 | 0.00 | 0.74 | 0.74 |
| 6.30 | 0.23 | 0.44 | 5.00 | 0.00 | 0.74 | 0.74 |
| 6.35 | 0.23 | 0.44 | 5.00 | 0.00 | 0.74 | 0.74 |
| 6.40 | 0.23 | 0.44 | 5.00 | 0.00 | 0.74 | 0.74 |
| 6.45 | 0.23 | 0.44 | 5.00 | 0.00 | 0.74 | 0.74 |
| 6.50 | 0.23 | 0.44 | 5.00 | 0.00 | 0.74 | 0.74 |
| 6.55 | 0.23 | 0.44 | 5.00 | 0.00 | 0.74 | 0.74 |
| 6.60 | 0.23 | 0.44 | 5.00 | 0.00 | 0.73 | 0.73 |
| 6.65 | 0.23 | 0.44 | 5.00 | 0.00 | 0.73 | 0.73 |
| 6.70 | 0.23 | 0.44 | 5.00 | 0.00 | 0.73 | 0.73 |
| 6.75 | 0.23 | 0.44 | 5.00 | 0.00 | 0.73 | 0.73 |
| 6.80 | 0.23 | 0.43 | 5.00 | 0.00 | 0.73 | 0.73 |
| 6.85 | 0.23 | 0.43 | 5.00 | 0.00 | 0.73 | 0.73 |
| 6.90 | 0.23 | 0.43 | 5.00 | 0.00 | 0.73 | 0.73 |
| 6.95 | 0.23 | 0.43 | 5.00 | 0.00 | 0.73 | 0.73 |
| 7.00 | 0.23 | 0.43 | 5.00 | 0.00 | 0.73 | 0.73 |
| 7.05 | 0.23 | 0.43 | 5.00 | 0.00 | 0.73 | 0.73 |
| 7.10 | 0.23 | 0.43 | 5.00 | 0.00 | 0.72 | 0.72 |
| 7.15 | 0.23 | 0.43 | 5.00 | 0.00 | 0.72 | 0.72 |
| 7.20 | 0.23 | 0.43 | 5.00 | 0.00 | 0.72 | 0.72 |
| 7.25 | 0.23 | 0.43 | 5.00 | 0.00 | 0.72 | 0.72 |

| | | | Liquefy.sum | | | |
|-------|------|------|-------------|------|------|------|
| 7.30 | 0.23 | 0.43 | 5.00 | 0.00 | 0.72 | 0.72 |
| 7.35 | 0.23 | 0.43 | 5.00 | 0.00 | 0.72 | 0.72 |
| 7.40 | 0.23 | 0.43 | 5.00 | 0.00 | 0.72 | 0.72 |
| 7.45 | 0.23 | 0.43 | 5.00 | 0.00 | 0.72 | 0.72 |
| 7.50 | 0.22 | 0.43 | 5.00 | 0.00 | 0.71 | 0.71 |
| 7.55 | 0.22 | 0.43 | 5.00 | 0.00 | 0.71 | 0.71 |
| 7.60 | 0.22 | 0.43 | 5.00 | 0.00 | 0.71 | 0.71 |
| 7.65 | 0.22 | 0.43 | 5.00 | 0.00 | 0.71 | 0.71 |
| 7.70 | 0.22 | 0.43 | 5.00 | 0.00 | 0.71 | 0.71 |
| 7.75 | 0.22 | 0.43 | 5.00 | 0.00 | 0.71 | 0.71 |
| 7.80 | 0.22 | 0.43 | 5.00 | 0.00 | 0.70 | 0.70 |
| 7.85 | 0.22 | 0.43 | 5.00 | 0.00 | 0.70 | 0.70 |
| 7.90 | 0.22 | 0.43 | 5.00 | 0.00 | 0.70 | 0.70 |
| 7.95 | 0.22 | 0.43 | 5.00 | 0.00 | 0.70 | 0.70 |
| 8.00 | 0.22 | 0.43 | 5.00 | 0.00 | 0.70 | 0.70 |
| 8.05 | 0.22 | 0.43 | 5.00 | 0.00 | 0.69 | 0.69 |
| 8.10 | 0.22 | 0.43 | 5.00 | 0.00 | 0.69 | 0.69 |
| 8.15 | 0.22 | 0.43 | 5.00 | 0.00 | 0.69 | 0.69 |
| 8.20 | 0.22 | 0.43 | 5.00 | 0.00 | 0.69 | 0.69 |
| 8.25 | 0.25 | 0.43 | 5.00 | 0.00 | 0.68 | 0.68 |
| 8.30 | 0.25 | 0.43 | 5.00 | 0.00 | 0.68 | 0.68 |
| 8.35 | 0.25 | 0.43 | 5.00 | 0.00 | 0.68 | 0.68 |
| 8.40 | 0.25 | 0.43 | 5.00 | 0.00 | 0.68 | 0.68 |
| 8.45 | 0.25 | 0.43 | 5.00 | 0.00 | 0.68 | 0.68 |
| 8.50 | 0.24 | 0.43 | 5.00 | 0.00 | 0.68 | 0.68 |
| 8.55 | 0.24 | 0.43 | 5.00 | 0.00 | 0.67 | 0.67 |
| 8.60 | 0.24 | 0.43 | 5.00 | 0.00 | 0.67 | 0.67 |
| 8.65 | 0.24 | 0.43 | 5.00 | 0.00 | 0.67 | 0.67 |
| 8.70 | 0.24 | 0.43 | 5.00 | 0.00 | 0.67 | 0.67 |
| 8.75 | 0.24 | 0.43 | 5.00 | 0.00 | 0.67 | 0.67 |
| 8.80 | 0.24 | 0.43 | 5.00 | 0.00 | 0.66 | 0.66 |
| 8.85 | 0.24 | 0.43 | 5.00 | 0.00 | 0.66 | 0.66 |
| 8.90 | 0.24 | 0.43 | 5.00 | 0.00 | 0.66 | 0.66 |
| 8.95 | 0.24 | 0.43 | 5.00 | 0.00 | 0.66 | 0.66 |
| 9.00 | 0.24 | 0.43 | 5.00 | 0.00 | 0.65 | 0.65 |
| 9.05 | 0.24 | 0.43 | 5.00 | 0.00 | 0.65 | 0.65 |
| 9.10 | 0.24 | 0.43 | 5.00 | 0.00 | 0.65 | 0.65 |
| 9.15 | 0.24 | 0.43 | 5.00 | 0.00 | 0.65 | 0.65 |
| 9.20 | 0.24 | 0.43 | 5.00 | 0.00 | 0.64 | 0.64 |
| 9.25 | 0.24 | 0.43 | 5.00 | 0.00 | 0.64 | 0.64 |
| 9.30 | 0.24 | 0.43 | 5.00 | 0.00 | 0.64 | 0.64 |
| 9.35 | 0.24 | 0.43 | 5.00 | 0.00 | 0.63 | 0.63 |
| 9.40 | 0.23 | 0.43 | 5.00 | 0.00 | 0.63 | 0.63 |
| 9.45 | 0.23 | 0.43 | 5.00 | 0.00 | 0.62 | 0.62 |
| 9.50 | 0.23 | 0.43 | 5.00 | 0.00 | 0.62 | 0.62 |
| 9.55 | 0.23 | 0.43 | 5.00 | 0.00 | 0.62 | 0.62 |
| 9.60 | 0.23 | 0.43 | 5.00 | 0.00 | 0.61 | 0.61 |
| 9.65 | 0.23 | 0.43 | 5.00 | 0.00 | 0.61 | 0.61 |
| 9.70 | 0.23 | 0.43 | 5.00 | 0.00 | 0.60 | 0.60 |
| 9.75 | 0.23 | 0.43 | 5.00 | 0.00 | 0.60 | 0.60 |
| 9.80 | 0.23 | 0.43 | 5.00 | 0.00 | 0.59 | 0.59 |
| 9.85 | 0.23 | 0.43 | 5.00 | 0.00 | 0.59 | 0.59 |
| 9.90 | 0.23 | 0.43 | 5.00 | 0.00 | 0.58 | 0.58 |
| 9.95 | 0.23 | 0.43 | 5.00 | 0.00 | 0.58 | 0.58 |
| 10.00 | 0.23 | 0.43 | 5.00 | 0.00 | 0.57 | 0.57 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 10.05 | 0.23 | 0.43 | 5.00 | 0.00 | 0.56 | 0.56 |
| 10.10 | 0.23 | 0.43 | 5.00 | 0.00 | 0.56 | 0.56 |
| 10.15 | 0.23 | 0.43 | 5.00 | 0.00 | 0.55 | 0.55 |
| 10.20 | 0.23 | 0.43 | 5.00 | 0.00 | 0.54 | 0.54 |
| 10.25 | 0.24 | 0.43 | 5.00 | 0.00 | 0.54 | 0.54 |
| 10.30 | 0.24 | 0.43 | 5.00 | 0.00 | 0.53 | 0.53 |
| 10.35 | 0.24 | 0.43 | 5.00 | 0.00 | 0.53 | 0.53 |
| 10.40 | 0.24 | 0.43 | 5.00 | 0.00 | 0.52 | 0.52 |
| 10.45 | 0.24 | 0.43 | 5.00 | 0.00 | 0.51 | 0.51 |
| 10.50 | 0.24 | 0.43 | 5.00 | 0.00 | 0.51 | 0.51 |
| 10.55 | 0.24 | 0.43 | 5.00 | 0.00 | 0.50 | 0.50 |
| 10.60 | 0.25 | 0.43 | 5.00 | 0.00 | 0.49 | 0.49 |
| 10.65 | 0.25 | 0.43 | 5.00 | 0.00 | 0.49 | 0.49 |
| 10.70 | 0.25 | 0.43 | 5.00 | 0.00 | 0.49 | 0.49 |
| 10.75 | 0.25 | 0.43 | 5.00 | 0.00 | 0.49 | 0.49 |
| 10.80 | 0.25 | 0.43 | 5.00 | 0.00 | 0.49 | 0.49 |
| 10.85 | 0.25 | 0.43 | 5.00 | 0.00 | 0.49 | 0.49 |
| 10.90 | 0.25 | 0.43 | 5.00 | 0.00 | 0.49 | 0.49 |
| 10.95 | 0.26 | 0.43 | 5.00 | 0.00 | 0.49 | 0.49 |
| 11.00 | 0.26 | 0.43 | 5.00 | 0.00 | 0.48 | 0.48 |
| 11.05 | 0.26 | 0.43 | 5.00 | 0.00 | 0.48 | 0.48 |
| 11.10 | 0.26 | 0.43 | 5.00 | 0.00 | 0.48 | 0.48 |
| 11.15 | 0.26 | 0.43 | 5.00 | 0.00 | 0.48 | 0.48 |
| 11.20 | 0.26 | 0.43 | 5.00 | 0.00 | 0.48 | 0.48 |
| 11.25 | 0.26 | 0.43 | 5.00 | 0.00 | 0.48 | 0.48 |
| 11.30 | 0.27 | 0.43 | 5.00 | 0.00 | 0.48 | 0.48 |
| 11.35 | 0.27 | 0.43 | 5.00 | 0.00 | 0.48 | 0.48 |
| 11.40 | 0.27 | 0.43 | 5.00 | 0.00 | 0.48 | 0.48 |
| 11.45 | 0.27 | 0.43 | 5.00 | 0.00 | 0.48 | 0.48 |
| 11.50 | 0.27 | 0.43 | 5.00 | 0.00 | 0.47 | 0.47 |
| 11.55 | 0.27 | 0.43 | 5.00 | 0.00 | 0.47 | 0.47 |
| 11.60 | 0.27 | 0.43 | 5.00 | 0.00 | 0.47 | 0.47 |
| 11.65 | 0.28 | 0.43 | 5.00 | 0.00 | 0.47 | 0.47 |
| 11.70 | 0.28 | 0.43 | 5.00 | 0.00 | 0.47 | 0.47 |
| 11.75 | 0.28 | 0.43 | 5.00 | 0.00 | 0.47 | 0.47 |
| 11.80 | 0.28 | 0.43 | 5.00 | 0.00 | 0.47 | 0.47 |
| 11.85 | 0.28 | 0.43 | 5.00 | 0.00 | 0.47 | 0.47 |
| 11.90 | 0.28 | 0.43 | 5.00 | 0.00 | 0.47 | 0.47 |
| 11.95 | 0.29 | 0.43 | 5.00 | 0.00 | 0.47 | 0.47 |
| 12.00 | 0.29 | 0.43 | 5.00 | 0.00 | 0.46 | 0.46 |
| 12.05 | 0.29 | 0.43 | 5.00 | 0.00 | 0.46 | 0.46 |
| 12.10 | 0.29 | 0.43 | 5.00 | 0.00 | 0.46 | 0.46 |
| 12.15 | 0.29 | 0.43 | 5.00 | 0.00 | 0.46 | 0.46 |
| 12.20 | 0.29 | 0.43 | 5.00 | 0.00 | 0.46 | 0.46 |
| 12.25 | 0.29 | 0.43 | 5.00 | 0.00 | 0.46 | 0.46 |
| 12.30 | 0.30 | 0.43 | 5.00 | 0.00 | 0.46 | 0.46 |
| 12.35 | 0.30 | 0.43 | 5.00 | 0.00 | 0.46 | 0.46 |
| 12.40 | 0.30 | 0.43 | 5.00 | 0.00 | 0.46 | 0.46 |
| 12.45 | 0.30 | 0.43 | 5.00 | 0.00 | 0.46 | 0.46 |
| 12.50 | 0.30 | 0.43 | 5.00 | 0.00 | 0.45 | 0.45 |
| 12.55 | 0.31 | 0.43 | 5.00 | 0.00 | 0.45 | 0.45 |
| 12.60 | 0.31 | 0.43 | 5.00 | 0.00 | 0.45 | 0.45 |
| 12.65 | 0.31 | 0.43 | 5.00 | 0.00 | 0.45 | 0.45 |
| 12.70 | 0.31 | 0.43 | 5.00 | 0.00 | 0.45 | 0.45 |
| 12.75 | 0.31 | 0.43 | 5.00 | 0.00 | 0.45 | 0.45 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 12.80 | 0.31 | 0.43 | 5.00 | 0.00 | 0.45 | 0.45 |
| 12.85 | 0.32 | 0.43 | 5.00 | 0.00 | 0.45 | 0.45 |
| 12.90 | 0.32 | 0.43 | 5.00 | 0.00 | 0.45 | 0.45 |
| 12.95 | 0.32 | 0.43 | 5.00 | 0.00 | 0.45 | 0.45 |
| 13.00 | 0.32 | 0.43 | 5.00 | 0.00 | 0.44 | 0.44 |
| 13.05 | 0.32 | 0.43 | 5.00 | 0.00 | 0.44 | 0.44 |
| 13.10 | 0.33 | 0.43 | 5.00 | 0.00 | 0.44 | 0.44 |
| 13.15 | 0.33 | 0.43 | 5.00 | 0.00 | 0.44 | 0.44 |
| 13.20 | 0.33 | 0.43 | 5.00 | 0.00 | 0.44 | 0.44 |
| 13.25 | 0.33 | 0.43 | 5.00 | 0.00 | 0.44 | 0.44 |
| 13.30 | 0.33 | 0.43 | 5.00 | 0.00 | 0.44 | 0.44 |
| 13.35 | 0.34 | 0.43 | 5.00 | 0.00 | 0.44 | 0.44 |
| 13.40 | 0.34 | 0.43 | 5.00 | 0.00 | 0.44 | 0.44 |
| 13.45 | 0.34 | 0.43 | 5.00 | 0.00 | 0.44 | 0.44 |
| 13.50 | 0.34 | 0.43 | 5.00 | 0.00 | 0.44 | 0.44 |
| 13.55 | 0.35 | 0.43 | 5.00 | 0.00 | 0.43 | 0.43 |
| 13.60 | 0.35 | 0.43 | 5.00 | 0.00 | 0.43 | 0.43 |
| 13.65 | 0.35 | 0.43 | 5.00 | 0.00 | 0.43 | 0.43 |
| 13.70 | 0.35 | 0.43 | 5.00 | 0.00 | 0.43 | 0.43 |
| 13.75 | 0.36 | 0.43 | 5.00 | 0.00 | 0.43 | 0.43 |
| 13.80 | 0.36 | 0.43 | 5.00 | 0.00 | 0.43 | 0.43 |
| 13.85 | 0.36 | 0.43 | 5.00 | 0.00 | 0.43 | 0.43 |
| 13.90 | 0.36 | 0.43 | 5.00 | 0.00 | 0.43 | 0.43 |
| 13.95 | 0.37 | 0.43 | 5.00 | 0.00 | 0.43 | 0.43 |
| 14.00 | 0.37 | 0.43 | 5.00 | 0.00 | 0.43 | 0.43 |
| 14.05 | 0.37 | 0.43 | 5.00 | 0.00 | 0.43 | 0.43 |
| 14.10 | 0.38 | 0.43 | 5.00 | 0.00 | 0.42 | 0.42 |
| 14.15 | 0.38 | 0.43 | 5.00 | 0.00 | 0.42 | 0.42 |
| 14.20 | 0.39 | 0.43 | 5.00 | 0.00 | 0.42 | 0.42 |
| 14.25 | 0.39 | 0.43 | 5.00 | 0.00 | 0.42 | 0.42 |
| 14.30 | 0.39 | 0.43 | 5.00 | 0.00 | 0.42 | 0.42 |
| 14.35 | 0.40 | 0.43 | 5.00 | 0.00 | 0.42 | 0.42 |
| 14.40 | 0.41 | 0.43 | 5.00 | 0.00 | 0.42 | 0.42 |
| 14.45 | 0.41 | 0.43 | 5.00 | 0.00 | 0.42 | 0.42 |
| 14.50 | 0.42 | 0.43 | 5.00 | 0.00 | 0.42 | 0.42 |
| 14.55 | 0.43 | 0.43 | 5.00 | 0.00 | 0.42 | 0.42 |
| 14.60 | 0.44 | 0.43 | 5.00 | 0.00 | 0.42 | 0.42 |
| 14.65 | 0.46 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 14.70 | 0.48 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 14.75 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 14.80 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 14.85 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 14.90 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 14.95 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 15.00 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 15.05 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 15.10 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 15.15 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 15.20 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 15.25 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 15.30 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 15.35 | 0.50 | 0.43 | 5.00 | 0.00 | 0.41 | 0.41 |
| 15.40 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 15.45 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 15.50 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 15.55 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 15.60 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 15.65 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 15.70 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 15.75 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 15.80 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 15.85 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 15.90 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 15.95 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 16.00 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 16.05 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 16.10 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 16.15 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 16.20 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 16.25 | 0.50 | 0.43 | 5.00 | 0.00 | 0.40 | 0.40 |
| 16.30 | 0.50 | 0.43 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.35 | 0.50 | 0.43 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.40 | 0.50 | 0.43 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.45 | 0.50 | 0.43 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.50 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.55 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.60 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.65 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.70 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.75 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.80 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.85 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.90 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 16.95 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 17.00 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 17.05 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 17.10 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 17.15 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 17.20 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 17.25 | 0.50 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 17.30 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.35 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.40 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.45 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.50 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.55 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.60 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.65 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.70 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.75 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.80 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.85 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.90 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 17.95 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 18.00 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 18.05 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 18.10 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 18.15 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 18.20 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 18.25 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 18.30 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 18.35 | 0.50 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 18.40 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 18.45 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 18.50 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 18.55 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 18.60 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 18.65 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 18.70 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 18.75 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 18.80 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 18.85 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 18.90 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 18.95 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 19.00 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 19.05 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 19.10 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 19.15 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 19.20 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 19.25 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 19.30 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 19.35 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 19.40 | 0.50 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 19.45 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 19.50 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 19.55 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 19.60 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 19.65 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 19.70 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 19.75 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 19.80 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 19.85 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 19.90 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 19.95 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 20.00 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 20.05 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 20.10 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 20.15 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 20.20 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 20.25 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 20.30 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 20.35 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 20.40 | 0.50 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 20.45 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 20.50 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 20.55 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 20.60 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 20.65 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 20.70 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 20.75 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 20.80 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 20.85 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 20.90 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 20.95 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 21.00 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 21.05 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 21.10 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 21.15 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 21.20 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 21.25 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 21.30 | 0.50 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 21.35 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 21.40 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 21.45 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 21.50 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 21.55 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 21.60 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 21.65 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 21.70 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 21.75 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 21.80 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 21.85 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 21.90 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 21.95 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 22.00 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 22.05 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 22.10 | 0.50 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 22.15 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.20 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.25 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.30 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.35 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.40 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.45 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.50 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.55 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.60 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.65 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.70 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.75 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.80 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.85 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.90 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 22.95 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 23.00 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 23.05 | 0.50 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 23.10 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.15 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.20 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.25 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.30 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.35 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.40 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.45 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.50 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.55 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.60 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.65 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.70 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.75 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 23.80 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.85 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.90 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 23.95 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.00 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.05 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.10 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.15 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.20 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.25 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.30 | 0.50 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.35 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 24.40 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 24.45 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 24.50 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 24.55 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 24.60 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 24.65 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 24.70 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 24.75 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 24.80 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 24.85 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 24.90 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 24.95 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.00 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.05 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.10 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.15 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.20 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.25 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.30 | 0.50 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.35 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.40 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.45 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.50 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.55 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.60 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.65 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.70 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.75 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.80 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.85 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.90 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.95 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 26.00 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 26.05 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 26.10 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 26.15 | 0.50 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 26.20 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.25 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.30 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.35 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.40 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.45 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.50 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 26.55 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.60 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.65 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.70 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.75 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.80 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.85 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.90 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.95 | 0.50 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 27.00 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.05 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.10 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.15 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.20 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.25 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.30 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.35 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.40 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.45 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.50 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.55 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.60 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.65 | 0.50 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 27.70 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 27.75 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 27.80 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 27.85 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 27.90 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 27.95 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 28.00 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 28.05 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 28.10 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 28.15 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 28.20 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 28.25 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 28.30 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 28.35 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 28.40 | 0.50 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 28.45 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 28.50 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 28.55 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 28.60 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 28.65 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 28.70 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 28.75 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 28.80 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 28.85 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 28.90 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 28.95 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 29.00 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 29.05 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 29.10 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 29.15 | 0.50 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 29.20 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 29.25 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 29.30 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 29.35 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 29.40 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 29.45 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 29.50 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 29.55 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 29.60 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 29.65 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 29.70 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 29.75 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 29.80 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 29.85 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 29.90 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 29.95 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 30.00 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 30.05 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 30.10 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 30.15 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 30.20 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 30.25 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 30.30 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 30.35 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 30.40 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 30.45 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 30.50 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 30.55 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 30.60 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 30.65 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 30.70 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 30.75 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 30.80 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 30.85 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 30.90 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 30.95 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 31.00 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 31.05 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 31.10 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 31.15 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 31.20 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 31.25 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 31.30 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 31.35 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 31.40 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 31.45 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 31.50 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 31.55 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 31.60 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 31.65 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 31.70 | 0.50 | 0.40 | 5.00 | 0.00 | 0.21 | 0.21 |
| 31.75 | 0.50 | 0.40 | 5.00 | 0.00 | 0.21 | 0.21 |
| 31.80 | 0.50 | 0.40 | 5.00 | 0.00 | 0.21 | 0.21 |
| 31.85 | 0.50 | 0.40 | 5.00 | 0.00 | 0.21 | 0.21 |
| 31.90 | 0.50 | 0.40 | 5.00 | 0.00 | 0.21 | 0.21 |
| 31.95 | 0.50 | 0.40 | 5.00 | 0.00 | 0.21 | 0.21 |
| 32.00 | 0.50 | 0.40 | 5.00 | 0.00 | 0.21 | 0.21 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 32.05 | 0.50 | 0.40 | 5.00 | 0.00 | 0.21 | 0.21 |
| 32.10 | 0.50 | 0.40 | 5.00 | 0.00 | 0.21 | 0.21 |
| 32.15 | 0.50 | 0.40 | 5.00 | 0.00 | 0.21 | 0.21 |
| 32.20 | 0.50 | 0.40 | 5.00 | 0.00 | 0.21 | 0.21 |
| 32.25 | 0.50 | 0.40 | 5.00 | 0.00 | 0.21 | 0.21 |
| 32.30 | 0.50 | 0.40 | 5.00 | 0.00 | 0.20 | 0.20 |
| 32.35 | 0.50 | 0.40 | 5.00 | 0.00 | 0.20 | 0.20 |
| 32.40 | 0.50 | 0.40 | 5.00 | 0.00 | 0.20 | 0.20 |
| 32.45 | 0.50 | 0.40 | 5.00 | 0.00 | 0.20 | 0.20 |
| 32.50 | 0.50 | 0.40 | 5.00 | 0.00 | 0.20 | 0.20 |
| 32.55 | 0.50 | 0.40 | 5.00 | 0.00 | 0.20 | 0.20 |
| 32.60 | 0.50 | 0.40 | 5.00 | 0.00 | 0.20 | 0.20 |
| 32.65 | 0.50 | 0.40 | 5.00 | 0.00 | 0.20 | 0.20 |
| 32.70 | 0.50 | 0.40 | 5.00 | 0.00 | 0.20 | 0.20 |
| 32.75 | 0.50 | 0.40 | 5.00 | 0.00 | 0.20 | 0.20 |
| 32.80 | 0.50 | 0.40 | 5.00 | 0.00 | 0.20 | 0.20 |
| 32.85 | 0.50 | 0.40 | 5.00 | 0.00 | 0.20 | 0.20 |
| 32.90 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 32.95 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 33.00 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 33.05 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 33.10 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 33.15 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 33.20 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 33.25 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 33.30 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 33.35 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 33.40 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 33.45 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 33.50 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 33.55 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 33.60 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 33.65 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 33.70 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 33.75 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 33.80 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 33.85 | 0.49 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 33.90 | 0.49 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 33.95 | 0.49 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 34.00 | 0.49 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 34.05 | 0.49 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 34.10 | 0.49 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 34.15 | 0.49 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 34.20 | 0.49 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 34.25 | 0.49 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 34.30 | 0.49 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 34.35 | 0.49 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 34.40 | 0.49 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 34.45 | 0.49 | 0.39 | 5.00 | 0.00 | 0.17 | 0.17 |
| 34.50 | 0.49 | 0.39 | 5.00 | 0.00 | 0.17 | 0.17 |
| 34.55 | 0.49 | 0.39 | 5.00 | 0.00 | 0.17 | 0.17 |
| 34.60 | 0.49 | 0.39 | 5.00 | 0.00 | 0.17 | 0.17 |
| 34.65 | 0.49 | 0.39 | 5.00 | 0.00 | 0.17 | 0.17 |
| 34.70 | 0.49 | 0.39 | 5.00 | 0.00 | 0.16 | 0.16 |
| 34.75 | 0.49 | 0.39 | 5.00 | 0.00 | 0.16 | 0.16 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 34.80 | 0.49 | 0.39 | 5.00 | 0.00 | 0.16 | 0.16 |
| 34.85 | 0.49 | 0.39 | 5.00 | 0.00 | 0.16 | 0.16 |
| 34.90 | 0.49 | 0.39 | 5.00 | 0.00 | 0.16 | 0.16 |
| 34.95 | 0.49 | 0.39 | 5.00 | 0.00 | 0.16 | 0.16 |
| 35.00 | 0.49 | 0.39 | 5.00 | 0.00 | 0.16 | 0.16 |
| 35.05 | 0.49 | 0.39 | 5.00 | 0.00 | 0.16 | 0.16 |
| 35.10 | 0.49 | 0.39 | 5.00 | 0.00 | 0.16 | 0.16 |
| 35.15 | 0.49 | 0.39 | 5.00 | 0.00 | 0.16 | 0.16 |
| 35.20 | 0.49 | 0.39 | 5.00 | 0.00 | 0.16 | 0.16 |
| 35.25 | 0.49 | 0.39 | 5.00 | 0.00 | 0.16 | 0.16 |
| 35.30 | 0.49 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.35 | 0.49 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.40 | 0.49 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.45 | 0.49 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.50 | 0.49 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.55 | 0.49 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.60 | 0.49 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.65 | 0.49 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.70 | 0.49 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.75 | 0.49 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.80 | 0.49 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.85 | 0.49 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.90 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.95 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.00 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.05 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.10 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.15 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.20 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.25 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.30 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.35 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.40 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.45 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.50 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.55 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.60 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.65 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.70 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.75 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.80 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.85 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.90 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.95 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 37.00 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 37.05 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 37.10 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 37.15 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 37.20 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 37.25 | 0.49 | 0.38 | 5.00 | 0.00 | 0.13 | 0.13 |
| 37.30 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.35 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.40 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.45 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.50 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 37.55 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.60 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.65 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.70 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.75 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.80 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.85 | 0.48 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.90 | 0.48 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.95 | 0.48 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 38.00 | 0.48 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 38.05 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.10 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.15 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.20 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.25 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.30 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.35 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.40 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.45 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.50 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.55 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.60 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.65 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.70 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.75 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.80 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.85 | 0.48 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.90 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 38.95 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.00 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.05 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.10 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.15 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.20 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.25 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.30 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.35 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.40 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.45 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.50 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.55 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.60 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.65 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.70 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.75 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.80 | 0.48 | 0.38 | 5.00 | 0.00 | 0.09 | 0.09 |
| 39.85 | 0.48 | 0.38 | 5.00 | 0.00 | 0.09 | 0.09 |
| 39.90 | 0.48 | 0.38 | 5.00 | 0.00 | 0.09 | 0.09 |
| 39.95 | 0.48 | 0.38 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.00 | 0.48 | 0.38 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.05 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.10 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.15 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.20 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.25 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |

| | | | | Liquefy.sum | | |
|-------|------|------|------|-------------|------|------|
| 40.30 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.35 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.40 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.45 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.50 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.55 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.60 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.65 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.70 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 40.75 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 40.80 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 40.85 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 40.90 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 40.95 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.00 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.05 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.10 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.15 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.20 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.25 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.30 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.35 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.40 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.45 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.50 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.55 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.60 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 41.65 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 41.70 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 41.75 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 41.80 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 41.85 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 41.90 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 41.95 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.00 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.05 | 0.47 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.10 | 0.47 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.15 | 0.47 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.20 | 0.47 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.25 | 0.47 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.30 | 0.47 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.35 | 0.47 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.40 | 0.47 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.45 | 0.47 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.50 | 0.47 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.55 | 0.47 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.60 | 0.47 | 0.37 | 5.00 | 0.00 | 0.06 | 0.06 |
| 42.65 | 0.47 | 0.37 | 5.00 | 0.00 | 0.06 | 0.06 |
| 42.70 | 0.47 | 0.37 | 5.00 | 0.00 | 0.06 | 0.06 |
| 42.75 | 0.47 | 0.37 | 5.00 | 0.00 | 0.06 | 0.06 |
| 42.80 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 42.85 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 42.90 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 42.95 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.00 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 43.05 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.10 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.15 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.20 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.25 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.30 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.35 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.40 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.45 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.50 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.55 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 43.60 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 43.65 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 43.70 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 43.75 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 43.80 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 43.85 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 43.90 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 43.95 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.00 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.05 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.10 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.15 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.20 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.25 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.30 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.35 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.40 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.45 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.50 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.55 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 44.60 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 44.65 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 44.70 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 44.75 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 44.80 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 44.85 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 44.90 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 44.95 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.00 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.05 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.10 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.15 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.20 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.25 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.30 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.35 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.40 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.45 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.50 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.55 | 0.47 | 0.36 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.60 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.65 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.70 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 45.75 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 45.80 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 45.85 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 45.90 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 45.95 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.00 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.05 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.10 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.15 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.20 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.25 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.30 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.35 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.40 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.45 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.50 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.55 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.60 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.65 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.70 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.75 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.80 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.85 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.90 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.95 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.00 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.05 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.10 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.15 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.20 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.25 | 0.46 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.30 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.35 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.40 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.45 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.50 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.55 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.60 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.65 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.70 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.75 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.80 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.85 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.90 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.95 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.00 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.05 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.10 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.15 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.20 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.25 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.30 | 0.46 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.35 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.40 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.45 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.50 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 48.55 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.60 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.65 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.70 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.75 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.80 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.85 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.90 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.95 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.00 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.05 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.10 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.15 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.20 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.25 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.30 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.35 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.40 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.45 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.50 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.55 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.60 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.65 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.70 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.75 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.80 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.85 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.90 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.95 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.00 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.05 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.10 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.15 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.20 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.25 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.30 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.35 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.40 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.45 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.50 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.55 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.60 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.65 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 50.70 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 50.75 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 50.80 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 50.85 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 50.90 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 50.95 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.00 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.05 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.10 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.15 | 0.45 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.20 | 0.45 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.25 | 0.45 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |

| | | | | Liquefy.sum | | |
|-------|------|------|------|-------------|------|------|
| 51.30 | 0.45 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.35 | 0.45 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.40 | 0.45 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.45 | 0.45 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.50 | 0.45 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |

 * F.S.<1, Liquefaction Potential Zone
 (F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

Units: Unit: qc, fs, Stress or Pressure = atm (1.0581tsf); Unit Weight = pcf; Depth = ft;
 Settlement = in.

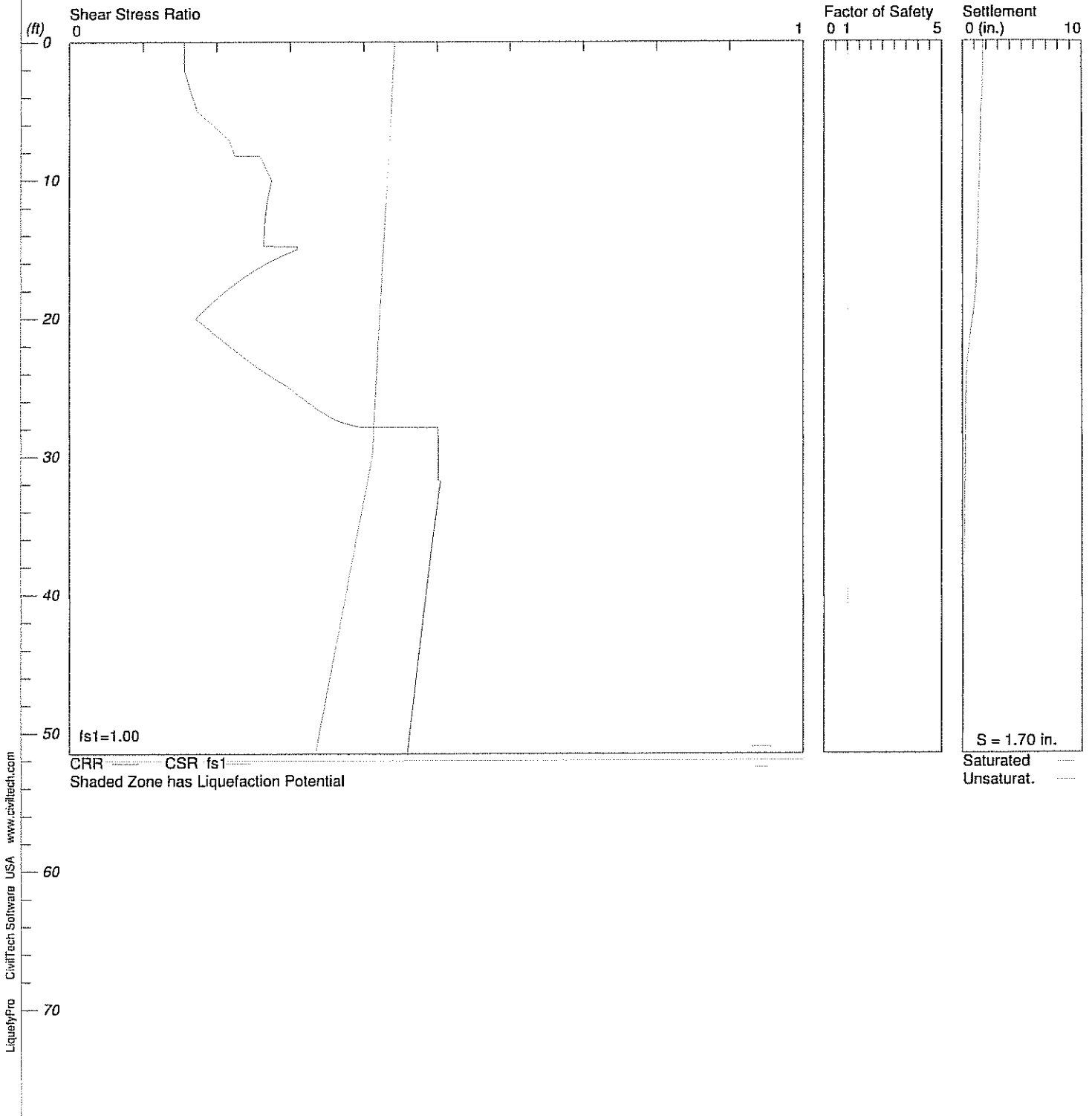
 1 atm (atmosphere) = 1 tsf (ton/ft2)
 CRRm Cyclic resistance ratio from soils
 CSRsf Cyclic stress ratio induced by a given earthquake (with user request
 factor of safety)
 F.S. Factor of Safety against liquefaction, F.S.=CRRm/CSRsf
 S_sat Settlement from saturated sands
 S_dry Settlement from Unsaturated Sands
 S_all Total Settlement from Saturated and Unsaturated Sands
 NoLiq No-Liquefy Soils

SEISMIC SETTLEMENT ANALYSIS

544-19101

Hole No.=BH-6 Water Depth=52.0 ft Surface Elev.=310 ft

Magnitude=7.49
Acceleration=0.68g



LiquefyPro CivilTech Software USA www.civiltech.com

Liquefy.sum

*

LIQUEFACTION ANALYSIS SUMMARY
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*

Font: Courier New, Regular, Size 8 is recommended for this report.
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Input File Name: F:\Liquefy5\544-19101 Rancho Mirage 31 (BH-6).liq
Title: 544-19101
Subtitle: Rancho Mirage 31

Surface Elev.=310 ft
Hole No.=BH-6
Depth of Hole= 51.50 ft
Water Table during Earthquake= 52.00 ft
Water Table during In-Situ Testing= 52.00 ft
Max. Acceleration= 0.68 g
Earthquake Magnitude= 7.49

Input Data:

Surface Elev.=310 ft
Hole No.=BH-6
Depth of Hole=51.50 ft
Water Table during Earthquake= 52.00 ft
Water Table during In-Situ Testing= 52.00 ft
Max. Acceleration=0.68 g
Earthquake Magnitude=7.49
No-Liquefiable Soils: Based on Analysis

1. SPT or BPT Calculation.
 2. Settlement Analysis Method: Tokimatsu, M-correction
 3. Fines Correction for Liquefaction: Modify Stark/Olson
 4. Fine Correction for Settlement: During Liquefaction*
 5. Settlement Calculation in: All zones*
 6. Hammer Energy Ratio, Ce = 1.25
 7. Borehole Diameter, Cb= 1
 8. Sampling Method, Cs= 1
 9. User request factor of safety (apply to CSR) , User= 1.0
Plot one CSR curve (fs1=User)
 10. Use Curve Smoothing: Yes*
- * Recommended Options

In-Situ Test Data:

| Depth ft | SPT | gamma pcf | Fines % |
|-------------|-------|--------------|------------|
| 0.00 | 9.00 | 102.70 | 0.00 |
| 2.00 | 9.00 | 102.70 | 0.00 |
| 5.00 | 10.00 | 102.70 | 0.00 |
| 10.00 | 16.00 | 102.70 | 0.00 |

| Liquefy.sum | | | |
|-------------|-------|--------|-------|
| 15.00 | 19.00 | 102.70 | 0.00 |
| 20.00 | 13.00 | 102.70 | 0.00 |
| 25.00 | 24.00 | 102.70 | 0.00 |
| 30.00 | 32.00 | 102.70 | 10.50 |
| 35.00 | 38.00 | 102.70 | 10.50 |
| 40.00 | 49.00 | 102.70 | 10.50 |
| 45.00 | 58.00 | 102.70 | 10.50 |
| 50.00 | 53.00 | 102.70 | 10.50 |

Output Results:

Settlement of Saturated Sands=0.00 in.
 Settlement of Unsaturated Sands=1.70 in.
 Total Settlement of Saturated and Unsaturated Sands=1.70 in.
 Differential Settlement=0.850 to 1.122 in.

| Depth ft | CRRm | CSRfs | F.S. | S_sat. in. | S_dry in. | S_all in. |
|-------------|------|-------|------|---------------|--------------|--------------|
| 0.00 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.05 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.10 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.15 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.20 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.25 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.30 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.35 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.40 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.45 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.50 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.55 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.60 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.65 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.70 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.75 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.80 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.85 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.90 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 0.95 | 0.16 | 0.44 | 5.00 | 0.00 | 1.70 | 1.70 |
| 1.00 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.05 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.10 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.15 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.20 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.25 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.30 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.35 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.40 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.45 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.50 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.55 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.60 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.65 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.70 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.75 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 1.80 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.85 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.90 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 1.95 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 2.00 | 0.16 | 0.44 | 5.00 | 0.00 | 1.69 | 1.69 |
| 2.05 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.10 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.15 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.20 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.25 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.30 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.35 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.40 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.45 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.50 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.55 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.60 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.65 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.70 | 0.16 | 0.44 | 5.00 | 0.00 | 1.68 | 1.68 |
| 2.75 | 0.16 | 0.44 | 5.00 | 0.00 | 1.67 | 1.67 |
| 2.80 | 0.16 | 0.44 | 5.00 | 0.00 | 1.67 | 1.67 |
| 2.85 | 0.16 | 0.44 | 5.00 | 0.00 | 1.67 | 1.67 |
| 2.90 | 0.16 | 0.44 | 5.00 | 0.00 | 1.67 | 1.67 |
| 2.95 | 0.16 | 0.44 | 5.00 | 0.00 | 1.67 | 1.67 |
| 3.00 | 0.16 | 0.44 | 5.00 | 0.00 | 1.67 | 1.67 |
| 3.05 | 0.16 | 0.44 | 5.00 | 0.00 | 1.67 | 1.67 |
| 3.10 | 0.16 | 0.44 | 5.00 | 0.00 | 1.67 | 1.67 |
| 3.15 | 0.16 | 0.44 | 5.00 | 0.00 | 1.67 | 1.67 |
| 3.20 | 0.16 | 0.44 | 5.00 | 0.00 | 1.67 | 1.67 |
| 3.25 | 0.16 | 0.44 | 5.00 | 0.00 | 1.67 | 1.67 |
| 3.30 | 0.16 | 0.44 | 5.00 | 0.00 | 1.66 | 1.66 |
| 3.35 | 0.16 | 0.44 | 5.00 | 0.00 | 1.66 | 1.66 |
| 3.40 | 0.16 | 0.44 | 5.00 | 0.00 | 1.66 | 1.66 |
| 3.45 | 0.16 | 0.44 | 5.00 | 0.00 | 1.66 | 1.66 |
| 3.50 | 0.16 | 0.44 | 5.00 | 0.00 | 1.66 | 1.66 |
| 3.55 | 0.16 | 0.44 | 5.00 | 0.00 | 1.66 | 1.66 |
| 3.60 | 0.16 | 0.44 | 5.00 | 0.00 | 1.66 | 1.66 |
| 3.65 | 0.17 | 0.44 | 5.00 | 0.00 | 1.65 | 1.65 |
| 3.70 | 0.17 | 0.44 | 5.00 | 0.00 | 1.65 | 1.65 |
| 3.75 | 0.17 | 0.44 | 5.00 | 0.00 | 1.65 | 1.65 |
| 3.80 | 0.17 | 0.44 | 5.00 | 0.00 | 1.65 | 1.65 |
| 3.85 | 0.17 | 0.44 | 5.00 | 0.00 | 1.65 | 1.65 |
| 3.90 | 0.17 | 0.44 | 5.00 | 0.00 | 1.64 | 1.64 |
| 3.95 | 0.17 | 0.44 | 5.00 | 0.00 | 1.64 | 1.64 |
| 4.00 | 0.17 | 0.44 | 5.00 | 0.00 | 1.64 | 1.64 |
| 4.05 | 0.17 | 0.44 | 5.00 | 0.00 | 1.63 | 1.63 |
| 4.10 | 0.17 | 0.44 | 5.00 | 0.00 | 1.63 | 1.63 |
| 4.15 | 0.17 | 0.44 | 5.00 | 0.00 | 1.63 | 1.63 |
| 4.20 | 0.17 | 0.44 | 5.00 | 0.00 | 1.62 | 1.62 |
| 4.25 | 0.17 | 0.44 | 5.00 | 0.00 | 1.62 | 1.62 |
| 4.30 | 0.17 | 0.44 | 5.00 | 0.00 | 1.61 | 1.61 |
| 4.35 | 0.17 | 0.44 | 5.00 | 0.00 | 1.61 | 1.61 |
| 4.40 | 0.17 | 0.44 | 5.00 | 0.00 | 1.60 | 1.60 |
| 4.45 | 0.17 | 0.44 | 5.00 | 0.00 | 1.60 | 1.60 |
| 4.50 | 0.17 | 0.44 | 5.00 | 0.00 | 1.59 | 1.59 |

Liquefy.sum

| | | | | | | |
|------|------|------|------|------|------|------|
| 4.55 | 0.17 | 0.44 | 5.00 | 0.00 | 1.59 | 1.59 |
| 4.60 | 0.17 | 0.44 | 5.00 | 0.00 | 1.58 | 1.58 |
| 4.65 | 0.17 | 0.44 | 5.00 | 0.00 | 1.57 | 1.57 |
| 4.70 | 0.17 | 0.44 | 5.00 | 0.00 | 1.56 | 1.56 |
| 4.75 | 0.17 | 0.44 | 5.00 | 0.00 | 1.55 | 1.55 |
| 4.80 | 0.17 | 0.44 | 5.00 | 0.00 | 1.54 | 1.54 |
| 4.85 | 0.17 | 0.44 | 5.00 | 0.00 | 1.54 | 1.54 |
| 4.90 | 0.17 | 0.44 | 5.00 | 0.00 | 1.54 | 1.54 |
| 4.95 | 0.17 | 0.44 | 5.00 | 0.00 | 1.54 | 1.54 |
| 5.00 | 0.17 | 0.44 | 5.00 | 0.00 | 1.54 | 1.54 |
| 5.05 | 0.17 | 0.44 | 5.00 | 0.00 | 1.54 | 1.54 |
| 5.10 | 0.17 | 0.44 | 5.00 | 0.00 | 1.53 | 1.53 |
| 5.15 | 0.18 | 0.44 | 5.00 | 0.00 | 1.53 | 1.53 |
| 5.20 | 0.18 | 0.44 | 5.00 | 0.00 | 1.53 | 1.53 |
| 5.25 | 0.18 | 0.44 | 5.00 | 0.00 | 1.53 | 1.53 |
| 5.30 | 0.18 | 0.44 | 5.00 | 0.00 | 1.53 | 1.53 |
| 5.35 | 0.18 | 0.44 | 5.00 | 0.00 | 1.53 | 1.53 |
| 5.40 | 0.18 | 0.44 | 5.00 | 0.00 | 1.53 | 1.53 |
| 5.45 | 0.18 | 0.44 | 5.00 | 0.00 | 1.53 | 1.53 |
| 5.50 | 0.18 | 0.44 | 5.00 | 0.00 | 1.53 | 1.53 |
| 5.55 | 0.18 | 0.44 | 5.00 | 0.00 | 1.52 | 1.52 |
| 5.60 | 0.18 | 0.44 | 5.00 | 0.00 | 1.52 | 1.52 |
| 5.65 | 0.19 | 0.44 | 5.00 | 0.00 | 1.52 | 1.52 |
| 5.70 | 0.19 | 0.44 | 5.00 | 0.00 | 1.52 | 1.52 |
| 5.75 | 0.19 | 0.44 | 5.00 | 0.00 | 1.52 | 1.52 |
| 5.80 | 0.19 | 0.44 | 5.00 | 0.00 | 1.52 | 1.52 |
| 5.85 | 0.19 | 0.44 | 5.00 | 0.00 | 1.52 | 1.52 |
| 5.90 | 0.19 | 0.44 | 5.00 | 0.00 | 1.52 | 1.52 |
| 5.95 | 0.19 | 0.44 | 5.00 | 0.00 | 1.52 | 1.52 |
| 6.00 | 0.19 | 0.44 | 5.00 | 0.00 | 1.52 | 1.52 |
| 6.05 | 0.19 | 0.44 | 5.00 | 0.00 | 1.51 | 1.51 |
| 6.10 | 0.20 | 0.44 | 5.00 | 0.00 | 1.51 | 1.51 |
| 6.15 | 0.20 | 0.44 | 5.00 | 0.00 | 1.51 | 1.51 |
| 6.20 | 0.20 | 0.44 | 5.00 | 0.00 | 1.51 | 1.51 |
| 6.25 | 0.20 | 0.44 | 5.00 | 0.00 | 1.51 | 1.51 |
| 6.30 | 0.20 | 0.44 | 5.00 | 0.00 | 1.51 | 1.51 |
| 6.35 | 0.20 | 0.44 | 5.00 | 0.00 | 1.51 | 1.51 |
| 6.40 | 0.20 | 0.44 | 5.00 | 0.00 | 1.51 | 1.51 |
| 6.45 | 0.20 | 0.44 | 5.00 | 0.00 | 1.51 | 1.51 |
| 6.50 | 0.20 | 0.44 | 5.00 | 0.00 | 1.50 | 1.50 |
| 6.55 | 0.20 | 0.44 | 5.00 | 0.00 | 1.50 | 1.50 |
| 6.60 | 0.21 | 0.44 | 5.00 | 0.00 | 1.50 | 1.50 |
| 6.65 | 0.21 | 0.44 | 5.00 | 0.00 | 1.50 | 1.50 |
| 6.70 | 0.21 | 0.44 | 5.00 | 0.00 | 1.50 | 1.50 |
| 6.75 | 0.21 | 0.44 | 5.00 | 0.00 | 1.50 | 1.50 |
| 6.80 | 0.21 | 0.43 | 5.00 | 0.00 | 1.50 | 1.50 |
| 6.85 | 0.21 | 0.43 | 5.00 | 0.00 | 1.50 | 1.50 |
| 6.90 | 0.21 | 0.43 | 5.00 | 0.00 | 1.50 | 1.50 |
| 6.95 | 0.21 | 0.43 | 5.00 | 0.00 | 1.49 | 1.49 |
| 7.00 | 0.21 | 0.43 | 5.00 | 0.00 | 1.49 | 1.49 |
| 7.05 | 0.22 | 0.43 | 5.00 | 0.00 | 1.49 | 1.49 |
| 7.10 | 0.22 | 0.43 | 5.00 | 0.00 | 1.49 | 1.49 |
| 7.15 | 0.22 | 0.43 | 5.00 | 0.00 | 1.49 | 1.49 |
| 7.20 | 0.22 | 0.43 | 5.00 | 0.00 | 1.49 | 1.49 |
| 7.25 | 0.22 | 0.43 | 5.00 | 0.00 | 1.49 | 1.49 |

| | | | | Liquefy.sum | | |
|-------|------|------|------|-------------|------|------|
| 7.30 | 0.22 | 0.43 | 5.00 | 0.00 | 1.49 | 1.49 |
| 7.35 | 0.22 | 0.43 | 5.00 | 0.00 | 1.48 | 1.48 |
| 7.40 | 0.22 | 0.43 | 5.00 | 0.00 | 1.48 | 1.48 |
| 7.45 | 0.22 | 0.43 | 5.00 | 0.00 | 1.48 | 1.48 |
| 7.50 | 0.22 | 0.43 | 5.00 | 0.00 | 1.48 | 1.48 |
| 7.55 | 0.22 | 0.43 | 5.00 | 0.00 | 1.48 | 1.48 |
| 7.60 | 0.22 | 0.43 | 5.00 | 0.00 | 1.48 | 1.48 |
| 7.65 | 0.22 | 0.43 | 5.00 | 0.00 | 1.48 | 1.48 |
| 7.70 | 0.22 | 0.43 | 5.00 | 0.00 | 1.47 | 1.47 |
| 7.75 | 0.22 | 0.43 | 5.00 | 0.00 | 1.47 | 1.47 |
| 7.80 | 0.22 | 0.43 | 5.00 | 0.00 | 1.47 | 1.47 |
| 7.85 | 0.22 | 0.43 | 5.00 | 0.00 | 1.47 | 1.47 |
| 7.90 | 0.22 | 0.43 | 5.00 | 0.00 | 1.47 | 1.47 |
| 7.95 | 0.22 | 0.43 | 5.00 | 0.00 | 1.47 | 1.47 |
| 8.00 | 0.22 | 0.43 | 5.00 | 0.00 | 1.46 | 1.46 |
| 8.05 | 0.22 | 0.43 | 5.00 | 0.00 | 1.46 | 1.46 |
| 8.10 | 0.22 | 0.43 | 5.00 | 0.00 | 1.46 | 1.46 |
| 8.15 | 0.22 | 0.43 | 5.00 | 0.00 | 1.46 | 1.46 |
| 8.20 | 0.22 | 0.43 | 5.00 | 0.00 | 1.46 | 1.46 |
| 8.25 | 0.26 | 0.43 | 5.00 | 0.00 | 1.46 | 1.46 |
| 8.30 | 0.26 | 0.43 | 5.00 | 0.00 | 1.45 | 1.45 |
| 8.35 | 0.26 | 0.43 | 5.00 | 0.00 | 1.45 | 1.45 |
| 8.40 | 0.26 | 0.43 | 5.00 | 0.00 | 1.45 | 1.45 |
| 8.45 | 0.26 | 0.43 | 5.00 | 0.00 | 1.45 | 1.45 |
| 8.50 | 0.26 | 0.43 | 5.00 | 0.00 | 1.45 | 1.45 |
| 8.55 | 0.26 | 0.43 | 5.00 | 0.00 | 1.45 | 1.45 |
| 8.60 | 0.26 | 0.43 | 5.00 | 0.00 | 1.45 | 1.45 |
| 8.65 | 0.26 | 0.43 | 5.00 | 0.00 | 1.45 | 1.45 |
| 8.70 | 0.26 | 0.43 | 5.00 | 0.00 | 1.45 | 1.45 |
| 8.75 | 0.26 | 0.43 | 5.00 | 0.00 | 1.44 | 1.44 |
| 8.80 | 0.26 | 0.43 | 5.00 | 0.00 | 1.44 | 1.44 |
| 8.85 | 0.26 | 0.43 | 5.00 | 0.00 | 1.44 | 1.44 |
| 8.90 | 0.26 | 0.43 | 5.00 | 0.00 | 1.44 | 1.44 |
| 8.95 | 0.26 | 0.43 | 5.00 | 0.00 | 1.44 | 1.44 |
| 9.00 | 0.27 | 0.43 | 5.00 | 0.00 | 1.44 | 1.44 |
| 9.05 | 0.27 | 0.43 | 5.00 | 0.00 | 1.44 | 1.44 |
| 9.10 | 0.27 | 0.43 | 5.00 | 0.00 | 1.43 | 1.43 |
| 9.15 | 0.27 | 0.43 | 5.00 | 0.00 | 1.43 | 1.43 |
| 9.20 | 0.27 | 0.43 | 5.00 | 0.00 | 1.43 | 1.43 |
| 9.25 | 0.27 | 0.43 | 5.00 | 0.00 | 1.43 | 1.43 |
| 9.30 | 0.27 | 0.43 | 5.00 | 0.00 | 1.43 | 1.43 |
| 9.35 | 0.27 | 0.43 | 5.00 | 0.00 | 1.43 | 1.43 |
| 9.40 | 0.27 | 0.43 | 5.00 | 0.00 | 1.42 | 1.42 |
| 9.45 | 0.27 | 0.43 | 5.00 | 0.00 | 1.42 | 1.42 |
| 9.50 | 0.27 | 0.43 | 5.00 | 0.00 | 1.42 | 1.42 |
| 9.55 | 0.27 | 0.43 | 5.00 | 0.00 | 1.42 | 1.42 |
| 9.60 | 0.27 | 0.43 | 5.00 | 0.00 | 1.42 | 1.42 |
| 9.65 | 0.27 | 0.43 | 5.00 | 0.00 | 1.42 | 1.42 |
| 9.70 | 0.27 | 0.43 | 5.00 | 0.00 | 1.41 | 1.41 |
| 9.75 | 0.27 | 0.43 | 5.00 | 0.00 | 1.41 | 1.41 |
| 9.80 | 0.27 | 0.43 | 5.00 | 0.00 | 1.41 | 1.41 |
| 9.85 | 0.27 | 0.43 | 5.00 | 0.00 | 1.41 | 1.41 |
| 9.90 | 0.27 | 0.43 | 5.00 | 0.00 | 1.41 | 1.41 |
| 9.95 | 0.27 | 0.43 | 5.00 | 0.00 | 1.40 | 1.40 |
| 10.00 | 0.27 | 0.43 | 5.00 | 0.00 | 1.40 | 1.40 |

| | | | | Liquefy.sum | | |
|-------|------|------|------|-------------|------|------|
| 10.05 | 0.27 | 0.43 | 5.00 | 0.00 | 1.40 | 1.40 |
| 10.10 | 0.27 | 0.43 | 5.00 | 0.00 | 1.40 | 1.40 |
| 10.15 | 0.27 | 0.43 | 5.00 | 0.00 | 1.40 | 1.40 |
| 10.20 | 0.27 | 0.43 | 5.00 | 0.00 | 1.39 | 1.39 |
| 10.25 | 0.27 | 0.43 | 5.00 | 0.00 | 1.39 | 1.39 |
| 10.30 | 0.27 | 0.43 | 5.00 | 0.00 | 1.39 | 1.39 |
| 10.35 | 0.27 | 0.43 | 5.00 | 0.00 | 1.39 | 1.39 |
| 10.40 | 0.27 | 0.43 | 5.00 | 0.00 | 1.38 | 1.38 |
| 10.45 | 0.27 | 0.43 | 5.00 | 0.00 | 1.38 | 1.38 |
| 10.50 | 0.27 | 0.43 | 5.00 | 0.00 | 1.38 | 1.38 |
| 10.55 | 0.27 | 0.43 | 5.00 | 0.00 | 1.37 | 1.37 |
| 10.60 | 0.27 | 0.43 | 5.00 | 0.00 | 1.37 | 1.37 |
| 10.65 | 0.27 | 0.43 | 5.00 | 0.00 | 1.37 | 1.37 |
| 10.70 | 0.27 | 0.43 | 5.00 | 0.00 | 1.37 | 1.37 |
| 10.75 | 0.27 | 0.43 | 5.00 | 0.00 | 1.36 | 1.36 |
| 10.80 | 0.27 | 0.43 | 5.00 | 0.00 | 1.36 | 1.36 |
| 10.85 | 0.27 | 0.43 | 5.00 | 0.00 | 1.36 | 1.36 |
| 10.90 | 0.27 | 0.43 | 5.00 | 0.00 | 1.35 | 1.35 |
| 10.95 | 0.27 | 0.43 | 5.00 | 0.00 | 1.35 | 1.35 |
| 11.00 | 0.27 | 0.43 | 5.00 | 0.00 | 1.35 | 1.35 |
| 11.05 | 0.27 | 0.43 | 5.00 | 0.00 | 1.34 | 1.34 |
| 11.10 | 0.27 | 0.43 | 5.00 | 0.00 | 1.34 | 1.34 |
| 11.15 | 0.27 | 0.43 | 5.00 | 0.00 | 1.34 | 1.34 |
| 11.20 | 0.27 | 0.43 | 5.00 | 0.00 | 1.34 | 1.34 |
| 11.25 | 0.27 | 0.43 | 5.00 | 0.00 | 1.34 | 1.34 |
| 11.30 | 0.27 | 0.43 | 5.00 | 0.00 | 1.33 | 1.33 |
| 11.35 | 0.27 | 0.43 | 5.00 | 0.00 | 1.33 | 1.33 |
| 11.40 | 0.27 | 0.43 | 5.00 | 0.00 | 1.33 | 1.33 |
| 11.45 | 0.27 | 0.43 | 5.00 | 0.00 | 1.33 | 1.33 |
| 11.50 | 0.27 | 0.43 | 5.00 | 0.00 | 1.33 | 1.33 |
| 11.55 | 0.27 | 0.43 | 5.00 | 0.00 | 1.33 | 1.33 |
| 11.60 | 0.27 | 0.43 | 5.00 | 0.00 | 1.33 | 1.33 |
| 11.65 | 0.27 | 0.43 | 5.00 | 0.00 | 1.33 | 1.33 |
| 11.70 | 0.27 | 0.43 | 5.00 | 0.00 | 1.33 | 1.33 |
| 11.75 | 0.27 | 0.43 | 5.00 | 0.00 | 1.33 | 1.33 |
| 11.80 | 0.27 | 0.43 | 5.00 | 0.00 | 1.32 | 1.32 |
| 11.85 | 0.27 | 0.43 | 5.00 | 0.00 | 1.32 | 1.32 |
| 11.90 | 0.27 | 0.43 | 5.00 | 0.00 | 1.32 | 1.32 |
| 11.95 | 0.27 | 0.43 | 5.00 | 0.00 | 1.32 | 1.32 |
| 12.00 | 0.27 | 0.43 | 5.00 | 0.00 | 1.32 | 1.32 |
| 12.05 | 0.27 | 0.43 | 5.00 | 0.00 | 1.32 | 1.32 |
| 12.10 | 0.27 | 0.43 | 5.00 | 0.00 | 1.32 | 1.32 |
| 12.15 | 0.27 | 0.43 | 5.00 | 0.00 | 1.32 | 1.32 |
| 12.20 | 0.27 | 0.43 | 5.00 | 0.00 | 1.32 | 1.32 |
| 12.25 | 0.27 | 0.43 | 5.00 | 0.00 | 1.32 | 1.32 |
| 12.30 | 0.27 | 0.43 | 5.00 | 0.00 | 1.31 | 1.31 |
| 12.35 | 0.27 | 0.43 | 5.00 | 0.00 | 1.31 | 1.31 |
| 12.40 | 0.27 | 0.43 | 5.00 | 0.00 | 1.31 | 1.31 |
| 12.45 | 0.27 | 0.43 | 5.00 | 0.00 | 1.31 | 1.31 |
| 12.50 | 0.27 | 0.43 | 5.00 | 0.00 | 1.31 | 1.31 |
| 12.55 | 0.27 | 0.43 | 5.00 | 0.00 | 1.31 | 1.31 |
| 12.60 | 0.27 | 0.43 | 5.00 | 0.00 | 1.31 | 1.31 |
| 12.65 | 0.27 | 0.43 | 5.00 | 0.00 | 1.31 | 1.31 |
| 12.70 | 0.27 | 0.43 | 5.00 | 0.00 | 1.31 | 1.31 |
| 12.75 | 0.27 | 0.43 | 5.00 | 0.00 | 1.30 | 1.30 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 12.80 | 0.27 | 0.43 | 5.00 | 0.00 | 1.30 | 1.30 |
| 12.85 | 0.27 | 0.43 | 5.00 | 0.00 | 1.30 | 1.30 |
| 12.90 | 0.27 | 0.43 | 5.00 | 0.00 | 1.30 | 1.30 |
| 12.95 | 0.27 | 0.43 | 5.00 | 0.00 | 1.30 | 1.30 |
| 13.00 | 0.27 | 0.43 | 5.00 | 0.00 | 1.30 | 1.30 |
| 13.05 | 0.27 | 0.43 | 5.00 | 0.00 | 1.30 | 1.30 |
| 13.10 | 0.27 | 0.43 | 5.00 | 0.00 | 1.30 | 1.30 |
| 13.15 | 0.27 | 0.43 | 5.00 | 0.00 | 1.29 | 1.29 |
| 13.20 | 0.26 | 0.43 | 5.00 | 0.00 | 1.29 | 1.29 |
| 13.25 | 0.26 | 0.43 | 5.00 | 0.00 | 1.29 | 1.29 |
| 13.30 | 0.26 | 0.43 | 5.00 | 0.00 | 1.29 | 1.29 |
| 13.35 | 0.26 | 0.43 | 5.00 | 0.00 | 1.29 | 1.29 |
| 13.40 | 0.26 | 0.43 | 5.00 | 0.00 | 1.29 | 1.29 |
| 13.45 | 0.26 | 0.43 | 5.00 | 0.00 | 1.29 | 1.29 |
| 13.50 | 0.26 | 0.43 | 5.00 | 0.00 | 1.29 | 1.29 |
| 13.55 | 0.26 | 0.43 | 5.00 | 0.00 | 1.28 | 1.28 |
| 13.60 | 0.26 | 0.43 | 5.00 | 0.00 | 1.28 | 1.28 |
| 13.65 | 0.26 | 0.43 | 5.00 | 0.00 | 1.28 | 1.28 |
| 13.70 | 0.26 | 0.43 | 5.00 | 0.00 | 1.28 | 1.28 |
| 13.75 | 0.26 | 0.43 | 5.00 | 0.00 | 1.28 | 1.28 |
| 13.80 | 0.26 | 0.43 | 5.00 | 0.00 | 1.28 | 1.28 |
| 13.85 | 0.26 | 0.43 | 5.00 | 0.00 | 1.28 | 1.28 |
| 13.90 | 0.26 | 0.43 | 5.00 | 0.00 | 1.28 | 1.28 |
| 13.95 | 0.26 | 0.43 | 5.00 | 0.00 | 1.27 | 1.27 |
| 14.00 | 0.26 | 0.43 | 5.00 | 0.00 | 1.27 | 1.27 |
| 14.05 | 0.26 | 0.43 | 5.00 | 0.00 | 1.27 | 1.27 |
| 14.10 | 0.26 | 0.43 | 5.00 | 0.00 | 1.27 | 1.27 |
| 14.15 | 0.26 | 0.43 | 5.00 | 0.00 | 1.27 | 1.27 |
| 14.20 | 0.26 | 0.43 | 5.00 | 0.00 | 1.27 | 1.27 |
| 14.25 | 0.26 | 0.43 | 5.00 | 0.00 | 1.27 | 1.27 |
| 14.30 | 0.26 | 0.43 | 5.00 | 0.00 | 1.26 | 1.26 |
| 14.35 | 0.26 | 0.43 | 5.00 | 0.00 | 1.26 | 1.26 |
| 14.40 | 0.26 | 0.43 | 5.00 | 0.00 | 1.26 | 1.26 |
| 14.45 | 0.26 | 0.43 | 5.00 | 0.00 | 1.26 | 1.26 |
| 14.50 | 0.26 | 0.43 | 5.00 | 0.00 | 1.26 | 1.26 |
| 14.55 | 0.26 | 0.43 | 5.00 | 0.00 | 1.26 | 1.26 |
| 14.60 | 0.26 | 0.43 | 5.00 | 0.00 | 1.26 | 1.26 |
| 14.65 | 0.26 | 0.43 | 5.00 | 0.00 | 1.25 | 1.25 |
| 14.70 | 0.26 | 0.43 | 5.00 | 0.00 | 1.25 | 1.25 |
| 14.75 | 0.26 | 0.43 | 5.00 | 0.00 | 1.25 | 1.25 |
| 14.80 | 0.31 | 0.43 | 5.00 | 0.00 | 1.25 | 1.25 |
| 14.85 | 0.31 | 0.43 | 5.00 | 0.00 | 1.25 | 1.25 |
| 14.90 | 0.31 | 0.43 | 5.00 | 0.00 | 1.25 | 1.25 |
| 14.95 | 0.31 | 0.43 | 5.00 | 0.00 | 1.25 | 1.25 |
| 15.00 | 0.31 | 0.43 | 5.00 | 0.00 | 1.25 | 1.25 |
| 15.05 | 0.31 | 0.43 | 5.00 | 0.00 | 1.24 | 1.24 |
| 15.10 | 0.30 | 0.43 | 5.00 | 0.00 | 1.24 | 1.24 |
| 15.15 | 0.30 | 0.43 | 5.00 | 0.00 | 1.24 | 1.24 |
| 15.20 | 0.30 | 0.43 | 5.00 | 0.00 | 1.24 | 1.24 |
| 15.25 | 0.30 | 0.43 | 5.00 | 0.00 | 1.24 | 1.24 |
| 15.30 | 0.30 | 0.43 | 5.00 | 0.00 | 1.24 | 1.24 |
| 15.35 | 0.29 | 0.43 | 5.00 | 0.00 | 1.24 | 1.24 |
| 15.40 | 0.29 | 0.43 | 5.00 | 0.00 | 1.24 | 1.24 |
| 15.45 | 0.29 | 0.43 | 5.00 | 0.00 | 1.23 | 1.23 |
| 15.50 | 0.29 | 0.43 | 5.00 | 0.00 | 1.23 | 1.23 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 15.55 | 0.28 | 0.43 | 5.00 | 0.00 | 1.23 | 1.23 |
| 15.60 | 0.28 | 0.43 | 5.00 | 0.00 | 1.23 | 1.23 |
| 15.65 | 0.28 | 0.43 | 5.00 | 0.00 | 1.23 | 1.23 |
| 15.70 | 0.28 | 0.43 | 5.00 | 0.00 | 1.23 | 1.23 |
| 15.75 | 0.28 | 0.43 | 5.00 | 0.00 | 1.22 | 1.22 |
| 15.80 | 0.28 | 0.43 | 5.00 | 0.00 | 1.22 | 1.22 |
| 15.85 | 0.27 | 0.43 | 5.00 | 0.00 | 1.22 | 1.22 |
| 15.90 | 0.27 | 0.43 | 5.00 | 0.00 | 1.22 | 1.22 |
| 15.95 | 0.27 | 0.43 | 5.00 | 0.00 | 1.22 | 1.22 |
| 16.00 | 0.27 | 0.43 | 5.00 | 0.00 | 1.22 | 1.22 |
| 16.05 | 0.27 | 0.43 | 5.00 | 0.00 | 1.22 | 1.22 |
| 16.10 | 0.26 | 0.43 | 5.00 | 0.00 | 1.21 | 1.21 |
| 16.15 | 0.26 | 0.43 | 5.00 | 0.00 | 1.21 | 1.21 |
| 16.20 | 0.26 | 0.43 | 5.00 | 0.00 | 1.21 | 1.21 |
| 16.25 | 0.26 | 0.43 | 5.00 | 0.00 | 1.21 | 1.21 |
| 16.30 | 0.26 | 0.43 | 5.00 | 0.00 | 1.21 | 1.21 |
| 16.35 | 0.26 | 0.43 | 5.00 | 0.00 | 1.20 | 1.20 |
| 16.40 | 0.25 | 0.43 | 5.00 | 0.00 | 1.20 | 1.20 |
| 16.45 | 0.25 | 0.43 | 5.00 | 0.00 | 1.20 | 1.20 |
| 16.50 | 0.25 | 0.42 | 5.00 | 0.00 | 1.20 | 1.20 |
| 16.55 | 0.25 | 0.42 | 5.00 | 0.00 | 1.20 | 1.20 |
| 16.60 | 0.25 | 0.42 | 5.00 | 0.00 | 1.19 | 1.19 |
| 16.65 | 0.25 | 0.42 | 5.00 | 0.00 | 1.19 | 1.19 |
| 16.70 | 0.25 | 0.42 | 5.00 | 0.00 | 1.19 | 1.19 |
| 16.75 | 0.24 | 0.42 | 5.00 | 0.00 | 1.19 | 1.19 |
| 16.80 | 0.24 | 0.42 | 5.00 | 0.00 | 1.18 | 1.18 |
| 16.85 | 0.24 | 0.42 | 5.00 | 0.00 | 1.18 | 1.18 |
| 16.90 | 0.24 | 0.42 | 5.00 | 0.00 | 1.18 | 1.18 |
| 16.95 | 0.24 | 0.42 | 5.00 | 0.00 | 1.18 | 1.18 |
| 17.00 | 0.24 | 0.42 | 5.00 | 0.00 | 1.17 | 1.17 |
| 17.05 | 0.24 | 0.42 | 5.00 | 0.00 | 1.17 | 1.17 |
| 17.10 | 0.23 | 0.42 | 5.00 | 0.00 | 1.17 | 1.17 |
| 17.15 | 0.23 | 0.42 | 5.00 | 0.00 | 1.17 | 1.17 |
| 17.20 | 0.23 | 0.42 | 5.00 | 0.00 | 1.16 | 1.16 |
| 17.25 | 0.23 | 0.42 | 5.00 | 0.00 | 1.16 | 1.16 |
| 17.30 | 0.23 | 0.42 | 5.00 | 0.00 | 1.16 | 1.16 |
| 17.35 | 0.23 | 0.42 | 5.00 | 0.00 | 1.16 | 1.16 |
| 17.40 | 0.23 | 0.42 | 5.00 | 0.00 | 1.15 | 1.15 |
| 17.45 | 0.23 | 0.42 | 5.00 | 0.00 | 1.15 | 1.15 |
| 17.50 | 0.22 | 0.42 | 5.00 | 0.00 | 1.15 | 1.15 |
| 17.55 | 0.22 | 0.42 | 5.00 | 0.00 | 1.14 | 1.14 |
| 17.60 | 0.22 | 0.42 | 5.00 | 0.00 | 1.14 | 1.14 |
| 17.65 | 0.22 | 0.42 | 5.00 | 0.00 | 1.14 | 1.14 |
| 17.70 | 0.22 | 0.42 | 5.00 | 0.00 | 1.13 | 1.13 |
| 17.75 | 0.22 | 0.42 | 5.00 | 0.00 | 1.13 | 1.13 |
| 17.80 | 0.22 | 0.42 | 5.00 | 0.00 | 1.13 | 1.13 |
| 17.85 | 0.22 | 0.42 | 5.00 | 0.00 | 1.12 | 1.12 |
| 17.90 | 0.21 | 0.42 | 5.00 | 0.00 | 1.12 | 1.12 |
| 17.95 | 0.21 | 0.42 | 5.00 | 0.00 | 1.12 | 1.12 |
| 18.00 | 0.21 | 0.42 | 5.00 | 0.00 | 1.11 | 1.11 |
| 18.05 | 0.21 | 0.42 | 5.00 | 0.00 | 1.11 | 1.11 |
| 18.10 | 0.21 | 0.42 | 5.00 | 0.00 | 1.10 | 1.10 |
| 18.15 | 0.21 | 0.42 | 5.00 | 0.00 | 1.10 | 1.10 |
| 18.20 | 0.21 | 0.42 | 5.00 | 0.00 | 1.09 | 1.09 |
| 18.25 | 0.21 | 0.42 | 5.00 | 0.00 | 1.09 | 1.09 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 18.30 | 0.21 | 0.42 | 5.00 | 0.00 | 1.09 | 1.09 |
| 18.35 | 0.20 | 0.42 | 5.00 | 0.00 | 1.08 | 1.08 |
| 18.40 | 0.20 | 0.42 | 5.00 | 0.00 | 1.08 | 1.08 |
| 18.45 | 0.20 | 0.42 | 5.00 | 0.00 | 1.07 | 1.07 |
| 18.50 | 0.20 | 0.42 | 5.00 | 0.00 | 1.07 | 1.07 |
| 18.55 | 0.20 | 0.42 | 5.00 | 0.00 | 1.06 | 1.06 |
| 18.60 | 0.20 | 0.42 | 5.00 | 0.00 | 1.06 | 1.06 |
| 18.65 | 0.20 | 0.42 | 5.00 | 0.00 | 1.05 | 1.05 |
| 18.70 | 0.20 | 0.42 | 5.00 | 0.00 | 1.05 | 1.05 |
| 18.75 | 0.20 | 0.42 | 5.00 | 0.00 | 1.04 | 1.04 |
| 18.80 | 0.19 | 0.42 | 5.00 | 0.00 | 1.04 | 1.04 |
| 18.85 | 0.19 | 0.42 | 5.00 | 0.00 | 1.03 | 1.03 |
| 18.90 | 0.19 | 0.42 | 5.00 | 0.00 | 1.02 | 1.02 |
| 18.95 | 0.19 | 0.42 | 5.00 | 0.00 | 1.02 | 1.02 |
| 19.00 | 0.19 | 0.42 | 5.00 | 0.00 | 1.01 | 1.01 |
| 19.05 | 0.19 | 0.42 | 5.00 | 0.00 | 1.01 | 1.01 |
| 19.10 | 0.19 | 0.42 | 5.00 | 0.00 | 1.00 | 1.00 |
| 19.15 | 0.19 | 0.42 | 5.00 | 0.00 | 0.99 | 0.99 |
| 19.20 | 0.19 | 0.42 | 5.00 | 0.00 | 0.99 | 0.99 |
| 19.25 | 0.18 | 0.42 | 5.00 | 0.00 | 0.98 | 0.98 |
| 19.30 | 0.18 | 0.42 | 5.00 | 0.00 | 0.97 | 0.97 |
| 19.35 | 0.18 | 0.42 | 5.00 | 0.00 | 0.96 | 0.96 |
| 19.40 | 0.18 | 0.42 | 5.00 | 0.00 | 0.96 | 0.96 |
| 19.45 | 0.18 | 0.42 | 5.00 | 0.00 | 0.95 | 0.95 |
| 19.50 | 0.18 | 0.42 | 5.00 | 0.00 | 0.94 | 0.94 |
| 19.55 | 0.18 | 0.42 | 5.00 | 0.00 | 0.93 | 0.93 |
| 19.60 | 0.18 | 0.42 | 5.00 | 0.00 | 0.92 | 0.92 |
| 19.65 | 0.18 | 0.42 | 5.00 | 0.00 | 0.92 | 0.92 |
| 19.70 | 0.18 | 0.42 | 5.00 | 0.00 | 0.91 | 0.91 |
| 19.75 | 0.17 | 0.42 | 5.00 | 0.00 | 0.90 | 0.90 |
| 19.80 | 0.17 | 0.42 | 5.00 | 0.00 | 0.89 | 0.89 |
| 19.85 | 0.17 | 0.42 | 5.00 | 0.00 | 0.88 | 0.88 |
| 19.90 | 0.17 | 0.42 | 5.00 | 0.00 | 0.87 | 0.87 |
| 19.95 | 0.17 | 0.42 | 5.00 | 0.00 | 0.86 | 0.86 |
| 20.00 | 0.17 | 0.42 | 5.00 | 0.00 | 0.85 | 0.85 |
| 20.05 | 0.17 | 0.42 | 5.00 | 0.00 | 0.84 | 0.84 |
| 20.10 | 0.17 | 0.42 | 5.00 | 0.00 | 0.83 | 0.83 |
| 20.15 | 0.17 | 0.42 | 5.00 | 0.00 | 0.82 | 0.82 |
| 20.20 | 0.17 | 0.42 | 5.00 | 0.00 | 0.81 | 0.81 |
| 20.25 | 0.18 | 0.42 | 5.00 | 0.00 | 0.80 | 0.80 |
| 20.30 | 0.18 | 0.42 | 5.00 | 0.00 | 0.79 | 0.79 |
| 20.35 | 0.18 | 0.42 | 5.00 | 0.00 | 0.78 | 0.78 |
| 20.40 | 0.18 | 0.42 | 5.00 | 0.00 | 0.77 | 0.77 |
| 20.45 | 0.18 | 0.42 | 5.00 | 0.00 | 0.76 | 0.76 |
| 20.50 | 0.18 | 0.42 | 5.00 | 0.00 | 0.75 | 0.75 |
| 20.55 | 0.18 | 0.42 | 5.00 | 0.00 | 0.74 | 0.74 |
| 20.60 | 0.18 | 0.42 | 5.00 | 0.00 | 0.73 | 0.73 |
| 20.65 | 0.19 | 0.42 | 5.00 | 0.00 | 0.73 | 0.73 |
| 20.70 | 0.19 | 0.42 | 5.00 | 0.00 | 0.72 | 0.72 |
| 20.75 | 0.19 | 0.42 | 5.00 | 0.00 | 0.71 | 0.71 |
| 20.80 | 0.19 | 0.42 | 5.00 | 0.00 | 0.70 | 0.70 |
| 20.85 | 0.19 | 0.42 | 5.00 | 0.00 | 0.69 | 0.69 |
| 20.90 | 0.19 | 0.42 | 5.00 | 0.00 | 0.68 | 0.68 |
| 20.95 | 0.19 | 0.42 | 5.00 | 0.00 | 0.68 | 0.68 |
| 21.00 | 0.19 | 0.42 | 5.00 | 0.00 | 0.67 | 0.67 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 21.05 | 0.19 | 0.42 | 5.00 | 0.00 | 0.66 | 0.66 |
| 21.10 | 0.20 | 0.42 | 5.00 | 0.00 | 0.65 | 0.65 |
| 21.15 | 0.20 | 0.42 | 5.00 | 0.00 | 0.65 | 0.65 |
| 21.20 | 0.20 | 0.42 | 5.00 | 0.00 | 0.64 | 0.64 |
| 21.25 | 0.20 | 0.42 | 5.00 | 0.00 | 0.63 | 0.63 |
| 21.30 | 0.20 | 0.42 | 5.00 | 0.00 | 0.62 | 0.62 |
| 21.35 | 0.20 | 0.42 | 5.00 | 0.00 | 0.62 | 0.62 |
| 21.40 | 0.20 | 0.42 | 5.00 | 0.00 | 0.61 | 0.61 |
| 21.45 | 0.20 | 0.42 | 5.00 | 0.00 | 0.60 | 0.60 |
| 21.50 | 0.21 | 0.42 | 5.00 | 0.00 | 0.60 | 0.60 |
| 21.55 | 0.21 | 0.42 | 5.00 | 0.00 | 0.59 | 0.59 |
| 21.60 | 0.21 | 0.42 | 5.00 | 0.00 | 0.58 | 0.58 |
| 21.65 | 0.21 | 0.42 | 5.00 | 0.00 | 0.58 | 0.58 |
| 21.70 | 0.21 | 0.42 | 5.00 | 0.00 | 0.57 | 0.57 |
| 21.75 | 0.21 | 0.42 | 5.00 | 0.00 | 0.56 | 0.56 |
| 21.80 | 0.21 | 0.42 | 5.00 | 0.00 | 0.56 | 0.56 |
| 21.85 | 0.21 | 0.42 | 5.00 | 0.00 | 0.55 | 0.55 |
| 21.90 | 0.21 | 0.42 | 5.00 | 0.00 | 0.54 | 0.54 |
| 21.95 | 0.22 | 0.42 | 5.00 | 0.00 | 0.54 | 0.54 |
| 22.00 | 0.22 | 0.42 | 5.00 | 0.00 | 0.53 | 0.53 |
| 22.05 | 0.22 | 0.42 | 5.00 | 0.00 | 0.53 | 0.53 |
| 22.10 | 0.22 | 0.42 | 5.00 | 0.00 | 0.52 | 0.52 |
| 22.15 | 0.22 | 0.42 | 5.00 | 0.00 | 0.51 | 0.51 |
| 22.20 | 0.22 | 0.42 | 5.00 | 0.00 | 0.51 | 0.51 |
| 22.25 | 0.22 | 0.42 | 5.00 | 0.00 | 0.50 | 0.50 |
| 22.30 | 0.22 | 0.42 | 5.00 | 0.00 | 0.50 | 0.50 |
| 22.35 | 0.23 | 0.42 | 5.00 | 0.00 | 0.49 | 0.49 |
| 22.40 | 0.23 | 0.42 | 5.00 | 0.00 | 0.48 | 0.48 |
| 22.45 | 0.23 | 0.42 | 5.00 | 0.00 | 0.48 | 0.48 |
| 22.50 | 0.23 | 0.42 | 5.00 | 0.00 | 0.47 | 0.47 |
| 22.55 | 0.23 | 0.42 | 5.00 | 0.00 | 0.47 | 0.47 |
| 22.60 | 0.23 | 0.42 | 5.00 | 0.00 | 0.46 | 0.46 |
| 22.65 | 0.23 | 0.42 | 5.00 | 0.00 | 0.46 | 0.46 |
| 22.70 | 0.23 | 0.42 | 5.00 | 0.00 | 0.45 | 0.45 |
| 22.75 | 0.23 | 0.42 | 5.00 | 0.00 | 0.45 | 0.45 |
| 22.80 | 0.24 | 0.42 | 5.00 | 0.00 | 0.44 | 0.44 |
| 22.85 | 0.24 | 0.42 | 5.00 | 0.00 | 0.44 | 0.44 |
| 22.90 | 0.24 | 0.42 | 5.00 | 0.00 | 0.43 | 0.43 |
| 22.95 | 0.24 | 0.42 | 5.00 | 0.00 | 0.43 | 0.43 |
| 23.00 | 0.24 | 0.42 | 5.00 | 0.00 | 0.42 | 0.42 |
| 23.05 | 0.24 | 0.42 | 5.00 | 0.00 | 0.42 | 0.42 |
| 23.10 | 0.24 | 0.42 | 5.00 | 0.00 | 0.41 | 0.41 |
| 23.15 | 0.25 | 0.42 | 5.00 | 0.00 | 0.41 | 0.41 |
| 23.20 | 0.25 | 0.42 | 5.00 | 0.00 | 0.40 | 0.40 |
| 23.25 | 0.25 | 0.42 | 5.00 | 0.00 | 0.40 | 0.40 |
| 23.30 | 0.25 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 23.35 | 0.25 | 0.42 | 5.00 | 0.00 | 0.39 | 0.39 |
| 23.40 | 0.25 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 23.45 | 0.25 | 0.42 | 5.00 | 0.00 | 0.38 | 0.38 |
| 23.50 | 0.25 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 23.55 | 0.26 | 0.42 | 5.00 | 0.00 | 0.37 | 0.37 |
| 23.60 | 0.26 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 23.65 | 0.26 | 0.42 | 5.00 | 0.00 | 0.36 | 0.36 |
| 23.70 | 0.26 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 23.75 | 0.26 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 23.80 | 0.26 | 0.42 | 5.00 | 0.00 | 0.35 | 0.35 |
| 23.85 | 0.26 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 23.90 | 0.27 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 23.95 | 0.27 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 24.00 | 0.27 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 24.05 | 0.27 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 24.10 | 0.27 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 24.15 | 0.27 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 24.20 | 0.27 | 0.42 | 5.00 | 0.00 | 0.34 | 0.34 |
| 24.25 | 0.28 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 24.30 | 0.28 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 24.35 | 0.28 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 24.40 | 0.28 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 24.45 | 0.28 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 24.50 | 0.28 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 24.55 | 0.28 | 0.42 | 5.00 | 0.00 | 0.33 | 0.33 |
| 24.60 | 0.29 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.65 | 0.29 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.70 | 0.29 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.75 | 0.29 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.80 | 0.29 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.85 | 0.29 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.90 | 0.30 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 24.95 | 0.30 | 0.42 | 5.00 | 0.00 | 0.32 | 0.32 |
| 25.00 | 0.30 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.05 | 0.30 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.10 | 0.30 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.15 | 0.30 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.20 | 0.30 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.25 | 0.30 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.30 | 0.31 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.35 | 0.31 | 0.42 | 5.00 | 0.00 | 0.31 | 0.31 |
| 25.40 | 0.31 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.45 | 0.31 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.50 | 0.31 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.55 | 0.31 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.60 | 0.31 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.65 | 0.31 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.70 | 0.31 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.75 | 0.32 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.80 | 0.32 | 0.42 | 5.00 | 0.00 | 0.30 | 0.30 |
| 25.85 | 0.32 | 0.42 | 5.00 | 0.00 | 0.29 | 0.29 |
| 25.90 | 0.32 | 0.42 | 5.00 | 0.00 | 0.29 | 0.29 |
| 25.95 | 0.32 | 0.42 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.00 | 0.32 | 0.42 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.05 | 0.32 | 0.42 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.10 | 0.32 | 0.42 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.15 | 0.33 | 0.42 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.20 | 0.33 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.25 | 0.33 | 0.41 | 5.00 | 0.00 | 0.29 | 0.29 |
| 26.30 | 0.33 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 26.35 | 0.33 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 26.40 | 0.33 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 26.45 | 0.33 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 26.50 | 0.34 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 26.55 | 0.34 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 26.60 | 0.34 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 26.65 | 0.34 | 0.41 | 5.00 | 0.00 | 0.28 | 0.28 |
| 26.70 | 0.34 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 26.75 | 0.34 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 26.80 | 0.34 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 26.85 | 0.35 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 26.90 | 0.35 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 26.95 | 0.35 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 27.00 | 0.35 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 27.05 | 0.35 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 27.10 | 0.35 | 0.41 | 5.00 | 0.00 | 0.27 | 0.27 |
| 27.15 | 0.35 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 27.20 | 0.36 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 27.25 | 0.36 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 27.30 | 0.36 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 27.35 | 0.36 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 27.40 | 0.36 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 27.45 | 0.37 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 27.50 | 0.37 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 27.55 | 0.37 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 27.60 | 0.38 | 0.41 | 5.00 | 0.00 | 0.26 | 0.26 |
| 27.65 | 0.38 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 27.70 | 0.38 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 27.75 | 0.39 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 27.80 | 0.39 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 27.85 | 0.40 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 27.90 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 27.95 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 28.00 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 28.05 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 28.10 | 0.50 | 0.41 | 5.00 | 0.00 | 0.25 | 0.25 |
| 28.15 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 28.20 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 28.25 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 28.30 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 28.35 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 28.40 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 28.45 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 28.50 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 28.55 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 28.60 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 28.65 | 0.50 | 0.41 | 5.00 | 0.00 | 0.24 | 0.24 |
| 28.70 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 28.75 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 28.80 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 28.85 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 28.90 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 28.95 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 29.00 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 29.05 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 29.10 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 29.15 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 29.20 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 29.25 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |

| Liquefy.sum | | | | | | |
|-------------|------|------|------|------|------|------|
| 29.30 | 0.50 | 0.41 | 5.00 | 0.00 | 0.23 | 0.23 |
| 29.35 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 29.40 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 29.45 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 29.50 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 29.55 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 29.60 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 29.65 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 29.70 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 29.75 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 29.80 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 29.85 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 29.90 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 29.95 | 0.50 | 0.41 | 5.00 | 0.00 | 0.22 | 0.22 |
| 30.00 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.05 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.10 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.15 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.20 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.25 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.30 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.35 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.40 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.45 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.50 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.55 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.60 | 0.50 | 0.41 | 5.00 | 0.00 | 0.21 | 0.21 |
| 30.65 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 30.70 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 30.75 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 30.80 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 30.85 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 30.90 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 30.95 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 31.00 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 31.05 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 31.10 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 31.15 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 31.20 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 31.25 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 31.30 | 0.50 | 0.41 | 5.00 | 0.00 | 0.20 | 0.20 |
| 31.35 | 0.50 | 0.41 | 5.00 | 0.00 | 0.19 | 0.19 |
| 31.40 | 0.50 | 0.41 | 5.00 | 0.00 | 0.19 | 0.19 |
| 31.45 | 0.50 | 0.41 | 5.00 | 0.00 | 0.19 | 0.19 |
| 31.50 | 0.50 | 0.41 | 5.00 | 0.00 | 0.19 | 0.19 |
| 31.55 | 0.50 | 0.41 | 5.00 | 0.00 | 0.19 | 0.19 |
| 31.60 | 0.50 | 0.41 | 5.00 | 0.00 | 0.19 | 0.19 |
| 31.65 | 0.50 | 0.41 | 5.00 | 0.00 | 0.19 | 0.19 |
| 31.70 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 31.75 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 31.80 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 31.85 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 31.90 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 31.95 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |
| 32.00 | 0.50 | 0.40 | 5.00 | 0.00 | 0.19 | 0.19 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 32.05 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.10 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.15 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.20 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.25 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.30 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.35 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.40 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.45 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.50 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.55 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.60 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.65 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.70 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.75 | 0.50 | 0.40 | 5.00 | 0.00 | 0.18 | 0.18 |
| 32.80 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 32.85 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 32.90 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 32.95 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 33.00 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 33.05 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 33.10 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 33.15 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 33.20 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 33.25 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 33.30 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 33.35 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 33.40 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 33.45 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 33.50 | 0.50 | 0.40 | 5.00 | 0.00 | 0.17 | 0.17 |
| 33.55 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 33.60 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 33.65 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 33.70 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 33.75 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 33.80 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 33.85 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 33.90 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 33.95 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 34.00 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 34.05 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 34.10 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 34.15 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 34.20 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 34.25 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 34.30 | 0.50 | 0.40 | 5.00 | 0.00 | 0.16 | 0.16 |
| 34.35 | 0.50 | 0.40 | 5.00 | 0.00 | 0.15 | 0.15 |
| 34.40 | 0.50 | 0.40 | 5.00 | 0.00 | 0.15 | 0.15 |
| 34.45 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 34.50 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 34.55 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 34.60 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 34.65 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 34.70 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 34.75 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 34.80 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 34.85 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 34.90 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 34.95 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.00 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.05 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.10 | 0.50 | 0.39 | 5.00 | 0.00 | 0.15 | 0.15 |
| 35.15 | 0.50 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.20 | 0.50 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.25 | 0.50 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.30 | 0.50 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.35 | 0.50 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.40 | 0.50 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.45 | 0.50 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.50 | 0.50 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.55 | 0.50 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.60 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.65 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.70 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.75 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.80 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.85 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.90 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 35.95 | 0.49 | 0.39 | 5.00 | 0.00 | 0.14 | 0.14 |
| 36.00 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.05 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.10 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.15 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.20 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.25 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.30 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.35 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.40 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.45 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.50 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.55 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.60 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.65 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.70 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.75 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.80 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.85 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.90 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 36.95 | 0.49 | 0.39 | 5.00 | 0.00 | 0.13 | 0.13 |
| 37.00 | 0.49 | 0.39 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.05 | 0.49 | 0.39 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.10 | 0.49 | 0.39 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.15 | 0.49 | 0.39 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.20 | 0.49 | 0.39 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.25 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.30 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.35 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.40 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.45 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.50 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 37.55 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.60 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.65 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.70 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.75 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.80 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.85 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.90 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 37.95 | 0.49 | 0.38 | 5.00 | 0.00 | 0.12 | 0.12 |
| 38.00 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.05 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.10 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.15 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.20 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.25 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.30 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.35 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.40 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.45 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.50 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.55 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.60 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.65 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.70 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.75 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.80 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.85 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.90 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 38.95 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 39.00 | 0.49 | 0.38 | 5.00 | 0.00 | 0.11 | 0.11 |
| 39.05 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.10 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.15 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.20 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.25 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.30 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.35 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.40 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.45 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.50 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.55 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.60 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.65 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.70 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.75 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.80 | 0.49 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.85 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.90 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 39.95 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 40.00 | 0.48 | 0.38 | 5.00 | 0.00 | 0.10 | 0.10 |
| 40.05 | 0.48 | 0.37 | 5.00 | 0.00 | 0.10 | 0.10 |
| 40.10 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.15 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.20 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.25 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 40.30 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.35 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.40 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.45 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.50 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.55 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.60 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.65 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.70 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.75 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.80 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.85 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.90 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 40.95 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 41.00 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 41.05 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 41.10 | 0.48 | 0.37 | 5.00 | 0.00 | 0.09 | 0.09 |
| 41.15 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.20 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.25 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.30 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.35 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.40 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.45 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.50 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.55 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.60 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.65 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.70 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.75 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.80 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.85 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.90 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 41.95 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 42.00 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 42.05 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 42.10 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 42.15 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 42.20 | 0.48 | 0.37 | 5.00 | 0.00 | 0.08 | 0.08 |
| 42.25 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.30 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.35 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.40 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.45 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.50 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.55 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.60 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.65 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.70 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.75 | 0.48 | 0.37 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.80 | 0.48 | 0.36 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.85 | 0.48 | 0.36 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.90 | 0.48 | 0.36 | 5.00 | 0.00 | 0.07 | 0.07 |
| 42.95 | 0.48 | 0.36 | 5.00 | 0.00 | 0.07 | 0.07 |
| 43.00 | 0.48 | 0.36 | 5.00 | 0.00 | 0.07 | 0.07 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 43.05 | 0.48 | 0.36 | 5.00 | 0.00 | 0.07 | 0.07 |
| 43.10 | 0.48 | 0.36 | 5.00 | 0.00 | 0.07 | 0.07 |
| 43.15 | 0.48 | 0.36 | 5.00 | 0.00 | 0.07 | 0.07 |
| 43.20 | 0.48 | 0.36 | 5.00 | 0.00 | 0.07 | 0.07 |
| 43.25 | 0.48 | 0.36 | 5.00 | 0.00 | 0.07 | 0.07 |
| 43.30 | 0.48 | 0.36 | 5.00 | 0.00 | 0.07 | 0.07 |
| 43.35 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.40 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.45 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.50 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.55 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.60 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.65 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.70 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.75 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.80 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.85 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.90 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 43.95 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 44.00 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 44.05 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 44.10 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 44.15 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 44.20 | 0.48 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 44.25 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 44.30 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 44.35 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 44.40 | 0.47 | 0.36 | 5.00 | 0.00 | 0.06 | 0.06 |
| 44.45 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.50 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.55 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.60 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.65 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.70 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.75 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.80 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.85 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.90 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 44.95 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.00 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.05 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.10 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.15 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.20 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.25 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.30 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.35 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.40 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.45 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.50 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.55 | 0.47 | 0.36 | 5.00 | 0.00 | 0.05 | 0.05 |
| 45.60 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.65 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.70 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.75 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 45.80 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.85 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.90 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 45.95 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.00 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.05 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.10 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.15 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.20 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.25 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.30 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.35 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.40 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.45 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.50 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.55 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.60 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.65 | 0.47 | 0.35 | 5.00 | 0.00 | 0.04 | 0.04 |
| 46.70 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.75 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.80 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.85 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.90 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 46.95 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.00 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.05 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.10 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.15 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.20 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.25 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.30 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.35 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.40 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.45 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.50 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.55 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.60 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.65 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.70 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.75 | 0.47 | 0.35 | 5.00 | 0.00 | 0.03 | 0.03 |
| 47.80 | 0.47 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.85 | 0.47 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.90 | 0.47 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 47.95 | 0.47 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.00 | 0.47 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.05 | 0.47 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.10 | 0.47 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.15 | 0.47 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.20 | 0.47 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.25 | 0.47 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.30 | 0.47 | 0.35 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.35 | 0.47 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.40 | 0.47 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.45 | 0.47 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.50 | 0.47 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |

Liquefy.sum

| | | | | | | |
|-------|------|------|------|------|------|------|
| 48.55 | 0.47 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.60 | 0.47 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.65 | 0.47 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.70 | 0.47 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.75 | 0.47 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.80 | 0.47 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.85 | 0.47 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.90 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 48.95 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 49.00 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 49.05 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 49.10 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 49.15 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 49.20 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 49.25 | 0.46 | 0.34 | 5.00 | 0.00 | 0.02 | 0.02 |
| 49.30 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.35 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.40 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.45 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.50 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.55 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.60 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.65 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.70 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.75 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.80 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.85 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.90 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 49.95 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.00 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.05 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.10 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.15 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.20 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.25 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.30 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.35 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.40 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.45 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.50 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.55 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.60 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.65 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.70 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.75 | 0.46 | 0.34 | 5.00 | 0.00 | 0.01 | 0.01 |
| 50.80 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 50.85 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 50.90 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 50.95 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.00 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.05 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.10 | 0.46 | 0.34 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.15 | 0.46 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.20 | 0.46 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.25 | 0.46 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |

| | | | Liquefy.sum | | | |
|-------|------|------|-------------|------|------|------|
| 51.30 | 0.46 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.35 | 0.46 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.40 | 0.46 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.45 | 0.46 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |
| 51.50 | 0.46 | 0.33 | 5.00 | 0.00 | 0.00 | 0.00 |

 * F.S.<1, Liquefaction Potential Zone
 (F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

Units: Unit: qc, fs, Stress or Pressure = atm (1.0581tsf); Unit Weight = pcf; Depth = ft;
 Settlement = in.

 1 atm (atmosphere) = 1 tsf (ton/ft2)
 CRRm Cyclic resistance ratio from soils
 CSRsf Cyclic stress ratio induced by a given earthquake (with user request
 factor of safety)
 F.S. Factor of Safety against liquefaction, F.S.=CRRm/CSRsf
 S_sat Settlement from saturated sands
 S_dry Settlement from Unsaturated Sands
 S_all Total Settlement from Saturated and Unsaturated Sands
 NoLiq No-Liquefy Soils