

CORAL MOUNTAIN RESORT
DRAFT EIR
SCH# 2021020310

TECHNICAL APPENDICES

Geotechnical Report
Appendix G

June 2021

GEOTECHNICAL INVESTIGATION
ANDALUSIA WEST SIDE DEVELOPMENT
WEST OF MADISON STREET
BETWEEN AVENUE 58 & AVENUE 60
LA QUINTA, CALIFORNIA

-Prepared By-

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Project No. 544-19025
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Meriwether Companies
2440 Junction Place, Suite 200
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Subject: Geotechnical Investigation

Project: Andalusia West Side Development
West of Madison Street Between Avenue 58 & Avenue 60
La Quinta, California

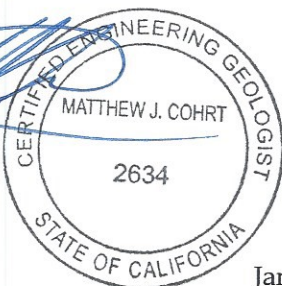
Sladden Engineering is pleased to present the results of the geotechnical investigation performed for the Andalusia West Side development in the City of La Quinta, California. Our services were completed in accordance with our proposal for geotechnical engineering services dated December 12, 2018 and your authorization to proceed with the work. The purpose of our investigation was to explore the subsurface conditions at the site to provide recommendations for foundation design and site preparation relative to the development of the project. 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 remainder of the project remains feasible.

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,
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GEOTECHNICAL INVESTIGATION
ANDALUSIA WEST SIDE DEVELOPMENT
LA QUINTA, CALIFORNIA

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INTRODUCTION

This report presents the results of the geotechnical investigation performed by Sladden Engineering (Sladden) for the Andalusia West Side mixed-use resort/residential development proposed for the project site located on the southwest corner of Avenue 58 and Madison Street in the City of La Quinta, California. The central portion of the site development is located at approximately 33.6212 degrees north latitude and 116.2570 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 near surface and subsurface materials throughout the currently undeveloped site to evaluate their *in-situ* characteristics in order to provide recommendations for site preparation and design criteria for foundation design as well as the design of various site improvements. This study also includes a review of published and unpublished geotechnical reports and geological literature regarding seismicity and potential geologic hazards that may impact the subject site.

PROJECT DESCRIPTION

Based on the preliminary site plans (Vita, 2018), it is our understanding that the proposed project will consist of constructing new residential structures, a multi-story hotel complex, a wave lagoon and various outdoor amenities. Sladden anticipates that the project will also include new concrete flatwork, swimming pools, underground utilities, landscape areas, access roadways, parking areas and various surface improvements. For our analyses we expect that the proposed new residential structures and hotel structures will consist of relatively lightweight one (1) or two (2) story wood-frame structures supported on conventional spread footings and concrete slabs-on-grade or post-tensioned slabs.

Sladden anticipates that grading will consist of generally minor cuts and fills in order to accomplish the desired pad elevations and to provide adequate gradients for site drainage. Significant excavation is expected to accomplish wave lagoon and lake construction. This does not include the removal and re-compaction of loosely placed stockpiled soil that exists within portions of the site. Upon completion of the foundation plans and precise grading plans, Sladden should be retained to verify that the recommendations presented within in this report are 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 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. If these assumed loads vary significantly from the actual loads, we should be consulted to verify the applicability of the recommendations provided.

SCOPE OF SERVICES

The purpose of our investigation was to determine specific engineering characteristics of the surface and near surface soil and evaluate potential geologic and seismic hazards in order to develop foundation design criteria and recommendations for site preparation. Exploration of the site was achieved by drilling ten (10) exploratory boreholes to depths of between approximately 21 and 51 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 ten (10) exploratory boreholes to depths between approximately 21 and 51 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.
- Advancing five (5) exploratory trenches to depths of approximately 5 feet bgs in order evaluate the subsurface conditions along previously identified vegetation linaments.
- The performance of laboratory testing on selected samples to evaluate their engineering characteristics.
- The review of available geologic literature and the discussion of potential geologic hazards.
- The review of various geotechnical reports previously prepared for the project site.
- The performance of 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 Andalusia-Westside development occupies a total area of approximately 377.20 acres. At the time of our investigation, the site was vacant and generally undeveloped with the exception of an old dilapidated farm house located in the central portion of the property. In addition, CVWD (Coachella Valley Water District) irrigation mains were observed on the site along with numerous dirt roads and hiking trails. Various desert vegetation is found throughout the site. The site is located on the west side of Madison Street between Avenue 58 and Avenue 60 in the City of La Quinta, California.

According to the USGS 7.5' Valeria, Martinez Mountain, La Quinta and Indio Quadrangle maps (USGS, 2015), the site is situated at an elevation of between 30 feet and 50 feet below mean sea level (MSL).

No natural ponding water or surface seepage was observed at or near the site during our field investigations. Site drainage appears to be controlled via sheet flow and surface infiltration.

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 – Orocopia 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 undifferentiated Quaternary-age lake deposits (Ql), alluvium (Qal) and Mesozoic granitic rocks (gr). 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 ten (10) exploratory boreholes on-site. The approximate locations of the boreholes are illustrated on the Borehole Location Plan (Figure 3). The boreholes were advanced using a truck-mounted Mobile B-61 drill rig equipped with 8-inch outside diameter (O.D.) hollow stem augers. A representative of Sladden was present to log the materials encountered and retrieve samples for laboratory testing and engineering analysis.

During our field investigation a thin mantle of disturbed soil was encountered to a depth of approximately one (1) to two (2) feet below existing grade in the area of our bores. The disturbed soil consisted of silty sand (SM) and sandy silt (ML). Underlying the fill soil and extending to the maximum depth explored, native alluvium was encountered. Native materials consisted primarily of silty sand (SM) and sandy silt (ML) with minor portions of clay (CL/CH). Generally, granular materials appeared grayish brown, slightly moist to moist, loose to dense and fine-grained. Cohesive layers appeared grayish to olive brown, slightly moist to wet and exhibited low to high plasticity characteristics.

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 and variable across the site.

Groundwater was encountered at depths of approximately 47 feet below existing grade for BH-2 and BH-6 during our field investigation on February 6, 2019. Currently, ongoing aquifer recharge operations are being conducted by Coachella Valley Water District (CVWD). Based on potential impacts to existing nearby developments (including inundation of low-lying improvements), we do not expect that recharging operations will allow groundwater to reach historical high depths in the site vicinity. We anticipate a high groundwater depth of 20 feet or more below existing grade.

Sladden's trench investigation of the site commenced on February 5, 2019 with the excavation of exploratory trenches T-1, T-2 and T-3. Exploratory trenches T-4 and T-5 were excavated on February 6, 2019 (Figures 3 & 4). All five (5) exploratory trenches were excavated to a total depth of approximately five (5) feet bgs. Exploratory trenches were excavated by Sladden Engineering utilizing a track mounted mini excavator equipped with a 2.0-foot wide bucket. The exploratory trenches were excavated to expose the near surface soil in an effort to locate and observe any discontinuities of the soil profile indicative of surface rupture or ground fissures. Geologic logging of all the exploratory trenches was provided by Sladden's Project Geologist working with or under the direction of a State of California Certified Engineering Geologist.

As part of the actual geologic logging process of the trenches, the trench walls were first evaluated to identify the soil stratigraphy and to group soil units. The identified contacts between soil units within the trenches were based on their stratigraphic position, soil type, and the nature of bounding contacts. Once all the preparation was completed, the actual geologic logging was performed by or under the direction of a California Certified Engineering Geologist utilizing the trench wall profiles at a scale of 1 inch equals 5 feet. The trench logs are presented within Appendix A (Plates 1-5).

As a result of Sladden's lineament trench investigation, features indicative of active surface faulting were not encountered within the exploratory trenches excavated.

SEISMICITY AND FAULTING

The southwestern United States is a tectonically active and structurally complex region, dominated by northwest trending dextral faults. Faults in the region are often part of complex fault systems composed of numerous subparallel faults that 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.

Sladden considers the most significant geologic hazard to the project to be the potential for moderate to severe 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).

Based on our research, the site is not currently located within any State of California or County of Riverside designated fault zone (CGS, 2015; RCPR, 2019). 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 other faults in the region.

TABLE 1
CLOSEST KNOWN ACTIVE FAULTS

Fault Name	Distance (Km)	Maximum Event
San Andreas - Coachella	13.9	7.2
San Andreas - Southern	13.9	7.2
San Jacinto - Anza	27.3	7.2
San Jacinto - Coyote Creek	29.3	6.8
Burnt Mountain	37.7	6.5
Eureka Peak	39.2	6.4
San Andreas - San Bernardino	39.3	7.5

2016 CBC SEISMIC DESIGN PARAMETERS

Sladden has reviewed the 2016 California Building Code (CBC) and summarized the current seismic design parameters for the proposed structures. 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. The project Design Map Reports are included within Appendix C (SEAC, 2019).

Risk Category (Table 1.5-1): II

Site Class (Table 1613.3.2): D

S_s (Figure 1613.3.1): 1.5g

S₁ (Figure 1613.3.1): 0.6g

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 X S_s)): 1.5g

S_{m1} (Equation 16-38 (F_v X S₁)): 0.901g

SDS (Equation 16-39 (2/3 X S_{ms})): 1.0g

SD1 (Equation 16-40 (2/3 X S_{m1})): 0.6g

Seismic Design Category: D

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 Jennings (1994), CGS (2015), Rodgers (1965) 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, 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) shear wave velocity (V_{s30}) of 259 m/s, the site could be subjected to ground motions on the order of 0.53g. The peak ground acceleration at the site is judged to have a 475 year return period and a 10 percent chance of exceedence 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.

We have performed seismic settlement calculations utilizing a magnitude of 7.34 (USGS, 2019). Anticipated high groundwater depths were selected at 20 feet bgs.

Calculations indicate potential total seismic settlements of up to 2.10 inches and 1.03 inches for BH-2 and BH-6, respectively. The potential seismically related differential settlements are expected to be less than 1.0 inches. Based upon the general uniformity of the soil and groundwater conditions underlying the site, we expect the maximum differential settlement to occur over a horizontal distance of approximately 50 feet. Accordingly, risks associated with seismic settlements should be considered "low". Our seismic settlement calculations are summarized below and included within Appendix D.

BOREHOLE	PGAm*	Mag.**	F.O.S.	Settlement (in.)	Differential Settlement (in.)
BH-2	0.513g	7.34	1.3	2.10	< 1.0
BH-6	0.513g	7.34	1.3	1.03	< 1.0

- IV. Tsunamis and Seiches. Because the site is situated at an elevated inland location and is not immediately adjacent to any impounded bodies of water, risk associated with tsunamis and seiches is considered negligible.
- V. Slope Failure. The site is located on relatively flat ground except for the ascending slope is located on the west side of the subject site. It is our professional opinion that risks associated with slope instability should not be a controlling factor in project design.
- VI. Expansive Soil. Expansion Index testing of select samples was performed to evaluate expansive potential of the materials underlying the site. Based on the results of our laboratory testing (EI = 1 & 66) the materials underlying the site are considered to have "very low" to "medium" expansion potential for the sandy and silty soil layers, respectively. Because significant grading is expected the expansion potential should be re-evaluated after grading.
- VII. 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 ultimate static settlement is estimated to be less than one inch when using the recommended foundation bearing pressures. As a practical matter, differential static settlement between footings can be assumed as one-half of the total static 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.

Previous studies by ESSW (2012) were conducted to evaluate existing distress to structures, roadways and improvements within the existing Andalusia development (SEC Madison and Avenue 58) and to evaluate the potential for areal subsidence to affect current and future development. ESSW (2012) did not find conclusive evidence of observed distress that could be directly attributed to areal subsidence.

The lineament evaluation performed as a part of this investigation indicates that the previously identified surface lineaments do not appear to be the result of subsidence.

- IX. Flooding and Erosion. Surface erosion was observed along the southwestern portion of our site during our field investigation conducted on February 1, 2019. Risks associated with flooding and erosion should be evaluated and mitigated by the project design Civil Engineer.
- X. 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), Subject: Concrete Mix Designs

CONCLUSIONS

Based on the results of our investigation and our review of the previous geotechnical reports prepared for the property, it is our professional opinion that the project remains feasible from a geotechnical perspective provided that the recommendations included in this report are incorporated into foundation design and carried out through construction. The main geotechnical concerns are the presence of potentially compressible and expansive near-surface native soil and potential seismic settlements.

We recommend that remedial grading within the proposed new building areas include the removal and re-compaction of any loose surface soil. Specific recommendations for site preparation are presented in the Earthwork and Grading section of this report.

Groundwater was encountered at a depth of approximately 47 feet bgs within BH-2 and BH-6. Based on the current depth and anticipated high groundwater depth, we do not expect that groundwater will impact grading operations or construction.

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 B or C. Soil conditions should be verified in the field by a "Competent person" employed by the Contractor.

The following preliminary design 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 subgrade soil, should be performed in accordance with the geotechnical recommendations presented in this report and portions of the local regulatory requirements, as applicable. All earthwork 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 should be cleared of the vegetation, associated root systems and debris. All areas scheduled to receive fill should be cleared of old fills and any irreducible matter. The strippings should be removed off-site, or stockpiled for later use in landscape areas. Undocumented fill soil or loose soil should be removed in its entirety and replaced as engineered fill. Voids left by obstructions should be properly backfilled in accordance with the compaction recommendations of this report.
- b. Preparation of the Residential Building Areas: In order to provide firm and uniform foundation bearing conditions, the primary foundation bearing soil should be over-excavated and re-compacted. Over-excavation should extend to a minimum depth of 3 feet below existing grade or 3 feet below the bottom of the footings, whichever is deeper. Once adequate removals have been verified, the exposed native soil should be scarified, moisture-conditioned and compacted to a minimum of 90 percent relative compaction.

- c. Preparation of the Hotel Building Areas. In order to provide firm and uniform bearing foundation bearing conditions, we recommend over-excavation and re-compaction throughout the building and foundation areas. All artificial fill soil and low density near surface native soil should be removed to a depth of at least 4 feet below existing grade or 4 feet below the bottom of the footings, whichever is greater. Remedial grading should extend laterally, a minimum of five feet beyond the building perimeter. The exposed surface should then be scarified, moisture conditioned to within two percent of 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 six (6) 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 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 material 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 verify proper placement of the fill materials. Table 2 provides a summary of the excavation and compaction recommendations.

**TABLE 2
SUMMARY OF RECOMMENDATIONS**

*Remedial Grading	Over-excavation and re-compaction within the residential building areas and extending laterally for 5 feet beyond the building limits and to a minimum of 3 feet below existing grade or 3 feet below the bottom of the footings, whichever is deeper. Over-excavation and re-compaction within the hotel building areas and extending laterally for 5 feet beyond the building limits and to a minimum of 4 feet below existing grade or 4 feet below the bottom of the footings, whichever is deeper.
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.
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.

- d. Shrinkage and Subsidence. Volumetric shrinkage of the material that is excavated and replaced as controlled compacted fill should be anticipated. We estimate that the shrinkage could vary from 10 to 25 percent. Subsidence of the surfaces that are scarified and compacted should be between 1 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.

FOUNDATIONS: CONVENTIONAL SHALLOW SPREAD FOOTINGS

Conventional shallow spread footings may be used for building support provided that the potential seismic settlements are accommodated in design. Load bearing walls may be supported on continuous spread footings and interior columns may be supported on isolated pad footings. All footings should be founded upon properly engineered fill and should have a minimum embedment depth of 18 inches measured from the lowest adjacent finished grade. Continuous and isolated footings should have minimum widths of 18 inches and 24 inches, respectively. Continuous and isolated footings placed on compact engineered fill soil may be designed using allowable (net) bearing pressures of 1800 and 2000 pounds per square foot (psf), respectively. Allowable increases of 250 psf for each additional 1 foot in width and 250 psf for each additional 6 inches in depth may be utilized, if desired. The maximum allowable bearing pressure should be 3,000 psf. The allowable bearing pressures apply to combined dead and sustained live loads.

The allowable bearing pressure may be increased by one-third when considering transient live loads, including seismic and wind forces. All footings should be reinforced in accordance with the project structural engineer's recommendations.

Based on the allowable bearing pressures recommended above, total static settlement of the shallow footings is anticipated to be less than one-inch, provided that foundation area preparation conforms to the recommendations described in this report. Differential static settlement is anticipated to be approximately one-half of the total settlement for similarly loaded footings spaced up to approximately 50 feet apart. The previously discussed seismic settlement should also be considered in design.

Lateral load resistance for the spread footings will be developed by passive soil pressure against the sides of the footings below grade and by friction acting at the base of the concrete footings bearing on compacted fill. 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 or the 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. Excavated soil generated from footing and/or utility trenches should not be stockpiled within the building envelope or in areas of exterior concrete flatwork.

POST-TENSIONED SLABS

Post-tensioned slabs may be considered for the proposed structures. We have evaluated the on-site soil for construction of post-tensioned foundation systems in general accordance with design specifications of the Post Tensioning Institute. Post-tensioned slabs should be designed to be rigid and capable of spanning areas of non-uniform support and meet the following criteria:

1. Bearing Capacity = 1500 psf
2. Potential Liquefaction Induced Differential Settlement = 1.00 inches (over a horizontal distance of 50 feet)
3. Coefficient of Friction = 0.40

SLABS-ON-GRADE

In order to reduce the risk of heave, cracking and settlement, concrete slabs-on-grade should be placed on properly compacted soil as outlined in the previous sections of this report. The slab subgrades should remain near optimum moisture content and should not be permitted to dry prior to concrete placement. All slab subgrades should be firm and unyielding. Disturbed soil should be removed and then replaced and compacted to a minimum of 90 percent relative compaction.

Slab thickness and reinforcement should be determined by the Structural Engineer. All slab reinforcement should be supported on concrete chairs to ensure that reinforcement is placed at slab mid-height. Final slab-on-grade designs should be in accordance with the structural engineer's recommendations.

Slabs with moisture sensitive surfaces should be underlain with a moisture vapor retarder consisting of a polyvinyl chloride (pvc) 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.

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 free-draining backfill conditions. The active pressure should be increased to 55 pcf equivalent fluid pressure where sloping backfill conditions (up to 2 to 1 H:V) are expected. At rest pressures should be used for retaining walls that are restrained from movement. At rest pressures may be estimated using an equivalent fluid weight of 55 pcf for native backfill soil with level drained conditions. Seismic pressures must be considered in the design of retaining walls in excess of 6 feet in height. Seismic pressures can be provided once specific wall heights and configurations are known.

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. R-Values of 10 for silty soil and 66 for sandy soil were determined by testing. A design R-Value of 50 was assumed to develop the following preliminary pavement design sections. The subgrade soil should be tested for R-Value after grading and the final pavement design should be based upon the R-Value of subgrade soil. For Pavement design, a Traffic Index (TI) of 6.0 was used for the light duty pavements (on site residential streets and parking areas) and a Traffic Index of 7.5 was assumed for heavy duty pavements (collector streets). 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 Thickness	
	TI=6.0	TI=7.5
Asphalt Concrete Surface Course	3.0 inches	4.0 inches
Class II Aggregate Base Course	4.5 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 Section 39. Class II aggregate base 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 and subgrade should be compacted to at least 90 percent of maximum dry density as determined by ASTM Test Method D 1557.

CORROSION SERIES

The soluble sulfate concentrations of the surface soil were determined to be 600 and 280 parts per million (ppm). The soil is considered to have a "negligible" corrosion potential with respect to concrete. However, based upon our previous experience in the project vicinity, the use of Type V cement and special sulfate resistant concrete mixes may be necessary for structural concrete. The 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 9.0. Based on soluble chloride concentration testing (180 and 90 ppm), the soil is considered to have a "low" corrosion potential with respect to normal grade steel.

The minimum resistivity of the surface soil was found to be 970 and 2600 ohm-cm, that indicates the site soil is considered to have a "severe" corrosion potential with respect to ferrous metal installations. A corrosion expert should be retained to provide appropriate corrosion protection measures for corrosion sensitive installations.

UTILITY TRENCH BACKFILL

All utility trench backfill should be compacted to a minimum of 90 percent relative compaction. 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 geotechnical consultant 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 pouring concrete.

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 us prior to construction to confirm that the full intent of the recommendations presented herein have been applied to design and construction. Following the 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 subgrade soil and 95 percent for Class II aggregate base as obtained by the ASTM Test Method D1557. Where testing indicates insufficient density, additional compactive effort shall be applied until retesting indicates satisfactory compaction.

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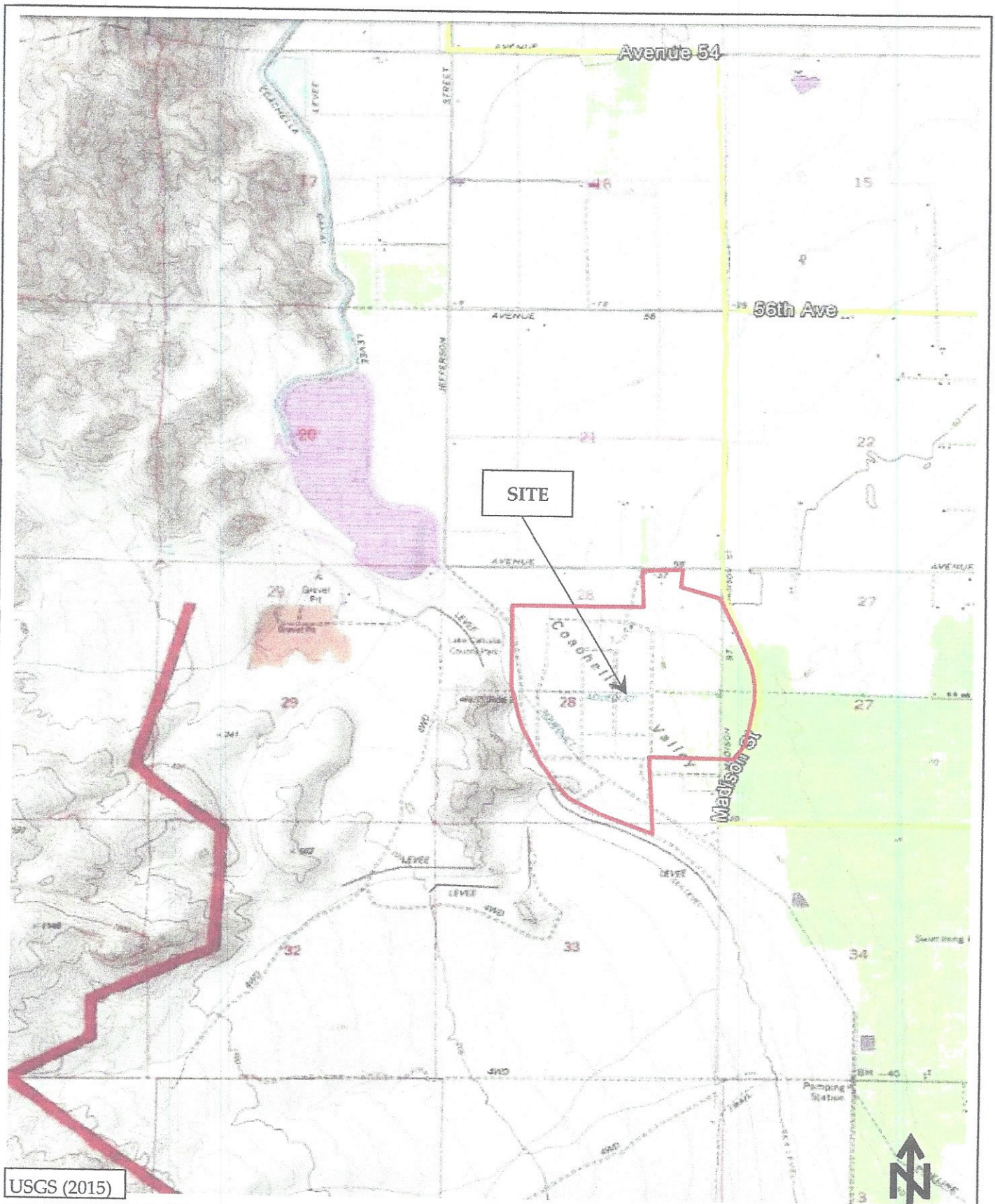
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FIGURES

SITE LOCATION MAP
REGIONAL GEOLOGIC MAP
BOREHOLE LOCATION PLAN
LINEAMENT PHOTOGRAPH



SITE LOCATION MAP

FIGURE

1



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19-01-049

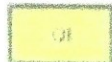
Date:

February 26, 2019

EXPLANATION OF SITE UNITS



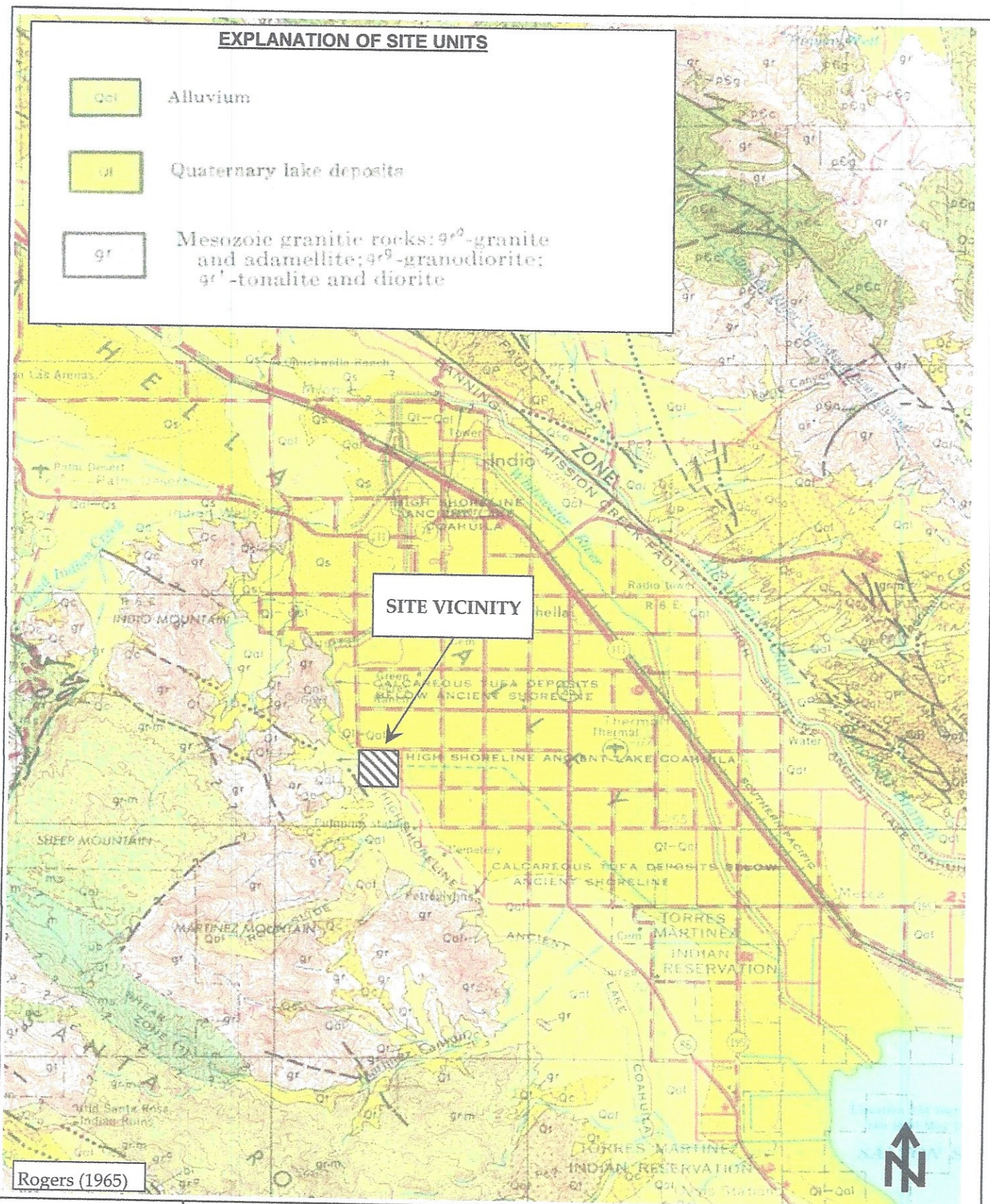
Alluvium



Quaternary lake deposits



Mesozoic granitic rocks: gr^g-granite and adamellite; gr^g-granodiorite; gr^t-tonalite and diorite



Rogers (1965)



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REGIONAL GEOLOGIC MAP

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FIGURE

2

LEGEND

 **BH-10** Approximate Exploratory Borehole Location

 **TP-5** Approximate Exploratory Trench Location



Vita (2019)



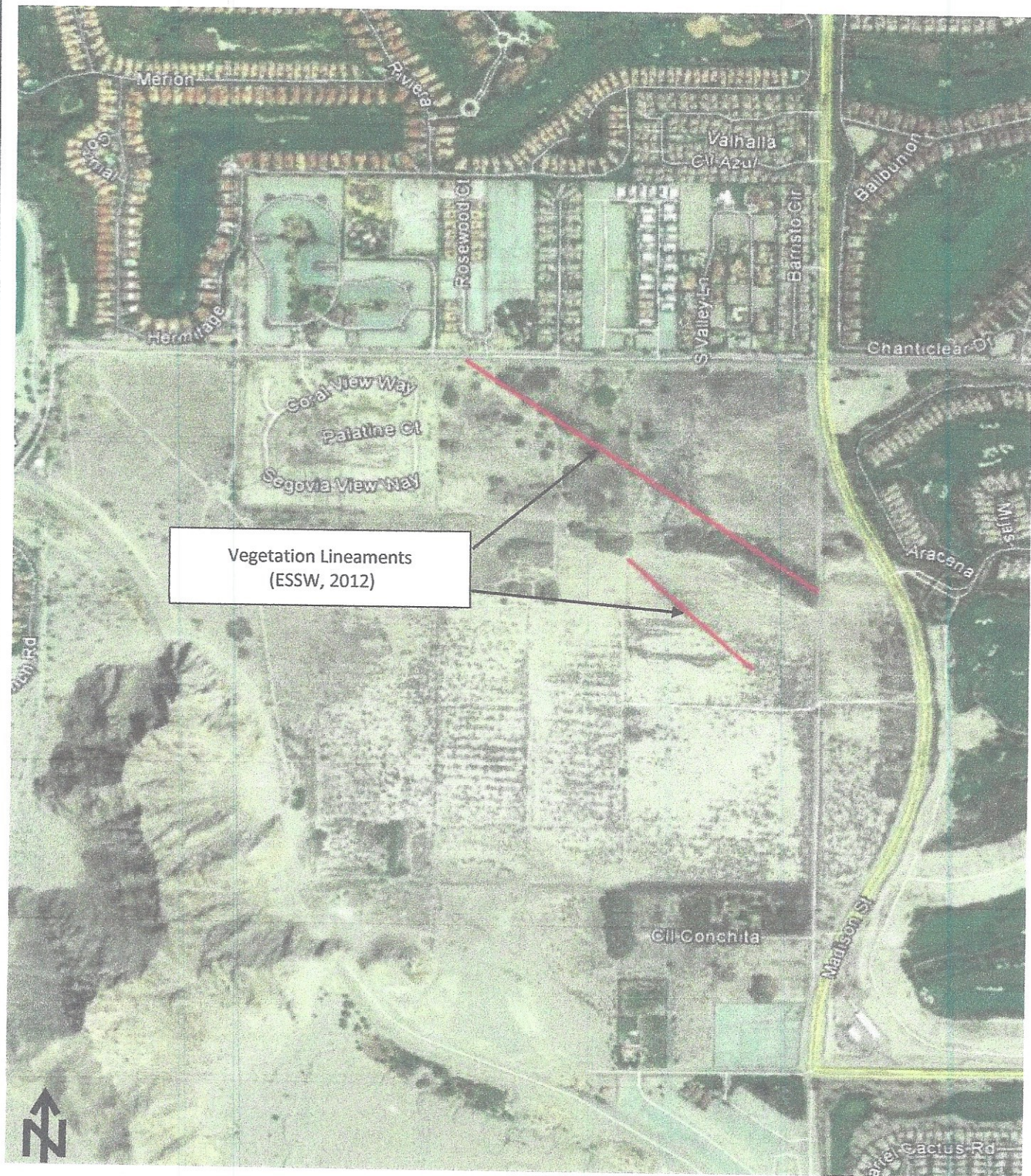
Sladden Engineering

BOREHOLE LOCATION PLAN

Project Number:	544-19025
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Date:	February 26, 2019

FIGURE

3



Google Earth (2019)



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LINEAMENT PHOTOGRAPH

Project Number:	544-19025
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Date:	February 26, 2019

FIGURE

4

APPENDIX A

FIELD EXPLORATION

APPENDIX A

FIELD EXPLORATION

For our field investigation ten (10) exploratory bores were excavated on February 1, 2019 utilizing a truck mounted rig (Mobile B-61) equipped with 8-inch outside diameter (O.D.) augers. Continuous logs of the materials encountered were made by a representative of Sladden Engineering.

Sladden's linement trench investigation was conducted on February 5, 2019 with the excavation of exploratory trenches T-1, T-2 and T-3 and February 6, 2019 for T-4 and T-5. All five (5) exploratory trenches were excavated to a total depth of approximately five (5) feet bgs. Exploratory trenches were excavated by Sladden Engineering utilizing a track mounted mini excavator equipped with a 2.0-foot wide bucket.

Materials encountered in the boreholes were classified in accordance with the Unified Soil Classification System which is presented in this appendix.

Representative undisturbed samples were obtained within our borings 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
			CH	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.

**SLADDEN ENGINEERING****BORE LOG**

Drill Rig: Mobile B-61

Date Drilled: 1/30/2019

Elevation: -20 Ft (MSL)

Boring No: BH-1

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
							2		Sandy Silt (ML); grayish brown, dry, low plasticity with gravel (Fill/Disturbed).
	5/6/11			37.1	1.9		4		
							6		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained, with gravel (QI-Qal).
	6/6/9			26.5	1.3		8		
							10		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained, with gravel (QI-Qal).
	6/7/9			49.4	2.5		12		
							14		
							16		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained, with gravel (QI-Qal).
							18		
	7/9/15			56.4	2.8		20		Sandy Silt (ML); grayish brown, slightly moist, very stiff, low plasticity (QI-Qal).
							22		
							24		Terminated at ~21.5 Ft. bgs.
							26		No Bedrock Encountered.
							28		No Groundwater or Seepage Encountered.
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

ANDALUSIA - WESTSIDE DEVELOPMENT
WEST OF MADISON ST., BETWEEN AVE. 58 & AVE. 60

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**SLADDEN ENGINEERING****BORE LOG**

Drill Rig: Mobile B-61

Date Drilled: 1/30/2019

Elevation: -40 Ft (MSL)

Boring No: BH-2

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
							2		Silt (ML); grayish brown, dry, low plasticity (Fill/Disturbed).
	8/15/20	1	66	97.8	4.4	85.4	4		Silt (ML); grayish brown, slightly moist, very stiff, medium plasticity with shells (QI-Qal).
	8/14/19			97.7	5.8	88.5	6		Silt (ML); grayish brown, slightly moist, very stiff, medium plasticity with shells (QI-Qal).
	5/6/9			13.4	1.6		10		Silty Sand (SM); grayish brown with orange mottling, dry, medium dense, fine-grained (QI-Qal).
	8/10/15			90.1	10.3	96.3	16		Sandy Clay (CL); grayish brown with orange mottling, moist, very stiff, medium plasticity (QI-Qal).
	7/8/14			64.3	10.6		20		Silt (ML); grayish brown, moist, very stiff, low plasticity with shells (QI-Qal).
	8/14/19			64.3	5.9	132.4	26		Silt (ML); grayish brown, moist, very stiff, low plasticity with shells (QI-Qal).
	8/10/10			35.6	5.5		30		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine-grained (QI-Qal).
	17/24/41			7.1	2.2	117.4	36		Gravelly Sand (SW); grayish brown, slightly moist, dense, fine-to coarse-grained (QI-Qal).
	6/10/10			48.4	17.4		40		Silty Sand (SM); grayish brown, very moist, medium dense, fine-grained (QI-Qal).
	4/5/11			81.1	30.2	92.5	46		Clayey Silt (ML); grayish brown, very moist, stiff, medium plasticity with shells (QI-Qal).
	5/9/15			45.9	23.5		50		Silty Sand (SM); grayish brown, wet, loose, fine-grained (QI-Qal).

Completion Notes:

Terminated at -51.5 Feet bgs.

No Bedrock Encountered.

Groundwater Encountered at -47.0 Feet bgs.

ANDALUSIA - WESTSIDE DEVELOPMENT

WEST OF MADISON ST., BETWEEN AVE. 58 & AVE. 60

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**SLADDEN ENGINEERING****BORE LOG**

Drill Rig: Mobile B-61

Date Drilled: 1/30/2019

Elevation: -40 Ft (MSL)

Boring No: BH-3

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
							2		Silt (ML); grayish brown, dry, low plasticity with shells (Fill/Disturbed).
	4/6/8			88.0	5.1		4		
							6		Silt (ML); grayish brown, slightly moist, stiff, low plasticity with shells (Ql-Qal).
	8/16/24			96.4	9.1	90.6	8		
							10		Clayey Silt (ML); grayish brown with orange mottling, slightly moist, very stiff, friable, low to medium plasticity with shells (Ql-Qal).
							12		
	8/8/9			29.6	2.2		14		
							16		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained (Ql-Qal).
							18		
	11/17/24			74.7	7.3	100.2	20		Silt (ML); grayish brown, dry, very stiff, low plasticity with shells (Ql-Qal).
							22		
							24		Terminated at ~21.5 Ft. bgs.
							26		No Bedrock Encountered.
							28		No Groundwater or Seepage Encountered.
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

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**SLADDEN ENGINEERING****BORE LOG**

Drill Rig: Mobile B-61

Date Drilled: 1/30/2019

Elevation: -45 Ft (MSL)

Boring No: BH-4

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
							2		Silt (ML); grayish brown, dry, low plasticity with shells (Fill/Disturbed).
	12/12/18			94.7	6.3	84.2	4		
							6		Silt (ML); grayish brown, slightly moist, very stiff, low plasticity with shells (QI-Qal).
	7/11/14			21.3	1.5		8		
							10		
							12		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained (QI-Qal).
	7/12/15			37.0	1.8	105.8	14		
							16		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained (QI-Qal).
							18		
	8/11/12			33.4	1.9		20		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained (QI-Qal).
							22		
							24		Terminated at ~21.5 Ft. bgs.
							26		No Bedrock Encountered.
							28		No Groundwater or Seepage Encountered.
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

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WEST OF MADISON ST., BETWEEN AVE. 58 & AVE. 60

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**SLADDEN ENGINEERING****BORE LOG**

Drill Rig: Mobile B-61

Date Drilled: 1/30/2019

Elevation: -40 Ft (MSL)

Boring No: BH-5

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
							2		Gravelly Sand (SP); grayish brown, dry, fine-to coarse-grained (Fill).
	4/4/6			15.9	1.4		4		Silty Sand (SM); grayish brown, slightly moist, loose, fine-to coarse-grained with gravel (Ql-Qal).
							6		
	10/14/20			18.6	1.2	111.0	8		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine-to coarse-grained with gravel and shells (Ql-Qal).
							10		
	5/10/9			24.5	1.7		12		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine-to coarse-grained with gravel and shells (Ql-Qal).
							14		
	12/13/18			17.1	1.2	113.9	16		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine-to coarse-grained with gravel and shells (Ql-Qal).
							18		
	8/10/13			12.9	1.2		20		Silty Sand (SM); grayish brown with orange mottling, slightly moist, medium dense, fine-to coarse-grained with gravel and shells (Ql-Qal).
							22		
	12/21/24			20.4	1.4	112.3	24		Silty Sand (SM); grayish brown with orange mottling, slightly moist, medium dense, fine-to coarse-grained with gravel and shells (Ql-Qal).
							26		
							28		Silty Sand (SM); grayish brown with orange mottling, slightly moist, medium dense, fine-to coarse-grained with gravel and shells (Ql-Qal).
							30		
							32		Silty Sand (SM); grayish brown with orange mottling, slightly moist, medium dense, fine-to coarse-grained with gravel and shells (Ql-Qal).
							34		
							36		Terminated at ~31.5 Ft. bgs. No Bedrock Encountered. No Groundwater or Seepage Encountered.
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

ANDALUSIA - WESTSIDE DEVELOPMENT

WEST OF MADISON ST., BETWEEN AVE. 58 & AVE. 60

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**SLADDEN ENGINEERING****BORE LOG**

Drill Rig:	Mobile B-61	Date Drilled:	2/1/2019
Elevation:	-55 Ft (MSL)	Boring No:	BH-6

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
	8/17/23			14.6	3.8	104.3	2		Silty Sand (SM); grayish brown, dry, fine-to coarse-grained with gravel (Fill).
	7/9/11			13.4	0.7		4		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine-grained (Ql-Qal).
							6		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine-grained (Ql-Qal).
	12/23/29			78.8	6.3	98.6	10		Silt (ML); grayish brown, slightly moist, very hard, low plasticity (Ql-Qal).
	6/13/25			92.1	8.9		14		Silt (ML); grayish brown, slightly moist, very hard, low plasticity (Ql-Qal).
	8/16/20			39.9	3.5	101.8	20		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine-grained (Ql-Qal).
	9/13/15			41.0	3.0		24		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine-grained (Ql-Qal).
	15/21/32			11.7	1.8	107.6	30		Sand (SP); grayish brown, slightly moist, dense, fine-grained (Ql-Qal).
	5/6/10			75.3	14.9		36		Clayey Silt (ML); grayish brown, moist, stiff, friable, medium plasticity (Ql-Qal).
	6/10/25			84.9	27.7	94.0	40		Silty Clay (CL/CH); olive brown, moist, very stiff, high plasticity (Ql-Qal).
	4/4/6			95.6	34.6		46		Sandy Clay (CL/CH); olive brown, moist, stiff, high plasticity (Ql-Qal).
	5/6/12			84.6	34.4	89.2	50		Sandy Clay (CL/CH); olive brown, moist, stiff, high plasticity (Ql-Qal).

Completion Notes:

Terminated at ~51.5 Feet bgs.

No Bedrock Encountered.

Groundwater Encountered at ~47.0 Feet bgs.

ANDALUSIA - WESTSIDE DEVELOPMENT

WEST OF MADISON ST., BETWEEN AVE. 58 & AVE. 60

Project No: 544-19025

Report No: 19-01-049

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**SLADDEN ENGINEERING****BORE LOG**

Drill Rig: Mobile B-61

Date Drilled: 2/1/2019

Elevation: -45 Ft (MSL)

Boring No: BH-7

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, dry, fine-grained (Fill/Disturbed).
	8/15/25			12.1	0.7	100.6	4		
							6		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained (QI-Qal).
	8/12/16			21.0	1.7		8		
							10		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained (QI-Qal).
							12		
	10/15/24			12.8	1.0	104.2	14		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained (QI-Qal).
							16		
							18		
	15/24/31			86.1	6.7		20		Silt (ML); grayish brown, dry to slightly moist, hard, low plasticity (QI-Qal).
							22		
							24		Terminated at ~21.5 Ft. bgs.
							26		No Bedrock Encountered.
							28		No Groundwater or Seepage Encountered.
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

ANDALUSIA - WESTSIDE DEVELOPMENT
WEST OF MADISON ST., BETWEEN AVE. 58 & AVE. 60

Project No: 544-19025

Report No: 19-01-049

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**SLADDEN ENGINEERING****BORE LOG**

Drill Rig: Mobile B-61

Date Drilled: 2/1/2019

Elevation: -55 Ft (MSL)

Boring No: BH-8

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
							2		Silty Sand (SM); grayish brown, slightly moist, fine-grained (QI-Qal).
	5/7/11			13.8	0.9		4		
							6		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained (QI-Qal).
							8		
	8/12/16			91.8	15.2	94.1	10		Sandy Silt (ML); grayish brown, moist, very stiff, low plasticity (QI-Qal).
							12		
							14		
	8/12/13			46.8	5.2		16		Silty Sand (SM); grayish brown, slightly moist, medium dense, fine-grained (QI-Qal).
							18		
							20		Silty Sand (SM); grayish brown, slightly moist, dense, fine-grained with clay (QI-Qal).
	8/16/20			15.2	2.6	100.6	22		
							24		Terminated at ~21.5 Ft. bgs.
							26		No Bedrock Encountered.
							28		No Groundwater or Seepage Encountered.
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

ANDALUSIA - WESTSIDE DEVELOPMENT
WEST OF MADISON ST., BETWEEN AVE. 58 & AVE. 60

Project No: 544-19025

Report No: 19-01-049

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**SLADDEN ENGINEERING****BORE LOG**

Drill Rig: Mobile B-61

Date Drilled: 2/1/2019

Elevation: -50 Ft (MSL)

Boring No: BH-9

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
							2		Sandy Silt (ML); grayish brown, dry, low plasticity (Fill/Disturbed).
	9/16/20			51.8	15.3	98.3	4		
							6		Sandy Silt (ML); grayish brown, moist, very stiff, low plasticity (Ql-Qal).
	7/9/13			15.5	1.7		8		
							10		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained (Ql-Qal).
	8/20/21			29.5	3.5	109.3	12		
							14		
							16		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained with clay (Ql-Qal).
							18		
	4/7/8			88.1	23.3		20		Sandy Silt (ML); grayish brown, moist, stiff, low plasticity (Ql-Qal).
							22		
							24		Terminated at ~21.5 Ft. bgs.
							26		No Bedrock Encountered.
							28		No Groundwater or Seepage Encountered.
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

ANDALUSIA - WESTSIDE DEVELOPMENT

WEST OF MADISON ST., BETWEEN AVE. 58 & AVE. 60

Project No: 544-19025

Report No: 19-01-049

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**SLADDEN ENGINEERING****BORE LOG**

Drill Rig: Mobile B-61

Date Drilled: 2/1/2019

Elevation: -50 Ft (MSL)

Boring No: BH-10

Sample	Blow Counts	Bulk Sample	Expansion Index	% Minus #200	% Moisture	Dry Density	Depth (Feet)	Graphic Lithology	Description
							2		Silt (ML); grayish brown, slightly moist, low plasticity (Fill/Disturbed).
	7/10/13			30.6	1.6		4		
							6		Silty Sand (SM); grayish brown, dry, medium dense, fine-grained (QI-Qal).
	13/18/23			14.8	1.8	103.6	8		
							10		Silty Sand (SM); grayish brown with orange mottling, dry, medium dense, fine-grained (QI-Qal).
							12		
	8/12/12			38.8	3.8		14		
							16		Silty Sand (SM); grayish brown with orange mottling, dry, medium dense, fine-grained (QI-Qal).
							18		
	7/15/21			71.6	8.4	99.6	20		Sandy Silt (ML); grayish brown, slightly moist to moist, very stiff, low plasticity (QI-Qal).
							22		
							24		Terminated at ~21.5 Ft. bgs.
							26		No Bedrock Encountered.
							28		No Groundwater or Seepage Encountered.
							30		
							32		
							34		
							36		
							38		
							40		
							42		
							44		
							46		
							48		
							50		

Completion Notes:

ANDALUSIA - WESTSIDE DEVELOPMENT

WEST OF MADISON ST., BETWEEN AVE. 58 & AVE. 60

Project No: 544-19025

Report No: 19-01-049

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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 soil 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. The results of this testing are presented graphically 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: Two (2) 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 Tests: Two (2) 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 Test: Four (4) relatively undisturbed 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 575 psf or 720 psf load increment.

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

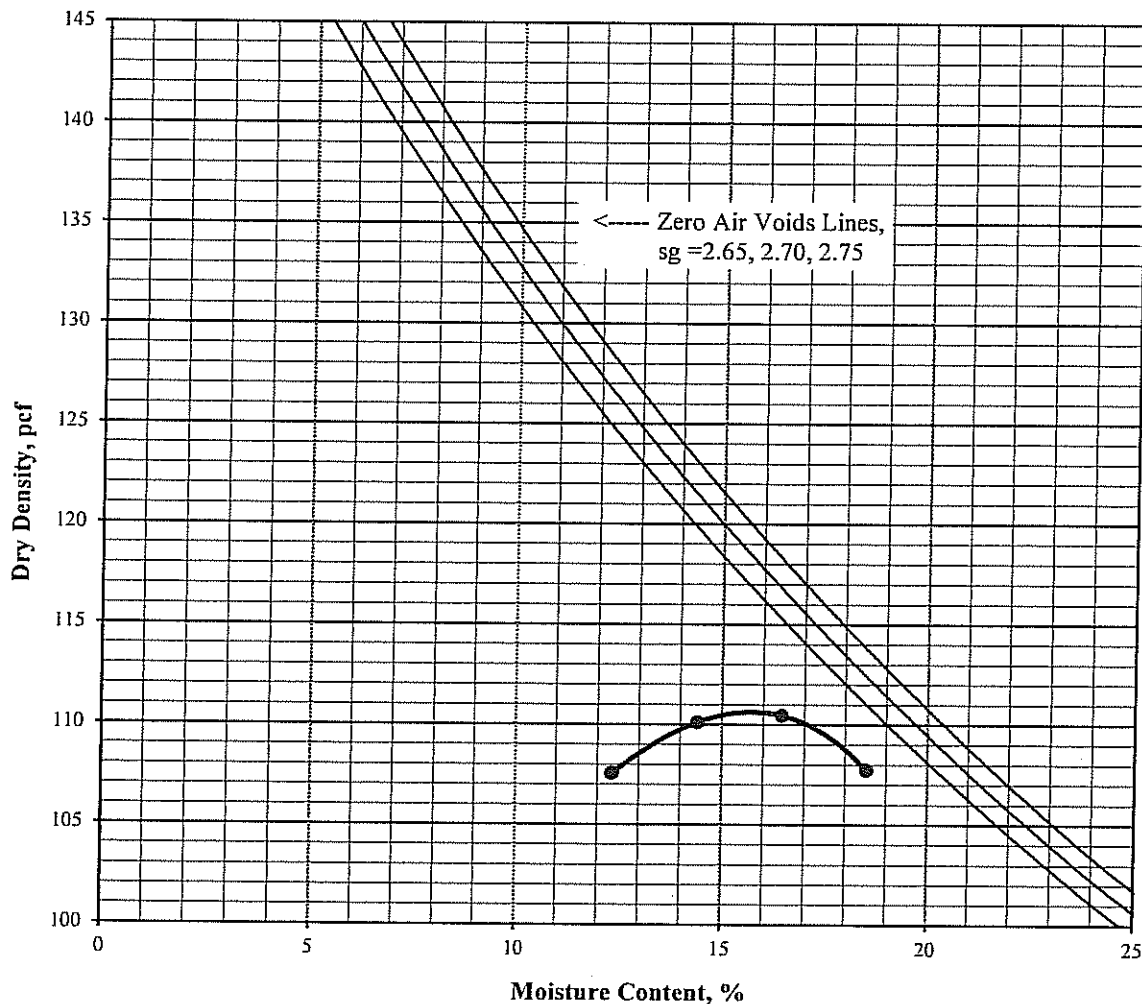
Project Number: 544-19025
Project Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample Location: BH-2 Bulk 1 @ 0-5'
Description: Olive Brown Silt (ML)

February 12, 2019

ASTM D-1557 A
Rammer Type: Machine

Maximum Density: 111 pcf
Optimum Moisture: 16%

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





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Maximum Density/Optimum Moisture

ASTM D698/D1557

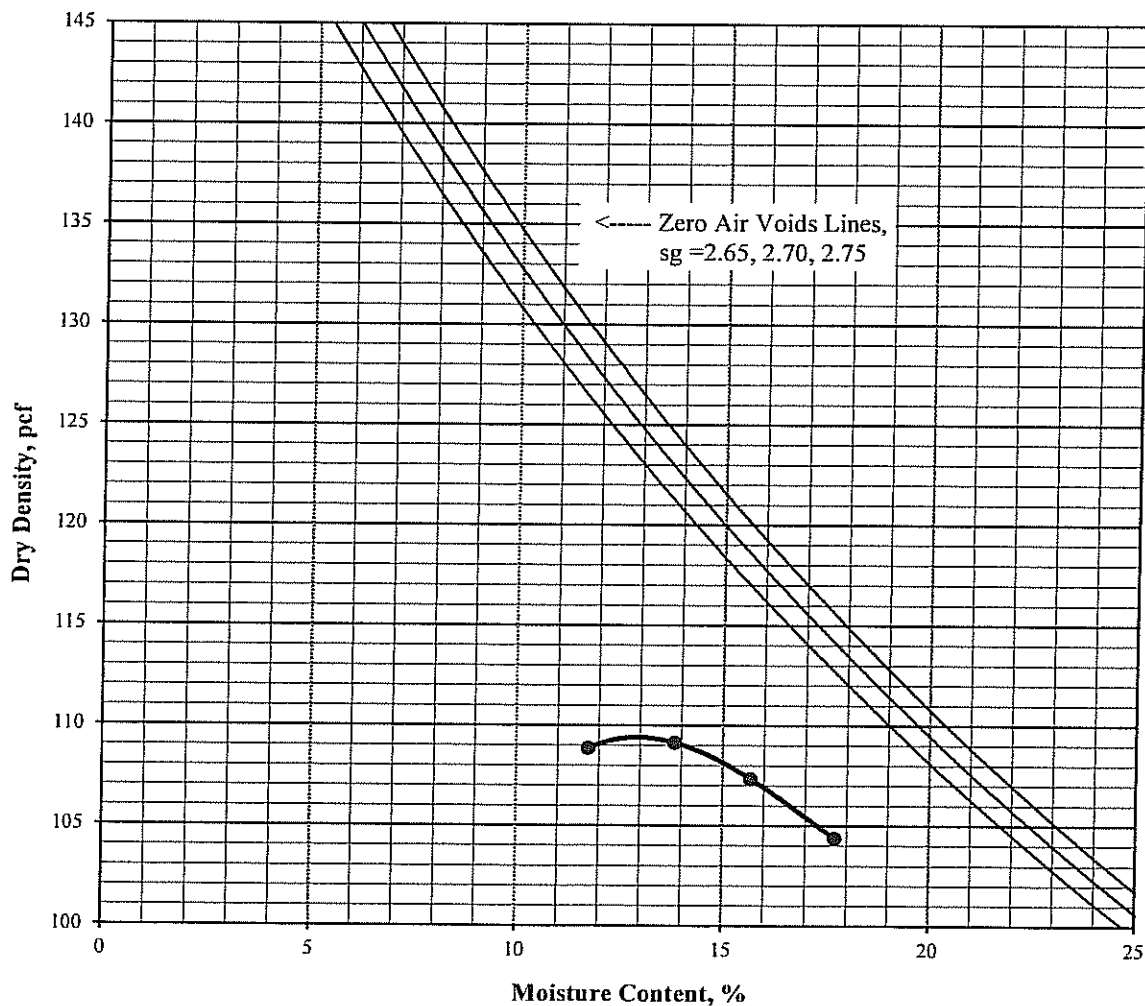
Project Number: 544-19025
Project Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample Location: BH-6 Bulk 2 @ 0-5'
Description: Dark Brown Silty Sand (SM)

February 12, 2019

ASTM D-1557 A
Rammer Type: Machine

Maximum Density: 109.5 pcf
Optimum Moisture: 14%

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





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Expansion Index

ASTM D 4829

Job Number: 544-19025
Job Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample ID: BH-2 Bulk 1 @ 0-5'
Soil Description: Olive Brown Silt (ML)

February 12, 2019

Wt of Soil + Ring:	532.9
Weight of Ring:	194.9
Wt of Wet Soil:	338.0
Percent Moisture:	14.5%
Sample Height, in	0.95
Wet Density, pcf:	107.8
Dry Denstiy, pcf:	94.2

% Saturation:	49.6
---------------	------

Expansion

Rack # 1

Date/Time	2/11/2019	2:00 PM
Initial Reading	0.0000	
Final Reading	0.0663	

Expansion Index

66

(Final - Initial) x 1000



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Expansion Index

ASTM D 4829

Job Number: 544-19025
Job Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample ID: BH-6 Bulk 2 @ 0-5'
Soil Description: Dark Brown Silty Sand (SM)

February 12, 2019

Wt of Soil + Ring:	541.4
Weight of Ring:	192.0
Wt of Wet Soil:	349.4
Percent Moisture:	12.6%
Sample Height, in	0.95
Wet Density, pcf:	111.5
Dry Denstiy, pcf:	99.0

% Saturation:	48.4
---------------	------

Expansion

Rack # 4

Date/Time	2/11/2019	2:20 PM
Initial Reading	0.0000	
Final Reading	0.0006	

Expansion Index

1

(Final - Initial) x 1000



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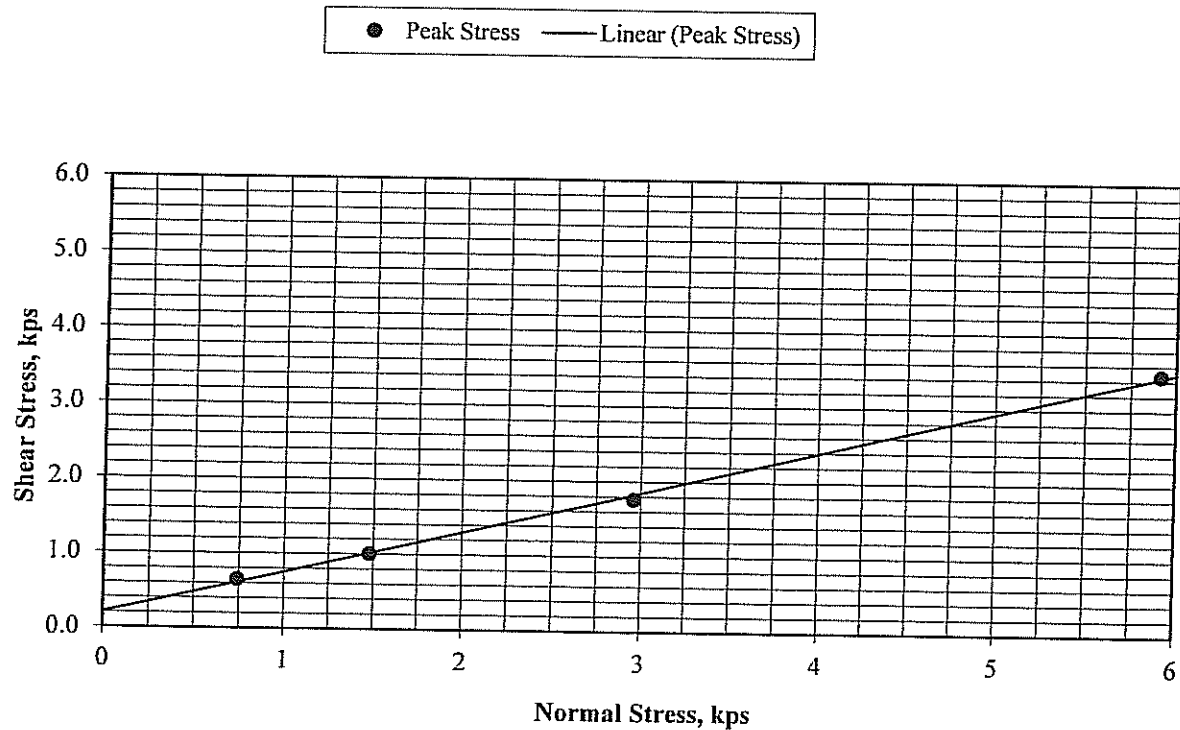
450 Egan Avenue, Beaumont, CA 92223 (951) 845-7743 Fax (951) 845-8863

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

Job Number: 544-19025
Job Name Andalusia - Westside Development
Lab ID No. LN6-19062
Sample ID BH-2 Bulk-1 @ 0-5'
Classification Olive Brown Silt (ML)
Sample Type Remolded @ 90% of Maximum Density

February 12, 2019
Initial Dry Density: 100.3 pcf
Initial Moisture Content: 15.8 %
Peak Friction Angle (ϕ): 29°
Cohesion (c): 200 psf

Test Results	1	2	3	4	Average
Moisture Content, %	27.2	27.2	27.2	27.2	27.2
Saturation, %	107.9	107.9	107.9	107.9	107.9
Normal Stress, kps	0.739	1.479	2.958	5.916	
Peak Stress, kps	0.649	1.002	1.761	3.466	





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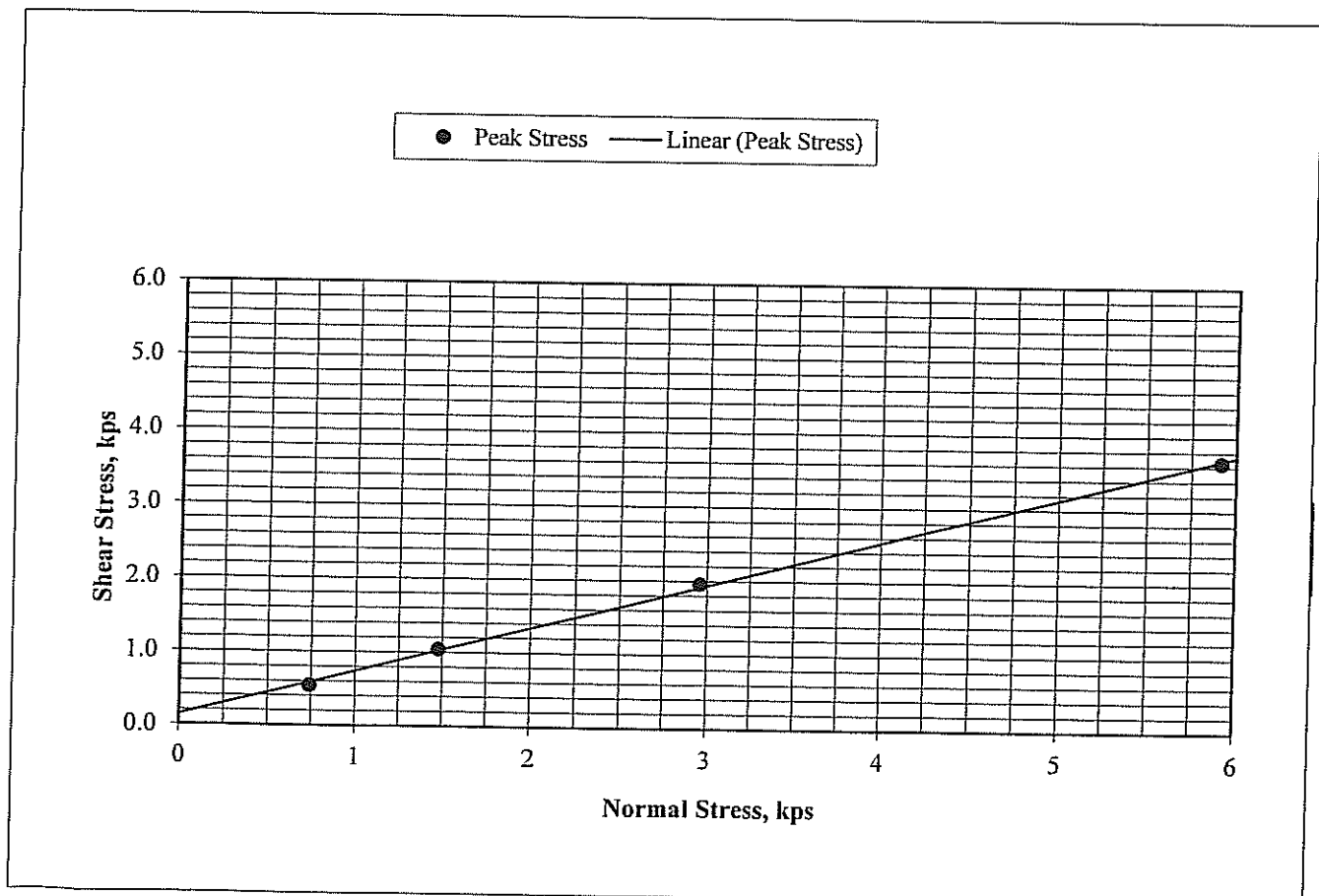
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Direct Shear ASTM D 3080-04 (modified for unconsolidated condition)

Job Number: 544-19025
Job Name Andalusia - Westside Development
Lab ID No. LN6-19062
Sample ID BH-2 Bulk-1 @ 0-5'
Classification Dark Brown Silty Sand (SM)
Sample Type Remolded @ 90% of Maximum Density

February 12, 2019
Initial Dry Density: 98.4 pcf
Initial Moisture Content: 13.8 %
Peak Friction Angle (ϕ): 31°
Cohesion (c): 140 psf

Test Results	1	2	3	4	Average
Moisture Content, %	23.6	23.6	23.6	23.6	23.6
Saturation, %	89.6	89.6	89.6	89.6	89.6
Normal Stress, kps	0.739	1.479	2.958	5.916	
Peak Stress, kps	0.540	1.041	1.959	3.655	





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Gradation

ASTM C117 & C136

Project Number: 544-19025

February 12, 2019

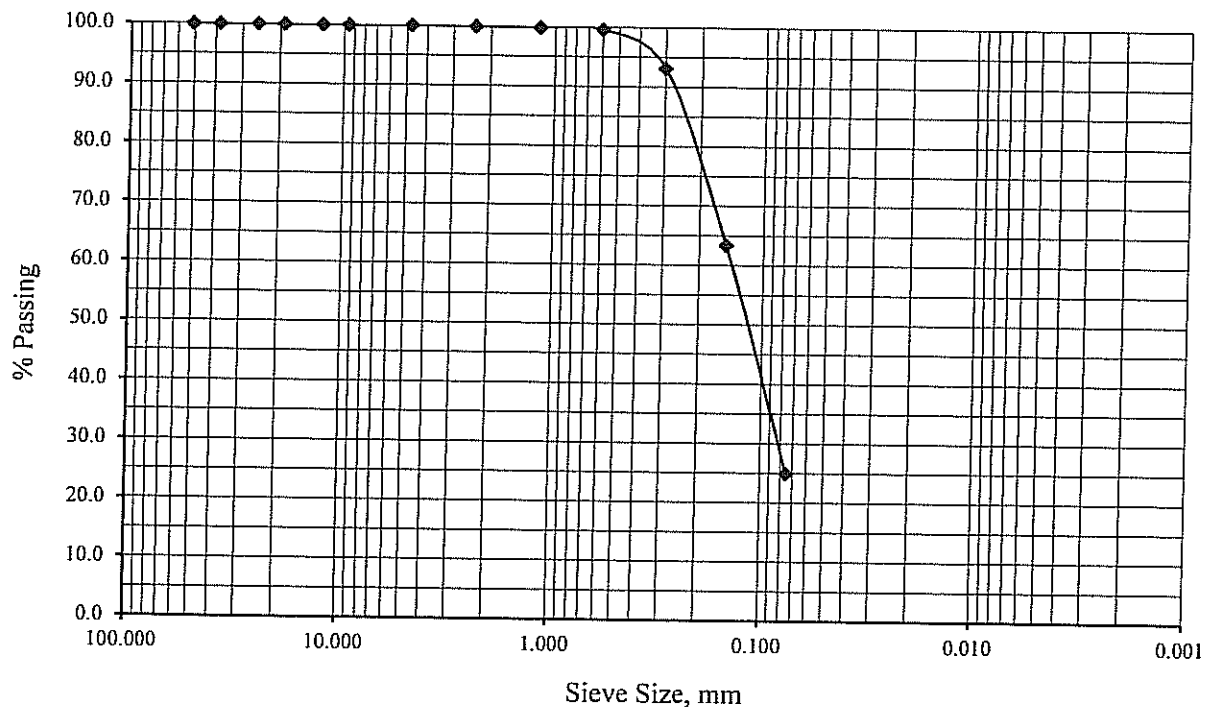
Project Name: Andalusia - Westside Development

Lab ID Number: LN6-19062

Sample ID: BH-6 Bulk-2 @ 0-5'

Soil Classification: 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	99.6
#50	0.30	93.1
#100	0.15	63.4
#200	0.075	24.9





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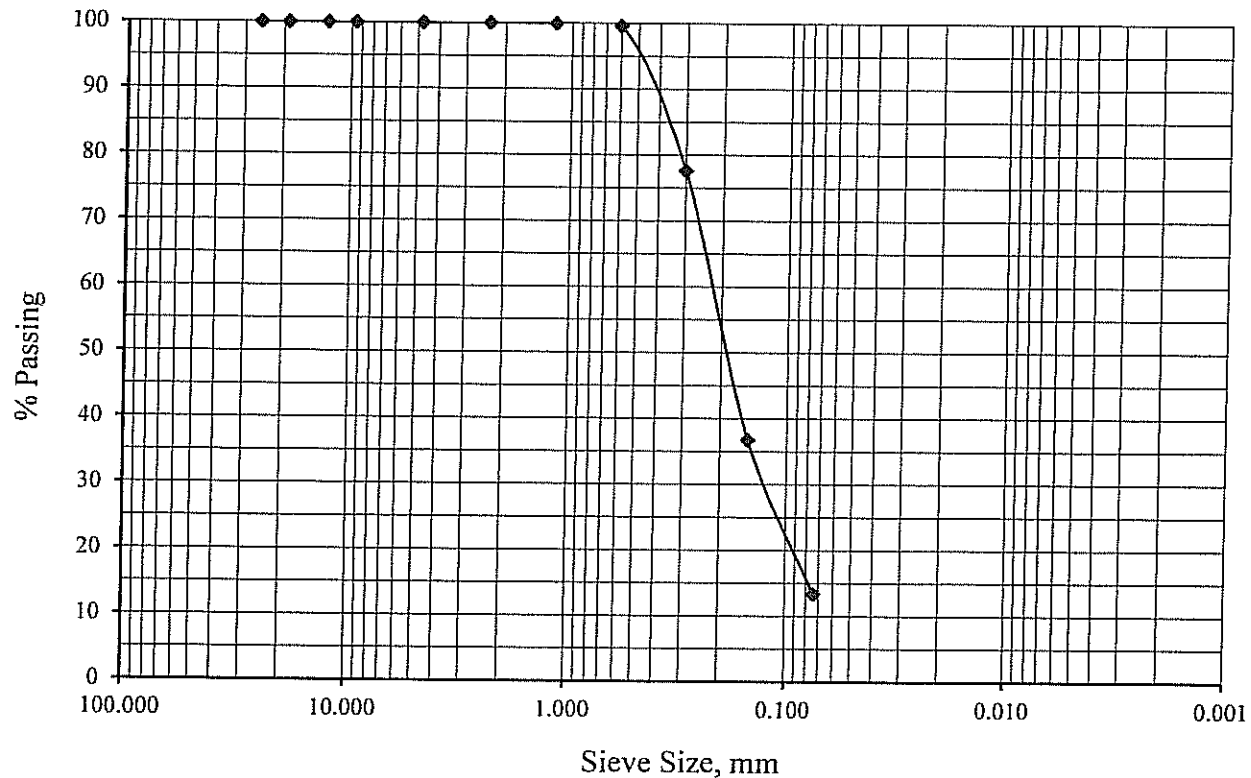
ASTM C117 & C136

Project Number: 544-19025
Project Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample ID: BH-2 S-3 @ 10'

February 12, 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	99.9
#30	0.60	99.6
#50	0.30	77.6
#100	0.15	36.8
#200	0.074	13.4





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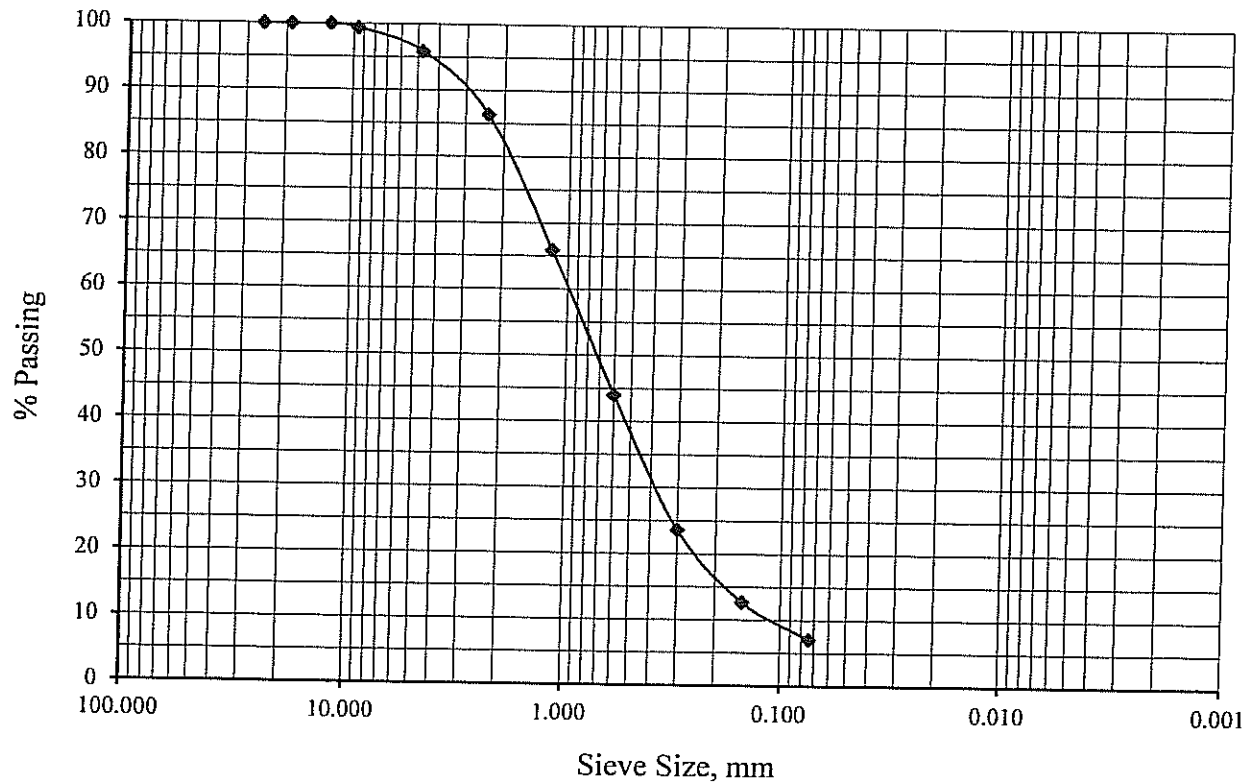
ASTM C117 & C136

Project Number: 544-19025
Project Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample ID: BH-2 R-8 @ 35'

February 12, 2019

Soil Classification: SW-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	99.4
#4	4.75	95.9
#8	2.36	86.4
#16	1.18	65.9
#30	0.60	44.0
#50	0.30	23.6
#100	0.15	12.7
#200	0.074	7.1





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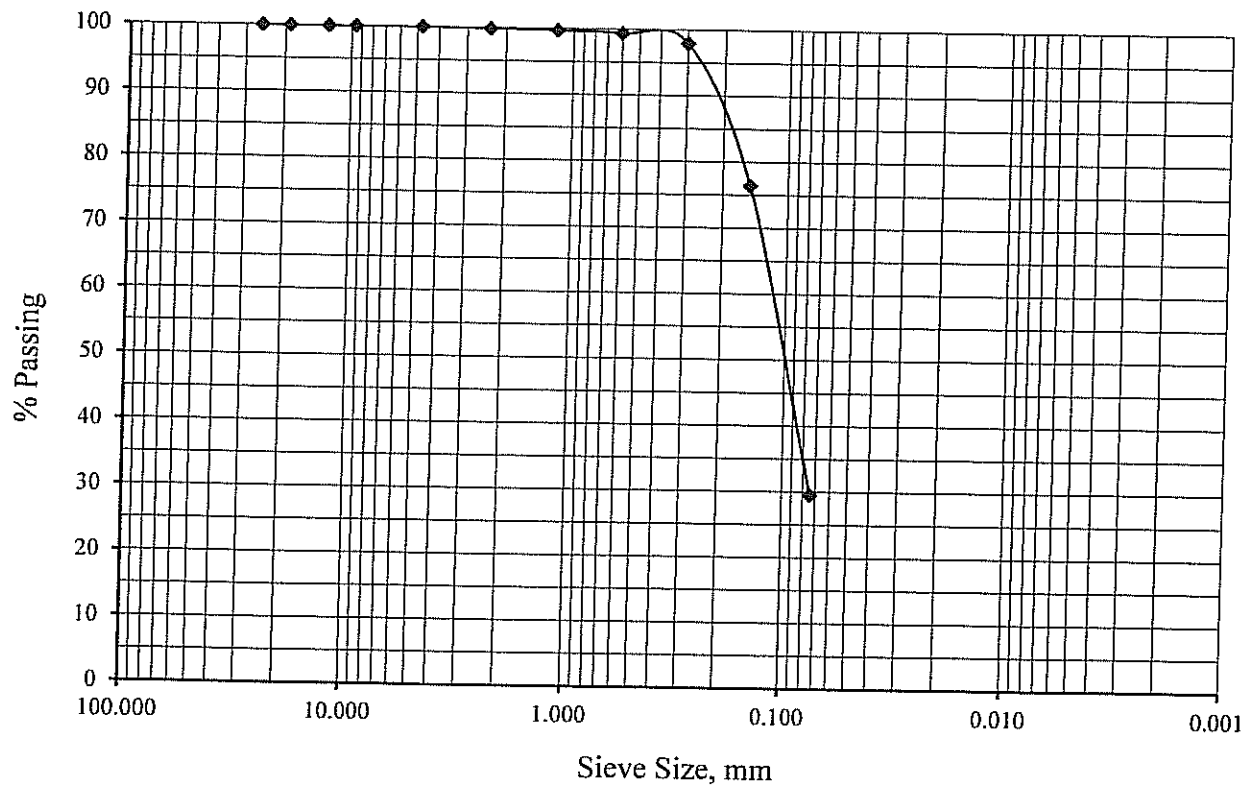
ASTM C117 & C136

Project Number: 544-19025
Project Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample ID: BH-3 S-3 @ 15'

February 12, 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	99.9
#16	1.18	99.7
#30	0.60	99.4
#50	0.30	97.9
#100	0.15	76.4
#200	0.074	29.6





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Gradation

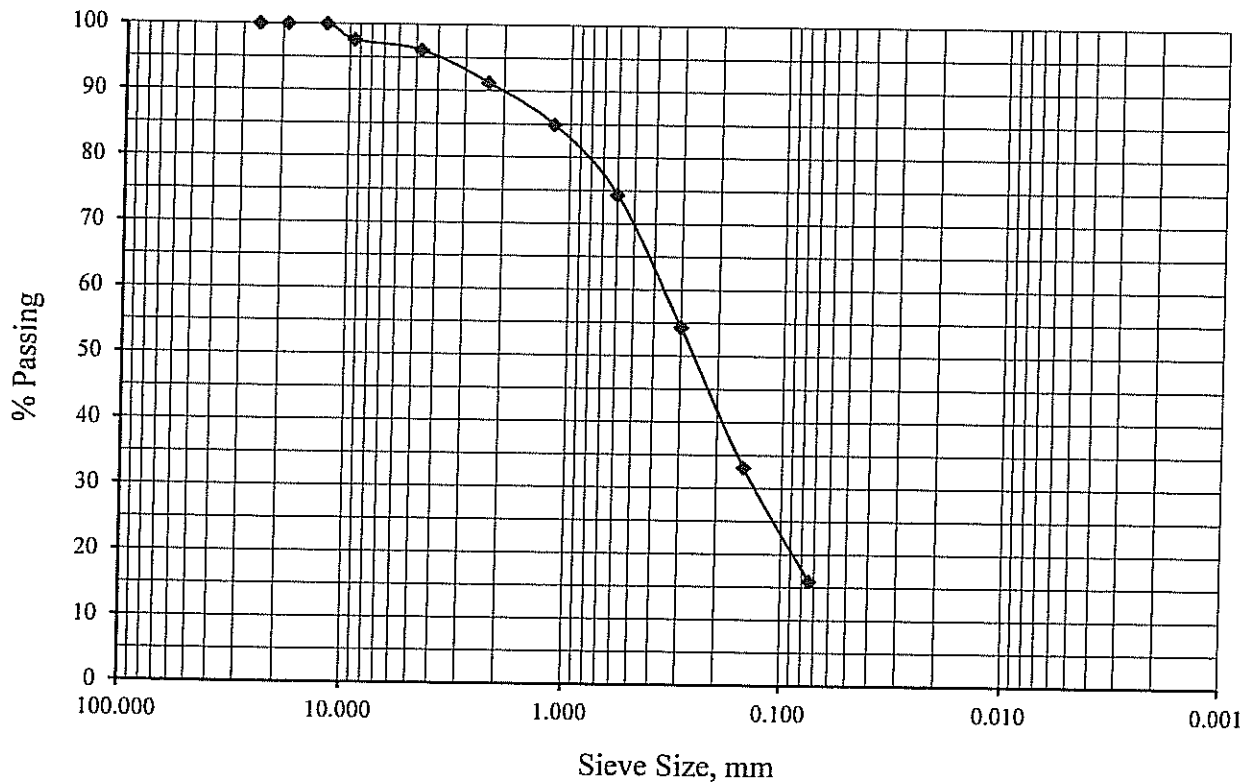
ASTM C117 & C136

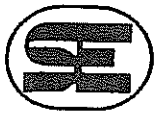
Project Number: 544-19025
Project Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample ID: BH-5 S-1 @ 5'

February 12, 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	97.6
#4	4.75	96.1
#8	2.36	91.3
#16	1.18	84.9
#30	0.60	74.4
#50	0.30	54.3
#100	0.15	33.1
#200	0.074	15.9





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Gradation

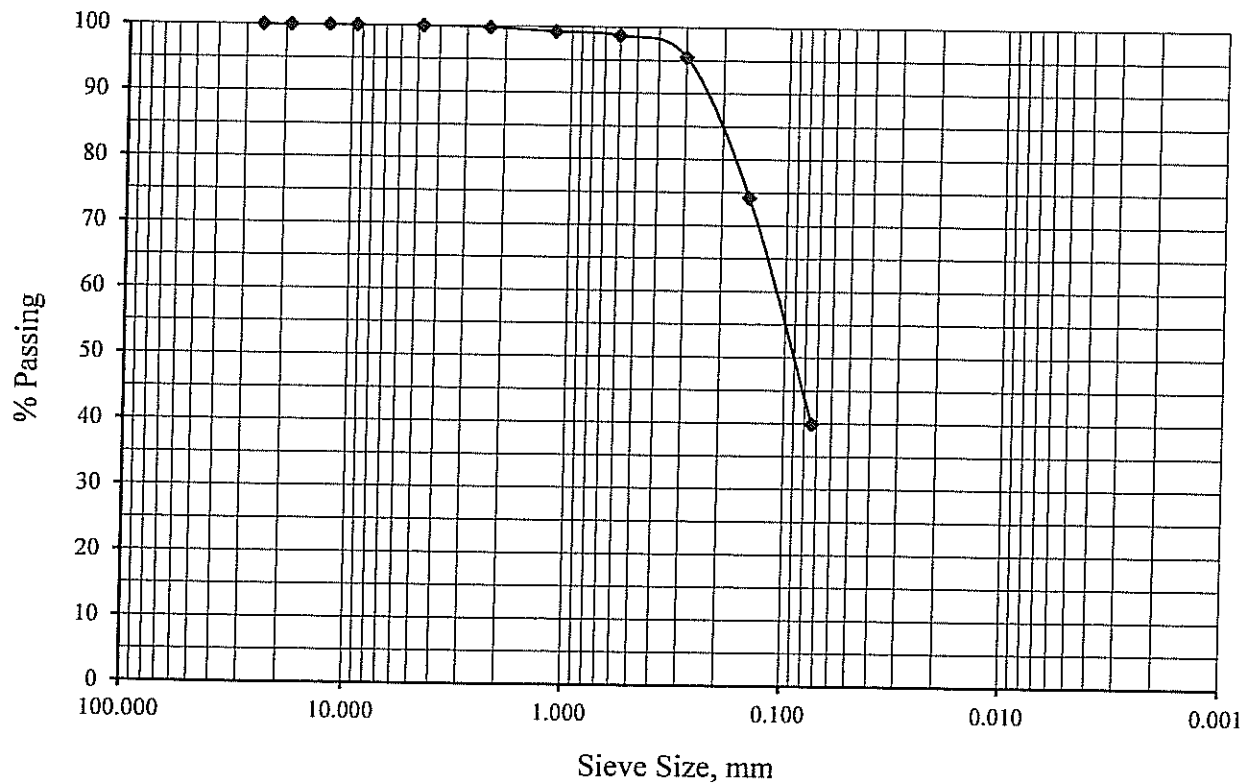
ASTM C117 & C136

Project Number: 544-19025
Project Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample ID: BH-6 R-5 @ 20'

February 12, 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	99.8
#16	1.18	99.3
#30	0.60	98.7
#50	0.30	95.5
#100	0.15	74.2
#200	0.074	39.9





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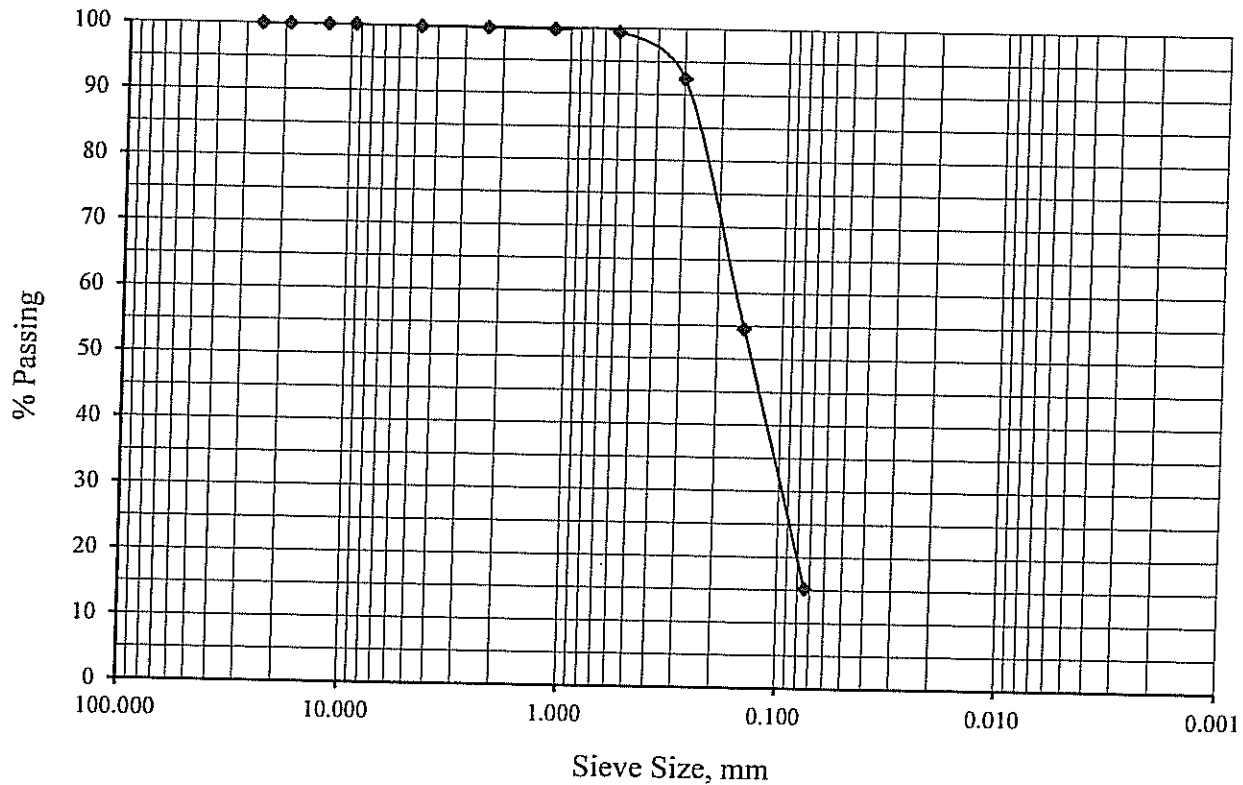
ASTM C117 & C136

Project Number: 544-19025
Project Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample ID: BH-8 R-4 @ 20'

February 12, 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	99.9
#8	2.36	99.8
#16	1.18	99.7
#30	0.60	99.4
#50	0.30	92.4
#100	0.15	54.6
#200	0.074	15.2





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Gradation

ASTM C117 & C136

Project Number: 544-19025

February 12, 2019

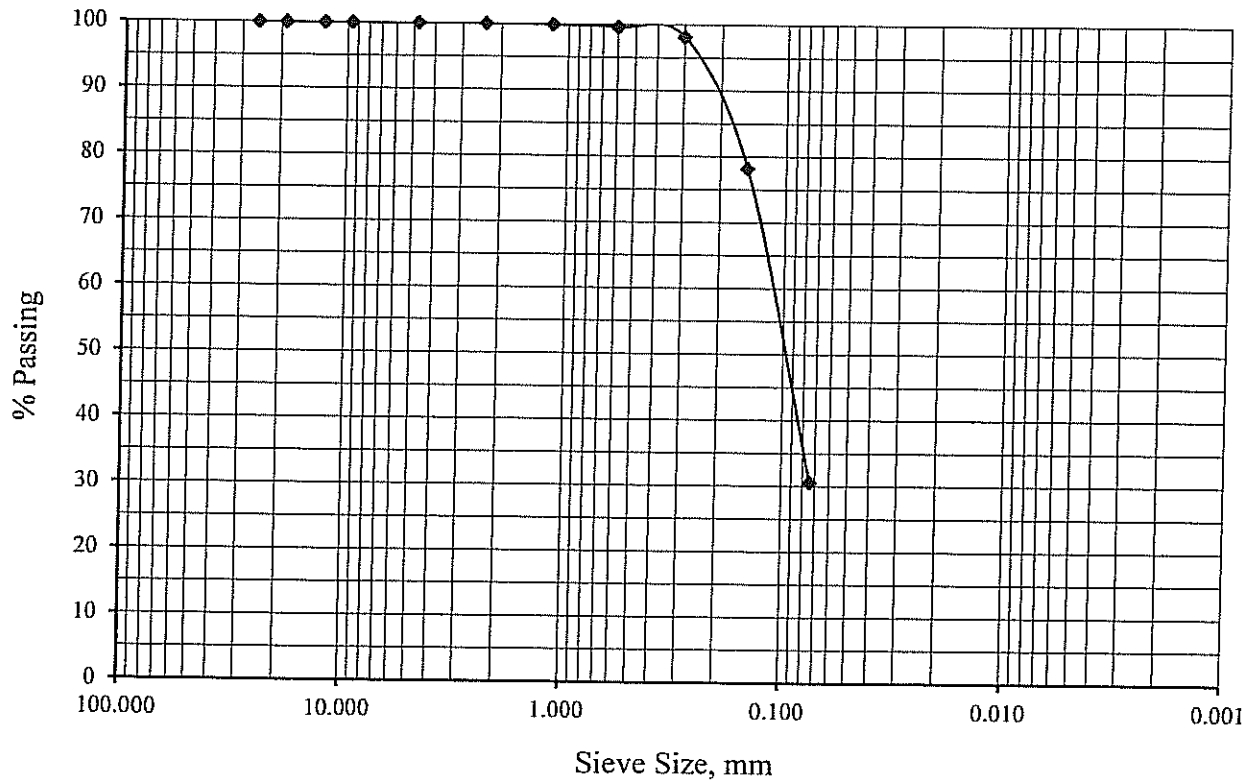
Project Name: Andalusia - Westside Development

Lab ID Number: LN6-19062

Sample ID: BH-10 S-1 @ 5'

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	99.9
#30	0.60	99.6
#50	0.30	98.2
#100	0.15	78.2
#200	0.074	30.6





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One Dimensional Consolidation

ASTM D2435 & D5333

Job Number: 544-19025
Job Name: Andalusia - Westside Development

February 12, 2019

Lab ID Number: LN6-19062

Sample ID: BH-2 R-2 @5'

Soil Description: Olive Brown Clay (CL)

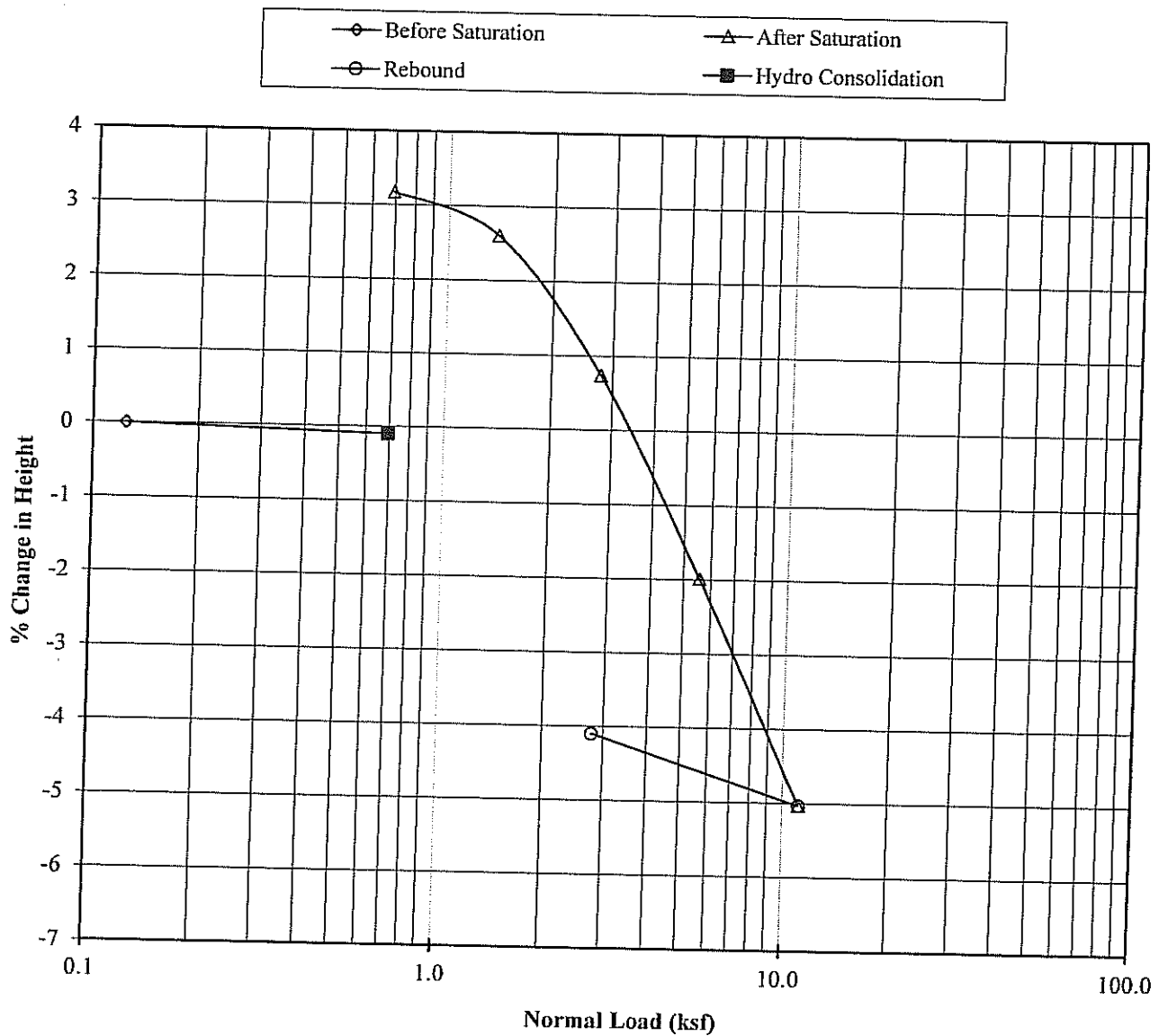
Initial Dry Density, pcf: 90.9

Initial Moisture, %: 5.8

Initial Void Ratio: 0.834

Specific Gravity: 2.67

% Change in Height vs Normal Presssure Diagram





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One Dimensional Consolidation

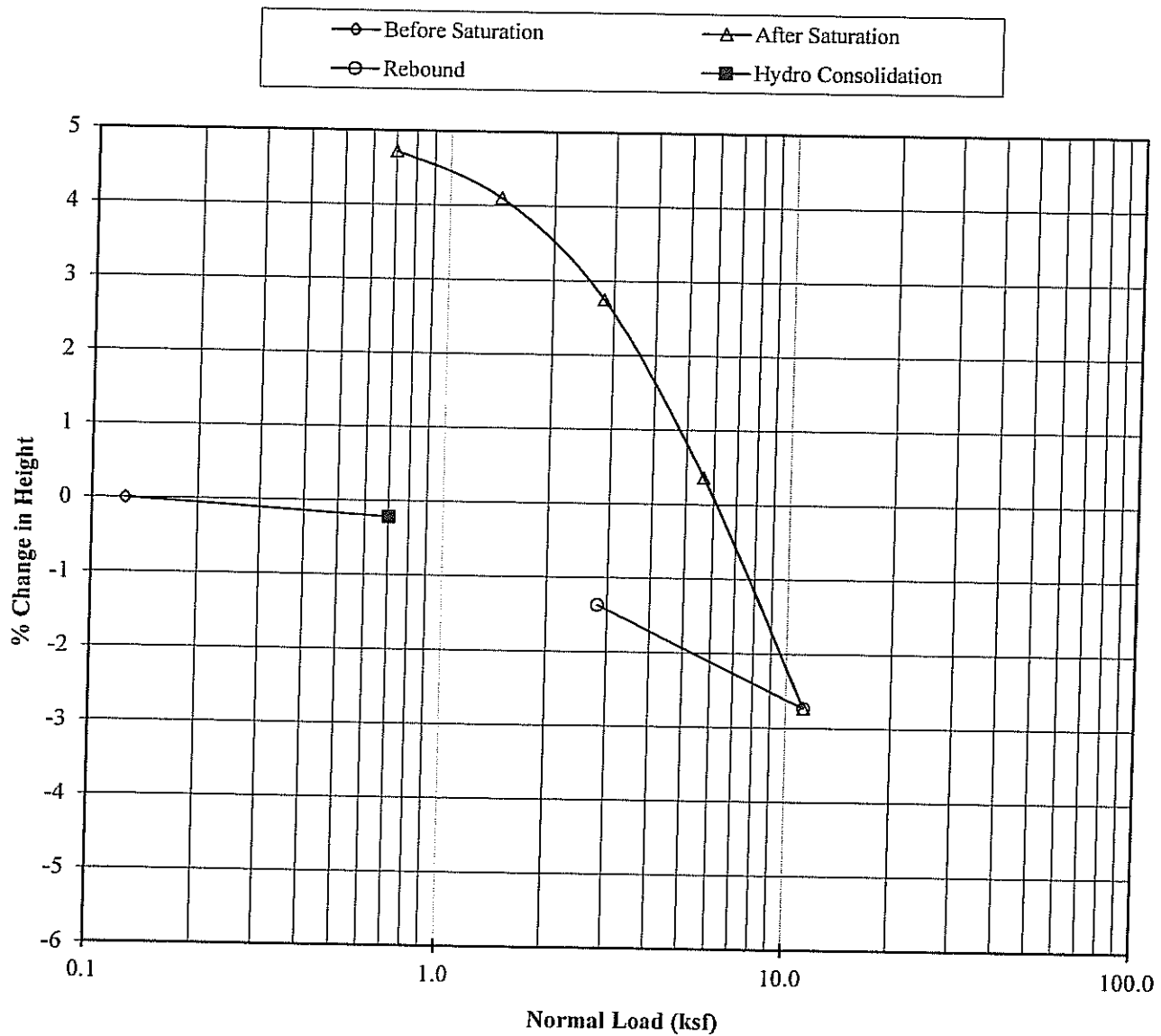
ASTM D2435 & D5333

Job Number: 544-19025
Job Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample ID: BH-3 R-2 @ 10'
Soil Description: Olive Brown Clay (CL)

February 12, 2019

Initial Dry Density, pcf: 91.2
Initial Moisture, %: 9.1
Initial Void Ratio: 0.827
Specific Gravity: 2.67

% Change in Height vs Normal Pressure Diagram





Sladden Engineering

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One Dimensional Consolidation

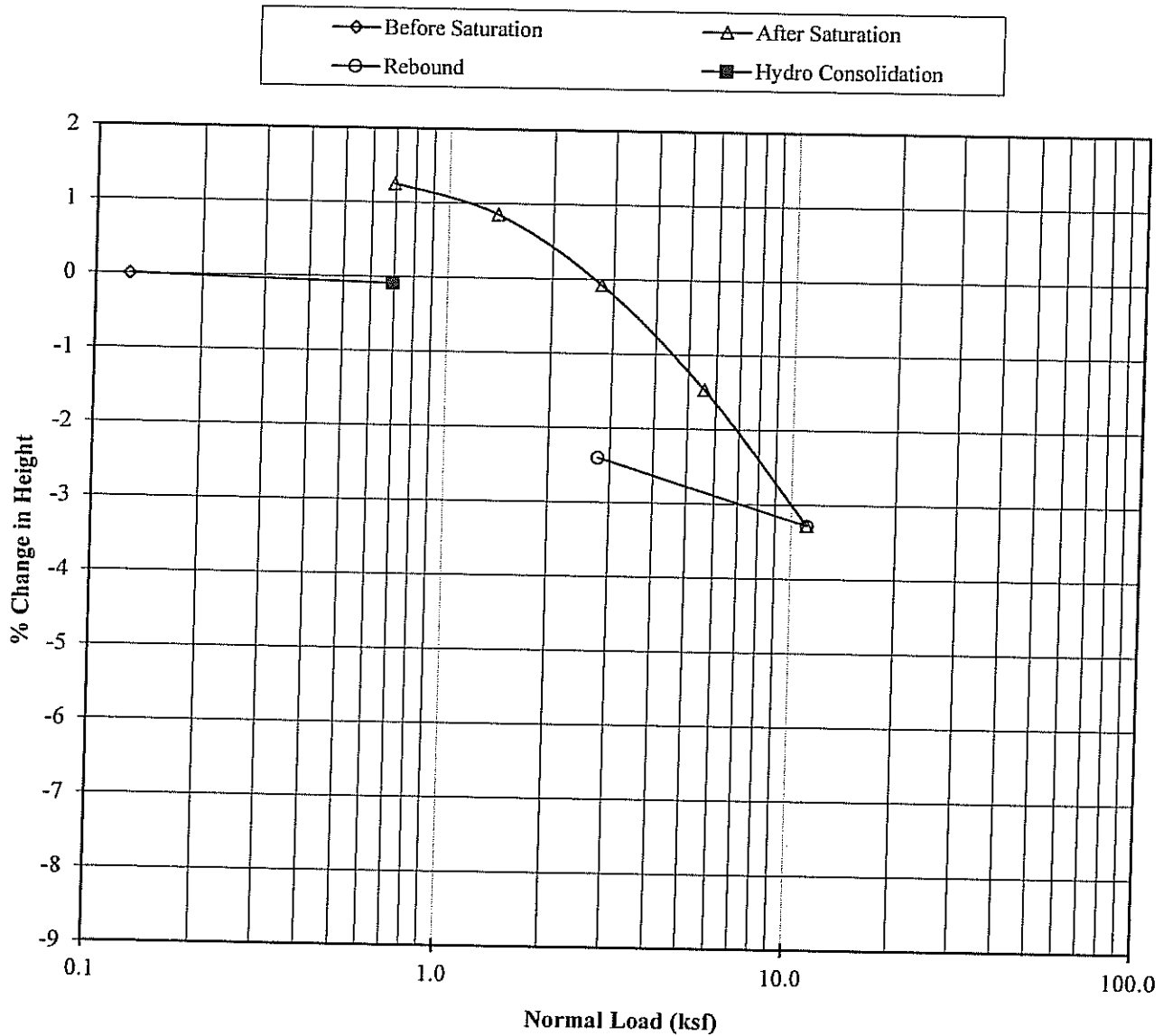
ASTM D2435 & D5333

Job Number: 544-19025
Job Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample ID: BH-8 R-2 @ 10'
Soil Description: Olive Brown Clay (CL)

February 12, 2019

Initial Dry Density, pcf: 89.6
Initial Moisture, %: 15.2
Initial Void Ratio: 0.861
Specific Gravity: 2.67

% Change in Height vs Normal Pressure Diagram





Sladden Engineering

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One Dimensional Consolidation

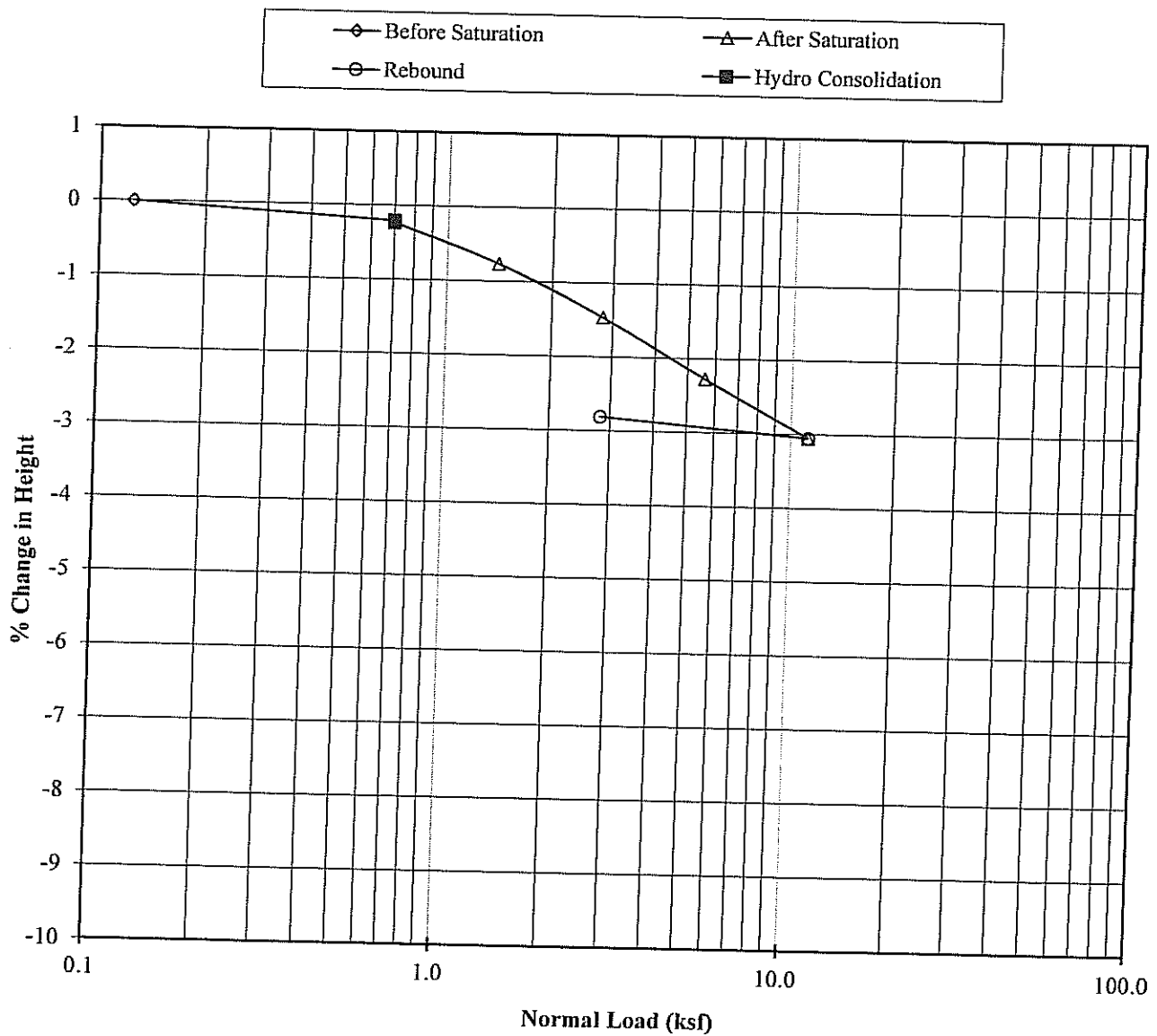
ASTM D2435 & D5333

Job Number: 544-19025
Job Name: Andalusia - Westside Development
Lab ID Number: LN6-19062
Sample ID: BH-9 R-1 @ 5'
Soil Description: Dark Brown Sandy Silt (ML)

February 12, 2019

Initial Dry Density, pcf: 96.0
Initial Moisture, %: 15.3
Initial Void Ratio: 0.736
Specific Gravity: 2.67

% 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: February 12, 2019

Account No.: 544-19025

Customer: Meriwether Companies

Location: SWC Madison Street & Avenue 58, La Quinta

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
BH-2 @ 0-5'	9.0	600	180	970
BH-6 @ 0-5'	9.0	280	90	2600



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RESISTANCE 'R' VALUE AND EXPANSION PRESSURE

CTM 301

February 20, 2019

Project Number: 544-19025

Project Name: Andalusia - Westside Development

Lab ID Number: LN6-19062

Sample ID: BH-2 Bulk 1 @ 0-5'

Sample Description: Olive Brown Silt (ML)

Specified Traffic Index: 5.0

Dry Density @ 300 psi Exudation Pressure: 103.5-pcf

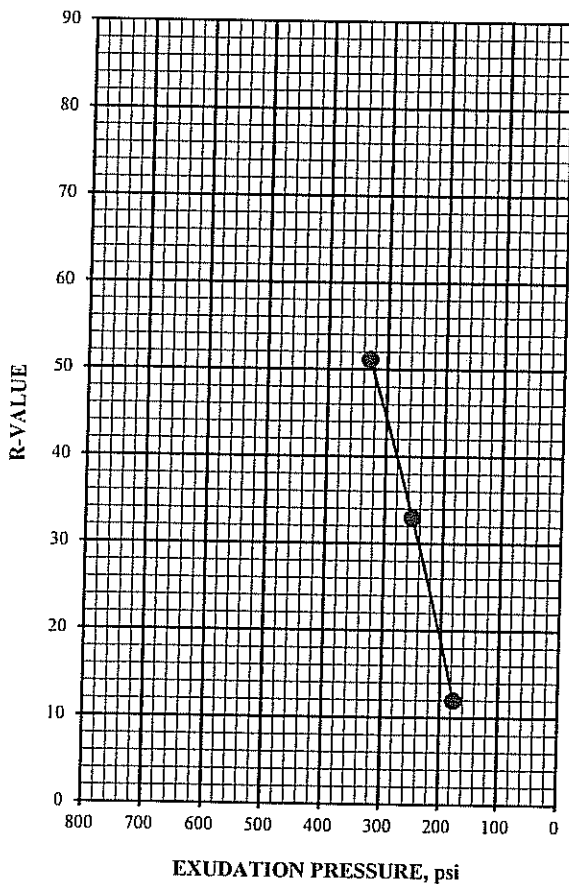
%Moisture @ 300 psi Exudation Pressure: 19.0%

R-Value - Exudation Pressure: 45

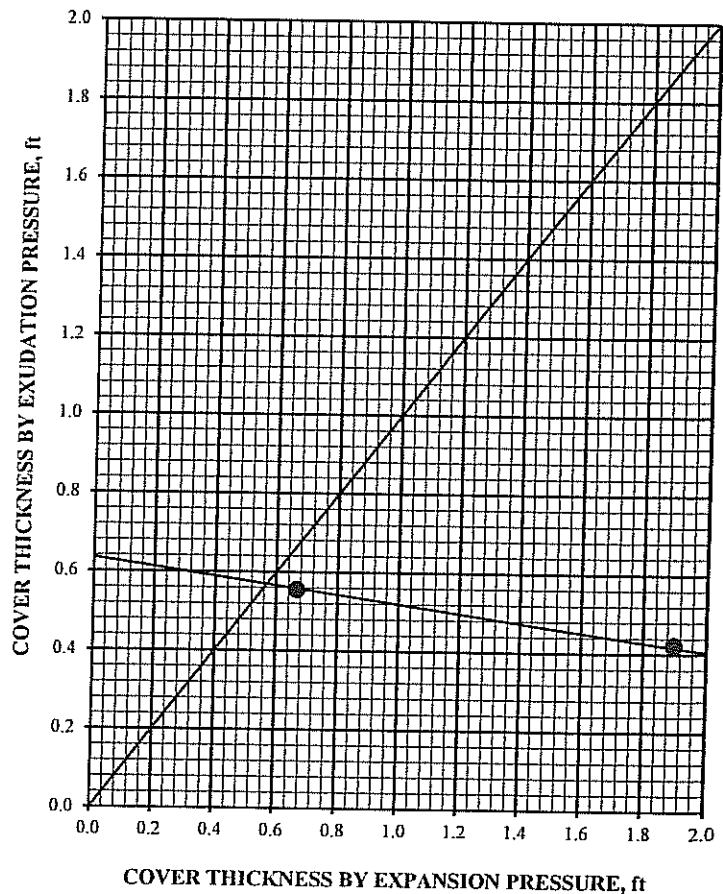
R-Value - Expansion Pressure: 10

R-Value @ Equilibrium: 10

EXUDATION PRESSURE CHART



EXPANSION PRESSURE CHART





Sladden Engineering

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RESISTANCE 'R' VALUE AND EXPANSION PRESSURE

CTM 301

February 20, 2019

Project Number: 544-19025

Project Name: Andalusia - Westside Development

Lab ID Number: LN6-19062

Sample ID: BH-6 Bulk 2 @ 0-5'

Sample Description: Dark Brown Silty Sand (SM)

Specified Traffic Index: 5.0

Dry Density @ 300 psi Exudation Pressure: 108.6-pcf

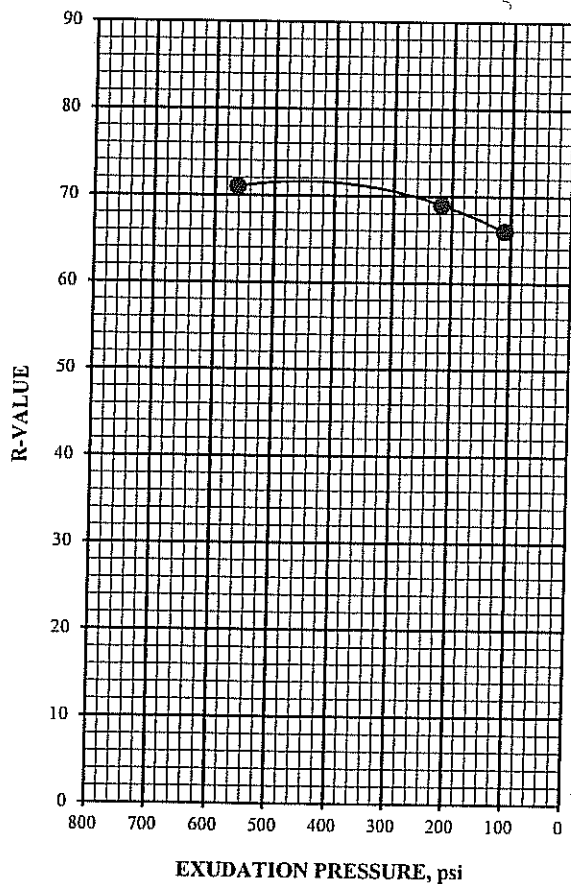
%Moisture @ 300 psi Exudation Pressure: 13.6%

R-Value - Exudation Pressure: 71

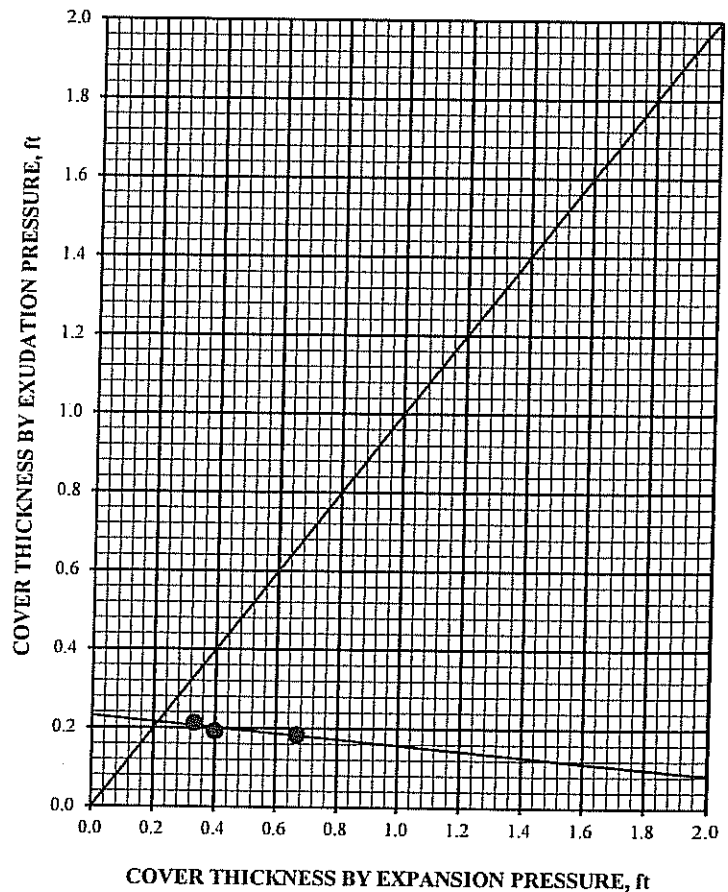
R-Value - Expansion Pressure: 66

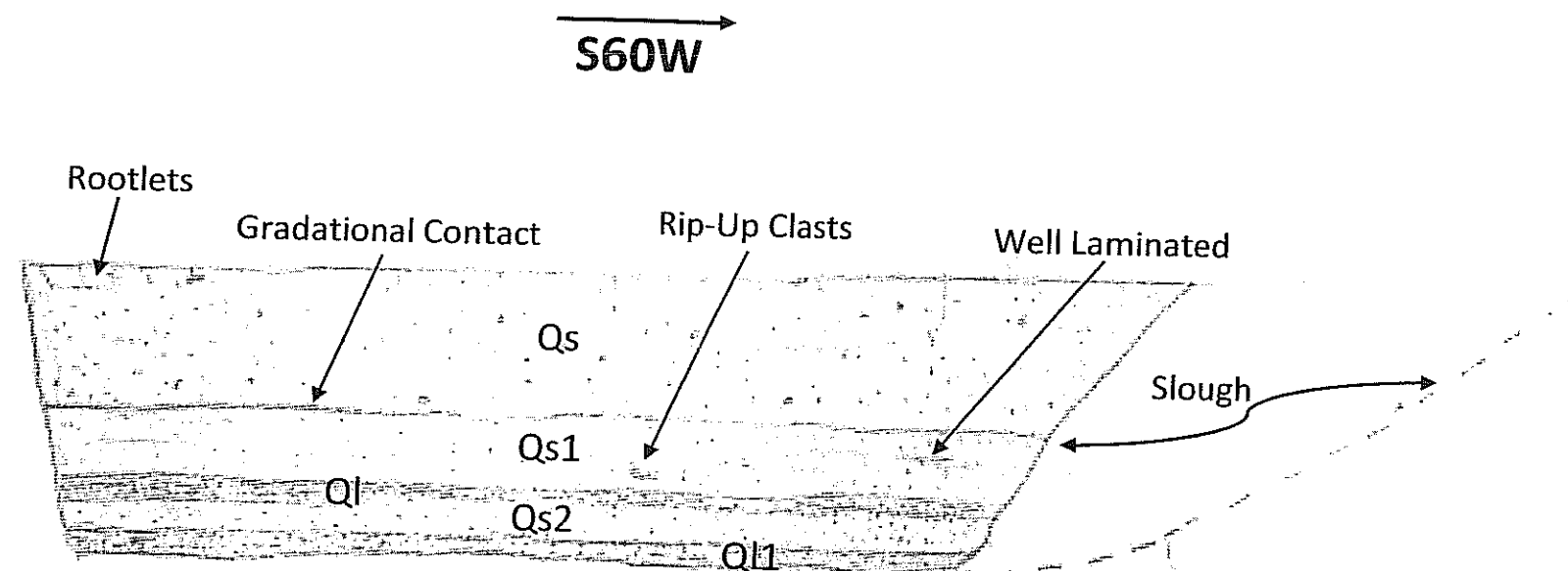
R-Value @ Equilibrium: 66

EXUDATION PRESSURE CHART



EXPANSION PRESSURE CHART





Qs: Dune sand (SM); grayish brown, dry, fine-grained.

Qs1: Dune sand (SM); grayish brown, dry, fine-grained, well-laminated.

Qs2: Dune sand (SM); grayish brown, dry, fine-grained, interbedded SM/ML layers, gastropods

Ql: lacustrine deposits (ML/CL); grayish brown, slightly moist, exhibited low to medium plasticity

Ql1: lacustrine deposits (ML/CL); grayish brown, slightly moist, exhibited low to medium plasticity

SCALE: 1"=2'
HORIZONTAL = VERTICAL



Sladden Engineering

TP-1

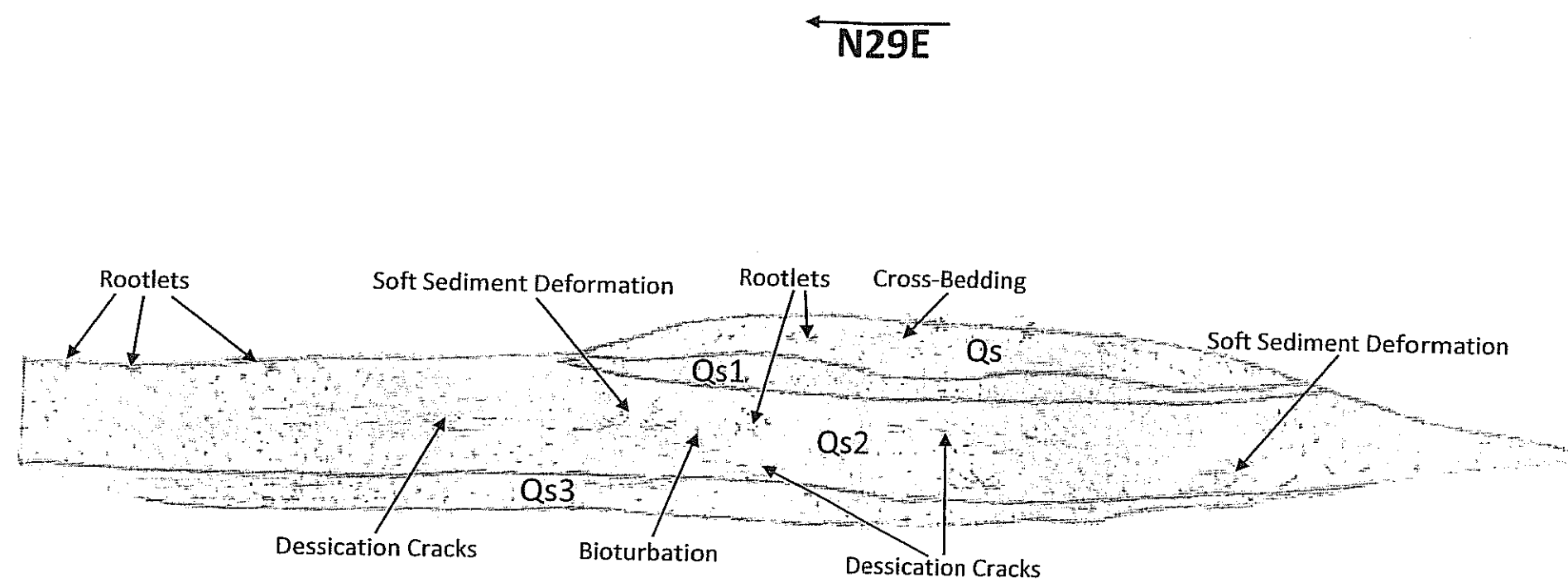
Project Number: 544-19025

Report Number: 19-01-049

Date: February 21, 2019

PLATE

1



Qs: Dune sand (SM); grayish brown, dry, fine-grained.

Qs1: Dune sand (SM); grayish brown, dry, fine-grained, gastropod shells throughout.

Qs2: Silty Sand (SM); mottled orangish and grayish brown, dry, fine-grained, dessication cracks present, well-laminated and gastropod shells throughout.

Qs3: Silty Sand (SM); mottled orangish and grayish brown, dry, fine-grained, well-laminated

SCALE: 1"=5'
HORIZONTAL = VERTICAL



Sladden Engineering

TP-2

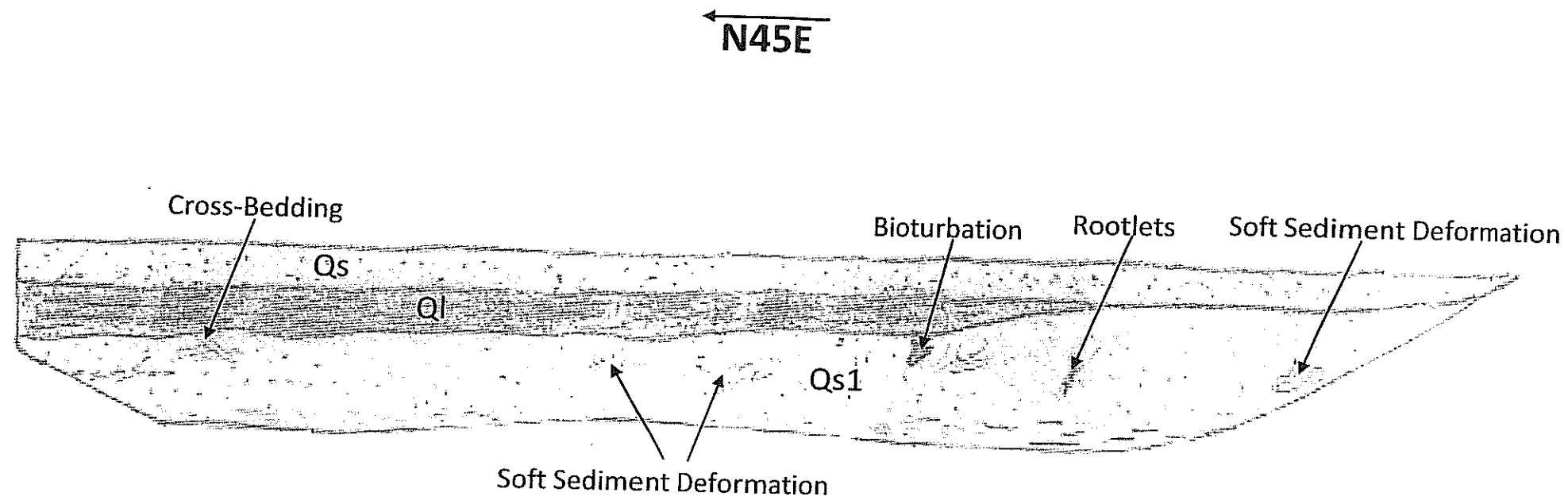
Project Number: 544-19025

Report Number: 19-01-049

Date: February 21, 2019

PLATE

2



Qs: Dune sand (SM); grayish brown, dry, fine-grained, gastropods throughout.

Qs1: Dune sand (SM); grayish brown, dry, fine-grained, well-laminated, gastropods throughout.

Ql: lacustrine deposits (ML/CL); grayish brown, slightly moist, exhibited low to medium plasticity characteristics..

SCALE: 1"=5'
HORIZONTAL = VERTICAL



Sladden Engineering

TP-3

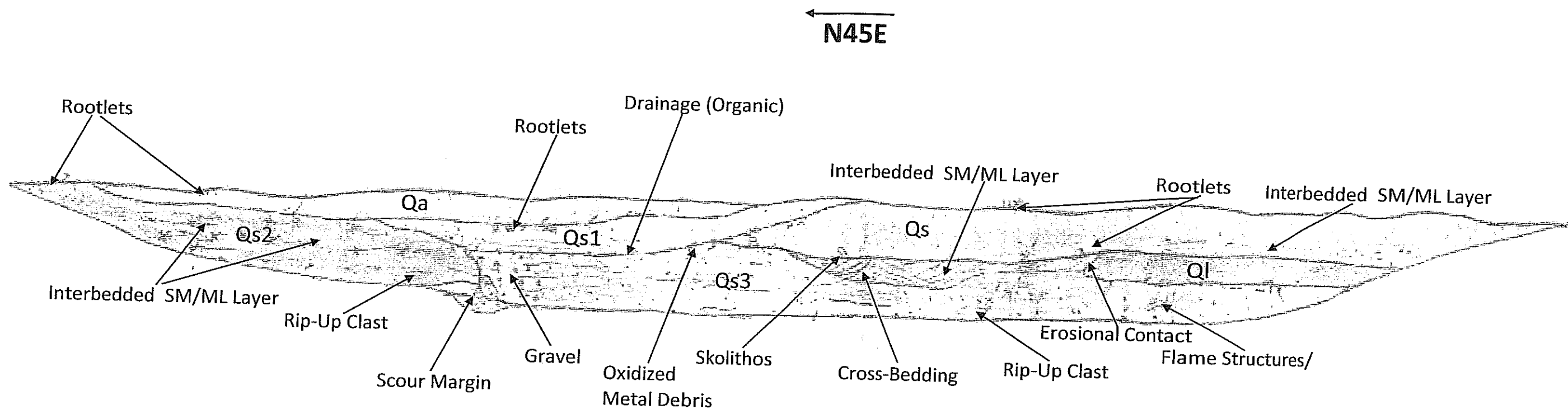
Project Number: 544-19025

Report Number: 19-01-049

Date: February 21, 2019

PLATE

3



Qa: Sand (SP); grayish brown, dry, fine to coarse-grained.

Qs: Dune sand (SM); grayish brown, dry, fine-grained, gastropods throughout.

Qs1: Dune sand (SM); grayish brown, dry, fine-grained, well-laminated.

Qs2: Silty sand (SM); grayish brown, dry, fine-grained, well-laminated, interbedded with SM/ML layers.

Qs3: Silty sand (SM); grayish brown, dry, fine to coarse-grained, well-laminated, gastropods throughout.

Ql: lacustrine deposits (ML/CL); grayish brown, slightly moist, exhibited low to medium plasticity characteristics..

SCALE: 1"=5'
HORIZONTAL = VERTICAL



Sladden Engineering

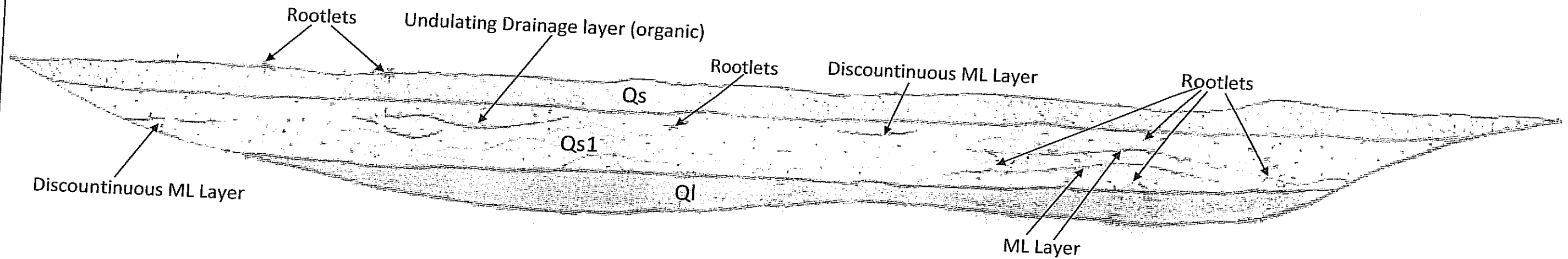
TP-4

Project Number:	544-19025
Report Number:	19-01-049
Date:	February 21, 2019

PLATE

4

← N42E



Qs: Organic rich silty sand (SM); grayish brown, dry, fine-grained, gastropods throughout.

Qs1: Silty sand (SM); grayish brown, dry, fine-grained, well-laminated, interbedded with silt (ML) layers, gastropods throughout.

Ql: clayey silt (ML) lacustrine deposits; grayish brown, slightly moist, exhibited low to medium plasticity characteristics..

SCALE: 1"=5'
HORIZONTAL = VERTICAL

 Sladden Engineering	TP-5		PLATE 5
	Project Number:	544-19025	
	Report Number:	19-01-049	
	Date:	February 21, 2019	

APPENDIX C

SEISMIC DESIGN MAPS AND REPORTS DEAGGREGATION OUTPUT



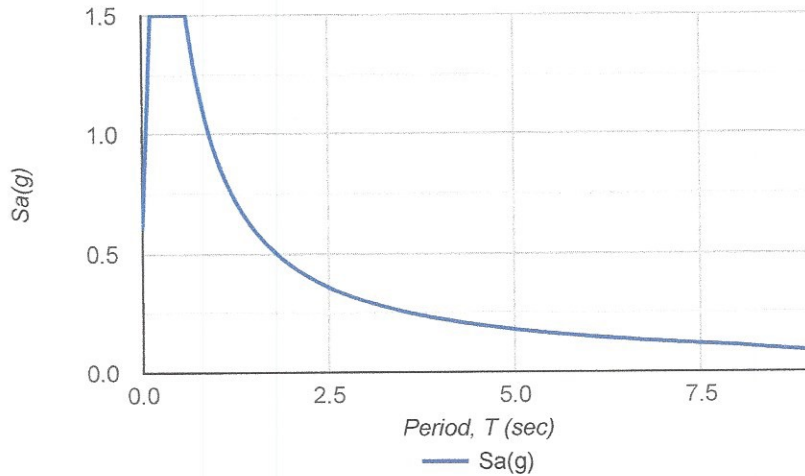
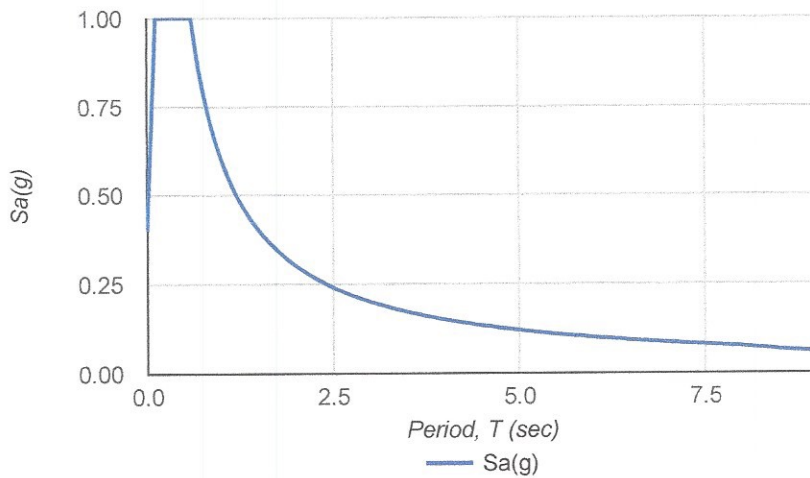
Latitude, Longitude: 33.621233, -116.257031



Date	2/4/2019, 9:45:00 AM
Design Code Reference Document	ASCE7-10
Risk Category	II
Site Class	D - Stiff Soil

Type	Value	Description
S_S	1.5	MCE_R ground motion. (for 0.2 second period)
S_1	0.6	MCE_R ground motion. (for 1.0s period)
S_{MS}	1.5	Site-modified spectral acceleration value
S_{M1}	0.901	Site-modified spectral acceleration value
S_{DS}	1	Numeric seismic design value at 0.2 second SA
S_{D1}	0.6	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	D	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	0.513	MCE_G peak ground acceleration
F_{PGA}	1	Site amplification factor at PGA
PGA_M	0.513	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
S_{sRT}	1.964	Probabilistic risk-targeted ground motion. (0.2 second)
S_{sUH}	1.841	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
S_{sD}	1.5	Factored deterministic acceleration value. (0.2 second)
S_{1RT}	0.728	Probabilistic risk-targeted ground motion. (1.0 second)
S_{1UH}	0.706	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S_{1D}	0.6	Factored deterministic acceleration value. (1.0 second)
$PGAd$	0.513	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	1.067	Mapped value of the risk coefficient at short periods
C_{R1}	1.031	Mapped value of the risk coefficient at a period of 1 s

MCER Response Spectrum**Design Response Spectrum****DISCLAIMER**

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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

33.621233

Time Horizon

Return period in years

475

Longitude

Decimal degrees, negative values for western longitudes

-116.257031

Site Class

259 m/s (Site class D)

^ Hazard Curve

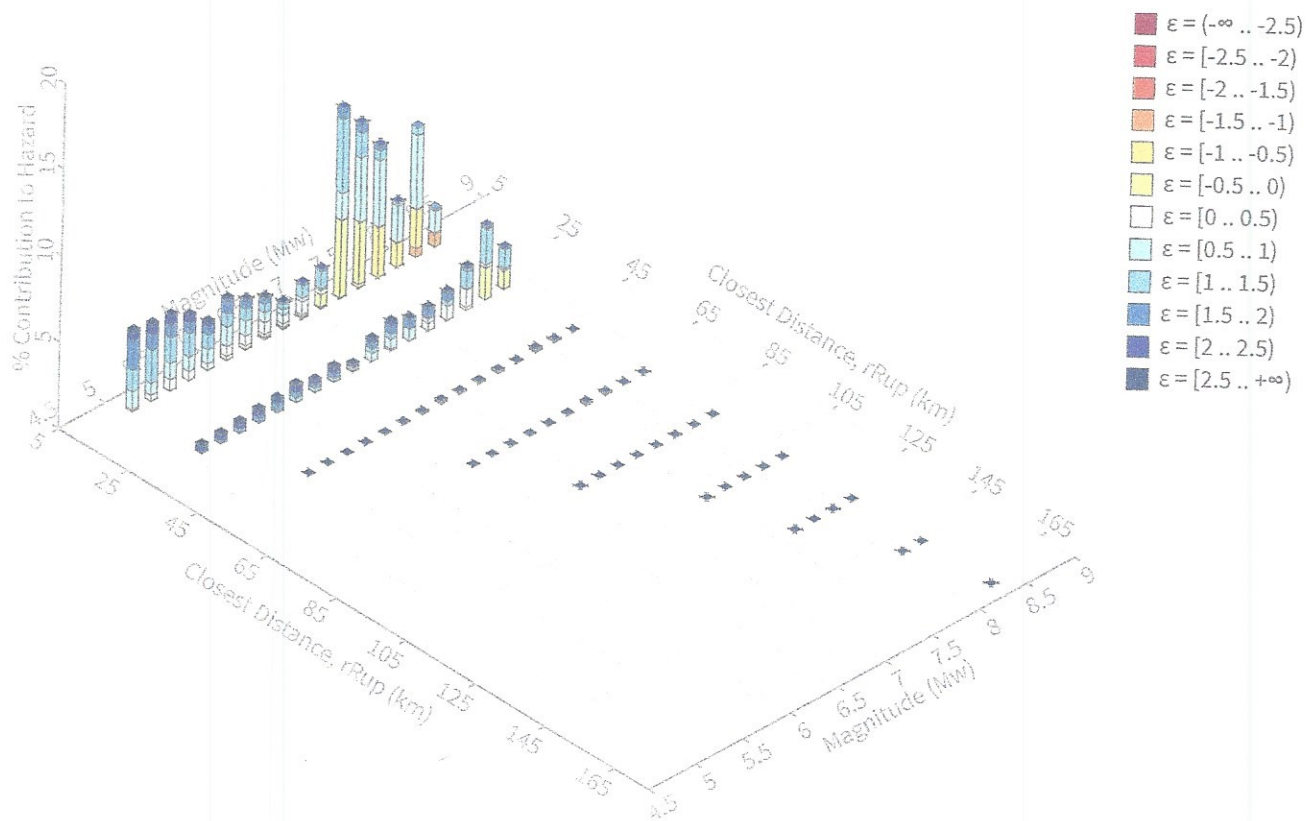
Please select "Edition", "Location" & "Site Class" above to compute a hazard curve.

Compute Hazard Curve

Deaggregation

Component

Total



Summary statistics for, Deaggregation: Total

Deaggregation targets

Return period: 475 yrs
Exceedance rate: 0.0021052632 yr⁻¹
PGA ground motion: 0.53248168 g

Recovered targets

Return period: 512.06357 yrs
Exceedance rate: 0.0019528825 yr⁻¹

Totals

Binned: 100 %
Residual: 0 %
Trace: 0.24 %

Mean (for all sources)

r: 16.62 km
m: 6.96
 ϵ_0 : 0.82 σ

Mode (largest r-m bin)

r: 13.92 km
m: 7.34
 ϵ_0 : 0.54 σ
Contribution: 10.99 %

Mode (largest ϵ_0 bin)

r: 13.96 km
m: 7.34
 ϵ_0 : -0.28 σ
Contribution: 4.41 %

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

$\epsilon 0$: [- ∞ .. -2.5)
 $\epsilon 1$: [-2.5 .. -2.0)
 $\epsilon 2$: [-2.0 .. -1.5)
 $\epsilon 3$: [-1.5 .. -1.0)
 $\epsilon 4$: [-1.0 .. -0.5)
 $\epsilon 5$: [-0.5 .. 0.0)
 $\epsilon 6$: [0.0 .. 0.5)
 $\epsilon 7$: [0.5 .. 1.0)
 $\epsilon 8$: [1.0 .. 1.5)
 $\epsilon 9$: [1.5 .. 2.0)
 $\epsilon 10$: [2.0 .. 2.5)
 $\epsilon 11$: [2.5 .. + ∞]

Deaggregation Contributors

Source Set	Source	Type	r	m	ϵ_0	lon	lat	az	%
UC33brAvg_FM31		System							32.14
	San Andreas (Coachella) rev [2]		13.97	7.61	0.39	116.150°W	33.710°N	45.15	21.93
	San Jacinto (Clark) rev [1]		25.87	7.64	0.92	116.420°W	33.433°N	215.79	3.48
	San Jacinto (Anza) rev [5]		27.90	7.97	0.76	116.513°W	33.490°N	238.41	3.32
UC33brAvg_FM32		System							31.98
	San Andreas (Coachella) rev [2]		13.97	7.61	0.40	116.150°W	33.710°N	45.15	21.80
	San Jacinto (Anza) rev [5]		27.90	7.96	0.77	116.513°W	33.490°N	238.41	3.39
	San Jacinto (Clark) rev [1]		25.87	7.65	0.91	116.420°W	33.433°N	215.79	3.36
UC33brAvg_FM31 (opt)		Grid							17.94
	PointSourceFinite: -116.257, 33.662		6.61	5.72	0.72	116.257°W	33.662°N	0.00	2.04
	PointSourceFinite: -116.257, 33.662		6.61	5.72	0.72	116.257°W	33.662°N	0.00	2.03
	PointSourceFinite: -116.257, 33.671		7.38	5.63	0.86	116.257°W	33.671°N	0.00	1.28
	PointSourceFinite: -116.257, 33.671		7.38	5.63	0.86	116.257°W	33.671°N	0.00	1.27
	PointSourceFinite: -116.257, 33.752		14.10	5.85	1.37	116.257°W	33.752°N	0.00	1.27
	PointSourceFinite: -116.257, 33.752		14.10	5.85	1.37	116.257°W	33.752°N	0.00	1.25
UC33brAvg_FM32 (opt)		Grid							17.93
	PointSourceFinite: -116.257, 33.662		6.61	5.72	0.72	116.257°W	33.662°N	0.00	2.04
	PointSourceFinite: -116.257, 33.662		6.61	5.72	0.72	116.257°W	33.662°N	0.00	2.03
	PointSourceFinite: -116.257, 33.671		7.38	5.63	0.86	116.257°W	33.671°N	0.00	1.28
	PointSourceFinite: -116.257, 33.671		7.38	5.63	0.86	116.257°W	33.671°N	0.00	1.27
	PointSourceFinite: -116.257, 33.752		14.10	5.84	1.37	116.257°W	33.752°N	0.00	1.27
	PointSourceFinite: -116.257, 33.752		14.10	5.84	1.37	116.257°W	33.752°N	0.00	1.25

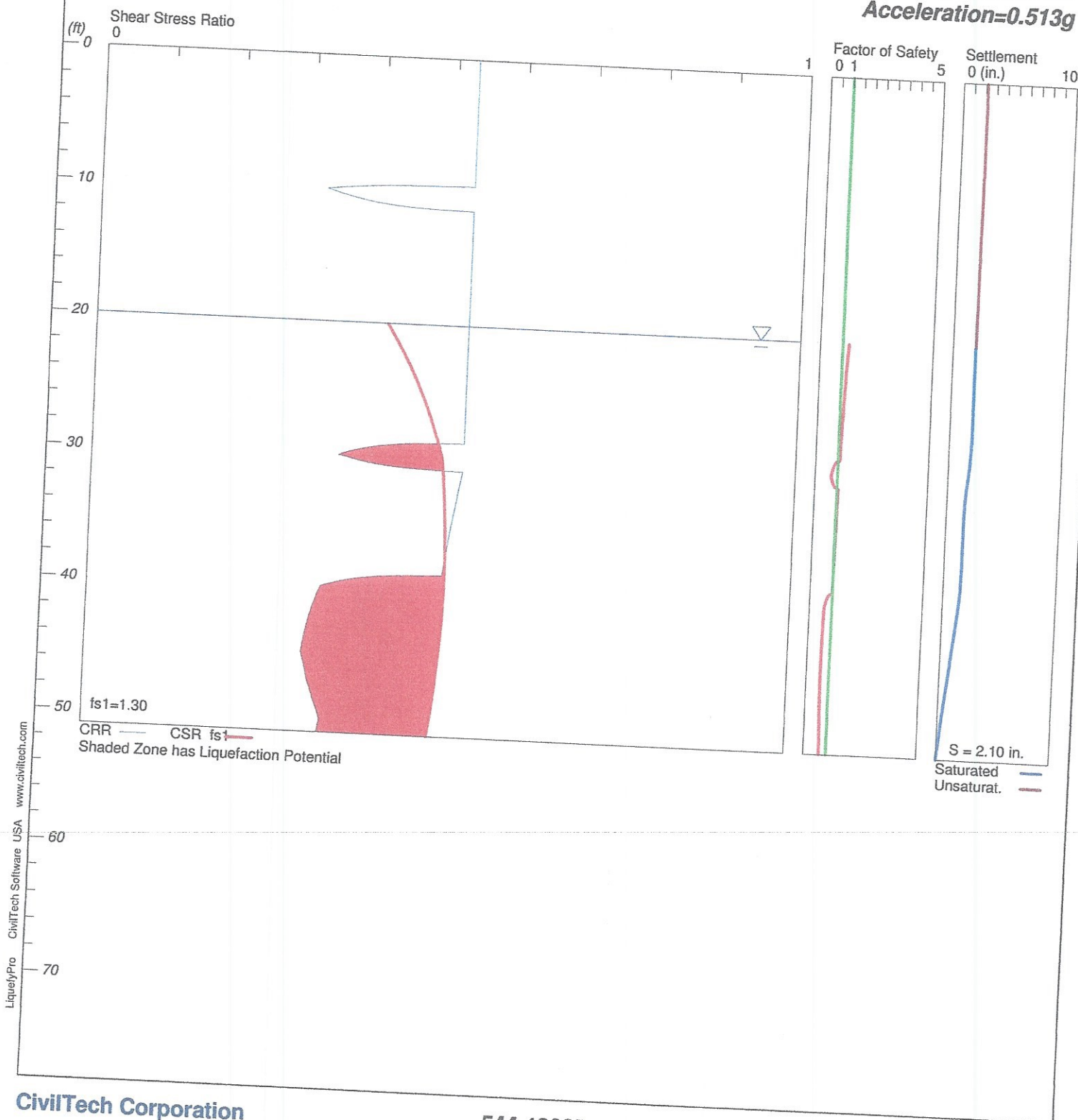
APPENDIX D
LIQUEFACTION ANALYSES

LIQUEFACTION ANALYSIS

Andalusia-Westside Development

Hole No.=BH-2 Water Depth=20 ft Surface Elev.=-40

Magnitude=7.34
Acceleration=0.513g



BH-2 Summary Liquefy.sum

LIQUEFACTION ANALYSIS SUMMARY

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Font: Courier New, Regular, Size 8 is recommended for this report.
Licensed to , 2/14/2019 10:19:01 AM

Input File Name: G:\Liquefy5\444-04194 Sage BH-1.liq
Title: Andalusia-Westside Development
Subtitle: 544-19025

Surface Elev.=-40
Hole No.=BH-2
Depth of Hole= 51.00 ft
Water Table during Earthquake= 20.00 ft
Water Table during In-Situ Testing= 47.00 ft
Max. Acceleration= 0.51 g
Earthquake Magnitude= 7.34

Input Data:

Surface Elev.=-40
Hole No.=BH-2
Depth of Hole=51.00 ft
Water Table during Earthquake= 20.00 ft
Water Table during In-Situ Testing= 47.00 ft
Max. Acceleration=0.51 g
Earthquake Magnitude=7.34
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= 1.3
Plot one CSR curve (fs1=User)
 10. Use Curve Smoothing: Yes*
- * Recommended Options

BH-2 Summary Liquefy.sum

In-Situ Test Data:

Depth ft	SPT	gamma pcf	Fines %
0.00	23.33	89.20	97.80
2.00	23.33	89.20	97.80
5.00	22.00	93.60	97.70
10.00	15.00	93.60	13.40
15.00	16.66	106.20	90.10
20.00	22.00	106.20	64.30
25.00	22.00	140.10	64.30
30.00	20.00	140.10	35.60
35.00	43.33	119.90	7.10
40.00	20.00	119.90	48.40
45.00	10.66	120.50	81.10
50.00	24.00	120.50	45.90

Output Results:

Settlement of Saturated Sands=1.99 in.

Settlement of Unsaturated Sands=0.11 in.

Total Settlement of Saturated and Unsaturated Sands=2.10 in.

Differential Settlement=1.050 to 1.386 in.

Depth ft	CRRm	CSRfs	F.S.	S_sat. in.	S_dry in.	S_all in.
0.00	0.53	0.43	5.00	1.99	0.11	2.10
0.05	0.53	0.43	5.00	1.99	0.11	2.10
0.10	0.53	0.43	5.00	1.99	0.11	2.10
0.15	0.53	0.43	5.00	1.99	0.11	2.10
0.20	0.53	0.43	5.00	1.99	0.11	2.10
0.25	0.53	0.43	5.00	1.99	0.11	2.10
0.30	0.53	0.43	5.00	1.99	0.11	2.10
0.35	0.53	0.43	5.00	1.99	0.11	2.10
0.40	0.53	0.43	5.00	1.99	0.11	2.10
0.45	0.53	0.43	5.00	1.99	0.11	2.10
0.50	0.53	0.43	5.00	1.99	0.11	2.10
0.55	0.53	0.43	5.00	1.99	0.11	2.10
0.60	0.53	0.43	5.00	1.99	0.11	2.10
0.65	0.53	0.43	5.00	1.99	0.11	2.10
0.70	0.53	0.43	5.00	1.99	0.11	2.10
0.75	0.53	0.43	5.00	1.99	0.11	2.10
0.80	0.53	0.43	5.00	1.99	0.11	2.10
0.85	0.53	0.43	5.00	1.99	0.11	2.10
0.90	0.53	0.43	5.00	1.99	0.11	2.10
0.95	0.53	0.43	5.00	1.99	0.11	2.10
1.00	0.53	0.43	5.00	1.99	0.11	2.10

BH-2 Summary Liquefy.sum

1.05	0.53	0.43	5.00	1.99	0.11	2.10
1.10	0.53	0.43	5.00	1.99	0.11	2.10
1.15	0.53	0.43	5.00	1.99	0.11	2.10
1.20	0.53	0.43	5.00	1.99	0.11	2.10
1.25	0.53	0.43	5.00	1.99	0.11	2.10
1.30	0.53	0.43	5.00	1.99	0.11	2.10
1.35	0.53	0.43	5.00	1.99	0.11	2.10
1.40	0.53	0.43	5.00	1.99	0.11	2.10
1.45	0.53	0.43	5.00	1.99	0.11	2.10
1.50	0.53	0.43	5.00	1.99	0.11	2.10
1.55	0.53	0.43	5.00	1.99	0.11	2.10
1.60	0.53	0.43	5.00	1.99	0.11	2.10
1.65	0.53	0.43	5.00	1.99	0.11	2.10
1.70	0.53	0.43	5.00	1.99	0.11	2.10
1.75	0.53	0.43	5.00	1.99	0.11	2.10
1.80	0.53	0.43	5.00	1.99	0.11	2.10
1.85	0.53	0.43	5.00	1.99	0.11	2.10
1.90	0.53	0.43	5.00	1.99	0.11	2.10
1.95	0.53	0.43	5.00	1.99	0.11	2.10
2.00	0.53	0.43	5.00	1.99	0.11	2.10
2.05	0.53	0.43	5.00	1.99	0.11	2.10
2.10	0.53	0.43	5.00	1.99	0.11	2.10
2.15	0.53	0.43	5.00	1.99	0.11	2.10
2.20	0.53	0.43	5.00	1.99	0.11	2.10
2.25	0.53	0.43	5.00	1.99	0.11	2.10
2.30	0.53	0.43	5.00	1.99	0.11	2.10
2.35	0.53	0.43	5.00	1.99	0.11	2.10
2.40	0.53	0.43	5.00	1.99	0.11	2.10
2.45	0.53	0.43	5.00	1.99	0.11	2.10
2.50	0.53	0.43	5.00	1.99	0.11	2.10
2.55	0.53	0.43	5.00	1.99	0.11	2.10
2.60	0.53	0.43	5.00	1.99	0.11	2.10
2.65	0.53	0.43	5.00	1.99	0.11	2.10
2.70	0.53	0.43	5.00	1.99	0.11	2.10
2.75	0.53	0.43	5.00	1.99	0.11	2.10
2.80	0.53	0.43	5.00	1.99	0.11	2.10
2.85	0.53	0.43	5.00	1.99	0.11	2.10
2.90	0.53	0.43	5.00	1.99	0.11	2.10
2.95	0.53	0.43	5.00	1.99	0.11	2.10
3.00	0.53	0.43	5.00	1.99	0.11	2.10
3.05	0.53	0.43	5.00	1.99	0.11	2.10
3.10	0.53	0.43	5.00	1.99	0.11	2.10
3.15	0.53	0.43	5.00	1.99	0.11	2.10
3.20	0.53	0.43	5.00	1.99	0.11	2.10
3.25	0.53	0.43	5.00	1.99	0.11	2.10
3.30	0.53	0.43	5.00	1.99	0.11	2.10
3.35	0.53	0.43	5.00	1.99	0.11	2.10
3.40	0.53	0.43	5.00	1.99	0.11	2.10

BH-2 Summary Liquefy.sum

3.45	0.53	0.43	5.00	1.99	0.11	2.10
3.50	0.53	0.43	5.00	1.99	0.11	2.10
3.55	0.53	0.43	5.00	1.99	0.11	2.10
3.60	0.53	0.43	5.00	1.99	0.11	2.10
3.65	0.53	0.43	5.00	1.99	0.11	2.10
3.70	0.53	0.43	5.00	1.99	0.11	2.10
3.75	0.53	0.43	5.00	1.99	0.11	2.10
3.80	0.53	0.43	5.00	1.99	0.11	2.10
3.85	0.53	0.43	5.00	1.99	0.11	2.10
3.90	0.53	0.43	5.00	1.99	0.11	2.10
3.95	0.53	0.43	5.00	1.99	0.11	2.10
4.00	0.53	0.43	5.00	1.99	0.11	2.09
4.05	0.53	0.43	5.00	1.99	0.11	2.09
4.10	0.53	0.43	5.00	1.99	0.11	2.09
4.15	0.53	0.43	5.00	1.99	0.11	2.09
4.20	0.53	0.43	5.00	1.99	0.11	2.09
4.25	0.53	0.43	5.00	1.99	0.11	2.09
4.30	0.53	0.43	5.00	1.99	0.11	2.09
4.35	0.53	0.43	5.00	1.99	0.11	2.09
4.40	0.53	0.43	5.00	1.99	0.11	2.09
4.45	0.53	0.43	5.00	1.99	0.11	2.09
4.50	0.53	0.43	5.00	1.99	0.10	2.09
4.55	0.53	0.43	5.00	1.99	0.10	2.09
4.60	0.53	0.43	5.00	1.99	0.10	2.09
4.65	0.53	0.43	5.00	1.99	0.10	2.09
4.70	0.53	0.43	5.00	1.99	0.10	2.09
4.75	0.53	0.43	5.00	1.99	0.10	2.09
4.80	0.53	0.43	5.00	1.99	0.10	2.09
4.85	0.53	0.43	5.00	1.99	0.10	2.09
4.90	0.53	0.43	5.00	1.99	0.10	2.09
4.95	0.53	0.43	5.00	1.99	0.10	2.09
5.00	0.53	0.43	5.00	1.99	0.10	2.09
5.05	0.53	0.43	5.00	1.99	0.10	2.09
5.10	0.53	0.43	5.00	1.99	0.10	2.09
5.15	0.53	0.43	5.00	1.99	0.10	2.09
5.20	0.53	0.43	5.00	1.99	0.10	2.09
5.25	0.53	0.43	5.00	1.99	0.10	2.09
5.30	0.53	0.43	5.00	1.99	0.10	2.09
5.35	0.53	0.43	5.00	1.99	0.10	2.09
5.40	0.53	0.43	5.00	1.99	0.10	2.09
5.45	0.53	0.43	5.00	1.99	0.10	2.09
5.50	0.53	0.43	5.00	1.99	0.10	2.09
5.55	0.53	0.43	5.00	1.99	0.10	2.09
5.60	0.53	0.43	5.00	1.99	0.10	2.09
5.65	0.53	0.43	5.00	1.99	0.10	2.09
5.70	0.53	0.43	5.00	1.99	0.10	2.09
5.75	0.53	0.43	5.00	1.99	0.10	2.09
5.80	0.53	0.43	5.00	1.99	0.10	2.09

BH-2 Summary Liquefy.sum

5.85	0.53	0.43	5.00	1.99	0.10	2.09
5.90	0.53	0.43	5.00	1.99	0.10	2.09
5.95	0.53	0.43	5.00	1.99	0.10	2.09
6.00	0.53	0.43	5.00	1.99	0.10	2.09
6.05	0.53	0.43	5.00	1.99	0.10	2.09
6.10	0.53	0.43	5.00	1.99	0.10	2.09
6.15	0.53	0.43	5.00	1.99	0.10	2.09
6.20	0.53	0.43	5.00	1.99	0.10	2.09
6.25	0.53	0.43	5.00	1.99	0.10	2.09
6.30	0.53	0.43	5.00	1.99	0.10	2.09
6.35	0.53	0.43	5.00	1.99	0.10	2.09
6.40	0.53	0.43	5.00	1.99	0.10	2.09
6.45	0.53	0.43	5.00	1.99	0.10	2.09
6.50	0.53	0.43	5.00	1.99	0.10	2.09
6.55	0.53	0.43	5.00	1.99	0.10	2.09
6.60	0.53	0.43	5.00	1.99	0.10	2.09
6.65	0.53	0.43	5.00	1.99	0.10	2.09
6.70	0.53	0.43	5.00	1.99	0.10	2.09
6.75	0.53	0.43	5.00	1.99	0.10	2.09
6.80	0.53	0.43	5.00	1.99	0.10	2.09
6.85	0.53	0.43	5.00	1.99	0.10	2.09
6.90	0.53	0.43	5.00	1.99	0.10	2.09
6.95	0.53	0.43	5.00	1.99	0.10	2.09
7.00	0.53	0.43	5.00	1.99	0.10	2.09
7.05	0.53	0.43	5.00	1.99	0.10	2.09
7.10	0.53	0.43	5.00	1.99	0.10	2.09
7.15	0.53	0.43	5.00	1.99	0.10	2.09
7.20	0.53	0.43	5.00	1.99	0.10	2.09
7.25	0.53	0.43	5.00	1.99	0.10	2.09
7.30	0.53	0.43	5.00	1.99	0.10	2.09
7.35	0.53	0.43	5.00	1.99	0.10	2.09
7.40	0.53	0.43	5.00	1.99	0.10	2.09
7.45	0.53	0.43	5.00	1.99	0.10	2.09
7.50	0.53	0.43	5.00	1.99	0.10	2.09
7.55	0.53	0.43	5.00	1.99	0.10	2.09
7.60	0.53	0.43	5.00	1.99	0.10	2.09
7.65	0.53	0.43	5.00	1.99	0.10	2.09
7.70	0.53	0.43	5.00	1.99	0.10	2.09
7.75	0.53	0.43	5.00	1.99	0.10	2.09
7.80	0.53	0.43	5.00	1.99	0.10	2.09
7.85	0.53	0.43	5.00	1.99	0.10	2.09
7.90	0.53	0.43	5.00	1.99	0.10	2.09
7.95	0.53	0.43	5.00	1.99	0.10	2.09
8.00	0.53	0.43	5.00	1.99	0.10	2.09
8.05	0.53	0.43	5.00	1.99	0.10	2.09
8.10	0.53	0.43	5.00	1.99	0.10	2.09
8.15	0.53	0.43	5.00	1.99	0.10	2.08
8.20	0.53	0.43	5.00	1.99	0.10	2.08

BH-2 Summary Liquefy.sum

8.25	0.53	0.43	5.00	1.99	0.10	2.08
8.30	0.53	0.43	5.00	1.99	0.10	2.08
8.35	0.53	0.43	5.00	1.99	0.10	2.08
8.40	0.53	0.42	5.00	1.99	0.09	2.08
8.45	0.53	0.42	5.00	1.99	0.09	2.08
8.50	0.53	0.42	5.00	1.99	0.09	2.08
8.55	0.53	0.42	5.00	1.99	0.09	2.08
8.60	0.53	0.42	5.00	1.99	0.09	2.08
8.65	0.53	0.42	5.00	1.99	0.09	2.08
8.70	0.53	0.42	5.00	1.99	0.09	2.08
8.75	0.53	0.42	5.00	1.99	0.09	2.08
8.80	0.53	0.42	5.00	1.99	0.09	2.08
8.85	0.53	0.42	5.00	1.99	0.09	2.08
8.90	0.53	0.42	5.00	1.99	0.09	2.08
8.95	0.53	0.42	5.00	1.99	0.09	2.08
9.00	0.53	0.42	5.00	1.99	0.09	2.08
9.05	0.53	0.42	5.00	1.99	0.09	2.08
9.10	0.53	0.42	5.00	1.99	0.09	2.08
9.15	0.53	0.42	5.00	1.99	0.09	2.08
9.20	0.53	0.42	5.00	1.99	0.09	2.08
9.25	0.53	0.42	5.00	1.99	0.09	2.08
9.30	0.53	0.42	5.00	1.99	0.09	2.08
9.35	0.53	0.42	5.00	1.99	0.09	2.08
9.40	0.53	0.42	5.00	1.99	0.09	2.08
9.45	0.53	0.42	5.00	1.99	0.09	2.08
9.50	0.48	0.42	5.00	1.99	0.09	2.08
9.55	0.43	0.42	5.00	1.99	0.09	2.08
9.60	0.41	0.42	5.00	1.99	0.09	2.08
9.65	0.39	0.42	5.00	1.99	0.09	2.08
9.70	0.38	0.42	5.00	1.99	0.09	2.08
9.75	0.36	0.42	5.00	1.99	0.09	2.08
9.80	0.35	0.42	5.00	1.99	0.09	2.07
9.85	0.34	0.42	5.00	1.99	0.08	2.07
9.90	0.34	0.42	5.00	1.99	0.08	2.07
9.95	0.33	0.42	5.00	1.99	0.08	2.07
10.00	0.32	0.42	5.00	1.99	0.08	2.07
10.05	0.32	0.42	5.00	1.99	0.08	2.07
10.10	0.33	0.42	5.00	1.99	0.08	2.07
10.15	0.33	0.42	5.00	1.99	0.08	2.07
10.20	0.33	0.42	5.00	1.99	0.08	2.07
10.25	0.34	0.42	5.00	1.99	0.08	2.07
10.30	0.34	0.42	5.00	1.99	0.08	2.07
10.35	0.34	0.42	5.00	1.99	0.08	2.07
10.40	0.35	0.42	5.00	1.99	0.08	2.07
10.45	0.35	0.42	5.00	1.99	0.08	2.06
10.50	0.35	0.42	5.00	1.99	0.07	2.06
10.55	0.36	0.42	5.00	1.99	0.07	2.06
10.60	0.36	0.42	5.00	1.99	0.07	2.06

BH-2 Summary Liquefy.sum

10.65	0.37	0.42	5.00	1.99	0.07	2.06
10.70	0.37	0.42	5.00	1.99	0.07	2.06
10.75	0.38	0.42	5.00	1.99	0.07	2.06
10.80	0.38	0.42	5.00	1.99	0.07	2.06
10.85	0.39	0.42	5.00	1.99	0.07	2.06
10.90	0.39	0.42	5.00	1.99	0.07	2.06
10.95	0.40	0.42	5.00	1.99	0.07	2.06
11.00	0.41	0.42	5.00	1.99	0.07	2.06
11.05	0.41	0.42	5.00	1.99	0.07	2.06
11.10	0.42	0.42	5.00	1.99	0.07	2.05
11.15	0.44	0.42	5.00	1.99	0.06	2.05
11.20	0.45	0.42	5.00	1.99	0.06	2.05
11.25	0.48	0.42	5.00	1.99	0.06	2.05
11.30	0.53	0.42	5.00	1.99	0.06	2.05
11.35	0.53	0.42	5.00	1.99	0.06	2.05
11.40	0.53	0.42	5.00	1.99	0.06	2.05
11.45	0.53	0.42	5.00	1.99	0.06	2.05
11.50	0.53	0.42	5.00	1.99	0.06	2.05
11.55	0.53	0.42	5.00	1.99	0.06	2.05
11.60	0.53	0.42	5.00	1.99	0.06	2.05
11.65	0.53	0.42	5.00	1.99	0.06	2.05
11.70	0.53	0.42	5.00	1.99	0.06	2.05
11.75	0.53	0.42	5.00	1.99	0.06	2.05
11.80	0.53	0.42	5.00	1.99	0.06	2.04
11.85	0.53	0.42	5.00	1.99	0.05	2.04
11.90	0.53	0.42	5.00	1.99	0.05	2.04
11.95	0.53	0.42	5.00	1.99	0.05	2.04
12.00	0.53	0.42	5.00	1.99	0.05	2.04
12.05	0.53	0.42	5.00	1.99	0.05	2.04
12.10	0.53	0.42	5.00	1.99	0.05	2.04
12.15	0.53	0.42	5.00	1.99	0.05	2.04
12.20	0.53	0.42	5.00	1.99	0.05	2.04
12.25	0.53	0.42	5.00	1.99	0.05	2.04
12.30	0.53	0.42	5.00	1.99	0.05	2.04
12.35	0.53	0.42	5.00	1.99	0.05	2.04
12.40	0.53	0.42	5.00	1.99	0.05	2.04
12.45	0.53	0.42	5.00	1.99	0.05	2.04
12.50	0.53	0.42	5.00	1.99	0.05	2.04
12.55	0.53	0.42	5.00	1.99	0.05	2.04
12.60	0.53	0.42	5.00	1.99	0.05	2.04
12.65	0.53	0.42	5.00	1.99	0.05	2.04
12.70	0.53	0.42	5.00	1.99	0.05	2.03
12.75	0.53	0.42	5.00	1.99	0.05	2.03
12.80	0.53	0.42	5.00	1.99	0.04	2.03
12.85	0.53	0.42	5.00	1.99	0.04	2.03
12.90	0.53	0.42	5.00	1.99	0.04	2.03
12.95	0.53	0.42	5.00	1.99	0.04	2.03
13.00	0.53	0.42	5.00	1.99	0.04	2.03

BH-2 Summary Liquefy.sum

13.05	0.53	0.42	5.00	1.99	0.04	2.03
13.10	0.53	0.42	5.00	1.99	0.04	2.03
13.15	0.53	0.42	5.00	1.99	0.04	2.03
13.20	0.53	0.42	5.00	1.99	0.04	2.03
13.25	0.53	0.42	5.00	1.99	0.04	2.03
13.30	0.53	0.42	5.00	1.99	0.04	2.03
13.35	0.53	0.42	5.00	1.99	0.04	2.03
13.40	0.53	0.42	5.00	1.99	0.04	2.03
13.45	0.53	0.42	5.00	1.99	0.04	2.03
13.50	0.53	0.42	5.00	1.99	0.04	2.03
13.55	0.53	0.42	5.00	1.99	0.04	2.03
13.60	0.53	0.42	5.00	1.99	0.04	2.03
13.65	0.53	0.42	5.00	1.99	0.04	2.03
13.70	0.53	0.42	5.00	1.99	0.04	2.03
13.75	0.53	0.42	5.00	1.99	0.04	2.03
13.80	0.53	0.42	5.00	1.99	0.04	2.03
13.85	0.53	0.42	5.00	1.99	0.04	2.03
13.90	0.53	0.42	5.00	1.99	0.04	2.03
13.95	0.53	0.42	5.00	1.99	0.04	2.03
14.00	0.53	0.42	5.00	1.99	0.04	2.03
14.05	0.53	0.42	5.00	1.99	0.04	2.03
14.10	0.53	0.42	5.00	1.99	0.04	2.03
14.15	0.53	0.42	5.00	1.99	0.04	2.03
14.20	0.53	0.42	5.00	1.99	0.04	2.03
14.25	0.53	0.42	5.00	1.99	0.04	2.03
14.30	0.53	0.42	5.00	1.99	0.04	2.03
14.35	0.53	0.42	5.00	1.99	0.04	2.02
14.40	0.53	0.42	5.00	1.99	0.04	2.02
14.45	0.53	0.42	5.00	1.99	0.04	2.02
14.50	0.53	0.42	5.00	1.99	0.04	2.02
14.55	0.53	0.42	5.00	1.99	0.03	2.02
14.60	0.53	0.42	5.00	1.99	0.03	2.02
14.65	0.53	0.42	5.00	1.99	0.03	2.02
14.70	0.53	0.42	5.00	1.99	0.03	2.02
14.75	0.53	0.42	5.00	1.99	0.03	2.02
14.80	0.53	0.42	5.00	1.99	0.03	2.02
14.85	0.53	0.42	5.00	1.99	0.03	2.02
14.90	0.53	0.42	5.00	1.99	0.03	2.02
14.95	0.53	0.42	5.00	1.99	0.03	2.02
15.00	0.53	0.42	5.00	1.99	0.03	2.02
15.05	0.53	0.42	5.00	1.99	0.03	2.02
15.10	0.53	0.42	5.00	1.99	0.03	2.02
15.15	0.53	0.42	5.00	1.99	0.03	2.02
15.20	0.53	0.42	5.00	1.99	0.03	2.02
15.25	0.53	0.42	5.00	1.99	0.03	2.02
15.30	0.53	0.42	5.00	1.99	0.03	2.02
15.35	0.53	0.42	5.00	1.99	0.03	2.02
15.40	0.53	0.42	5.00	1.99	0.03	2.02

BH-2 Summary Liquefy.sum

15.45	0.53	0.42	5.00	1.99	0.03	2.02
15.50	0.53	0.42	5.00	1.99	0.03	2.02
15.55	0.53	0.42	5.00	1.99	0.03	2.02
15.60	0.53	0.42	5.00	1.99	0.03	2.02
15.65	0.53	0.42	5.00	1.99	0.03	2.02
15.70	0.53	0.42	5.00	1.99	0.03	2.02
15.75	0.53	0.42	5.00	1.99	0.03	2.02
15.80	0.53	0.42	5.00	1.99	0.03	2.02
15.85	0.53	0.42	5.00	1.99	0.03	2.02
15.90	0.53	0.42	5.00	1.99	0.03	2.02
15.95	0.53	0.42	5.00	1.99	0.03	2.02
16.00	0.53	0.42	5.00	1.99	0.03	2.02
16.05	0.53	0.42	5.00	1.99	0.03	2.02
16.10	0.53	0.42	5.00	1.99	0.03	2.02
16.15	0.53	0.42	5.00	1.99	0.03	2.02
16.20	0.53	0.42	5.00	1.99	0.03	2.02
16.25	0.53	0.42	5.00	1.99	0.03	2.02
16.30	0.53	0.42	5.00	1.99	0.03	2.01
16.35	0.53	0.42	5.00	1.99	0.03	2.01
16.40	0.53	0.42	5.00	1.99	0.03	2.01
16.45	0.53	0.42	5.00	1.99	0.02	2.01
16.50	0.53	0.42	5.00	1.99	0.02	2.01
16.55	0.53	0.42	5.00	1.99	0.02	2.01
16.60	0.53	0.42	5.00	1.99	0.02	2.01
16.65	0.53	0.42	5.00	1.99	0.02	2.01
16.70	0.53	0.42	5.00	1.99	0.02	2.01
16.75	0.53	0.42	5.00	1.99	0.02	2.01
16.80	0.53	0.42	5.00	1.99	0.02	2.01
16.85	0.53	0.42	5.00	1.99	0.02	2.01
16.90	0.53	0.42	5.00	1.99	0.02	2.01
16.95	0.53	0.42	5.00	1.99	0.02	2.01
17.00	0.53	0.42	5.00	1.99	0.02	2.01
17.05	0.53	0.42	5.00	1.99	0.02	2.01
17.10	0.53	0.42	5.00	1.99	0.02	2.01
17.15	0.53	0.42	5.00	1.99	0.02	2.01
17.20	0.53	0.42	5.00	1.99	0.02	2.01
17.25	0.53	0.42	5.00	1.99	0.02	2.01
17.30	0.53	0.42	5.00	1.99	0.02	2.01
17.35	0.53	0.42	5.00	1.99	0.02	2.01
17.40	0.53	0.42	5.00	1.99	0.02	2.01
17.45	0.53	0.42	5.00	1.99	0.02	2.01
17.50	0.53	0.42	5.00	1.99	0.02	2.01
17.55	0.53	0.42	5.00	1.99	0.02	2.01
17.60	0.53	0.42	5.00	1.99	0.02	2.01
17.65	0.53	0.42	5.00	1.99	0.02	2.01
17.70	0.53	0.42	5.00	1.99	0.02	2.01
17.75	0.53	0.42	5.00	1.99	0.02	2.01
17.80	0.53	0.42	5.00	1.99	0.02	2.01

BH-2 Summary Liquefy.sum

17.85	0.53	0.42	5.00	1.99	0.02	2.01
17.90	0.53	0.42	5.00	1.99	0.02	2.01
17.95	0.53	0.42	5.00	1.99	0.02	2.00
18.00	0.53	0.42	5.00	1.99	0.02	2.00
18.05	0.53	0.42	5.00	1.99	0.01	2.00
18.10	0.53	0.42	5.00	1.99	0.01	2.00
18.15	0.53	0.42	5.00	1.99	0.01	2.00
18.20	0.53	0.42	5.00	1.99	0.01	2.00
18.25	0.53	0.42	5.00	1.99	0.01	2.00
18.30	0.53	0.41	5.00	1.99	0.01	2.00
18.35	0.53	0.41	5.00	1.99	0.01	2.00
18.40	0.53	0.41	5.00	1.99	0.01	2.00
18.45	0.53	0.41	5.00	1.99	0.01	2.00
18.50	0.53	0.41	5.00	1.99	0.01	2.00
18.55	0.53	0.41	5.00	1.99	0.01	2.00
18.60	0.53	0.41	5.00	1.99	0.01	2.00
18.65	0.53	0.41	5.00	1.99	0.01	2.00
18.70	0.53	0.41	5.00	1.99	0.01	2.00
18.75	0.53	0.41	5.00	1.99	0.01	2.00
18.80	0.53	0.41	5.00	1.99	0.01	2.00
18.85	0.53	0.41	5.00	1.99	0.01	2.00
18.90	0.53	0.41	5.00	1.99	0.01	2.00
18.95	0.53	0.41	5.00	1.99	0.01	2.00
19.00	0.53	0.41	5.00	1.99	0.01	2.00
19.05	0.53	0.41	5.00	1.99	0.01	2.00
19.10	0.53	0.41	5.00	1.99	0.01	2.00
19.15	0.53	0.41	5.00	1.99	0.01	2.00
19.20	0.53	0.41	5.00	1.99	0.01	2.00
19.25	0.53	0.41	5.00	1.99	0.01	2.00
19.30	0.53	0.41	5.00	1.99	0.01	2.00
19.35	0.53	0.41	5.00	1.99	0.01	1.99
19.40	0.53	0.41	5.00	1.99	0.01	1.99
19.45	0.53	0.41	5.00	1.99	0.00	1.99
19.50	0.53	0.41	5.00	1.99	0.00	1.99
19.55	0.53	0.41	5.00	1.99	0.00	1.99
19.60	0.53	0.41	5.00	1.99	0.00	1.99
19.65	0.53	0.41	5.00	1.99	0.00	1.99
19.70	0.53	0.41	5.00	1.99	0.00	1.99
19.75	0.53	0.41	5.00	1.99	0.00	1.99
19.80	0.53	0.41	5.00	1.99	0.00	1.99
19.85	0.53	0.41	5.00	1.99	0.00	1.99
19.90	0.53	0.41	5.00	1.99	0.00	1.99
19.95	0.53	0.41	5.00	1.99	0.00	1.99
20.00	0.53	0.41	5.00	1.99	0.00	1.99
20.05	0.53	0.41	1.28	1.99	0.00	1.99
20.10	0.53	0.41	1.28	1.99	0.00	1.99
20.15	0.53	0.41	1.27	1.99	0.00	1.99
20.20	0.53	0.42	1.27	1.99	0.00	1.99

BH-2 Summary Liquefy.sum

20.25	0.53	0.42	1.27	1.99	0.00	1.99
20.30	0.53	0.42	1.27	1.99	0.00	1.99
20.35	0.53	0.42	1.27	1.99	0.00	1.99
20.40	0.53	0.42	1.27	1.99	0.00	1.99
20.45	0.53	0.42	1.26	1.99	0.00	1.99
20.50	0.53	0.42	1.26	1.99	0.00	1.99
20.55	0.53	0.42	1.26	1.99	0.00	1.99
20.60	0.53	0.42	1.26	1.99	0.00	1.99
20.65	0.53	0.42	1.26	1.99	0.00	1.99
20.70	0.53	0.42	1.25	1.99	0.00	1.99
20.75	0.53	0.42	1.25	1.99	0.00	1.99
20.80	0.53	0.42	1.25	1.99	0.00	1.99
20.85	0.53	0.42	1.25	1.99	0.00	1.99
20.90	0.53	0.42	1.25	1.99	0.00	1.99
20.95	0.53	0.42	1.25	1.99	0.00	1.99
21.00	0.53	0.42	1.24	1.99	0.00	1.99
21.05	0.53	0.43	1.24	1.99	0.00	1.99
21.10	0.53	0.43	1.24	1.99	0.00	1.99
21.15	0.53	0.43	1.24	1.99	0.00	1.99
21.20	0.53	0.43	1.24	1.99	0.00	1.99
21.25	0.53	0.43	1.24	1.99	0.00	1.99
21.30	0.53	0.43	1.23	1.99	0.00	1.99
21.35	0.53	0.43	1.23	1.99	0.00	1.99
21.40	0.53	0.43	1.23	1.99	0.00	1.99
21.45	0.53	0.43	1.23	1.99	0.00	1.99
21.50	0.53	0.43	1.23	1.99	0.00	1.99
21.55	0.53	0.43	1.23	1.99	0.00	1.99
21.60	0.53	0.43	1.22	1.99	0.00	1.99
21.65	0.53	0.43	1.22	1.99	0.00	1.99
21.70	0.53	0.43	1.22	1.99	0.00	1.99
21.75	0.53	0.43	1.22	1.99	0.00	1.99
21.80	0.53	0.43	1.22	1.99	0.00	1.99
21.85	0.53	0.43	1.22	1.99	0.00	1.99
21.90	0.53	0.43	1.22	1.99	0.00	1.99
21.95	0.53	0.44	1.21	1.99	0.00	1.99
22.00	0.53	0.44	1.21	1.99	0.00	1.99
22.05	0.53	0.44	1.21	1.99	0.00	1.99
22.10	0.53	0.44	1.21	1.99	0.00	1.99
22.15	0.53	0.44	1.21	1.99	0.00	1.99
22.20	0.53	0.44	1.21	1.99	0.00	1.99
22.25	0.53	0.44	1.21	1.99	0.00	1.99
22.30	0.53	0.44	1.20	1.99	0.00	1.99
22.35	0.53	0.44	1.20	1.99	0.00	1.99
22.40	0.53	0.44	1.20	1.99	0.00	1.99
22.45	0.53	0.44	1.20	1.99	0.00	1.99
22.50	0.53	0.44	1.20	1.99	0.00	1.99
22.55	0.53	0.44	1.20	1.99	0.00	1.99
22.60	0.53	0.44	1.20	1.99	0.00	1.99

BH-2 Summary Liquefy.sum

22.65	0.53	0.44	1.19	1.99	0.00	1.99
22.70	0.53	0.44	1.19	1.99	0.00	1.99
22.75	0.53	0.44	1.19	1.99	0.00	1.99
22.80	0.53	0.44	1.19	1.99	0.00	1.99
22.85	0.53	0.44	1.19	1.99	0.00	1.99
22.90	0.53	0.44	1.19	1.99	0.00	1.99
22.95	0.53	0.45	1.19	1.99	0.00	1.99
23.00	0.53	0.45	1.18	1.99	0.00	1.99
23.05	0.53	0.45	1.18	1.99	0.00	1.99
23.10	0.53	0.45	1.18	1.99	0.00	1.99
23.15	0.53	0.45	1.18	1.99	0.00	1.99
23.20	0.53	0.45	1.18	1.99	0.00	1.99
23.25	0.53	0.45	1.18	1.99	0.00	1.99
23.30	0.53	0.45	1.18	1.99	0.00	1.99
23.35	0.53	0.45	1.18	1.99	0.00	1.99
23.40	0.53	0.45	1.17	1.99	0.00	1.99
23.45	0.53	0.45	1.17	1.99	0.00	1.99
23.50	0.53	0.45	1.17	1.99	0.00	1.99
23.55	0.53	0.45	1.17	1.99	0.00	1.99
23.60	0.53	0.45	1.17	1.99	0.00	1.99
23.65	0.53	0.45	1.17	1.99	0.00	1.99
23.70	0.53	0.45	1.17	1.99	0.00	1.99
23.75	0.53	0.45	1.17	1.99	0.00	1.99
23.80	0.53	0.45	1.16	1.99	0.00	1.99
23.85	0.53	0.45	1.16	1.99	0.00	1.99
23.90	0.53	0.45	1.16	1.99	0.00	1.99
23.95	0.53	0.45	1.16	1.99	0.00	1.99
24.00	0.53	0.46	1.16	1.99	0.00	1.99
24.05	0.53	0.46	1.16	1.99	0.00	1.99
24.10	0.53	0.46	1.16	1.99	0.00	1.99
24.15	0.53	0.46	1.16	1.99	0.00	1.99
24.20	0.53	0.46	1.16	1.99	0.00	1.99
24.25	0.53	0.46	1.15	1.99	0.00	1.99
24.30	0.53	0.46	1.15	1.99	0.00	1.99
24.35	0.53	0.46	1.15	1.99	0.00	1.99
24.40	0.53	0.46	1.15	1.99	0.00	1.99
24.45	0.53	0.46	1.15	1.99	0.00	1.99
24.50	0.53	0.46	1.15	1.99	0.00	1.99
24.55	0.53	0.46	1.15	1.99	0.00	1.99
24.60	0.53	0.46	1.15	1.99	0.00	1.99
24.65	0.53	0.46	1.15	1.99	0.00	1.99
24.70	0.53	0.46	1.14	1.99	0.00	1.99
24.75	0.53	0.46	1.14	1.99	0.00	1.99
24.80	0.53	0.46	1.14	1.99	0.00	1.99
24.85	0.53	0.46	1.14	1.99	0.00	1.99
24.90	0.53	0.46	1.14	1.99	0.00	1.99
24.95	0.53	0.46	1.14	1.99	0.00	1.99
25.00	0.53	0.46	1.14	1.99	0.00	1.99

BH-2 Summary Liquefy.sum

25.05	0.53	0.46	1.14	1.99	0.00	1.99
25.10	0.53	0.46	1.14	1.99	0.00	1.99
25.15	0.53	0.47	1.14	1.99	0.00	1.99
25.20	0.53	0.47	1.13	1.99	0.00	1.99
25.25	0.53	0.47	1.13	1.99	0.00	1.99
25.30	0.53	0.47	1.13	1.99	0.00	1.99
25.35	0.53	0.47	1.13	1.99	0.00	1.99
25.40	0.53	0.47	1.13	1.99	0.00	1.99
25.45	0.53	0.47	1.13	1.99	0.00	1.99
25.50	0.53	0.47	1.13	1.99	0.00	1.99
25.55	0.53	0.47	1.13	1.99	0.00	1.99
25.60	0.53	0.47	1.13	1.99	0.00	1.99
25.65	0.53	0.47	1.13	1.99	0.00	1.99
25.70	0.53	0.47	1.12	1.99	0.00	1.99
25.75	0.53	0.47	1.12	1.99	0.00	1.99
25.80	0.53	0.47	1.12	1.99	0.00	1.99
25.85	0.53	0.47	1.12	1.99	0.00	1.99
25.90	0.53	0.47	1.12	1.99	0.00	1.99
25.95	0.53	0.47	1.12	1.99	0.00	1.99
26.00	0.53	0.47	1.12	1.99	0.00	1.99
26.05	0.53	0.47	1.12	1.99	0.00	1.99
26.10	0.53	0.47	1.12	1.99	0.00	1.99
26.15	0.53	0.47	1.12	1.99	0.00	1.99
26.20	0.53	0.47	1.12	1.99	0.00	1.99
26.25	0.53	0.47	1.11	1.99	0.00	1.99
26.30	0.53	0.47	1.11	1.99	0.00	1.99
26.35	0.53	0.47	1.11	1.99	0.00	1.99
26.40	0.53	0.47	1.11	1.99	0.00	1.99
26.45	0.53	0.48	1.11	1.98	0.00	1.98
26.50	0.53	0.48	1.11	1.98	0.00	1.98
26.55	0.53	0.48	1.11	1.98	0.00	1.98
26.60	0.53	0.48	1.11	1.98	0.00	1.98
26.65	0.53	0.48	1.11	1.98	0.00	1.98
26.70	0.53	0.48	1.11	1.98	0.00	1.98
26.75	0.53	0.48	1.11	1.98	0.00	1.98
26.80	0.53	0.48	1.11	1.98	0.00	1.98
26.85	0.53	0.48	1.10	1.98	0.00	1.98
26.90	0.53	0.48	1.10	1.98	0.00	1.98
26.95	0.53	0.48	1.10	1.98	0.00	1.98
27.00	0.53	0.48	1.10	1.97	0.00	1.97
27.05	0.53	0.48	1.10	1.97	0.00	1.97
27.10	0.53	0.48	1.10	1.97	0.00	1.97
27.15	0.53	0.48	1.10	1.97	0.00	1.97
27.20	0.53	0.48	1.10	1.97	0.00	1.97
27.25	0.53	0.48	1.10	1.97	0.00	1.97
27.30	0.53	0.48	1.10	1.97	0.00	1.97
27.35	0.53	0.48	1.10	1.96	0.00	1.96
27.40	0.53	0.48	1.10	1.96	0.00	1.96

BH-2 Summary Liquefy.sum

27.45	0.53	0.48	1.10	1.96	0.00	1.96
27.50	0.53	0.48	1.09	1.96	0.00	1.96
27.55	0.53	0.48	1.09	1.96	0.00	1.96
27.60	0.53	0.48	1.09	1.95	0.00	1.95
27.65	0.53	0.48	1.09	1.95	0.00	1.95
27.70	0.53	0.48	1.09	1.95	0.00	1.95
27.75	0.53	0.48	1.09	1.94	0.00	1.94
27.80	0.53	0.48	1.09	1.94	0.00	1.94
27.85	0.53	0.48	1.09	1.94	0.00	1.94
27.90	0.53	0.49	1.09	1.93	0.00	1.93
27.95	0.53	0.49	1.09	1.93	0.00	1.93
28.00	0.53	0.49	1.09	1.93	0.00	1.93
28.05	0.53	0.49	1.09	1.93	0.00	1.93
28.10	0.53	0.49	1.09	1.92	0.00	1.92
28.15	0.53	0.49	1.08	1.92	0.00	1.92
28.20	0.53	0.49	1.08	1.92	0.00	1.92
28.25	0.53	0.49	1.08	1.91	0.00	1.91
28.30	0.53	0.49	1.08	1.91	0.00	1.91
28.35	0.53	0.49	1.08	1.91	0.00	1.91
28.40	0.53	0.49	1.08	1.90	0.00	1.90
28.45	0.53	0.49	1.08	1.90	0.00	1.90
28.50	0.53	0.49	1.08	1.90	0.00	1.90
28.55	0.53	0.49	1.08	1.89	0.00	1.89
28.60	0.53	0.49	1.08	1.89	0.00	1.89
28.65	0.53	0.49	1.08	1.89	0.00	1.89
28.70	0.53	0.49	1.08	1.88	0.00	1.88
28.75	0.53	0.49	1.08	1.88	0.00	1.88
28.80	0.53	0.49	1.08	1.87	0.00	1.87
28.85	0.50	0.49	1.01	1.87	0.00	1.87
28.90	0.47	0.49	0.96*	1.87	0.00	1.87
28.95	0.45	0.49	0.92*	1.86	0.00	1.86
29.00	0.44	0.49	0.89*	1.86	0.00	1.86
29.05	0.43	0.49	0.87*	1.85	0.00	1.85
29.10	0.42	0.49	0.85*	1.85	0.00	1.85
29.15	0.41	0.49	0.84*	1.84	0.00	1.84
29.20	0.41	0.49	0.83*	1.84	0.00	1.84
29.25	0.40	0.49	0.82*	1.83	0.00	1.83
29.30	0.40	0.49	0.80*	1.83	0.00	1.83
29.35	0.39	0.49	0.79*	1.82	0.00	1.82
29.40	0.39	0.49	0.78*	1.82	0.00	1.82
29.45	0.38	0.49	0.78*	1.81	0.00	1.81
29.50	0.38	0.49	0.77*	1.81	0.00	1.81
29.55	0.38	0.50	0.76*	1.80	0.00	1.80
29.60	0.37	0.50	0.75*	1.80	0.00	1.80
29.65	0.37	0.50	0.74*	1.79	0.00	1.79
29.70	0.37	0.50	0.74*	1.78	0.00	1.78
29.75	0.36	0.50	0.73*	1.78	0.00	1.78
29.80	0.36	0.50	0.72*	1.77	0.00	1.77

BH-2 Summary Liquefy.sum

29.85	0.36	0.50	0.72*	1.77	0.00	1.77
29.90	0.35	0.50	0.71*	1.76	0.00	1.76
29.95	0.35	0.50	0.71*	1.76	0.00	1.76
30.00	0.35	0.50	0.70*	1.75	0.00	1.75
30.05	0.35	0.50	0.71*	1.74	0.00	1.74
30.10	0.36	0.50	0.72*	1.74	0.00	1.74
30.15	0.36	0.50	0.73*	1.73	0.00	1.73
30.20	0.37	0.50	0.73*	1.72	0.00	1.72
30.25	0.37	0.50	0.74*	1.72	0.00	1.72
30.30	0.37	0.50	0.75*	1.71	0.00	1.71
30.35	0.38	0.50	0.76*	1.71	0.00	1.71
30.40	0.38	0.50	0.77*	1.70	0.00	1.70
30.45	0.39	0.50	0.78*	1.70	0.00	1.70
30.50	0.39	0.50	0.79*	1.69	0.00	1.69
30.55	0.40	0.50	0.80*	1.69	0.00	1.69
30.60	0.40	0.50	0.81*	1.68	0.00	1.68
30.65	0.41	0.50	0.83*	1.68	0.00	1.68
30.70	0.42	0.50	0.84*	1.67	0.00	1.67
30.75	0.43	0.50	0.86*	1.67	0.00	1.67
30.80	0.44	0.50	0.89*	1.66	0.00	1.66
30.85	0.46	0.50	0.92*	1.66	0.00	1.66
30.90	0.49	0.50	0.97*	1.65	0.00	1.65
30.95	0.53	0.50	1.06	1.65	0.00	1.65
31.00	0.53	0.50	1.06	1.64	0.00	1.64
31.05	0.53	0.50	1.05	1.64	0.00	1.64
31.10	0.53	0.50	1.05	1.64	0.00	1.64
31.15	0.53	0.50	1.05	1.63	0.00	1.63
31.20	0.53	0.50	1.05	1.63	0.00	1.63
31.25	0.53	0.50	1.05	1.62	0.00	1.62
31.30	0.53	0.50	1.05	1.62	0.00	1.62
31.35	0.53	0.50	1.05	1.62	0.00	1.62
31.40	0.53	0.50	1.05	1.61	0.00	1.61
31.45	0.53	0.50	1.05	1.61	0.00	1.61
31.50	0.53	0.50	1.05	1.61	0.00	1.61
31.55	0.53	0.50	1.05	1.60	0.00	1.60
31.60	0.53	0.50	1.05	1.60	0.00	1.60
31.65	0.53	0.50	1.05	1.60	0.00	1.60
31.70	0.53	0.50	1.05	1.59	0.00	1.59
31.75	0.53	0.50	1.05	1.59	0.00	1.59
31.80	0.52	0.50	1.05	1.59	0.00	1.59
31.85	0.52	0.50	1.05	1.59	0.00	1.59
31.90	0.52	0.50	1.05	1.59	0.00	1.59
31.95	0.52	0.50	1.05	1.58	0.00	1.58
32.00	0.52	0.50	1.04	1.58	0.00	1.58
32.05	0.52	0.50	1.04	1.58	0.00	1.58
32.10	0.52	0.50	1.04	1.58	0.00	1.58
32.15	0.52	0.50	1.04	1.58	0.00	1.58
32.20	0.52	0.50	1.04	1.58	0.00	1.58

BH-2 Summary Liquefy.sum

32.25	0.52	0.50	1.04	1.58	0.00	1.58
32.30	0.52	0.50	1.04	1.57	0.00	1.57
32.35	0.52	0.50	1.04	1.57	0.00	1.57
32.40	0.52	0.50	1.04	1.57	0.00	1.57
32.45	0.52	0.50	1.04	1.57	0.00	1.57
32.50	0.52	0.50	1.04	1.57	0.00	1.57
32.55	0.52	0.50	1.04	1.57	0.00	1.57
32.60	0.52	0.50	1.04	1.57	0.00	1.57
32.65	0.52	0.50	1.04	1.57	0.00	1.57
32.70	0.52	0.50	1.04	1.57	0.00	1.57
32.75	0.52	0.50	1.04	1.57	0.00	1.57
32.80	0.52	0.50	1.04	1.56	0.00	1.56
32.85	0.52	0.50	1.04	1.56	0.00	1.56
32.90	0.52	0.50	1.04	1.56	0.00	1.56
32.95	0.52	0.50	1.04	1.56	0.00	1.56
33.00	0.52	0.50	1.03	1.56	0.00	1.56
33.05	0.52	0.50	1.03	1.56	0.00	1.56
33.10	0.52	0.50	1.03	1.56	0.00	1.56
33.15	0.52	0.50	1.03	1.56	0.00	1.56
33.20	0.52	0.50	1.03	1.56	0.00	1.56
33.25	0.52	0.50	1.03	1.56	0.00	1.56
33.30	0.52	0.50	1.03	1.56	0.00	1.56
33.35	0.52	0.50	1.03	1.56	0.00	1.56
33.40	0.52	0.50	1.03	1.56	0.00	1.56
33.45	0.52	0.50	1.03	1.56	0.00	1.56
33.50	0.52	0.50	1.03	1.56	0.00	1.56
33.55	0.52	0.50	1.03	1.56	0.00	1.56
33.60	0.52	0.50	1.03	1.56	0.00	1.56
33.65	0.52	0.50	1.03	1.56	0.00	1.56
33.70	0.52	0.50	1.03	1.56	0.00	1.56
33.75	0.52	0.50	1.03	1.56	0.00	1.56
33.80	0.52	0.50	1.03	1.56	0.00	1.56
33.85	0.52	0.50	1.03	1.56	0.00	1.56
33.90	0.52	0.50	1.03	1.56	0.00	1.56
33.95	0.52	0.50	1.03	1.56	0.00	1.56
34.00	0.52	0.50	1.03	1.56	0.00	1.56
34.05	0.52	0.50	1.03	1.56	0.00	1.56
34.10	0.52	0.50	1.03	1.56	0.00	1.56
34.15	0.52	0.50	1.02	1.56	0.00	1.56
34.20	0.52	0.51	1.02	1.56	0.00	1.56
34.25	0.52	0.51	1.02	1.56	0.00	1.56
34.30	0.52	0.51	1.02	1.56	0.00	1.56
34.35	0.52	0.51	1.02	1.56	0.00	1.56
34.40	0.52	0.51	1.02	1.56	0.00	1.56
34.45	0.52	0.51	1.02	1.56	0.00	1.56
34.50	0.52	0.51	1.02	1.56	0.00	1.56
34.55	0.52	0.51	1.02	1.56	0.00	1.56
34.60	0.52	0.51	1.02	1.56	0.00	1.56

BH-2 Summary Liquefy.sum

34.65	0.52	0.51	1.02	1.56	0.00	1.56
34.70	0.52	0.51	1.02	1.56	0.00	1.56
34.75	0.52	0.51	1.02	1.56	0.00	1.56
34.80	0.52	0.51	1.02	1.56	0.00	1.56
34.85	0.52	0.51	1.02	1.56	0.00	1.56
34.90	0.52	0.51	1.02	1.56	0.00	1.56
34.95	0.52	0.51	1.02	1.56	0.00	1.56
35.00	0.51	0.51	1.02	1.56	0.00	1.56
35.05	0.51	0.51	1.02	1.56	0.00	1.56
35.10	0.51	0.51	1.02	1.56	0.00	1.56
35.15	0.51	0.51	1.02	1.56	0.00	1.56
35.20	0.51	0.51	1.02	1.56	0.00	1.56
35.25	0.51	0.51	1.02	1.56	0.00	1.56
35.30	0.51	0.51	1.02	1.56	0.00	1.56
35.35	0.51	0.51	1.01	1.56	0.00	1.56
35.40	0.51	0.51	1.01	1.56	0.00	1.56
35.45	0.51	0.51	1.01	1.56	0.00	1.56
35.50	0.51	0.51	1.01	1.56	0.00	1.56
35.55	0.51	0.51	1.01	1.56	0.00	1.56
35.60	0.51	0.51	1.01	1.56	0.00	1.56
35.65	0.51	0.51	1.01	1.56	0.00	1.56
35.70	0.51	0.51	1.01	1.56	0.00	1.56
35.75	0.51	0.51	1.01	1.56	0.00	1.56
35.80	0.51	0.51	1.01	1.56	0.00	1.56
35.85	0.51	0.51	1.01	1.56	0.00	1.56
35.90	0.51	0.51	1.01	1.56	0.00	1.56
35.95	0.51	0.51	1.01	1.56	0.00	1.56
36.00	0.51	0.51	1.01	1.56	0.00	1.56
36.05	0.51	0.51	1.01	1.56	0.00	1.56
36.10	0.51	0.51	1.01	1.56	0.00	1.56
36.15	0.51	0.51	1.01	1.56	0.00	1.56
36.20	0.51	0.51	1.01	1.56	0.00	1.56
36.25	0.51	0.51	1.01	1.56	0.00	1.56
36.30	0.51	0.51	1.01	1.56	0.00	1.56
36.35	0.51	0.51	1.01	1.56	0.00	1.56
36.40	0.51	0.51	1.01	1.56	0.00	1.56
36.45	0.51	0.51	1.01	1.56	0.00	1.56
36.50	0.51	0.51	1.01	1.56	0.00	1.56
36.55	0.51	0.51	1.01	1.56	0.00	1.56
36.60	0.51	0.51	1.01	1.56	0.00	1.56
36.65	0.51	0.51	1.01	1.56	0.00	1.56
36.70	0.51	0.51	1.01	1.56	0.00	1.56
36.75	0.51	0.51	1.00	1.56	0.00	1.56
36.80	0.51	0.51	1.00	1.56	0.00	1.56
36.85	0.51	0.51	1.00	1.55	0.00	1.55
36.90	0.51	0.51	1.00	1.55	0.00	1.55
36.95	0.51	0.51	1.00	1.55	0.00	1.55
37.00	0.51	0.51	1.00	1.55	0.00	1.55

BH-2 Summary Liquefy.sum

37.05	0.51	0.51	1.00	1.55	0.00	1.55
37.10	0.51	0.51	1.00	1.55	0.00	1.55
37.15	0.51	0.51	1.00	1.55	0.00	1.55
37.20	0.51	0.51	1.00	1.55	0.00	1.55
37.25	0.51	0.51	1.00	1.55	0.00	1.55
37.30	0.51	0.51	1.00	1.55	0.00	1.55
37.35	0.51	0.51	1.00	1.55	0.00	1.55
37.40	0.51	0.51	1.00	1.54	0.00	1.54
37.45	0.51	0.51	1.00	1.54	0.00	1.54
37.50	0.51	0.51	1.00*	1.54	0.00	1.54
37.55	0.51	0.51	1.00*	1.54	0.00	1.54
37.60	0.51	0.51	1.00*	1.54	0.00	1.54
37.65	0.51	0.51	1.00*	1.54	0.00	1.54
37.70	0.51	0.51	1.00*	1.54	0.00	1.54
37.75	0.51	0.51	1.00*	1.54	0.00	1.54
37.80	0.51	0.51	1.00*	1.53	0.00	1.53
37.85	0.51	0.51	1.00*	1.53	0.00	1.53
37.90	0.51	0.51	1.00*	1.53	0.00	1.53
37.95	0.51	0.51	1.00*	1.53	0.00	1.53
38.00	0.51	0.51	1.00*	1.53	0.00	1.53
38.05	0.51	0.51	1.00*	1.52	0.00	1.52
38.10	0.51	0.51	1.00*	1.52	0.00	1.52
38.15	0.51	0.51	1.00*	1.52	0.00	1.52
38.20	0.51	0.51	1.00*	1.51	0.00	1.51
38.25	0.51	0.51	1.00*	1.51	0.00	1.51
38.30	0.51	0.51	1.00*	1.51	0.00	1.51
38.35	0.51	0.51	0.99*	1.50	0.00	1.50
38.40	0.51	0.51	0.99*	1.50	0.00	1.50
38.45	0.51	0.51	0.99*	1.50	0.00	1.50
38.50	0.50	0.51	0.99*	1.49	0.00	1.49
38.55	0.50	0.51	0.99*	1.49	0.00	1.49
38.60	0.50	0.51	0.99*	1.49	0.00	1.49
38.65	0.50	0.51	0.99*	1.48	0.00	1.48
38.70	0.50	0.51	0.99*	1.48	0.00	1.48
38.75	0.50	0.51	0.99*	1.47	0.00	1.47
38.80	0.50	0.51	0.99*	1.47	0.00	1.47
38.85	0.50	0.51	0.99*	1.47	0.00	1.47
38.90	0.48	0.51	0.94*	1.46	0.00	1.46
38.95	0.45	0.51	0.89*	1.46	0.00	1.46
39.00	0.43	0.51	0.85*	1.45	0.00	1.45
39.05	0.42	0.51	0.83*	1.45	0.00	1.45
39.10	0.41	0.51	0.81*	1.44	0.00	1.44
39.15	0.40	0.51	0.79*	1.44	0.00	1.44
39.20	0.39	0.51	0.78*	1.43	0.00	1.43
39.25	0.39	0.51	0.76*	1.43	0.00	1.43
39.30	0.38	0.51	0.75*	1.42	0.00	1.42
39.35	0.38	0.51	0.74*	1.42	0.00	1.42
39.40	0.37	0.51	0.73*	1.41	0.00	1.41

BH-2 Summary Liquefy.sum

39.45	0.37	0.51	0.72*	1.41	0.00	1.41
39.50	0.36	0.51	0.72*	1.40	0.00	1.40
39.55	0.36	0.51	0.71*	1.40	0.00	1.40
39.60	0.36	0.51	0.70*	1.39	0.00	1.39
39.65	0.35	0.51	0.70*	1.39	0.00	1.39
39.70	0.35	0.51	0.69*	1.38	0.00	1.38
39.75	0.35	0.51	0.68*	1.38	0.00	1.38
39.80	0.34	0.51	0.68*	1.37	0.00	1.37
39.85	0.34	0.51	0.67*	1.36	0.00	1.36
39.90	0.34	0.51	0.66*	1.36	0.00	1.36
39.95	0.33	0.51	0.66*	1.35	0.00	1.35
40.00	0.33	0.51	0.65*	1.35	0.00	1.35
40.05	0.33	0.51	0.65*	1.34	0.00	1.34
40.10	0.33	0.51	0.65*	1.33	0.00	1.33
40.15	0.33	0.51	0.65*	1.33	0.00	1.33
40.20	0.33	0.51	0.65*	1.32	0.00	1.32
40.25	0.33	0.51	0.65*	1.31	0.00	1.31
40.30	0.33	0.51	0.65*	1.31	0.00	1.31
40.35	0.33	0.51	0.65*	1.30	0.00	1.30
40.40	0.33	0.51	0.65*	1.30	0.00	1.30
40.45	0.33	0.51	0.65*	1.29	0.00	1.29
40.50	0.33	0.51	0.65*	1.28	0.00	1.28
40.55	0.33	0.51	0.65*	1.28	0.00	1.28
40.60	0.33	0.51	0.65*	1.27	0.00	1.27
40.65	0.33	0.51	0.64*	1.27	0.00	1.27
40.70	0.33	0.51	0.64*	1.26	0.00	1.26
40.75	0.33	0.51	0.64*	1.25	0.00	1.25
40.80	0.33	0.51	0.64*	1.25	0.00	1.25
40.85	0.33	0.51	0.64*	1.24	0.00	1.24
40.90	0.33	0.51	0.64*	1.23	0.00	1.23
40.95	0.33	0.51	0.64*	1.23	0.00	1.23
41.00	0.32	0.51	0.64*	1.22	0.00	1.22
41.05	0.32	0.51	0.64*	1.22	0.00	1.22
41.10	0.32	0.51	0.64*	1.21	0.00	1.21
41.15	0.32	0.51	0.64*	1.20	0.00	1.20
41.20	0.32	0.51	0.64*	1.20	0.00	1.20
41.25	0.32	0.51	0.64*	1.19	0.00	1.19
41.30	0.32	0.51	0.64*	1.18	0.00	1.18
41.35	0.32	0.51	0.64*	1.18	0.00	1.18
41.40	0.32	0.51	0.64*	1.17	0.00	1.17
41.45	0.32	0.51	0.64*	1.17	0.00	1.17
41.50	0.32	0.51	0.63*	1.16	0.00	1.16
41.55	0.32	0.51	0.63*	1.15	0.00	1.15
41.60	0.32	0.51	0.63*	1.15	0.00	1.15
41.65	0.32	0.51	0.63*	1.14	0.00	1.14
41.70	0.32	0.51	0.63*	1.13	0.00	1.13
41.75	0.32	0.51	0.63*	1.13	0.00	1.13
41.80	0.32	0.51	0.63*	1.12	0.00	1.12

BH-2 Summary Liquefy.sum

41.85	0.32	0.51	0.63*	1.12	0.00	1.12
41.90	0.32	0.51	0.63*	1.11	0.00	1.11
41.95	0.32	0.51	0.63*	1.10	0.00	1.10
42.00	0.32	0.51	0.63*	1.10	0.00	1.10
42.05	0.32	0.51	0.63*	1.09	0.00	1.09
42.10	0.32	0.51	0.63*	1.08	0.00	1.08
42.15	0.32	0.51	0.63*	1.08	0.00	1.08
42.20	0.32	0.51	0.63*	1.07	0.00	1.07
42.25	0.32	0.51	0.63*	1.07	0.00	1.07
42.30	0.32	0.51	0.63*	1.06	0.00	1.06
42.35	0.32	0.51	0.63*	1.05	0.00	1.05
42.40	0.32	0.51	0.63*	1.05	0.00	1.05
42.45	0.32	0.51	0.63*	1.04	0.00	1.04
42.50	0.32	0.51	0.63*	1.03	0.00	1.03
42.55	0.32	0.51	0.63*	1.03	0.00	1.03
42.60	0.32	0.51	0.62*	1.02	0.00	1.02
42.65	0.32	0.51	0.62*	1.02	0.00	1.02
42.70	0.32	0.51	0.62*	1.01	0.00	1.01
42.75	0.32	0.51	0.62*	1.00	0.00	1.00
42.80	0.32	0.51	0.62*	1.00	0.00	1.00
42.85	0.32	0.51	0.62*	0.99	0.00	0.99
42.90	0.31	0.51	0.62*	0.98	0.00	0.98
42.95	0.31	0.51	0.62*	0.98	0.00	0.98
43.00	0.31	0.51	0.62*	0.97	0.00	0.97
43.05	0.31	0.51	0.62*	0.96	0.00	0.96
43.10	0.31	0.51	0.62*	0.96	0.00	0.96
43.15	0.31	0.51	0.62*	0.95	0.00	0.95
43.20	0.31	0.51	0.62*	0.95	0.00	0.95
43.25	0.31	0.51	0.62*	0.94	0.00	0.94
43.30	0.31	0.51	0.62*	0.93	0.00	0.93
43.35	0.31	0.51	0.62*	0.93	0.00	0.93
43.40	0.31	0.51	0.62*	0.92	0.00	0.92
43.45	0.31	0.51	0.62*	0.91	0.00	0.91
43.50	0.31	0.51	0.62*	0.91	0.00	0.91
43.55	0.31	0.51	0.62*	0.90	0.00	0.90
43.60	0.31	0.51	0.62*	0.89	0.00	0.89
43.65	0.31	0.51	0.62*	0.89	0.00	0.89
43.70	0.31	0.50	0.62*	0.88	0.00	0.88
43.75	0.31	0.50	0.62*	0.88	0.00	0.88
43.80	0.31	0.50	0.62*	0.87	0.00	0.87
43.85	0.31	0.50	0.62*	0.86	0.00	0.86
43.90	0.31	0.50	0.62*	0.86	0.00	0.86
43.95	0.31	0.50	0.62*	0.85	0.00	0.85
44.00	0.31	0.50	0.62*	0.84	0.00	0.84
44.05	0.31	0.50	0.62*	0.84	0.00	0.84
44.10	0.31	0.50	0.62*	0.83	0.00	0.83
44.15	0.31	0.50	0.62*	0.82	0.00	0.82
44.20	0.31	0.50	0.62*	0.82	0.00	0.82

BH-2 Summary Liquefy.sum

44.25	0.31	0.50	0.61*	0.81	0.00	0.81
44.30	0.31	0.50	0.61*	0.81	0.00	0.81
44.35	0.31	0.50	0.61*	0.80	0.00	0.80
44.40	0.31	0.50	0.61*	0.79	0.00	0.79
44.45	0.31	0.50	0.61*	0.79	0.00	0.79
44.50	0.31	0.50	0.61*	0.78	0.00	0.78
44.55	0.31	0.50	0.61*	0.77	0.00	0.77
44.60	0.31	0.50	0.61*	0.77	0.00	0.77
44.65	0.31	0.50	0.61*	0.76	0.00	0.76
44.70	0.31	0.50	0.61*	0.75	0.00	0.75
44.75	0.31	0.50	0.61*	0.75	0.00	0.75
44.80	0.31	0.50	0.61*	0.74	0.00	0.74
44.85	0.31	0.50	0.61*	0.74	0.00	0.74
44.90	0.31	0.50	0.61*	0.73	0.00	0.73
44.95	0.31	0.50	0.61*	0.72	0.00	0.72
45.00	0.31	0.50	0.61*	0.72	0.00	0.72
45.05	0.31	0.50	0.61*	0.71	0.00	0.71
45.10	0.31	0.50	0.61*	0.70	0.00	0.70
45.15	0.31	0.50	0.61*	0.70	0.00	0.70
45.20	0.31	0.50	0.61*	0.69	0.00	0.69
45.25	0.31	0.50	0.62*	0.68	0.00	0.68
45.30	0.31	0.50	0.62*	0.68	0.00	0.68
45.35	0.31	0.50	0.62*	0.67	0.00	0.67
45.40	0.31	0.50	0.62*	0.67	0.00	0.67
45.45	0.31	0.50	0.62*	0.66	0.00	0.66
45.50	0.31	0.50	0.62*	0.65	0.00	0.65
45.55	0.31	0.50	0.62*	0.65	0.00	0.65
45.60	0.31	0.50	0.62*	0.64	0.00	0.64
45.65	0.31	0.50	0.62*	0.63	0.00	0.63
45.70	0.31	0.50	0.62*	0.63	0.00	0.63
45.75	0.31	0.50	0.62*	0.62	0.00	0.62
45.80	0.31	0.50	0.62*	0.61	0.00	0.61
45.85	0.31	0.50	0.62*	0.61	0.00	0.61
45.90	0.31	0.50	0.62*	0.60	0.00	0.60
45.95	0.31	0.50	0.62*	0.60	0.00	0.60
46.00	0.31	0.50	0.62*	0.59	0.00	0.59
46.05	0.31	0.50	0.63*	0.58	0.00	0.58
46.10	0.31	0.50	0.63*	0.58	0.00	0.58
46.15	0.31	0.50	0.63*	0.57	0.00	0.57
46.20	0.31	0.50	0.63*	0.56	0.00	0.56
46.25	0.31	0.50	0.63*	0.56	0.00	0.56
46.30	0.31	0.50	0.63*	0.55	0.00	0.55
46.35	0.32	0.50	0.63*	0.55	0.00	0.55
46.40	0.32	0.50	0.63*	0.54	0.00	0.54
46.45	0.32	0.50	0.63*	0.53	0.00	0.53
46.50	0.32	0.50	0.63*	0.53	0.00	0.53
46.55	0.32	0.50	0.63*	0.52	0.00	0.52
46.60	0.32	0.50	0.63*	0.52	0.00	0.52

BH-2 Summary Liquefy.sum

46.65	0.32	0.50	0.63*	0.51	0.00	0.51
46.70	0.32	0.50	0.63*	0.50	0.00	0.50
46.75	0.32	0.50	0.63*	0.50	0.00	0.50
46.80	0.32	0.50	0.63*	0.49	0.00	0.49
46.85	0.32	0.50	0.63*	0.48	0.00	0.48
46.90	0.32	0.50	0.63*	0.48	0.00	0.48
46.95	0.32	0.50	0.64*	0.47	0.00	0.47
47.00	0.32	0.50	0.64*	0.47	0.00	0.47
47.05	0.32	0.50	0.64*	0.46	0.00	0.46
47.10	0.32	0.50	0.64*	0.45	0.00	0.45
47.15	0.32	0.50	0.64*	0.45	0.00	0.45
47.20	0.32	0.50	0.64*	0.44	0.00	0.44
47.25	0.32	0.50	0.64*	0.44	0.00	0.44
47.30	0.32	0.50	0.64*	0.43	0.00	0.43
47.35	0.32	0.50	0.64*	0.42	0.00	0.42
47.40	0.32	0.50	0.64*	0.42	0.00	0.42
47.45	0.32	0.50	0.64*	0.41	0.00	0.41
47.50	0.32	0.50	0.64*	0.40	0.00	0.40
47.55	0.32	0.50	0.64*	0.40	0.00	0.40
47.60	0.32	0.50	0.65*	0.39	0.00	0.39
47.65	0.32	0.50	0.65*	0.39	0.00	0.39
47.70	0.32	0.50	0.65*	0.38	0.00	0.38
47.75	0.32	0.50	0.65*	0.37	0.00	0.37
47.80	0.32	0.50	0.65*	0.37	0.00	0.37
47.85	0.32	0.50	0.65*	0.36	0.00	0.36
47.90	0.32	0.50	0.65*	0.36	0.00	0.36
47.95	0.32	0.50	0.65*	0.35	0.00	0.35
48.00	0.32	0.50	0.65*	0.34	0.00	0.34
48.05	0.32	0.50	0.65*	0.34	0.00	0.34
48.10	0.33	0.50	0.65*	0.33	0.00	0.33
48.15	0.33	0.50	0.65*	0.33	0.00	0.33
48.20	0.33	0.50	0.65*	0.32	0.00	0.32
48.25	0.33	0.50	0.66*	0.31	0.00	0.31
48.30	0.33	0.50	0.66*	0.31	0.00	0.31
48.35	0.33	0.50	0.66*	0.30	0.00	0.30
48.40	0.33	0.50	0.66*	0.30	0.00	0.30
48.45	0.33	0.50	0.66*	0.29	0.00	0.29
48.50	0.33	0.50	0.66*	0.28	0.00	0.28
48.55	0.33	0.50	0.66*	0.28	0.00	0.28
48.60	0.33	0.50	0.66*	0.27	0.00	0.27
48.65	0.33	0.50	0.66*	0.27	0.00	0.27
48.70	0.33	0.50	0.66*	0.26	0.00	0.26
48.75	0.33	0.50	0.66*	0.25	0.00	0.25
48.80	0.33	0.50	0.66*	0.25	0.00	0.25
48.85	0.33	0.50	0.67*	0.24	0.00	0.24
48.90	0.33	0.50	0.67*	0.24	0.00	0.24
48.95	0.33	0.50	0.67*	0.23	0.00	0.23
49.00	0.33	0.50	0.67*	0.23	0.00	0.23

BH-2 Summary Liquefy.sum

49.05	0.33	0.50	0.67*	0.22	0.00	0.22
49.10	0.33	0.50	0.67*	0.21	0.00	0.21
49.15	0.33	0.50	0.67*	0.21	0.00	0.21
49.20	0.33	0.50	0.67*	0.20	0.00	0.20
49.25	0.33	0.50	0.67*	0.20	0.00	0.20
49.30	0.33	0.50	0.67*	0.19	0.00	0.19
49.35	0.33	0.50	0.67*	0.19	0.00	0.19
49.40	0.33	0.50	0.67*	0.18	0.00	0.18
49.45	0.33	0.50	0.68*	0.17	0.00	0.17
49.50	0.33	0.50	0.68*	0.17	0.00	0.17
49.55	0.34	0.49	0.68*	0.16	0.00	0.16
49.60	0.34	0.49	0.68*	0.16	0.00	0.16
49.65	0.34	0.49	0.68*	0.15	0.00	0.15
49.70	0.34	0.49	0.68*	0.15	0.00	0.15
49.75	0.34	0.49	0.68*	0.14	0.00	0.14
49.80	0.34	0.49	0.68*	0.13	0.00	0.13
49.85	0.34	0.49	0.68*	0.13	0.00	0.13
49.90	0.34	0.49	0.68*	0.12	0.00	0.12
49.95	0.34	0.49	0.68*	0.12	0.00	0.12
50.00	0.34	0.49	0.69*	0.11	0.00	0.11
50.05	0.34	0.49	0.68*	0.11	0.00	0.11
50.10	0.34	0.49	0.68*	0.10	0.00	0.10
50.15	0.34	0.49	0.68*	0.10	0.00	0.10
50.20	0.34	0.49	0.68*	0.09	0.00	0.09
50.25	0.34	0.49	0.68*	0.08	0.00	0.08
50.30	0.34	0.49	0.68*	0.08	0.00	0.08
50.35	0.34	0.49	0.68*	0.07	0.00	0.07
50.40	0.34	0.49	0.68*	0.07	0.00	0.07
50.45	0.34	0.49	0.68*	0.06	0.00	0.06
50.50	0.34	0.49	0.68*	0.06	0.00	0.06
50.55	0.34	0.49	0.68*	0.05	0.00	0.05
50.60	0.34	0.49	0.68*	0.04	0.00	0.04
50.65	0.34	0.49	0.68*	0.04	0.00	0.04
50.70	0.34	0.49	0.68*	0.03	0.00	0.03
50.75	0.34	0.49	0.68*	0.03	0.00	0.03
50.80	0.34	0.49	0.68*	0.02	0.00	0.02
50.85	0.34	0.49	0.68*	0.02	0.00	0.02
50.90	0.34	0.49	0.68*	0.01	0.00	0.01
50.95	0.34	0.49	0.68*	0.01	0.00	0.01
51.00	0.33	0.49	0.68*	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: Welcome to LiquefyPro!

1 atm (atmosphere) = 1 tsf (ton/ft²)

BH-2 Summary Liquefy.sum

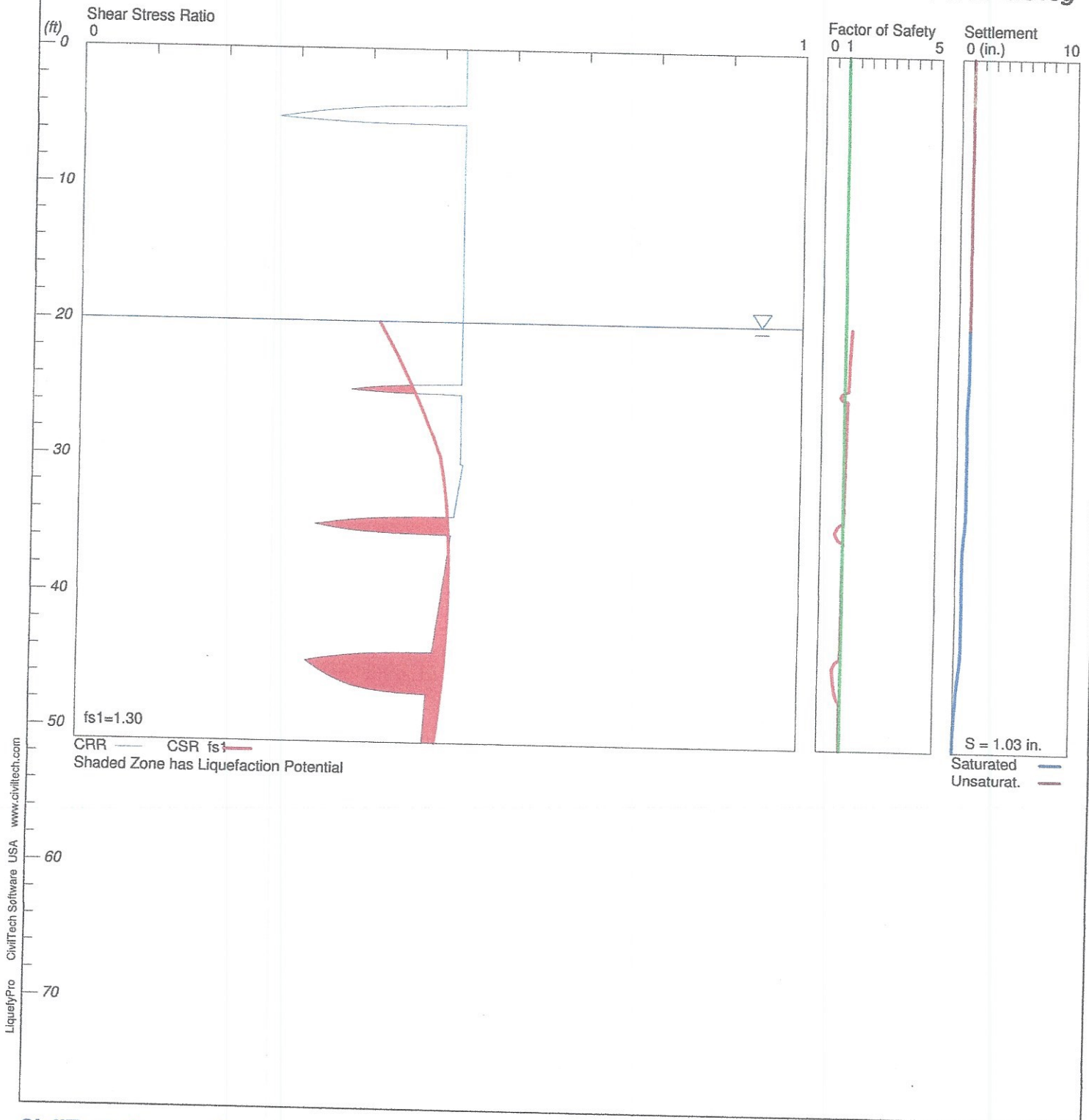
CRRm	Cyclic resistance ratio from soils
CSRsf	Cyclic stress ratio induced by a given earthquake (with user
request factor of safety)	
F.S.	Factor of Safety against liquefaction, $F.S. = CRRm / CSRsf$
S_sat	Settlement from saturated sands
S_dry	Settlement from Unsaturated Sands
S_all	Total Settlement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

LIQUEFACTION ANALYSIS

Andalusia-Westside Development

Hole No.=BH-6 Water Depth=20 ft Surface Elev.= -55

Magnitude=7.34
Acceleration=0.513g



BH-6 Summary Liquefy.sum

LIQUEFACTION ANALYSIS SUMMARY

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Input File Name: G:\Liquefy5\544-19025 BH-2.liq
Title: Andalusia-Westside Development
Subtitle: 544-19025

Surface Elev.=-55
Hole No.=BH-6
Depth of Hole= 51.00 ft
Water Table during Earthquake= 20.00 ft
Water Table during In-Situ Testing= 47.00 ft
Max. Acceleration= 0.51 g
Earthquake Magnitude= 7.34

Input Data:

Surface Elev.=-55
Hole No.=BH-6
Depth of Hole=51.00 ft
Water Table during Earthquake= 20.00 ft
Water Table during In-Situ Testing= 47.00 ft
Max. Acceleration=0.51 g
Earthquake Magnitude=7.34
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= 1.3
Plot one CSR curve (fs1=User)
 10. Use Curve Smoothing: Yes*
- * Recommended Options

BH-6 Summary Liquefy.sum

In-Situ Test Data:

Depth ft	SPT	gamma pcf	Fines %
0.00	26.66	108.20	14.60
2.00	26.66	108.20	14.60
5.00	13.33	104.80	13.40
10.00	52.00	104.80	78.80
15.00	25.33	105.40	92.10
20.00	36.00	105.40	39.90
25.00	18.66	109.50	41.00
30.00	53.00	109.50	11.70
35.00	10.66	120.00	75.30
40.00	35.00	120.00	84.90
45.00	6.66	119.90	95.60
50.00	18.00	119.90	84.60

Output Results:

Settlement of Saturated Sands=0.96 in.

Settlement of Unsaturated Sands=0.08 in.

Total Settlement of Saturated and Unsaturated Sands=1.03 in.

Differential Settlement=0.517 to 0.683 in.

Depth ft	CRRm	CSRfs	F.S.	S_sat. in.	S_dry in.	S_all in.
0.00	0.53	0.43	5.00	0.96	0.08	1.03
0.05	0.53	0.43	5.00	0.96	0.08	1.03
0.10	0.53	0.43	5.00	0.96	0.08	1.03
0.15	0.53	0.43	5.00	0.96	0.08	1.03
0.20	0.53	0.43	5.00	0.96	0.08	1.03
0.25	0.53	0.43	5.00	0.96	0.08	1.03
0.30	0.53	0.43	5.00	0.96	0.08	1.03
0.35	0.53	0.43	5.00	0.96	0.08	1.03
0.40	0.53	0.43	5.00	0.96	0.08	1.03
0.45	0.53	0.43	5.00	0.96	0.08	1.03
0.50	0.53	0.43	5.00	0.96	0.08	1.03
0.55	0.53	0.43	5.00	0.96	0.08	1.03
0.60	0.53	0.43	5.00	0.96	0.08	1.03
0.65	0.53	0.43	5.00	0.96	0.08	1.03
0.70	0.53	0.43	5.00	0.96	0.08	1.03
0.75	0.53	0.43	5.00	0.96	0.08	1.03
0.80	0.53	0.43	5.00	0.96	0.08	1.03
0.85	0.53	0.43	5.00	0.96	0.08	1.03
0.90	0.53	0.43	5.00	0.96	0.08	1.03
0.95	0.53	0.43	5.00	0.96	0.08	1.03
1.00	0.53	0.43	5.00	0.96	0.08	1.03

BH-6 Summary Liquefy.sum

1.05	0.53	0.43	5.00	0.96	0.08	1.03
1.10	0.53	0.43	5.00	0.96	0.08	1.03
1.15	0.53	0.43	5.00	0.96	0.08	1.03
1.20	0.53	0.43	5.00	0.96	0.08	1.03
1.25	0.53	0.43	5.00	0.96	0.08	1.03
1.30	0.53	0.43	5.00	0.96	0.08	1.03
1.35	0.53	0.43	5.00	0.96	0.08	1.03
1.40	0.53	0.43	5.00	0.96	0.08	1.03
1.45	0.53	0.43	5.00	0.96	0.08	1.03
1.50	0.53	0.43	5.00	0.96	0.08	1.03
1.55	0.53	0.43	5.00	0.96	0.08	1.03
1.60	0.53	0.43	5.00	0.96	0.08	1.03
1.65	0.53	0.43	5.00	0.96	0.08	1.03
1.70	0.53	0.43	5.00	0.96	0.08	1.03
1.75	0.53	0.43	5.00	0.96	0.08	1.03
1.80	0.53	0.43	5.00	0.96	0.08	1.03
1.85	0.53	0.43	5.00	0.96	0.08	1.03
1.90	0.53	0.43	5.00	0.96	0.08	1.03
1.95	0.53	0.43	5.00	0.96	0.08	1.03
2.00	0.53	0.43	5.00	0.96	0.08	1.03
2.05	0.53	0.43	5.00	0.96	0.08	1.03
2.10	0.53	0.43	5.00	0.96	0.07	1.03
2.15	0.53	0.43	5.00	0.96	0.07	1.03
2.20	0.53	0.43	5.00	0.96	0.07	1.03
2.25	0.53	0.43	5.00	0.96	0.07	1.03
2.30	0.53	0.43	5.00	0.96	0.07	1.03
2.35	0.53	0.43	5.00	0.96	0.07	1.03
2.40	0.53	0.43	5.00	0.96	0.07	1.03
2.45	0.53	0.43	5.00	0.96	0.07	1.03
2.50	0.53	0.43	5.00	0.96	0.07	1.03
2.55	0.53	0.43	5.00	0.96	0.07	1.03
2.60	0.53	0.43	5.00	0.96	0.07	1.03
2.65	0.53	0.43	5.00	0.96	0.07	1.03
2.70	0.53	0.43	5.00	0.96	0.07	1.03
2.75	0.53	0.43	5.00	0.96	0.07	1.03
2.80	0.53	0.43	5.00	0.96	0.07	1.03
2.85	0.53	0.43	5.00	0.96	0.07	1.03
2.90	0.53	0.43	5.00	0.96	0.07	1.03
2.95	0.53	0.43	5.00	0.96	0.07	1.03
3.00	0.53	0.43	5.00	0.96	0.07	1.03
3.05	0.53	0.43	5.00	0.96	0.07	1.03
3.10	0.53	0.43	5.00	0.96	0.07	1.03
3.15	0.53	0.43	5.00	0.96	0.07	1.03
3.20	0.53	0.43	5.00	0.96	0.07	1.03
3.25	0.53	0.43	5.00	0.96	0.07	1.03
3.30	0.53	0.43	5.00	0.96	0.07	1.03
3.35	0.53	0.43	5.00	0.96	0.07	1.03
3.40	0.53	0.43	5.00	0.96	0.07	1.03

BH-6 Summary Liquefy.sum

3.45	0.53	0.43	5.00	0.96	0.07	1.03
3.50	0.53	0.43	5.00	0.96	0.07	1.03
3.55	0.53	0.43	5.00	0.96	0.07	1.03
3.60	0.53	0.43	5.00	0.96	0.07	1.03
3.65	0.53	0.43	5.00	0.96	0.07	1.03
3.70	0.53	0.43	5.00	0.96	0.07	1.03
3.75	0.53	0.43	5.00	0.96	0.07	1.03
3.80	0.53	0.43	5.00	0.96	0.07	1.03
3.85	0.53	0.43	5.00	0.96	0.07	1.03
3.90	0.53	0.43	5.00	0.96	0.07	1.03
3.95	0.53	0.43	5.00	0.96	0.07	1.03
4.00	0.53	0.43	5.00	0.96	0.07	1.03
4.05	0.51	0.43	5.00	0.96	0.07	1.03
4.10	0.44	0.43	5.00	0.96	0.07	1.03
4.15	0.41	0.43	5.00	0.96	0.07	1.03
4.20	0.40	0.43	5.00	0.96	0.07	1.03
4.25	0.38	0.43	5.00	0.96	0.07	1.03
4.30	0.37	0.43	5.00	0.96	0.07	1.03
4.35	0.36	0.43	5.00	0.96	0.07	1.03
4.40	0.35	0.43	5.00	0.96	0.07	1.02
4.45	0.34	0.43	5.00	0.96	0.07	1.02
4.50	0.33	0.43	5.00	0.96	0.07	1.02
4.55	0.33	0.43	5.00	0.96	0.07	1.02
4.60	0.32	0.43	5.00	0.96	0.07	1.02
4.65	0.31	0.43	5.00	0.96	0.07	1.02
4.70	0.31	0.43	5.00	0.96	0.07	1.02
4.75	0.30	0.43	5.00	0.96	0.06	1.02
4.80	0.29	0.43	5.00	0.96	0.06	1.02
4.85	0.29	0.43	5.00	0.96	0.06	1.02
4.90	0.28	0.43	5.00	0.96	0.06	1.02
4.95	0.28	0.43	5.00	0.96	0.06	1.02
5.00	0.27	0.43	5.00	0.96	0.06	1.02
5.05	0.28	0.43	5.00	0.96	0.06	1.02
5.10	0.30	0.43	5.00	0.96	0.06	1.02
5.15	0.31	0.43	5.00	0.96	0.06	1.02
5.20	0.32	0.43	5.00	0.96	0.06	1.02
5.25	0.34	0.43	5.00	0.96	0.06	1.02
5.30	0.36	0.43	5.00	0.96	0.06	1.02
5.35	0.38	0.43	5.00	0.96	0.06	1.02
5.40	0.42	0.43	5.00	0.96	0.06	1.02
5.45	0.53	0.43	5.00	0.96	0.06	1.02
5.50	0.53	0.43	5.00	0.96	0.06	1.02
5.55	0.53	0.43	5.00	0.96	0.06	1.02
5.60	0.53	0.43	5.00	0.96	0.06	1.02
5.65	0.53	0.43	5.00	0.96	0.06	1.02
5.70	0.53	0.43	5.00	0.96	0.06	1.02
5.75	0.53	0.43	5.00	0.96	0.06	1.02
5.80	0.53	0.43	5.00	0.96	0.06	1.02

BH-6 Summary Liquefy.sum

5.85	0.53	0.43	5.00	0.96	0.06	1.02
5.90	0.53	0.43	5.00	0.96	0.06	1.02
5.95	0.53	0.43	5.00	0.96	0.06	1.02
6.00	0.53	0.43	5.00	0.96	0.06	1.01
6.05	0.53	0.43	5.00	0.96	0.06	1.01
6.10	0.53	0.43	5.00	0.96	0.06	1.01
6.15	0.53	0.43	5.00	0.96	0.06	1.01
6.20	0.53	0.43	5.00	0.96	0.06	1.01
6.25	0.53	0.43	5.00	0.96	0.06	1.01
6.30	0.53	0.43	5.00	0.96	0.06	1.01
6.35	0.53	0.43	5.00	0.96	0.06	1.01
6.40	0.53	0.43	5.00	0.96	0.06	1.01
6.45	0.53	0.43	5.00	0.96	0.06	1.01
6.50	0.53	0.43	5.00	0.96	0.06	1.01
6.55	0.53	0.43	5.00	0.96	0.06	1.01
6.60	0.53	0.43	5.00	0.96	0.06	1.01
6.65	0.53	0.43	5.00	0.96	0.06	1.01
6.70	0.53	0.43	5.00	0.96	0.06	1.01
6.75	0.53	0.43	5.00	0.96	0.06	1.01
6.80	0.53	0.43	5.00	0.96	0.06	1.01
6.85	0.53	0.43	5.00	0.96	0.06	1.01
6.90	0.53	0.43	5.00	0.96	0.05	1.01
6.95	0.53	0.43	5.00	0.96	0.05	1.01
7.00	0.53	0.43	5.00	0.96	0.05	1.01
7.05	0.53	0.43	5.00	0.96	0.05	1.01
7.10	0.53	0.43	5.00	0.96	0.05	1.01
7.15	0.53	0.43	5.00	0.96	0.05	1.01
7.20	0.53	0.43	5.00	0.96	0.05	1.01
7.25	0.53	0.43	5.00	0.96	0.05	1.01
7.30	0.53	0.43	5.00	0.96	0.05	1.01
7.35	0.53	0.43	5.00	0.96	0.05	1.01
7.40	0.53	0.43	5.00	0.96	0.05	1.01
7.45	0.53	0.43	5.00	0.96	0.05	1.01
7.50	0.53	0.43	5.00	0.96	0.05	1.01
7.55	0.53	0.43	5.00	0.96	0.05	1.01
7.60	0.53	0.43	5.00	0.96	0.05	1.01
7.65	0.53	0.43	5.00	0.96	0.05	1.01
7.70	0.53	0.43	5.00	0.96	0.05	1.01
7.75	0.53	0.43	5.00	0.96	0.05	1.01
7.80	0.53	0.43	5.00	0.96	0.05	1.01
7.85	0.53	0.43	5.00	0.96	0.05	1.01
7.90	0.53	0.43	5.00	0.96	0.05	1.01
7.95	0.53	0.43	5.00	0.96	0.05	1.01
8.00	0.53	0.43	5.00	0.96	0.05	1.01
8.05	0.53	0.43	5.00	0.96	0.05	1.01
8.10	0.53	0.43	5.00	0.96	0.05	1.01
8.15	0.53	0.43	5.00	0.96	0.05	1.01
8.20	0.53	0.43	5.00	0.96	0.05	1.01

BH-6 Summary Liquefy.sum

8.25	0.53	0.43	5.00	0.96	0.05	1.01
8.30	0.53	0.43	5.00	0.96	0.05	1.01
8.35	0.53	0.43	5.00	0.96	0.05	1.01
8.40	0.53	0.42	5.00	0.96	0.05	1.01
8.45	0.53	0.42	5.00	0.96	0.05	1.01
8.50	0.53	0.42	5.00	0.96	0.05	1.01
8.55	0.53	0.42	5.00	0.96	0.05	1.01
8.60	0.53	0.42	5.00	0.96	0.05	1.01
8.65	0.53	0.42	5.00	0.96	0.05	1.01
8.70	0.53	0.42	5.00	0.96	0.05	1.01
8.75	0.53	0.42	5.00	0.96	0.05	1.01
8.80	0.53	0.42	5.00	0.96	0.05	1.01
8.85	0.53	0.42	5.00	0.96	0.05	1.01
8.90	0.53	0.42	5.00	0.96	0.05	1.01
8.95	0.53	0.42	5.00	0.96	0.05	1.01
9.00	0.53	0.42	5.00	0.96	0.05	1.01
9.05	0.53	0.42	5.00	0.96	0.05	1.01
9.10	0.53	0.42	5.00	0.96	0.05	1.01
9.15	0.53	0.42	5.00	0.96	0.05	1.01
9.20	0.53	0.42	5.00	0.96	0.05	1.01
9.25	0.53	0.42	5.00	0.96	0.05	1.01
9.30	0.53	0.42	5.00	0.96	0.05	1.01
9.35	0.53	0.42	5.00	0.96	0.05	1.01
9.40	0.53	0.42	5.00	0.96	0.05	1.01
9.45	0.53	0.42	5.00	0.96	0.05	1.01
9.50	0.53	0.42	5.00	0.96	0.05	1.01
9.55	0.53	0.42	5.00	0.96	0.05	1.01
9.60	0.53	0.42	5.00	0.96	0.05	1.01
9.65	0.53	0.42	5.00	0.96	0.05	1.00
9.70	0.53	0.42	5.00	0.96	0.05	1.00
9.75	0.53	0.42	5.00	0.96	0.05	1.00
9.80	0.53	0.42	5.00	0.96	0.05	1.00
9.85	0.53	0.42	5.00	0.96	0.05	1.00
9.90	0.53	0.42	5.00	0.96	0.05	1.00
9.95	0.53	0.42	5.00	0.96	0.05	1.00
10.00	0.53	0.42	5.00	0.96	0.05	1.00
10.05	0.53	0.42	5.00	0.96	0.05	1.00
10.10	0.53	0.42	5.00	0.96	0.05	1.00
10.15	0.53	0.42	5.00	0.96	0.05	1.00
10.20	0.53	0.42	5.00	0.96	0.05	1.00
10.25	0.53	0.42	5.00	0.96	0.05	1.00
10.30	0.53	0.42	5.00	0.96	0.05	1.00
10.35	0.53	0.42	5.00	0.96	0.05	1.00
10.40	0.53	0.42	5.00	0.96	0.05	1.00
10.45	0.53	0.42	5.00	0.96	0.05	1.00
10.50	0.53	0.42	5.00	0.96	0.05	1.00
10.55	0.53	0.42	5.00	0.96	0.05	1.00
10.60	0.53	0.42	5.00	0.96	0.04	1.00

BH-6 Summary Liquefy.sum

10.65	0.53	0.42	5.00	0.96	0.04	1.00
10.70	0.53	0.42	5.00	0.96	0.04	1.00
10.75	0.53	0.42	5.00	0.96	0.04	1.00
10.80	0.53	0.42	5.00	0.96	0.04	1.00
10.85	0.53	0.42	5.00	0.96	0.04	1.00
10.90	0.53	0.42	5.00	0.96	0.04	1.00
10.95	0.53	0.42	5.00	0.96	0.04	1.00
11.00	0.53	0.42	5.00	0.96	0.04	1.00
11.05	0.53	0.42	5.00	0.96	0.04	1.00
11.10	0.53	0.42	5.00	0.96	0.04	1.00
11.15	0.53	0.42	5.00	0.96	0.04	1.00
11.20	0.53	0.42	5.00	0.96	0.04	1.00
11.25	0.53	0.42	5.00	0.96	0.04	1.00
11.30	0.53	0.42	5.00	0.96	0.04	1.00
11.35	0.53	0.42	5.00	0.96	0.04	1.00
11.40	0.53	0.42	5.00	0.96	0.04	1.00
11.45	0.53	0.42	5.00	0.96	0.04	1.00
11.50	0.53	0.42	5.00	0.96	0.04	1.00
11.55	0.53	0.42	5.00	0.96	0.04	1.00
11.60	0.53	0.42	5.00	0.96	0.04	1.00
11.65	0.53	0.42	5.00	0.96	0.04	1.00
11.70	0.53	0.42	5.00	0.96	0.04	1.00
11.75	0.53	0.42	5.00	0.96	0.04	1.00
11.80	0.53	0.42	5.00	0.96	0.04	1.00
11.85	0.53	0.42	5.00	0.96	0.04	1.00
11.90	0.53	0.42	5.00	0.96	0.04	1.00
11.95	0.53	0.42	5.00	0.96	0.04	1.00
12.00	0.53	0.42	5.00	0.96	0.04	1.00
12.05	0.53	0.42	5.00	0.96	0.04	1.00
12.10	0.53	0.42	5.00	0.96	0.04	1.00
12.15	0.53	0.42	5.00	0.96	0.04	1.00
12.20	0.53	0.42	5.00	0.96	0.04	1.00
12.25	0.53	0.42	5.00	0.96	0.04	1.00
12.30	0.53	0.42	5.00	0.96	0.04	1.00
12.35	0.53	0.42	5.00	0.96	0.04	1.00
12.40	0.53	0.42	5.00	0.96	0.04	1.00
12.45	0.53	0.42	5.00	0.96	0.04	1.00
12.50	0.53	0.42	5.00	0.96	0.04	1.00
12.55	0.53	0.42	5.00	0.96	0.04	1.00
12.60	0.53	0.42	5.00	0.96	0.04	1.00
12.65	0.53	0.42	5.00	0.96	0.04	1.00
12.70	0.53	0.42	5.00	0.96	0.04	1.00
12.75	0.53	0.42	5.00	0.96	0.04	1.00
12.80	0.53	0.42	5.00	0.96	0.04	1.00
12.85	0.53	0.42	5.00	0.96	0.04	1.00
12.90	0.53	0.42	5.00	0.96	0.04	1.00
12.95	0.53	0.42	5.00	0.96	0.04	1.00
13.00	0.53	0.42	5.00	0.96	0.04	1.00

BH-6 Summary Liquefy.sum

13.05	0.53	0.42	5.00	0.96	0.04	1.00
13.10	0.53	0.42	5.00	0.96	0.04	1.00
13.15	0.53	0.42	5.00	0.96	0.04	0.99
13.20	0.53	0.42	5.00	0.96	0.04	0.99
13.25	0.53	0.42	5.00	0.96	0.04	0.99
13.30	0.53	0.42	5.00	0.96	0.04	0.99
13.35	0.53	0.42	5.00	0.96	0.04	0.99
13.40	0.53	0.42	5.00	0.96	0.04	0.99
13.45	0.53	0.42	5.00	0.96	0.04	0.99
13.50	0.53	0.42	5.00	0.96	0.04	0.99
13.55	0.53	0.42	5.00	0.96	0.04	0.99
13.60	0.53	0.42	5.00	0.96	0.04	0.99
13.65	0.53	0.42	5.00	0.96	0.04	0.99
13.70	0.53	0.42	5.00	0.96	0.04	0.99
13.75	0.53	0.42	5.00	0.96	0.04	0.99
13.80	0.53	0.42	5.00	0.96	0.04	0.99
13.85	0.53	0.42	5.00	0.96	0.03	0.99
13.90	0.53	0.42	5.00	0.96	0.03	0.99
13.95	0.53	0.42	5.00	0.96	0.03	0.99
14.00	0.53	0.42	5.00	0.96	0.03	0.99
14.05	0.53	0.42	5.00	0.96	0.03	0.99
14.10	0.53	0.42	5.00	0.96	0.03	0.99
14.15	0.53	0.42	5.00	0.96	0.03	0.99
14.20	0.53	0.42	5.00	0.96	0.03	0.99
14.25	0.53	0.42	5.00	0.96	0.03	0.99
14.30	0.53	0.42	5.00	0.96	0.03	0.99
14.35	0.53	0.42	5.00	0.96	0.03	0.99
14.40	0.53	0.42	5.00	0.96	0.03	0.99
14.45	0.53	0.42	5.00	0.96	0.03	0.99
14.50	0.53	0.42	5.00	0.96	0.03	0.99
14.55	0.53	0.42	5.00	0.96	0.03	0.99
14.60	0.53	0.42	5.00	0.96	0.03	0.99
14.65	0.53	0.42	5.00	0.96	0.03	0.99
14.70	0.53	0.42	5.00	0.96	0.03	0.99
14.75	0.53	0.42	5.00	0.96	0.03	0.99
14.80	0.53	0.42	5.00	0.96	0.03	0.99
14.85	0.53	0.42	5.00	0.96	0.03	0.99
14.90	0.53	0.42	5.00	0.96	0.03	0.99
14.95	0.53	0.42	5.00	0.96	0.03	0.99
15.00	0.53	0.42	5.00	0.96	0.03	0.99
15.05	0.53	0.42	5.00	0.96	0.03	0.99
15.10	0.53	0.42	5.00	0.96	0.03	0.99
15.15	0.53	0.42	5.00	0.96	0.03	0.99
15.20	0.53	0.42	5.00	0.96	0.03	0.99
15.25	0.53	0.42	5.00	0.96	0.03	0.99
15.30	0.53	0.42	5.00	0.96	0.03	0.99
15.35	0.53	0.42	5.00	0.96	0.03	0.99
15.40	0.53	0.42	5.00	0.96	0.03	0.99

BH-6 Summary Liquefy.sum

15.45	0.53	0.42	5.00	0.96	0.03	0.99
15.50	0.53	0.42	5.00	0.96	0.03	0.98
15.55	0.53	0.42	5.00	0.96	0.03	0.98
15.60	0.53	0.42	5.00	0.96	0.03	0.98
15.65	0.53	0.42	5.00	0.96	0.03	0.98
15.70	0.53	0.42	5.00	0.96	0.03	0.98
15.75	0.53	0.42	5.00	0.96	0.03	0.98
15.80	0.53	0.42	5.00	0.96	0.03	0.98
15.85	0.53	0.42	5.00	0.96	0.03	0.98
15.90	0.53	0.42	5.00	0.96	0.03	0.98
15.95	0.53	0.42	5.00	0.96	0.03	0.98
16.00	0.53	0.42	5.00	0.96	0.03	0.98
16.05	0.53	0.42	5.00	0.96	0.02	0.98
16.10	0.53	0.42	5.00	0.96	0.02	0.98
16.15	0.53	0.42	5.00	0.96	0.02	0.98
16.20	0.53	0.42	5.00	0.96	0.02	0.98
16.25	0.53	0.42	5.00	0.96	0.02	0.98
16.30	0.53	0.42	5.00	0.96	0.02	0.98
16.35	0.53	0.42	5.00	0.96	0.02	0.98
16.40	0.53	0.42	5.00	0.96	0.02	0.98
16.45	0.53	0.42	5.00	0.96	0.02	0.98
16.50	0.53	0.42	5.00	0.96	0.02	0.98
16.55	0.53	0.42	5.00	0.96	0.02	0.98
16.60	0.53	0.42	5.00	0.96	0.02	0.98
16.65	0.53	0.42	5.00	0.96	0.02	0.98
16.70	0.53	0.42	5.00	0.96	0.02	0.98
16.75	0.53	0.42	5.00	0.96	0.02	0.98
16.80	0.53	0.42	5.00	0.96	0.02	0.98
16.85	0.53	0.42	5.00	0.96	0.02	0.98
16.90	0.53	0.42	5.00	0.96	0.02	0.98
16.95	0.53	0.42	5.00	0.96	0.02	0.98
17.00	0.53	0.42	5.00	0.96	0.02	0.98
17.05	0.53	0.42	5.00	0.96	0.02	0.98
17.10	0.53	0.42	5.00	0.96	0.02	0.98
17.15	0.53	0.42	5.00	0.96	0.02	0.98
17.20	0.53	0.42	5.00	0.96	0.02	0.98
17.25	0.53	0.42	5.00	0.96	0.02	0.98
17.30	0.53	0.42	5.00	0.96	0.02	0.98
17.35	0.53	0.42	5.00	0.96	0.02	0.98
17.40	0.53	0.42	5.00	0.96	0.02	0.97
17.45	0.53	0.42	5.00	0.96	0.02	0.97
17.50	0.53	0.42	5.00	0.96	0.02	0.97
17.55	0.53	0.42	5.00	0.96	0.02	0.97
17.60	0.53	0.42	5.00	0.96	0.02	0.97
17.65	0.53	0.42	5.00	0.96	0.02	0.97
17.70	0.53	0.42	5.00	0.96	0.02	0.97
17.75	0.53	0.42	5.00	0.96	0.02	0.97
17.80	0.53	0.42	5.00	0.96	0.02	0.97

BH-6 Summary Liquefy.sum

17.85	0.53	0.42	5.00	0.96	0.01	0.97
17.90	0.53	0.42	5.00	0.96	0.01	0.97
17.95	0.53	0.42	5.00	0.96	0.01	0.97
18.00	0.53	0.42	5.00	0.96	0.01	0.97
18.05	0.53	0.42	5.00	0.96	0.01	0.97
18.10	0.53	0.42	5.00	0.96	0.01	0.97
18.15	0.53	0.42	5.00	0.96	0.01	0.97
18.20	0.53	0.42	5.00	0.96	0.01	0.97
18.25	0.53	0.42	5.00	0.96	0.01	0.97
18.30	0.53	0.41	5.00	0.96	0.01	0.97
18.35	0.53	0.41	5.00	0.96	0.01	0.97
18.40	0.53	0.41	5.00	0.96	0.01	0.97
18.45	0.53	0.41	5.00	0.96	0.01	0.97
18.50	0.53	0.41	5.00	0.96	0.01	0.97
18.55	0.53	0.41	5.00	0.96	0.01	0.97
18.60	0.53	0.41	5.00	0.96	0.01	0.97
18.65	0.53	0.41	5.00	0.96	0.01	0.97
18.70	0.53	0.41	5.00	0.96	0.01	0.97
18.75	0.53	0.41	5.00	0.96	0.01	0.97
18.80	0.53	0.41	5.00	0.96	0.01	0.97
18.85	0.53	0.41	5.00	0.96	0.01	0.97
18.90	0.53	0.41	5.00	0.96	0.01	0.97
18.95	0.53	0.41	5.00	0.96	0.01	0.97
19.00	0.53	0.41	5.00	0.96	0.01	0.96
19.05	0.53	0.41	5.00	0.96	0.01	0.96
19.10	0.53	0.41	5.00	0.96	0.01	0.96
19.15	0.53	0.41	5.00	0.96	0.01	0.96
19.20	0.53	0.41	5.00	0.96	0.01	0.96
19.25	0.53	0.41	5.00	0.96	0.01	0.96
19.30	0.53	0.41	5.00	0.96	0.01	0.96
19.35	0.53	0.41	5.00	0.96	0.01	0.96
19.40	0.53	0.41	5.00	0.96	0.00	0.96
19.45	0.53	0.41	5.00	0.96	0.00	0.96
19.50	0.53	0.41	5.00	0.96	0.00	0.96
19.55	0.53	0.41	5.00	0.96	0.00	0.96
19.60	0.53	0.41	5.00	0.96	0.00	0.96
19.65	0.53	0.41	5.00	0.96	0.00	0.96
19.70	0.53	0.41	5.00	0.96	0.00	0.96
19.75	0.53	0.41	5.00	0.96	0.00	0.96
19.80	0.53	0.41	5.00	0.96	0.00	0.96
19.85	0.53	0.41	5.00	0.96	0.00	0.96
19.90	0.53	0.41	5.00	0.96	0.00	0.96
19.95	0.53	0.41	5.00	0.96	0.00	0.96
20.00	0.53	0.41	5.00	0.96	0.00	0.96
20.05	0.53	0.41	1.28	0.96	0.00	0.96
20.10	0.53	0.41	1.28	0.96	0.00	0.96
20.15	0.53	0.41	1.27	0.96	0.00	0.96
20.20	0.53	0.41	1.27	0.96	0.00	0.96

BH-6 Summary Liquefy.sum

20.25	0.53	0.42	1.27	0.96	0.00	0.96
20.30	0.53	0.42	1.27	0.96	0.00	0.96
20.35	0.53	0.42	1.27	0.96	0.00	0.96
20.40	0.53	0.42	1.27	0.96	0.00	0.96
20.45	0.53	0.42	1.26	0.96	0.00	0.96
20.50	0.53	0.42	1.26	0.96	0.00	0.96
20.55	0.53	0.42	1.26	0.96	0.00	0.96
20.60	0.53	0.42	1.26	0.96	0.00	0.96
20.65	0.53	0.42	1.26	0.96	0.00	0.96
20.70	0.53	0.42	1.26	0.96	0.00	0.96
20.75	0.53	0.42	1.25	0.96	0.00	0.96
20.80	0.53	0.42	1.25	0.96	0.00	0.96
20.85	0.53	0.42	1.25	0.96	0.00	0.96
20.90	0.53	0.42	1.25	0.96	0.00	0.96
20.95	0.53	0.42	1.25	0.96	0.00	0.96
21.00	0.53	0.42	1.25	0.96	0.00	0.96
21.05	0.53	0.42	1.25	0.96	0.00	0.96
21.10	0.53	0.42	1.24	0.96	0.00	0.96
21.15	0.53	0.43	1.24	0.96	0.00	0.96
21.20	0.53	0.43	1.24	0.96	0.00	0.96
21.25	0.53	0.43	1.24	0.96	0.00	0.96
21.30	0.53	0.43	1.24	0.96	0.00	0.96
21.35	0.53	0.43	1.24	0.96	0.00	0.96
21.40	0.53	0.43	1.23	0.96	0.00	0.96
21.45	0.53	0.43	1.23	0.96	0.00	0.96
21.50	0.53	0.43	1.23	0.96	0.00	0.96
21.55	0.53	0.43	1.23	0.96	0.00	0.96
21.60	0.53	0.43	1.23	0.96	0.00	0.96
21.65	0.53	0.43	1.23	0.96	0.00	0.96
21.70	0.53	0.43	1.23	0.96	0.00	0.96
21.75	0.53	0.43	1.22	0.96	0.00	0.96
21.80	0.53	0.43	1.22	0.96	0.00	0.96
21.85	0.53	0.43	1.22	0.96	0.00	0.96
21.90	0.53	0.43	1.22	0.96	0.00	0.96
21.95	0.53	0.43	1.22	0.96	0.00	0.96
22.00	0.53	0.43	1.22	0.96	0.00	0.96
22.05	0.53	0.43	1.22	0.96	0.00	0.96
22.10	0.53	0.43	1.21	0.96	0.00	0.96
22.15	0.53	0.44	1.21	0.96	0.00	0.96
22.20	0.53	0.44	1.21	0.96	0.00	0.96
22.25	0.53	0.44	1.21	0.96	0.00	0.96
22.30	0.53	0.44	1.21	0.96	0.00	0.96
22.35	0.53	0.44	1.21	0.96	0.00	0.96
22.40	0.53	0.44	1.21	0.96	0.00	0.96
22.45	0.53	0.44	1.20	0.96	0.00	0.96
22.50	0.53	0.44	1.20	0.96	0.00	0.96
22.55	0.53	0.44	1.20	0.96	0.00	0.96
22.60	0.53	0.44	1.20	0.96	0.00	0.96

BH-6 Summary Liquefy.sum

22.65	0.53	0.44	1.20	0.96	0.00	0.96
22.70	0.53	0.44	1.20	0.96	0.00	0.96
22.75	0.53	0.44	1.20	0.96	0.00	0.96
22.80	0.53	0.44	1.20	0.96	0.00	0.96
22.85	0.53	0.44	1.19	0.96	0.00	0.96
22.90	0.53	0.44	1.19	0.96	0.00	0.96
22.95	0.53	0.44	1.19	0.96	0.00	0.96
23.00	0.53	0.44	1.19	0.96	0.00	0.96
23.05	0.53	0.44	1.19	0.96	0.00	0.96
23.10	0.53	0.44	1.19	0.96	0.00	0.96
23.15	0.53	0.45	1.19	0.96	0.00	0.96
23.20	0.53	0.45	1.18	0.96	0.00	0.96
23.25	0.53	0.45	1.18	0.96	0.00	0.96
23.30	0.53	0.45	1.18	0.96	0.00	0.96
23.35	0.53	0.45	1.18	0.96	0.00	0.96
23.40	0.53	0.45	1.18	0.96	0.00	0.96
23.45	0.53	0.45	1.18	0.96	0.00	0.96
23.50	0.53	0.45	1.18	0.96	0.00	0.96
23.55	0.53	0.45	1.18	0.96	0.00	0.96
23.60	0.53	0.45	1.18	0.96	0.00	0.96
23.65	0.53	0.45	1.17	0.96	0.00	0.96
23.70	0.53	0.45	1.17	0.96	0.00	0.96
23.75	0.53	0.45	1.17	0.95	0.00	0.95
23.80	0.53	0.45	1.17	0.95	0.00	0.95
23.85	0.53	0.45	1.17	0.95	0.00	0.95
23.90	0.53	0.45	1.17	0.95	0.00	0.95
23.95	0.53	0.45	1.17	0.95	0.00	0.95
24.00	0.53	0.45	1.17	0.95	0.00	0.95
24.05	0.53	0.45	1.16	0.95	0.00	0.95
24.10	0.53	0.45	1.16	0.95	0.00	0.95
24.15	0.53	0.45	1.16	0.95	0.00	0.95
24.20	0.53	0.46	1.16	0.94	0.00	0.94
24.25	0.53	0.46	1.16	0.94	0.00	0.94
24.30	0.53	0.46	1.16	0.94	0.00	0.94
24.35	0.53	0.46	1.16	0.94	0.00	0.94
24.40	0.53	0.46	1.16	0.93	0.00	0.93
24.45	0.53	0.46	1.16	0.93	0.00	0.93
24.50	0.53	0.46	1.15	0.93	0.00	0.93
24.55	0.53	0.46	1.15	0.92	0.00	0.92
24.60	0.51	0.46	1.10	0.92	0.00	0.92
24.65	0.46	0.46	1.00	0.91	0.00	0.91
24.70	0.44	0.46	0.95*	0.91	0.00	0.91
24.75	0.42	0.46	0.91*	0.91	0.00	0.91
24.80	0.41	0.46	0.89*	0.90	0.00	0.90
24.85	0.40	0.46	0.86*	0.90	0.00	0.90
24.90	0.39	0.46	0.85*	0.89	0.00	0.89
24.95	0.38	0.46	0.83*	0.89	0.00	0.89
25.00	0.38	0.46	0.81*	0.88	0.00	0.88

BH-6 Summary Liquefy.sum

25.05	0.38	0.46	0.83*	0.88	0.00	0.88
25.10	0.40	0.46	0.85*	0.87	0.00	0.87
25.15	0.41	0.46	0.88*	0.87	0.00	0.87
25.20	0.43	0.46	0.92*	0.86	0.00	0.86
25.25	0.45	0.46	0.97*	0.86	0.00	0.86
25.30	0.51	0.46	1.09	0.85	0.00	0.85
25.35	0.53	0.47	1.14	0.85	0.00	0.85
25.40	0.53	0.47	1.13	0.85	0.00	0.85
25.45	0.53	0.47	1.13	0.84	0.00	0.84
25.50	0.53	0.47	1.13	0.84	0.00	0.84
25.55	0.53	0.47	1.13	0.83	0.00	0.83
25.60	0.53	0.47	1.13	0.83	0.00	0.83
25.65	0.53	0.47	1.13	0.83	0.00	0.83
25.70	0.53	0.47	1.13	0.83	0.00	0.83
25.75	0.53	0.47	1.13	0.82	0.00	0.82
25.80	0.53	0.47	1.13	0.82	0.00	0.82
25.85	0.53	0.47	1.13	0.82	0.00	0.82
25.90	0.53	0.47	1.12	0.82	0.00	0.82
25.95	0.53	0.47	1.12	0.82	0.00	0.82
26.00	0.53	0.47	1.12	0.82	0.00	0.82
26.05	0.53	0.47	1.12	0.82	0.00	0.82
26.10	0.53	0.47	1.12	0.82	0.00	0.82
26.15	0.53	0.47	1.12	0.82	0.00	0.82
26.20	0.53	0.47	1.12	0.82	0.00	0.82
26.25	0.53	0.47	1.12	0.81	0.00	0.81
26.30	0.53	0.47	1.12	0.81	0.00	0.81
26.35	0.53	0.47	1.12	0.81	0.00	0.81
26.40	0.53	0.47	1.11	0.81	0.00	0.81
26.45	0.53	0.47	1.11	0.81	0.00	0.81
26.50	0.53	0.47	1.11	0.81	0.00	0.81
26.55	0.53	0.47	1.11	0.81	0.00	0.81
26.60	0.53	0.48	1.11	0.81	0.00	0.81
26.65	0.53	0.48	1.11	0.81	0.00	0.81
26.70	0.53	0.48	1.11	0.81	0.00	0.81
26.75	0.53	0.48	1.11	0.81	0.00	0.81
26.80	0.53	0.48	1.11	0.81	0.00	0.81
26.85	0.53	0.48	1.11	0.81	0.00	0.81
26.90	0.53	0.48	1.11	0.81	0.00	0.81
26.95	0.53	0.48	1.10	0.81	0.00	0.81
27.00	0.53	0.48	1.10	0.81	0.00	0.81
27.05	0.53	0.48	1.10	0.81	0.00	0.81
27.10	0.53	0.48	1.10	0.81	0.00	0.81
27.15	0.53	0.48	1.10	0.81	0.00	0.81
27.20	0.53	0.48	1.10	0.81	0.00	0.81
27.25	0.53	0.48	1.10	0.81	0.00	0.81
27.30	0.53	0.48	1.10	0.81	0.00	0.81
27.35	0.53	0.48	1.10	0.81	0.00	0.81
27.40	0.53	0.48	1.10	0.81	0.00	0.81

BH-6 Summary Liquefy.sum

27.45	0.53	0.48	1.10	0.81	0.00	0.81
27.50	0.53	0.48	1.09	0.81	0.00	0.81
27.55	0.53	0.48	1.09	0.81	0.00	0.81
27.60	0.53	0.48	1.09	0.81	0.00	0.81
27.65	0.53	0.48	1.09	0.81	0.00	0.81
27.70	0.53	0.48	1.09	0.81	0.00	0.81
27.75	0.53	0.48	1.09	0.81	0.00	0.81
27.80	0.53	0.48	1.09	0.81	0.00	0.81
27.85	0.53	0.49	1.09	0.81	0.00	0.81
27.90	0.53	0.49	1.09	0.81	0.00	0.81
27.95	0.53	0.49	1.09	0.81	0.00	0.81
28.00	0.53	0.49	1.09	0.81	0.00	0.81
28.05	0.53	0.49	1.09	0.81	0.00	0.81
28.10	0.53	0.49	1.08	0.81	0.00	0.81
28.15	0.53	0.49	1.08	0.81	0.00	0.81
28.20	0.53	0.49	1.08	0.81	0.00	0.81
28.25	0.53	0.49	1.08	0.81	0.00	0.81
28.30	0.53	0.49	1.08	0.81	0.00	0.81
28.35	0.53	0.49	1.08	0.81	0.00	0.81
28.40	0.53	0.49	1.08	0.81	0.00	0.81
28.45	0.53	0.49	1.08	0.81	0.00	0.81
28.50	0.53	0.49	1.08	0.81	0.00	0.81
28.55	0.53	0.49	1.08	0.81	0.00	0.81
28.60	0.53	0.49	1.08	0.81	0.00	0.81
28.65	0.53	0.49	1.08	0.81	0.00	0.81
28.70	0.53	0.49	1.08	0.81	0.00	0.81
28.75	0.53	0.49	1.07	0.81	0.00	0.81
28.80	0.53	0.49	1.07	0.81	0.00	0.81
28.85	0.53	0.49	1.07	0.81	0.00	0.81
28.90	0.53	0.49	1.07	0.81	0.00	0.81
28.95	0.53	0.49	1.07	0.81	0.00	0.81
29.00	0.53	0.49	1.07	0.81	0.00	0.81
29.05	0.53	0.49	1.07	0.81	0.00	0.81
29.10	0.53	0.49	1.07	0.81	0.00	0.81
29.15	0.53	0.49	1.07	0.81	0.00	0.81
29.20	0.53	0.49	1.07	0.81	0.00	0.81
29.25	0.53	0.50	1.07	0.81	0.00	0.81
29.30	0.53	0.50	1.07	0.81	0.00	0.81
29.35	0.53	0.50	1.07	0.81	0.00	0.81
29.40	0.53	0.50	1.06	0.81	0.00	0.81
29.45	0.53	0.50	1.06	0.81	0.00	0.81
29.50	0.53	0.50	1.06	0.81	0.00	0.81
29.55	0.53	0.50	1.06	0.81	0.00	0.81
29.60	0.53	0.50	1.06	0.81	0.00	0.81
29.65	0.53	0.50	1.06	0.81	0.00	0.81
29.70	0.53	0.50	1.06	0.81	0.00	0.81
29.75	0.53	0.50	1.06	0.81	0.00	0.81
29.80	0.53	0.50	1.06	0.81	0.00	0.81

BH-6 Summary Liquefy.sum

29.85	0.53	0.50	1.06	0.81	0.00	0.81
29.90	0.53	0.50	1.06	0.81	0.00	0.81
29.95	0.53	0.50	1.06	0.81	0.00	0.81
30.00	0.53	0.50	1.06	0.81	0.00	0.81
30.05	0.53	0.50	1.06	0.81	0.00	0.81
30.10	0.53	0.50	1.06	0.81	0.00	0.81
30.15	0.53	0.50	1.05	0.81	0.00	0.81
30.20	0.53	0.50	1.05	0.81	0.00	0.81
30.25	0.53	0.50	1.05	0.81	0.00	0.81
30.30	0.53	0.50	1.05	0.81	0.00	0.81
30.35	0.53	0.50	1.05	0.81	0.00	0.81
30.40	0.53	0.50	1.05	0.81	0.00	0.81
30.45	0.53	0.50	1.05	0.81	0.00	0.81
30.50	0.53	0.50	1.05	0.81	0.00	0.81
30.55	0.53	0.50	1.06	0.81	0.00	0.81
30.60	0.53	0.50	1.06	0.81	0.00	0.81
30.65	0.53	0.50	1.06	0.81	0.00	0.81
30.70	0.53	0.50	1.06	0.81	0.00	0.81
30.75	0.53	0.50	1.06	0.81	0.00	0.81
30.80	0.53	0.50	1.06	0.81	0.00	0.81
30.85	0.53	0.50	1.05	0.81	0.00	0.81
30.90	0.53	0.50	1.05	0.81	0.00	0.81
30.95	0.53	0.50	1.05	0.81	0.00	0.81
31.00	0.53	0.50	1.05	0.81	0.00	0.81
31.05	0.53	0.50	1.05	0.81	0.00	0.81
31.10	0.53	0.50	1.05	0.81	0.00	0.81
31.15	0.53	0.50	1.05	0.81	0.00	0.81
31.20	0.53	0.50	1.05	0.81	0.00	0.81
31.25	0.53	0.50	1.05	0.81	0.00	0.81
31.30	0.53	0.50	1.05	0.81	0.00	0.81
31.35	0.53	0.50	1.05	0.81	0.00	0.81
31.40	0.53	0.50	1.05	0.81	0.00	0.81
31.45	0.53	0.50	1.05	0.81	0.00	0.81
31.50	0.53	0.51	1.05	0.81	0.00	0.81
31.55	0.53	0.51	1.05	0.81	0.00	0.81
31.60	0.53	0.51	1.05	0.81	0.00	0.81
31.65	0.53	0.51	1.05	0.81	0.00	0.81
31.70	0.53	0.51	1.04	0.81	0.00	0.81
31.75	0.53	0.51	1.04	0.81	0.00	0.81
31.80	0.53	0.51	1.04	0.81	0.00	0.81
31.85	0.53	0.51	1.04	0.81	0.00	0.81
31.90	0.53	0.51	1.04	0.81	0.00	0.81
31.95	0.53	0.51	1.04	0.81	0.00	0.81
32.00	0.53	0.51	1.04	0.81	0.00	0.81
32.05	0.53	0.51	1.04	0.81	0.00	0.81
32.10	0.53	0.51	1.04	0.81	0.00	0.81
32.15	0.53	0.51	1.04	0.81	0.00	0.81
32.20	0.53	0.51	1.04	0.81	0.00	0.81

BH-6 Summary Liquefy.sum

32.25	0.53	0.51	1.04	0.81	0.00	0.81
32.30	0.53	0.51	1.04	0.81	0.00	0.81
32.35	0.53	0.51	1.04	0.81	0.00	0.81
32.40	0.53	0.51	1.04	0.81	0.00	0.81
32.45	0.53	0.51	1.04	0.81	0.00	0.81
32.50	0.53	0.51	1.04	0.81	0.00	0.81
32.55	0.53	0.51	1.04	0.81	0.00	0.81
32.60	0.53	0.51	1.03	0.81	0.00	0.81
32.65	0.53	0.51	1.03	0.81	0.00	0.81
32.70	0.53	0.51	1.03	0.81	0.00	0.81
32.75	0.53	0.51	1.03	0.81	0.00	0.81
32.80	0.52	0.51	1.03	0.81	0.00	0.81
32.85	0.52	0.51	1.03	0.81	0.00	0.81
32.90	0.52	0.51	1.03	0.81	0.00	0.81
32.95	0.52	0.51	1.03	0.81	0.00	0.81
33.00	0.52	0.51	1.03	0.81	0.00	0.81
33.05	0.52	0.51	1.03	0.81	0.00	0.81
33.10	0.52	0.51	1.03	0.81	0.00	0.81
33.15	0.52	0.51	1.03	0.81	0.00	0.81
33.20	0.52	0.51	1.03	0.81	0.00	0.81
33.25	0.52	0.51	1.03	0.81	0.00	0.81
33.30	0.52	0.51	1.03	0.81	0.00	0.81
33.35	0.52	0.51	1.03	0.81	0.00	0.81
33.40	0.52	0.51	1.03	0.81	0.00	0.81
33.45	0.52	0.51	1.03	0.81	0.00	0.81
33.50	0.52	0.51	1.03	0.81	0.00	0.81
33.55	0.52	0.51	1.03	0.81	0.00	0.81
33.60	0.52	0.51	1.02	0.81	0.00	0.81
33.65	0.52	0.51	1.02	0.81	0.00	0.81
33.70	0.52	0.51	1.02	0.81	0.00	0.81
33.75	0.52	0.51	1.02	0.81	0.00	0.81
33.80	0.52	0.51	1.02	0.80	0.00	0.80
33.85	0.52	0.51	1.02	0.80	0.00	0.80
33.90	0.52	0.51	1.02	0.80	0.00	0.80
33.95	0.52	0.51	1.02	0.80	0.00	0.80
34.00	0.52	0.51	1.02	0.80	0.00	0.80
34.05	0.52	0.51	1.02	0.79	0.00	0.79
34.10	0.52	0.51	1.02	0.79	0.00	0.79
34.15	0.52	0.51	1.02	0.79	0.00	0.79
34.20	0.52	0.51	1.02	0.78	0.00	0.78
34.25	0.52	0.51	1.02	0.78	0.00	0.78
34.30	0.52	0.51	1.02	0.78	0.00	0.78
34.35	0.52	0.51	1.02	0.77	0.00	0.77
34.40	0.46	0.51	0.90*	0.77	0.00	0.77
34.45	0.43	0.51	0.84*	0.76	0.00	0.76
34.50	0.41	0.51	0.80*	0.76	0.00	0.76
34.55	0.40	0.51	0.77*	0.75	0.00	0.75
34.60	0.39	0.51	0.75*	0.75	0.00	0.75

BH-6 Summary Liquefy.sum

34.65	0.38	0.51	0.73*	0.74	0.00	0.74
34.70	0.37	0.51	0.72*	0.74	0.00	0.74
34.75	0.36	0.51	0.70*	0.73	0.00	0.73
34.80	0.35	0.51	0.69*	0.73	0.00	0.73
34.85	0.35	0.51	0.68*	0.72	0.00	0.72
34.90	0.34	0.51	0.66*	0.71	0.00	0.71
34.95	0.33	0.51	0.65*	0.71	0.00	0.71
35.00	0.33	0.51	0.64*	0.70	0.00	0.70
35.05	0.33	0.51	0.65*	0.69	0.00	0.69
35.10	0.34	0.51	0.66*	0.69	0.00	0.69
35.15	0.34	0.51	0.67*	0.68	0.00	0.68
35.20	0.35	0.51	0.68*	0.68	0.00	0.68
35.25	0.36	0.51	0.70*	0.67	0.00	0.67
35.30	0.36	0.51	0.71*	0.66	0.00	0.66
35.35	0.37	0.51	0.72*	0.66	0.00	0.66
35.40	0.38	0.51	0.74*	0.65	0.00	0.65
35.45	0.39	0.51	0.76*	0.65	0.00	0.65
35.50	0.40	0.51	0.78*	0.64	0.00	0.64
35.55	0.41	0.51	0.81*	0.64	0.00	0.64
35.60	0.43	0.51	0.85*	0.63	0.00	0.63
35.65	0.47	0.51	0.92*	0.63	0.00	0.63
35.70	0.52	0.51	1.01	0.62	0.00	0.62
35.75	0.52	0.51	1.01	0.62	0.00	0.62
35.80	0.52	0.51	1.01	0.62	0.00	0.62
35.85	0.52	0.51	1.01	0.61	0.00	0.61
35.90	0.52	0.51	1.01	0.61	0.00	0.61
35.95	0.52	0.51	1.00	0.60	0.00	0.60
36.00	0.52	0.51	1.00	0.60	0.00	0.60
36.05	0.52	0.51	1.00	0.60	0.00	0.60
36.10	0.52	0.51	1.00	0.59	0.00	0.59
36.15	0.52	0.51	1.00	0.59	0.00	0.59
36.20	0.51	0.51	1.00	0.59	0.00	0.59
36.25	0.51	0.51	1.00	0.59	0.00	0.59
36.30	0.51	0.51	1.00	0.59	0.00	0.59
36.35	0.51	0.51	1.00	0.58	0.00	0.58
36.40	0.51	0.51	1.00	0.58	0.00	0.58
36.45	0.51	0.51	1.00	0.58	0.00	0.58
36.50	0.51	0.51	1.00	0.58	0.00	0.58
36.55	0.51	0.51	1.00	0.58	0.00	0.58
36.60	0.51	0.51	1.00	0.58	0.00	0.58
36.65	0.51	0.51	1.00*	0.58	0.00	0.58
36.70	0.51	0.51	1.00*	0.58	0.00	0.58
36.75	0.51	0.51	1.00*	0.57	0.00	0.57
36.80	0.51	0.51	1.00*	0.57	0.00	0.57
36.85	0.51	0.51	1.00*	0.57	0.00	0.57
36.90	0.51	0.51	1.00*	0.57	0.00	0.57
36.95	0.51	0.51	1.00*	0.57	0.00	0.57
37.00	0.51	0.51	1.00*	0.57	0.00	0.57

BH-6 Summary Liquefy.sum

37.05	0.51	0.51	1.00*	0.57	0.00	0.57
37.10	0.51	0.51	1.00*	0.57	0.00	0.57
37.15	0.51	0.51	1.00*	0.57	0.00	0.57
37.20	0.51	0.51	1.00*	0.57	0.00	0.57
37.25	0.51	0.51	1.00*	0.57	0.00	0.57
37.30	0.51	0.51	1.00*	0.57	0.00	0.57
37.35	0.51	0.51	1.00*	0.57	0.00	0.57
37.40	0.51	0.51	0.99*	0.57	0.00	0.57
37.45	0.51	0.51	0.99*	0.57	0.00	0.57
37.50	0.51	0.51	0.99*	0.57	0.00	0.57
37.55	0.51	0.51	0.99*	0.57	0.00	0.57
37.60	0.51	0.51	0.99*	0.57	0.00	0.57
37.65	0.51	0.51	0.99*	0.57	0.00	0.57
37.70	0.51	0.51	0.99*	0.57	0.00	0.57
37.75	0.51	0.51	0.99*	0.57	0.00	0.57
37.80	0.51	0.51	0.99*	0.57	0.00	0.57
37.85	0.51	0.51	0.99*	0.57	0.00	0.57
37.90	0.51	0.51	0.99*	0.57	0.00	0.57
37.95	0.51	0.51	0.99*	0.57	0.00	0.57
38.00	0.51	0.51	0.99*	0.57	0.00	0.57
38.05	0.51	0.51	0.99*	0.57	0.00	0.57
38.10	0.51	0.51	0.99*	0.57	0.00	0.57
38.15	0.51	0.51	0.99*	0.57	0.00	0.57
38.20	0.51	0.51	0.99*	0.57	0.00	0.57
38.25	0.51	0.51	0.99*	0.57	0.00	0.57
38.30	0.51	0.51	0.99*	0.57	0.00	0.57
38.35	0.51	0.51	0.99*	0.57	0.00	0.57
38.40	0.51	0.51	0.99*	0.57	0.00	0.57
38.45	0.51	0.51	0.99*	0.57	0.00	0.57
38.50	0.51	0.51	0.99*	0.57	0.00	0.57
38.55	0.51	0.51	0.99*	0.57	0.00	0.57
38.60	0.51	0.51	0.99*	0.57	0.00	0.57
38.65	0.51	0.51	0.99*	0.57	0.00	0.57
38.70	0.51	0.51	0.99*	0.57	0.00	0.57
38.75	0.51	0.51	0.99*	0.57	0.00	0.57
38.80	0.51	0.51	0.99*	0.57	0.00	0.57
38.85	0.51	0.51	0.99*	0.57	0.00	0.57
38.90	0.51	0.51	0.99*	0.57	0.00	0.57
38.95	0.51	0.51	0.99*	0.57	0.00	0.57
39.00	0.51	0.51	0.99*	0.57	0.00	0.57
39.05	0.51	0.51	0.99*	0.57	0.00	0.57
39.10	0.51	0.51	0.98*	0.57	0.00	0.57
39.15	0.51	0.51	0.98*	0.57	0.00	0.57
39.20	0.51	0.51	0.98*	0.57	0.00	0.57
39.25	0.51	0.51	0.98*	0.57	0.00	0.57
39.30	0.51	0.51	0.98*	0.57	0.00	0.57
39.35	0.51	0.51	0.98*	0.57	0.00	0.57
39.40	0.51	0.51	0.98*	0.57	0.00	0.57

BH-6 Summary Liquefy.sum

39.45	0.51	0.51	0.98*	0.57	0.00	0.57
39.50	0.51	0.51	0.98*	0.57	0.00	0.57
39.55	0.51	0.51	0.98*	0.57	0.00	0.57
39.60	0.51	0.51	0.98*	0.57	0.00	0.57
39.65	0.51	0.51	0.98*	0.57	0.00	0.57
39.70	0.50	0.51	0.98*	0.57	0.00	0.57
39.75	0.50	0.51	0.98*	0.57	0.00	0.57
39.80	0.50	0.51	0.98*	0.57	0.00	0.57
39.85	0.50	0.51	0.98*	0.57	0.00	0.57
39.90	0.50	0.51	0.98*	0.57	0.00	0.57
39.95	0.50	0.51	0.98*	0.57	0.00	0.57
40.00	0.50	0.51	0.98*	0.57	0.00	0.57
40.05	0.50	0.51	0.98*	0.57	0.00	0.57
40.10	0.50	0.51	0.98*	0.57	0.00	0.57
40.15	0.50	0.51	0.98*	0.57	0.00	0.57
40.20	0.50	0.51	0.98*	0.57	0.00	0.57
40.25	0.50	0.51	0.98*	0.57	0.00	0.57
40.30	0.50	0.51	0.98*	0.57	0.00	0.57
40.35	0.50	0.51	0.98*	0.57	0.00	0.57
40.40	0.50	0.51	0.98*	0.57	0.00	0.57
40.45	0.50	0.51	0.98*	0.57	0.00	0.57
40.50	0.50	0.51	0.98*	0.57	0.00	0.57
40.55	0.50	0.51	0.98*	0.57	0.00	0.57
40.60	0.50	0.51	0.98*	0.57	0.00	0.57
40.65	0.50	0.51	0.98*	0.57	0.00	0.57
40.70	0.50	0.51	0.98*	0.57	0.00	0.57
40.75	0.50	0.51	0.98*	0.57	0.00	0.57
40.80	0.50	0.51	0.98*	0.57	0.00	0.57
40.85	0.50	0.51	0.98*	0.57	0.00	0.57
40.90	0.50	0.51	0.98*	0.57	0.00	0.57
40.95	0.50	0.51	0.98*	0.57	0.00	0.57
41.00	0.50	0.51	0.98*	0.57	0.00	0.57
41.05	0.50	0.51	0.98*	0.57	0.00	0.57
41.10	0.50	0.51	0.98*	0.57	0.00	0.57
41.15	0.50	0.51	0.98*	0.57	0.00	0.57
41.20	0.50	0.51	0.97*	0.57	0.00	0.57
41.25	0.50	0.51	0.97*	0.57	0.00	0.57
41.30	0.50	0.51	0.97*	0.57	0.00	0.57
41.35	0.50	0.51	0.97*	0.57	0.00	0.57
41.40	0.50	0.51	0.97*	0.57	0.00	0.57
41.45	0.50	0.51	0.97*	0.57	0.00	0.57
41.50	0.50	0.51	0.97*	0.57	0.00	0.57
41.55	0.50	0.51	0.97*	0.57	0.00	0.57
41.60	0.50	0.51	0.97*	0.57	0.00	0.57
41.65	0.50	0.51	0.97*	0.57	0.00	0.57
41.70	0.50	0.51	0.97*	0.57	0.00	0.57
41.75	0.50	0.51	0.97*	0.57	0.00	0.57
41.80	0.50	0.51	0.97*	0.57	0.00	0.57

BH-6 Summary Liquefy.sum

41.85	0.50	0.51	0.97*	0.57	0.00	0.57
41.90	0.50	0.51	0.97*	0.57	0.00	0.57
41.95	0.50	0.51	0.97*	0.57	0.00	0.57
42.00	0.50	0.51	0.97*	0.57	0.00	0.57
42.05	0.50	0.51	0.97*	0.57	0.00	0.57
42.10	0.50	0.51	0.97*	0.57	0.00	0.57
42.15	0.50	0.51	0.97*	0.57	0.00	0.57
42.20	0.50	0.51	0.97*	0.57	0.00	0.57
42.25	0.50	0.51	0.97*	0.57	0.00	0.57
42.30	0.50	0.51	0.97*	0.57	0.00	0.57
42.35	0.50	0.51	0.97*	0.57	0.00	0.57
42.40	0.50	0.51	0.97*	0.57	0.00	0.57
42.45	0.50	0.51	0.97*	0.57	0.00	0.57
42.50	0.50	0.51	0.97*	0.57	0.00	0.57
42.55	0.50	0.51	0.97*	0.57	0.00	0.57
42.60	0.50	0.51	0.97*	0.57	0.00	0.57
42.65	0.50	0.51	0.97*	0.57	0.00	0.57
42.70	0.50	0.51	0.97*	0.57	0.00	0.57
42.75	0.50	0.51	0.97*	0.57	0.00	0.57
42.80	0.50	0.51	0.97*	0.57	0.00	0.57
42.85	0.50	0.51	0.97*	0.57	0.00	0.57
42.90	0.50	0.51	0.97*	0.57	0.00	0.57
42.95	0.50	0.51	0.97*	0.57	0.00	0.57
43.00	0.50	0.51	0.97*	0.57	0.00	0.57
43.05	0.50	0.51	0.97*	0.57	0.00	0.57
43.10	0.50	0.51	0.97*	0.57	0.00	0.57
43.15	0.50	0.51	0.97*	0.57	0.00	0.57
43.20	0.50	0.51	0.97*	0.57	0.00	0.57
43.25	0.50	0.51	0.97*	0.57	0.00	0.57
43.30	0.50	0.51	0.97*	0.57	0.00	0.57
43.35	0.50	0.51	0.97*	0.56	0.00	0.56
43.40	0.49	0.51	0.97*	0.56	0.00	0.56
43.45	0.49	0.51	0.97*	0.56	0.00	0.56
43.50	0.49	0.51	0.97*	0.56	0.00	0.56
43.55	0.49	0.51	0.97*	0.56	0.00	0.56
43.60	0.49	0.51	0.97*	0.56	0.00	0.56
43.65	0.49	0.51	0.97*	0.56	0.00	0.56
43.70	0.49	0.51	0.97*	0.56	0.00	0.56
43.75	0.49	0.51	0.97*	0.55	0.00	0.55
43.80	0.49	0.51	0.97*	0.55	0.00	0.55
43.85	0.49	0.51	0.97*	0.55	0.00	0.55
43.90	0.49	0.51	0.97*	0.55	0.00	0.55
43.95	0.49	0.51	0.97*	0.54	0.00	0.54
44.00	0.49	0.51	0.97*	0.54	0.00	0.54
44.05	0.49	0.51	0.97*	0.54	0.00	0.54
44.10	0.49	0.51	0.96*	0.53	0.00	0.53
44.15	0.49	0.51	0.96*	0.53	0.00	0.53
44.20	0.49	0.51	0.96*	0.53	0.00	0.53

BH-6 Summary Liquefy.sum

44.25	0.49	0.51	0.96*	0.52	0.00	0.52
44.30	0.49	0.51	0.96*	0.52	0.00	0.52
44.35	0.44	0.51	0.85*	0.51	0.00	0.51
44.40	0.41	0.51	0.80*	0.51	0.00	0.51
44.45	0.39	0.51	0.77*	0.50	0.00	0.50
44.50	0.38	0.51	0.75*	0.50	0.00	0.50
44.55	0.37	0.51	0.73*	0.49	0.00	0.49
44.60	0.36	0.51	0.71*	0.49	0.00	0.49
44.65	0.36	0.51	0.70*	0.48	0.00	0.48
44.70	0.35	0.51	0.68*	0.48	0.00	0.48
44.75	0.34	0.51	0.67*	0.47	0.00	0.47
44.80	0.34	0.51	0.66*	0.47	0.00	0.47
44.85	0.33	0.51	0.65*	0.46	0.00	0.46
44.90	0.33	0.51	0.64*	0.45	0.00	0.45
44.95	0.32	0.51	0.63*	0.45	0.00	0.45
45.00	0.32	0.51	0.62*	0.44	0.00	0.44
45.05	0.32	0.51	0.62*	0.44	0.00	0.44
45.10	0.32	0.51	0.63*	0.43	0.00	0.43
45.15	0.32	0.51	0.63*	0.42	0.00	0.42
45.20	0.32	0.51	0.63*	0.42	0.00	0.42
45.25	0.32	0.51	0.64*	0.41	0.00	0.41
45.30	0.33	0.51	0.64*	0.41	0.00	0.41
45.35	0.33	0.51	0.64*	0.40	0.00	0.40
45.40	0.33	0.51	0.64*	0.39	0.00	0.39
45.45	0.33	0.51	0.65*	0.39	0.00	0.39
45.50	0.33	0.51	0.65*	0.38	0.00	0.38
45.55	0.33	0.51	0.65*	0.37	0.00	0.37
45.60	0.33	0.51	0.66*	0.37	0.00	0.37
45.65	0.34	0.51	0.66*	0.36	0.00	0.36
45.70	0.34	0.51	0.66*	0.36	0.00	0.36
45.75	0.34	0.51	0.66*	0.35	0.00	0.35
45.80	0.34	0.51	0.67*	0.35	0.00	0.35
45.85	0.34	0.51	0.67*	0.34	0.00	0.34
45.90	0.34	0.51	0.67*	0.33	0.00	0.33
45.95	0.34	0.51	0.68*	0.33	0.00	0.33
46.00	0.35	0.51	0.68*	0.32	0.00	0.32
46.05	0.35	0.51	0.68*	0.32	0.00	0.32
46.10	0.35	0.51	0.69*	0.31	0.00	0.31
46.15	0.35	0.51	0.69*	0.31	0.00	0.31
46.20	0.35	0.51	0.70*	0.30	0.00	0.30
46.25	0.36	0.51	0.70*	0.29	0.00	0.29
46.30	0.36	0.51	0.70*	0.29	0.00	0.29
46.35	0.36	0.51	0.71*	0.28	0.00	0.28
46.40	0.36	0.51	0.71*	0.28	0.00	0.28
46.45	0.36	0.51	0.72*	0.27	0.00	0.27
46.50	0.37	0.51	0.72*	0.27	0.00	0.27
46.55	0.37	0.51	0.73*	0.26	0.00	0.26
46.60	0.37	0.51	0.73*	0.26	0.00	0.26

BH-6 Summary Liquefy.sum

46.65	0.37	0.51	0.74*	0.25	0.00	0.25
46.70	0.38	0.51	0.74*	0.25	0.00	0.25
46.75	0.38	0.51	0.75*	0.24	0.00	0.24
46.80	0.38	0.51	0.75*	0.24	0.00	0.24
46.85	0.38	0.51	0.76*	0.23	0.00	0.23
46.90	0.39	0.51	0.77*	0.23	0.00	0.23
46.95	0.39	0.51	0.77*	0.22	0.00	0.22
47.00	0.40	0.51	0.78*	0.22	0.00	0.22
47.05	0.40	0.51	0.79*	0.21	0.00	0.21
47.10	0.41	0.51	0.80*	0.21	0.00	0.21
47.15	0.41	0.51	0.81*	0.20	0.00	0.20
47.20	0.42	0.51	0.83*	0.20	0.00	0.20
47.25	0.43	0.51	0.85*	0.20	0.00	0.20
47.30	0.44	0.51	0.87*	0.19	0.00	0.19
47.35	0.45	0.51	0.90*	0.19	0.00	0.19
47.40	0.47	0.51	0.93*	0.18	0.00	0.18
47.45	0.49	0.51	0.96*	0.18	0.00	0.18
47.50	0.49	0.51	0.96*	0.17	0.00	0.17
47.55	0.49	0.51	0.96*	0.17	0.00	0.17
47.60	0.48	0.51	0.96*	0.17	0.00	0.17
47.65	0.48	0.51	0.96*	0.16	0.00	0.16
47.70	0.48	0.51	0.96*	0.16	0.00	0.16
47.75	0.48	0.51	0.96*	0.15	0.00	0.15
47.80	0.48	0.51	0.96*	0.15	0.00	0.15
47.85	0.48	0.51	0.96*	0.14	0.00	0.14
47.90	0.48	0.50	0.96*	0.14	0.00	0.14
47.95	0.48	0.50	0.96*	0.14	0.00	0.14
48.00	0.48	0.50	0.96*	0.13	0.00	0.13
48.05	0.48	0.50	0.96*	0.13	0.00	0.13
48.10	0.48	0.50	0.96*	0.13	0.00	0.13
48.15	0.48	0.50	0.96*	0.12	0.00	0.12
48.20	0.48	0.50	0.96*	0.12	0.00	0.12
48.25	0.48	0.50	0.96*	0.11	0.00	0.11
48.30	0.48	0.50	0.96*	0.11	0.00	0.11
48.35	0.48	0.50	0.96*	0.11	0.00	0.11
48.40	0.48	0.50	0.96*	0.10	0.00	0.10
48.45	0.48	0.50	0.96*	0.10	0.00	0.10
48.50	0.48	0.50	0.96*	0.10	0.00	0.10
48.55	0.48	0.50	0.96*	0.09	0.00	0.09
48.60	0.48	0.50	0.96*	0.09	0.00	0.09
48.65	0.48	0.50	0.96*	0.09	0.00	0.09
48.70	0.48	0.50	0.96*	0.08	0.00	0.08
48.75	0.48	0.50	0.96*	0.08	0.00	0.08
48.80	0.48	0.50	0.96*	0.08	0.00	0.08
48.85	0.48	0.50	0.96*	0.07	0.00	0.07
48.90	0.48	0.50	0.96*	0.07	0.00	0.07
48.95	0.48	0.50	0.96*	0.07	0.00	0.07
49.00	0.48	0.50	0.96*	0.07	0.00	0.07

BH-6 Summary Liquefy.sum

49.05	0.48	0.50	0.96*	0.06	0.00	0.06
49.10	0.48	0.50	0.96*	0.06	0.00	0.06
49.15	0.48	0.50	0.96*	0.06	0.00	0.06
49.20	0.48	0.50	0.96*	0.06	0.00	0.06
49.25	0.48	0.50	0.96*	0.05	0.00	0.05
49.30	0.48	0.50	0.96*	0.05	0.00	0.05
49.35	0.48	0.50	0.96*	0.05	0.00	0.05
49.40	0.48	0.50	0.96*	0.05	0.00	0.05
49.45	0.48	0.50	0.96*	0.04	0.00	0.04
49.50	0.48	0.50	0.96*	0.04	0.00	0.04
49.55	0.48	0.50	0.96*	0.04	0.00	0.04
49.60	0.48	0.50	0.96*	0.04	0.00	0.04
49.65	0.48	0.50	0.96*	0.04	0.00	0.04
49.70	0.48	0.50	0.96*	0.03	0.00	0.03
49.75	0.48	0.50	0.96*	0.03	0.00	0.03
49.80	0.48	0.50	0.96*	0.03	0.00	0.03
49.85	0.48	0.50	0.96*	0.03	0.00	0.03
49.90	0.48	0.50	0.96*	0.03	0.00	0.03
49.95	0.48	0.50	0.96*	0.03	0.00	0.03
50.00	0.48	0.50	0.96*	0.02	0.00	0.02
50.05	0.48	0.50	0.96*	0.02	0.00	0.02
50.10	0.48	0.50	0.96*	0.02	0.00	0.02
50.15	0.48	0.50	0.96*	0.02	0.00	0.02
50.20	0.48	0.50	0.96*	0.02	0.00	0.02
50.25	0.48	0.50	0.96*	0.02	0.00	0.02
50.30	0.48	0.50	0.96*	0.02	0.00	0.02
50.35	0.48	0.50	0.96*	0.02	0.00	0.02
50.40	0.48	0.50	0.96*	0.01	0.00	0.01
50.45	0.48	0.50	0.96*	0.01	0.00	0.01
50.50	0.48	0.50	0.96*	0.01	0.00	0.01
50.55	0.48	0.50	0.96*	0.01	0.00	0.01
50.60	0.48	0.50	0.96*	0.01	0.00	0.01
50.65	0.48	0.50	0.96*	0.01	0.00	0.01
50.70	0.48	0.50	0.96*	0.01	0.00	0.01
50.75	0.48	0.50	0.96*	0.01	0.00	0.01
50.80	0.48	0.50	0.97*	0.01	0.00	0.01
50.85	0.48	0.50	0.97*	0.00	0.00	0.00
50.90	0.48	0.50	0.97*	0.00	0.00	0.00
50.95	0.48	0.50	0.97*	0.00	0.00	0.00
51.00	0.48	0.50	0.97*	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: Welcome to LiquefyPro!

1 atm (atmosphere) = 1 tsf (ton/ft2)

BH-6 Summary Liquefy.sum

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