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APPENDIX 5.4A

Agapito Associates, Inc. (2024) Geotechnical Characterization Report for the Willow Rock-Dawn Road Project Site

951-20

GEOTECHNICAL CHARACTERIZATION REPORT FOR THE WILLOW ROCK – DAWN ROAD PROJECT SITE

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GEOTECHNICAL CHARACTERIZATION REPORT FOR THE WILLOW ROCK – DAWN ROAD PROJECT SITE

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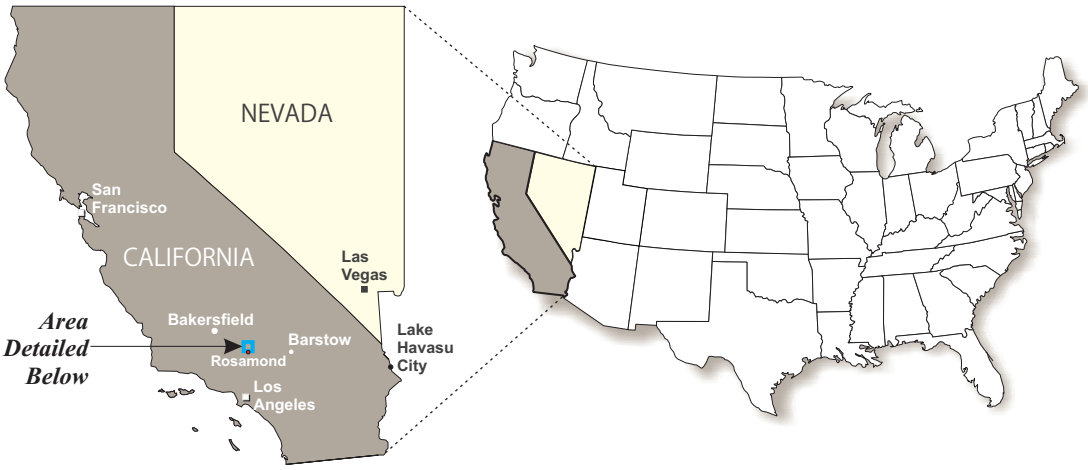
1 INTRODUCTION

The Willow Rock – Dawn Road Project site (Willow Rock) is located approximately 2 miles north of Rosamond, California in the Mojave Desert (see Figure 1-1). The site is bounded by the Antelope Valley Freeway to the west and the Sierra Highway to the east. Drilling records from the site indicate the existing ground surface is located between 2,560 and 2,570 feet above mean sea level (ft AMSL).

The site has been selected for investigation into the feasibility for the construction of an Advanced Compressed Air Energy Storage (A-CAES) cavern. Hydrostor's target depth for cavern construction is between the intervals of 2,000 and 2,500 ft below ground surface (bgs). Since depth is a function of surface elevation, this investigation will refer to subsurface elevations to maintain constant vertical measurements. Therefore, the "target cavern horizon" equates to an elevation of 570 to 60 ft AMSL

The geotechnical characterization in this report is constrained to the anticipated ground conditions within the target cavern horizon. The characterization of the overlying ground conditions for vertical shaft construction will require further field investigation with focus on these intervals. While the exploration program is ongoing for this site, the purpose of this report is to summarize our analysis of the data collected from the first three deep subsurface core holes and provide geotechnical design parameters for both empirical and numerical assessment methodologies. However unlikely, the summarized geotechnical design parameters could change based on the results and analysis of the ongoing exploration program.



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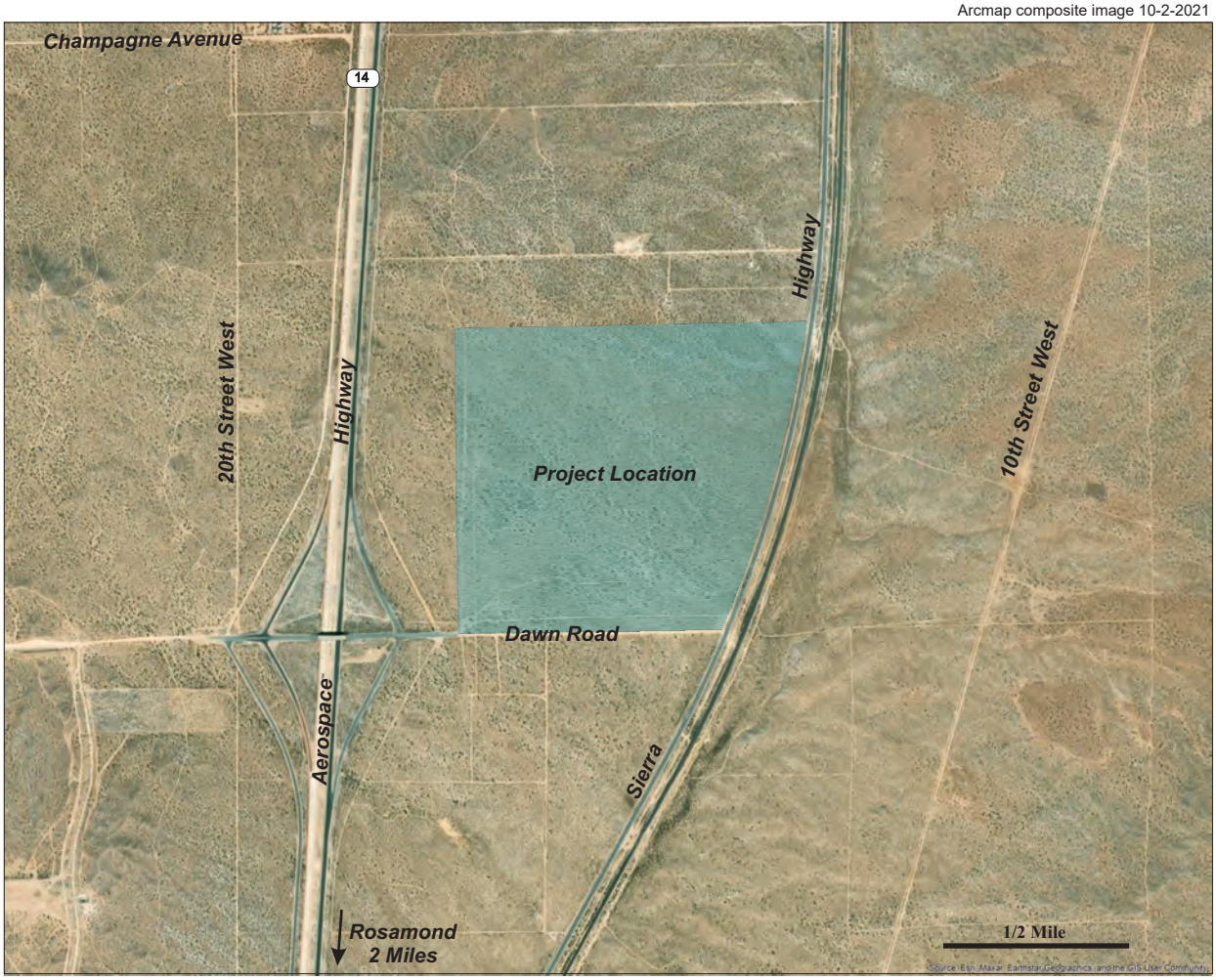

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Figure 1-1. Location of the Willow Rock – Dawn Road Project Site

2 GEOTECHNICAL SETTING

2.1 Records Search

To obtain existing information on the geological and hydrological settings of the Willow Rock site, a literature search was performed that resulted in the following referenced sources:

- Geology of the Willow Springs and Rosamond Quadrangles California (Dibblee 1963).
- Areal Geology of the Western Mojave Desert California (Dibblee 1967).
- Willow Springs and Rosamond 15-minute quadrangle USGS maps (2008).

The following reference was provided by Hydrostor as part of their surface investigation:

- Geotechnical Data Report – Zevsar Energy Storage Project (Yeh and Associates, Inc 2023).

The information from Dibblee (1963) was collected during the U.S. Geological Survey's study of the areal geology of the western Mojave Desert. The aim of the study was to determine whether formations of Tertiary and Quaternary age might contain hidden saline deposits of economic value. A secondary aim was to determine the general character of the pre-Tertiary crystalline bedrock complex and to investigate the relationship of the complex to the depositional history and structure of the Cenozoic formations.

The information from Dibblee (1967) was part of a geologic investigation carried out by the U.S. Geological Survey of the known and potential deposits of borate minerals in the southern California desert regions.

The information from the geotechnical data report summarizes the results of a shallow subsurface geotechnical site investigation carried out by Yeh and Associates, Inc in 2023.

2.2 Regional and Local Geology

The Willow Rock site is located in the Antelope Valley in the Western Mojave Desert in California (see Figure 2-1). Antelope Valley is a structural basin filled with a hundred- to several thousand-foot thickness of Cenozoic alluvial sedimentary deposits (Dibblee 1963). The valley is bounded by the Garlock fault to the northwest and the San Andreas fault to the southwest, forming the "Mojave block" (Dibblee 1967). The Project site, shown in Figure 2-2 and within the 15-minute Rosamond quadrangle (USGS 2008), is situated on the remnants of an isolated low hill which is comprised of exposed quartz monzonite.

The quartz monzonite is a plutonic rock that is probably Mesozoic, possibly Cretaceous in age (Dibblee 1963). It is by far the most extensive plutonic rock in the area and is the primary rock type of the granitic batholith that underlies the Mojave Desert. Dibblee (1963) describes the quartz monzonite as a medium to coarse-grained holocrystalline granitic rock, gray-white when fresh but commonly buff white on weathering. It is composed of almost equal percentages of quartz, potassium feldspar, and plagioclase, a small percentage of biotite and trace hornblende can be found locally.

Near the Project site, the quartz monzonite is locally cut by dike swarms of pegmatite and aplite of the same mineralogic composition of almost entirely quartz and feldspar. The dikes range from

less than an inch (in.) to about 6 ft in width and are traceable from a few feet to half a mile (Dibblee 1963). They are typically parallel, trending to the northwest, and are vertical or steeply inclined to the southwest.

The Project site is situated along the northeastern side of the Rosamond Hills area (see Figure 2-2). The Rosamond Hills consist of a large eastward-trending uplifted area, possibly an upwarp, of quartz monzonite (Dibblee 1963). The hills are cut by many minor high-angle normal faults that trend either west-northwest or east-northeast. The largest fault within the Rosamond Hills is located immediately northeast of the Project site (see Figure 2-2). The fault trends northwest within the quartz monzonite for an approximate distance of 5 miles and appears to extend another mile northwestward through the recent alluvium. As shown in Figure 2-3, surface exposures of the fault are marked by a zone of pulverized quartz monzonite covered by a white caliche-like crust. This fault, nor any of the other faults within Rosamond Hills show evidence of recent activity (Dibblee 1963).

The 15-minute Rosamond quadrangle map indicates the Project site is underlain by a continuous massive unit of quartz monzonite (see Figure 2-4). The quartz monzonite forms the crystalline bedrock basement complex upon which assemblages of Cenozoic age rest unconformably (Dibblee 1963). Seismic reflection profiling of the western Mojave Desert indicates the basement rocks are between 15 and 20 miles thick (Cheadle et al. 1986).

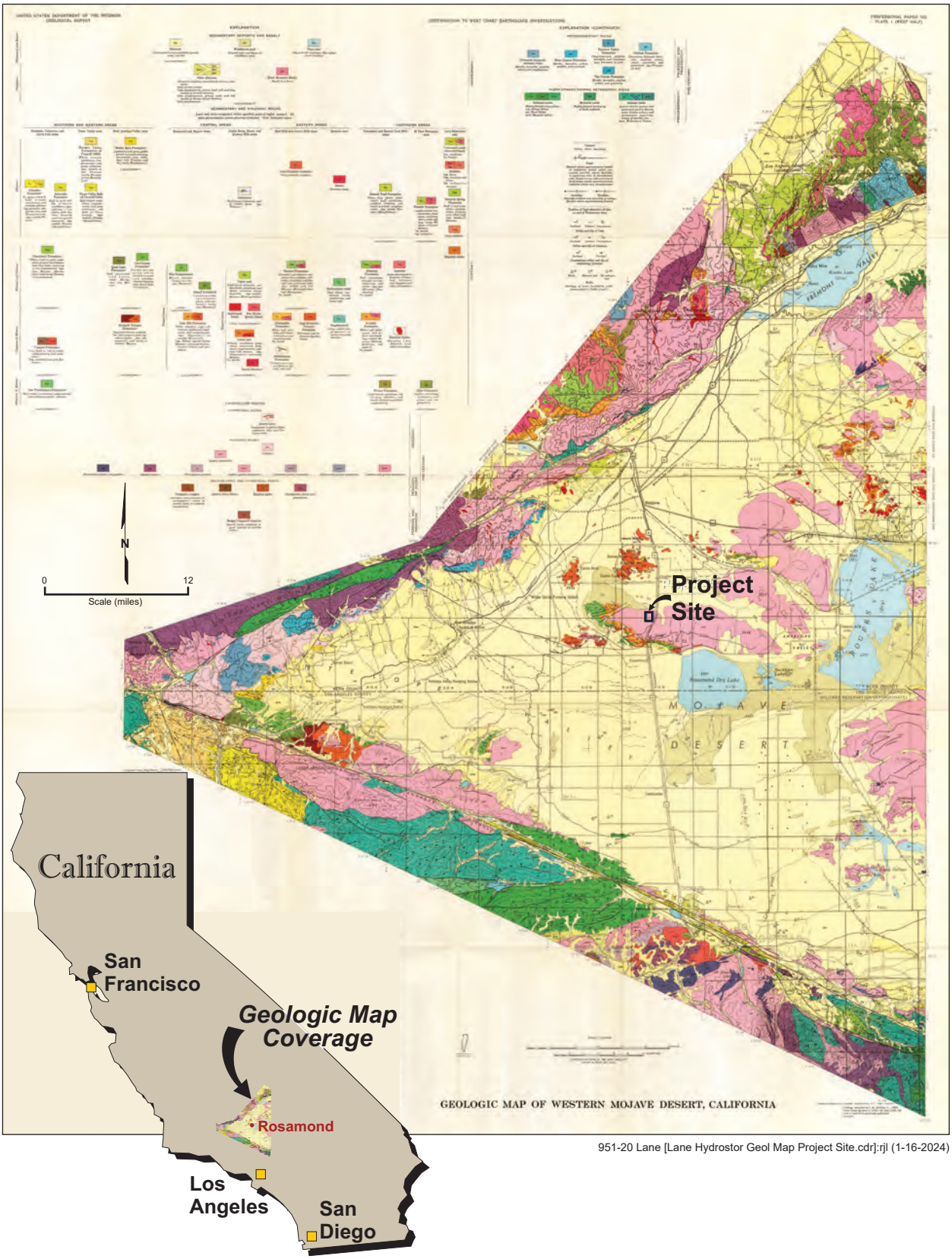

Figure 2-1. Geologic Map of the Antelope Valley in the Western Mojave Desert Showing the Location of the Project Area

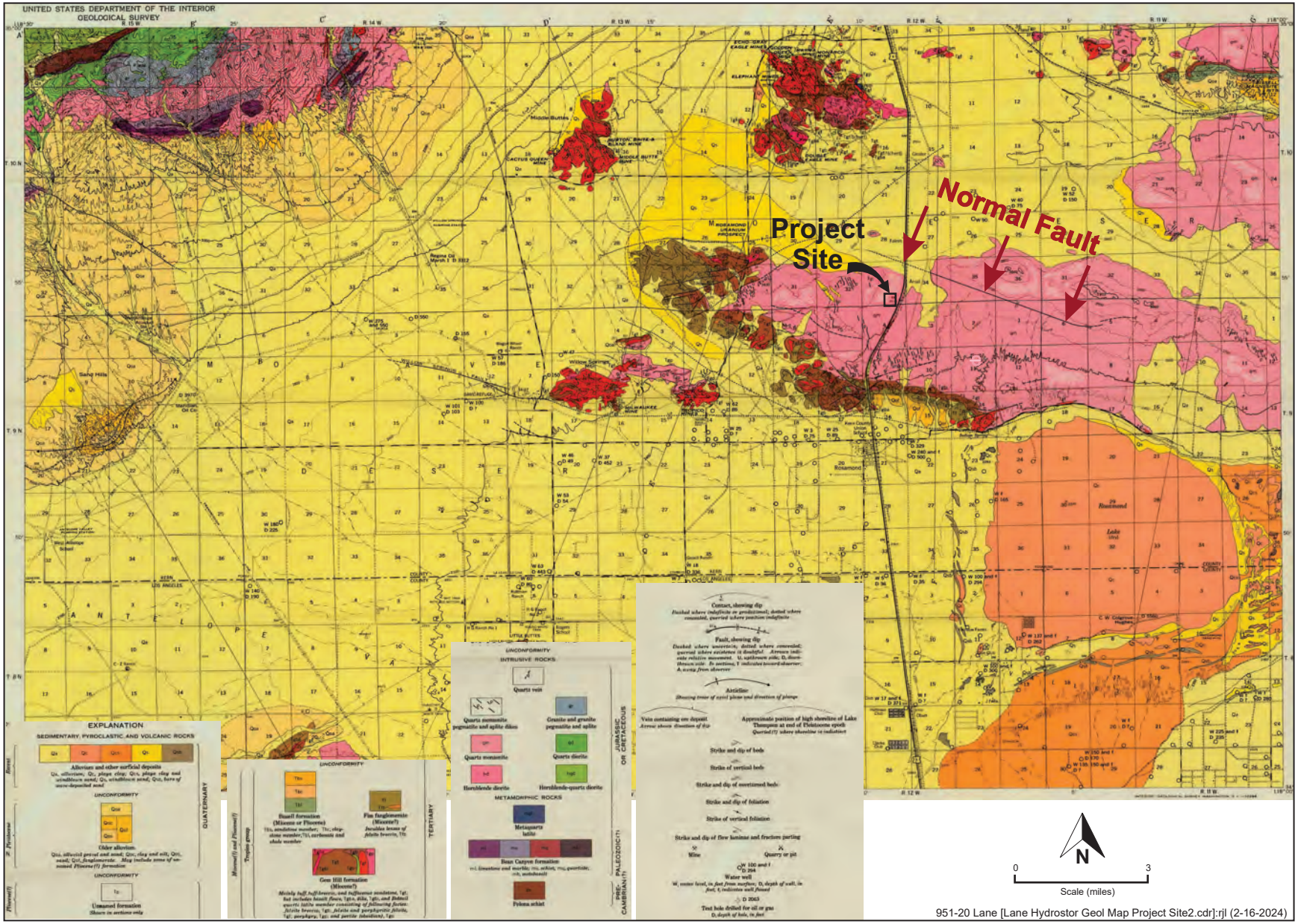

Figure 2-2. 15-minute Rosamond Quadrangle Geologic Map Showing the Location of the Project Area the Mapped and Inferred Location of the Northwest-Southeast Trending Normal Fault

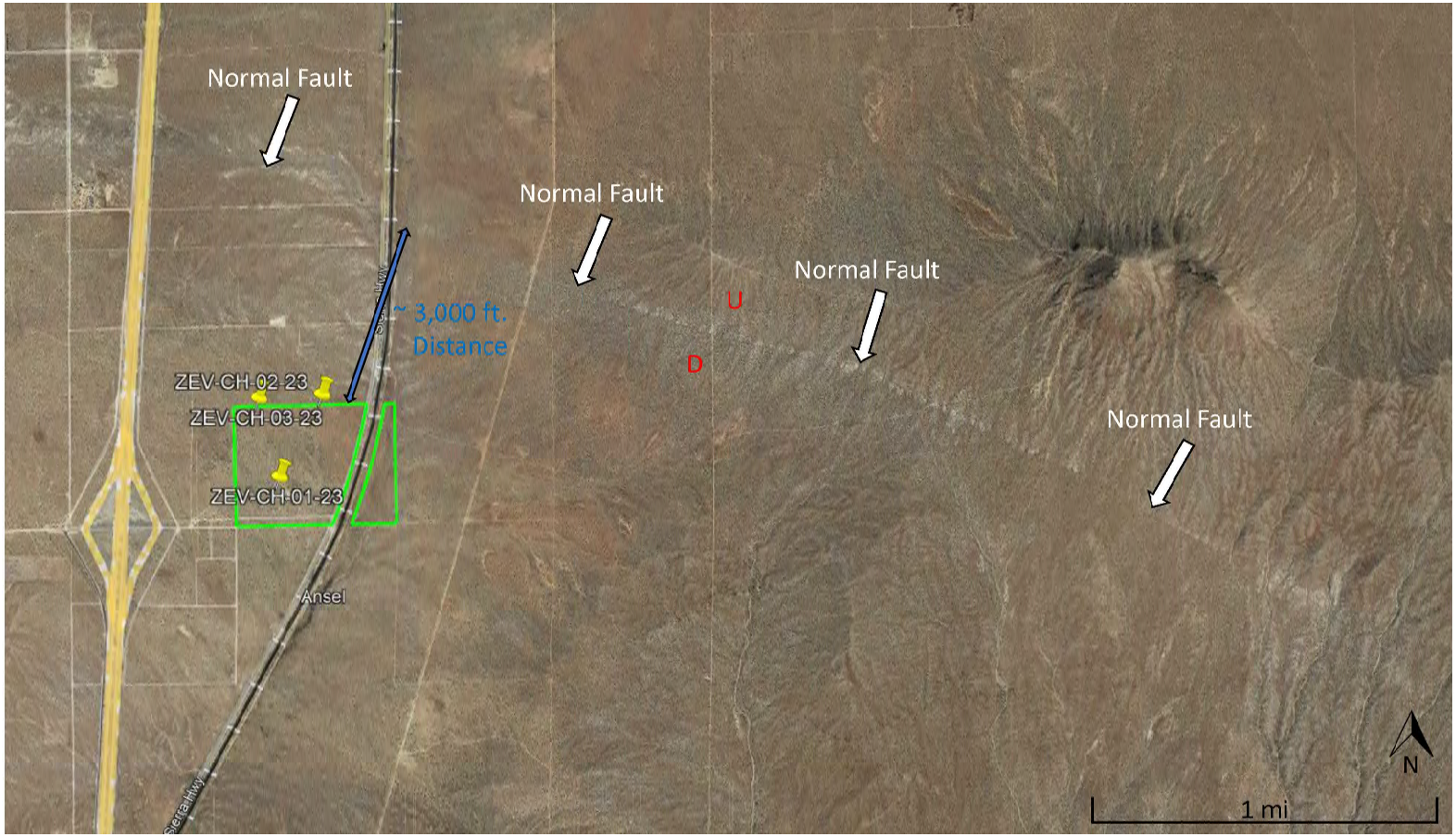

Figure 2-3. Satellite Image Showing the Project Area and the Surface Exposure of the Northwest-Southeast Trending Normal Fault

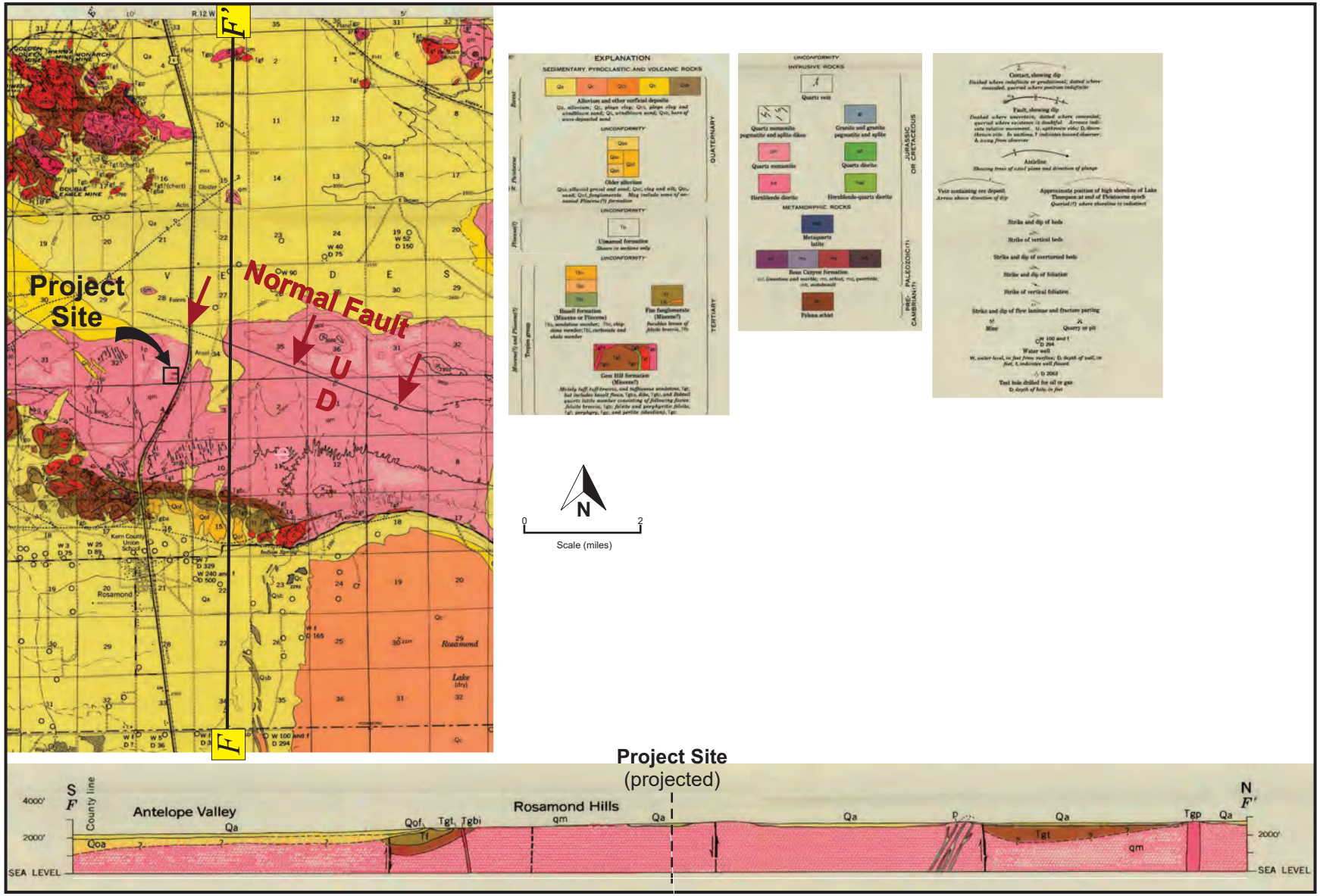

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Figure 2-4. Cross-section Showing the Bedrock Geology around the Project Area

3 SITE SPECIFIC GEOTECHNICAL CONDITIONS

The geotechnical conditions at the Willow Rock site have been determined from separate surface and subsurface geotechnical investigation programs. The surface geotechnical investigation collected information from the soil and weathered bedrock underlying the site that will be used to assist in the design of the surface infrastructure. The subsurface investigation involved core drilling to approximate depths of 3,000 ft below the surface. The results of the geotechnical investigations are summarized in the succeeding sections.

3.1 Surficial Geotechnical Investigation

The characterization of the surficial deposits at the Project site is based on a geotechnical investigation carried out by Yeh and Associates, Inc (2023). The logged and inferred geology of the surficial deposits determined from the investigation are shown in Figure 3-1. Most of the site is overlain by 3.0 to 7.5 ft of residual soils, which are comprised of loose to very dense, well graded sand with varying amounts of silt and clay (SW, SM, SC). Underlying the soils is 20 to 45 ft of decomposed to intensely weathered quartz monzonite. The unit was described as very soft to moderately hard, very slightly fractured to moderately fractured. The decomposed zones were logged as silty to clayey sand (SM, SC). The borings continued to a depth of between 51 and 71 ft, where most of the quartz monzonite was logged as slightly to moderately weathered, very soft to hard, and intensely to slightly fractured. Isolated zones of intensely weathered to decomposed quartz monzonite were logged in this interval. The depths of the borings did not penetrate fresh rock at any of the sample locations.

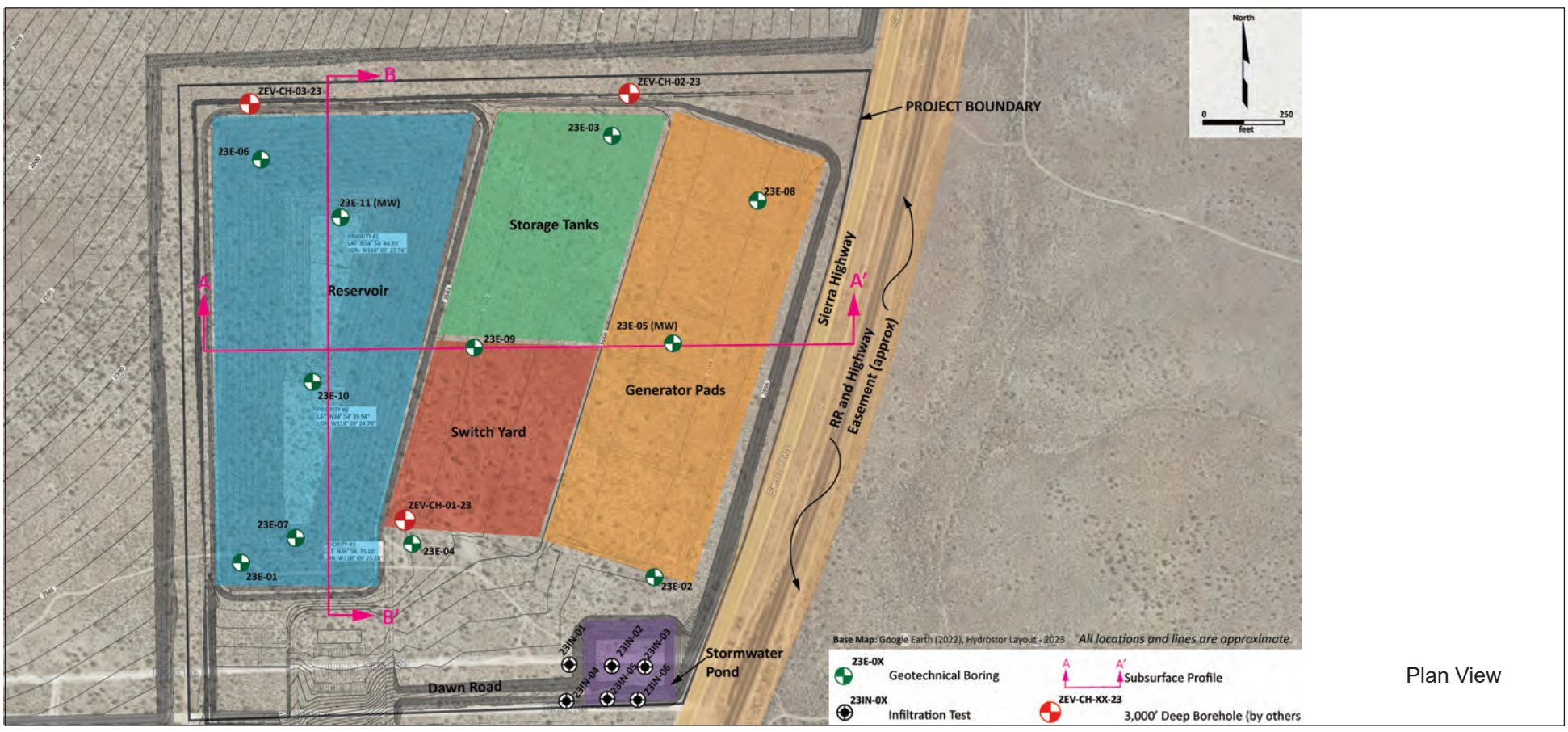
UCS tests carried out on rock core indicated intact strengths of between 70 and 5,770 pounds-per-square inch (psi), which is indicative of extremely weak to weak rock (ISRM 2007). The laboratory test results are provided in Table 3-1.

Monitoring wells indicate the groundwater depth at the site is approximately 40 ft below the surface (see Figure 3-1). Yeh and Associates, Inc. suggest that groundwater conditions at the site will vary seasonally due to variations in storm runoff, irrigation, and groundwater pumping in the site's vicinity.

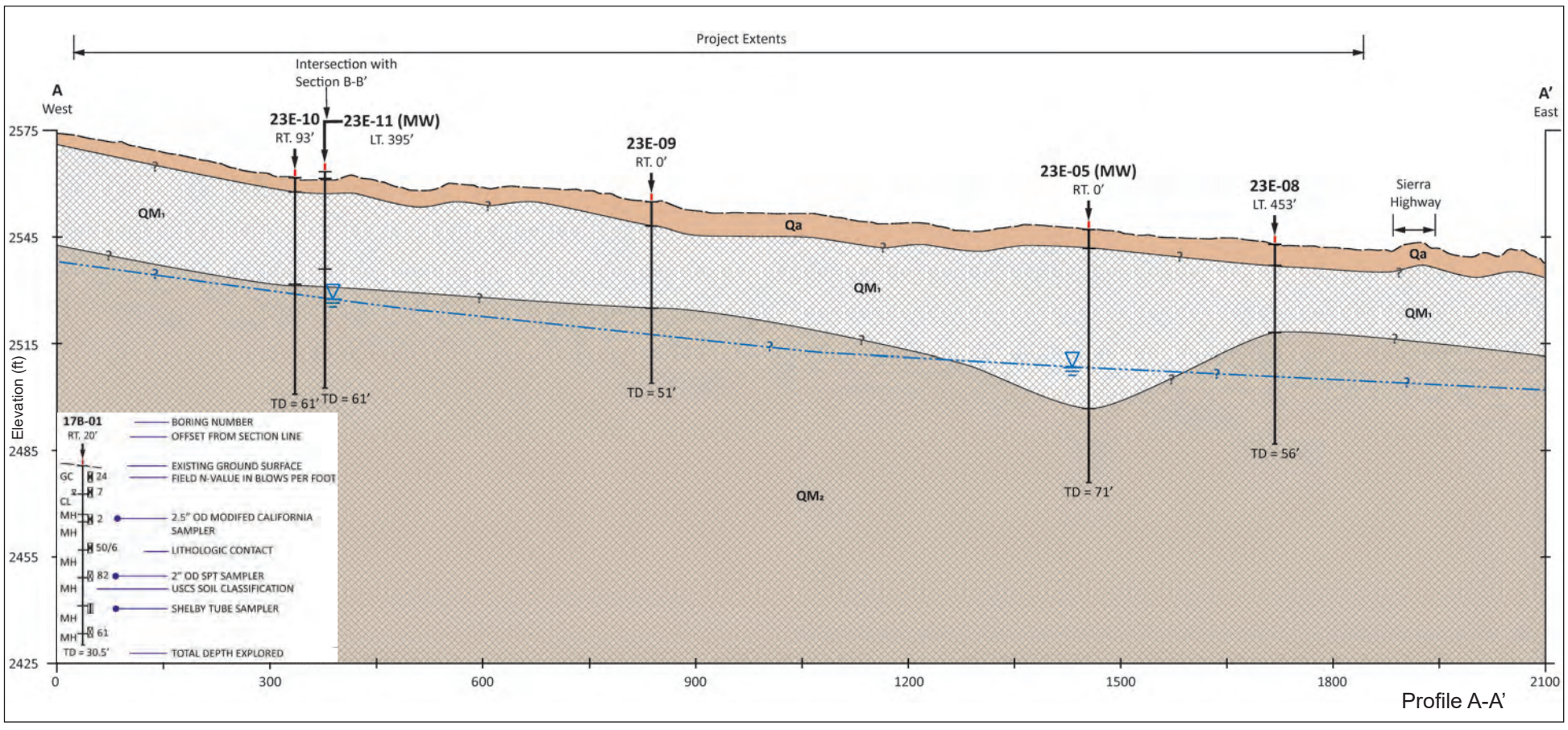
3.2 Subsurface Geotechnical Investigation

CRUX Subsurface Drilling advanced three core holes (ZEV-CH-01-23, ZEV-CH-02-23, and ZEV-CH-03-23) between March 17, 2023, and October 21, 2023, at the locations shown in Figure 3-2. The core holes were started with rotary drilling and setting HW casing to depths of between 70 and 171 ft. The borings were drilled using HQ-3-sized diamond bits and 10-ft-long wireline core barrels. This resulted in 2.41-inch-diameter cores, which were stored in 5-ft-long wooden core boxes. The end depth of core drilling ranged between 3,015 and 3,167 ft for the core holes, which equates to elevations of between 445 and 607 ft below mean sea level (BMSL).

Core logging was performed by Lane and Carboniferous, LLC geologist Chris Messinger. Core logging consisted of identifying the mineralogy and rock type for each run of core, the alteration of discontinuities for each run, noting the percentage core recovery for each 10-ft run, and noting the Rock Quality Designation (RQD) for each run based on the percentage of the run comprised of pieces longer than 4 in..



Plan View



Profile A-A'

Legend

Qa **Alluvium:** Medium dense to dense clayey SAND (SC) and dense silty SAND (SM)

QM₁ **Quartz Monzonite:** Intensely weathered to decomposed igneous rock (QUARTZ MONZONITE), very soft to moderately hard; decomposed to dense to very dense silty SAND (SM) and dense to very dense well graded SAND (SW)

QM₂ **Quartz Monzonite:** Fresh to decomposed igneous rock (QUARTZ MONZONITE), soft to hard

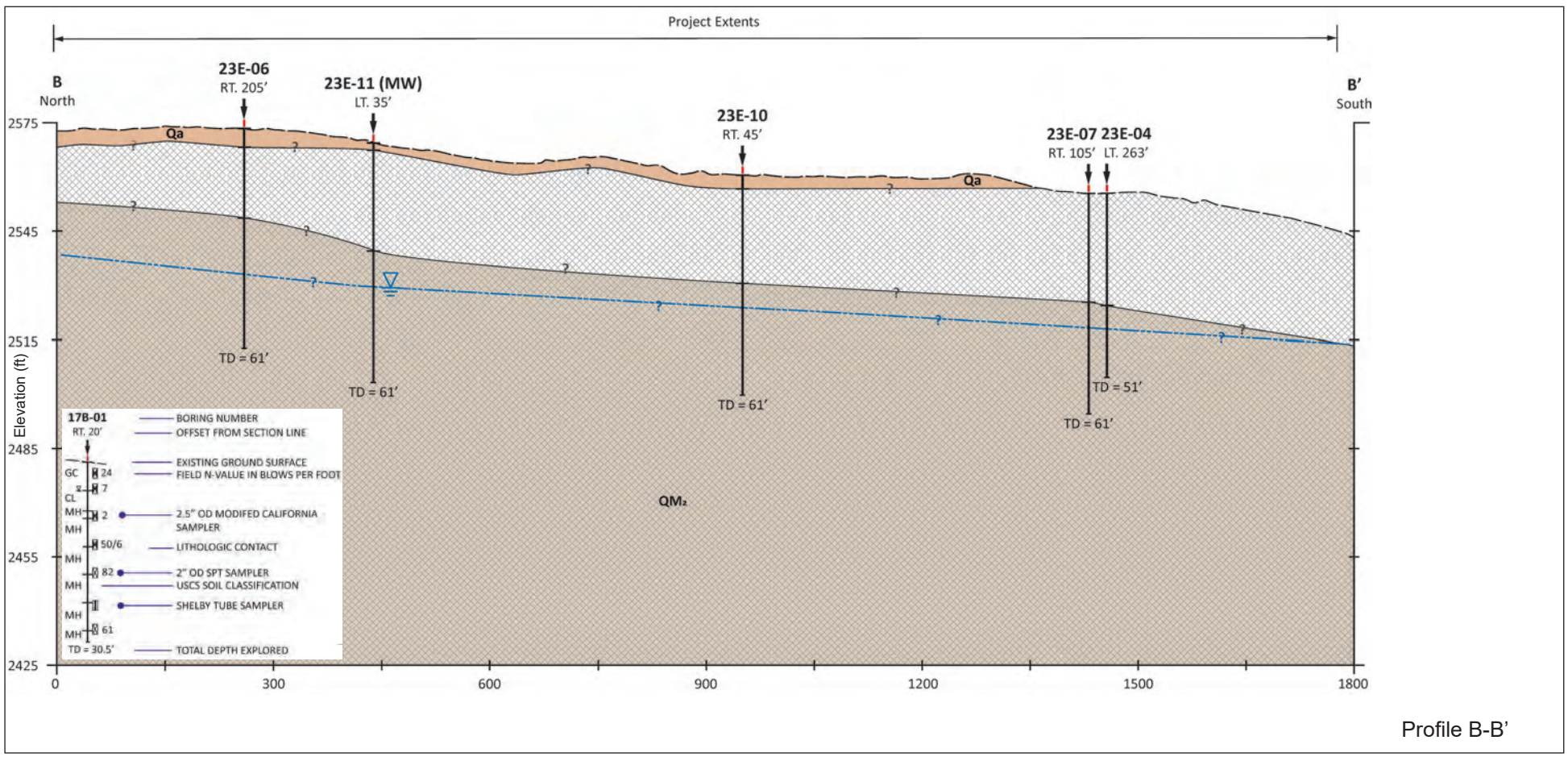
Geologic contact, queried where uncertain

Interpreted groundwater surface based on measured data, queried where uncertain

Groundwater level measured with tranducers

Note:

All boundaries and locations are approximate.



Profile B-B'

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ENGINEERS & GEOLOGISTS
951-20 Lane [Lane Hydrostor Plan_Profiles from Yeh.cdr]rjl(1-17-2024)

Figure 3-1. Logged and Inferred Subsurface Geotechnical Conditions at the Project Site

Table 3-1. Laboratory UCS Test Results from the Surface Geotechnical Investigation Program (Yeh and Associates, Inc 2023)

Borehole	Material	Depth (ft)		Unit Weight (pcf)	Unconfined Compressive Strength (psi)
		From	To		
23E-02	Quartz monzonite, moderately weathered	67.5	68.0	153.4	77
23E-03	Quartz monzonite, moderately weathered	52.8	53.3	154.3	147
23E-04	Quartz monzonite, moderately weathered	39.0	39.5	155.3	647
23E-05	Quartz monzonite, moderately weathered	55.5	56.0	160.9	1,940
23E-05	Quartz monzonite, intensely weathered	57.2	57.7	155.2	97
23E-05	Quartz monzonite, fresh	65.0	65.5	162.9	5,770
23E-06	Quartz monzonite, slightly weathered	55.1	56.1	158.7	866
23E-06	Quartz monzonite, slightly weathered	59.1	59.6	158.4	218
23E-06	Quartz monzonite, moderately weathered	60.6	61.1	147.7	209

3.2.1 Core Hole Lithology

The detailed lithology is logged for each of the core holes and is provided in the geotechnical logs found in Appendix A. A summary of the lithology data is also provided in Table 3-2 (a-c).

All three core holes indicate the lithology in the target cavern horizon is comprised of quartz monzonite. The only exception to this is in core hole ZEV-CH-02-23, where the target interval was intersected by two thin diorite dikes. Additionally, the quartz monzonite in the lower part of the target interval in this hole has undergone recrystallization and is dominated by the mineral monazite. Monazite is a hard and resistant mineral that forms when igneous rocks undergo crystallization.

In all three core holes, the quartz monzonite has undergone various degrees of hydrothermal alteration. Hydrothermal alteration occurs when hot, mineral-rich fluids interact with rocks and minerals, causing them to change in terms of their mineral composition, texture, and structure. Dibble (1963) suggested that much of the alteration in the area occurs along fault or fracture zones. Table 3-3 outlines the various degrees of alteration used to classify the rock (ISRM 2007).

Within the target cavern horizon, the alteration of the quartz monzonite in ZEV-CH-01-23 is almost entirely fresh to slightly altered (see Figure 3-3). In ZEV-CH-02-23, thick zones of moderately to highly altered quartz monzonite were logged between the elevations of 456 to 401 ft AMSL, and 325 to 251 ft AMSL (see Figure 3-4). In ZEV-CH-03-23, the quartz monzonite between the elevations of 570 and 455 ft AMSL was logged as moderately to highly altered. Elsewhere in the target interval, most of the core was logged as fresh to slightly altered (see Figure 3-5).

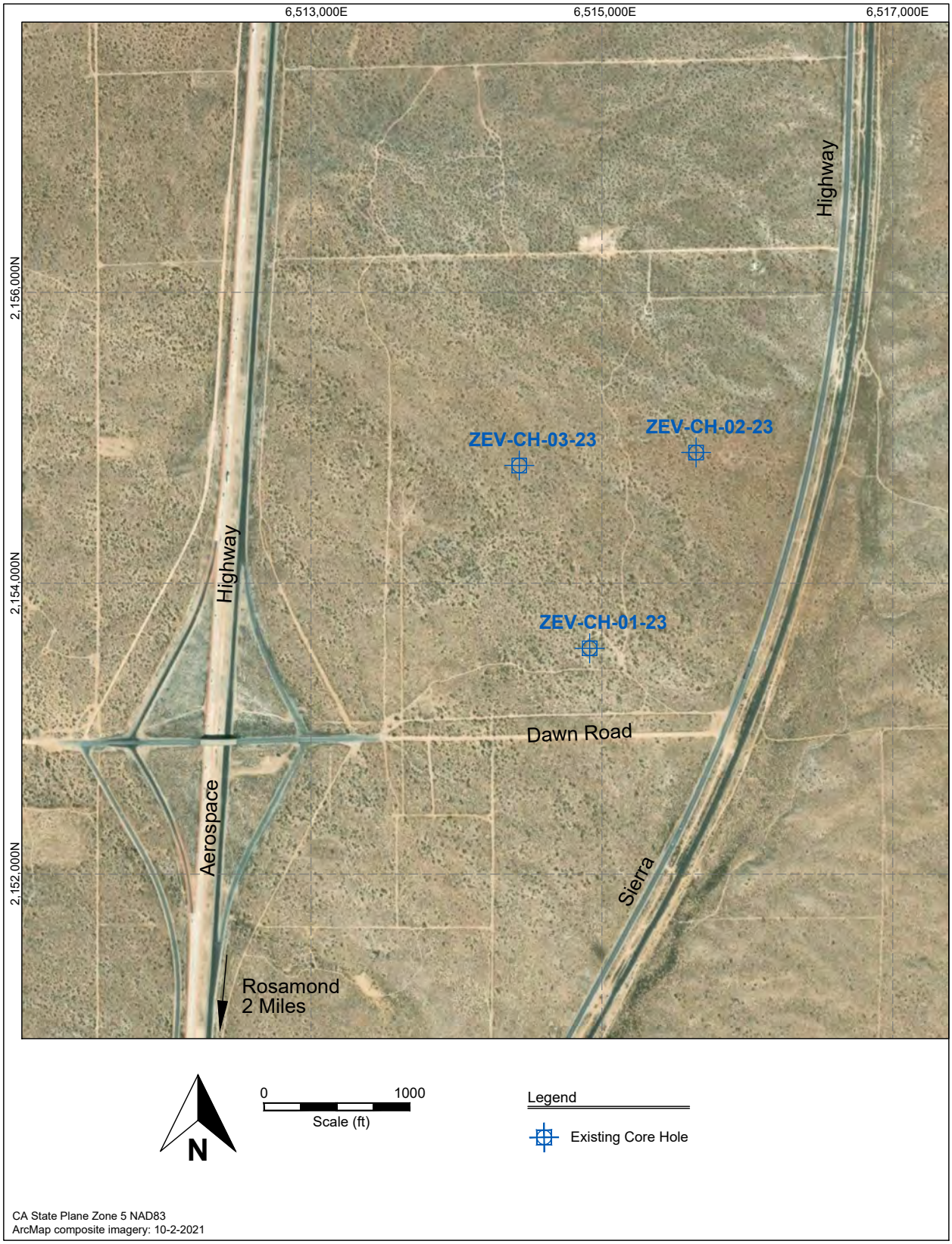

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Figure 3-2. Location of Deep Subsurface Exploration Core Holes at the Project Site

Table 3-2a. Summary of Lithology in ZEV-CH-01-23

Depth (ft)		Elevation (ft MSL)		Lithology
From:	To:	From:	To:	
Core Hole: ZEV-CH-01-23				
0	71	2,560	2489	HW casing
71	140	2,489	2,420	Quartz monzonite, most of the core is moderately to highly altered
140	1,327	2,420	1,233	Quartz monzonite, most of the core is slightly to moderately altered
1,327	1,541	1,233	1,019	Quartz monzonite, most of the core is moderately to highly altered
1,541	1,829	1,019	731	Quartz monzonite, most of the core is fresh to slightly altered
1,829	1,847	731	713	Diorite
1,847	2,532	713	28	Quartz monzonite, most of the core is fresh to slightly altered
2,532	2,682	28	-122	Quartz monzonite, most of the core is slightly to moderately altered
2,682	2,707	-122	-147	Pegmatite dike
2,707	2,721	-147	-161	Quartz monzonite, most of the core is fresh to slightly altered
2,721	2,777	-161	-217	Diorite
2,777	3,167	-217	-607	Quartz monzonite, most of the core is fresh to slightly altered

Table 3-2b. Summary of Lithology in ZEV-CH-02-23

Depth (ft)		Elevation (ft MSL)		Lithology
From:	To:	From:	To:	
Core Hole: ZEV-CH-02-23				
0	70	2,570	2500	HW casing
70	160	2,500	2,410	Quartz monzonite, most of the core is moderately to highly altered
160	895	2,410	1,675	Quartz monzonite, most of the core is fresh to slightly altered
895	1,000	1,675	1,570	Quartz monzonite, most of the core is moderately to highly altered
1,000	1,186	1,570	1,384	Quartz monzonite, most of the core is fresh to slightly altered
1,186	1,225	1,384	1,345	Diorite
1,225	1,270	1,345	1,300	Quartz monzonite, most of the core is moderately to highly altered
1,270	1,791	1,300	779	Quartz monzonite, most of the core is fresh to slightly altered
1,791	1,795	779	775	Dolerite
1,795	2,114	775	456	Quartz monzonite, most of the core is fresh to slightly altered
2,114	2,215	456	355	Quartz monazite
2,215	2,320	355	250	Quartz monzonite, most of the core is slightly to moderately altered
2,320	2,330	250	240	Dolerite
2,330	2,351	240	219	Quartz monzonite, most of the core is fresh to slightly altered
2,351	2,358	219	212	Diorite
2,358	2,650	212	-80	Quartz monzonite, most of the core is fresh to slightly altered
2,650	2,755	-80	-185	Quartz monzonite, most of the core is moderately to highly altered
2,755	2,921	-185	-351	Quartz monzonite, most of the core is fresh to slightly altered
2,921	2,930	-351	-360	Diabase dike
2,930	3,045	-360	-475	Quartz monzonite, most of the core is slightly altered

Table 3-2c. Summary of Lithology in ZEV-CH-03-23

Depth (ft)		Elevation (ft MSL)		Lithology
From:	To:	From:	To:	
Core Hole: ZEV-CH-03-23				
0	171	2,570	2399	HW casing
171	264	2,399	2,306	Quartz monzonite, most of the core is fresh to slightly altered
264	306	2,306	2,264	Quartz monzonite, most of the core is moderately to highly altered
306	590	2,264	1,980	Quartz monzonite, most of the core is fresh to slightly altered
590	621	1,980	1,949	Quartz monzonite, most of the core is moderately to highly altered
621	1,195	1,949	1,375	Quartz monzonite, most of the core is fresh to slightly altered
1,195	1,197	1,375	1,373	Dolerite dike
1,197	1,216	1,373	1,354	Quartz monzonite, most of the core is fresh to slightly altered
1,216	1,229	1,354	1,341	Dolerite dike
1,229	1,246	1,341	1,324	Quartz monzonite, most of the core is fresh to slightly altered
1,246	1,251	1,324	1,319	Dolerite dike
1,251	1,321	1,319	1,249	Quartz monzonite, most of the core is fresh to moderately altered
1,321	1,328	1,249	1,242	Dolerite dike
1,328	1,461	1,242	1,109	Quartz monzonite, most of the core is slightly to moderately altered
1,461	1,814	1,109	756	Quartz monzonite, most of the core is fresh to slightly altered
1,814	1,886	756	684	Quartz monzonite, most of the core is slightly to moderately altered
1,886	1,895	684	675	Diorite dike
1,895	2,000	675	570	Quartz monzonite, most of the core is fresh to slightly altered
2,000	2,151	570	419	Quartz monzonite, most of the core is moderately to highly altered
2,151	2,496	419	74	Quartz monzonite, most of the core is fresh to slightly altered
2,496	2,525	74	45	Diorite dike
2,525	2,766	45	-196	Quartz monzonite, most of the core is fresh to slightly altered
2,766	2,841	-196	-271	Quartz monzonite, most of the core is moderately altered to decomposed
2,841	2,906	-271	-336	Quartz monzonite, most of the core is fresh to slightly altered
2,906	3,015	-336	-445	Quartz monzonite, most of the core is slightly to moderately altered

Table 3-3: Effect of Alteration on Fresh Rock (ISRM 2007)

Classification	Symbol	Description
Fresh	Fr	No visible signs of alteration; perhaps slight discoloration on defect surfaces.
Slightly Altered	SA	Alteration confined to veins and/or veinlets. Little or no penetration of alteration beyond vein/veinlet boundaries. No discernable effect on the strength properties of the parent rock type.
Moderately Altered	MA	Alteration is controlled by veins and may penetrate wall rock as narrow vein selvages or envelopes. Alteration may also by pervasive but weakly developed. Modifications to the rock are small.
Highly Altered	HA	Pervasive alteration of rock-forming minerals and intact rock to assemblages that significantly change the strength properties of the parent rock type.
Completely Altered	CA	Intensive, pervasive, complete alteration of rock-forming minerals. The rock mass may resemble soil. For hydrothermal alteration, any alteration assemblages that results in the nearly complete or complete change in rock strength relative to the parent rock type.

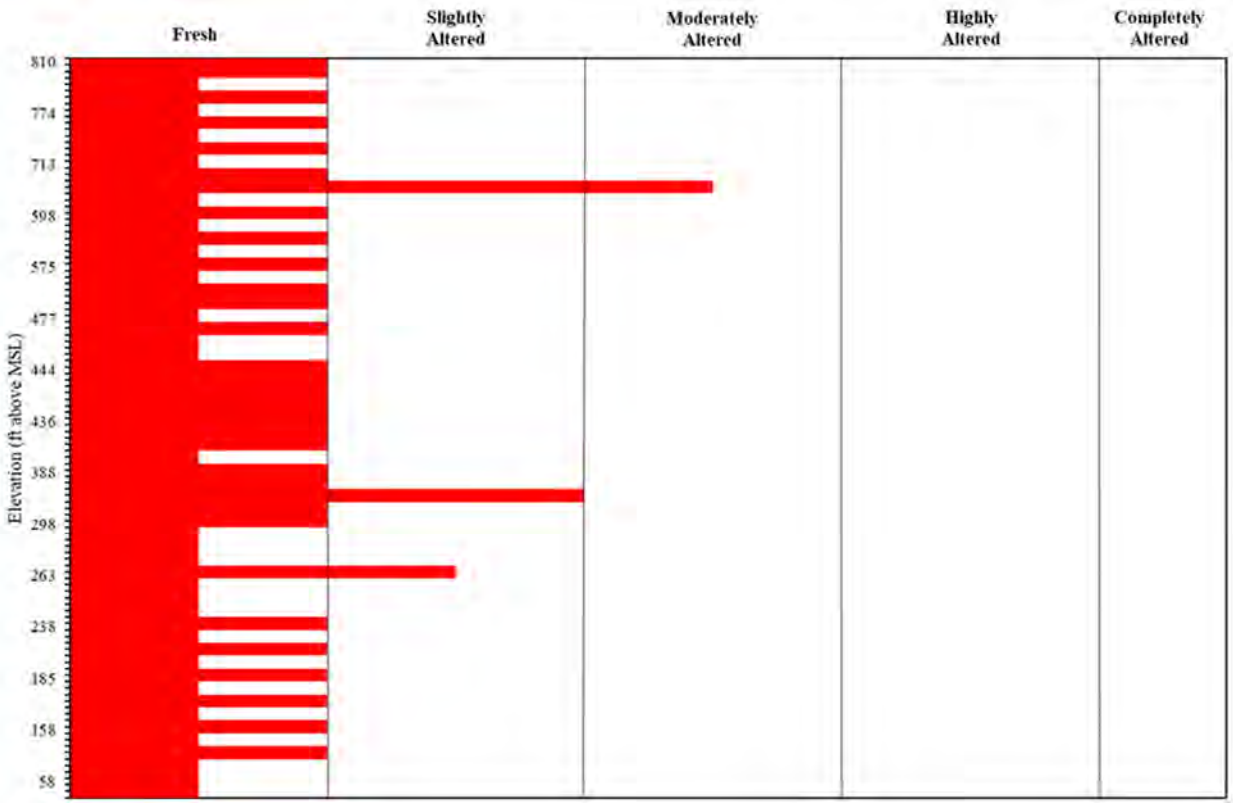

Figure 3-3. Degree of Alteration Logged in Core Hole ZEV-CH-01-23

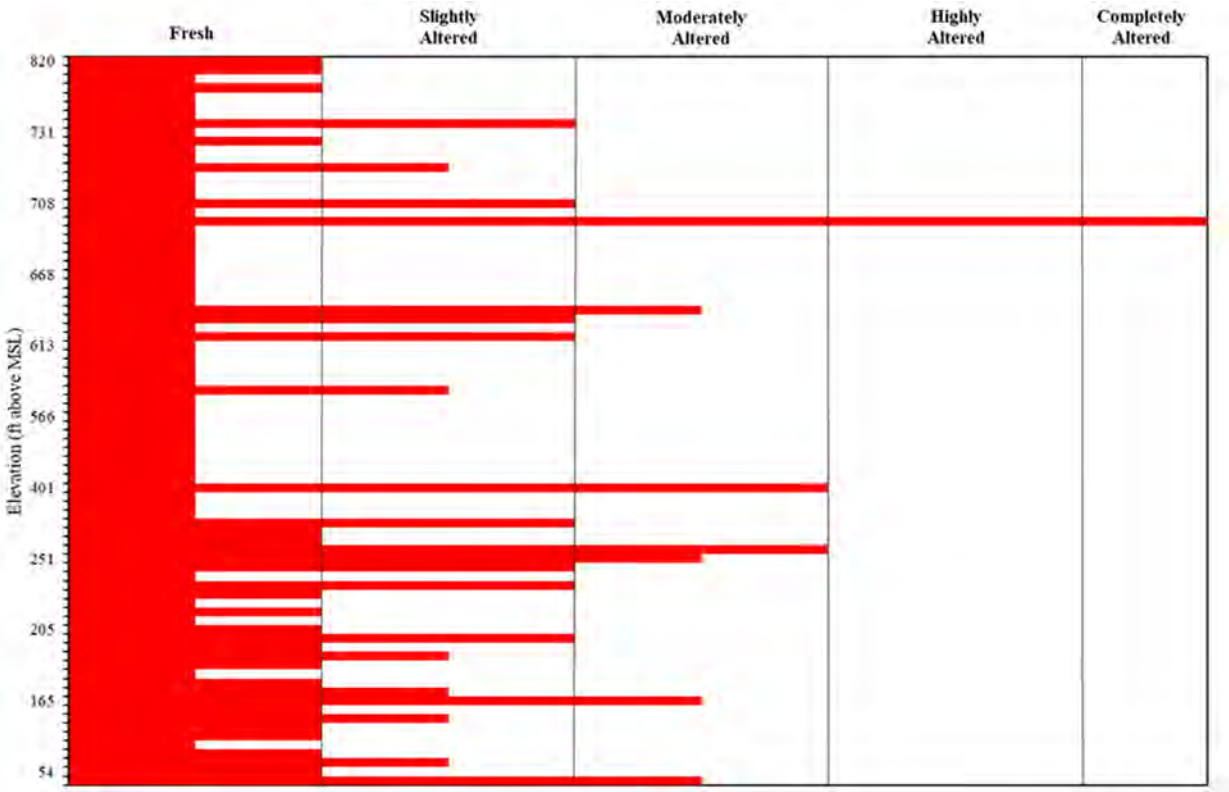

Figure 3-4. Degree of Alteration Logged in Core Hole ZEV-CH-02-23

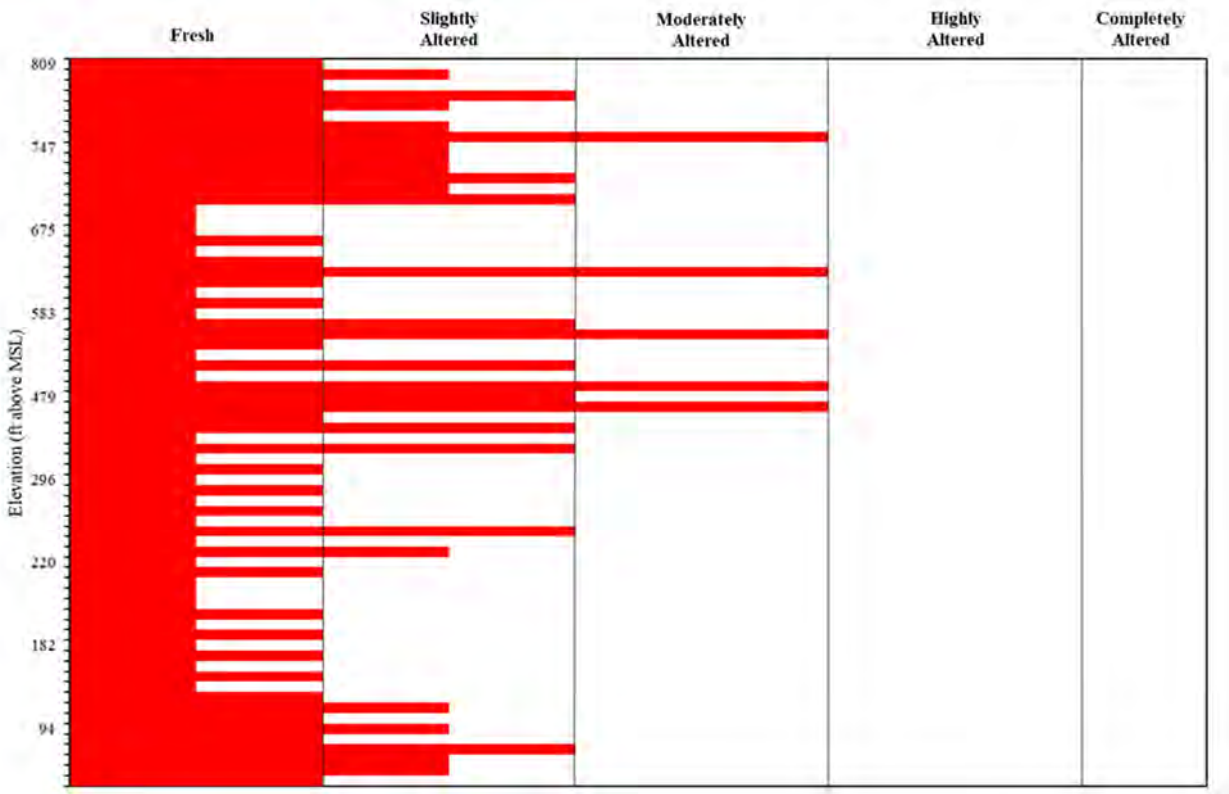

Figure 3-5. Degree of Alteration Logged in Core Hole ZEV-CH-03-23

3.2.2 Rock Quality

The RQD classification system has been used to classify the degree of jointing or block size of the recovered core (Deere 1963). The rock quality descriptors corresponding to the RQD values are given in Table 3-4. In core holes ZEV-CH-01-23 and ZEV-CH-02-23, the logging indicates decreasing rock quality as depth increases through the cavern target horizon (see Figures 3-6 and 3-7). The rock quality is "Good" to "Excellent" in the upper part of the target interval, and progressively decreases to "Poor" to "Very Poor" at the lower part of the target interval. The rock quality within the target horizon in ZEV-CH-03-23 is markedly lower than the previous core holes with a vast majority of the core being classed as "Very Poor" to "Poor" to an elevation of 215 ft AMSL (see Figure 3-8). Below this elevation, the rock quality improves to "Fair" to "Good" (see Figure 3-8).

3.2.3 Packer Testing

Packer testing was performed by project geologist Chris Messinger. Packers were set to isolate the interval being tested, which was approximately 21.8 ft. A small amount of water was added to the test interval after which the interval was pressurized to 80 psi over the hydrostatic pressure. The water level was then measured, first at 1-minute intervals for 5 minutes and 5-minute intervals thereafter, until the flow rate into the rock stabilized.

The recorded flow rates in all three core holes within the cavern target horizon are all less than 4.5 gallons-per-hour (gph), with most of the rates less than 2.0 gph (see Figures 3-9 to 3-11). The packer test results indicate that the hydraulic conductivity of the rock mass ranges between 1.90 x 10^{-8} and 8.55 x 10^{-7} centimeters per second (cm/s) (see Figures 3-9 to 3-11). The hydraulic conductivity values can be used to infer the condition of the rock mass discontinuities according to Table 3-5 (Quinones-Rozo 2010). The condition of the rock mass discontinuities within the cavern target horizon can therefore be classed as "Very Tight".

3.2.4 Geophysical Logging

Geophysical logging was performed by GEOVision, Inc. (GEOVision). The core hole geophysical logging program consisted of running a sonde containing temperature and conductivity sensors, optical (OTV) and acoustic (ATV) televiewers, an acoustic caliper, and a borehole deviation sensor. The interpretation of the directions and inclinations of discontinuities in the rock was plotted as tadpoles (filled circles with tails indicating dip direction) on plots of dip versus depth. The OTV and ATV logs for the three core holes are included in Appendix B.

Table 3-4. RQD Classification System (Deere and Deere 1988)

RQD	Description of Rock Quality
0 to <25	Very Poor
25 to <50	Poor
50 to <75	Fair
75 to <90	Good
90 to 100	Excellent

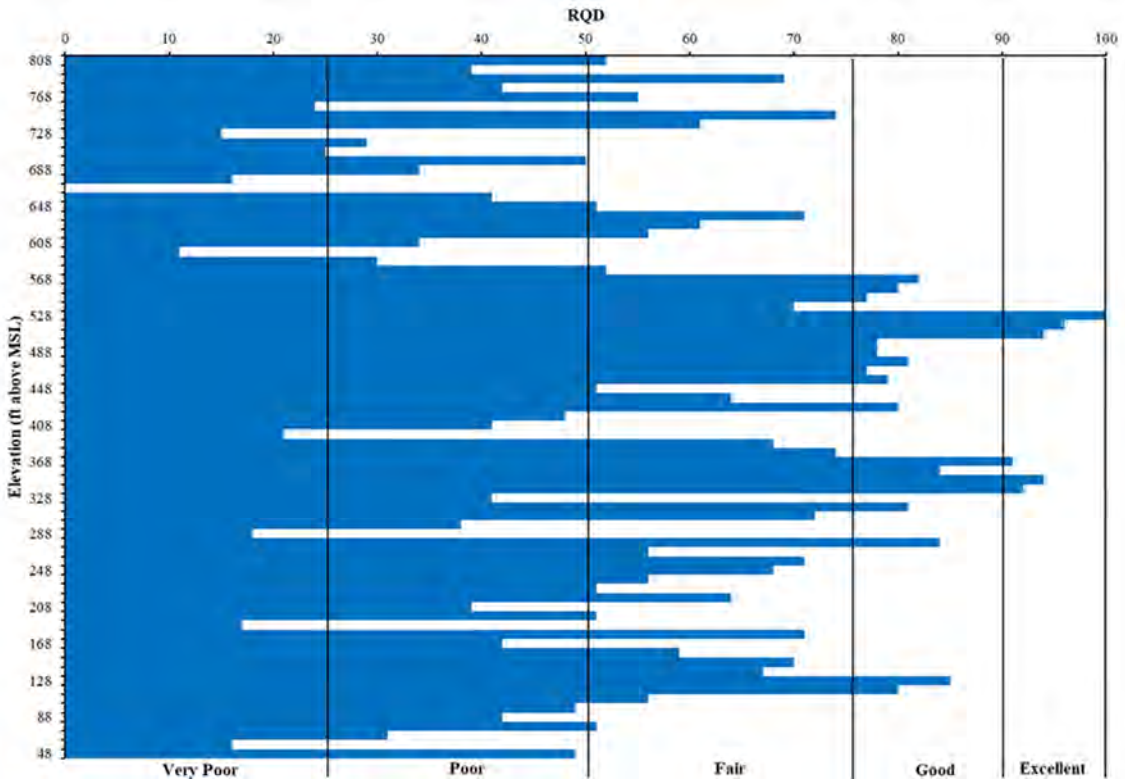

Figure 3-6. Rock Quality Logged in Core Hole ZEV-CH-01-23

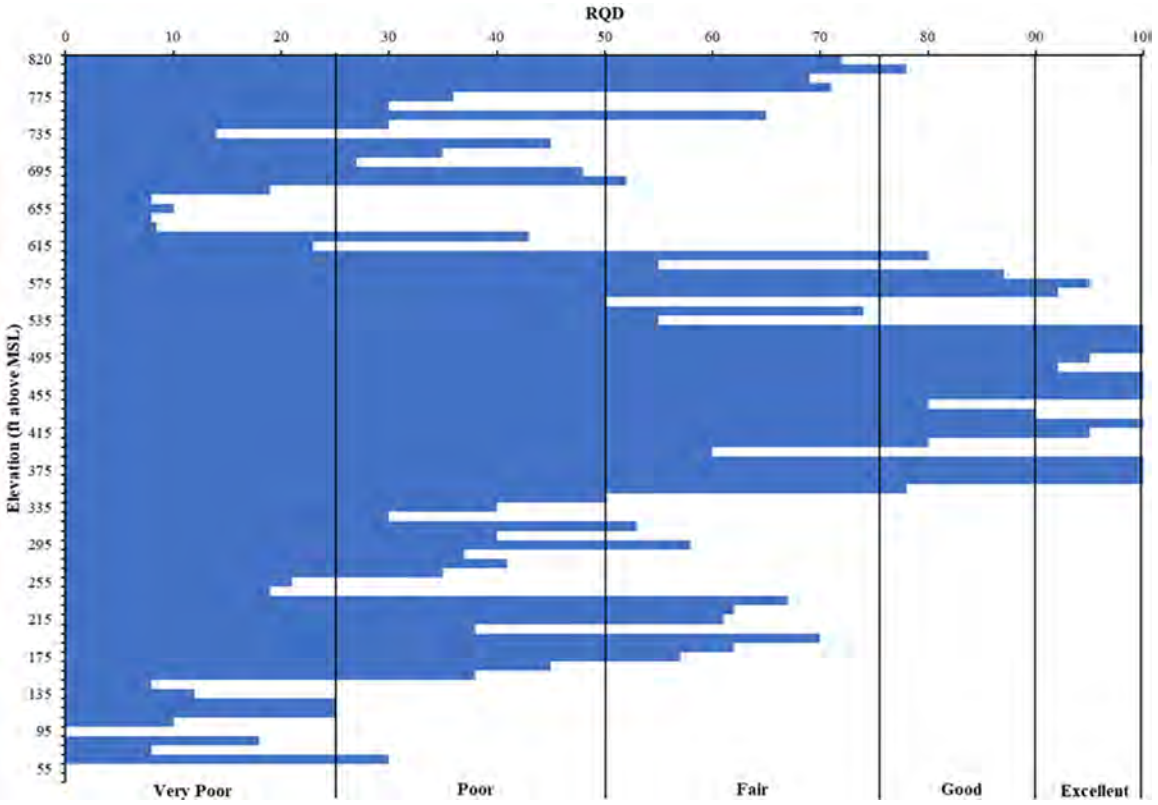

Figure 3-7. Rock Quality Logged in Core Hole ZEV-CH-02-23

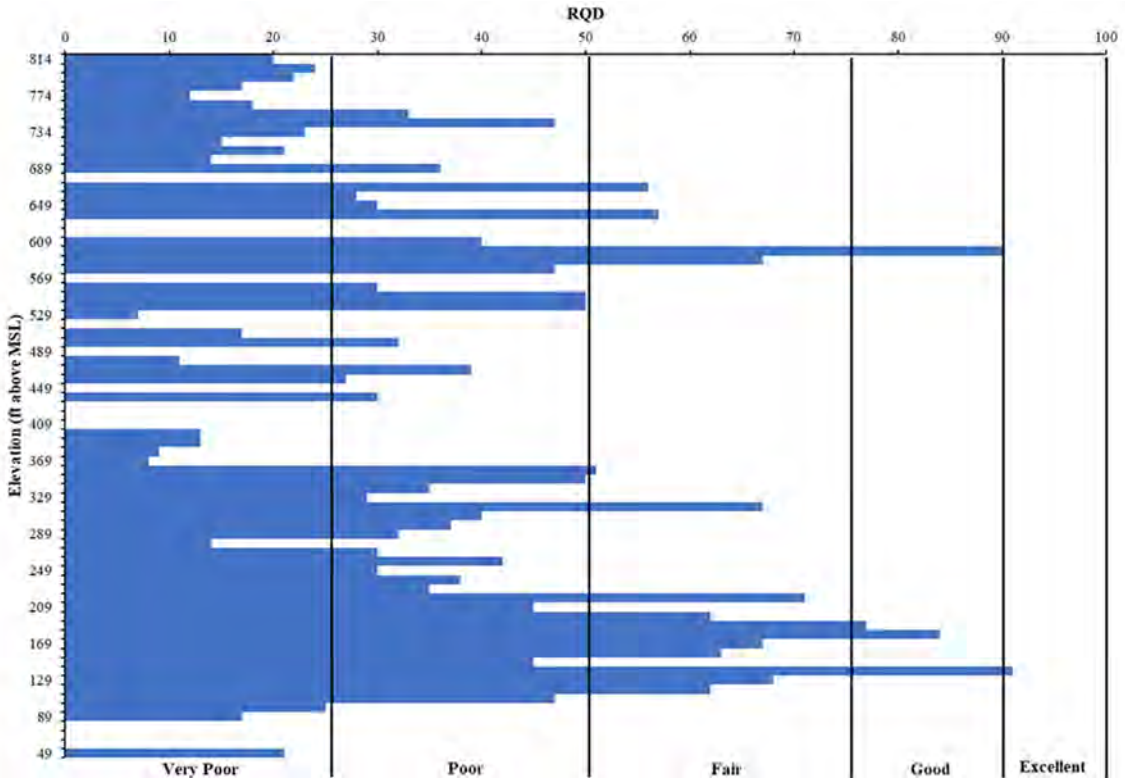

Figure 3-8. Rock Quality Logged in Core Hole ZEV-CH-03-23

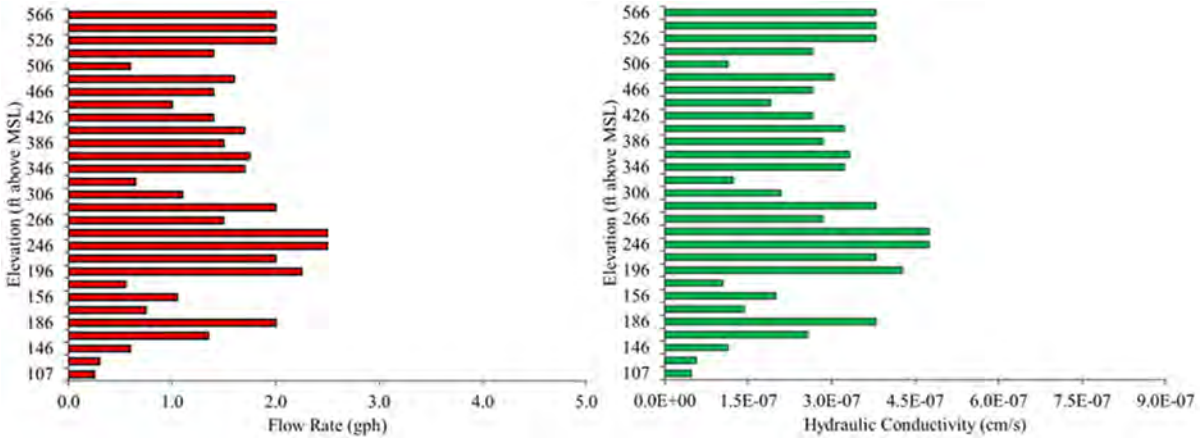

Figure 3-9. Flow Rate and Permeability Recorded in Core Hole ZEV-CH-01-23

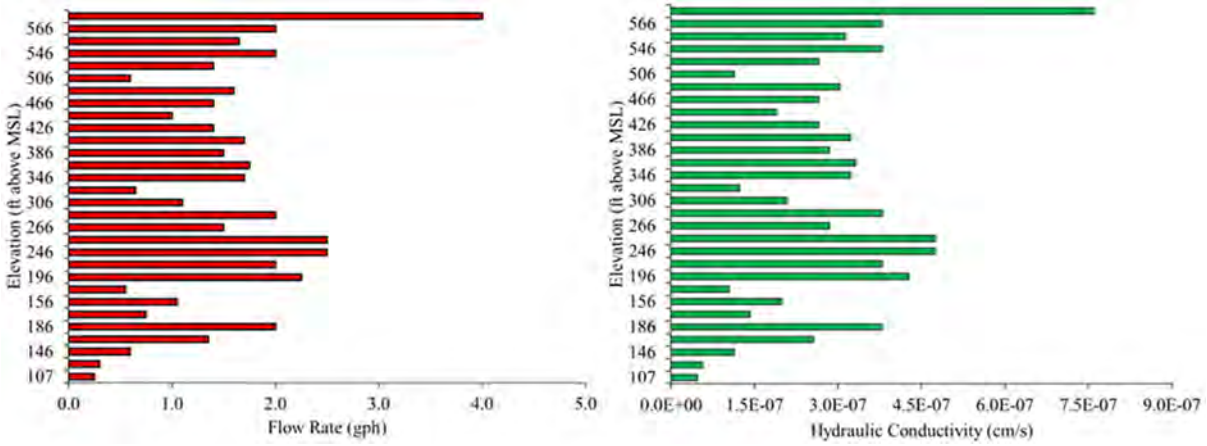

Figure 3-10. Flow Rate and Permeability Recorded in Core Hole ZEV-CH-02-23

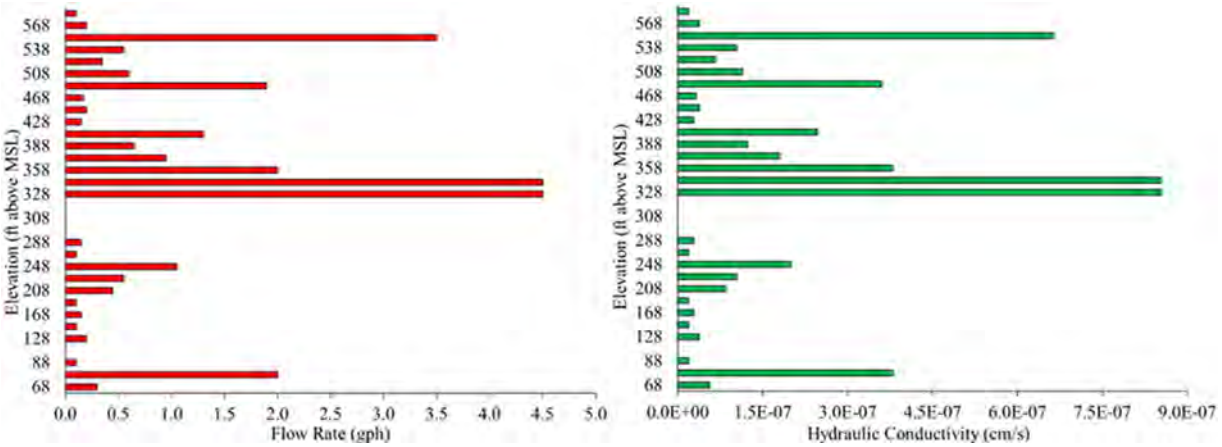

Figure 3-11. Flow Rate and Permeability Recorded in Core Hole ZEV-CH-03-23

Table 3-5. Condition of Rock Mass Discontinuities Associated with Different Hydraulic Conductivities (Quinones-Rozo 2010)

Hydraulic Conductivity Range (cm/s)	Condition of Rock Mass Discontinuities
$<1 \times 10^{-5}$	Very Tight
1×10^{-5} to 6×10^{-5}	Tight
6×10^{-5} to 2×10^{-4}	Few Partly Open
2×10^{-4} to 6×10^{-4}	Some Open
6×10^{-4} to 1×10^{-3}	Many Open
$>1 \times 10^{-3}$	Open Closely Spaced or Voids

3.2.5 Structural Defects

Utilizing the ATV and OTV logs for the three core holes, discontinuities in the core hole wall and their inclination were identified by GEOVision. The summary data for the discontinuities are presented in the geophysical reports included in Appendix B. Agapito grouped the discontinuities together for each core hole and plotted the joints on stereonets and rose diagrams to confirm dip and dip azimuth of the structure, and to identify joint sets within the fracture data. Representative stereonets and rose diagrams are provided in Figures 3-12 to 3-15. A summary of the joint set trends identified is given in Table 3-6.

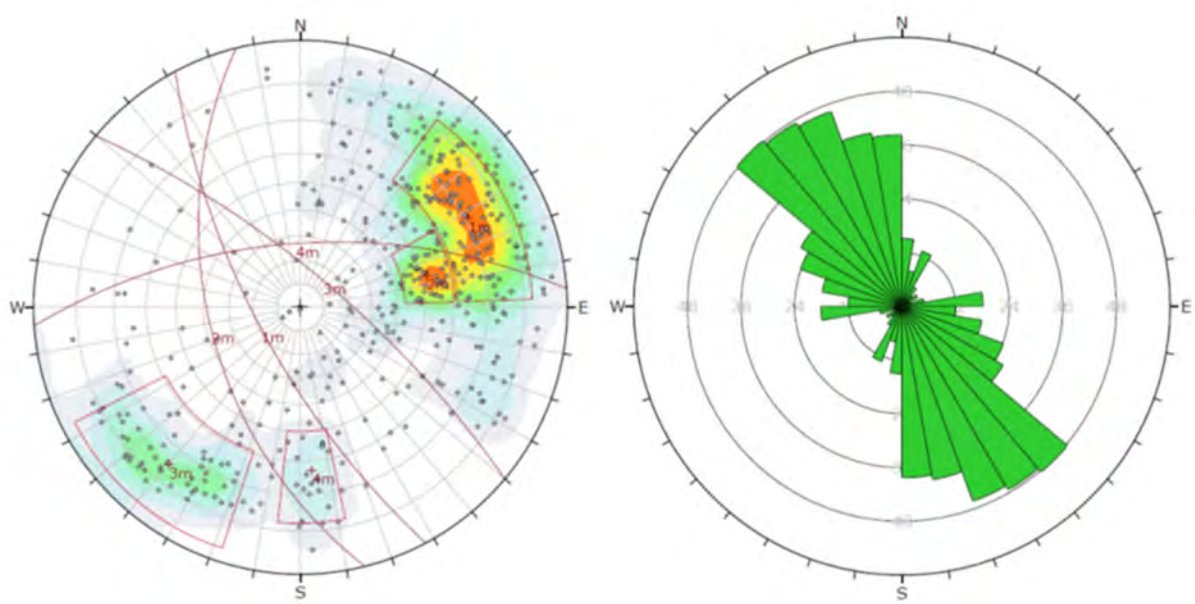

Figure 3-12. Stereonet (left) and Rose Diagram (right) of the Joints within the Cavern Target Horizon for ZEV-CH-01-23

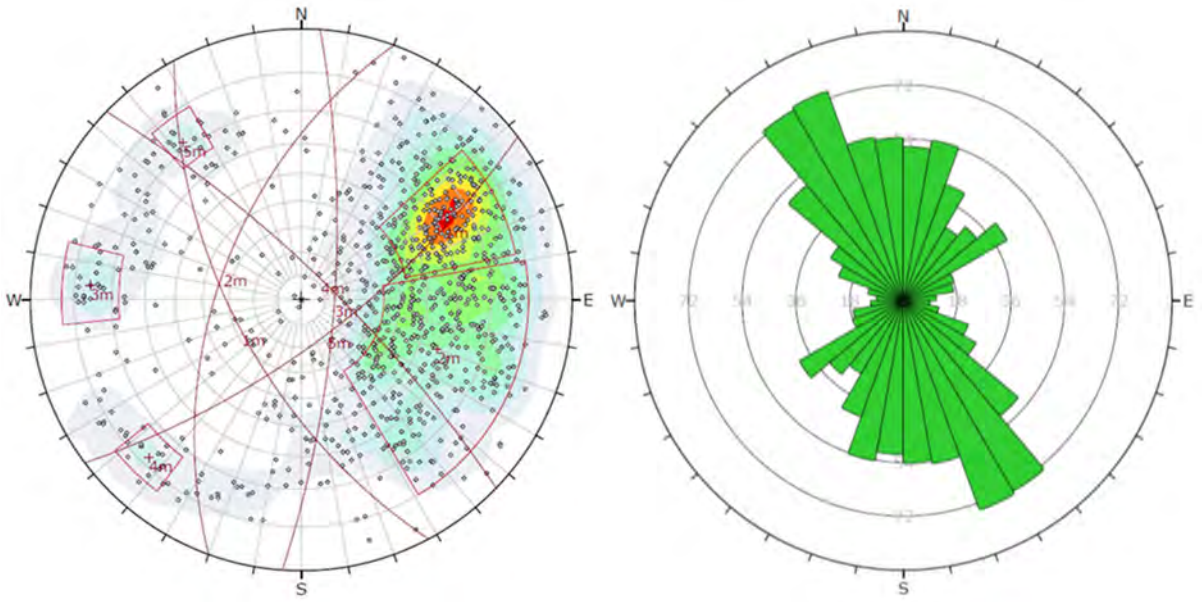

Figure 3-13. Stereonet (left) and Rose Diagram (right) of the Joints within the Cavern Target Horizon for ZEV-CH-02-23

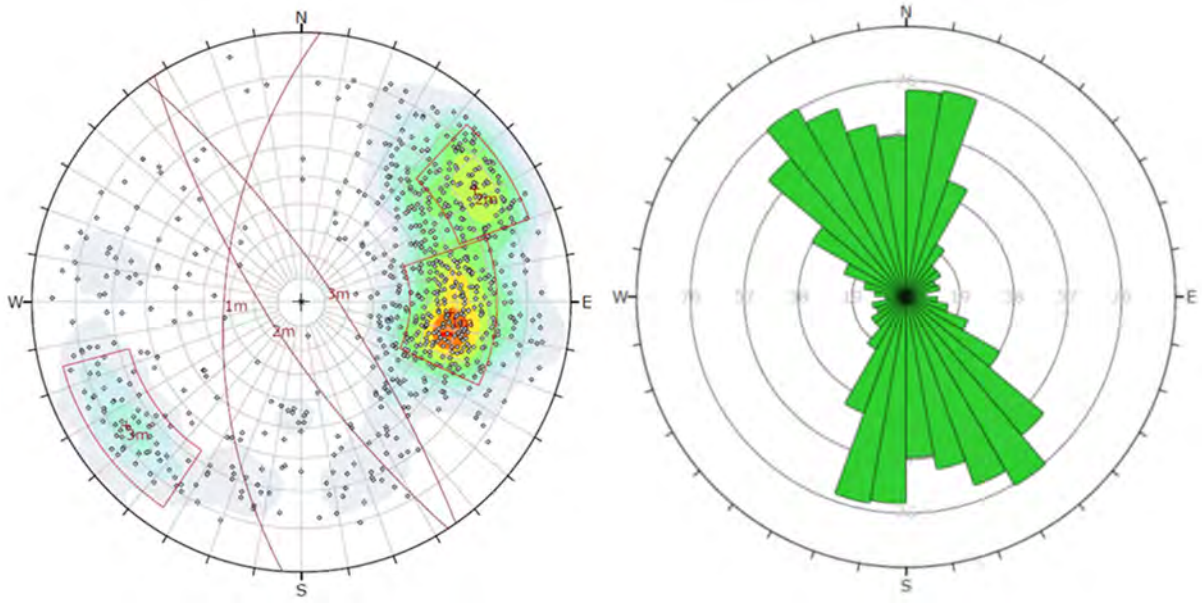

Figure 3-14. Stereonet (left) and Rose Diagram (right) of the Joints within the Cavern Target Horizon for ZEV-CH-03-23

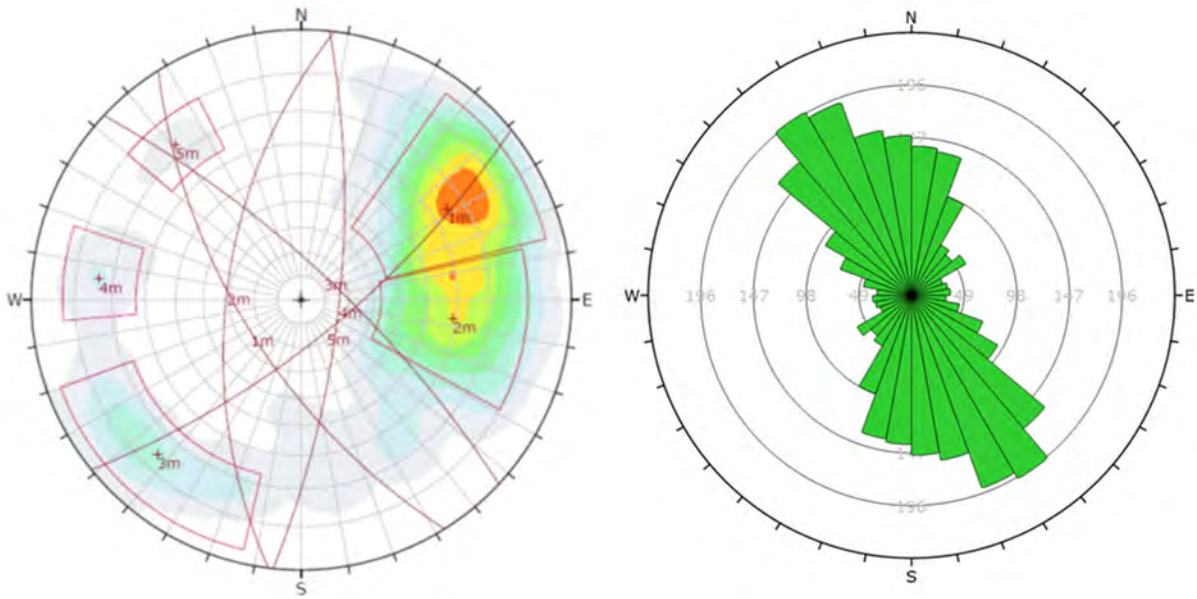

Figure 3-15. Stereonet (left) and Rose Diagram (right) of the Joints within the Cavern Target Horizon for all Core Holes Combined

Table 3-6. Summary of Structure Orientation and Dip in the Cavern Target Interval

Borehole	Joints			
	Joint Set	Dip Direction	Strike	Dip (°)
ZEV-CH-01-23	JS1	242	N28°W	71
	JS2	256	N14°W	52
	JS3	40	S50°E	75
	JS4	356	N86°E	63
ZEV-CH-02-23	JS1	242	N28°W	62
	JS2	290	N20°E	56
	JS3	44	S46°E	78
	JS4	94	S04°W	76
	JS5	143	N53°E	72
ZEV-CH-03-23	JS1	274	N04°E	58
	JS2	237	N33°W	75
	JS3	55	S35°E	77
COMBINED	JS1	238	N32°W	65
	JS2	277	N07°E	59
	JS3	43	S47°E	76
	JS4	96	S06°W	74
	JS5	141	N51°E	73

From Table 3-6, the predominate joint set within the target cavern horizon has a strike averaging N32°W and a dip averaging 65° to the west-southwest. A secondary joint set has an average strike of N07°E and dip averaging 59° to the west. A tertiary set, which is evident in all three core holes, has a strike averaging S47°E and a dip averaging 76° to the northeast. Other random steeply dipping joints were measured in all three core holes.

The discontinuity spacing can be classified using the descriptions provided in Table 3-7. The spacing of the combined joints in the target cavern horizon can therefore be classed as close to moderate with the majority of the discontinuities spaced between 100 and 400 mm (0.3 and 1.3 ft). The maximum spacing is 600 millimeters (mm [2 ft]), which is classified as borderline moderate to wide spacing. A histogram showing the distribution of all joints is provided in Figure 3-16. A similar spacing distribution is evident for joints sets 1 and 2 within the target horizon (see Figures 3-17 and 3-18).

The persistence, or length, of the joints cannot be determined from the core drilling. This could be estimated from nearby extensive surface exposures of the quartz monzonite, but Agapito is not aware of any such studies.

Table 3-7. Discontinuity Spacing Classification (ISRM 2007)

Description of Discontinuity Spacing	Spacing (mm)
Extremely Close	< 20
Very Close	20 to < 60
Close	60 to < 200
Moderate	200 to < 600
Wide	600 to < 2000
Very Wide	2000 to < 6000
Extremely Wide	> 6000

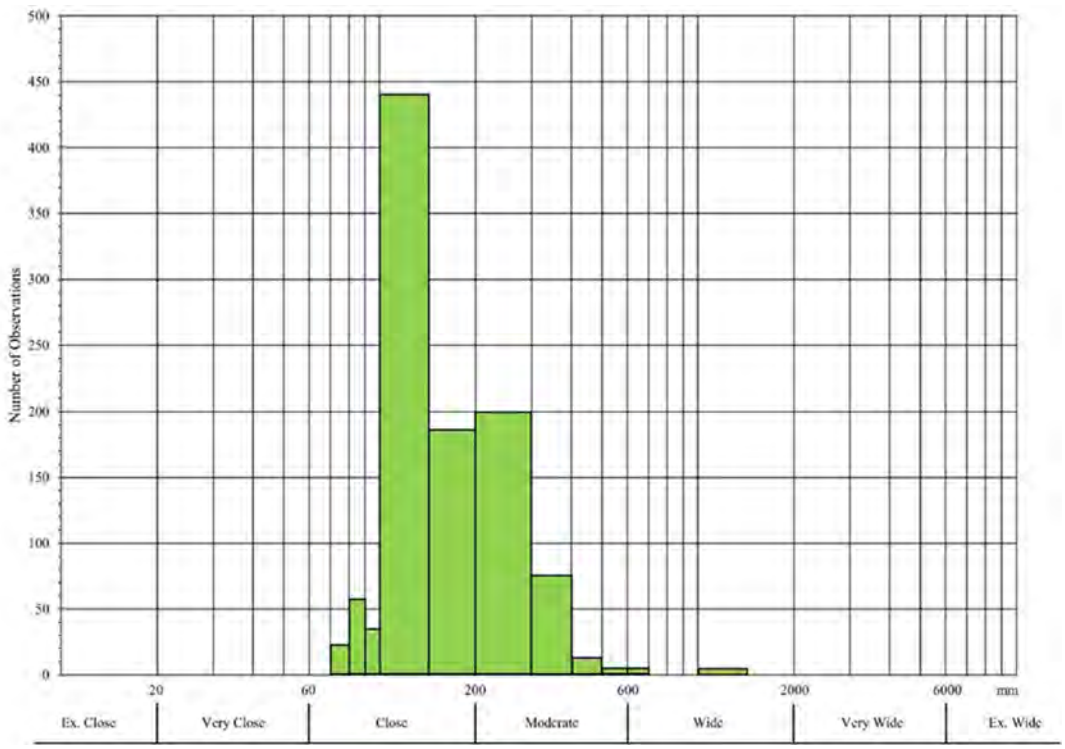

Figure 3-16. Histogram Showing the Distribution of Discontinuity Spacing for All Joint Sets in the Target Cavern Horizon

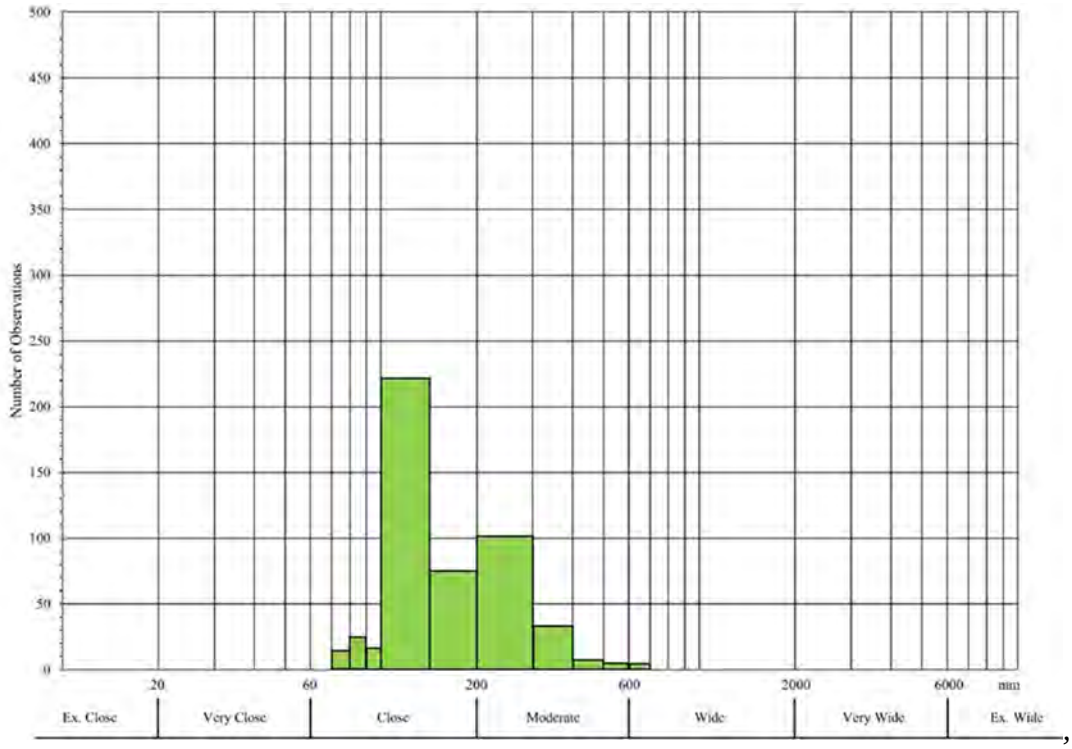

Figure 3-17. Histogram Showing the Distribution of Discontinuity Spacing for Joint Set 1 in the Target Cavern Horizon

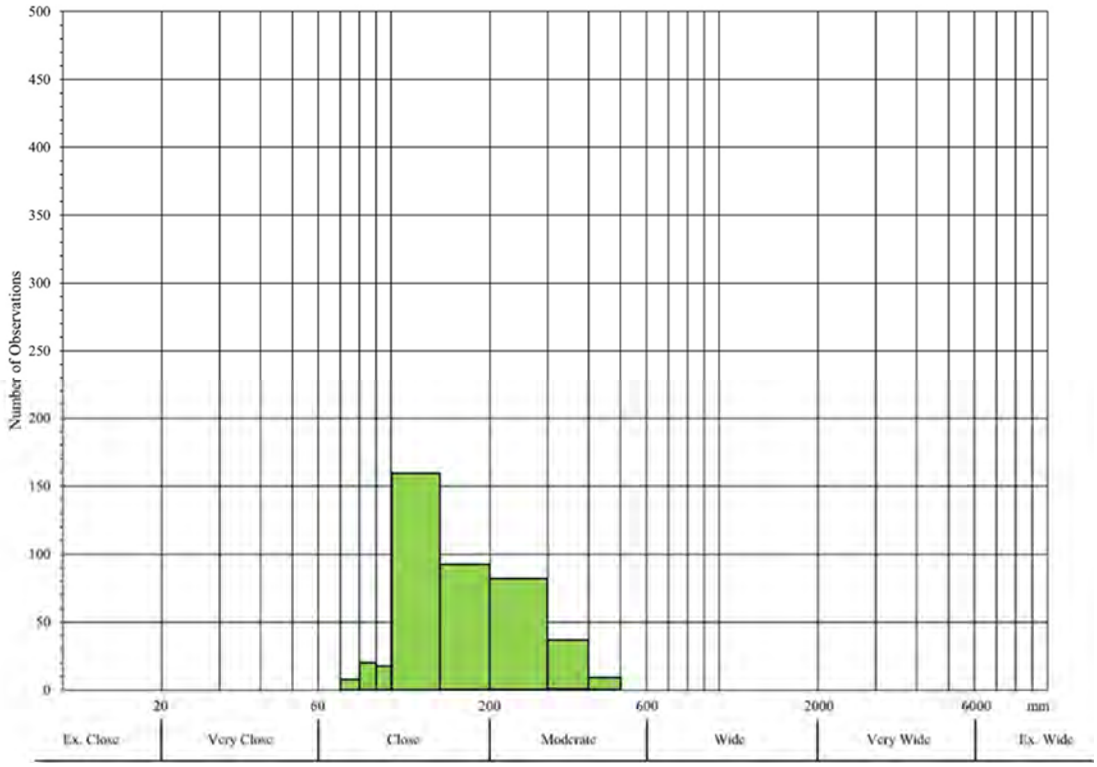

Figure 3-18. Histogram Showing the Distribution of Discontinuity Spacing for Joint Set 2 in the Target Cavern Horizon

4 GEOTECHNICAL CHARACTERIZATION

4.1 Geomechanical Properties of the Intact Rock

Agapito conducted laboratory testing on a large number of core samples collected from the three core holes. The core samples were collected from each hole beginning at depths of around 1,500 ft. The sampling frequency was increased between the depths of 2,000 and 3,000 ft to account for the investigation of various cavern horizons. The samples were packaged and shipped to Agapito's laboratory in Grand Junction, Colorado, for testing according to Agapito testing recommendations. The samples were tested for uniaxial compressive strength (UCS), splitting tensile strength (Brazilian), triaxial compression strength, slake durability index, axial point load strength index (PLT-A), density, moisture content, Young's modulus (E), and Poisson's ratio (ν). Table 4-1 summarizes all data from the testing program for each rock type with the detailed test results provided in Appendix C. A summary of the Mohr-Coulomb failure criteria for intact rock derived from the triaxial data from the tests performed, with confining pressures ranging from 1,500 to 2,500 psi, are shown in Table 4-2.

Table 4-1. Summary of Laboratory Rock Mechanics Testing Results from the Exploration Core Holes

Rock Type	Density (pcf)	UCS (psi)	E ($x10^6$ psi)	ν	Tensile Strength (psi)	PLT-A $I_{s(50)}$	Moisture (%)	Slake Durability Index (%)	Durability
Quartz Monzonite (all)	165.7	17,522	8.29	0.25	1,103	687	0.45%	94.6	Medium High
Quartz Monzonite (Fr to SA)	165.9	17,619	9.37	0.25	1,060	711	0.38%	96.8	High
Quartz Monzonite (SA to MA)	164.5	12,524	6.56	0.25	1,179	635	0.64%	91.2	Medium High
Quartz Monzonite (MA to HA)	162.5	-	-	-	1,154	638	0.70%	82.0	Medium
Quartz Monzonite (HA to CA)	153.0	-	-	-	-	83	-	-	-
Quartz Monazite	167.8	22,922	9.91	0.26	1,356	936	0.33%	99.1	Very High
Diorite	163.9	21,587	10.88	0.17	1,298	714	0.21%	99.1	Very High
Pegmatite	157.4	12,090	6.97	0.25	-	173	0.41%	94.8	Medium High

Table 4-2. Summary of Triaxial Test Results from the Exploration Core Holes

Rock Type	ϕ (degrees)	c (psi)
Quartz Monzonite (all)	30.2	8,874
Quarz Monazite	24.0	9,019

4.1.1 Unit Weight

The density of the quartz monzonite was determined from laboratory testing on a total of 228 samples. The density ranged from 138.0 pounds-per-cubic foot (pcf) to 174.6 pcf with a mean of 165.7 pcf.

4.1.2 Uniaxial Compressive Strength

UCS tests were performed on rock core samples and the individual test results are summarized in Appendix C. Samples were prepared from as-shipped core. Failures were denoted as being "pre-existing" where failure occurred along obvious pre-existing planes of weakness (i.e. joints). These results were omitted from the analysis.

A correlation factor can be used to convert the axial point load strength ($I_{s(50)}$) to UCS for rock. A graphical comparison of the UCS and corrected axial point load strength for each core hole indicates a correlation factor of 20 is appropriate (see Figures 4-1 to 4-3). As shown in the figures, most of the intact rock can be classed as medium to high strength (ISRM 2007). The low to moderate intact rock strength recorded in the core is indicative of areas that have undergone high to complete alteration.

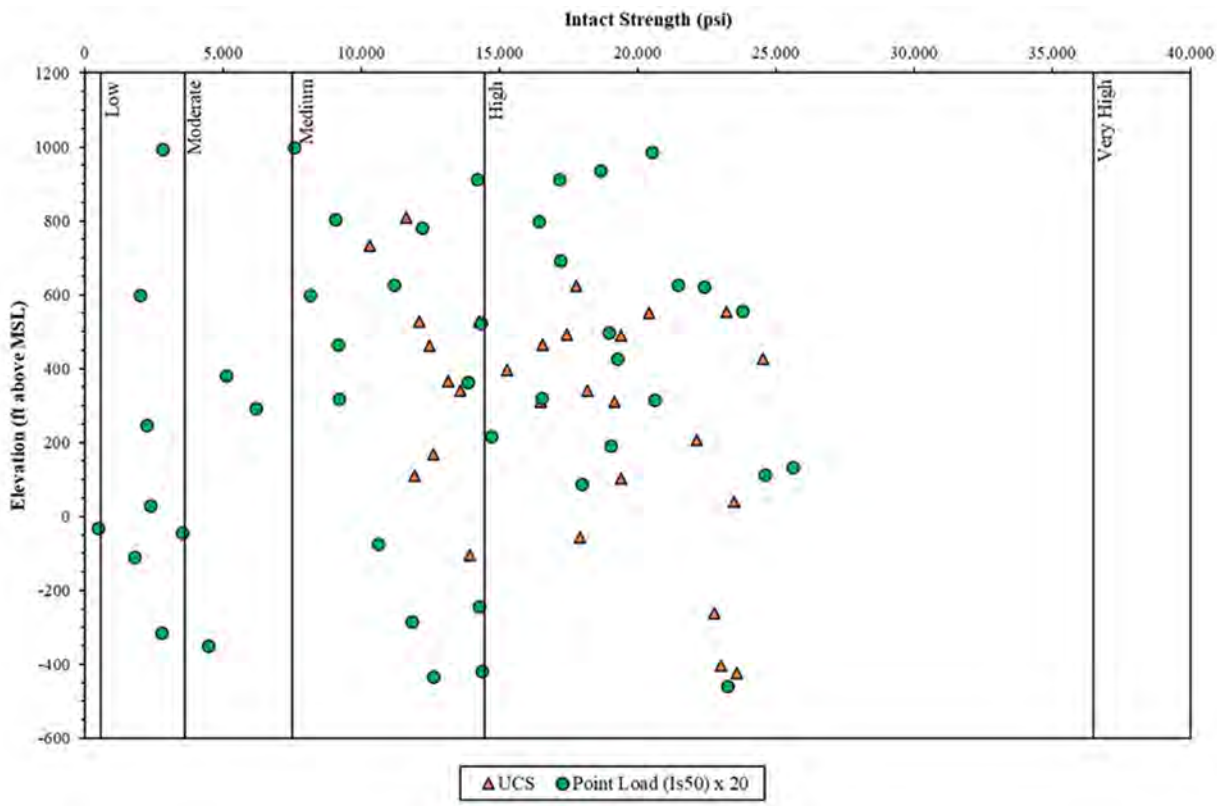

Figure 4-1. Intact Rock Strength Recorded in Core Hole ZEV-CH-01-23

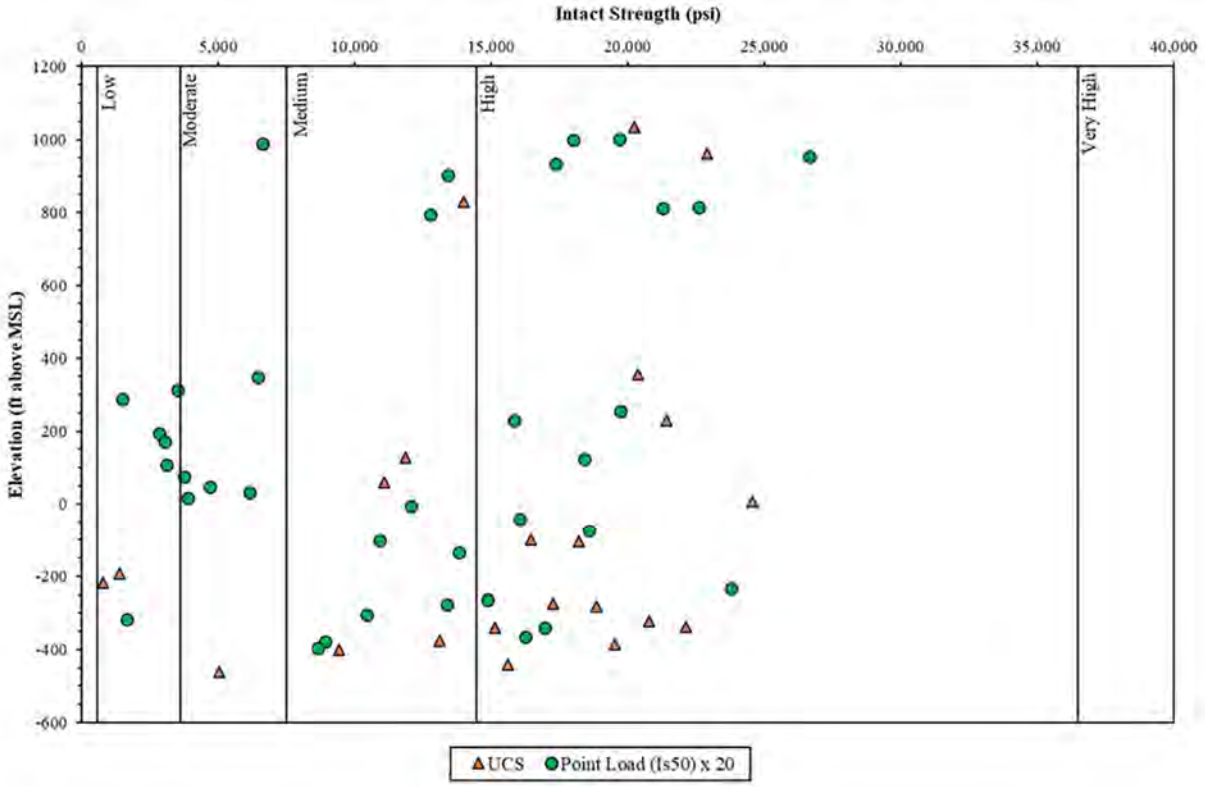

Figure 4-2. Intact Rock Strength Recorded in Core Hole ZEV-CH-02-23

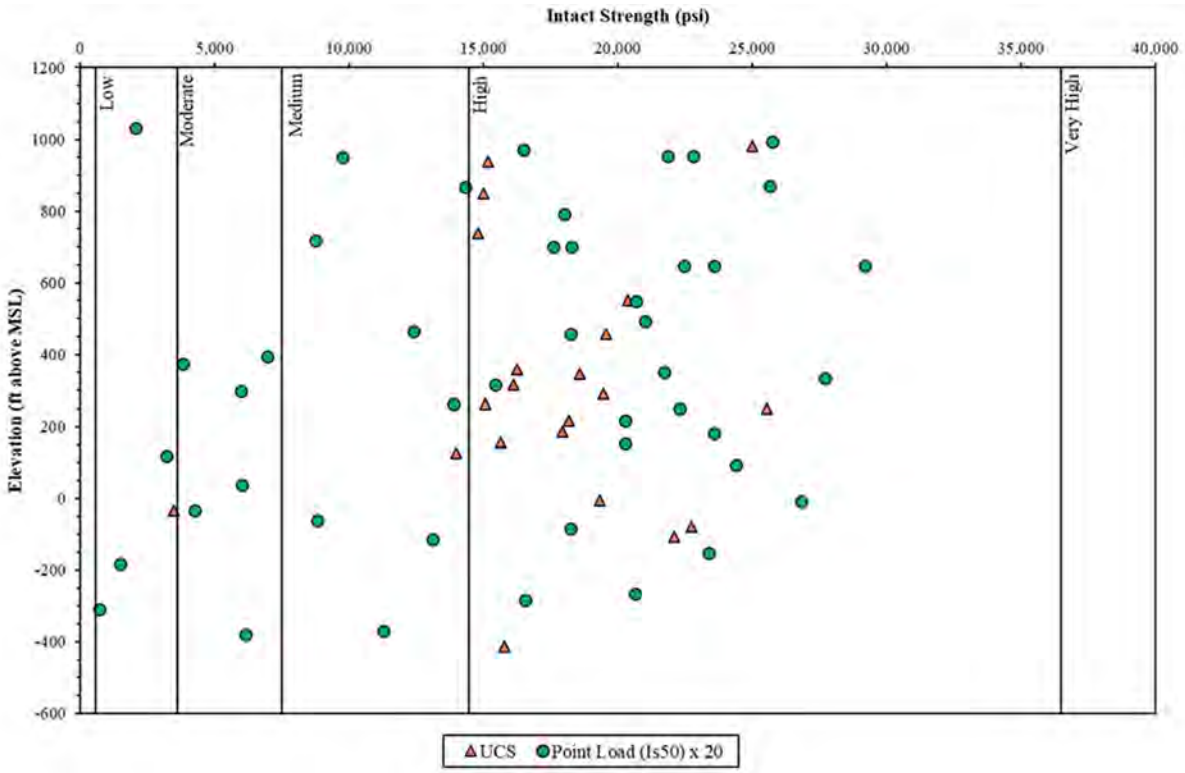

Figure 4-3. Intact Rock Strength Recorded in Core Hole ZEV-CH-03-23

4.1.3 Elastic Properties

Laboratory testing for UCS rock samples produced plots of stress versus strain up to a peak strength level in the unconfined state. The average slope of these lines, between the 0 and 55% ultimate strength level, was used to derive the intact elastic properties. The individual test results for both Young's modulus and Poisson's ratio are summarized in Appendix C. As shown in Table 4-1 above, stiffness decreases in the slightly to moderately altered quartz monzonite.

4.1.4 Slake Durability

The slake durability test is used to estimate qualitatively the durability of weak rocks through weakening and disintegration resulting from cycles of wetting and drying. This is an important test to help understand the rock's behavior in the A-CAES cavern that will be subjected to daily cycles of water infiltration and hot compressed air. Most of the anticipated rock in the cavern horizon can be classed as medium high to very high durability (see Figures 4-4 to 4-6). The quartz monzonite that has been logged as moderately to highly altered typically exhibits medium durability. Medium durability is indicative of a specimen that contains large and small fragments after two-cycles of wetting and drying (ASTM D4644-08). This means that some of the sample fragments broke down into smaller fragments.

Figure 4-4. Slake Durability Index Recorded in Core Hole ZEV-CH-01-23

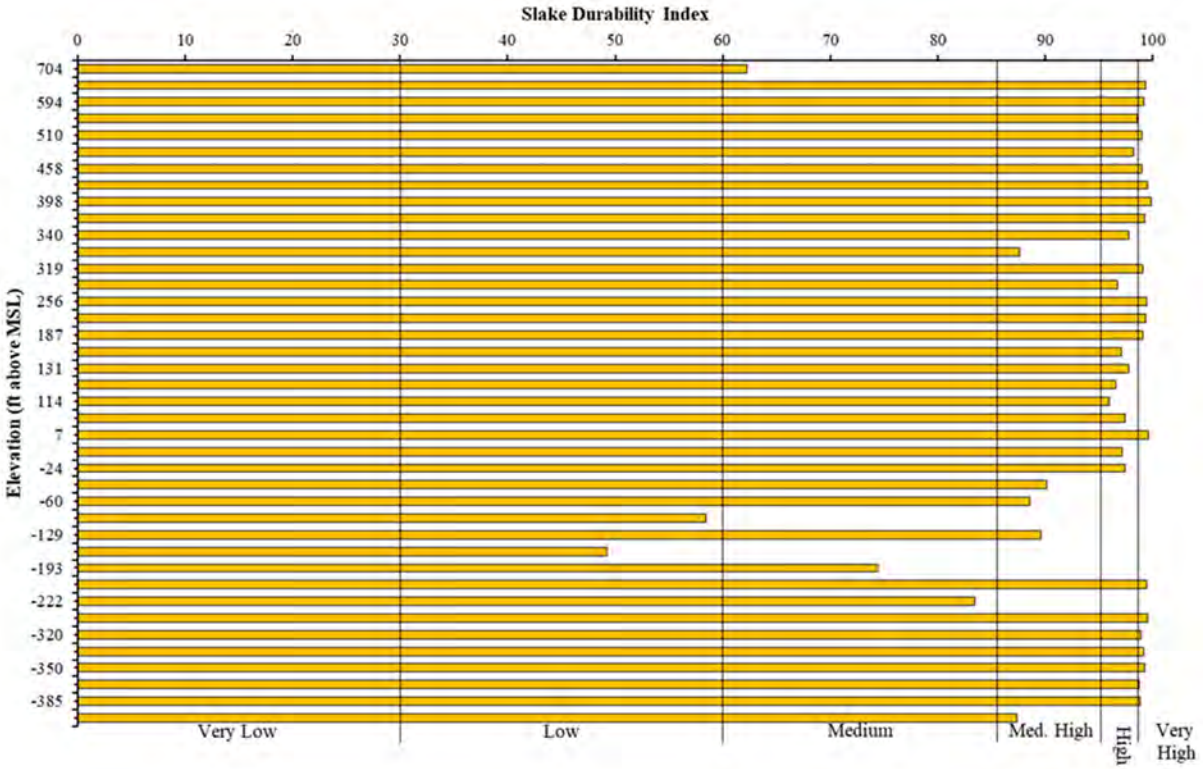

Figure 4-5. Slake Durability Index Recorded in Core Hole ZEV-CH-02-23

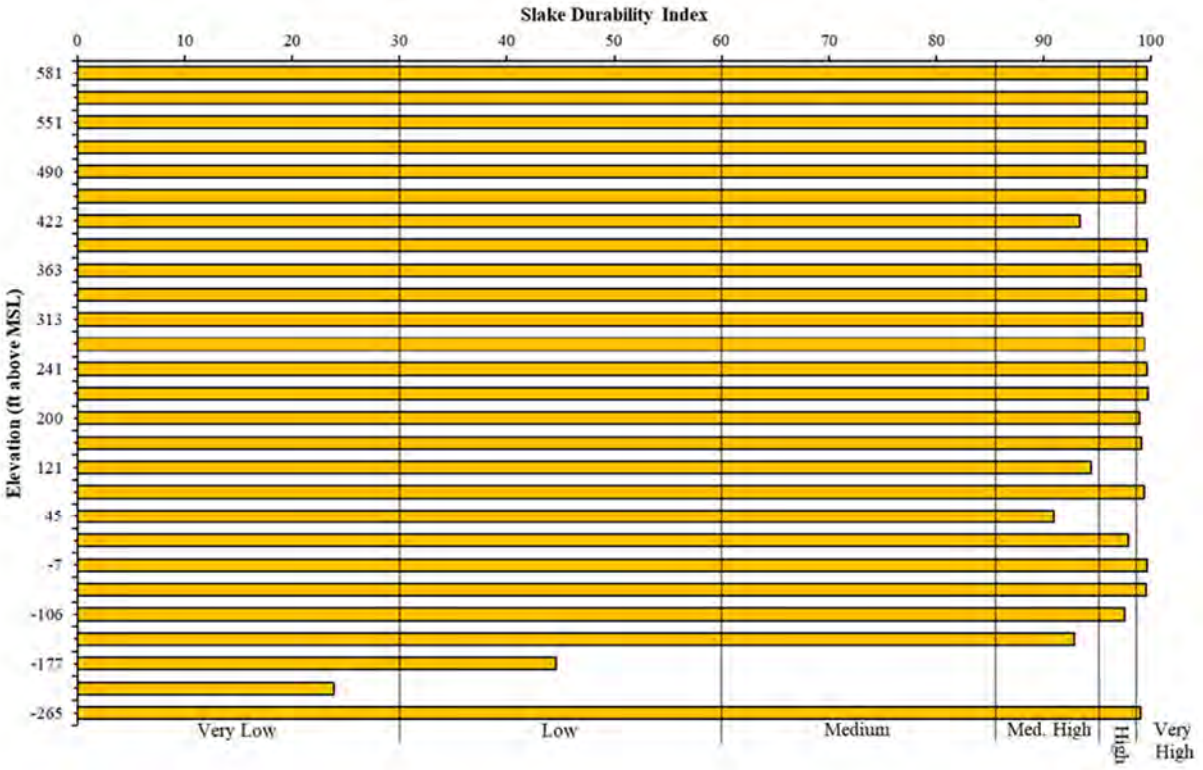

Figure 4-6. Slake Durability Index Recorded in Core Hole ZEV-CH-03-23

4.2 Rock Mass Characterization

Two rock mass classification systems have been used to evaluate the competency of the rock mass anticipated in the target cavern horizon. These systems will be used to characterize the condition of the rock mass for the purpose of assessing ground behavior and establishing rock mass geomechanical properties for numerical modeling. These systems include the Rock Mass Rating (RMR) and the Tunneling Quality Index (Q). A summary of the rock mass classification results is presented in the following sections, and the details of the analysis are proved in Appendix D.

4.2.1 Rock Mass Rating (RMR)

The Rock Mass Rating (RMR) is a geomechanical classification system for rocks (Bieniawski 1976, 1989). The system uses the following six parameters to classify rock mass quality: UCS, the RQD, spacing of discontinuities, condition of discontinuities, groundwater condition, and orientation of discontinuities. The reported RMR values for this assessment does not consider the orientation of discontinuities.

The results of the analysis indicate that the rock mass in core holes ZEV-CH-01-23 and ZEV-CH-02-23 can be classified as "Fair" to "Good" within the target cavern horizon (see Figures 4-7 and 4-8). A higher percentage of "Good" rock mass is positioned near the top of the target horizon in both core holes. In core hole ZEV-CH-03-23, most of the rock mass reduces to borderline "Poor" to "Fair" (see Figure 4-9). The lower RMRs in this core hole can be attributed to increased fracturing of the rock mass.

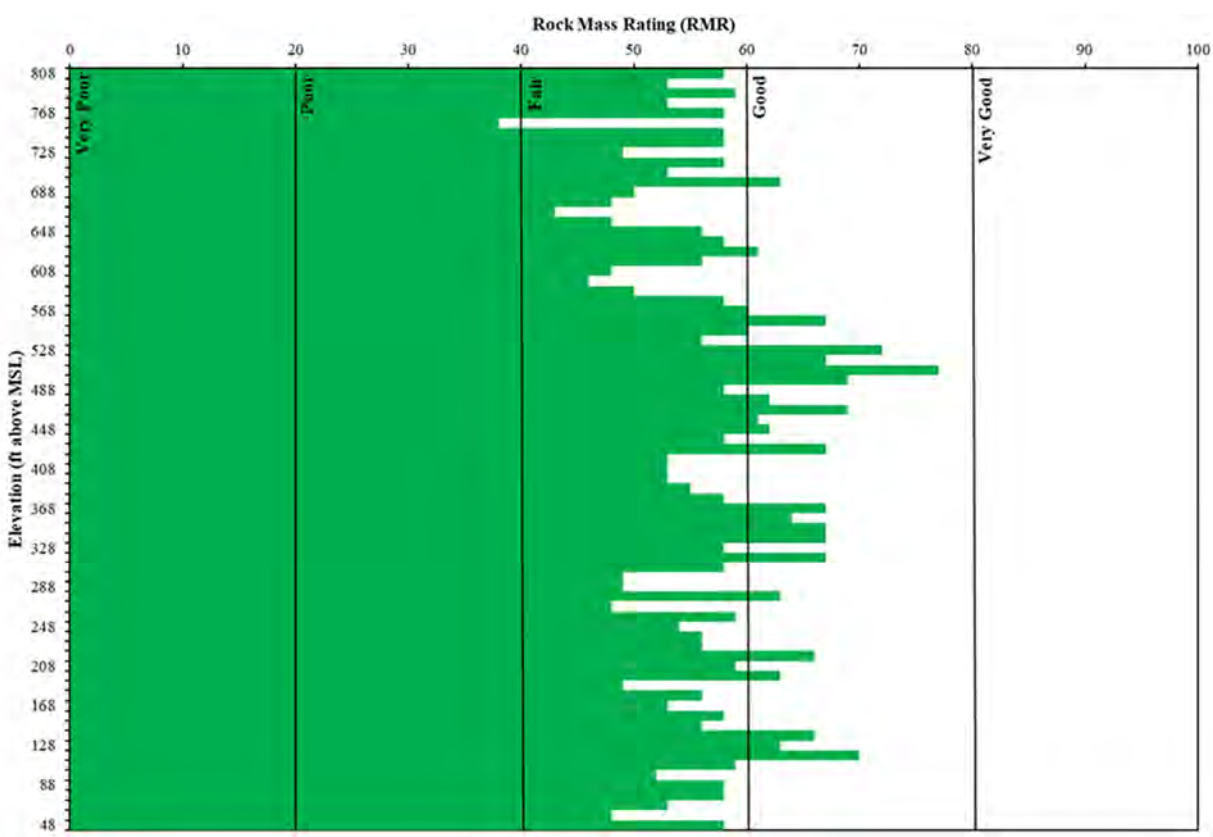

Figure 4-7. Rock Mass Rating for Core Hole ZEV-CH-01-23

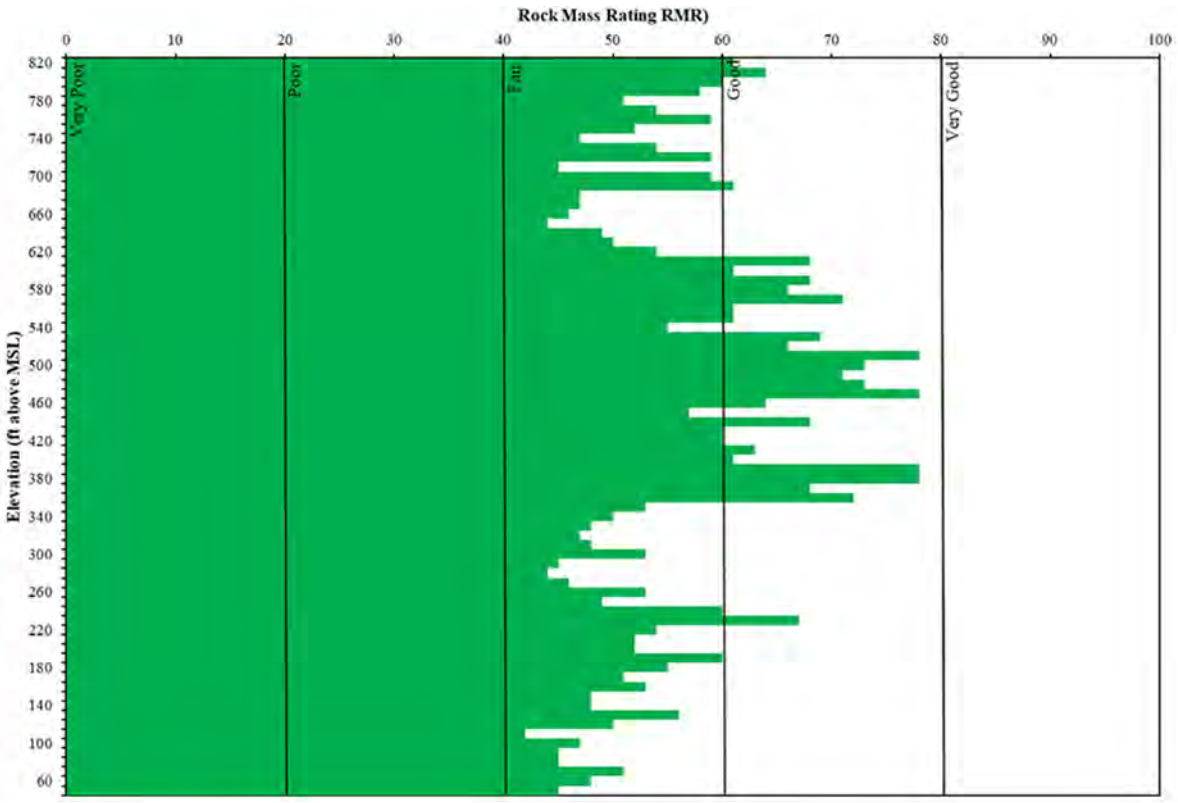

Figure 4-8. Rock Mass Rating for Core Hole ZEV-CH-02-23

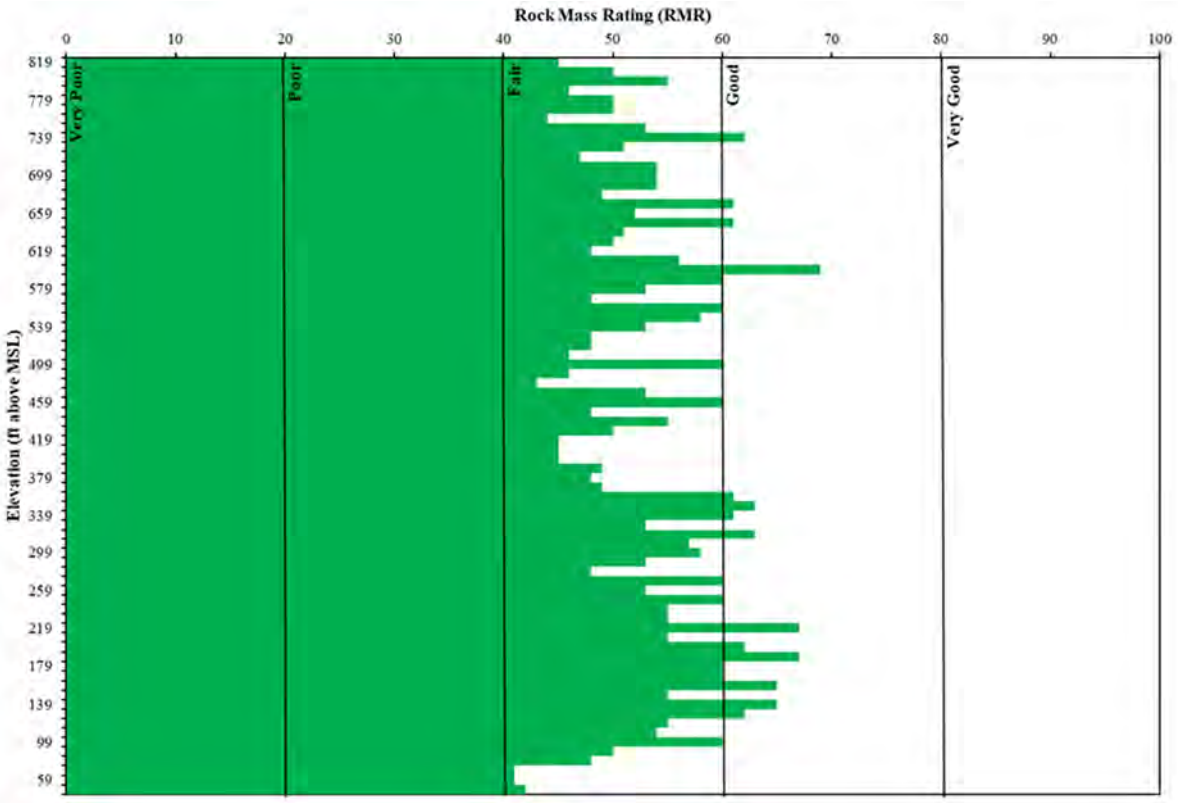

Figure 4-9. Rock Mass Rating for Core Hole ZEV-CH-03-23

4.2.2 NGI Q-system

The Norwegian Geotechnical Institute's Q-system is an empirical rock mass classification system developed by Barton et al. (1974), which is used to facilitate the selection of ground support. The Q-system is based on a numerical evaluation of rock mass properties similar to RMR, except the system does not account directly for the strength of the intact rock. The system assigns a degree of rock quality based on six key parameters, specifically: the RQD, the number of joint sets, the roughness of the most unfavorable joint or discontinuity, the degree of joint alteration or infilling, water inflow, and the in-situ stress environment.

The parameters are grouped into three quotients to give the rock mass quality using the following equation:

$$Q = \frac{RQD}{J_n} \times \frac{J_r}{J_a} \times \frac{J_w}{SRF}$$

In core holes ZEV-CH-01-23 and ZEV-CH-02-23, most of the rock mass within the target cavern horizon is classed as "Poor" to "Fair" with isolated zones of "Good" rock mass near the top of the target horizon (see Figures 4-10 and 4-11). In core hole ZEV-CH-03-23, most of the rock mass in the target horizon is classed as "Poor" with localized zones of "Very Poor" and "Fair" rock (see Figure 4-12). Similar to the RMR rating system, the reduction in rock mass quality in this core hole is related to the increased fracturing of the rock mass.

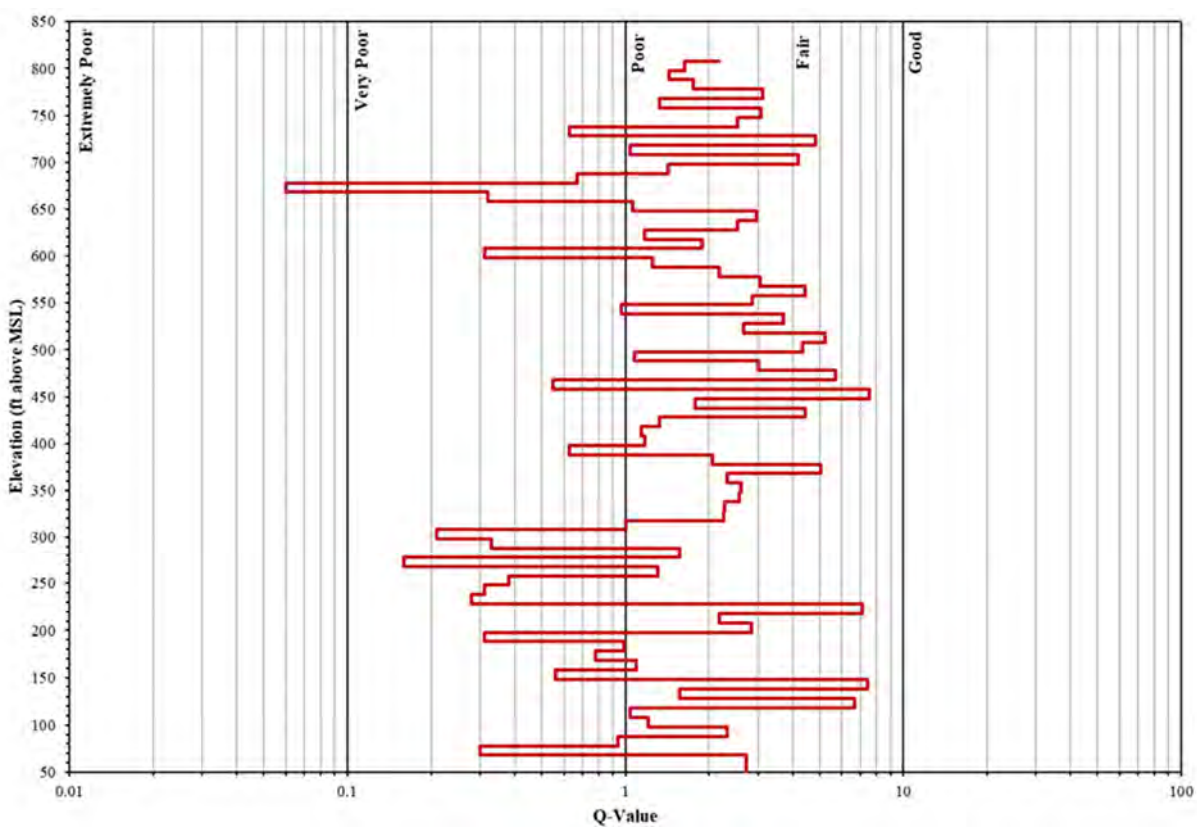

Figure 4-10. Q Ratings for Core Hole ZEV-CH-01-23

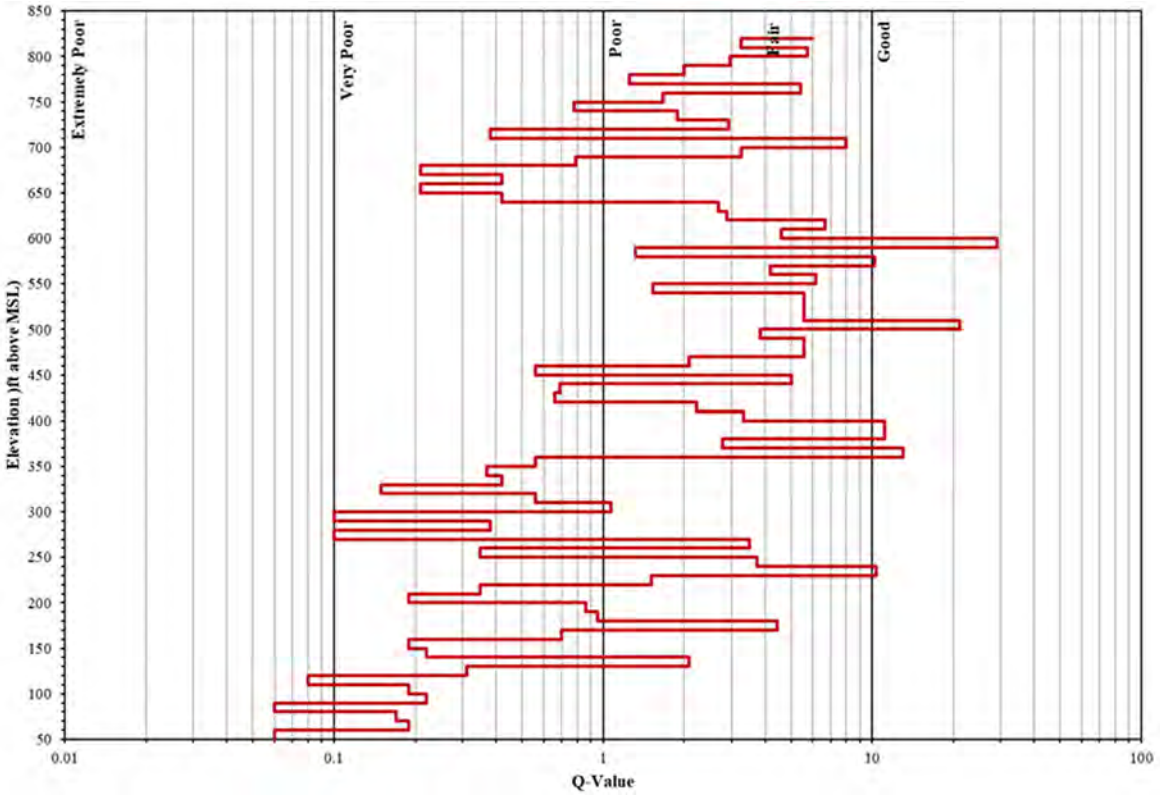

Figure 4-11. Q Ratings for Core Hole ZEV-CH-02-23

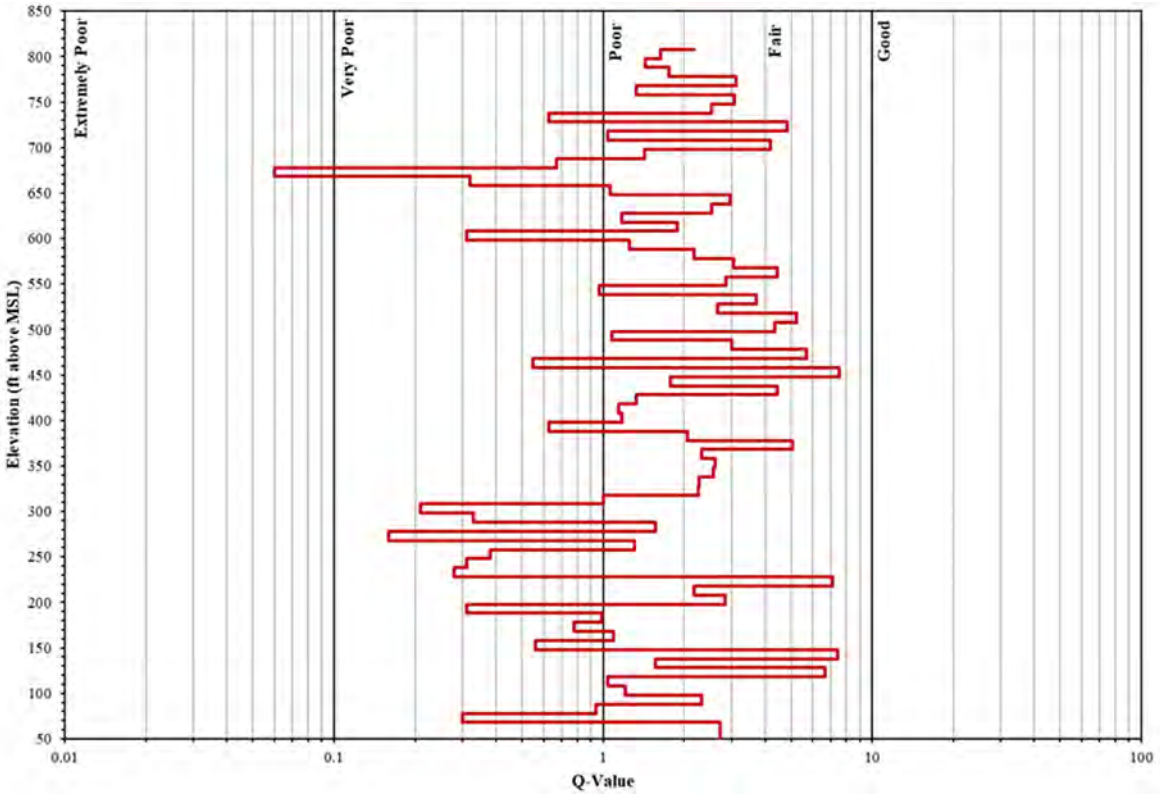

Figure 4-12. Q Ratings for Core Hole ZEV-CH-03-23

4.3 In-situ Stress Conditions

4.3.1 Regional Stress

The maximum in-situ stress (σ_{hmax}) component near the San Andreas and Garlock Faults is horizontal. McGarr et al. (1982) indicate that σ_{hmax} is aligned in a N20°W direction (see Figure 4-13). Numerous measurements have been taken near the San Andreas Fault and other active faults in California. Using regression lines presented by McGarr et al. (1982) at the depths of the target cavern horizon, σ_{hmax} is estimated between 3,765 and 4,540 psi, the minimum horizontal stress (σ_{hmin}) between 2,340 and 2,930 psi, and the vertical stress (σ_v) between 2,305 and 2,880 psi. The ratio between the maximum horizontal stress and vertical stress is termed the K ratio, which in this case is around 1.6.

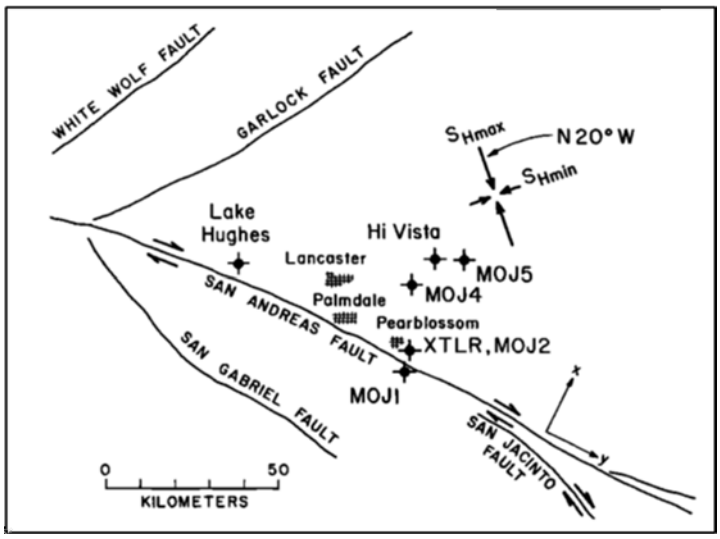

Figure 4-13. Map Showing the Measured Orientation of the In-situ Horizontal Stresses in the Antelope Valley (McGarr et al. 1982)

4.3.2 Borehole Breakout

Borehole breakout is the stress-induced deformation of a borehole cross section in a preferential direction, which occurs when the stress concentration around the borehole exceeds the rock strength (Ask et al., 2006; Babcock, 1978; Bell and Goug, 1979; Zoback et al., 1985). Breakout is the result of compressive failure along the borehole wall, with borehole spalling in the direction of minimum horizontal stress (see Figure 4-14). Maximum principal stress orientations from breakout have been shown to be consistent with the results of other more traditional stress measurement techniques such as hydraulic fracturing and overcoring (Zoback and Zoback, 1980; Plumb and Hickman, 1985; Zajac and Stock, 1997).

Breakout is formed by the spalling of fragments from the borehole wall in the direction of minimum horizontal stress (σ_h), as shown in Figure 4-14 (Fowler and Wier 2008). In crystalline rocks, such as quartz monzonite, breakout is initially observed as small pits or irregular chips at the borehole wall (Plumb, 1989). Thus, breakout in crystalline rocks is thought to initiate at the borehole wall rather than in the interior as seen in sedimentary rocks.

In core holes ZEV-CH-01-23 and ZEV-CH-02-23, borehole breakout can be seen in the amplitude logs as two 180° opposed dark traces parallel to the borehole wall (see Figure 4-15). The breakout is oriented approximately N70°E, which is indicative of a major horizontal stress direction of N20°W. The logs indicate that this orientation is consistent throughout the target cavern horizon in both core holes. This orientation is in line with the regional major horizontal stress direction measured in Antelope Valley (see Figure 4-13).

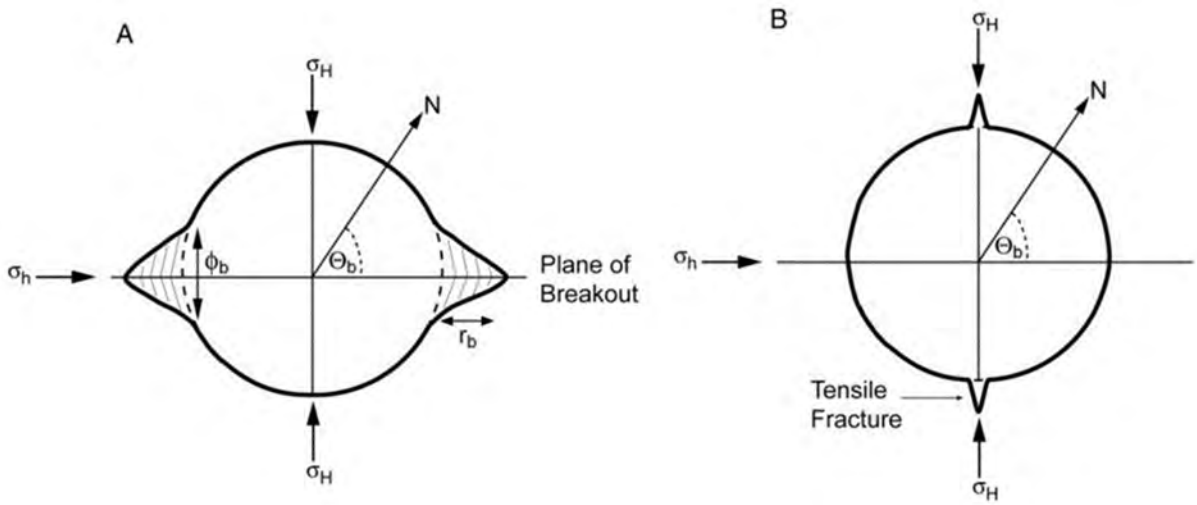

Figure 4-14. Theoretical Borehole Cross-section, Showing the Relationship between the Major Principal Horizontal Stress (σ_H)**, the Minor Principal Horizontal Stress** (σ_h) **for** (A) **Borehole Breakout and** (B) **Tensile Fracture** (Fowler and Weir, 2008)

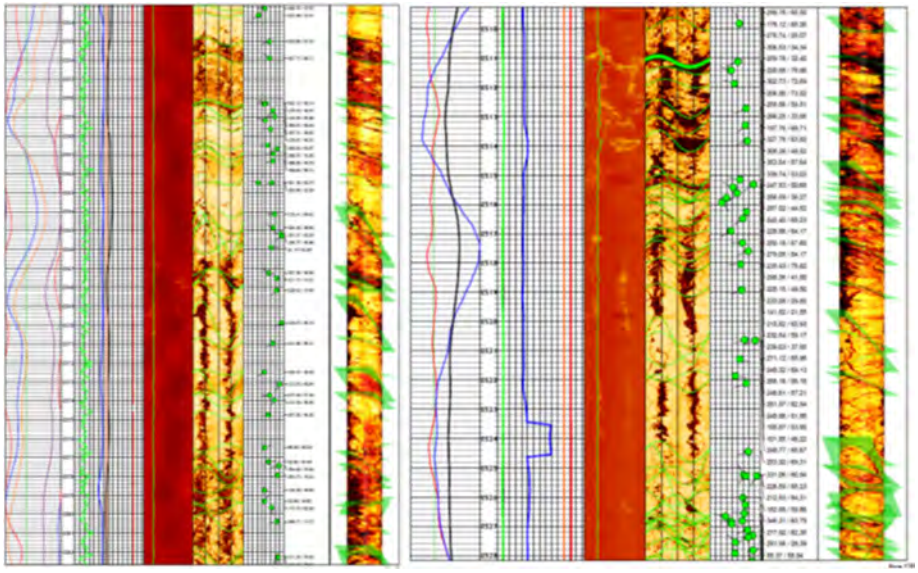

Figure 4-15. Acoustic Televiewer Logs (ATV) **Showing Borehole Breakout in the Amplitude Logs for Core Holes ZEV-CH-01-23** (left) **and ZEV-CH-02-23** (right)

4.3.3 Sigra Overcore

The maximum and minimum horizontal stresses within the target cavern horizon were measured using the overcoring method in core hole ZEV-CH-03-23. The measurements were obtained using the in-situ stress measurement tool (IST2D) and downhole technique developed by Sigra, Pty. (Sigra) of Brisbane, Australia (Gray 2000). The IST technique measures the two-dimensional rock stresses in the plane perpendicular to the core hole wall, and because core holes are generally vertical, this technique provides the principal stresses in the horizontal plane at the testing depth.

The IST2D tool is a pilot hole overcoring device that automatically measures the deformation across the diameter of a 25 to 27 mm pilot hole at six locations during overcoring. The overcore samples are tested to determine the core's mechanical properties relating to Young's Moduli and Poisson's Ratio as well as uniaxial compressive strength. The analysis is in terms of axisymmetric anisotropic elastic, though not necessarily linearly elastic behavior. The derivation of core properties is described by Gray, Zhao, and Liu (2018).

Two successful measurements were taken at depths of 2,030.0 and 2,033.4 ft in core hole ZEV-CH-03-23. The results are given in Table 4-3, and the details of the testing are provided in Appendix E. Using the axial modulus values derived from the laboratory tests of the overcore samples, the average maximum horizontal stress (σ_1) is 1.2 times the minimum horizontal stress (σ_3) and 1.6 times the estimated vertical stress (σ_v). Thus, the ratio between the major maximum horizontal stress and vertical stress indicates a reasonably high horizontal stress regime, which aligns with the regional measurements collected by McGarr et al. (1982). Similarities were also measured in the major horizontal stress orientation, where the direction ranged between N20°W and N54°W. This suggests that the horizontal stresses at the roject site are related to tectonic activity associated with the San Andreas Fault.

Table 4-3. Summary of IST2D Stress Testing in Core Hole ZEV-CH-03-23

Hole Name	ZEV-CH-03-23	
Overcore Number	**0052-070**	**0054-070**
Date Tested	9/5/2022	9/5/2022
Depth (ft)	2,030.0	2,033.4
Unconfined Compresive Strength (psi)	26,468	12,696
Young's Modulus ($\times 10^6$ psi)†	10.38	9.31
Poisson's Ratio †	0.32	0.19
Estimated Vertical Stress (psi)	2,368	2,373
Self-loading Horizontal Stress σ_{hsw} (psi)	1,114	557
Maximum Horizontal Stress σ_1 (psi)	4,098.8	3,611
Minimum Horizontal Stress σ_3 (psi)	3,115.4	3,446
σ_1:σ_3 Ratio	1.3	1.0
True Bearing of Maximum Horizontal Stress	340.38°	303.98°
Maximum Horizontal Strain ϵ_1 (microstrain)	226.8	269.8
Minimum Horizontal Strain ϵ_2 (microstrain)	101.6	248.6

psi = pounds per square inch; ° = degree; E = East
† Tangent Calculation Method
magnetic declination of 11.68° E

4.4 Seismic Risk

The risk of damage due to earthquakes is primarily restricted to surface or very near-surface structures (Dowding and Rozen 1978). Sharma and Judd (1991) have estimated that little real damage occurs to underground openings at depths greater than 200 to 300 ft, except where a tunnel intersects a fault directly affected by the earthquake. According to Dowding and Rozen (1978) and confirmed by Sharma and Judd (1991) and Jaramillo (2017), no damage occurs in deep rock tunnels for Peak Ground Accelerations (PGAs) less than 19% of the acceleration due to gravity (0.19 g) and only minor damage occurs for PGAs between 0.19 g and 0.50 g. PGA is by far the most widely accepted index of the ground shaking intensity and damage from earthquakes. Thus, heavy earthquake damage can be sustained by surface buildings, while any deep underground excavations could remain mostly unharmed.

The Project site is located in a region where the likelihood of a damaging earthquake in the next 100 years is one of the highest within the United States (see Figure 4-16). Furthermore, the PGA with a 2% probability of exceedance in 50 years (i.e., occurs once every 2,475 years) was determined to be 0.39 g using Applied Technology Council (ATC) software for the ASCE7-16 Design Standard. This assumes a site amplification factor at PGA of 0.8 for Site Class A material. As per ASCE7-10, Site Class A material includes hard rock with shear waver velocities of > 5,000 ft/s.

Based on the PGA values, earthquake damage to a cavern at the target depths is expected to be minor. In this case, minor damage due to shaking includes fall of stones and formation of new cracks. Conversely, damage to surface buildings at the site from earthquakes could be significant as the maximum expected earthquake magnitude within a 50-year period in the area is 7.5 Richter. Nevertheless, the risk of landslides and soil liquefaction is small.

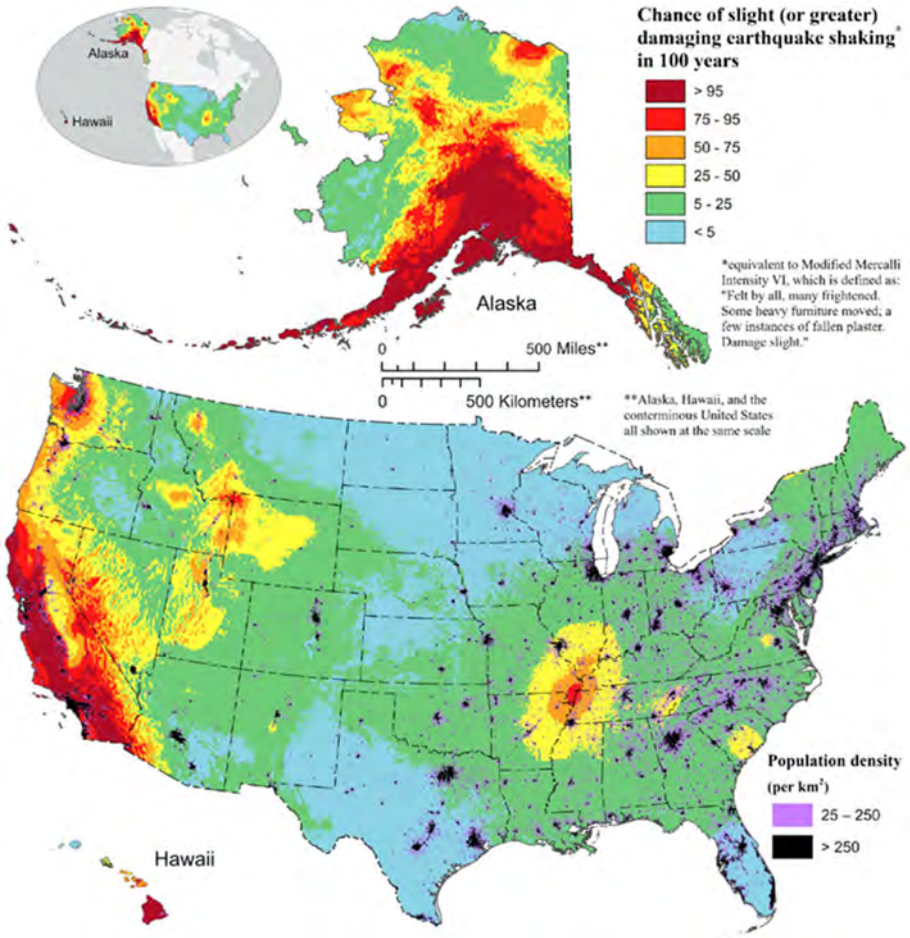

Figure 4-16. Map Showing the Chance of any Level of Damaging Earthquake Shaking in 100 years from the 2023 50-State National Seismic Hazard Model (US National Seismic Hazard Model 2023)

4.5 Rock Mass Strength and Deformation Properties

4.5.1 Geological Strength Index (GSI)

The Geological Strength Index (GSI), first introduced by Hoek (1994), was developed to evaluate parameters for the Hoek-Brown strength criterion for rock masses (Hoek et al. 2002) as well as for estimating deformation modulus of a rock mass. The GSI is a complement to the Hoek-Brown strength criterion and can be used to estimate the parameters s, a, and m_b in the criterion.

GSI can be determined based on visual assessment of the rock mass and includes consideration of the degree of "blockiness" or mechanical interlock, as well as the discontinuity conditions following a procedure developed by Hoek and Marinos (2000). GSI can also be assessed using correlations with RMR and Q.

As there are no excavated exposures of the rock mass in the target cavern horizon, the GSI was defined based on correlations with the RMR and Q values determined from the core logging. RMR and Q include factors for in-situ and groundwater stresses, which are typically determined or

defined in the numerical modeling process (Hoek et al. 2000). Therefore, in order to consider only intrinsic rock and joint characteristics, modified Q' and RMR classifications were applied.

When RMR is used to estimate GSI, the last two parameters are adjusted so that a rating of 15 is assigned to groundwater and a rating of 0 for orientation (Hoek et al. 2000), which is known as the RMR_{89} term. The rating is then related to GSI using the following relationship when RMR_{89} is > 23:

$$GSI = RMR_{89} - 5$$

For rock masses with $RMR_{89} < 23$, the RMR system cannot be used the Q-system should be used instead. When using the Q-system to estimate GSI, the joint water reduction factor (J_w) and the stress reduction factor (SRF) should both be set to 1 to obtain the modified tunneling quality index Q'. The following relationship can then be used to determine GSI (Hoek et al. 2000):

$$GSI = 9 \ln Q' + 44$$

Due to the "Fair" to "Good" quality of the rock mass (i.e. RMR > 23), only the RMR correlation was used for determining the respective GSI for each core run. The distribution of the calculated GSI values are provided in Figures 4-17 to 4-19.

The results for core holes ZEV-CH-01-23 and ZEV-CH-02-23 indicate that the GSI within the target cavern horizon ranges between 42 and 78 and the rock mass is anticipated to have a GSI of 59, on average. For core hole ZEV-CH-03-23, the GSI ranges between 41 and 67, with an average of 55.

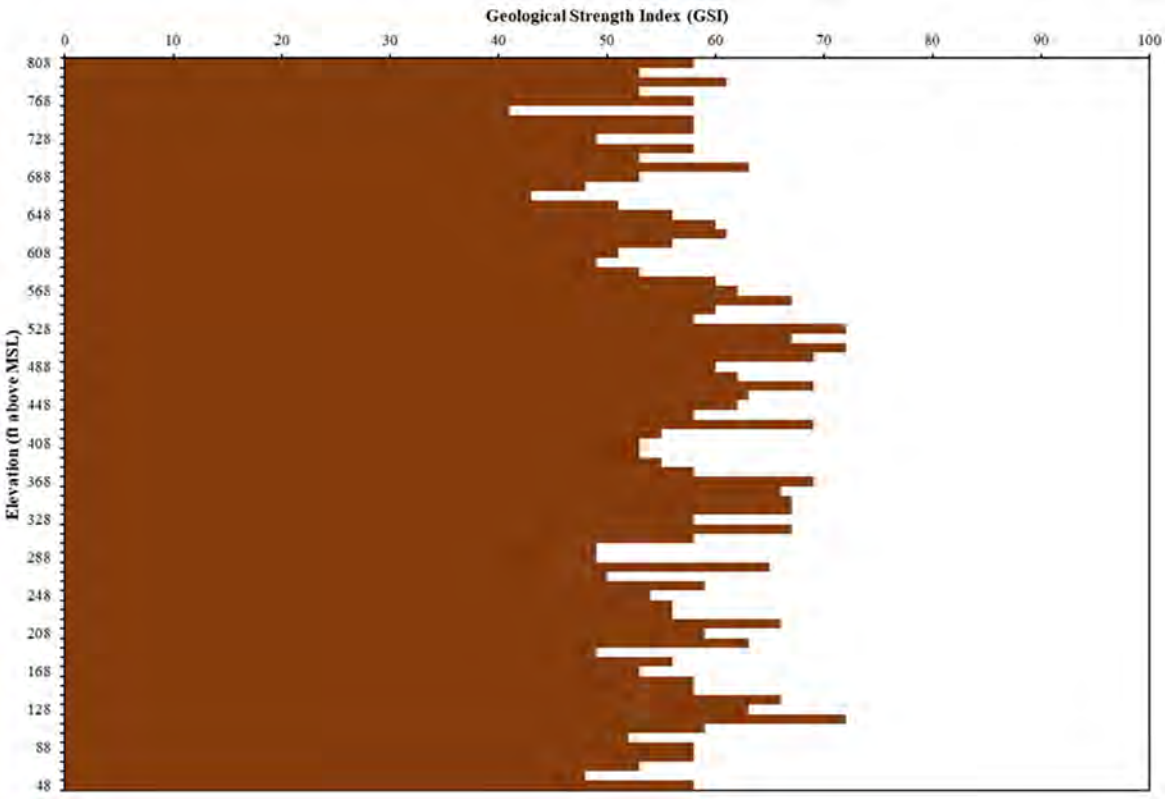

Figure 4-17. GSI Ratings for Core Hole ZEV-CH-01-23

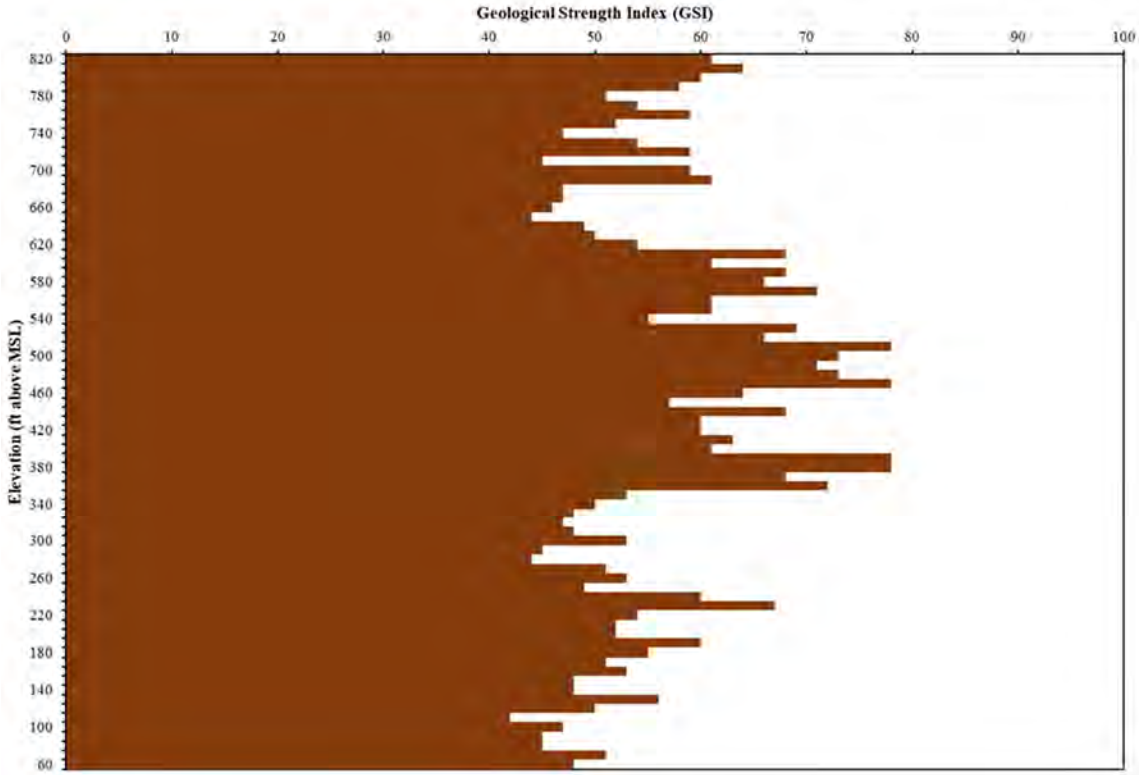

Figure 4-18. GSI Ratings for Core Hole ZEV-CH-02-23

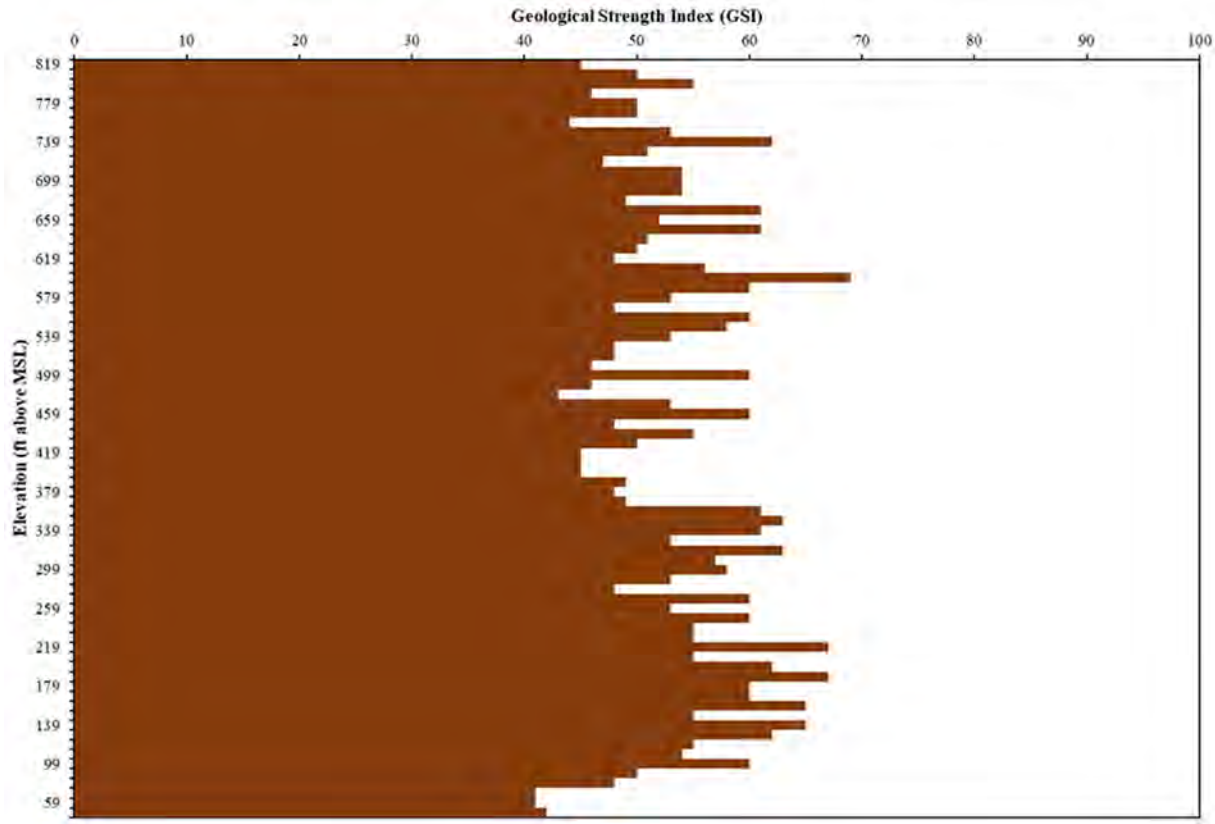

Figure 4-19. GSI Ratings for Core Hole ZEV-CH-03-23

4.5.2 Hoek-Brown Criterion

Hoek et al (2002) proposed a method for determining estimates of the strength of jointed rock masses based on the assessment of the interlocking of rock blocks and the condition of the surfaces between the blocks. For most rocks of good to reasonable quality, in which the rock mass strength is controlled by tightly interlocking angular rock pieces, the Hoek-Brown failure criterion is defined by the following equation:

$$\sigma_1' = \sigma_3' + \sigma_c \left(m_b \frac{\sigma_3}{\sigma_c} + s \right)^{0.5}$$

Where σ_1' = maximum effective principal stress
σ_s' = minimum effective principal stress
σ_c = UCS of intact rock
m_b = value of the constant m for the rock mass
s = constant which depends upon the characteristics of the rock mass

For poor quality rock masses, in which the tight interlocking has been partially destroyed by shearing or weathering, the modified Hoek-Brown failure criterion is defined by the following equation:

$$\sigma_1' = \sigma_3' + \sigma_c(m_b \frac{\sigma_3}{\sigma_c})^a$$

Where a = consent, which depends upon the characteristics of the rock mass

The relationships between m_b/m_i, s, and a and the GSI are as follows:

For GSI > 25 (Undisturbed rock masses)

$$m_b = m_i exp\left(\frac{GSI - 100}{28 - 14D}\right)$$

$$s = exp\left(\frac{GSI - 100}{9 - 3D}\right)$$

For GSI < 25 (Undisturbed rock masses)

$$a = 0.65 - \frac{GSI}{200}$$

Based on these relationships, four properties are required to use the Hoek-Brown criterion for estimating the strength and deformability of the rock mass. The four properties include the following:

- Uniaxial compressive strength of the intact rock, σ_{ci}
- Value of the Hoek-Brown constant m_i for the intact rock
- Value of the GSI for the rock mass
- Value of the disturbance factor, D

The uniaxial compressive strength of the intact rock as well as the GSI of the rock mass were previously discussed in the preceding sections, however the m_i term and the disturbance factor (D) are discussed below.

4.5.2.1 Definition of m_i

The *mi* parameter is considered constant for a specific rock type and does not change with anisotropy direction (Saroglou and Tsiambaos 2008, and Saeidi et al. 2014). Saroglou et al. suggests that for an anisotropic rock, it is best determined by a set of triaxial compressive strength tests at various confining pressures on core samples. This represents the "true" intact strength with effects of anisotropy being removed as the sample will not fail structurally and will fail through the intact rock.

The triaxial tests (σ_3 = 1,500 and 2,500 psi), uniaxial compressive strength tests, and average Brazilian tensile tests were used to define the Hoek-Brown strength envelope for the rock mass in the target cavern horizon (see Figure 4-20). The resulting m_i constant from a best fit line was determined to be 19.3. This result is consistent with the recommended range for coarse grained granites (20±5) based on published values of m_i provided by Hoek and Marinos (2000).

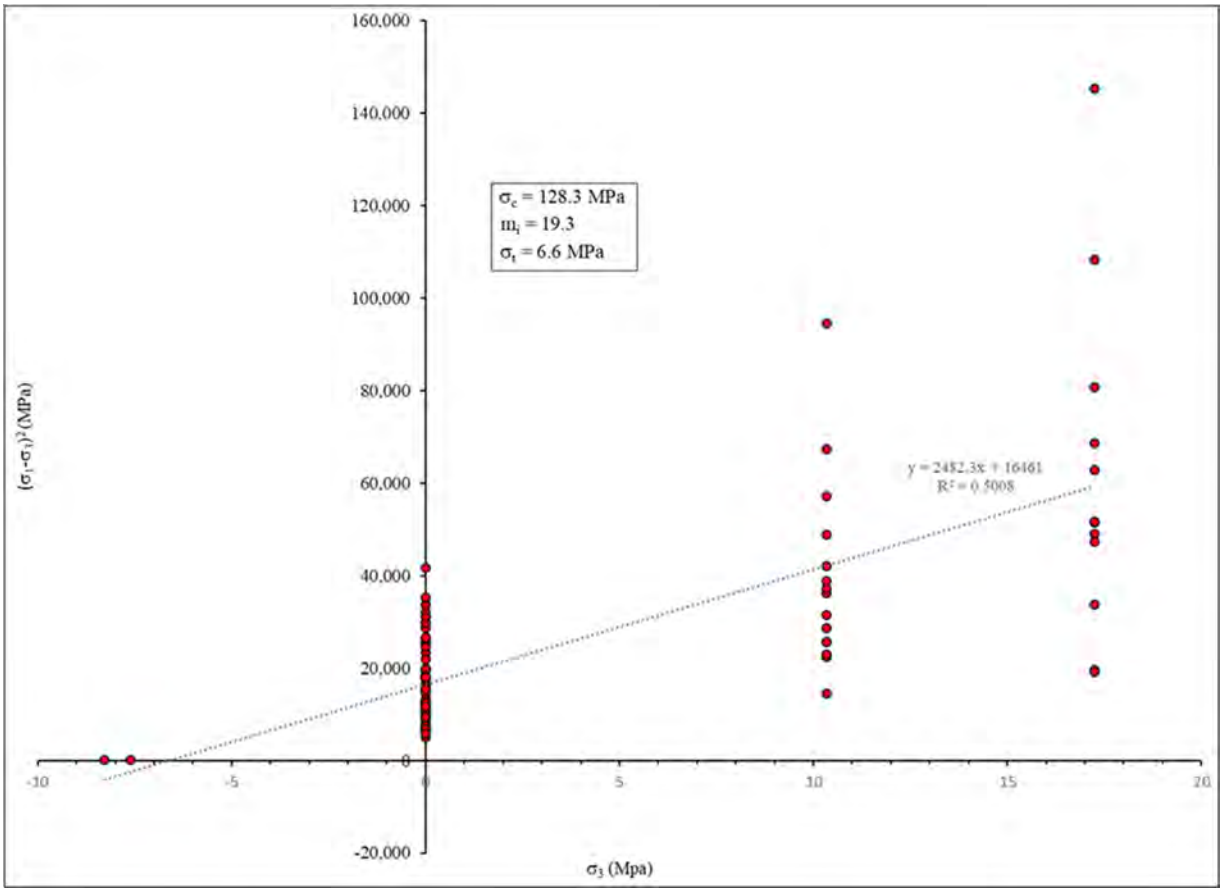

Figure 4-20. Linear Regression Analysis for the Input and Derivation of m_i Constant

4.5.2.1 Disturbance Factor (D)

The disturbance factor, *D*, is a factor which depends on the degree of disturbance to the rock due to blast damage and stress relaxation around the excavation. The disturbance factor varies from 0 for undisturbed rock masses to 1 for very disturbed rock masses. It is important to note that the disturbance factor should only be applied to blast damaged zones and not to the entire rock mass. Applying the blast damage to the entire rock mass is inappropriate and results in overly conservative results.

Guidelines for estimating disturbance factor are provided by Hoek et al (2002) and are shown in Figure 4-21. For the purpose of this assessment, a disturbance factor of 0 has been assumed, which represents excellent quality-controlled blasting that results in minimal disturbance to the confined rock mass surrounding the excavation.

Appearance of rock mass	Description of rock mass	Suggested value of D
	Excellent quality controlled blasting or excavation by Tunnel Boring Machine results in minimal disturbance to the confined rock mass surrounding a tunnel.	$D = 0$
	Mechanical or hand excavation in poor quality rock masses (no blasting) results in minimal disturbance to the surrounding rock mass. Where squeezing problems result in significant floor heave, disturbance can be severe unless a temporary invert, as shown in the photograph, is placed.	$D = 0$ $D = 0.5$ No invert
	Very poor quality blasting in a hard rock tunnel results in severe local damage, extending 2 or 3 m, in the surrounding rock mass.	$D = 0.8$
	Small scale blasting in civil engineering slopes results in modest rock mass damage, particularly if controlled blasting is used as shown on the left hand side of the photograph. However, stress relief results in some disturbance.	$D = 0.7$ Good blasting $D = 1.0$ Poor blasting
	Very large open pit mine slopes suffer significant disturbance due to heavy production blasting and also due to stress relief from overburden removal. In some softer rocks excavation can be carried out by ripping and dozing and the degree of damage to the slopes is less.	$D = 1.0$ Production blasting $D = 0.7$ Mechanical excavation

Figure 4-21. Guidelines for Estimating Disturbance Factor (*D*) (Hoek et al. 2002)

4.5.2.2 Summary of Hoek-Brown Parameters

The Hoek-Brown parameters for the rock mass anticipated in the target cavern horizon were determined using the following values:

- GSI Range: 48 to 72
- UCS of Intact Rock Range: 10,000 to 24,000 psi
- m_i Parameter: 19.3
- Disturbance Factor, D: 0

The resulting Hoek-Brown parameters are summarized in Table 4-4.

Table 4-4. Hoek-Brown Parameters

Hoek-Brown Parameter	Typical Range	Representative Value
m_b	3.013 - 7.100	4.463
s	0.003 - 0.045	0.011
a	0.5	0.5

4.5.3 Mohr-Coulomb Criterion

Many geotechnical software programs are written in terms of the Mohr-Coulomb failure criterion, so it is necessary to determine equivalent angles of friction and cohesive strengths for each rock mass and stress range. Mohr-Coulomb parameters for the rock mass can be determined by using the following equations (Hoek, Carranza-Torres and Corkum, 2002):

$$\varphi' = \sin^{-1}\left(\frac{6am_b(s + m_b\sigma'_{3n})^{a-1}}{2(1+a)(2+a) + 6am_b(s + m_b\sigma'_{3n})^{a-1}}\right)$$

$$c' = \frac{\sigma_{ci}[(1+2a)s + (1-a)m_b\sigma'_{3n}](s + m_b\sigma'_{3n})^{a-1}}{(1+a)(2+a)\sqrt{1 + \left(\frac{(6am_b(s + m_b\sigma'_{3n})^{a-1}}{((1+a)(2+a))}\right)}}$$

where $\sigma'_{3n} = \sigma'_{3max}/\sigma_{ci}$

The critical aspect of developing appropriate Mohr-Coulomb parameters is selecting the appropriate value of σ'_{3max} that is anticipated in the rock mass. Hoek-Brown suggests the following relationship for deep tunnels:

$$\frac{\sigma'_{3max}}{\sigma'_{cm}} = 0.47\left(\frac{\sigma'_{cm}}{\gamma H}\right)^{-0.94}$$

where σ'_{cm} is the rock mass strength determined by the Hoek-Brown failure criterion, γ is the unit weight of the rock mass and H is the depth of the tunnel below the surface.

For the target cavern horizons, this relationship results in a σ'_{3max} range of between 1,200 and 1,500 psi for the nominal rock mass strengths determined at a unit weight of 166 pcf. This stress is considerably lower than the major horizontal stress measured through the in-situ stress testing. Hoek and Brown (2002) state that where the horizontal stress is higher than the vertical stress, the horizontal stress value should be used in place of γH. On this basis, a range of stresses between 2,000 and 2,500 psi were assumed for determining Mohr-Coulomb parameters.

4.5.3.1 Intact Mohr-Coulomb Parameters

The intact Mohr-Coulomb Parameters were calculated for the assumed stress range for intact rock (i.e. GSI=100, $m_b = m_i$, $a = 0.5$, and $s = 1$). Table 4-5 provides a summary of the Mohr-Coulomb parameters for intact rock for the various stresses.

Table 4-5. Intact Mohr-Coulomb Properties for Various Stresses

Depth (ft)	s_{3max} (psi)	Range of Anticipated Values		Range of Anticipated Values	
		Cohesion, C' (psi)	Friction Angle, f' (°)	Cohesion, C' (psi)	Friction Angle, f' (°)
2,000	2,032	1,758 - 3,555	51.2 - 55.6	2,724	54.2
2,100	2,126	1,780 - 3,578	50.9 - 55.4	2,747	53.9
2,200	2,222	1,804 - 3,600	50.6 - 55..2	2,770	53.7
2,300	2,318	1,827 - 3,623	50.3 - 55.0	2,793	53.5
2,400	2,412	1,850 - 3,646	50.1 - 54.8	2,819	53.3
2,500	2,506	1,873 - 3,669	49.8 - 54.6	2,840	53.0

4.5.3.1 Rock Mass Mohr-Coulomb Parameters

The Mohr-Coulomb properties were calculated for the assumed stress range for the rock mass in the target cavern horizon. Table 4-6 provides a summary of the Mohr-Coulomb parameters for an isotropic rock mass (i.e. GSI = 48 to 72, UCS = 10,000 to 24,000 psi, $m_i = 19.3$, and D=0).

Table 4-6. Rock Mass Mohr-Coulomb Properties for Various Stresses

Depth (ft)	s_{3max} (psi)	Range of Anticipated Values		Range of Anticipated Values	
		Cohesion, C' (psi)	Friction Angle, f' (°)	Cohesion, C' (psi)	Friction Angle, f' (°)
2,000	2,032	518 - 1,115	38.5 - 51.6	741	46.0
2,100	2,126	535 - 1,142	38.1 - 51.2	764	45.6
2,200	2,222	552 -1,170	37.7 - 50.9	787	45.3
2,300	2,318	569 - 1,196	37.4 - 50.6	809	44.9
2,400	2,412	586 - 1,223	37.0 - 50.3	831	44.6
2,500	2,506	602 - 1,249	36.7 - 50.0	853	44.3

4.5.4 Rock Mass Elastic Modulus

The elastic modulus (E_{rm}) of the rock mass within the target cavern horizon was determined based on the following relationship (Hoek and Diederichs, 2006):

$$E_{rm} = E_i\left(0.02 + \frac{1 - \frac{D}{2}}{1 + e^{\left(\frac{(60+15D-GSI)}{11}\right)}}\right)$$

where E_i is the intact rock modulus, which was determined using the modulus ratio (MR) (ratio of elastic modulus and unconfined compressive strength) developed from UCS testing and the compressive strength of the rock using the following equation:

$$E_i = (MR)\sigma_{ci}$$

The average ratio of the laboratory testing results of the UCS and Young's modulus of the intact rock within the target cavern horizon was determined to be 515. This is consistent with published recommended guideline value ranges of between 300 and 550 for granite (Deere, 1968). The rock mass elastic modulus was then determined using the following values:

- GSI Range: 48 to 72
- UCS of Intact Rock Range: 10,000 to 24,000 psi
- Modulus Ratio (MR): 515
- Disturbance Factor, *D*: 0

The resulting rock mass modulus values are summarized in Table 4-7.

Table 4-7. Rock Mass Modulus

Rock Mass Modulus	Typical Range (psi)	Representative Value (psi)
E_m	1,071 - 6,610	2,675

4.5.5 Joint Stiffness

The normal and shear stiffness of the joints in the target cavern horizon can be estimated from the rock mass modulus, the intact rock modulus, and the mean joint spacing (Ingrad and Kraushaar, 1960). It is assumed that the deformability of the overall mass is due to both elastic deformation of the intact rock mass and joint deformation. The following equation simplifies the rock mass into a system of two springs in series:

$$\frac{1}{E_{rm}} = \frac{1}{E_i} + \frac{1}{k_n L}$$

where E_{rm} is the rock mass modulus, E_i is the intact rock modulus, k_n is the joint normal stiffness, and L is the mean joint spacing. It is assumed that there is only one joint set oriented normal to the applied loading.

The same methodology can be followed to estimate the shear stiffness of the joints using the following equation:

$$\frac{1}{G_m} = \frac{1}{G_i} + \frac{1}{k_s L}$$

where G is the shear modulus and k_s is the joint shear stiffness.

The following relationship is used to relate E to G:

$$E = 2(1 + \nu)G$$

Based on the Young's modulus determined for the intact rock within the target cavern horizon through laboratory testing, the Young's modulus of the rock mass determined through the rock mass characterization, and an assumed mean joint spacing ranging between 0.3 and 1.3 ft, the joint normal and shear stiffnesses were calculated. A summary of the joint normal and shear stiffness values are provided in Table 4-8.

Table 4-8. Summary of Joint Normal Stiffness and Joint Shear Stiffness

Parameter	Range of Anticpiated Values (psi/ft)	Representative Value (psi/ft)
k_n	9.88×10^6 - 3.95×10^7	2.32×10^7
k_s	3.95×10^6 - 1.58×10^7	9.30×10^6

4.5.6 Rock Mass Dilation

The rock mass dilation angle was not directly measured during laboratory testing, however, recommendations from Hoek (2001) can be used to estimate it. For average quality rock masses, the dilation angle can be estimated to be equal to the friction angle of the rock mass divided by eight. Based on the Mohr-Coulomb parameters determined above for various cavern depths, the rock mass dilation angle is estimated to range between 5.5 and 5.8 degrees.

5 CONCLUSIONS

Geological and geotechnical data were collected from three deep subsurface core holes at the Willow Rock site. The rock core was logged, and samples were selected for a full suite of geomechanical laboratory testing. Packer testing was carried out at key intervals to determine hydraulic conductivity, and each hole was surveyed with downhole geophysical tools. In one of the core holes, IST2D overcore testing was carried out to measure horizontal stress directions and magnitudes. This data was used to develop a preliminary geotechnical model for the proposed A-CAES cavern construction.

These geotechnical design parameters were developed and presented within this report to support the pre-FEED study for cavern construction. These values should be reevaluated as new information is collected from the ongoing core drilling program, and as additional information becomes available during project design.

Consistent with the information outlined in this report, it is Agapito's assessment that the geotechnical conditions anticipated in the target cavern horizon are conducive for cavern construction.

6 REFERENCES

Ask, M.V.S., Ask, D. and Christiansson, R. (2006) Detection of borehole breakouts at Forsmark site, Sweden. In-situ Rock Stress - Measurement, Interpretation and Application, Lu, Li, Kjøholt and Dhale (editors), Taylor & Francis, London, pp. 79–86.

Babcock, E.A. (1978) Measurement of subsurface fractures from dipmeter logs: AAPG Bulletin, 62(7), pp. 111–1126. Reprinted 1990 in Foster, N.H. and Beaumont, E.A. (editors) Formation evaluation II – log interpretation: AAPG Treatise of Petroleum Geology Reprint Series 17, pp. 457–472.

Barton, N., Lien, R., and Lunde, J. (1974). "Engineering classification of rock masses for the design of tunnel support". Rock Mech. 6. pp. 189-236.

Bieniawski, Z.T. (1976). "Rock mass classifications in rock engineering". *Proc. of Symposium on Exploration for Rock Engineering*, Belkema, Rotterdam, Vol. 1, pp 97-106.

Bieniawski, Z. T. (1989). Engineering Rock Mass Classifications. J.W. Wiley & Sons. New York.

Bell, J.S. and Gough, D.I. (1979) Northeast-southwest compressive stress in Alberta: Evidence from oil wells. Earth and Planetary Science Letters 45(2), pp. 475–482.

Deere D.U. 1968. Chapter 1: Geological considerations. In Rock Mechanics in Engineering Practice (eds. Stagg K.G. and Zienkiewicz, O.C.), 1-20. London: John Wiley and Sons.

Deere, D. U., and D. W. Deere (1988), "The Rock Quality Designation (RQD) Index in Practice," *Rock Classification Systems for Engineering Purposes, ASTM STP 984*, Louis Kirkaldie Ed., American Society for Testing and Materials, Philadelphia, 1988, pp. 91-101.

Dibblee, Jr., T. W. (1963), Geology of the Willow Springs and Rosamond Quadrangles, Geological Survey Bulletin 1089-C, Washington, DC: US Government Printing Office, 117 pp.

Dibblee, Jr., T. W. (1967), Areal Geology of the Western Mojave Desert, Plate 1 (West-Half), Geological Survey Professional Paper 522, Washington, DC: US Government Printing Office, 1 sheet.

Dowding, C. H. and A. Rozen (1978), "Damage to Rock Tunnels from Earthquake Shaking," *J. Geotech. Eng. Div.,* 104(GT2):175–191.

Fowler, MJ & Weir, FM 2008, 'The Use of Borehole Breakout for Geotechnical Investigation of an Open Pit Mine', in Y Potvin, J Carter, A Dyskin & R Jeffrey (eds), *SHIRMS 2008: Proceedings of the First Southern Hemisphere International Rock Mechanics Symposium*, Australian Centre for Geomechanics, Perth, pp. 541-550.

Gray, I. (2000), "The Measurement and Interpretation of Stress," *Bowen Basin Symposium on Seam Gas*, pp. 321–324.

Gray, I., Zhao, X., and Liu, L. (2018) Mechanical Properties of Coal Measure Rocks Containing Fluids at Pressure, Proceedings of the 18th Coal Operators' Conference, Mining Engineering, University of Wollongong, 195-204.

Hoek, E. (1994). "Strength of rock and rock masses". *ISRM News Journal*. 2 (2). Pp. 4-16.

Hoek, E., Carranza-Torres C., Corkum B. (2002), "Hoek-Brown criterion – 2002 Edition", Proc. NARMS-TAC Conference, Toronto, 2002, 1, 267-273.

Hoek, E. and Marinos, P. (2000) "Predicting Tunnel Squeezing". *Tunnels and Tunneling International*. Part 1 – November 2000, Part 2 – December 2000.

Hoek, E., Kaiser, P.K., and Bawden, W.F. (2000). Support of Underground Excavations in Hard Rock. A.A. Balkema. Rotterdam.

Hoek, E. (2001) "Rock mass properties for underground mines". *Underground Mining Methods: Engineering Fundamentals and International Case Studies*. (Edited by W. A. Hustrulid and R.L. Bullock), Littleton, Colorado: Society for Mining, Metallurgy, and Exploration (SME) 2001.

Hoek, E. and Diederichs, M.S. (2006). "Empirical estimation of rock mass modulus". *International Journal of Rock Mechanics and Mining Sciences*. 43. Pp. 2013-215.

Ingard, U and Kraushaar, W.L. (1960), *Introduction to Mechanics, Matter, and Waves.* Addison Wesley, London p76.

ISRM (2007), The Complete ISRM Suggested Methods for Rock Classification, Testing and Monitoring: 1974-2006 (eds R Ulusay & JA Hudson). ISRM Turkish National Group, Ankara, Turkey.

Jaramillo, C. A. (2017), "Impact of Seismic Design on Tunnels in Rock – Case Histories," *Underground Space,* Vol. 2, pp. 106–114.

Marinos. P., and Hoek, E. (2000) "GSI: A geologically friendly tool for rock mass strength estimation". *Proc. GeoEng 2000 Conference,* Melbourne. 1422-1442.

McGarr, A., M. D. Zoback, and T. C. Hanks (1982), "Implications of an Elastic Analysis of In Situ Stress Measurements near the San Andreas Fault," J. Geophys. Res., 87(B9):7797–7806.

Plumb, R.A. (1989) Fracture patterns associated with incipient borehole breakouts. Rock at Great Depth, V. Maury and D. Fourmaintaux (editors), 2, Balkema, Rotterdam, pp. 761–768.

Plumb, R.A. and Hickman, S.H. (1985) Stress-induced borehole elongation: A comparison between the four-arm dipmeter and the borehole televiewer in the Auburn Geothermal well. Journal of Geophysical Research 90(B7), pp. 5513–5522.

Quiñones-Rozo, C., (2010), Lugeon test interpretation, revisited, in: Collaborative Management of Integrated Watersheds, US Society of Dams, 30th Annual Conference, 2010, pp. 405–414.

Saeidi, O., Rasouli, V., Vaneghi, R.G., Gholami, R., and Torabi, S.R. (2014). "A modified failure criterion for transversely isotropic rocks". *Geoscience Frontiers.* 5. Pp. 215-225.

Saraglou, H. and Tsiambaos, G. (2008). "Modified Hoek-Brown failure criterion for anisotropic intact rock" *International Journal of Rock Mechanics and Mining Sciences*. 45. Pp. 223-234.

Sharma, S. and W. R. Judd (1991), "Underground Opening Damage from Earthquakes," *Engineering Geology,* Vol. 30, pp. 263-276.

Yeh and Associates, Inc (2023). Geotechnical Data Report. Zevsar Energy Storage Project Seirra Highway and Dawn Road, Kern County, California. Yeh Project No.: 223-202. November 17, 2023.

Zajac, B.J. and Stock, J.M. (1997) Using borehole breakouts to constrain the complete stress tensor: Results from the Sijan Deep Drilling Project and offshore Santa Maria Basin, California. Journal of Geophysical Research 102(B5), pp. 10083–10100.

Zoback, M.L. and Zoback, M.D. (1980) State of stress in the conterminous United States. Journal of Geophysical Research 85(B11), pp. 6113–6156.

Zoback, M.D., Moos, D., Mastin, L. and Anderson, R.N. (1985) Well bore breakouts and in situ stress. Journal of Geophysical Research 90, pp. 5523–5530

APPENDIX A

GEOTECHNICAL LOGS

Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

ZEV-CH-01-23

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
2555	5											
2550	10											
2545	15											
2540	20											
2535	25											
2530	30											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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2520	40											
2515	45											
2510	50											
2505	55											
2500	60											
2495	65											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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	71	QTZ MONZONITE, medium - coarse grained, white to light gray, phaneritic, biotite/muscovite phenocyrsts and large K-spar crystals										
		From 74' to 82': Large biotite crystals							C	100	80	
2485	75							77.85': 3°-5° Planar				
2480	80							From 81' to 82': Planar irregular				
		From 82' to 86': Chlorite						From 83.67' to 84.62': 30°-42° Angled-slickensides	C	100	68	
2475	85							85.24': 45°				
		From 86' to 96': Breaking down into clays						89': 80°-82° Rev. fracture				
2470	90							89.9': Planar				
								91.45': Planar				
								92': Planar				
								93.15': Planar	C	85	64	
								94.45': 10° Planar				
2465	95											
		From 96' to 101': Chalky										
	97	CORE LOSS										
	98.5											
2460	100							99.85': 45° Joint fracture, J.				
								From 100' to 101': 38° Joint fracture, J.				
								102': J. at 40°				
								102.67': J. at 22°	C	100	82	
								103.67': J. at 17°				

BORING TYPE: HQ3
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SAMPLING & IN SITU TESTING LEGEND

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

(Continued Next Page)

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								105.67': 2 J. at 61°				
								107.1': S. vertical at 79° (slickenside)				
								109': S. at 32°				
	110							109.55': S. at 16°				
2450		From 111' to 116': Chlorite/biotite conversion										
								112': S. at 82°, chlorite/biotite	C	100	86.5	
	115											
2445												
								117': 16° Planar				
	120											
2440								120.4': Planar				
								123.1': Planar	C	100	90	
								124': Planar				
	125											
2435												
	130											
2430												
		From 133' to 140': Feldspar breakdown, increased percentage of qtz feldspar, intrusive pegmatites							C	100	90	
	135											
2425								From 137.25' to 153.25': Planar				

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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		From 140' to 207': Biotite/chlorite										
									C	100	95	
2415	145											
2410	150											
									C	100	86	
2405	155											
2400	160											
								From 163' to 164': Multiple planar fractures 32°-41°	C	100	86	
2395	165											
2390	170							171.25': Planar 172': Planar irregular	C	100	86	

BORING TYPE: HQ3
DRILLER: Crux
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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	180							175.85': Planar 176.45': Planar irregular From 176.85' to 181': Fracture				
2380									C	100	71	
	185											
2375												
2370	190											
	191	CORE LOSS										
	192								C	90	87	
	195											
2365												
								From 199' to 200': S.				
2360	200							From 201' to 201.25': 13° Planar From 202' to 204': 6 Planar breaks	C	100	76	
	205											
2355												
		From 207' to 211': Biotite/chlorite						From 207' to 211': Slickensides along biotite/chlorite contacts and fractures 208': Slickenside 81° fracture	C	100	69	

BORING TYPE: HQ3
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 209' to 210': 86° fracture NW-SE chlorite/biotite slickenside 210': Planar 211': 22° Planar 212.33': 17° Planar 212.9': Planar 214': Planar From 215' to 221': Slickensides along biotite/chlorite 215.82': 45° Slickenside From 216' to 217': 4 Planar fractures From 217' to 218': 59° Slickenside From 219.25' to 219.5': Wedge rev angle 18°-31° 220.8': 42° Planar 221.33': Planar	C	100	81	
2345	215	From 215' to 221': Biotite/chlorite										
2340	220											
	222	From 222' to 252': Large K felspar crystals, biotite/chlorite QTZ MONZONITE, coarse grained, white to light gray, phaneritic - porphyritic, quartz-felspar-biotite with large crystallizations of K-spar + biotite mica and trace amounts of hornblende and chlorite										
2335	225											
2330	230								C	100	86	
2325	235											
2320	240							From 238.1' to 240': 4 Planar irregular 244': 18° Planar	C	100	80	

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CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

(Continued Next Page)

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								245': Planar				
								248.1': Planar 249': Planar 249.62': Planar 250.9': 41° NW-SE	C	100	84	
2310	250	From 252' to 267': Biotite/chlorite present						From 252' to 267': Fracture jointing				
2305	255							255.9': 42° Planar From 256' to 257': 4 J. at 24°-30°				
2300	260							258.7': Planar 258.8': Angled biotite/chlorite bands 11°-30° - shear/slip 259': 32° band 260': Planar 261.3': Planar 262.8': 11° From 263' to 264': 3 Planar fractures	C	100	87	
2295	265	From 267' to 270': Increase in chlorite						From 267' to 270': 2 J., 17° planar				
2290	270							270': Shear/slip J. 11°-32° 273': 3 J.	C	100	70	
2285	275	From 277' to 280': Increase in plagioclase felspar						From 278' to 281': 12 Planar-J. fractures	C	50	52	

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 282' to 297': Increased fractured run fractured/crumbled heavily				
	284	CORE LOSS										
2275	285											
	289								C	75	31	
2270	290											
	294.4	CORE LOSS										
2265	295 295											
	298	QTZ MONZONITE, medium grained, white to light gray, porphyritic, increase in quartz and plagioclase content						299': 53° NW-SE	C	100	87	
2260	300											
		From 302' to 303': Increase in plagiocase crystals						From 302' to 303': Fractured/crumbled				
								304.5': Planar				
2255	305							305.62': 59° Planar				
								From 306' to 307': 3 Planar fractures				
								From 308.62' to 309': S. fracture 39°	C	100	90	
2250	310											
								314': Planar irregular				

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
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								From 314.6' to 315': Reverse angle J. at 12°, 10°, 9°, 21° 315.9': 41° Planar 317.6': 33° Planar From 318' to 318.25': 14° Planar	C	100	89	
2240	320							From 322' to 323': Rev. E-W 9°-15° (2) 323.9': Planar 324.88': 9° Planar				
2235	325							326': 13° Planar				
	327	From 327' to 361': More granite, increased percentage of oligiclase and quartz/qtz monzonite QTZ MONZONITE, white to light gray, phaneritic to porphyritic, increased percentage of K feldspar and plagioclase feldspar, sections of oligclase K feldspar and granite, trace amounts of hornblende chlorite and muscovite						328.1': Planar irregular 328.9': Planar 329.7': 17° Planar 330': Planar 330.95': Planar 333': 16° Planar 333.6': 27° Planar	C	100	90	
2230	330											
2225	335							336': 21° Planar, same orientation				
2220	340							338': Wedge - planar S. at 67° From 340' to 341.1': Planar 344.2': Planar From 345.45' to 346.4': 3 J. 27°-33°	C	100	86	
2215	345							347.6': 38° Planar	C	100	89	

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								350': 29° Planar				
								351': 42° J. (2)				
								352.3': 44° Planar				
	355							354.6': 40° Planar				
2205								355.4': Planar				
								From 356' to 357': 3 J. on K felspar contact at 27°-35°				
								359': Planar	C	100	92	
	360											
2200		From 361' to 391': Increase in plagioclase feldspar, crystals of feldspar and diorite										
								From 363' to 363.6': Planar irregular				
	365											
2195								365': 40° Planar				
								366': 27° Planar				
								367.42': 44° Planar				
	370							From 370' to 372': Multiple fractures (6)	C	100	82	
2190												
								From 373' to 373.9': Planar				
	375							374.7': 17° at K felspar				
2185								376': Planar				
								From 377' to 381': 18 J. fractures at 25° planar				
	380								C	100	76	
2180												
								383.9': 42° Planar				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								385': Wedge rev angle 38°-42° 386': 49° Planar From 387' to 397': Brocken fractured, decomposed weathered, 20-30 fractures				
2170	390								C	100	56	
2165	395											
2160	400							398.9': Planar 401.8': Planar From 402' to 417': Increased weatherd decomposed (at 404.5)	C	95	80	
2155	405											
2150	410								C	100	73	
2145	415											
	417	CORE LOSS										
	418							From 418' to 432': Weathered decomposed softened	C	90	67	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
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CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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PROJECT: Hydrostor Zevsar
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	425											
2135												
	430								C	100	49	
2130												
	432	QTZ MONZONITE, light gray to white, phaneritic, increase in plagioclase feldspar, porphyritic biotite crystals, quartz feldspar, biotite, muscovite with trace amounts of chlorite and epidote						From 432' to 434.9': Multiple fractures and orientations, crumbled				
	435							435.4': 47° Planar 435.7': 90° S.				
2125								From 437' to 442': Fragmented 45°-23°-17° planar irregular, 21 total breaks in this 5' span				
	440								C	100	31	
2120												
	445							444.62': Planar irregular along K feldspar contacts 444.9': 17° Planar From 445.1' to 445.67': 2 47° J., 2 45° J, 45° wedge, 32° wedge 446': 31° Planar				
2115												
	450							446.6': 18° Planar From 449' to 449.72': Vertical S. at 90° 450': 48° Planar From 451.1' to 452': Vertical S. at 90° and multiple perpendicular fractures	C	100	67	
2110												

BORING TYPE: HQ3
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 452' to 454.7': Multiple fractures (11) From 456' to 458': Crumbled 458.7': 42° Irregular 459.7': 48° Irregular 461': 11° Irregular	C	100	61	
2100	460											
	462	QTZ MONZONITE, light gray-white-green										
2095	465											
2090	470								C	100	22	
2085	475											
2080	480								C	100	50	
2075	485											
									C	100	61	

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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	492	QTZ MONZONITE, white to light gray, phaneritic, with biotite hornblende porphyry, trace amounts of chlorite and epidote, mineral concentrations medium-high in qtz, plagioclase feldspar, biotite and oligiclase						From 492' to 493': Fragmented 494': 16° Planar 494.71': Planar irregular From 496' to 496.5': Fragmented From 496.5' to 497': Slight alter 498.9': S. at 90° (3") 500': Irregular fracture vertical to S. From 500.5' to 501.5': 45° Wedge, 45° NE-SW - 51°NW-SE 501.67': J. at 38° 502.9': Planar 504.1': Planar irregular From 505' to 506': Fragmented K feldspar 506': Planar	C	100	83	
2065	495											
2060	500											
2055	505											
2050	510							509.9': Small vertical wedge at 92° From 510' to 522': Fractured	C	100	70	
2045	515											
2040	520								C	95	41	
	522	QTZ MONZONITE, light gray to white, massive phaneritic, with biotite mica porphyry, trace amounts of hornblende + muscovite mica and pyroxene						From 522' to 523': Rubble				
	524	CORE LOSS										
	524.7							524': 71° Rough				

BORING TYPE: HQ3
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								undulating surface J. fracture From 525' to 526': J. rubble				
2030	530	From 532' to 534': Plagioclase feldspar present						From 529' to 530': Increased veining From 531' to 531.6': Rubble, at J. (altered - soft) From 532' to 534': Large 25" vein, intrusive plagioclase feldspar infill From 533.6' to 534': 48° Undulating J. S. fracture, slickenside	C	100	32	
2025	535											
	536	From 536' to 537': Moving towards granite, increase in K feldspar GRANITE/GRANODIORITE, pink to light gray, phaneritic, increase in K feldspar, trace amounts of hornblende + muscovite and chlorite						From 536' to 537': Rubble From 537' to 539': 6 planar fractures				
	539	QTZ MONZONITE, light gray to white, phaneritic, increase in plagioclase and biotite/hornblende, Plagioclase-orthoclase feldspar, quatz and biotite, with trace amounts of muscovite + hornblende + pyroxene 'alteration' (chlorite/epidote)							C	94	67	
2020	540							540.6': 47° smooth microfractures healed 541': 30° smooth 541.3': J. at 41° 542.9': 29° Undulating - smooth				
	544.1	From 544' to 560.5': Biotite/chlorite present										
	544.7	CORE LOSS						543.67': Rough S. at 68° From 544' to 560.5': Moderate veining, biotite/chlorite infill strongly detected From 547' to 557': Planar undulating - rough - smooth				
2015	545											
2010	550								C	100	51	
2005	555											
								From 557' to 558': 4 Planar fractures				
								From 560.5' to 568.5':	C	90	79	

BORING TYPE: HQ3
DRILLER: Crux
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HOLE DEPTH (ft): 3167
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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		From 560.5' to 568.5': Biotite, chlorite, feldspar						Mild microdefects, crumbled to start, veining infill with biotite, chlorite, and feldspar				
	562	CORE LOSS						From 561.5' to 562': Rubble nat J.				
	563							563.25': 38° J. rough/stepped				
1995	565							564': Planar stepped/rough - grading into 45° stepped/smooth				
								564.7': Planar/smooth				
								From 566' to 567': Rubble, 3" 45° S. J. wedge				
								567.25': Planar	C	100	46	
1990	570							567.81': 38° smooth				
								From 568' to 568.5': Rubble/multiple fractures				
								From 568.5' to 569': Extremely veined (biotite, minor defects)				
								570': 79° S. fracture, 7" smooth/planar chlorite surface				
1985	575							571.2': Rubble IRS R3-R4				
								From 572' to 573': 4 Planar smooth				
								From 573' to 597': Extreme to moderate veining with biotite/chlorite infill	C	100	89	
1980	580							574': 38° Undulating smooth				
								From 575' to 576.4': Harding healed fracturing radiating				
								From 576.4' to 577': Extreme veining and microfractures all headed with biotite and chlorite				
1975	585							578.75': Planar smooth				
								580.25': Planar smooth				
								581.33': 32° Undulating rough				
								583': 27° Planar smooth	C	100	91	
1970	590							584': 91° Undulating rough				
								585': 46°-51° J. fractures undulating smooth biotite/chlorite				
								586.71': 45° Undulating rough				
								588.1': 22° Planar				

BORING TYPE: HQ3
DRILLER: Crux
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								smooth From 590' to 592': Decomposed soft-medium From 593' to 593.9': Undulating 74° rough/smooth chlorite/biotite infill 594.75': 22° J. NE-SW, 29° J. NW-SE 595.33': Soft, brittle 596': Planar irregular, rough 598.67': Planar smooth 604': S. at 88° rough/stepped shear fracture	C	100	82	
1960	600	From 601' to 603': Soft-medium chlorite present										
1955	605	From 605.3' to 606.3': Pegmatite/Qtz feldspar										
1950	610							613': 80° S. fracture undulating/smooth 614.4': Undulating/smooth From 615' to 620.5': Brittle, low to moderate defects	C	100	93	
1945	615											
1940	620							624.25': 45° planar smooth 625.25': 32° planar smooth From 627' to 629': 45° inundated, smooth, J. fractures (6)	C	100	87	
1935	625											
	627	QTZ MONZONITE, light gray to white, phaneritic, with biotite/hornblende prophyry, trace amounts of muscovite + chlorite + epidote + pyroxene							C	100	91	

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	635							From 631.25' to 632': Rough-stepped wedge, slickenside at 631.67' 632.4': 17° stepped smooth 633': 45° planar smooth From 633.4' to 634.1': Vertical 82° shear with slickenside (stepped) From 634' to 635.5': inundated smooth, then inundated S. 88°-90° fracture 637.1': Planar 638.3': Planar 640': Planar 641': 45° planar smooth From 642' to 647': 20°-45° Planar inundated fracture, 12 J.	C	100	50	
	640											
	645							647.25': Planar 647.9': Planar From 651' to 651.8': S. at 80°, planar smooth fracture From 653.2' to 655': 4 J.	C	100	81	
	650											
	655							655.7': Planar chlorite veins From 656' to 656.2': Rubble/K fedslpar intrusion From 658' to 658.75': 82° Vertical S. undulating smooth 659': Planar 661': Planar	C	100	52	
	660											

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								665': Planar From 665.25' to 668.5': Rubble J. fractures				
									C	100	64	
1890	670							671': Planar 672.25': Planar 0° smooth 672.6': Planar 0° smooth 673.1': Planar 0° smooth				
1885	675							675.82': Planar 0° From 677' to 680.25': 12 Planar 0°, 2 Planar-smooth 42°, altered From 678' to 687': Minor to moderate veining	C	100	40	
1880	680											
1875	685							From 685.38' to 687': Vertical S. inundated smooth with 40°-45° J. fractures (4)				
								687.9': Planar 688.6': Planar	C	100	72	
1870	690							From 690.2' to 690.9': Stepped S. rough 691': S. at 77° smooth/planar 693.25': Planar				
1865	695							695.7': Planar From 697' to 700': 3 Planar 0°, defected, minor veining				
									C	100	84	

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								From 701' to 702': (4) 42°-45° Jointed planar smooth fractures				
1855	705											
								708': 38° Planar 709': 45° Planar - rough	C	100	96	
1850	710											
								711': Planar 0° From 711.1' to 712': Vertical S. at 90°, stepped, rough, moderate veining 713': 67° Slickenside smooth biotite/chlorite 714.67': 38° planar smooth				
1845	715											
								719': Planar From 719.3' to 720': Vertical S. at 87°-90° along veining - biotite/chlorite infill, planar smooth 720.5': Planar 721.67': 40° planar smooth	C	100	100	
1840	720											
1835	725											
								728': Planar 0° 730': 37° planar smooth slickenside	C	100	70	
1830	730											
		From 732' to 747': Chlorite/epidote present						731.7': Planar 1° From 732' to 747': Rubble defected, decayed, moderate to extreme veining				

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LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
1820	740								C	100	10	
1815	745	From 747' to 762': Chlorite present						From 746.4' to 747': 67° S. planar smooth fracture				
1810	750							749.48': Planar smooth 751': 45° inundated smooth, chlorite From 753' to 753.9': Planar irregular	C	100	53	
1805	755							From 755' to 756': Decomposed				
1800	760							758': Planar rough 0° 760': Planar irregular From 762' to 767': 40°-56°-82° S. jointed fractures offset, 14 fractures	C	100	58	
1795	765							From 767' to 777': 2 Planar, rubble to 775', minor to moderate veining				
								769.2': Mod. Altered fracture	C	100	50	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
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CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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DIP/AZIMUTH: -90 /

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								771.3': S. at 90°				
1785	775											
	777	QTZ MONZONITE, light gray to white, massive phaneritic										
1780	780								C	100	80	
1775	785											
1770	790								C	100	19	
1765	795							From 797' to 801': Extensive fractures and defects				
1760	800								C	100	12	
								From 803' to 804': Extensive fractures and defects				

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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									C	100	85	
1750	810											
1745	815							From 815' to 817': Extensive fractures and defects				
									C	100	56	
1740	820											
								From 823' to 824': Major veining				
1735	825											
									C	95	46	
1730	830							832': 38 inundated smooth				
1725	835							From 835' to 836': 3 planar smooth				
	836.5	CORE LOSS						From 837' to 840.33': Vertical S. fracture at 79°-90°, fresh, inundated, stepped, rough	C	70	12	

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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	840							From 842' to 847': Rubble, multiple J. fractures, joints - planar smooth				
1715	845							From 847' to 848.75': 69° inundated smooth				
1710	850							850.33': Planar irregular 851.25': S. at 90°	C	100	46	
	852	QTZ MONZONITE, light gray to white, massive phaneritic, with biotite porphyry phenocrysts, trace muscovite, pyroxene, chlorite, epidote, hornblende						From 852' to 853': 4 Planar smooth at 0°				
1705	855							From 855' to 855.6': (4) 38°-42° J. fractures, moderate veining along fracture lines, biotite infill 856.2': Planar smooth 856.4': Planar smooth From 857' to 858.25': Rubble				
1700	860							860.72': 52° Planar smooth 863.4': 22° Irregular inundated smooth perpendicular	C	100	76	
1695	865							From 867' to 868': 42° Rev angle, 12° wedge, planar smooth From 869' to 870': 90° S. fracture (stepped, inundated)	C	100	71	
1690	870							872.75': 32° rough, fresh 873': 12° rough, fresh 873.75': 39° smooth				

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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								planar 874': Planar 0°-1° smooth, chlorite From 875' to 877': 14° Planar smooth From 878' to 879': 86° S. fracture, partial slickenside, inundated smooth 879.67': 45° J. fracture, planar smooth 880.65': 45° J. fracture, planar smooth From 881.5' to 882': Rubble, vertical S. From 882' to 883': Vertical S. at 86°, 6" long, planar smooth 883': 0° Planar smooth	C	100	57	
1680	880											
1675	885											
								From 884' to 886.25': 79° inundated - smooth/moderate From 887' to 889': 90° Planar rough, fresh 890': 45°-60° inundated smooth From 892' to 894': Vertical S. and J., smooth planar 895': 49° Planar smooth	C	100	41	
1670	890											
1665	895											
								897': 67° inundated smooth 898': Planar smooth 899': 31° Planar smooth 899.9': 48° inundated smooth 901.45': 45° Slickenside biotite/chlorite From 902' to 905': (5) 32°-48° J. fractures, planar smooth 906.1': 31° Planar smooth	C	100	81	
1660	900											
1655	905											
								908.67': 22° inundated smooth	C	100	83	

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
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								910.1': Planar From 911' to 912': Rubble				
1645	915							From 915' to 920': J. fractures, inundated/smooth rubble, increased fractures, moderate veining				
		From 919' to 927': Increased biotite/chlorite						From 919' to 927': Moderate to mild veining	C	100	27	
1640	920 920	QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite porphyry crystals, trace pyroxene, hornblende, muscovite										
1635	925											
								From 929' to 942': Fracturing along biotite/chlorite veins, moderate veining	C	100	67	
1630	930											
1625	935											
1620	940								C	100	24	
								From 942' to 957': Moderate to severe veining				

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C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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									C	100	75	
1610	950											
1605	955											
	957	QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite and hornblende porphyry phenocrysts, trace muscovite, pyroxene, and chlorite						958': 22° Planar smooth	C	100	69	
1600	960							959.9': 3° inundated rough				
								From 961' to 962': Vertical S. at 87°-90°, inundated rough				
								963.1': inundated smooth				
								964': 45° Slickenside biotite				
1595	965							From 964.4' to 965': inundated smooth				
								From 966' to 969': Rubble	C	100	21	
1590	970							From 970' to 972': J. at 45°, planar smooth				
								973.4': 22° inundated smooth				
1585	975							From 975.4' to 976': Wedge with 41° Rev and 47° Rev angles				
								From 977' to 979': Rubble	C	100	55	

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								From 981' to 982': Jointed planar smooth 45° fractures, rough				
								983': Rough irregular, stepped 32°				
								From 984' to 986': Rubble				
1575	985											
								From 987.5' to 989.5': 5 Planar smooth 0°-4°				
1570	990								C	100	72	
								991': Planar smooth				
								From 992' to 992.75': 45° wedge				
1565	995							From 995' to 997': S. stepped				
								From 996' to 997': 2 Planar smooth				
								998': 13° Planar smooth				
1560	1000							999.6': 38° Planar smooth	C	100	72	
								1000.9': Planar smooth				
								From 1003' to 1005': Rubble decomposed, extreme veining				
1555	1005							From 1005' to 1007': 4 Planar smooth 0°-3°				
								1008': 45° Planar smooth				
1550	1010							1009.9': 48° Planar smooth	C	100	71	
								1011.38': 41° Planar smooth				
								From 1013' to 1014': 3 Planar smooth, moderate veining				
	1014	QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite and						From 1014' to 1032':				

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		hornblende porphyry phenocrysts, trace muscovite, pyroxene, and chlorite						Highly fractured, all rubble				
1540	1020								C	100	31	
1535	1025											
1530	1030								C	100	17	
								From 1032' to 1042.5': Rubble, J. fractures at 45°-90° throughout				
1525	1035											
1520	1040								C	100	19	
1515	1045											
	1047	QTZ MONZONITE, fine grained, light green to gray, aphanitic						From 1047' to 1058': Decomposed	C	100	0	

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1505	1055											
	1058	QTZ MONZONITE, white to light gray, phaneritic, massive, with biotite and hornblende porphyry phenocrysts, trace muscovite, pyroxene, chlorite							C	100	94	
1500	1060							1063': Planar smooth 1064.1': 21° Planar smooth 1064.72': Planar smooth 1066.1': 17° Slickenside smooth				
1495	1065											
1490	1070							1068.9': 42° inundated rough From 1069' to 1074': S. fracture at 90°, inundated rough	C	100	41	
		From 1074' to 1076': Presense of chlorite						From 1074' to 1077': Rubble, J. fractures 38°-0°, planar smooth				
1485	1075											
	1078	QTZ MONZONITE, light gray to greenish gray, phaneritic to aphanitic, massive, with an incrase in chlorite and biotite, trace muscovite						1077.67': 42° Planar smooth From 1079' to 1082': Major veining	C	100	80	
1480	1080							From 1082' to 1085': Minor to extreme veining				

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								From 1085' to 1087': Rubble, major veining				
								From 1087' to 1090': 42° smooth, crumbled	C	100	42	
1470	1090							From 1090' to 1092': Rubble, minor veining				
	1092	QTZ MONZONITE, white to light gray, phaneritic, massive, biotite porphyry with monzonite, trace muscovite, hornblended, pyroxene, and chlorite						1092.4': 45° inundated rough 1093': inundated smooth From 1094' to 1096': Rubble J. fractures				
1465	1095											
1460	1100							1100': 39° Planar smooth, moderate veining 1101': 41° Planar smooth 1102.2': 39° Slickenside smooth 1104': Planar smooth 1105': 47° inundated smooth	C	100	95	
1455	1105							From 1107' to 1108.2': S. fracture at 79°, planar smooth				
		From 1109' to 1120': Intrusive pegmatite						1108.7': 39° Planar smooth, healed fracturing along pegmatite contact From 1109' to 1111': S. healed fracture	C	100	87	
1450	1110							1113': 48° inundated smooth, inside pegmatite 1114': 78° inundated smooth 1114.9': 49° inundated smooth				
1445	1115							From 1115' to 1117': Hairline fracture, healed 90° vertical fracture, biotite/hornblende From 1117' to 1122': Rubble J. fractures	C	100	41	

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LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
		From 1120' to 1122': Increase in chlorite										
1435	1125							1124.67': 51° inundated rough, chlorite From 1125' to 1127': inundated rough jointed fracture, rubble				
1430	1130							1129': 27° Slickenside From 1130' to 1132': Rubble	C	95	50	
	1132 1132.5	CORE LOSS										
1425	1135							1134': 29°NW-SE 42°NE-SW wedge, planar smooth From 1135' to 1139': Jointed rubble				
1420	1140							From 1140' to 1142': (4) 22° J. fractured, smooth	C	100	64	
1415	1145							1143.9': 59° inundated smooth 1145': 27° Rough/stepped From 1146' to 1146.5': 39° Planar smooth, extreme veining 1146.4': 0° Planar smooth				
1410	1150							From 1150' to 1152': Vertical 90° fracture, multiple J.	C	100	71	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								1155': 22° vertical, 4"				
1400	1160							From 1159' to 1161': S. fracture, inundated smooth	C	100	61	
								From 1163.5' to 1164': S. at 90° planar smooth				
1395	1165							From 1165' to 1167': Vertical S. at 90° planar smooth				
	1167	QTZ MONZONITE, white to light gray, phaneritic, massive						From 1167' to 1227': Highly fractured, vertical to 45° J. fractures throughout, hydrothermal activity				
1390	1170								C	100	20	
1385	1175											
1380	1180								C	100	28	
1375	1185											
									C	100	17	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
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CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
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1365	1195											
1360	1200								C	100	12	
1355	1205											
1350	1210								C	100	31	
1345	1215											
1340	1220								C	100	70	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
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SAMPLING & IN SITU TESTING LEGEND

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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	1227	QTZ MONZONITE, white to light gray, phaneritic, massive, with biotite porphyry, trace muscovite, hornblende, chlorite, and pyroxene										
1330	1230							From 1229.4' to 1230.6': Defected	C	100	55	
								1231.9': 6° Planar smooth From 1232' to 1235': 48°-61° J. fracture inundated smooth				
1325	1235											
								1237.4': 0° Planar smooth From 1238' to 1239': (2) 52° J. fractures, planar smooth	C	100	57	
1320	1240											
								From 1242.6' to 1243': 61° Planar smooth				
1315	1245							From 1245.75' to 1245.99': Wedge, rev angle fracture, slickenside, smooth				
								1246.2': Planar smooth From 1247.6' to 1248': S. at 87° inundated smooth	C	100	31	
1310	1250							From 1248' to 1250': Minor veining From 1250' to 1252': Minor veining				
1305	1255							From 1256' to 1257': S. at 79° planar smooth				
								1258.71': Wedge, biotite/slickenside	C	100	87	

BORING TYPE: HQ3
DRILLER: Crux
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HOLE DEPTH (ft): 3167
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CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								1259.81': Planar smooth				
								1261.2': Planar smooth				
								1262.2': Planar smooth				
								From 1262.4' to 1263': J. wedge rev angle fracture				
1295	1265							1266.1': 38° Planar smooth				
								From 1267.4' to 1268': Planar smooth, decomposed, minor veining				
1290	1270							From 1269.4' to 1270': Jointed 45°-37° fracture inundated smooth	C	100	77	
1285	1275							1275.9': 71° Planar smooth				
1280	1280							1279.8': Planar smooth	C	100	78	
								1280.9': inundated smooth				
								From 1282' to 1283': Decomposed, minor veining				
1275	1285											
	1287	QTZ MONZONITE, light gray to green, aphanitic, massive, with high concentrations of qtz feldspar						From 1287' to 1317': Minor to moderate veining				
1270	1290								C	100	59	

BORING TYPE: HQ3
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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									C	100	72	
1260	1300											
1255	1305											
									C	100	54	
1250	1310											
		From 1312' to 1317': K feldspar										
1245	1315											
	1317	QTZ MONZONITE, light gray to white/pink, phaneritic, massive						From 1317' to 1327': Fractured rubble throughout most of sequence	C	100	32	
1240	1320											
1235	1325											
	1327	GRANITE, red to pink						From 1327' to 1332': Soil like	C	100	12	

BORING TYPE: HQ3
DRILLER: Crux
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HOLE DEPTH (ft): 3167
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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ENGINEERS & GEOLOGISTS

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	1332	GRANITE, light gray to white with pink, massive, infused with qtz feldspar pegmatites and K feldspar, trace muscovite, hornblende, and pyroxene						From 1332' to 1347': Highly fractured				
1225	1335											
1220	1340								C	100	77	
1215	1345											
	1347	QTZ MONZONITE, light gray to green with pink, aphanitic, massive, infiltration of K feldspar						From 1347' to 1361': Moderate to extreme veining From 1347.1' to 1348': Rubble 1349': Planar smooth				
1210	1350								C	100	69	
		From 1352' to 1353': Qtz feldspar pegmatite						1353.67': Planar irregular				
1205	1355											
								From 1358' to 1359': Rubble				
1200	1360								C	100	50	
	1361	QTZ MONZONITE, light gray to green, aphanitic, massive, with high concentrations of qtz feldspar						From 1361' to 1390': Moderate to extreme veining				

BORING TYPE: HQ3
DRILLER: Crux
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CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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ENGINEERS & GEOLOGISTS

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1190	1370								C	100	0	
1185	1375											
1180	1380								C	100	0	
1175	1385											
1170	1390	QTZ MONZONITE, light gray to white to pink, phaneritic							C	100	42	
1165	1395							1393': Planar smooth From 1394' to 1395': S. at 90° inundated smooth 1395.2': 45° Planar smooth				
								1397.9': Planar smooth From 1399' to 1400': Rubble	C	100	82	

BORING TYPE: HQ3
DRILLER: Crux
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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
PROJECT: Hydrostor Zevsar
PROJECT LOCATION: Rosamod, CA

SURFACE ELEVATION (ft): 2560
NORTHING: 2153552.632
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								From 1401' to 1401.3': Rubble				
1155	1405							1405': Planar smooth				
								From 1407.3' to 1409': 6 Planar smooth	C	100	61	
1150	1410											
								From 1412' to 1415.5': Rubble, decomposed				
1145	1415											
								From 1418.2' to 1419.4': Rubble	C	100	37	
1140	1420											
	1422	QTZ MONZONITE, light gray to green with pink, aphanitic, with K feldspar, biotite, chlorite, and epidote						From 1422' to 1437': Moderate to severe veining, broken down into soil like quality				
1135	1425											
									C	100	78	
1130	1430											

BORING TYPE: HQ3
HOLE DEPTH (ft): 3167
REMARKS:

DRILLER: Crux
WATER OBSERVATIONS: 1902 ft, 2592 ft

LOGGED BY: Chris Messenger
CASING: HW to 71 ft

SAMPLING & IN SITU TESTING LEGEND

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
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		From 1437' to 1442': Qtz feldspar pegmatite										
1120	1440							From 1442' to 1512': Moderate to severe veining, broken down into soil like quality	C	100	75	
1115	1445											
1110	1450								C	100	72	
1105	1455											
1100	1460								C	100	73	
1095	1465											
									C	100	76	

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1085	1475											
1080	1480								C	100	77	
1075	1485											
1070	1490								C	100	71	
1065	1495											
1060	1500								C	100	40	
									C	100	60	

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1050	1510											
	1512	QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite porphyry, increased K feldspar replacing plagioclase, small qtz feldspar pegmatite, trace pyroxene, muscovite, chlorite, and hornblende						From 1512' to 1513': 45°-38° J. fractures, slickenside 1514': Planar smooth From 1515' to 1516': J. fractures, planar smooth	C	100	71	
1045	1515											UCS = 8,545 ITS = 655
1040	1520	From 1520' to 1523.5': Qtz feldspar pegmatite						1520.2': 12° inundated smooth From 1521' to 1522': Rubble, J. planar at 0°, S. at 90° From 1523.2' to 1523.6': S. at 90° inundated smooth	C	100	39	
1035	1525							From 1525' to 1527': Rubble J. fractures From 1527.5' to 1528': 42°-45° inundated smooth From 1528' to 1529': Rubble				
1030	1530							1529.5': 67° inundated smooth 1531': 67° inundated smooth				
	1533	QTZ MONZONITE, light gray to green, aphanitc to phaneritic, massive						From 1533' to 1541': Minor to moderate veining	C	100	69	
1025	1535							1533.3': 21° inundated smooth From 1533.4' to 1534': 4 Planar From 1534.75' to 1539': Rubble J. fractures				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
	1541	QTZ MONZONITE, light gray to white, phaneritic, massive										
1015	1545							From 1545' to 1546': Vertical S. at 90°, inundated rough 1546.4': 32° and 38° Planar smooth wedge	C	100	80	
1010	1550							1548.6': 47° Planar 1549': 27° Planar smooth 1549.2': 4° Planar smooth 1550': 0° Planar smooth From 1552' to 1553.5': Rubble J. fracture	C	100	41	
1005	1555							1555': 42° Planar smooth, S. at 61° 1555.9': 0° Planar smooth From 1556' to 1557': Rubble J. fracture From 1557' to 1559.5': (6) 31°-47° fractures, rubble				
1000	1560							1560.4': 47° Planar smooth 1561.5': 39° and 42° Wedge 1562.3': Planar smooth 1563.47': 21° Planar smooth From 1564' to 1565.3': (4) 20°-30° Planar smooth 1565.6': 68° inundated smooth From 1567' to 1569.3': S. at 90° to 45° inundated smooth J. fractures	C	100	78	PL(A) = 379 PL(A) = 141
995	1565											
990	1570							1571.6': Planar smooth From 1573' to 1574': 4 Rubble J. planar smooth	C	100	69	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
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PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
												PL(A) = 1,025
								From 1578' to 1581': (6) 42°-26°-90° S. fractures, planar smooth; 1578.1': 47° Planar smooth				
980	1580											
								From 1582' to 1584': Rubble, S. at 45°-90°; From 1584.5' to 1585.5': Vertical slickenside biotite/chlorite at 90°	C	100	29	
975	1585							From 1587' to 1589': S. fracture at 90°-77° planar smooth				
970	1590							1591': Planar smooth				
								1592.9': 41° Planar smooth; From 1593.3' to 1593.5': 2 J. fractures at 41°; 1594': 42° Planar smooth; From 1595.6' to 1597': Rubble; From 1597' to 1602': (15) 39°-49° S. J. fractures planar smooth	C	100	56	
965	1595											
960	1600							From 1602' to 1605': S. J. fractures at 32°-90° along pegmatite intrusions (10), rubble				
955	1605							1606': 44° Planar smooth; From 1608' to 1610.9': 6 S. at 38°-90°	C	100	56	

BORING TYPE: HQ3
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								1611': Planar smooth				
		From 1613' to 1616': Qtz feldspar pegmatite						1611.9': 22° Planar smooth From 1614' to 1615': Jointed rubble 1615.9': 17° inundated smooth	C	100	78	
945	1615											
940	1620							From 1618.4' to 1618.6': Planar smooth From 1621' to 1622': S. at 81° inundated smooth, purple mineral in S.	C	100	81	PL(A) = 932
935	1625							1624.9': Planar smooth 1625.1': 42° Planar smooth From 1626' to 1627': Rubble J. fracture From 1628.75' to 1629': 45°-41° Planar smooth				
930	1630							1630': S. at 78° planar smooth 1631.9': 39° Planar	C	100	61	
925	1635											
920	1640								C	100	86	

BORING TYPE: HQ3
DRILLER: Crux
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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												PL(A) = 710
												PL(A) = 858
910	1650											
								From 1654' to 1657': 12 J. fractures planar smooth	C	100	41	
905	1655											
								From 1657' to 1659.6': Alteration appears as fracture, no true fracture				
								From 1659.6' to 1661': 6 J. fractures at 57° planar smooth				
900	1660											
								From 1662.5' to 1666': Rubble J. planar smooth fractures				
895	1665								C	100	62	
890	1670							1669.7': inundated smooth				
								1670': 0° Planar smooth				
								1670.7': 0° Planar smooth				
								1671.2': 0° Planar smooth				UCS = 3,022
								1672.3': 0° Planar smooth	C	100	66	
885	1675							1672.6': 0° Planar smooth				
								1674': Planar smooth				
								1675.2': 23° Planar smooth				
								1675.6': 17° Planar smooth				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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		From 1680' to 1681': Qtz feldspar pegmatite						1676': 21° Planar smooth 1676.8': 41° Planar smooth				
875	1685								C	100	56	
870	1690											
	1692	QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite and hornblende porphyry, trace muscovite, pyroxene, chlorite, and lower percentage of K feldspar										
865	1695								C	100	51	
								From 1697.4' to 1700.4': Rubble J. fractures planar smooth				
860	1700											
								1702.1': 49° inundated stepped rough 1703.25': 12° Planar smooth				
855	1705							1704': 27° Planar smooth From 1704.8' to 1705': Jointed 39° S. fractures planar smooth From 1705' to 1707': Vertical S. at 90° inundated smooth	C	100	70	
850	1710											
									C	100	73	

BORING TYPE: HQ3
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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840	1720											
835	1725								C	100	81	
830	1730											
825	1735								C	100	74	
								From 1737' to 1739': Rubble				
								1739.2': 49° Planar smooth				
820	1740							1739.7': 41° Planar smooth				
								From 1740.7' to 1743.7': Rubble				
815	1745							From 1744.8' to 1745.2': 45°K feldspar sheeting - 46° Plagioclase sheeting wedge	C	100	71	
								1745.7': Planar irregular				
								From 1746' to 1746.3': (3) 51° stress fractures, smooth planar				
								From 1747' to 1749': Rubble				

BORING TYPE: HQ3
DRILLER: Crux
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HOLE DEPTH (ft): 3167
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
												UCS = 11,631
								From 1752.2' to 1753.2': 90° vertical planar smooth				
805	1755							1754.9': Planar smooth	C	83	52	PL(A) = 453
								1755.81': 17° Planar smooth				
	1757	CORE LOSS						From 1756' to 1757': (7) J. fractures 20°-40° planar smooth				
	1758.7	From 1759.2' to 1760': Pegmatite						1759.3': Pegmatite				
800	1760							1761': Vertical S. at 90° planar smooth				PL(A) = 821
								1761.9': 45° Planar smooth				
								From 1762' to 1764': Vertical S. at 90°				
795	1765							From 1764' to 1766.8': (10) 19°-31° J. fractures, planar smooth	C	100	39	
								1767.6': 38° inundated smooth				
								1768': 0° Planar smooth				
790	1770							From 1768.6' to 1769': 90° S. to 42°				
								From 1769' to 1769.8': Vertical S. at 90° inundated rough				
								1770.6': 45° inundated smooth, chlorite				
								1771.3': 67° Planar smooth	C	100	69	
785	1775							From 1772' to 1773': Rubble				
								From 1774' to 1782': Healed hairline fractures, plagioclase infill				
								1775.1': 10° Planar smooth				
780	1780							From 1775.75' to 1776': 58° Planar smooth				PL(A) = 610
								1777.6': 41° Planar smooth				
								1779': 45°-38° Wedge				
								1781': 13° Planar inundated				
								From 1783' to 1786':	C	100	42	

BORING TYPE: HQ3
DRILLER: Crux
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CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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PROJECT No: 951-20
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EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
		From 1785.7' to 1786.5': Pegmatite						Vertical S. at 90°, rubble				
								1788.1': 17° Planar smooth				
								From 1789.4' to 1789.5': 2 Planar smooth 0°-1°				
770	1790							1790': 29° Planar smooth				
								1790.61': 58° Planar smooth				
								1791': Rev angle 42° smooth planar				
765	1795							1791.5': Wedge mean break	C	100	55	ITS = 1,278
								1794.1': 68° Planar smooth				
								1796': Planar irregular				
		From 1798' to 1800': Pegmatite						From 1797.5' to 1801': 90°-42° J. fractures, almost rubble				
760	1800											
								From 1802' to 1807': Hairline healed 90°-69° vertical fracture mostly expanded, some area slightly separated				
755	1805								C	100	24	
								1808': Planar smooth				
								From 1808.4' to 1809.2': Rubble				
750	1810							From 1810' to 1812': Hairline 90° healed, plagioclase infill fracturing system				
								1812.4': 46° Planar smooth				
								1813.1': 29° Planar smooth	C	100	74	
745	1815							1816': Vertical S. at 90°, healed fracturing				
								1818': Planar smooth				
								1818.2': 30° Planar smooth				

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								1819': (4) 21°-17° J. stress fractures From 1820.4' to 1821.5': 61°-60° Stress J. fractures	C	100	61	UCS = 10,296
735	1825											
	1829	DIORITE, medium to coarse grained, light to dark gray, aphanitic - phaneritic, massive, homogenous, with plagioclase/qtz porphyry										
730	1830							1829.9': 2 J. fractures at 59° From 1830.6' to 1831': 2 Planar breaks				PL(A) = 567
								1833': Planar smooth	C	100	15	
725	1835							1835': 47° Planar smooth				
								1838.1': Planar smooth From 1839' to 1839.4': Rubble				
720	1840							From 1840' to 1842': Rubble				
								From 1843' to 1846': (13) 7°-19° J. fractures, planar smooth	C	100	29	
715	1845											
	1847	QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite/hornblende porphyry, trace muscovite, pyroxene, chlorite						1847': Vertical S. planar smooth 1848.75': Planar smooth				
710	1850							1850': Planar smooth From 1850.2' to 1854': Rubble, S. at 90° planar smooth				
									C	100	25	

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								1855.1': Vertical fracture 1855.4': Reverse angle fracture at 45° 1856.1': 45° fracture, creating wedge with 1855.4' From 1857' to 1859': (10) 22°-34° Planar smooth				
700	1860											
								From 1863.7' to 1864.1': 3 Planar smooth From 1865' to 1865.6': Planar smooth 1865.2': 22° Planar smooth 1866': 0° Planar smooth 1866.1': 51°-45° Wedge reverse angle inundated smooth 1867.45': Planar smooth 1868.6': 2 Planar smooth	C	100	50	PL(A) = 860
695	1865											
690	1870											
								From 1869.2' to 1872': Vertical S. at 90°, (3) 45° Stress J. From 1872' to 1877': Rubble 1878': 32° Planar smooth From 1880' to 1885': Stress J. fractures at 45°-90°	C	100	34	
685	1875											
680	1880											
								1886.2': 1/2 Rubble 1886.6': 41°-32°	C	100	16	
675	1885											

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LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
	1893	QTZ MONZONITE, grayish green to pink, massive						From 1892.5' to 1893': Rubble (pegmatite) From 1893' to 1902': Brittle	C	100	0	
665	1895											
660	1900											
	1902	QTZ MONZONITE, light gray to white to pink, intruded with qtz feldspar pegmatite				▼		From 1902' to 1915': Weathering rock	C	100	41	
655	1905											
650	1910											
	1915								C	100	51	
645	1916	QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite/hornblende porphyry, trace muscovite, chlorite, pyroxene						From 1915' to 1917': (16) Planar smooth 0°-4° From 1917' to 1920': Rubble J. fractures planar smooth, plagioclase infill				
640	1920											
									C	100	71	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
∿	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
▼	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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NORTHING: 2153552.632
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PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								1925.2': 11° Planar smooth From 1925.4' to 1926': 90° inundated smooth From 1927' to 1928.1': 27°,78° Rev angle 59° wedge planar smooth				ITS = 1,256
630	1930							From 1930.2' to 1930.4': 0°-5° Planar smooth				
								1932.1': 42°-45° Planar smooth 1932.2': Planar smooth From 1933.2' to 1934.6': (3) 78° J. fractures with K feldspar infill, smooth planar From 1934.6' to 1934.8': (2) 84° J. fractures planar smooth 1935.7': Vertical S. 1936.1': inundated smooth From 1936.2' to 1936.6': 71°-48° Rev angle, smooth planar	C	100	61	PL(A) = 1,073 PL(A) = 559 UCS = 17,783 PL(A) = 23,502
625	1935											
620	1940							1938': 0° Planar smooth From 1938.4' to 1939': (3) 45° J. fractures with K feldspar infill, planar smooth 1939.5': 45° Planar 1940.2': 32° inundated smooth 1940.25': 55° J. fracture 1940.3': 55° J. fracture 1940.4': 55° J. fracture 1940.9': 17° Planar From 1941' to 1942': (6) 71° J. fractures, (3) 45° Planar smooth	C	100	56	
615	1945											
610	1950							From 1943.1' to 1943.4': 90°-47°-38° (3) Planar smooth - K feldspar contact 1946.2': Planar irregular 1949': 51° inundated rough From 1949.2' to 1946': 49° inundated smooth, multiple headed fractures (K feldspar) From 1950' to 1954': Rubble	C	100	34	
605	1955											

BORING TYPE: HQ3
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 1954.6' to 1955': (2) 41° (1) 84° inundated smooth				PL(A) = 100
	1962	QTZ MONZONITE, light gray to white to pink, pegmatic, massive, with K feldspar and pegmatite						From 1960' to 1961.3': (6) 0°-4° Planar 1961.8': Planar irregular				PL(A) = 407
595	1965							From 1962' to 1977': Heavily fractured due to pegmatite, rubble	C	100	11	
590	1970											
									C	100	30	
585	1975											
	1977	QTZ MONZONITE, light gray to white, massive, with biotite/hornblende porphyry, trace pyroxene, muscovite, chlorite, pyrite, and epidote										SLK = Type I
580	1980											
		From 1982.8' to 1983': Qtz feldspar pegmatite										SLK = Type I
575	1985	From 1985.1' to 1985.4': Qtz feldspar pegmatite							C	100	52	
570	1990											
								From 1993' to 1994.1': (4) 0°-3° Planar smooth	C	100	82	

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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 1999' to 2000': (3) 41° J. stress fractures planar smooth				
560	2000							From 2000.75' to 2000.95': (2) 19°-21° Planar smooth				
								From 2001.4' to 2002': 61° Healed fracture, K feldspar				
								From 2003' to 2003.7': 60°-42° J. stress fractures planar smooth	C	100	80	PL(A) = 1,189
555	2005							2005': 0° Planar smooth				
								2006': 31° Planar smooth				ITS = 1,661
								2006.6': K feldspar contact				UCS = 20,405
												SLK = Type I
550	2010							2010': Planar smooth				TRI = 26,719
								2011': 30° Planar smooth				
									C	100	77	
545	2015							2016': Rubble				
								From 2017' to 2018': 3 Planar smooth				
								From 2019' to 2019.73': 4 Healed J. fractures, K feldspar				
540	2020							2021': 6° Planar smooth				
								2023': 2° Planar smooth				
								From 2024' to 2025': 60°-70° K feldspar infill J. stress fractures, planar smooth	C	100	70	
535	2025							From 2026' to 2026.48': (2) 41° Planar smooth				
								From 2027.2' to 2028.6': Planar smooth				

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C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								2031': 0° Planar smooth				
									C	100	100	ITS = 1,129 UCS = 12,102 SLK = Type I TRI = 37,956 PL(A) = 716
525	2035											
								2039.2': 22° Planar smooth				
520	2040							2040': 0° Planar smooth				
								From 2042' to 2043': (3) 40° Healed J. fractures, planar smooth	C	100	96	
515	2045											
								2047.2': 44° Planar smooth				
								2049': 17° Planar smooth				
510	2050							2050.7': Planar smooth				
								2054': Planar smooth	C	100	94	
505	2055							2055.6': 17° inundated smooth				
								2056': 16° inundated smooth				
500	2060											PL(A) = 947
								2063.7': 0° Planar smooth	C	100	78	

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								2064.1': 0° Planar smooth				
								2064.4': 0° Planar smooth				ITS = 1,364
								2064.8': 0° Planar smooth				
								2066.7': 0° Planar smooth				UCS = 17,449
490	2070							2070': Planar smooth				SLK = Type I
								2071': Planar smooth				TRI = 32,052
								2074.1': Planar smooth	C	100	78	
485	2075											
								From 2077' to 2079': (6) 15°-30° J. fracture, pegmatite				
480	2080											
								2081': K feldspar, epidote - planar				
		From 2083' to 2083.2': K feldspar						2083': 3 Planar	C	100	81	
475	2085							2084.9': 32° Planar smooth				
								2086': 61° inundated smooth				
470	2090							2089.7': 0° Planar smooth, 61° Stress fracture				
								2090': Stress healed fractures from pegmatite				
								2091': 47° Planar smooth				
								2093.6': 42° Planar				
465	2095							2094': 68° Healed K feldspar	C	100	77	PL(A) = 458
												ITS = 1,247
												UCS = 16,552
								From 2098.6' to 2098.9': Planar smooth				

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C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 2100' to 2102': Vertical S. at 90° planar smooth				
								From 2103.1' to 2103.4': Planar smooth, slickenside	C	100	79	SLK = Type I TRI = 42,196
455	2105											
		From 2108.6' to 2112': Qtz feldspar pegmatite						From 2108' to 2112': (9) 38°-42° J. fractures, pegmatite infusion				
450	2110											
		From 2112' to 2116': Qtz feldspar pegmatite						From 2112' to 2117': Qtz feldspar pegmatite hairline healed fractures throughout From 2112.1' to 2113.5': (4) 30°-42° fracture points	C	100	51	
445	2115							2115': Planar smooth 2116.1': 51° Planar smooth From 2117' to 2120.6': Vertical S. at 90° K feldspar infill				
440	2120											
								2122.7': Planar smooth 2123': Planar smooth	C	100	64	
435	2125							2126.4': Vertical S. From 2127' to 2128.3': 3 Planar smooth, (1) 38° planar smooth 2129.3': Planar smooth				ITS = 1,361
430	2130							From 2130.65' to 2131': (3) 0°-3° Planar smooth				
								2133.8': 79° Planar smooth	C	100	80	UCS = 24,510 PL(A) = 963

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								From 2134.5' to 2137': Vertical S. and (2) 51° angle				
								2137.6': Planar smooth				SLK = Type I
420	2140							2140': Planar smooth				
	2142	QTZ MONZONITE, light gray to white, phaneritic, with porphyritic biotite mica, quartz, K feldspar, and plagioclase, trace amounts of pyrite						From 2142' to 2144': Vertical 90° inundated smooth				
415	2145							2145': 67° Shear-stress into 90° at 2145.75	C	100	48	
								2147': Planar irregular				
								2148': 26° Planar smooth				
								2149': 79° J. fracture				
410	2150							2150.7': (2) 40° Planar smooth				
								2151.5': Planar smooth				
								2152.4': Planar smooth				
								2152.8': Planar smooth				
405	2155							From 2153.7' to 2154.8': Reverse F. occurring	C	100	41	
								From 2154' to 2156': 4 Planar smooth at 0, 38°, 41°, 67°				
								From 2157' to 2159': Highly fractured rubble				
400	2160							From 2160.4' to 2160.6': 38°-43° Planar smooth				ITS = 1,066
								From 2163.2' to 2172': Vertical 90°-80°, compiled with 45°-65° stress J. fractures, partially rubble				UCS = 15,267
395	2165							From 2165.3' to 2166.3': High degree/vertical fractures	C	100	21	
		From 2169.7' to 2170': Pegmatite										

BORING TYPE: HQ3
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	2172	QTZ MONZONITE, light gray to white, phaneritic, with porphyritic biotite mica, K-feldspar, plagioclase, and quartz, trace chlorite										
385	2175							From 2173.6' to 2175': Rubble From 2176' to 2177': Vertical S. at 81° planar smooth 2177.35': 17° Planar smooth	C	100	68	SLK = Type I PL(A) = 255
380	2180							From 2179.6' to 2180.2': 3 Planar smooth From 2182.55' to 2184': (3) 22°-25° Stress J. fractures				
375	2185							2186.2': 39° Planar From 2188' to 2188.8': 42°-78° Planar 2189.5': Planar smooth	C	100	74	ITS = 782
370	2190							2190.6': 45° Planar smooth From 2191.2' to 2191.4': Planar smooth 2192.6': 45° inundated smooth				
365	2195							2193.9': inundated smooth 2194.2': inundated smooth From 2195' to 2196': (3) 55° Planar smooth J. fractures 2196.7': 22° Planar	C	100	91	UCS = 13,136 PL(A) = 693 SLK = Type I
360	2200							2200': 6° Planar smooth 2201': 4° Planar				TRI = 20,972
								2203.7': 80° altered slickenside	C	100	84	

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								From 2205' to 2206.4': 10°-18° Planar				
								2208.2': inundated				
								2209': 6° inundated				
350	2210							2209.8': inundated				
								2211.2': 7° Planar				
								2211.8': 19° Planar				
									C	100	94	
345	2215							2215.2': Planar smooth				
								2216.2': Planar smooth				
												ITS = 590
340	2220											UCS = 13,570
								2221.2': Planar smooth				
								2222.2': Planar smooth				
								2223.1': 17° Planar smooth				
								2223.8': 52° Planar	C	100	92	SLK = Type I
335	2225							2224': 40° Planar smooth				
								2225.81': 9° Planar smooth				
								2226.4': Planar smooth				
								2227.4': 32° Planar smooth				
330	2230							2229.1': 6° Planar smooth				
									C	100	41	
325	2235							From 2235.7' to 2237': (8) 22°-25° Stress J. fractures, planar smooth				
								From 2236' to 2237': (6) 70°-80° Stress J. fractures, rubble				TRI = 37,349
												PL(A) = 826
								2237.9': 59° Stress J. planar smooth				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 2238' to 2238.6': 87° S. fracture inundated smooth				
								2238.6': 59° Stress J. planar smooth				
								2242.9': 31° Planar smooth				ITS = 1,174
315	2245							From 2245' to 2246': Healed K feldspar stress fractures (6)	C	100	81	PL(A) = 459
								2246.7': 57° Planar				
								From 2248' to 2248.9': 90°-80° Vertical fracture, K-feldspar infill				SLK = Type I
												UCS = 19,149
310	2250							2250': 17° Planar smooth				
								From 2250.8' to 2252': 90° inundated smooth				
								From 2252' to 2253': (2) 38°-41° inundated smooth				
305	2255							From 2255.5' to 2257': S. at 86°	C	100	72	
								From 2257' to 2260.8': Rubble				
300	2260											
	2262	QTZ MONZONITE, light gray to white, phaneritic, with porphyritic biotite, K-feldspar, quartz, and plagioclase, trace chlorite and epidote From 2263' to 2264': Qtz feldspar pegmatite						From 2262' to 2294': Micro fractures filled with plagioclase, K-feldspar found on fractures				
295	2265								C	100	38	PL(A) = 310
290	2270											
									C	100	18	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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SURFACE ELEVATION (ft): 2560
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PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
												SLK = Type I
280	2280											
275	2285								C	100	84	ITS = 499
270	2290											
265	2294	QTZ MONZONITE, light to dark gray, phaneritic, with porphyritic biotite, quartz, and plagioclase						From 2294' to 2297': Chlorite visible along fractures	C	100	56	
	2295											
	2297	QTZ MONZONITE, light gray to white, phaneritic, with porphyritic biotite mica, K-feldspar, plagioclase, and quartz, trace chlorite and epidote						From 2297' to 2322': Some pegmatite veining, minor fracturing				UCS = 582
260	2300											
												ITS = 190
255	2305								C	100	71	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
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EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
												PL(A) = 111
245	2315							From 2314.6' to 2316': Heavily fractured	C	100	68	
		From 2318' to 2319.3': Qtz feldspar pegmatite										SLK = Type II
240	2320											
	2322	From 2322' to 2324': Pegmatite										
		QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite/hornblende porphyry, trace K-feldspar, chlorite, epidote, pyrite, pyroxene										ITS = 244
235	2325	From 2325' to 2356': Pegmatite						From 2324.4' to 2325.1': Rubble	C	100	56	
												UCS = 2,990
								2328.9': Planar smooth				
230	2330							2329.9': 4° Planar smooth				
								2330.6': 6° Rubble				
								2331': Planar irregular				UCS = 3,805
225	2335							2334': S. fracture surface	C	100	51	
								From 2337' to 2346': (20) 0°-12° J. fractures planar smooth to rubble				
220	2340											
												PL(A) = 735
									C	100	64	

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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 2348' to 2348.75': 40°-42° inundated smooth				
210	2350							From 2349.8' to 2350.2': 79° S. fracture				
								From 2350.4' to 2351.8': Planar smooth				SLK = Type I
								2352.2': Planar smooth				UCS = 22,117
								2353': 61° inundated smooth				
205	2355							From 2354' to 2356': (6) Planar smooth	C	100	39	
								From 2357' to 2359': (4) 39°-48° J. stress fracture planar smooth				
200	2360											SLK = Type I
								From 2361' to 2364': S. at 87° inundated smooth				
195	2365							From 2365' to 2365.9': (3) 77° Stress fractures	C	100	51	
								From 2366' to 2367': 2 Planar				
								2366.6': S. at 58°				PL(A) = 950
								2367.4': Planar smooth				
								2367.8': Planar smooth				
190	2370							From 2370' to 2371': Rubble				
												ITS = 840
								2372.7': Planar smooth				
								From 2374' to 2382': Rubble (pegmatite)				
185	2375	From 2374.75' to 2380': Qtz feldspar pegmatite							C	100	17	

BORING TYPE: HQ3
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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	2382	From 2382' to 2383': Pegmatite						From 2382' to 2383.75': Rubble				
		QTZ MONZONITE, light gray, phaneritic, massive, with interbedded qtz feldspar pegmatites, domininant in plagioclase, biotite, hornblende, and quartz, trace pyrite, chlorite, epidote, pyroxene, and muscovite						2385': Rev angle fracture 58°-49° wedge, planar smooth	C	100	71	
175	2385							From 2385.5' to 2387.2': Rubble				
								2388.7': 40° Smooth planar with plagioclase infill				
170	2390							2390': 0°-1° Planar				UCS = 12,604
								2391': (3) 32° J. fractures 4"				
								2391.8': 45° Planar rough, large crystallizations				
								From 2392' to 2397': (16) 21°-45° J. fractures planar smooth	C	100	42	
165	2395											
								2397.4': Planar smooth				ITS = 756
								2399.2': Planar smooth				
160	2400							2400.1': 67° inundated smooth				
								From 2400.5' to 2401': S. at 90°				
		From 2402.5' to 2406.3': Pegmatite						From 2402' to 2405': Rubble				
155	2405								C	100	59	
								2406': 7° Planar smooth				
												SLK = Type I
150	2410							2410.3': Planar smooth				
		From 2412' to 2472': Best zone										
								2412.5': 79° Vertical S.				
								2414.6': 6° Planar	C	100	70	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								smooth/inundated				UCS = 5,349
								2415': 27° Planar smooth				
								2416.1': 0° Planar smooth				
								2417.7': 7° Planar smooth				ITS = 1,440
140	2420							2419': 52° Planar smooth				
								2420.2': 47° Planar smooth				
								2421.2': 48° Planar smooth				
								From 2423' to 2425': Vertical S. at 88° inundated smooth with plagioclase infill	C	100	67	
135	2425											PL(A) = 1,281
								2428.2': 69° Planar smooth				
								2429.08': Stress fracture 71°-61°				SLK = Type I
130	2430							2429.4': J. fractures - 71° S.				
								2431.7': S. at 87° planar smooth				
								2432.9': S. at 67°				
								2433.4': Multiple fractures on 45°	C	100	85	
125	2435							2433.6': S. at 66°				
								2434': S. at 71°, stress joints, planar smooth				
								From 2436.2' to 2438': (3) 71°-74° S. inundated smooth				
120	2440							2440.9': Planar smooth				TRI = 31,409
								From 2442.5' to 2443': 69°-71° inundated smooth				
115	2445								C	100	80	
								2446.75': S. at 67°				
								2448': Planar irregular				PL(A) = 1,230
												SLK = Type I
								From 2450' to 2450.3':				

BORING TYPE: HQ3
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								Rev angle at 55° and 32°				UCS = 11,914
								From 2452.8' to 2453.4': (3) 80° Stress J. fractures planar smooth, increase in K-feldspar From 2454' to 2456': (5) 0°-10° Planar smooth	C	100	56	
105	2455											ITS = 1,502
								From 2457' to 2459': Rubble/Stress J.				
100	2460							2459.45': 0° and 38° Planar smooth From 2460' to 2461': (4) 0°-3° Planar smooth				
								From 2462' to 2463.6': Vertical S. at 80°-90°				
95	2465							From 2464.4' to 2465': Healed fractures, large infill with calcite and K-feldspar From 2465.5' to 2466.3': Vertical S.	C	100	49	
								From 2467' to 2470': Smaller K-feldspar infill along stress J. fractures				TRI = 26,131
90	2470							From 2468.2' to 2469': Reverse From 2469' to 2470': (3) 0° Planar smooth fractures with qtz feldspar pegmatite				
								From 2471.4' to 2472': Top S., K-feldspar infill				PL(A) = 899
85	2475								C	100	42	
												TRI = 26,683
80	2480											
									C	100	51	

BORING TYPE: HQ3
DRILLER: Crux
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SAMPLING & IN SITU TESTING LEGEND

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												ITS = 1,265
70	2490											
65	2495							From 2494.4' to 2495.2': (4) 27° J. stress fractures planar smooth	C	100	31	
60	2500											
	2502	CORE LOSS										
55	2505								C	40	16	
	2508											
50	2510											
45	2515								C	100	49	SLK = Type I

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												UCS = 23,472
35	2525								C	100	73	ITS = 1,314
30	2530											PL(A) = 119
	2532	QTZ MONZONITE, light gray, phaneritic, massive, with trace chlorite, muscovite, and pyroxene						2532.5': 45° Planar smooth 2533.2': Planar irregular 2534': Planar smooth 2534.5': Planar smooth 2535.6': Planar smooth 2536.4': Vertical S. at 67° From 2537' to 2537.2': Vertical S. 2538': (2) 38° J. fractures	C	100	61	ITS = 999
25	2535											
20	2540							2540.9': 82° inundated smooth 2541.2': 69° Planar smooth From 2542' to 2543': Rubble From 2543.2' to 2543.4': (2) 42°-29° Planar smooth From 2545' to 2546.7': Vertical S. at 90° planar smooth From 2547' to 2549': (5) 0°-4° Planar smooth	C	100	42	UCS = 2,607
15	2545											
10	2550							From 2550' to 2553': 10 Planar smooth and S. at 87° From 2551' to 2552': (4) 0°-7° Planar smooth 2552': S. inundated smooth From 2552.4' to 2552.7': (2) 38° J. fractures	C	100	60	

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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								planar smooth From 2553.2' to 2554': Vertical S., pegmatite then decomposed monzonite to 2557' From 2553.7' to 2553.9': 2 Planar smooth From 2554' to 2555': Vertical 90° fracture 2555': 48° Planar smooth 2555.7': 38° Planar smooth From 2562' to 2577': All rubble				
0	2560											SLK = Type II
-5	2565								C	100	16	SLK = Type I
-10	2570											
-15	2575							From 2577.3' to 2577.9': 61°-57° Planar smooth From 2579' to 2582': Rubble	C	100	25	UCS = 2,960
-20	2580											
-25	2585							2583': Planar irregular 2586.7': S. at 88°	C	100	82	ITS = 112

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
												PL(A) = 23
		From 2592' to 2596': Very wet, possible aquifer				▼						
-35	2595								C	100	23	
								From 2598' to 2601': Brittle, minor vertical fractures throughout, biotite/chlorite infill				
-40	2600											
												PL(A) = 177
-45	2605								C	100	31	
								From 2607' to 2608': (2) 67° Planar smooth				
								From 2607.1' to 2611': inundated/stepped smooth				
-50	2610							From 2610' to 2611': (2) 32° Planar smooth				
								From 2612' to 2613': Wet/weathered				
								From 2613.5' to 2615': Vertical S. 80°-90° planar smooth				
-55	2615	From 2615' to 2615.2': Qtz feldspar pegmatite						2615': Planar irregular	C	100	70	
		QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite/hornblende porphyry, trace chlorite, muscovite, pyroxene, and pyrite										UCS = 17,917
												ITS = 1,103
								2619': Rev. angle S. 45°-29° planar smooth				
-60	2620							2620': 57° Inudating smooth				
								From 2620.9' to 2621': 23°-28° Planar smooth				
								2621.7': Planar smooth				ITS = 1,366
								2622': 63° K-feldspar, plagioclase, biotite, infill slickenside	C	100	81	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
~	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
▼	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								2625.9': Planar irregular From 2626.6' to 2626.75': 20°-45° Planar smooth 2627': 52° Planar smooth From 2629' to 2631': 69° Planar smooth 7" jointing network at 90°-70° healed fractures with biotite/chlorite infill				
-70	2630							2632': 68° Planar smooth	C	100	61	PL(A) = 531 SLK = Type I
-75	2635							From 2636' to 2637': Vertical S. at 83° with multiple stress fractures, biotite/chlorite infill				
-80	2640								C	100	40	UCS = 3,628
-85	2645	From 2644.8' to 2645': Qtz feldspar pegmatite										
-90	2650							From 2652.5' to 2654': Vertical S. at 90° deformed	C	100	50	ITS = 656
-95	2655							2657.1': inundated smooth 2658': 67° Planar smooth 2658.9': 22 Planar				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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PROJECT: Hydrostor Zevsar
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PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								smooth				
		From 2661.5' to 2661.8': Qtz feldspar pegmatite						From 2659' to 2660': 59° Stepped rough				
								From 2659.65' to 2660.1': Vertical S. at 78° planar smooth				
								2661': Hairline fracture at 65° unloading	C	100	70	UCS = 13,928
-105	2665							2661.5': Planar irregular with pegmatite				
								2663': 49° biotite/chlorite infill, planar smooth				SLK = Type I
								From 2667' to 2682': Rubble, qtz pegmatite				
-110	2670											PL(A) = 90
		From 2672' to 2672.5': Diorite										
-115	2675								C	96	18	
	2675.9	CORE LOSS						2675.9': 0.4'				
	2676.3											
-120	2680											
	2682	QTZ FELDSPAR PEGMATITE, white to light gray to pink, with K feldspar										SLK = Type I
								2683.9': 0° Planar smooth	C	100	82	
-125	2685							2684.1': 0° Planar smooth				
								2684.9': 0° Planar smooth				ITS = 121
								From 2685.1' to 2685.2': 0° Planar smooth				
-130	2690							2689.6': 47° inundated smooth				PL(A) = 173
								2690.65': Planar irregular				
								2691.9': 46° Planar smooth				
								From 2692' to 2693': Rubble				
	2694.5	CORE LOSS						2694.5': 61° Planar	C	97	71	

BORING TYPE: HQ3
DRILLER: Crux
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HOLE DEPTH (ft): 3167
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CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
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PROJECT: Hydrostor Zevsar
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EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
	2694.8							smooth				
								2695': 0.3'				
								2696.1': Planar irregular				
								From 2696.7' to 2697': Rubble				
-140	2700											
									C	95	26	UCS = 12,090
-145	2705											
	2707	QTZ MONZONITE, light gray to white, phaneritic, massive										
								From 2708.6' to 2708.9': (2) 39° Planar smooth				
	2710							From 2709.6' to 2710': (2) 50° Planar smooth				
-150	2710.5	CORE LOSS										
	2711							2711.4': 45° Planar smooth				
								From 2712' to 2715': Rubble				
									C	100	31	
-155	2715							From 2715' to 2715.68': Vertical S. at 71°				
								From 2718' to 2721': 47° Planar smooth, rev angle fractures, rubble				
-160	2720											
	2721	DIORITE, light gray, phaneritic, massive, with trace biotite/hornblende porphyry phenocrysts						From 2721' to 2722': Rubble				
								From 2722' to 2723': Diorite with biotite/hornblende infill				PL(A) = 1,039
								From 2724' to 2725': Multiple angle/planar fractures (6)	C	100	51	
-165	2725							From 2725' to 2726': Rubble				
								2726.5': Planar smooth				
								2727': Planar smooth				
								2727.5': Rev angle fracture at 27° and 45° planar smooth				UCS = 9,219

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								2730.5': 0° Planar smooth				
								2733': 38° Planar smooth 2734': Planar smooth 2734.5': 61° Planar smooth From 2735' to 2737': Multiple healed and open 70°-80° vertical S. fractures	C	100	70	SLK = Type I
-175	2735											
-180	2740							2739.5': 55° Planar smooth From 2739.7' to 2740': Vertical S. at 51°-55° inundated smooth				ITS = 1,582
								2741.5': inundated irregular rough From 2742' to 2743.1': Rubble 2744': 78° Healed/62° vertical S. From 2744.9' to 2745.75': Vertical S. From 2747' to 2749': Rubble, 40°-50° angle planar smooth	C	100	46	
-185	2745											
-190	2750							2750.1': S. at 67° planar smooth From 2751' to 2752': 38°-46° Planar smooth				
								2752.7': 32° Planar smooth 2754.3': 67° Planar smooth From 2755' to 2756': Multiple S. fractures at 90°-80° inundated	C	100	53	
-195	2755											UCS = 21,587
								2758': Planar smooth 2759': 67° inundated smooth From 2760' to 2762': S. fracture				
-200	2760											
												PL(A) = 750
								2764.5': 67° Planar	C	100	52	

BORING TYPE: HQ3
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HOLE DEPTH (ft): 3167
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								2765': 45° Planar smooth, K-feldspar 2766': 61° Planar smooth 2767': 2 J. fractures 2768': 32° inundated smooth				
-210	2770							2768.4': S. fracture 2769.1': 90° Planar smooth				
								From 2769.7' to 2770.6': Rubble From 2771' to 2772': S. at 67° planar smooth	C	100	61	SLK = Type I ITS = 1,042
-215	2775											PL(A) = 499
	2777	QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite/hornblende porphyry phenocrysts From 2778.4' to 2779': Shiny luster, black in color						From 2777.7' to 2778': Clay like, altered From 2778.4' to 2779': Slickensided, deformed				
-220	2780											
		From 2782' to 2802': Biotite/chlorite present						From 2782' to 2787': Healed vertical fracture (chlorite)				
-225	2785								C	100	71	
								From 2787' to 2787.4': Planar smooth				UCS = 3,927
-230	2790							From 2790' to 2791.6': 6 Planar smooth				
								2793.1': 47° Planar smooth, K-feldspar contact From 2794' to 2797': Fractured rubble, chlorite rich, healed fracturing, moderate veining	C	100	30	
-235	2795											

BORING TYPE: HQ3
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CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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	2802	QTZ MONZONITE, light gray to white, phaneritic, massive, with sections of pegmatite and decomposed biotite/hornblende phenocrysts, trace muscovite, chlorite, and pyroxene						From 2802.4' to 2802.6': 0°-3° Planar irregular 2803': 32° Planar smooth/inundated smooth 2804.3': 0° Planar smooth From 2804.9' to 2805': (4) 0° Planar smooth From 2807' to 2808': S. at 90° biotite infill/mineralization 2809': 61° Planar rough 2809.8': Rev angle at 27° planar smooth	C	100	76	ITS = 1,023 PL(A) = 712
-245	2805											
-250	2810							From 2812' to 2814.6': Rubble, vertical and horizontal fractures	C	100	39	
-255	2815							From 2815' to 2816': (4) 3°-9° Planar smooth 2817.3': 32° Planar smooth From 2818' to 2819.6': (6) 68°-71° J. fractures, (1) 49° Planar smooth, K-feldspar-chlorite From 2821' to 2822': Vertical S. at 80°-90° healed fracture, planar smooth				
-260	2820											UCS = 22,772
								2823.6': Planar irregular 2824.1': 52° inundated rough 2824.9': 48° inundated rough 2826.3': 61° Planar smooth (chlorite/biotite) 2827.3': 52° Planar smooth From 2828' to 2828.4': 31°-28° Planar smooth From 2830' to 2832': Multiple fracture lines both vertical and horizontal	C	100	61	SLK = Type I
-265	2825											
-270	2830							From 2832' to 2842': Multiple unidirectional fractures 0°-90° vertical and 0°-42° horizontal,	C	100	16	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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								rubble, healed plagioclase/K-feldspar infill 2-4mm				
-280	2840											
								2843.9': Defected crumple/rubble	C	100	36	PL(A) = 591
-285	2845							From 2847' to 2852': 40° Planar smooth, 60° inundated rough				
-290	2850							From 2852' to 2857': (4) 0°-3° Planar smooth				
								From 2853' to 2855.7': Hairline stress fractures, planar smooth along mineralized infill	C	100	36	
-295	2855							From 2857' to 2860.4': Rubble				
-300	2860							From 2860.4' to 2861': (4) 38°-42° Planar smooth				
								2862.2': 51° Planar smooth				
								2862.7': 48° Planar smooth with stress line fracture	C	100	82	
-305	2865							2864': inundated rough irregular				
								2865.7': Biotite slickenside at 49° planar smooth				
								2867.3': Planar irregular				
								2868': Planar irregular				

BORING TYPE: HQ3
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C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 2869' to 2870': (5) 0°-10° Planar smooth, K-feldspar				
								From 2871' to 2872': Vertical S. 78°-88° inundated rough				
								From 2872.4' to 2873': Healed fractures				PL(A) = 138
-315	2875							2874': 4° Planar smooth	C	100	66	ITS = 417
								2876': 17° inundated rough				
								2876.4': 3° Planar smooth				
		From 2878' to 2881': Pegmatite						2876.9': 0° Planar smooth				
-320	2880							From 2878' to 2878.2': Fragmented				
								2879': Fragmented, rough irregular				
								From 2880' to 2881.6': (6) 0°-3° Planar breaks fragmented				
								2880.9': 1° Planar smooth	C	100	61	
-325	2885							From 2882' to 2883': Rubble				
								From 2885.6' to 2886.4': (3) 38°-40° Planar smooth on K-feldspar infill				
								From 2887' to 2888': Decomposed rubble				UCS = 4,611
-330	2890							2889.1': Planar irregular				
								2890': Rev angle planar irregular				SLK = Type II
								2891': 3° Planar, defected				
-335	2895	From 2894.8' to 2895.8': Qtz feldspar pegmatite						From 2892' to 2893': 30°-40° Planar irregular break, healed K-feldspar fractures	C	100	40	
								2893.5': Planar rough				
								From 2893.7' to 2894': Rubble				
								2896.1': 52° Planar smooth				
-340	2900							From 2897' to 2898.2': 80°-90° Vertical fracture inundated rough				
								From 2899' to 2902.6': (16) 3°-0° Planar smooth fractures, K-feldspar contact				ITS = 1,454
								2903.8': Planar irregular	C	100	46	SLK = Type I

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								2904.2': Vertical S. rough, 39° Planar smooth biotite From 2904.9' to 2906': Rubble, defected From 2905' to 2906': Rev angle fracture From 2907' to 2910.2': Broken fragmented 0°-19°, healed K-feldspar and 7 open fractures				
-350	2910											PL(A) = 224
								From 2911' to 2911.4': (2) 71° Planar smooth fractures From 2912' to 2912.6': 61° Planar smooth From 2913.6' to 2917': Rubble, stress J. fractures From 2917' to 2918.2': 90° Vertical inundated rough 2918': 16°-31° J. stress fractures, rubble	C	100	20	
-355	2915											
-360	2920											
								From 2922' to 2923': Vertical fracture inundated rough From 2925.3' to 2928': Rubble From 2929' to 2931': Vertical S. inundated rough (pegmatite)	C	100	36	
-365	2925											
-370	2930											
								From 2932' to 2932.7': Rubble From 2934' to 2935': inundated rough 2935.6': inundated rough From 2936' to 2937': Vertical S. inundated rough From 2937' to 2942': Healed multiline fractures, healed K-feldspar	C	100	44	SLK = Type II
-375	2935											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 2943' to 2945': Vertical S. at 80°-90° inundated rough From 2943.1' to 2950': Rubble, broken fragmented	C	100	25	ITS = 877
-385	2945											
-390	2950											
	2952	QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite/hornblende, trace muscovite chlorite, pyroxene						2952.55': Irregular inundated/smooth and rough, Rev angle 45° smooth, 31° rough From 2952.9' to 2954': inundated rough	C	100	51	
-395	2955							2955.9': 3° Planar smooth, 5° planar smooth, 45° Planar 2956.6': 3° Planar smooth (white feldspar 4mm) 2957.3': Vertical 90° and 51°-62° fracturing, stepped rough				
-400	2960							2958.9': inundated rough, wedge From 2960.4' to 2960.8': 0° Planar smooth, 0° Planar, 51° stepped rough				UCS = 23,002
-405	2965							From 2961' to 2962': Vertical 90° inundated rough, top shear 2962.4': 3° Planar smooth 2964.1': 0° Planar smooth From 2968' to 2970.6': J. vertical stress fracture, rubble	C	100	64	
-410	2970							2971.9': 42° inundated smooth From 2972' to 2973': 42°, 51°-38° Planar smooth	C	100	91	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
												SLK = Type I PL(A) = 717
-420	2980											TRI = 26,949
								2983.56': 3° Planar irregular, rough, white K-feldspar 2984.9': 1°-3° Planar irregular smooth	C	100	81	UCS = 23,574
-425	2985	From 2986.6' to 2987.2': Qtz feldspar pegmatite						From 2985.7' to 2985.9': Multiple directional fractures 90°-45° 2986.25': 61° Planar rough (pegmatite) 2987.6': Planar irregular-smooth (pegmatite)				
-430	2990							2989.1': Planar/inundated smooth 2990.72': Stepped rough 2991.1': 52° Smooth, K-feldspar infill 4-6mm	C	100	92	PL(A) = 630
-435	2995							From 2992' to 2993': 90° Vertical to 47°, inundated rough From 2994.1' to 2994.6': 0° Planar smooth and 11° inundated smooth 2995': 7° inundated smooth (white K-feldspar)				
-440	3000							2996.6': Planar smooth 2998.3': 0° Irregular rough 2998.8': 30° Planar smooth 2999.8': 67° Planar irregular-smooth	C	100	90	ITS = 1,319
-445	3005							3000.9': 22° Planar smooth (white K-feldspar infill) 3001': 67° Planar smooth 3006.7': 42° Planar smooth From 3008' to 3008.2':				SLK = Type I TRI = 36,097

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								(2) 38°-32° J. stress fractures planar smooth, (2) 90° vertical fractures				
								3009.2': 4° Planar smooth				
								From 3010' to 3011.1': (5) 3°-11° J. stress fractures, planar smooth				
-455	3015							From 3012.8' to 3013': Rubble, pegmatite	C	100	71	
								3014': 0° Planar smooth				
								3015.1': 4°-8° Planar irregular				UCS = 10,509
								3015.5': 77° Planar				TRI = 32,880
								3016.25': inundated rough-smooth (K-feldspar white infill)				
-460	3020							From 3016.8' to 3017': 45° Planar smooth				
								3018.55': 51° Planar				
								From 3019' to 3020.2': Partially healed 38° fracture				
-465	3025							From 3020' to 3022': 90°-80° Vertical fractures, healed white K-feldspar infill, increase in pink K-feldspar	C	100	40	
								From 3023' to 3023.4': (3) 38° J. fractures planar smooth				
-470	3030	From 3030' to 3032.4': Chlorite present						From 3024.1' to 3026': (13) 45°-65° J. stress fractures planar smooth				
								From 3027.1' to 3027.9': Planar irregular smooth				
								From 3028.4' to 3031': 30° - Rev angle 60° (6)				
								From 3033' to 3038': Multiple 90°-45°-0° fractures, rubble	C	100	25	
-475	3035											
								From 3039.7' to 3039.9': 4°-11° Planar irregular rough				
-480	3040							From 3040.4' to 3040.9': 22°-11° Stepped-planar rough-smooth				
								3042.1': Planar rough				
								3042.7': 45° Planar rough	C	100	50	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
-490	3050							3043.5': 35° Planar rough 3044.5': 90° Vertical From 3046' to 3047': Rubble 3046.1': S. at 90° rough From 3048' to 3049.2': Vertical S. fractures at 90°-79°, inundated rough				
-495	3055							3052.48': Planar smooth 3053.51': Planar smooth From 3054' to 3056': Vertical stepped stress fractures, rubble, inundated smooth-rough 3056.7': 45° Planar smooth 3057.2': (2) 0° Planar smooth 3057.9': 0° Planar smooth From 3059' to 3059.6': Rubble	C	100	60	
-500	3060							3061': Planar irregular-smooth 0°-4° From 3061.6' to 3082': (2) 6°-0° Planar smooth 3062.8': Planar smooth at pegmatite contact From 3063.9' to 3065.6': (5) 40°-60° Stress J. fractures - planar smooth, increase in K-feldspar, hairline healed throughout From 3066' to 3068': Vertical S. at 90°, slickenside planar smooth From 3069' to 3072': (7) 0° Planar smooth	C	100	68	
-505	3065											
-510	3070											
-515	3075							3073': Planar smooth 3073.78': 4° Planar smooth 3075.1': Planar rough	C	100	97	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								3080.4': 4° Planar smooth 3081': Planar irregular smooth 3082.3': 6° Planar smooth 3083': 0° Planar smooth 3083.3': 58° inundated smooth From 3083.9' to 3084.3': Rev angle 22° and 57° planar smooth From 3085' to 3087': Vertical S. at 90°, rubble inundated rough From 3085.7' to 3086.2': 51° Planar smooth, offset healed fractures	C	100	63	
-525	3085											
-530	3090							3090': Stepped-rough-smooth (mineralization) 3090.9': 0° Planar smooth From 3092' to 3092.5': Rubble From 3093.5' to 3093.9': 30° J. fracture planar rough From 3094' to 3097': 2 Stress J. fractures fully healed at contact, planar smooth 3097.9': 69° S. fracture planar smooth 3099.7': 32° Planar smooth	C	100	27	
-535	3095											
-540	3100											
-545	3105							From 3101' to 3102': Rubble From 3102' to 3117': Hairline vertical/horizontal stress fractures multi directional, healed fractures	C	100	0	
-550	3110											
									C	100	37	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 3118.1' to 3119.8': Rubble, chlorite slickenside/biotite				
-560	3120							3121.1': Planar irregular				
								From 3122' to 3123.9': Vertical S. fracture planar smooth, weatherd mineralization				
-565	3125							3124.9': 37° Planar smooth	C	100	90	
								From 3126.3' to 3127': (4) 0°-22° inundated-planar smooth				
								3127.9': Planar-inundated rough				
								3129.1': Planar irregular smooth				
-570	3130							3129.8': 16° Planar smooth				
	3132	QTZ MONZONITE, light gray to white, massive, with biotite/hornblende porphyry, trace muscovite, pyroxene, and pyrite						3130.8': 0°-4° Planar irregular smooth				
								3131.5': 39° Planar				
								3131.7': Rev angle 48°, planar rough	C	100	51	
-575	3135							3133': 45° Planar smooth				
								3133.6': 18° Planar smooth				
								From 3134.3' to 3134.6': (3) 0°-12° J. stress fractures, planar smooth				
-580	3140							3135.4': 27° Planar smooth				
								From 3136' to 3137': 67°-71° Rev angle planar smooth				
								From 3137' to 3148.3': Multiple fractures, rubble				
		From 3144' to 3148.5': Qtz feldspar pegmatite							C	100	28	
-585	3145											
								3148.2': 17° Planar smooth				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2560
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2153552.632
DATE: 3/17/2023 - 5/19/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514916.08
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 3150.1' to 3152': 26° inundated smooth-rough, healed				
								3153': 90°-70°				
-595	3155							3155': 41° Irregular stepped-rough	C	100	70	
								3155.9': 12° K-feldspar contact planar smooth				
								3157.6': Planar irregular				
								From 3158.9' to 3159.2': Large headed 4mm, 48° offset fractures				
-600	3160							3159.9': Planar irregular				
								3160.75': 44° Planar smooth				
								From 3161' to 3162': 87° Vertical inundated rough				
-605	3165											
		Bottom of borehole at 3167.0 feet.										
-610												
-615												
-620												

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3167
WATER OBSERVATIONS: 1902 ft, 2592 ft
CASING: HW to 71 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

ZEV-CH-02-23

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
	0	Well Casing										
2565	5											
2560	10											
2555	15											
2550	20											
2545	25											
2540	30											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
PROJECT: Hydrostor Zevsar
PROJECT LOCATION: Rosamod, CA

SURFACE ELEVATION (ft): 2570
NORTHING: 2154898.691
EASTING: 6515647.859

PROJECT No: 951-20
DATE: 6/1/2023 - 7/25/2023
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
2530	40											
2525	45											
2520	50											
2515	55											
2510	60											
2505	65											

BORING TYPE: HQ3
HOLE DEPTH (ft): 3045
REMARKS:

DRILLER: Crux
WATER OBSERVATIONS: 795 ft, 826.5 ft

LOGGED BY: Chris Messenger
CASING: HW to 70 ft

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
	70	QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite, chlorite, and epidote, trace hornblende and muscovite							C	93	67	
2495	75											
	76.3	CORE LOSS										
	77											
2490	80								C	100	88	
2485	85											
2480	90								C	100	42	
2475	95											
2470	100							From 100' to 140': High fracturing frequency, partly rubble	C	100	17	

BORING TYPE: HQ3
DRILLER: Crux
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REMARKS:

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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2460	110								C	100	32	
2455	115											
2450	120								C	90	21	
	122.5	CORE LOSS										
	123.5											
2445	125											
2440	130	From 133' to 137': K feldspar							C	100	40	
2435	135											

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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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	145								C	100	80	
2425												
	150								C	100	80	
2420												
	155											
2415												
	160	QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite porphyry, trace epidote, chlorite, muscovite, and pyrite						From 160' to 161.9': Planar/smooth	C	100	70	
2410												
	165							From 165' to 169': (9) 20°-32° Planar/smooth joint				
2405												
	170							170.6': 0° Planar 171': 69° Planar 171.8': 72° Planar 172.6': Inundated/planar 58° 174.2': 42° Inundated	C	95	57	
2400												

BORING TYPE: HQ3
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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								planar From 174.5' to 175': (3) 0° Planar From 175' to 178': (6) Planar 0°-20°				
	178.7 179.2	CORE LOSS										
2390	180							From 180' to 182': (4) 0° Planar	C	100	57	
2385	185							From 185' to 187': Rubble 187': (5) 47°-62° J. fracture soft				
2380	190							191': 0° Inundated planar 192': 4° Inundated planar 192.6': 22° Planar From 194' to 194.6': Wedge rev 22° and 25° inundated rough From 195' to 196': Rubble 197': 4° Planar 198.6': 0° Planar From 199' to 200': (2) 0° Planar	C	100	77	
2375	195											
2370	200							201.9': 38° Planar smooth From 202' to 203.5': (5) 0°-6° Planar smooth 204': 78° Vertical S. inudated rough From 205' to 206': (2) 0°-4° Planar 206.7': 38° Planar rough From 207' to 209': (4) 26°-32° J. fracture smooth planar	C	100	66	
2365	205											

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C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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2355	215							213.4': 52° Planar smooth From 214' to 216': (4) 3°-10° Planar 217.1': Planar inundated 218.9': Planar inundated	C	100	86	
2350	220	QTZ MONZONITE, light gray to white, phaneritic, massive, with biotite, trace epidote, chlorite, hornblende, pyrite						222': 0° Planar 222.5': 58° Inundated rough 224.3': 17° Planar smooth From 225' to 228': (9) 0°-8° Planar From 228.5' to 229.5': (2) 22° and 38° Inundated/smooth	C	100	75	
2345	225											
2340	230							From 230' to 231': (2) 0° Planar From 232' to 233': (2) 40° and 81° Vertical S. inundated rough From 234' to 237': (6) 0°-17° Planar	C	100	71	
2335	235											
2330	240							241.1': 16°-21° Wedge 242': 0° Planar From 243' to 244': (2) 67° J. fracture	C	100	94	

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
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								245.8': 71° Inundated rough				
2320	250							From 250' to 253': (3) 0°-22° Planar smooth				
								From 253' to 257': (14) 10°-32° J. fractures, partial rubble	C	100	69	
2315	255	From 256.4' to 256.9': Qtz feldspar						From 258' to 258.3': (2) 22°-38° Planar smooth				
2310	260							From 260' to 261': 90° Vertical S. inundated rough				
								263': 71° Inundated rough	C	100	83	
2305	265							From 265' to 267': (3) 40°-60° Fractures/slickensides				
								From 268.2' to 268.7': (3) 7°-15° Planar smooth				
2300	270							From 270' to 275': (5) 0°-15° Planar smooth				
									C	100	90	
2295	275							From 276' to 277': (3) 17°-39° Planar smooth				

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								280.2': 0° Planar				
									C	100	64	
								283.6': 29° Inundated rough				
2285	285							From 284' to 284.5': Rubble decomposed				
								285.5': Planar irregular				
								From 288' to 289.2': (3) Chlorite infilled slickensides 0°-17°				
2280	290											
								291.9': 3° Inundated rough	C	100	84	
								From 292.8' to 295': 0°-16° Planar, high chlorite				
2275	295	From 295' to 296': Qtz feldspar pegmatite						295.3': 0° Planar				
								296.7': 8° Along deformation contact				
								298.3': 7° Planar				
2270	300							299.8': 17° Planar				
								300.9': 8° Slickenside				
								303': 4° Inundated rough	C	100	97	
2265	305											
								306.4': 29° Slickenside				
								From 308' to 309': (2) R2 inundated smooth				
		From 308.7' to 309': Qtz feldspar pegmatite										
2260	310							310': 67° Inundated rough, coated with black biotite				
								310.8': 58° Planar				
								311.5': 0° Planar	C	100	95	
								313.2': 0°-2° Planar irregular, high veining				

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								318': 41° Planar smooth				
2250	320							319.7': 78° Slickenside				
								321': 0° Planar irregular				
								322.3': 48° Inundated smooth slickenside	C	100	91	
								323.2': Planar irregular				
2245	325							324.9': 0° Planar irregular				
								From 326' to 330': (6) 0°-4° Planar irregular				
2240	330							From 331.3' to 334.1': (4) 17°-24° Planar J. fractures	C	100	78	
2235	335							336.1': 22° Planar				
								336.6': 42°-90° Vertical S. coated with biotite/chlorite rough				
								From 337' to 340': Decomposed				
2230	340							340.2': 45° Inundated rough				
								341': 7° Inundated				
								342': 49° Inundated rough	C	100	94	
								From 342.1' to 344': (3) Wedge				
2225	345											

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								353': 19° Planar slickenside biotite/chlorite	C	100	99	
2215	355							355.7': 10° Planar slickenside				
								358.4': 31° Inundated rough				
2210	360	From 362' to 365': Qtz feldspar pegmatite							C	100	100	
								363.72': 28° Planar				
2205	365											
2200	370							From 370' to 385': (6) Planar smooth, (1) 37° at 376.5	C	100	100	
2195	375											
2190	380								C	100	96	

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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								388.62': 17° Inundated rough				
2180	390							From 390' to 400': (4) 0°-4° Planar smooth	C	100	100	
2175	395											
2170	400							From 400' to 415': (7) 0°-22° Planar smooth	C	100	100	
2165	405											
2160	410								C	100	100	
2155	415							From 415' to 430': (2) 0° Planar smooth				
	418.75	DIORITE										
	419											

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								421.7': 17° Veining	C	100	94	
2145	425											
	426	DIORITE										
	427							426.5': 40° Planar smooth				
2140	430											
								431.9': 45° Planar	C	100	92	
2135	435											
								From 436' to 437': Wedge 22°-31°				
2130	440											
								From 443' to 444': 0°-8° Planar irregular	C	100	90	
2125	445							445.6': 8° Planar smooth				
2120	450							450.2': Planar smooth chlorite				
								451.9': 84° Planar slickenside, chlorite	C	100	97	
								453.9': 81° Planar slickenside, chlorite				

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								455.6': Planar slickenside, chlorite				
								458.9': 29° Planar smooth				
2110	460	QTZ MONZONITE, light gray to white, phaneritic, massive, with epidote and chlorite						From 460' to 470': Healed fracturing veining; 461': 51° Planar irregular smooth; 462': 17° Inundated rough; From 463' to 465': (3) Planar smooth	C	100	51	
2105	465											
2100	470							From 471' to 474': 38°-47° Inundated rough	C	100	94	
2095	475							From 476' to 477': 27°-81° Inundated rough; 478': 0° Planar smooth; 478.9': 0° Planar smooth; From 479' to 482': (2) 45° Planar slickenside				
2090	480							From 482.6' to 483.7': 0°-8° Planar smooth	C	100	82	
2085	485							From 485' to 487': Rubble; From 487' to 490': (6) Planar irregular rough				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 491' to 493.7': 0°-8° Planar smooth	C	100	65	
2075	495							From 494' to 495': Vertical speed rough From 495' to 496': (3) 0°-9° Planar slickenside From 496' to 497': 90° Vertical From 498' to 499': (3) 17°, 19°, 24° Inundated slickenside				
2070	500							From 500.75' to 503': (6) 6°-9° Planar smooth	C	100	80	
								From 503.8' to 504.4': (3) 0°-7° Planar smooth				
2065	505											
2060	510							From 511' to 515': Calcite healed fracture 7-10mm thick	C	100	100	
2055	515							519': 52° Planar smooth				
2050	520							522': 41° Planar smooth	C	100	98	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
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CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 526' to 527': 84° Vertical S. veined				
								529': Multiple 70°-90° Vertical veined fractured healed and open				
2040	530											
								533': 50° Planar smooth, 42° irregular smooth	C	100	90	
2035	535							536': 71° Wedge rev angle 69°				
2030	540							From 540' to 541': 6" Vertical S. planar slickenside				
								541': 0° Planar				
								542': 0° Planar decomposed	C	95	51	
								From 544' to 544.6': 48° Irregular inundated slickenside				
2025	545											
	546.5	CORE LOSS										
	547											
2020	550											
								From 551' to 552.7': (6) 0°-17° Planar smooth				
								From 553' to 553.75': 79° Stepped slickenside	C	100	70	
2015	555											
								From 559' to 560': Decomposed				

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C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
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								From 561' to 565': (13) 0°-19° Planar smooth 562': 49° Inundated smooth 563': 55° Inundated smooth From 565' to 571': (17) Fractures				
2005	565 566 567	QTZ MONZONITE, light gray to white, phaneritic, massive, with rich plagioclase and defection biotite, trace muscovite, pyrite, chlorite, and K feldspar CORE LOSS							C	90	19	
2000	570							From 572' to 573': Rubble From 573.5' to 573.8': 42° Planar smooth				
1995	575							From 577' to 580': High healed Ca+2 fractures From 577.5' to 579': 88° Vertical S. inundated smooth/defected	C	100	31	
1990	580							From 581' to 585': (5) 22°-41° Planar smooth				
1985	585							From 585' to 586.5': 74° Inundated smooth From 587' to 591': Rubble	C	100	11	
1980	590							From 592' to 594.6': Wedge 28°-42° stepped defected				

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EL	DEPTH (ft)	Description of Strata	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
			From 596' to 597': 71° Vertical S. inundated slickenside	C	100	48.5	
1970	600		From 601' to 602': 71° S. From 602.5' to 605': (3) Planar smooth				
1965	605	From 606' to 612': Qtz feldspar pegmatite	606.75': 17° Stepped rough	C	100	71	
1960	610		609.3': 49° Inundated smooth From 610' to 625': Mostly rubble vertical fractures throughout				
1955	615			C	100	9	
1950	620						
1945	625		625.3': Planar irregular From 627' to 628.4': (2) 56°-51° J. fractures	C	100	66	

Degree of Alteration: Fr, SA, MA, HA, CA
Graphic Log
Rock Strength: Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard
Water
Fracture Spacing (ft): 0.05, 0.25, 0.50, 2.50, 5.00

BORING TYPE: HQ3
DRILLER: Crux
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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 630' to 637': (3) 0°-7° Planar smooth				
1935	635											
								From 637' to 638': (4) 20°-24° J. fractures planar smooth	C	100	90	
								639': 21° Planar smooth				
1930	640							From 640' to 653': (2) 0°-7° Planar smooth				
1925	645											
									C	100	96	
1920	650											
								From 653.3' to 654': 2°-6° Planar irregular stepped rev				
1915	655							From 655.4' to 656': 40°-52° Stepped rough				
								From 656' to 657': Vertical healed Ca+2				
		From 658' to 658.75': Qtz feldspar						From 658' to 659': (2) Vertical S. J. fractures stepped rough 79°-86°	C	100	78	
1910	660							660.3': 32° Planar smooth				

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								From 665' to 667': (3) 0°-12° Planar smooth 668.25': 48° Inundated slickenside	C	100	64	
1900	670							671': Healed fracture biotite/chlorite From 672' to 674': Vertical S. stepped rough From 674' to 675': (3) Planar slickenside defected				
1895	675	From 676' to 679': Qtz feldspar pegmatite						From 676' to 677': Rubble	C	100	55	
1890	680							680': 14° Stepped rough From 682' to 682.8': 7° Planar smooth From 682.6' to 693.1': 89° Vertical S. inundated smooth				
1885	685	From 685' to 687': Qtz feldspar pegmatite						From 682.7' to 685': Deformed rubble From 685' to 687': Hairline vertical fracture throughout From 689' to 690': Vertical S.	C	100	62	
1880	690	From 690' to 691': Qtz feldspar pegmatite						From 690' to 690.25': Rubble From 693.5' to 696': (5) 0°-22° Planar smooth				
1875	695							From 696.5' to 698': 90° Vertical S. inundated smooth From 699' to 700': (2) 0° Planar smooth	C	90	31	

BORING TYPE: HQ3
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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
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								From 702' to 713': Rubble				
	704	CORE LOSS										
1865	705	From 705' to 707.8': Qtz feldspar pegmatite							C	90	12	
1860	710											
	712	CORE LOSS										
	713											
1855	715							From 715.3' to 717': 90° Vertical inundated rough				
								From 718' to 720': (8) Rubble planar breaks	C	100	8	
1850	720							From 720' to 725': 90° Vertical S., multiple stress fractures stepped rough				
1845	725	From 725' to 726.7': K feldspar						From 726' to 728.1': Defected	C	100	27	
1840	730							From 730' to 735': Vertical S. fracturing rubble				

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								736.7': 22° Planar smooth 738.6': 74° (3) 70°-90° S. stress fractures stepped rough From 740' to 743': Heavily healed vertical fractures From 741' to 742.5': Rubble 743.6': Planar irregular	C	100	64	
1830	740											
1825	745	QTZ MONAZITE, light gray to white, phaneritic, massive, dominant in sodium and calcium rich plagioclase, biotite, and quartz, trace muscovite, chlorite, epidote, and hornblende						From 745' to 747': (3) 38°-42°-44° J. fractures From 747' to 750': Hairline healed radiating fractures	C	100	81	
1820	750							From 751' to 751.7': (3) 35°-40° Inundated rough From 753.9' to 755': (3) 0°-7° Planar smooth				
1815	755							755.6': Rev angle wedge 59°-32° inundated slickenside, black biotite 755.7': 16° Planar smooth	C	100	61	
1810	760							From 761' to 762.9': (5) J. fractures 15°-22° inundated smooth From 764' to 765': Rubble				
1805	765							From 765' to 770': (8) 0°-10° Planar smooth	C	100	69	

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								From 771' to 775': (5) 12°-20° J. fractures planar smooth				
1795	775							From 775.5' to 779': Rubble				
		From 778' to 779': Qtz feldspar pegmatite							C	100	47	
1790	780							781': Planar irregular				
								From 782.1' to 784': Hairline partially healed S. fracture 79°-90° inundated rough				
								From 784' to 786.7': (4) 0°-7° Planar smooth				
1785	785											
		From 786.7' to 787.6': Qtz feldspar pegmatite						From 786.7' to 788': Rubble	C	100	52	
								From 789' to 790': 90° S. inundated stepped rough				
1780	790							From 791' to 795': (6) 20° Planar smooth				
								From 794' to 794.7': 44°				
1775	795											
	796 / 796.2	CORE LOSS										
								From 797' to 798': (2) Planar irregular	C	98	71	
1770	800							From 801' to 805': (5) defected 0°-22° breaks				

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								From 805' to 817': Rubble	C	100	0	
1760	810											
1755	815							From 817' to 820': Partial rubble	C	100	12	
1750	820							From 820' to 828': Rubble				
1745	825											
	825.5	CORE LOSS										
	826.5								C	90	22	
1740	830							829.1': 45° Planar smooth 829.7': 45° Planar smooth From 830' to 833': Partially defected, partial rubble				
		From 834' to 835': Qtz feldspar pegmatite						833.8': Planar irregular				
1735	835								C	100	56	
								838.6': 17° Planar smooth				

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 840' to 842': (3) 20° Planar smooth				
								842.6': 47° Inundated rough				
								From 843.7' to 846': (5) 50°-60° J. fractures planar slickensides, chlorite				
1725	845											
								847.1': Planar smooth	C	100	46	
								From 848.6' to 850': Vertical 90° S. fractures planar smooth				
1720	850							From 850' to 865': 45°-90° stress fractured exc 855'-857'				
1715	855								C	100	34	
1710	860											
								From 865' to 870': (13) 22°-51° Inundated smooth				
1705	865								C	100	27	
1700	870	From 871' to 872': Qtz feldspar pegmatite						From 870' to 874': Rubble				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 876' to 880': (16) 40°-90° Planar smooth	C	100	20	
1690	880							From 880' to 890': Rubble exe 882'-885' (9) 40°-50° stress fractures, planar smooth				
1685	885								C	100	10	
1680	890											
1675	895	QTZ MONZONITE, light gray to white, phaneritic, massive, high in chlorite and epidote						From 895' to 905': Rubble, multiple fractures throughout	C	100	0	
1670	900											
1665	905	From 906' to 908': Qtz feldspar						From 905' to 915': Rubble, multiple fractures throughout	C	100	17	

BORING TYPE: HQ3
DRILLER: Crux
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C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
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		From 911.5' to 912': Qtz feldspar										
1655	915	From 917' to 925': Pyrite						From 915' to 925': Rubble, multiple fractures throughout	C	100	0	
1650	920											
1645	925							From 925' to 935': Rubble, multiple fractures throughout	C	100	0	
1640	930											
1635	935							From 935' to 945': Rubble, multiple fractures throughout	C	100	10	
1630	940											
		From 944' to 952.5': High chlorite						From 945' to 955':				

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								Rubble, multiple fractures throughout	C	100	8	
1620	950											
1615	955							From 955' to 965': Rubble, multiple fractures throughout	C	97	0	
		From 959' to 960.3': Qtz feldspar										
1610	960											
	961											
	961.3	CORE LOSS										
1605	965							From 965' to 975': Rubble, multiple fractures throughout	C	100	0	
		From 967' to 969': Qtz feldspar										
1600	970	From 970' to 980': Qtz feldspar										
1595	975							From 975' to 985': Rubble, multiple fractures throughout	C	100	12	

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1585	985							From 985' to 995': Rubble, multiple fractures throughout	C	100	8	
1580	990											
1575	995							From 995' to 1000': Rubble, multiple fractures throughout	C	100	69	
1570	1000	QTZ MONZONITE, light gray to white, phaneritic, massive, biotite rich						From 1002' to 1002.7': 90° S. 1003': Planar irregular	C	100	68	
1565	1005							From 1005' to 1006': (3) Planar rough From 1006.6' to 1007': 72° Planar slickenside From 1008' to 1013': (7-9) 17°-20° Planar smooth				
1560	1010	From 1013' to 1015': Qtz feldspar						From 1009' to 1010': Rubble From 1011.5' to 1012.3': Rubble From 1013' to 1017.4': Rubble	C	85	17	

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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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	1017.4	CORE LOSS										
	1018.9							From 1018.9' to 1020.5': Rubble				
1550	1020							From 1020.5' to 1030': (35) 0°-30° Planar smooth fractures only 14" section	C	100	12.5	
1545	1025											
1540	1030							From 1030' to 1032': 90°-57° J. fractures, rubble From 1032' to 1035': (3) Planar smooth From 1032.1' to 1040': (25) Multiple 1"-3" portions with 0°-30° planar fractures	C	100	30	
1535	1035											
1530	1040	From 1040' to 1041': Qtz feldspar						From 1040' to 1042.8': Rubble				
	1040.6 1041	CORE LOSS							C	96	34	
1525	1045							1043': 39° Undulating smooth From 1044' to 1045': (5) 51° Planar smooth From 1045' to 1046': (2) Planar smooth From 1047' to 1050': (4) 20° Planar smooth, 0° planar smooth				

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1515	1055							1052.8': 4° Planar smooth From 1054.5' to 1054.8': (2) 49° J. fractures undulating smooth From 1055' to 1056': Rubble 1057': Planar irregular From 1057.8' to 1060': 90°-67° Stress J. fracture, S. fracture stepped rough	C	100	60	
1510	1060	From 1062.8' to 1064.1': Qtz feldspar						From 1060' to 1061.7': Rubble 1063.8': Planar smooth	C	100	47	
1505	1065							From 1066.6' to 1067.4': 90° S. fracture undulating rough From 1067.4' to 1069': 90° S. fracture undulating smooth				
1500	1070							From 1070' to 1072.9': 90° S. rubble From 1072.9' to 1074.6': Undulating smooth large 90° healed fracture, calcite From 1075' to 1076.8': (3) 45°-50° Undulating and 19" 84° undulating rough stress fracture From 1077' to 1081': Multiple fracturing no 4" sample 0°-80° undulating smooth	C	100	26	
1495	1075											
1490	1080							From 1082' to 1085': 80°-90° Healed (biotite) defected fracture From 1083.2' to 1085': (3) 84°-90° stacked stress J. fractures stepped rough	C	100	49	

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								1087.1': 38° Planar smooth From 1088.1' to 1089': 17° Planar smooth				
		From 1089' to 1090': Qtz feldspar						From 1089.6' to 1090': Rubble				
1480	1090							From 1090' to 1091': (4) 30° J. fractures planar smooth	C	100	44	
1475	1095							1097': Planar rough defected 1098': 29° Planar slickenside From 1098.7' to 1099.5': 79°-84° Stepped rough				
1470	1100											
	1101 1101.4	CORE LOSS										
								From 1102' to 1105': (6) Planar irregular	C	96	50	
1465	1105											
								1106.8': 22° Planar smooth 1107.3': 20° Planar smooth 1107.9': 22° Planar smooth				
1460	1110							From 1108' to 1110': Rubble From 1110' to 1111': (3) Planar irregular From 1112' to 1112.3': (2) 0°-10° Planar undulating rough	C	100	74	
1455	1115							From 1112.3' to 1116': 79°-84° Biotite/chlorite healed fracture 1116.4': 51° Undulating slickenside From 1118.9' to 1119': Planar smooth				

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								1122': Planar smooth	C	100	63	
1445	1125							1126': Rev angle 90° and 41° undulating smooth				
								1127.4': Planar smooth				
								1129.4': 32° Planar smooth				
1440	1130							From 1131' to 1132.4': 90° Planar rough	C	100	51	
								From 1133' to 1134': (2) 0°-6° Planar smooth				
								1134': 45° Undulating smooth				
1435	1135							1136.2': 32° Undulating rough				
								1138.5': 39° Planar smooth				
1430	1140							1141.3': 0° Planar smooth	C	100	70	
								1144': 67° Planar biotite mineralization smooth				
1425	1145							1145': 38° Stepped rough				
1420	1150							1150': 42° Undulating smooth				
								From 1151' to 1152.3': 90°-69° Vertical S. fracture stepped rough	C	100	52	
								1152.5': 40° Planar smooth				
								From 1153' to 1154': (2) 79°-84° J. fractures				

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								planar smooth From 1155' to 1159': (9) 0°-12° Planar smooth				
1410	1160							From 1160' to 1161': (5) 0°-12° Planar smooth From 1162' to 1164': Rubble, multiple (8) 10°-15° smooth planar J. fractures	C	100	61	
1405	1165							1164.5': 40° Planar smooth From 1165' to 1185': Multiple angled fractures throughout				
1400	1170								C	100	31	
1395	1175											
1390	1180								C	100	30	
1385	1185											
	1186	DIORITE, dark gray, phaneritic, rich in sodium and calcium, quartz, hornblende, and amphibole, trace muscovite, chlorite, pyrite, and biotite						1186.5': 42° Planar smooth From 1187.3' to 1189': (2) 80°-90° Undulating smooth J. stress fractures				

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								From 1190' to 1190.5': (2) 80°-90° Undulating smooth J. stress fractures From 1191.3' to 1192.6': Planar irregular From 1193' to 1195': Rubble From 1195' to 1210': Multiple stacked 0°-22° planar smooth with calcite infill (4) 4" sections or > only	C	100	20	
1375	1195											
1370	1200	From 1202.5' to 1206': Qtz feldspar pegmatite							C	100	14	
1365	1205											
1360	1210							From 1210' to 1215': Rubble or (16) as above	C	100	20	
1355	1215							1215.2': Planar 1216': 38° Planar smooth From 1217' to 1217.8': Calcite infilled 51° planar smooth From 1218' to 1221': Broken 2" sections, rubble				
1350	1220							From 1221' to 1222': 90° Planar smooth From 1223' to 1225': Multiple 80°-90° S. fractures planar smooth	C	100	0	

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DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
	1225	QTZ MONZONITE, light gray to white, phaneritic, massive						From 1225' to 1241': Rubble 2" sections				
1340	1230								C	88	0	
	1233	CORE LOSS										
	1233.7											
1335	1235											
	1236	CORE LOSS										
	1236.5											
1330	1240							1241.7': 32° Planar smooth From 1242' to 1242.6': 71° Undulating rough S. fracture From 1243' to 1247.3': Planar smooth 15 or > 2"	C	73	10	
1325	1245											
	1247.3	CORE LOSS										
1320	1250											
	1251.1							From 1251.1' to 1252': (4) Planar smooth 1252.6': 48° Undulating rough From 1254' to 1255': Rubble From 1255' to 1270': Broken/rubble - multiple azimuth fracture all through, except 1257'-1258'	C	89	12	
1315	1255											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
1305	1265							From 1262' to 1264': (5) 0°-6° Planar smooth	C	100	8	
1300	1270	QTZ MONAZITE, light gray to white, phaneritic, massive, sodium/calcium feldspar, quartz, hornblende, biotite, trace muscovite, chlorite, epidote, pyrite						1270.9': Planar irregular 1272.25': 7° Planar smooth	C	100	78	
1295	1275							1275.5': 0° Planar smooth 1276': 38° Healed fractures 1277': 10° Undulating rough 1277.1': 0° Planar irregular				
1290	1280							1278.9': 41° Planar smooth From 1280' to 1281': 67° and 90° Slip/S. J. fractures planar smooth 1281.7': 40° Planar smooth 1283.5': 12° Undulating smooth From 1284.7' to 1286': (8) Planar smooth 1285': 38° and 32° 1288.3': Planar smooth From 1289.1' to 1289.2': 1° and 17° Planar smooth	C	100	70	
1285	1285											
1280	1290							1293.6': 67° Undulating smooth calcite infill/mineralization	C	100	71	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								1294': Planar smooth From 1296.25' to 1296.7': 61° Planar smooth Ca+2 mineralization From 1297' to 1300': (11) 9°-31° Planar smooth J. fractures From 1300' to 1303': (17) 9°-22° Planar smooth J. fractures 1304': 14° Planar smooth 1306.7': Planar smooth K feldspar healed fractures From 1307' to 1308': (2) Planar smooth	C	100	62	
		From 1319' to 1320': Qtz feldspar pegmatite						From 1312.6' to 1313': (4) 13°-15° Planar smooth From 1313.6' to 1313.9': 7°-9° Planar smooth along K feldspar infill contact From 1315.2' to 1316': 44° Undulating smooth From 1316' to 1317': 81° S. and (2) 27° J. fractures From 1318' to 1320': Rubble	C	100	52	
								1320.3': 39° K feldspar planar smooth 1321': Planar irregular along calcite healed zones 1322': Healed Ca+2 open planar irregular From 1322.1' to 1323': (3) 12° Planar irregular From 1324' to 1325': 71° Biotite defected (gray-smooth) infill, multiple healed fractures From 1325' to 1329': no 4" sample, 0°-19° J. fractures planar smooth	C	100	49	

EL: 1270, 1265, 1260, 1255, 1250, 1245
DEPTH (ft): 1300, 1305, 1310, 1315, 1320, 1325

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
1235	1335							1331.5': Vertical healed and 37° planar smooth 1332': 0° Planar smooth From 1333' to 1333.6': 90° S. undulating rough 1334.2': Ca+2 Infill, 0° planar smooth 1336.1': 17° Planar smooth From 1337.4' to 1337.9': 0°-4° Planar smooth	C	100	38	
1230	1340							1339.4': 12° Planar smooth 1340': 57° Planar slickenside defected biotite 1341.7': 27° Planar smooth 1342': Rev angle 1342.25': 22°-31° Planar smooth From 1343.3' to 1343.9': 0°-17° Planar smooth Ca+2 mineralization From 1345' to 1346.4': 81°-90° Undulating S. fracture mineralization smooth	C	100	65	
1225	1345											
1220	1350							1347.1': 41° Ca+2 Planar smooth 1347.3': Rev angle 33° Ca+2 planar smooth From 1348.7' to 1349.6': 0°-2° Planar smooth From 1351.7' to 1356.8': (13) 0°-29° Planar smooth, (3) 4" sections	C	100	74	
1215	1355 1355.5 1356	DIORITE						1357.2': 17° Planar smooth 1358': 69° Ca+2 planar smooth				
1210	1360							1361': Planar irregular From 1362' to 1365': (5) 30°-35° Planar smooth	C	100	41	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
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CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								1365': K and Ca+2 infill healed fracture From 1366' to 1367': 90° S. fracture				
1200	1370	QTZ MONAZITE, light gray to white, phaneritic, massive						From 1370' to 1375': 3.5/5°	C	100	35	
1195	1375							From 1375' to 1390': Decomposed				
1190	1380								C	100	0	
1185	1385											
1180	1390							From 1391' to 1393': Broken fragmented	C	100	44	
1175	1395							1396.5': Planar smooth From 1396.7' to 1397.4': Undulating rough 1398': 42° Planar smooth				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 1399' to 1400': 79° S. fracture planar smooth From 1401' to 1403': (5) 0°-7° Planar smooth 1403.6': 61° Planar slickenside 1404.2': 0° Planar smooth 1405.4': 38° Planar smooth From 1406.1' to 1406.9': 0°-9° Smooth 1407.8': Planar smooth From 1408' to 1411': Defected	C	100	57	
								From 1412.6' to 1413.9': 90° S. fracture - rubble stepped rough From 1414' to 1416.2': (9) 0°-10° Planar rough 1417.2': 39° Planar smooth 1418.4': 29° Planar smooth From 1419' to 1420': (3) J. fractures stocked 80°-84° planar smooth	C	100	47	
		QTZ MONZONITE, light gray to white, phaneritic, massive, with NaCa+ plagioclase, quartz, biotite, trace pyroxene, muscovite, and pyrite						1420.1': 0° Planar smooth 1421': 0° Planar smooth 1422.9': 0° Planar smooth 1423.9': (2) 38° J. fractures undulating smooth 1424': 27° Planar smooth 1427.1': 35° Planar smooth 1428.7': 29° Planar smooth	C	100	77	
								From 1429.5' to 1429.7': 22° Planar smooth 1430.67': 39° Undulating smooth 1432': 12° Planar rough From 1433' to 1437': 90° Undulating smooth S.	C	100	61	

EL: 1165, 1160, 1155, 1150, 1145, 1140
DEPTH (ft): 1405, 1410, 1415, 1420, 1425, 1430

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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CLIENT: Lane Power & Energy Solutions
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PROJECT: Hydrostor Zevsar
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PROJECT LOCATION: Rosamod, CA
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								fracture From 1437' to 1437.9': (3) 0°-4° Planar smooth				
1130	1440							From 1440' to 1441': 90° S. fracture contact with 45° planar smooth 1442': Planar smooth From 1444' to 1445.5': (4) 31° Planar smooth rev angle	C	100	61	
1125	1445							1446.8': Planar smooth From 1448' to 1450': (7) 0°-21° Planar smooth, (3) 4" section				
1120	1450							1451': 38° Planar smooth From 1452' to 1453.2': (5) 30°-42° Healed fractures undulating smooth From 1454.1' to 1455': 51°-52°-43°	C	100	45	
1115	1455							1455.2': Planar irregular 1456.4': Planar irregular 1457.7': 45° Planar irregular 1458': 32° Planar irregular				
1110	1460							From 1459.1' to 1459.3': Rev angle 51°-42° planar undulating smooth From 1460' to 1465': (15) 0°-45° Multifracture (1) 4" section undulating planar smooth mostly along healed Ca+2 infill structures	C	100	40	
1105	1465							1465.5': 42° Undulating smooth From 1466' to 1467': (3) 86°-79° J. fractures undulating rough 1469.5': 32° Planar				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
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CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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								slickenside 1470.6': Planar irregular 1473.1': 27° Planar smooth 1473.5': 4° Planar smooth 1473.9': 22° Planar smooth 1476': (2) J. fractures stepped rough 79°-64° 1479.1': Planar smooth	C	100	72	
1095	1475											
1090	1480							1481.2': Planar smooth From 1482' to 1483.7': (5) 70°-80° Planar smooth J. fractures From 1484' to 1486': Stepped rough 81° S. fracture 1486.7': 62° Undulating smooth From 1488.2' to 1489': (2) 38°-42° Planar smooth 1489.6': 38° Planar smooth	C	100	66	
1085	1485											
1080	1490							From 1490' to 1494': Multiple 20°-45° rev angle fractures along mineralization infill (healed fracturing) K feldspar Ca+2 From 1492.8' to 1494': 45° Vertical S. 1495.5': 38° Planar smooth 1496': 45° Planar smooth From 1499.3' to 1499.7': (3) 40° J. fractures	C	100	40	
1075	1495											
1070	1500							1500.5': 45° Planar rough From 1501.1' to 1501.4': (4) 77° Healed J. fractures Ca+2 1501.9': 62° Planar smooth	C	100	36	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
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CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 1503' to 1505': (4) 67° Undulating smooth From 1505' to 1506': Rubble 1507.9': 28° Planar smooth From 1509' to 1510': (6) Slip/step J. undulating smooth rough fractures				
1060	1510							1510.85': 5° Planar smooth From 1512' to 1513.4': (7) 9°-45° J. fractures planar smooth 1514': 20° Planar smooth 1514.1': 61° Planar smooth	C	100	61	
1055	1515							1516.7': Undulating smooth along healed Ca+2 fracture 1517.67': 39° Planar smooth From 1518' to 1518.9': (3) 0° Planar smooth				
1050	1520							1519.2': Planar irregular 1521': 21° Undulating smooth (healed Ca+2) 1521.6': 0° Planar smooth 1522.4': 0° Planar smooth 1523.2': 0° Planar smooth 1523.9': 0° Planar smooth From 1524' to 1525': (3) 61°-68° Planar smooth J. fractures	C	100	45	
1045	1525	From 1525.5' to 1526': Very damp after 2 days dry time										
1040	1530							From 1525.4' to 1526': Rubble From 1526.7' to 1526.7': 0°-19° Planar smooth From 1527' to 1528': (3) 70°-80° Undulating smooth J. fractures From 1529' to 1530.3': 70°-90° S. stepped rough 1532': 47° Planar smooth/ rough 1532.4': 17° Planar smooth healed fracture From 1534' to 1535': Rubble, high stressed area with multiple	C	100	90	UCS = 20,223
1035	1535											

BORING TYPE: HQ3
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SAMPLING & IN SITU TESTING LEGEND

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
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								fractures 1536': Planar irregular along healed section 1538': Undulating smooth/ rough 0°-1° 1539': 76° Planar smooth/ rough 1541.2': 6° Undulating rough 1541.48': 38° Planar smooth From 1543.1' to 1543.35': 8° and 33° Planar smooth 1546.5': 90° S. planar rough	C	100	36	
1025	1545											
1020	1550							1548': 86° S. along healed fracture, undulating smooth From 1550.4' to 1552': 90° S. fracture planar smooth From 1553.5' to 1554': 81° S. planar smooth	C	100	38	
1015	1555							1556.2': 7° Planar smooth 1558.3': 29° Planar smooth From 1559' to 1560': 86° S. planar smooth				
1010	1560							From 1560' to 1561': (2) 7°, 45° Planar smooth 1562': (2) 90° S. J. undulating smooth From 1563' to 1564': 90° S. undulating smooth	C	90	27	
1005	1565	CORE LOSS										
	1566							1566.9': 0° Planar smooth 1567': 45° Stepped rough 1569': 39° Planar smooth				PL(A) = 985
1000	1570	QTZ MONZONITE, light gray to white, phaneritic, massive, with plagioclase, biotite, and quartz, trace muscovite, chlorite, hornblende, pyroxene, and pyrite							C	100	100	PL(A) = 901

BORING TYPE: HQ3
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PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								1576.45': Planar smooth 1576.8': Planar smooth 1577.15': Planar smooth				
990	1580							1580.4': Planar smooth 1580.55': Planar smooth 1580.75': Planar smooth 1582.45': 22° Planar smooth	C	100	92	PL(A) = 331
985	1585							From 1586.55' to 1587': (2) 20°-22° Planar smooth 1587.4': Planar smooth 1588.7': 33° K feldspar healed fracture 1589.3': 30° Planar smooth				
980	1590								C	100	87	ITS = 1,214
975	1595							1594.4': 27° Along K feldspar infill planar smooth 1598.75': Undulating rough				
970	1600							From 1599' to 1600': (5) 0°-11° Planar smooth	C	100	47	
965	1605							From 1603' to 1603.2': 29° Planar slickenside From 1603.4' to 1605': (7) 70°-84° High angle S. J. fractures following healed zones, undulating smooth to rough From 1606.8' to 1607.2': (4) Planar rough				UCS = 22,921

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								1612': Planar irregular 1612.9': 39° Planar smooth 1613': 47° Undulating rough	C	100	91	
955	1615											PL(A) = 1,333
950	1620								C	100	96	
								1624.1': Planar smooth				
945	1625											
								1628.3': 39° Planar smooth 1629.7': 90° S. planar smooth				
940	1630							1631': 62° Planar smooth 1632': Rev angle multi directional healed fractures undulating smooth	C	100	92	
935	1635							From 1633' to 1633.3': (2) 59°-67° S. J. fractures undulating smooth 1634.5': 47° Planar smooth 1636.55': 0° Planar smooth				PL(A) = 867
								1639.2': 29° Planar smooth				
930	1640							1639.5': 0° Planar smooth 1639.9': 0° Planar smooth 1640.2': Planar smooth	C	100	65	
		From 1642' to 1643': Qtz feldspar pegmatite						From 1641' to 1644': (4) 0°-22° Planar smooth				

BORING TYPE: HQ3
DRILLER: Crux
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CASING: HW to 70 ft
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 1643' to 1643.3': 67° Planar smooth along Ca+2 infill healed fractures (close to rubble)				
								1644': 67° S. planar smooth				
								1644.8': 0° Planar irregular				
920	1650							1645.1': Planar smooth				
								1647': Planar rough				
								From 1650.2' to 1653.2': (3) 17°-33° Planar smooth	C	100	95	
915	1655							1655': Planar smooth				
								From 1659' to 1660': (3) Planar smooth				
910	1660	From 1659.5' to 1661.25': Honeycomb qtz feldspar pegmatite						1662': 51° Undulating smooth	C	100	89	
905	1665							From 1667.4' to 1667.6': Planar smooth				PL(A) = 670
900	1670							1669.9': 47° Planar smooth				
								1670.6': 42° Planar smooth				
								From 1671' to 1672': Rubble	C	100	40	
								From 1672.5' to 1673': 61° S. planar smooth				
895	1675							From 1673' to 1674': Healed 90° J. fracture planar smooth				
								1679': 39° Planar smooth				

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C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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									C	100	98	
885	1685							1684.6': Planar smooth				
												ITS = 1,545
								1688.9': 59° J. fracture/ healed fragmented				
880	1690								C	100	70	
875	1695											
	1697	QTZ MONZONITE, light gray to white, phaneritic, massive						From 1698' to 1698.5': 80° Undulating S. stress fractures, smooth				
870	1700							1700.5': 0° Planar smooth				
								From 1702.35' to 1705': (10) 68°-74° J. fractures, undulating rough - smooth	C	100	20	
865	1705							From 1704.5' to 1705': Vertical 90° J. fracture				
860	1710							From 1711' to 1715': (4) 52°-61° J. planar smooth	C	100	40	

BORING TYPE: HQ3
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 1716.8' to 1719': (4) 52°-61° J. planar smooth From 1716.9' to 1719': (4) 40°-50° Planar smooth, remainder rubble				
850	1720							1720.8': Planar smooth 1721.8': 47° Planar rough From 1722.8' to 1725': Rubble	C	100	38	
845	1725							1727': Stepped 59° rough				
840	1730							From 1733' to 1734.5': Rubble	C	100	40	
835	1735							From 1735' to 1736': (2) 39°-44° Planar smooth From 1736' to 1738': Rubble vertical S. fracturing From 1738.45' to 1738.65': 0° Planar smooth				
830	1740							1741.3': 0° Planar irregular 1741.38': 11° Planar undulating smooth From 1741.9' to 1742.6': 90° Undulating rough S. fracture	C	100	29	UCS = 14,001
825	1745							From 1745' to 1749': Rubble From 1748.6' to 1750': 90° Stepped rough 90° S.				

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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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	1750	QTZ MONZONITE, light gray to white, phaneritic, massive, with plagioclase, quartz, biotite, and hornblende, trace muscovite and pyrite						From 1750' to 1751.75': 90° Planar smooth S. fracture 1752': 42° Planar smooth K feldspar From 1753' to 1754': 90° S. planar smooth epidote/chlorite	C	100	72	
815	1755											PL(A) = 1,130 PL(A) = 1,065
810	1760							1760.2': Planar smooth 1763': Planar smooth	C	100	78	
805	1765							From 1767' to 1768': (3) 67° S. planar smooth Cl-3 1769': 0° Planar smooth				
800	1770							From 1769.2' to 1769.8': 77° Planar smooth From 1770.6' to 1771': 71° Undulating rough 1771.1': 0° Planar smooth 1771.4': 32° Planar smooth	C	100	69	
795	1775							1773.6': 61° Undulating smooth From 1776.8' to 1777': 52° Planar smooth From 1777' to 1778': 82° Undulating smooth 1778.7': Planar smooth				PL(A) = 638
790	1780							1782': 4° Planar smooth 1782.9': Planar smooth 1784': 0° Planar smooth	C	100	71	ITS = 1,309

BORING TYPE: HQ3
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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 1785' to 1788': (6) Planar smooth				
								1789.4': 81° Planar smooth S. fractures				
780	1790											
	1791	DOLERITE/ DIABASE DIKE										
	1793.8											
775	1795	QTZ MONAZITE, light gray to white, phaneritic, massive						1796': 87° Planar 1796.7': Planar smooth 1798': 7° Planar smooth From 1798.6' to 1799.4': 45°-90° Rev angle fracture, healed K feldspar fracture	C	100	36	
770	1800							From 1800' to 1801': (3) 0° Planar smooth 1802': 7° Planar smooth From 1802.7' to 1803.2': 69° Undulating rough				
765	1805							1805.5': 0° Planar smooth From 1807' to 1808': Rubble	C	100	30	
760	1810	From 1811.5' to 1812.4': Qtz feldspar pegmatite						From 1810.4' to 1811': 90° S. planar rough, fresh From 1811' to 1814': Rubble < 2"				
755	1815							From 1816' to 1817.5': (3) 0° Planar smooth 1818': Radiating 90°-70° Ca+2 healed, open fracture stepped rough From 1819' to 1820': (4)	C	100	65	

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C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								0° Planar smooth				
								1821.9': Planar irregular From 1822' to 1825': (6) 0°-7° Planar smooth				
745	1825							From 1825' to 1840': High in Ca+2 and K healed fractures From 1825.1' to 1827.5': Vertical 90° healed J. fracture From 1827' to 1830': (5) 2°-7° Planar smooth	C	100	30	
740	1830							From 1830' to 1831': Rubble defected 1832': 8°-45° Stepped rough, large K+ and Ca+ combined infill				
735	1835							1834.7': Planar smooth 1836': 67° S. and 81° planar smooth From 1837' to 1838': Multifracture 90°-45°-0° rubble	C	100	14	
		From 1839' to 1840': High chlorite						From 1838.9' to 1839.2': 0°-9° Undulating rough				
730	1840	From 1841.5' to 1842': Qtz-K feldspar pegmatite						From 1840' to 1855': Multidirectional fractures, rubble				
725	1845								C	100	45	
720	1850	From 1852' to 1854': Qtz-K feldspar pegmatite										UCS = 15,752

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
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								From 1856.4' to 1857': Rev angle at 39° and 42° planar smooth From 1858' to 1870': Decomposed	C	100	35	PL(A) = 213
710	1860											
705	1865								C	100	27	SLK = Type II
700	1870	From 1871.7' to 1872.4': High K-feldspar						1870.5': Planar smooth From 1871.4' to 1872.5': (5) 40°-44° Undulating rough From 1873.1' to 1875': (5) 33°-38° Planar smooth				
695	1875							From 1876.4' to 1876.8': 49° Planar smooth 1877.8': 48° Undulating rough From 1879' to 1880': (3) Planar smooth and 90° 2" planar smooth 1881': 44° Stepped rough 1881.9': 40° Planar smooth 1883': 49° Planar smooth From 1883.9' to 1884.6': Undulating smooth	C	100	48	PL(A) = 755
690	1880											
685	1885							1886.5': 45° Undulating rough - smooth 1888': 51° Planar slickenside / biotite defection	C	100	52	PL(A) = 781 ITS = 1,335

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								1890': 69° along healed K feldspar and Ca+2				
		From 1892' to 1892.6': Qtz-K feldspar pegmatite						1892': 90° S. 6" planar smooth coated Ca+2 1892.8': Planar smooth				
675	1895							From 1893.4' to 1893.8': 67° Planar smooth K felspar / Ca+2 From 1894' to 1894.5': 90° S. undulating smooth				
								From 1894.1' to 1895': High healed fractures K and Ca+2	C	100	19	
670	1900							From 1896.9' to 1897.55': 71° Undulating Ca+2				
		From 1901.2' to 1902': Qtz feldspar						From 1898' to 1920': Rubble From 1900' to 1901': (2) 4°-8° Planar smooth From 1901' to 1920': Rubble mostly from driller				
665	1905											
		From 1906' to 1908': Qtz feldspar pegmatite							C	100	8	
660	1910											
655	1915								C	100	10	
650	1920							From 1920' to 1925': Multiple J. and healed 70°-90° fractures 1920.9': Qtz feldspar From 1923' to 1929': Rubble				

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									C	100	8	
640	1930							From 1930' to 1945': Rubble defected zone				
635	1935								C	100	8.5	
								From 1938' to 1943': Defected				
630	1940											
625	1945	QTZ MONAZITE, light gray to white, phaneritic, massive, with plagioclase, K feldspar, biotite, hornblende, and quartz, trace mica/muscovite, pyrite, chlorite, and epidote						1946.1': 48° Planar smooth				
								1946.7': 39° Planar smooth	C	100	43	
								1947.1': 61° Planar slickenside wedge rev angle fracture undulating smooth 57°				
620	1950							1948.8': 12° Planar slickenside				UCS = 18,272
								1949': 39° Undulating rough				
								From 1951' to 1951.6': 79° Undulating smooth				
615	1955							From 1953' to 1954.4': 38° Stepped along K feldspar infill smooth at 1953.5' rev angle				
		From 1957' to 1958': Qtz feldspar pegmatite						1954.4': Stepped rough at 84°	C	100	23	
								From 1955.6' to 1956.3': 90° S. fractures stepped rough - smooth				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 1957' to 1960': K feldspar high percentage 1960': 71° 1961': 42° Rubble stepped rough 1963': 44° Planar smooth				
		From 1964' to 1966.5': Qtz feldspar / monazite										
605	1965								C	100	80	
600	1970											SLK = Type I PL(A) = 875
595	1975								C	100	55	SLK = Type I PL(A) = 643
								1978.7': 47° Planar smooth				
590	1980	From 1980' to 1981.5': Qtz feldspar pegmatite						From 1980' to 1981': Defected 1981.2': 84° Stepped rough 1983': Rev angle at 42° and 49° undulating rough From 1983.2' to 1984': Undulating smooth				
585	1985							From 1985' to 1986': (3) 20°-30° Planar smooth From 1986.6' to 1987.1': (4) J. fracture 1988.6': 51° Planar smooth	C	100	87	PL(A) = 1,155
580	1990	From 1991.5' to 1991.8': Qtz feldspar pegmatite										ITS = 1,433

BORING TYPE: HQ3
DRILLER: Crux
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CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
			1998.4': K feldspar infill planar smooth 1998.8': 49° Planar smooth	C	100	95	TRI = 37,314
570	2000		From 2001.4' to 2001.8': 45° K feldspar infill planar smooth 2001.9': 2 directional fracture 22° and 45° planar undulating smooth				TRI = 24,460
		From 2004' to 2005': Qtz feldspar pegmatite					
565	2005		2003.5': 0° Planar smooth 2006.72': 0° Planar smooth 2007': 0° Planar smooth	C	100	92	UCS = 26,655 PL(A) = 1,067
560	2010		2010.2': 0° Planar smooth 2011.4': 31° Planar smooth 2012.1': 34° Planar smooth 2012.4': 79° S. undulating smooth				SLK = Type I
555	2015		2013': Planar irregular 2013.8': 38° Planar smooth From 2016' to 2016.4': Undulating rough 2017': Rev angle undulating smooth	C	100	50	ITS = 1,473
550	2020		2020.5': 0°-4° Undulating rough From 2021.5' to 2022.7': Rubble From 2022.7' to 2022.9': 47° Undulating rough 2024.7': 0° Planar smooth				
545	2025		2026.1': 47° Undulating rough				
		From 2027' to 2028': Qtz feldspar pegmatite	From 2028.5' to 2028.9': Multidirectional 71°-77° planar smooth	C	100	74	

Degree of Alteration: Fr, SA, MA, HA, CA
Graphic Log
Rock Strength: Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard
Water
Fracture Spacing (ft): 0.05, 0.25, 0.50, 2.50, 5.00

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
												TRI = 40,255
								2032': 32° Irregular planar smooth From 2033' to 2033.7': Rubble				
535	2035							From 2035.5' to 2036.5': (2) 84°-82° J. fractures undulating / stepped smooth and (1) 45° slickenside From 2037.8' to 2038': 77° Ca+2 infill undulating smooth 2038.5': 0° Planar smooth	C	100	55	
530	2040							From 2038.6' to 2039.3': 90° Undulating Ca+2 infill but rough 2042.4': 81° Planar smooth				UCS = 27,231
525	2045							2045.5': 0°-4° Planar smooth 2046.2': 0°-4° Planar smooth 2046.4': 0°-4° Planar smooth From 2046.75' to 2047': 63° Ca+2 filled planar smooth 2046.9': 0°-4° Planar smooth From 2051.2' to 2051.9': 87° Vertical S. fracture undulating smooth From 2053' to 2054': (2) 61° and (2) 28° rev angle planar smooth	C	100	100	PL(A) = 1,150
520	2050											
515	2055							2056': (2) 85°-88° S. fracture undulating smooth 2057.9': 45° Undulating smooth	C	100	100	ITS = 1,515 SLK = Type I
510	2060											

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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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												UCS = 22,671
								2067.9': 7° Planar smooth	C	100	100	
												TRI = 37,335
500	2070							2071': 34° Planar smooth				
								2072.9': 45° Planar smooth				
								2074': 39° Undulating smooth				
495	2075								C	100	95	PL(A) = 1,157
490	2080							2080.9': 45° Undulating rough				ITS = 879
								2082.4': 45° K + Ca+2 infill planar smooth				
485	2085											SLK = Type I
									C	100	92	
480	2090											TRI = 28,355
475	2095											UCS = 16,566
									C	100	100	

BORING TYPE: HQ3
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
												PL(A) = 824
465	2105	From 2105' to 2106.3': Qtz feldspar pegmatite							C	100	100	ITS = 1,158
460	2110											SLK = Type I
		From 2113.3' to 2114': Qtz feldspar pegmatite						2113': 2° Planar irregular 2114.2': 45° Undulating smooth				
455	2115								C	100	100	
								2118.6': 7° Planar smooth				
450	2120											TRI = 42,405
								2124': 42°-43° Planar smooth 0.1" spacing				
445	2125							2126.7': Planar irregular 2127.5': 32° Planar smooth	C	100	80	
								From 2129.1' to 2129.5': 0° Planar smooth				
440	2130							2131.2': Planar rough				UCS = 25,939
								2133.4': 0° Planar smooth 2133.9': 4° Planar				

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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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ENGINEERS & GEOLOGISTS

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								smooth				
								2135.5': 0° Planar smooth				PL(A) = 1,421
									C	100	90	
								2138.3': 11° Planar smooth				
								2139': 47° Chlorite slickenside				
430	2140							2139.5': 27° Planar smooth				
								2140.2': 0° Planar				ITS = 1,618
								2141.7': Planar smooth				
								2143': 11° and 0° smooth				
425	2145											
									C	100	100	SLK = Type I
420	2150											
								2151.2': 0° Planar				TRI = 24,335
								2154': 0° Planar smooth				
415	2155											
								2158': 17°-12° Planar 10° smooth	C	100	95	
								2159': 17° Planar smooth				
410	2160											UCS = 23,626
								2162': 0° Planar smooth				
								From 2162.4' to 2163': (4) 22°-27° K feldspar fractures planar smooth				PL(A) = 937
405	2165							2165.5': 42° Planar smooth				
								2165.9': 31° Planar smooth				
								From 2166' to 2167': 90° S. undulating rough	C	100	80	
								2168': 27° Planar				

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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								smooth 2168.8': Planar smooth 2169.8': Planar smooth 2171.9': 36° Planar rough				ITS = 1,545 SLK = Type I
395	2175	From 2178' to 2180': Qtz feldspar pegmatite						2178.3': (2) 61°-63° Planar smooth From 2178.8' to 2179.1': 71° Undulating rough	C	100	60	TRI = 31,052
390	2180											
385	2185								C	100	100	UCS = 29,590 PL(A) = 1,195
380	2190											
375	2195								C	100	100	ITS = 1,249
370	2200											

BORING TYPE: HQ3
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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									C	100	100	SLK = Type I
360	2210							2211.3': Undulating stepped rough Ca+2				TRI = 24,657
355	2215	QTZ MONZONITE, light gray to white and pink, phaneritic, massive, with high K feldspar and increased chlorite and epidote						2216': Planar smooth 2216.7': Decomposed 42° planar irregular	C	100	78	UCS = 20,384
350	2220							2220.3': 47° Undulating smooth 2221': 52° Planar smooth 2222': Planar smooth 2222.75': 76° Planar smooth				PL(A) = 322
345	2225							From 2223.2' to 2224': 79° Undulating smooth healed fractures - vertical and 45° K and chlorite infill 2228': 12° Planar smooth	C	100	50	
340	2230							2231.2': 45°-47° Planar smooth From 2232' to 2236': Decomposed				UCS = 5,697 SLK = Type I SLK = Type II
335	2235								C	100	40	ITS = 204

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								2240.2': 47° Undulating decomposed smooth				
325	2245							From 2245' to 2248': Defected	C	100	30	
								2249': 32° Planar smooth brittle				
320	2250							2251': 42° Planar smooth				SLK = Type I
								2252.6': 47° Planar along chlorite infill				
								2253.7': 42° Planar smooth				
315	2255							From 2256' to 2260': (7) 20°-40° along chlorite and veining planar smooth defected	C	100	53	PL(A) = 176
310	2260							From 2261.8' to 2262.4': Stepped smooth				ITS = 1,322
								From 2261.9' to 2267': (19) 5°-30° Planar				
305	2265							From 2267' to 2269.2': (12) 0°-14° Planar smooth	C	100	40	
								From 2269.2' to 2269.7': 69° Undulating smooth				
300	2270							From 2270' to 2275': (10) 10°-35° Planar smooth				
								From 2275' to 2280':				

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
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								(20) 10°-45° Undulating smooth				
								From 2278' to 2280': Healed 90° J. fracture planar smooth	C	100	58	
290	2280							2281.1': 42° Planar smooth				
								2281.6': 16° Planar smooth				
								2283.2': 0°-4° Planar smooth				PL(A) = 74
285	2285							From 2284' to 2284.6': Planar slickenside				
								From 2285' to 2290': (17) 0°-24° Planar smooth	C	100	37	SLK = Type I
280	2290							From 2291' to 2291.2': (2) 40°-35° Planar Ca+2 smooth				
								2291.2': (15) 0°-15° Planar smooth				
275	2295											TRI = 19,035
								2296.4': Planar smooth				ITS = 942
								From 2297.4' to 2297.7': 61° Planar smooth	C	100	41	
								From 2297.7' to 2298.4': Vertical healed fracture				
270	2300							From 2298.4' to 2301': (5) 17°-37° Planar smooth				
265	2305							From 2306' to 2308': Diorite				
								From 2306.1' to 2310': (8) 0° Planar smooth, (4) 32°-44° planar smooth	C	100	35	UCS = 1,888

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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								2311': 12° Planar smooth				
								2313.5': 42° Undulating rough				
								2314.2': 40° Planar smooth				PL(A) = 987
255	2315							From 2316' to 2320': 0°-90° Rubble multifaction				SLK = Type I
									C	100	21	
250	2320 2820	DIORITE						From 2320.1' to 2325': (4) 45° Planar smooth, (3) 0° Planar smooth, remainder rubble				
245	2325							From 2325' to 2326.5': 90° S. stepped rough				
								From 2327' to 2333': Rubble (20-30) breaks and <2"	C	100	19	
240	2330 2830											
												ITS = 923
								From 2334' to 2335': Rubble				
235	2335 2835	QTZ MONZONITE, light gray to white, phaneritic, massive, with K feldspar, biotite, hornblende, quartz, trace muscovite, pyroxene, chlorite, and pyrite						From 2336.7' to 2338.3': Rubble	C	100	67	
230	2340							2339.1': Rev angle and qtz feldspar intrusive 38° and 44° undulating rough				
								2339.4': 42° Planar smooth				UCS = 21,408
		From 2342' to 2344': Qtz pegmatite						2342': 2° Planar smooth				PL(A) = 792
								2342.5': 22° Planar smooth				
								2343.6': 0°-17° Undulating smooth				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								2344.5': 61° Planar smooth From 2345.2' to 2345.6': Planar rough 2346.7': Planar irregular smooth/ rough 2347.3': 51° Planar smooth 2349': 49° Undulating rough From 2349.8' to 2350': (3) 40°-45° Planar J. smooth From 2350' to 2351.5': (7) 30°-0° Planar smooth	C	100	62	SLK = Type I ITS = 1,088
220	2350											
	2351	DIORITE										
215	2355							2351': 32° Stepped rough at K feldspar contact From 2352.35' to 2353': Rubble From 2353' to 2353.75': (3) 48°-51° Planar smooth From 2355' to 2356.75': Rubble From 2357.3' to 2358': (6) Healed / open 0° planar smooth	C	100	61	TRI = 8,838
	2358											
210	2360							2358.4': 39° Planar smooth 2359.8': 33° Planar smooth				
205	2365							2361.8': 17° Planar smooth From 2362.5' to 2362.75': 39° Planar smooth 2363.6': Planar smooth 2364.5': 32° Slickenside From 2365' to 2366': Rubble 2366.5': Planar smooth 2367.2': Undulating rough From 2367.5' to 2367.9': 12°-22° Planar smooth	C	100	38	
200	2370											
195	2375							From 2373.2' to 2373.75': 30°-42° Planar slickenside 2374.1': 32° Planar smooth 2374.7': Planar smooth 2375.4': Planar rough	C	100	70	PL(A) = 143

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
185	2385							2376.2': 42° Planar slickenside From 2377' to 2378': (2) Planar smooth From 2378.8' to 2379.2': 22° and 45° Planar smooth 2379.8': 17° Planar smooth				UCS = 9,099 SLK = Type I ITS = 507
								2380.5': Planar rough From 2381.4' to 2382.1': 90° S. From 2382.1' to 2382.4': Rubble	C	100	62	
	2389	DIORITE						2385.4': 42° Planar smooth				
180	2390							2386': 44° Planar smooth 2386.7': 42° Planar smooth 2387.1': 42° Planar smooth From 2388' to 2388.6': 79° Stepped rough				TRI = 10,855
175	2395							2389': 87° Planar smooth				UCS = 2,344
								2390': Planar smooth From 2390.1' to 2392': 90° Stress J. fracture undulating smooth From 2393.5' to 2394.1': 45° Stepped rough 2394.9': Planar rough From 2401.8' to 2402.2': Pegmatite contact / healed 90° fractures From 2403.4' to 2403.6': Rubble	C	100	57	PL(A) = 152
170	2400	From 2400' to 2405': Qtz feldspar pegmatite										
165	2405											ITS = 256
									C	100	45	SLK = Type I
160	2410							2410.6': Planar smooth From 2414' to 2419': Rubble, 2 identifiable fractures				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
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CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								2416': 32° Planar smooth 2417': 42° Planar smooth	C	100	38	
150	2420							2422.2': Planar smooth From 2422.5' to 2425': (4) Planar smooth				
145	2425	QTZ MONZONITE, light gray to white, phaneritic, massive, with plagioclase, biotite, hornblende, and quartz, trace muscovite, chlorite, and pyrite From 2427' to 2431': Qtz feldspar pegmatite						2426': 45° Planar smooth From 2427' to 2432': Rubble	C	100	8	
140	2430							From 2432' to 2436': (12) 12°-32° Planar smooth				
135	2435											
	2436	CORE LOSS						From 2436' to 2437.8': Rubble				
	2437								C	90	12	SLK = Type I
130	2440							From 2440.3' to 2441.3': Stepped rough 98				UCS = 11,872 SLK = Type I
								2444': 79° Planar smooth				
125	2445							From 2444.7' to 2445': (2) 67° Planar J. smooth From 2445.3' to 2446': 69° Undulating smooth Ca+2 From 2447' to 2448': 90° Healed 0° planar smooth From 2448.6' to 2450':	C	100	25	PL(A) = 921

BORING TYPE: HQ3
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								Rubble From 2450' to 2453': Multiple 90° stepped and undulating smooth				
115	2455							From 2455' to 2460': (17) 0°-28° Planar smooth From 2457' to 2458': 4" >	C	100	25	SLK = Type II
110	2460							2461.8': 0° Planar smooth 2462.1': 0° Planar smooth 2463': Decomposed				PL(A) = 155
105	2465							2463.75': 45° Slickenside stepped From 2464' to 2466': 78° Undulating smooth 2464.1': 0° Planar smooth From 2466' to 2470': Rubble	C	100	10	
100	2470							From 2470' to 2472': Rubble 2472.9': 38° Planar smooth From 2473.2' to 2474': (4) Undulating 60°-70° smooth J. fractures				ITS = 639
95	2475							From 2475' to 2478': Rubble 2478': 90° S. planar rough	C	100	0	
90	2480							2480': 69°-78° S. planar rough From 2480.1' to 2484': Rubble From 2484.6' to 2485':				

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DRILLER: Crux
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CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								84° Undulating smooth 2485.8': Planar smooth From 2486.9' to 2488': Rubble 2489.1': 32° Planar smooth	C	100	18	
80	2490							2491': (3) 67° J. fracture 2491.3': Planar rough From 2492' to 2493.7': Rubble From 2494' to 2496.8': (2) 35° Planar smooth				
75	2495							From 2496.8' to 2498': Rubble (0° Planar smooth fraction) From 2499.1' to 2499.8': 80° Stepped rough	C	100	8	PL(A) = 188
70	2500							2500.2': 39° Planar smooth From 2503.6' to 2509': Rubble				ITS = 657
		From 2504' to 2508': Qtz feldspar pegmatite							C	100	30	
65	2505											
60	2510							From 2510' to 2512': (3) 10°-32° Planar smooth 2512': Mostly planar 0° smooth				UCS = 11,075 SLK = Type I
55	2515							From 2515' to 2517': (6) 30°-49° Planar rough / undulating rough From 2517' to 2523': Rubble defected	C	100	0	UCS = 1,152

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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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45	2525							2523.1': 6° Planar smooth From 2524' to 2525': (2) 17°-16° Planar smooth From 2525' to 2528': Rubble				PL(A) = 236
								2528.6': 0° Planar smooth 2529.7': 0° Planar smooth From 2530' to 2535': Defected rubble	C	100	0	ITS = 12
40	2530											
35	2535							From 2536' to 2536.8': 90° Stepped S. rough From 2537' to 2542': (9) 0°-22° Planar smooth/ rough	C	100	47	PL(A) = 307
30	2540							From 2542' to 2545': Rubble				
25	2545	QTZ MONZONITE, light gray to white, phaneritic, massive, with plagioclase, quartz, biotite, and hornblende, trace muscovite, pyrite, chlorite, and epidote						From 2545' to 2550': High fractures 0°-90° mostly planar smooth	C	100	50	
20	2550							2550.9': 32° Planar smooth 2551.9': 90° Stepped rough				PL(A) = 195

BORING TYPE: HQ3
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REMARKS:

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								2555.9': Planar smooth				
								2557.3': 24° Planar smooth	C	100	66	
								2558.6': 17° Planar rough				
10	2560	From 2560' to 2561': Qtz feldspar pegmatite						From 2559' to 2560': 90° Planar smooth				
								From 2560.7' to 2561': (2) 51° Stepped rough				ITS = 1,313
								2563': 19° Undulating smooth				UCS = 24,552
												SLK = Type I
5	2565							From 2565' to 2566': (2) 70°-74° S. planar rough				
								2567': 3° Planar rough	C	100	33	
								From 2567.5' to 2575': Rubble except 2571'-2572'				
0	2570											
								2571.9': 38° Planar smooth				
								From 2575' to 2590': Rubble planar 0°-45° smooth fracture, Ca+2 healed fractures				
-5	2575											PL(A) = 602
		From 2577' to 2579.1': Qtz feldspar pegmatite							C	100	25	
-10	2580											
												SLK = Type II
-15	2585											
									C	100	29	
								From 2590' to 2605':				

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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								Rubble continued high 90° vertical fractures 2592'-2594'				SLK = Type I
-25	2595							From 2597' to 2599': Ca+2 large infill along fracture stepped rough 80°-90°, remeinder rubble	C	100	38	
-30	2600											
-35	2605							From 2605' to 2607': Rubble From 2607.2' to 2608.7': 90° Planar slickenside	C	100	44	UCS = 6,160
-40	2610											PL(A) = 802
-45	2615							From 2616.2' to 2616.7': Planar smooth From 2618.3' to 2620': Rubble	C	100	33	
-50	2620	From 2622' to 2625': Qtz feldspar pegmatite						From 2620' to 2629': Rubble				

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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									C	100	37	
								From 2629' to 2630': Defected				SLK = Type II
-60	2630											SLK = Type II
								2631': 45° Planar smooth				
								From 2631.2' to 2631.4': <2" Planar breaks				
												ITS = 1,097
								2634.3': 31° Planar smooth				
-65	2635											
								2634.9': 30° Planar smooth				
								2636': 0°-90° Stepped rough	C	100	38	
								2637.1': 0° Planar smooth				
								From 2637.3' to 2638.4': 79° Planar smooth				
-70	2640											
								From 2639' to 2641': Rubble				
								2642': 40° Planar smooth				
								From 2643' to 2644': (4) 0° Planar smooth				PL(A) = 929
								2644.1': 61° Undulating rough				
-75	2645											ITS = 319
								From 2645' to 2645.5': 59° Planar smooth				
								From 2647' to 2648': 32°-30° Undulating rough	C	100	53	
								From 2648' to 2650': (3) 60°-67° Undulating rough, brittle				
-80	2650	QTZ MONZONITE, light gray to white, phaneritic, massive						From 2650' to 2665': Decomposed				
	2652.9	CORE LOSS							C	89	0	
	2653.2											
-85	2655											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
DATE: 6/1/2023 - 7/25/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
									C	100	0	
-95	2665							From 2665' to 2666.8': Rubble/ defected				UCS = 16,438 ITS = 1,245
-100	2670							From 2670' to 2671': Rubble defected				
								2671.5': Planar irregular 2672.1': Planar irregular 2672.7': Planar irregular 2673': 45° Planar irregular 2674': (2) 50°-55° J. fractures 2676.2': 31° From 2676.9' to 2680': Rubble	C	100	32	PL(A) = 546 UCS = 18,210 SLK = Type II
-105	2675											
-110	2680							From 2680' to 2690': Multiple angled fractures throughout				
									C	100	0	
-115	2685											
-120	2690							From 2690' to 2700': Multiple angled fractures throughout				
									C	100	0	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154898.691
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PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
												SLK = Type II
-130	2700							From 2700' to 2710': Rubble, multiple fractures throughout	C	100	0	
-135	2705											PL(A) = 691
-140	2710							From 2710' to 2720': Rubble, multiple fractures throughout	C	100	0	
-145	2715											
-150	2720							From 2720' to 2730': Rubble, multiple fractures throughout	C	100	0	
-155	2725							From 2730' to 2740':				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
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CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								Rubble, multiple fractures throughout	C	100	0	
-165	2735											SLK = Type II
-170	2740							From 2740' to 2750': Rubble, multiple fractures throughout	C	100	0	
-175	2745											
-180	2750							From 2750' to 2755': Rubble, multiple fractures throughout	C	100	9	
-185	2755	QTZ MONZONITE, light gray to white and dark gray to white, phaneritic, massive, with plagioclase, biotite, and quartz, trace muscovite, epidote, pyrite, and chlorite						From 2755' to 2761': Rubble				
-190	2760							2761.8': Planar irregular	C	100	39	UCS = 1,398 SLK = Type II
								2764.3': (3) 28°-35° J. fractures planar smooth				

BORING TYPE: HQ3
DRILLER: Crux
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 2765' to 2765.4': 90° Undulated rough 2766.1': Planar irregular 2767': 22° Planar smooth From 2767.2' to 2768': 24° Planar rough				
-200	2770							2768.3': (5) 30°-42° Planar smooth 2771.6': 42° Planar smooth 2774.1': 45° Planar smooth From 2775.4' to 2776': (2) 57°-59° Stepped/ undulating rough From 2777.2' to 2777.4': 42° and 44° smooth Ca+2 From 2778' to 2778.3': Rubble	C	100	67	TRI = 39,680 ITS = 1,561 TRI = 48,169 TRI = 39,974 SLK = Type I
-205	2775											
-210	2780							2779': 16° Planar smooth 2780': Planar rough 2781.2': 42° Planar smooth From 2785' to 2792': Rubble 2785.6': 42° Planar smooth 2786.4': Altered planar rough 2786.9': Altered planar rough	C	100	41	UCS = 797
-215	2785											
-220	2790							From 2787.7' to 2788': Rubble 2793.1': 12° Undulating smooth 2793.7': 47° Planar smooth From 2794' to 2797': Multiple fractures, rubble From 2797' to 2799.5': 90° Undulating stepped rough - smooth Ca+2 infill fracture healed	C	100	0	SLK = Type II
-225	2795	From 2794' to 2800': Qtz feldspar pegmatite, high K feldspar										

BORING TYPE: HQ3
DRILLER: Crux
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 2800' to 2806.7': Rubble, 90° fractures	C	100	10	PL(A) = 1,189
-235	2805							2807.9': 39° Planar rough 2808.9': 39° Planar smooth				
-240	2810							From 2809' to 2815': Some vertical 80°-90° healed and unhealed fracturing, rubble remainder	C	100	0	
-245	2815							From 2815' to 2817': 79°-84° Stepped rough fracture From 2817' to 2817.6': Rubble with identifiable healed and open 80°-90° undulating fracture 2819.2': 39° K feldspar infill undulating smooth				
-250	2820							From 2820' to 2827': Rubble partially fractured	C	100	0	
-255	2825							2827': 44°-38°-44° Undulating smooth Ca+2 30° planar rough wedge From 2827.4' to 2829.2': 84° Planar rough, 77° undulating rough				
-260	2830							From 2830' to 2831': Rubble From 2831' to 2833': Updating 90° smooth From 2833.7' to 2835': Rubble	C	100	24	PL(A) = 743

BORING TYPE: HQ3
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								2835.2': 45° Planar smooth From 2836' to 2837': 90° Undulating rough 2838': Planar rough From 2838.4' to 2839': Healed K feldspar fracture, hydrothermal				
-270	2840							From 2840.7' to 2841': 90° Undulating rough From 2841' to 2842.7': Rubble 2844.1': 51° Planar smooth	C	100	27	UCS = 17,259
-275	2845	QTZ MONZONITE, light gray to white, phaneritic, massive, with Ca+2 plagioclase feldspar and qtz K feldspar biotite, trace muscovite and chlorite						2844.2': 44° Planar rough From 2844.5' to 2845': 90° Undulating rough From 2846.2' to 2847': 90° Undulating rough	C	100	35	PL(A) = 670
-280	2850							From 2853.65' to 2855': 90° Undulating rough				UCS = 18,864
-285	2855							From 2855' to 2858': Rubble From 2858.6' to 2859': 67° Undulating smooth / degraded biotite veining	C	100	28	
-290	2860							From 2859' to 2860': Rubble 2862.6': 69° Planar rough 2862.8': 71° Planar rough				SLK = Type I ITS = 736
-295	2865							From 2863.1' to 2864': 57° Planar smooth, rubble From 2864.8' to 2869.4': 30°-45° Planar rough, rubble 2867.8': 90° Undulating rough	C	100	39	

BORING TYPE: HQ3
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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								From 2869' to 2870': Veining healed fracture defected biotite 2871.1': 38° Planar smooth From 2873' to 2873.2': (2) 0° Planar smooth				SLK = Type I PL(A) = 522
-305	2875							From 2876' to 2879': Multiple 30°-90° fractures, rubble, planar rough From 2879' to 2887': Rubble decomposed	C	100	8	
-310	2880											
-315	2885							2887.4': 26° Planar smooth 2888.2': 42°-90° Planar smooth	C	100	47	PL(A) = 83
-320	2890							From 2891.35' to 2891.72': 69°-71° Undulating rough From 2892' to 2894': Rev angle 77°-74°-72° healed Ca+2 90° fracturing ending at 45° planar smooth				SLK = Type I UCS = 20,766
-325	2895							2898': 0°-12° Planar smooth From 2898.4' to 2895': Rubble	C	100	17	ITS = 890
-330	2900							From 2900' to 2902': (7) 42°-51° J. fractures planar smooth From 2902.3' to 2905': Disc (10) 0° planar smooth				

BORING TYPE: HQ3
DRILLER: Crux
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								2905.6': 42° Planar smooth				UCS = 22,134
								2907': 0° Planar rough 2907.6': 3° Planar smooth	C	100	80	PL(A) = 848
-340	2910							2908': 42° Planar smooth K feldspar 2909.2': 41° Stepped rough 2910.8': 7°-11° Planar smooth				UCS = 15,131 ITS = 673
								2913.8': 40° Planar smooth				SLK = Type I
-345	2915							2914.9': 79° Undulating rough From 2915.5' to 2915.75': Wedge 32°-42° Planar smooth From 2916.5' to 2917': Stepped rough 42°-42° wedge	C	100	30	ITS = 815
-350	2920											SLK = Type I
	2921.6	DIABASE DIKE						2921': 80° Planar rough From 2921.8' to 2922.6': Diabase 90° dike				
	2923.6							From 2922.9' to 2923.9': 90° Planar smooth From 2924' to 2928': Rubble				
-355	2925											
	2927.45	DIABASE DIKE						From 2928.3' to 2930': Diabase 84° dike	C	100	20	
-360	2930							From 2930' to 2932': Intrusive alteration rubble				
	2930.65											
								2933': 39° Planar rough 2933.4': Rev angle 42° rough undulating				PL(A) = 813
-365	2935	QTZ MONZONITE, light gray to white, phaneritic, massive, with plagioclase, K feldspar, biotite, and quartz, trace muscovite, pyrite, and chlorite						From 2935' to 2936.75': Stepped rough 81° and 83° J. fractures				
								From 2938.2' to 2938.5': (3) 62° J. undulating slickenside fractures 2939': (3) 42° Planar	C	100	12	ITS = 893

BORING TYPE: HQ3
DRILLER: Crux
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								smooth J. fractures				
								2943': Disc alteration 0° rough planar				
-375	2945							2944.9': 27° Planar smooth				
								2945.7': 39° Planar smooth	C	100	67	UCS = 13,118 PL(A) = 446
								2949': 51° Undulating rough				
-380	2950											ITS = 842 SLK = Type I
								2952.9': 42° Planar smooth Ca+2				
-385	2955											UCS = 19,524 SLK = Type I
								2956.9': 27° Planar smooth From 2957' to 2964': (40) Disc alteration planar rough	C	100	27	
-390	2960											
												PL(A) = 432
-395	2965							From 2965' to 2966': 90° Stepped rough and 71° Planar rough				
								2966.9': 9° Planar smooth K feldspar From 2967' to 2970': Rubble	C	100	20	
-400	2970											UCS = 9,417
								2971.1': 31° Stepped smooth K feldspar				PL(A) = 1,082
								2972.4': 0°-7° Planar smooth				ITS = 1,171
								2972.6': 0°-7° Planar smooth				

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								2972.9': 0°-7° Planar smooth From 2973' to 2975': (6) 39° Planar smooth J. From 2977' to 2978': (3) 29°-84° J. planar rough From 2979' to 2980': (4) 0°-9° Planar rough	C	100	11	SLK = Type II
-410	2980											
-415	2985								C	100	7	
-420	2990											
-425	2995								C	100	0	
-430	3000											
-435	3005							From 3010' to 3012': Veined and Ca+2 K	C	100	20	

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C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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PROJECT LOCATION: Rosamod, CA
EASTING: 6515647.859
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								feldspar healed 90° fracture and (2) 90°-87° open healed fractures undulating smooth				
												UCS = 15,596
								3013': 39° Undulating rough				ITS = 1,031
								From 3014' to 3015': 88° Planar slickenside				
-445	3015											
												PL(A) = 794
								From 3017' to 3017.9': Rubble	C	100	41	
								From 3018.7' to 3020': Rubble				
-450	3020											PL(A) = 929
								3021.3': 2° Planar smooth				
-455	3025							3025.25': 0° Planar rough				
									C	100	47	
-460	3030											UCS = 5,045
								From 3032.25' to 3034': Undulating stepped rough 90° fracture				
-465	3035											
												PL(A) = 915
									C	100	26	
-470	3040											
								From 3041.5' to 3043': (3) 0°-17° Planar smooth				

Bottom of borehole at 3045.0 feet.

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3045
WATER OBSERVATIONS: 795 ft, 826.5 ft
CASING: HW to 70 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

ZEV-CH-03-23

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
	0	Well Casing										
2565	5											
2560	10											
2555	15											
2550	20											
2545	25											
2540	30											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
2530	40											
2525	45											
2520	50											
2515	55											
2510	60											
2505	65											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

ZEV-CH-03-23

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
2495	75											
2490	80											
2485	85											
2480	90											
2475	95											
2470	100											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
2460	110											
2455	115											
2450	120											
2445	125											
2440	130											
2435	135											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
2425	145											
2420	150											
2415	155											
2410	160											
2405	165											
2400	170											
	171	QTZ MONZONITE, light gray to white, phaneritic, massive, with plagioclase, K feldspar, alkali quartz, pyroxene, and biotite, trace chlorite, muscovite, and pyrite						From 171.9' to 172.7': 90° Planar smooth Ca+2 infill 173.7': 32° Planar smooth	C	100	44	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 174.3' to 175.2': 77° Stepped rough 176.4': 42°-47° Undulating smooth From 178' to 178.3': 41° Planar smooth 179': 29° Planar smooth 179.9': 44° Planar smooth From 180.4' to 181': Rubble 182.9': 31° Planar smooth 184': 66° Planar smooth From 184.9' to 186': (2) 22°-28° Planar smooth with biotite infill From 186.5' to 187': 88° Planar smooth	C	100	61	
								190': 2° Planar smooth From 192.4' to 194': (3) 38°-47° Planar smooth 197.1': 0° Planar smooth 198.1': Irregular planar 198.9': 22° Planar smooth 199.5': 22° Planar smooth	C	100	78	
								202.3': 57° Undulating rough From 203.75' to 204.2': Rev angle 47° planar smooth 79° undulating smooth From 205' to 206': (2) 0° Planar smooth 207.1': 31° Planar slickenside 209': Planar smooth	C	100	87	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								210.6': 0° Planar smooth				
	215							213.6': 39° Planar smooth 214.2': 7° Undulating smooth 215.6': 3° Planar smooth From 217' to 222': (6) Planar irregular	C	100	56	
2355												
	220											
2350												
	225							223.7': 42° Planar smooth From 226' to 229': (2) Planar smooth	C	100	78	
2345												
	230											
2340												
	235							From 233.5' to 233.9': 67° Stepped rough From 234' to 235.3': 90° Undulating smooth 237.5': 42° Planar smooth	C	100	46	
2335												
	240							240.2': Planar irregular				
2330												
								242.2': Planar irregular From 243' to 246': Rubble	C	100	82	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
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EASTING: 6514431.756
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 246.1' to 246.3': 16° Planar rough				
								249.4': Planar irregular				
2320	250							250.1': 27° Planar smooth				
								252.1': 0° Planar smooth				
								253.2': 17° Planar smooth	C	100	64	
2315	255											
2310	260											
								From 263.4' to 263.9': Undulating stepped rough Ca+2	C	100	60	
2305	265							From 264' to 265': Rubble				
2300	270							270': 0° Planar smooth				
								271': Slickenside				
									C	100	20	
2295	275											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
	285								C	100	30	
2285												
	290											
2280												
								293.9': 7° Planar smooth	C	100	80	
	295											
2275								295.9': Planar smooth				
								From 298.6' to 298.9': (2) Planar irregular				
	300											
2270								300.75': Planar irregular				
								From 302.4' to 303.2': 74° Planar smooth				
								From 303.7' to 304': (2) 17°-22° Planar irregular	C	100	53	
	305							304.7': 55° Planar irregular				
2265								305.4': Planar irregular				
								308': 42° Planar smooth				
	310							From 310' to 311': (4) 0°-10° Planar smooth				
2260												
								312': 17° Planar irregular				
								312.9': 41° Planar irregular	C	100	69	
								314.45': Planar irregular				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
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PROJECT LOCATION: Rosamod, CA
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 316' to 317': Rubble				
								317.5': 42° Planar smooth				
								318.25': 17° Planar				
								318.75': 42° Undulating smooth				
2250	320							320.2': Undulating smooth				
								From 321.2' to 321.75': 32° Planar smooth				
								From 323' to 324': Rubble	C	100	70	
2245	325											
								327.1': 0° Planar smooth, 45° planar smooth				
								329': 22° Undulating smooth				
2240	330											
								From 331' to 332.5': (3) 16°-24° Planar irregular				
									C	100	61	
								334.1': 49° Planar smooth				
2235	335											
								From 337' to 339': (8) 0°-4° Planar smooth				
2230	340											
								342': Planar irregular				
									C	100	90	
2225	345											
								348.75': 39° Planar smooth				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
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DATE: 8/5/2023 - 10/21/2023
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								351.7': Rev fracture veining, 39° undulating smooth From 353' to 353.8': 32°-45° Planar smooth	C	100	78	
2215	355											
2210	360							360': 67° Undulating rough 362.3': 42° Undulating rough 363': Planar irregular 364.1': 52° Slickenside	C	100	80	
2205	365							From 365.1' to 365.45': 77° Undulating rough From 366' to 366.5': Rubble From 366.5' to 367': 89° Stepped rough 368.9': 31° Planar rough				
2200	370							369.85': 36° Planar smooth 370.75': 42° Undulating rough From 374' to 376': (3) 22°-31° Planar smooth/rough	C	100	82	
2195	375							375.9': 31° Planar slickenside From 377' to 378': 90° Rough, rubble 378.75': Planar smooth				
2190	380							379': Rev angle 31°-42° undulating rough 380': 47° Undulating rough From 381' to 383': 90° S. stepped rough	C	100	61	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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SURFACE ELEVATION (ft): 2570
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PROJECT: Hydrostor Zevsar
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								387.6': 17° Planar smooth				
								388.7': Planar smooth				
2180	390							390': 52° Planar smooth				
									C	100	71	
2175	395											
								397.75': 7° Planar rough				
								398.6': 45° Planar smooth				
2170	400							398.9': 0°-4° Planar smooth - 51° Planar smooth				
								399.6': Undulating rough				
								From 401' to 401.6': Decomposed, rubble	C	100	91	
2165	405							405': 53° Undulating smooth				
2160	410											
									C	100	96	
2155	415											
								418': 31° Planar smooth				
								419.78': 41° Planar				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								smooth				
								421.75': 69° Undulating slickenside	C	100	93	
								424.1': Undulating rough				
2145	425							425.1': 45° Planar slickenside				
								428.75': Planar rough				
2140	430							429.35': 0° Planar smooth				
								430.5': 0° Planar smooth				
								432': 31° Planar smooth	C	100	62	
2135	435							435': 42° Planar smooth				
								From 439' to 440': (4) 0°-4° Planar smooth				
2130	440							441.25': 37° Planar smooth				
								From 441.5' to 446': (8) 0°-7° Planar smooth	C	100	60	
2125	445							448.35': 45° Undulating rough				
2120	450							From 451' to 461': Multiple 0°-12° Planar smooth fractures throughout	C	100	30	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
	460							From 461' to 471': Multiple 0°-12° Planar smooth fractures throughout				
2110									C	100	22	
	465											
2105												
	470							From 471' to 481': Multiple 0°-12° Planar smooth fractures throughout				
2100									C	100	21	
	475											
2095												
	480							From 481' to 492': Multiple 0°-12° Planar smooth fractures throughout				
2090									C	100	31	
	485											
2085												

BORING TYPE: HQ3
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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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									C	90	0	
2075	495											
	496	CORE LOSS										
	497											
2070	500											
								502.6': Stepped slickenside/ rough From 504' to 506': (4) 32°-41° Undulating rough	C	100	41	
2065	505							506.35': 67° Planar smooth From 508' to 512': (9) 12°-21° Planar smooth				
2060	510											
								513.2': 49° Slickenside 514': 39° Slickenside	C	100	26	
2055	515							515.7': 44°-39° Wedge rev angle, planar smooth From 517' to 520': (8) Weak fractures irregular 0°-27°				
2050	520											
								523': 39° Irregular 524': Planar irregular	C	100	27	

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
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								From 525' to 531': (12) 30°-31° along biotite healed veins				
2040	530											
	531	QTZ MONZONITE, light gray to white, phaneritic, massive, with plagioclase, K feldspar, quartz, biotite, and pyroxene, trace muscovite, chlorite, pyrite						533.4': 67° Undulating smooth	C	100	61	
2035	535							From 535' to 536': 90° Undulating rough/ mineral coating				
								537.2': 51° Planar smooth				
								537.9': 44° Planar smooth				
2030	540							From 538.8' to 540': (3) 20°-25° Planar smooth				
								From 541.7' to 542': 78° Slickenside				
								From 542.8' to 544': Rubble	C	100	39	
2025	545							545': 47° Undulating slickenside				
								546.3': 67° Undulating slickenside				
								From 548' to 549': 27° Rev angle and 69° planar slickenside				
								From 549.1' to 553': (10) 0°-17° Planar smooth				
2020	550											
								From 553.6' to 558': Rubble	C	100	37	
2015	555							554.6': 47° Undulating rough				
								From 558.2' to 559': (2) 17° Planar smooth, (1) 79° undulating rough				

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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2005	565							561.7': 61° Planar smooth 563.2': 12° Planar smooth 564': 49° Planar rough 565.45': 7° Planar smooth From 567' to 572': (9) 12°-27° Planar smooth	C	100	34	
2000	570							570.2': J.				
1995	575							From 575.6' to 576': 82° S. undulating smooth	C	100	70	
1990	580							From 581' to 582.25': (3) 12°-17° Undulating smooth				
1985	585							584.1': 7° Planar rough From 585' to 585.7': 61° Planar smooth 586.7': Undulating smooth From 587' to 590.3': (3) 22°-27° Planar smooth	C	100	70	
1980	590 590	QTZ MONZONITE, light gray to white, phaneritic, massive							C	100	20	

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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1970	600											
									C	100	30	
1965	605											
1960	610											
									C	100	20	
1955	615											
1950	620											
	621	QTZ MONZONITE, light gray to white, phaneritic, massive, rich in feldspar, quartz, pyroxene, and biotite, trace chlorite, muscovite, pyrite						621.5': 45° Undulating smooth along veins 623': 67° Undulating smooth along veins 624': 78° Undulating rough From 625.7' to 626': 17° Planar smooth	C	100	79	
1945	625							629.6': 31° Planar				

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								smooth				
								From 632' to 635': (6) 7°-12° Planar smooth	C	100	70	
1935	635											
1930	640							640.5': 17° Planar smooth				
								642.9': 38° Undulating rough	C	100	40	
								643.6': 61° Planar smooth				
1925	645							From 646' to 648': 90° Stepped rough				
1920	650							From 651' to 654.6': (12) 0°-19° Planar smooth	C	100	73	
1915	655							655.8': 39° Undulating slickenside/smooth				
								659.3': 3° Planar rough				
1910	660							660': 2° Planar smooth				
								663.31': 21° Planar smooth	C	100	78	

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								664.78': 0° Planar rough 665.2': 0° Planar smooth From 666' to 667': (2) 0°-12° Planar smooth				
1900	670							From 671' to 675': (9) 0°-21° Planar smooth	C	100	77	
1895	675											
1890	680							From 679.7' to 680.1': (3) 12° Planar smooth From 681.2' to 681.7': (3) 27°-38° Undulating smooth 683': 40° Planar smooth 684': 30° Planar smooth	C	100	82	
1885	685							685.6': 39° Planar smooth				
1880	690							692.3': 21° Planar rough	C	100	96	
1875	695											

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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								700.5': 0° Planar smooth				
								From 704' to 705': (2) 0°-4° Planar smooth	C	100	91	
1865	705							705.75': 3° Planar smooth				
								708.2': 45° Planar smooth				
1860	710					▼		From 710.3' to 711': (2) 21°-45° Planar smooth				
									C	100	50	
1855	715											
								718': 32° Planar smooth				
1850	720							720.6': 67° Planar smooth				
								From 721' to 723.2': (6) 7°-17° Planar smooth				
									C	100	70	
1845	725											
								727.4': Planar irregular				
								728.2': 17° Planar smooth				
1840	730							729.1': 19° Planar smooth				
								730': Planar smooth				
								From 732' to 733': Rubble				
									C	100	50	
								734.2': 24° Planar smooth				

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∿	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
▼	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								735': 42° Undulating smooth				
								737.62': Planar rough				
1830	740							739.95': 29° Planar smooth				
								743.2': 42° Planar smooth	C	100	90	
1825	745											
								749': 39° Undulating rough				
1820	750											
								752': 0° Planar smooth	C	100	91	
1815	755							754.71': 41° Slickenside				
								756.2': 37° Planar smooth				
								757.1': 45° Planar smooth				
								759.3': 19° Planar smooth				
1810	760											
								763': Veining, 79° slickenside	C	100	90	
								764.55': 31°-25° J. planar rough				
1805	765											

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								770.1': 17° Planar smooth				
								771.75': 45° Undulating smooth				
								773': 0°-39° Wedge planar smooth	C	100	73	
								773.9': 14° Planar smooth				
1795	775							776.45': 45° Planar smooth				
1790	780							779.7': 2° Planar smooth				
								782': 11° Planar smooth	C	100	89	
1785	785							785.7': 17° Planar smooth				
								786.4': 27° Planar smooth				
								789.4': 42°-17° Rough, 42° smooth				
1780	790								C	100	94	
1775	795							795': (2) 32°-41° Planar smooth				
								797.42': 31° Planar smooth				
								798.9': 41° Planar smooth				
1770	800							799.4': 32° Planar smooth				
								801.3': 30° Undulating smooth along vein				
								802.9': 7° Stepped rough	C	100	95	

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								807.2': 41° Undulating smooth				
								809': 22° Planar smooth				
1760	810							811.6': 24° Undulating smooth	C	100	97	
1755	815							814.6': 7° Planar smooth				
								816.2': 39° Planar smooth, veins				
								818.2': 11° Planar smooth				
1750	820							819.9': 45° Planar rough				
								821.3': 51° Planar smooth	C	100	90	
1745	825							825.3': 42° Planar rough				
								From 826' to 827': Rubble				
								828': 45° Planar rough				
								From 829' to 830': 22° Planar smooth				
1740	830							831.2': Planar irregular, stepped rough				
								833.6': 7° Planar smooth	C	100	96	
1735	835							835.6': 7° Planar smooth				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								840.2': 21° Planar smooth veins				
									C	100	87	
1725	845							845.1': 43° Planar smooth				
								849': 21° Planar smooth veins				
1720	850							From 851' to 852': (2) 28° Planar smooth				
								From 853.9' to 857.9': Stepped/undulating smooth	C	100	80	
1715	855											
								858.6': 21° Planar smooth				
1710	860							859.9': Planar smooth				
	861	QTZ MONZONITE, light gray to white, phaneritic, massive, rich in plagioclase and K feldspar, quartz, and biotite, trace muscovite and chlorite						860.4': 32° Planar smooth				
								861.2': Planar				
								863.3': Planar	C	100	86	
1705	865							864.8': Planar				
								867.9': 25° S.				
								868.2': Planar				
1700	870							869': S.				
								870.9': 45° S.				
								872.7': Planar				
								873': Planar	C	100	76	
								874': J.				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
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PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								876': 60° S.				
								878.2': Planar				
								878.5': 55° S.				
1690	880							879.2': Planar				
								880.3': 35° S.				
								881': 45° S.				
								882': Planar				
								883': 25° S.	C	100	70	
								884.3': 35° S.				
1685	885							885.7': 30° S.				
								886.5': 65° S.				
								From 889.3' to 889.6': Planar				
1680	890											
								891.7': Planar				
								893.9': 30° S.	C	100	96	
1675	895							896': Planar				
1670	900							900.4': 35° S.				
								900.9': Planar				
								901.2': 45° S.				
								901.6': 25° S.	C	80	58	
	904	CORE LOSS						901.9': 30° S.				
1665	905							903.3': 25° S.				
	906											
								907.4': Planar				
								908.6': 20° S.				

BORING TYPE: HQ3
DRILLER: Crux
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
PROJECT: Hydrostor Zevsar
PROJECT LOCATION: Rosamod, CA

SURFACE ELEVATION (ft): 2570
NORTHING: 2154809.152
EASTING: 6514431.756

PROJECT No: 951-20
DATE: 8/5/2023 - 10/21/2023
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								914.2': 35° S. 914.8': 70° S. 916': 25° S. 916.7': 40° S.	C	100	60	
1655	915											
1650	920							922': Planar 924.2': 50° S. 925.4': Planar 926.9': Planar 928': 30° S. 929.1': 40° S. 929.2': 45° S. 930.5': Planar 930.8': 25° S.	C	100	60	
1645	925											
1640	930											
1635	935							936.9': Planar 938': Planar 938.5': J. 939': Planar 939.3': 25° S.	C	100	16	
1630	940							940': 65° S. 940.5': 55° S. 941': 35° S. 941.5': 70° S.	C	100	41	

BORING TYPE: HQ3
HOLE DEPTH (ft): 3014.7
REMARKS:

DRILLER: Crux
WATER OBSERVATIONS: 711 ft

LOGGED BY: Chris Messenger
CASING: HW to 171 ft

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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								From 943' to 944': J.				
								944.9': Planar				
								945.5': 75° S.				
								945.9': Planar				
								946.6': 40° S.				
								946.8': 50° S.				
1620	950							947': 40° S.				
								947.7': 45° S.				
								948': 50° S.				
								948.6': 35° S.				
								950': Planar	C	100	73	
								From 952' to 953.5': J.				
1615	955							953.6': 25° S.				
								955.4': 40° S.				
								957': Planar				
								957.6': Planar				
								957.9': 45° S.				
1610	960							959.5': Planar				
								962': Planar				
								962.9': 48° S.				
								963.2': 28° S.	C	100	40	
1605	965							964': 55° S.				
								966': 65° S.				
								From 966.1' to 971': Fractured throughout				
1600	970	From 971' to 972': Qtz feldspar						971.2': 20° S.				
								973.3': 30° S.	C	100	63	
								973.5': 55° S.				
1595	975							From 974.2' to 974.9': Multiple planar S. at 40°-40°-30°-45°				
								975.9': 60° S.				
								976': 45° S.				
								977.7': 43° S.				
								978.6': Planar				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								980.2': 40° S.				
								981.25': 42° Stepped slickenside	C	100	63	
								982.9': 11° Planar smooth				
								984': 90°-71° Stepped rough				
1585	985							985': 36° Planar smooth				
								986.1': Wedge rev angle 39°-46° planar slickenside				
								987.9': 17° Stepped rough				
1580	990							From 990' to 991': 90° S. planar smooth				
								993.65': 16° Planar smooth	C	100	51	
1575	995							995.62': 3° Planar smooth				
1570	1000											
									C	100	73	
1565	1005											
1560	1010											
								1013.75': 45° Planar smooth	C	100	89	

BORING TYPE: HQ3
DRILLER: Crux
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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								1014.7': 12° Planar smooth				
								1017.85': 3° Planar rough				
1550	1020											
								1023.9': 4° Undulating rough	C	100	62	
1545	1025							From 1025' to 1026': (3) 3°-17° Planar smooth				
								1027.1': 12° Planar smooth				
								From 1029.35' to 1031': 90° Stepped rough				
1540	1030											
								1031.9': 62° Planar smooth				
								1033.6': 40° Undulating rough	C	100	65	
1535	1035							From 1034' to 1035': (2) 11°-19° Planar smooth				
1530	1040											
	1041	QTZ MONZONITE, light gray to white, phaneritic, massive										
								1042.2': Planar smooth				
								From 1043' to 1044': (2) 46° Planar smooth	C	100	41	
1525	1045							1043.3': 45° S. undulating				
								1043.7': Planar undulating				
								1045': 59° Planar slickenside				
								1045.1': 45° S.				
								1046': 45° Planar				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
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								slickenside				
								From 1046.9' to 1048': (5) 0°-4° Planar smooth				
								1047': Planar smooth				
								From 1047.5' to 1047.9': Planar smooth	C	100	34	
1515	1055							1048.4': 45° Stepped rough				
								From 1049' to 1050': 69°-90° Multiple J. with healed fractures undulating smooth				
								1049.5': 60° Undulating rough				
								1049.8': 50° Undulating rough				
1510	1060	QTZ MONZONITE, light gray, phaneritic, massive						1050.5': 45° Planar smooth				
								1050.6': J.				
								From 1051' to 1054': (5) 7°-47° Planar smooth	C	100	0	
								1051.5': Planar smooth				
1505	1065							1051.7': 30° Planar slickenside				
								1052.3': 45° Planar smooth				
								1053.7': 30° Planar				
								1053.8': 30° Planar				
								1054.3': 25° Planar rough				
1500	1070							1055.9': Planar undulating				
								1056': Planar rough				
								1056.9': 50° Undulating rough	C	100	27	
								1057.4': 43° Planar smooth				
1495	1075							1058': 50° Stepped rough				
								From 1058.1' to 1059': Rubble				
								1058.5': 55° Undulating rough				
								1058.6': 30° Planar smooth				
1490	1080							1060': 35° Undulating rough				
								1060.2': 38° Planar smooth				
		From 1083' to 1086': Qtz feldspar pegmatite						1060.8': 60° Undulating rough	C	100	72	
								1061.3': 40° Planar				

BORING TYPE: HQ3
DRILLER: Crux
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EASTING: 6514431.756
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	1086	QTZ MONZONITE, light gray to white, phaneritic, massive						rough 1061.8': 45° Undulating rough 1062.3': 45° Planar rough 1062.5': Undulating rough From 1063.5' to 1073': Multiple fractures 1074.2': 35° Planar smooth 1075': Planar smooth 1075.4': Planar smooth 1075.7': Planar smooth 1077': 45° Undulating rough 1077.3': 18° Undulating rough 1077.6': 45° Planar smooth 1077.8': 45° Undulating rough 1077.9': 45° Undulating rough 1078': 55° Planar smooth 1080.4': 40° Planar smooth 1082': 50° Planar rough 1085': Planar undulating 1087.2': 73° Undulating rough 1088': Planar rough 1089': Planar rough 1090': 55° Stepped slickenside 1090.9': Planar rough 1092': 35° Planar smooth 1094': Planar smooth From 1094.5' to 1095': J. 1095.2': 50° Undulating rough 1095.7': 25° Planar rough From 1095.9' to 1097': Multiple J. 1097.3': Undulating planar 1097.5': 45° Planar	C C C	100 100 100	53 100 91	
1480	1090											
1475	1095	From 1096' to 1097': Qtz feldspar										
1470	1100											
1465	1105											
1460	1110											
1455	1115	From 1115' to 1117': Qtz feldspar										
		From 1119' to 1121': Qtz feldspar										

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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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								smooth				
								1098.9': 35° Planar undulating				
								1099.4': J.				
								1100.2': Planar undulating	C	100	95	
		From 1124' to 1125': Qtz feldspar						1103.2': 30° Planar undulating				
1445	1125							1107': 35° Planar smooth				
								1109.6': 50° Planar smooth				
								From 1112' to 1113': Multiple J.				
1440	1130							1121': 30° Planar smooth				
								1121.8': Planar rough				
								1124': 55° Planar rough				
								1125.7': 30° Planar undulating	C	100	83	
								1126': Planar smooth				
1435	1135							1128.6': 50° Planar smooth				
								1129.5': 35° Planar smooth				
								1130': 35° Planar smooth				
								1130.8': 25° Planar smooth				
1430	1140							1131.7': 45° Undulating rough				
								1132': 25° Planar smooth				
								1132.9': 45° Undulating rough	C	100	90	
								1134.3': 25° Stepped rough				
1425	1145							1136': Planar rough				
								From 1136.1' to 1137': Multiple fractures				
								1140.5': 35° Planar smooth				
								1141': 45° Undulating rough				
1420	1150							1144.2': 20° Planar rough				
								1145': Planar rough				
								1145.5': 45° Planar rough				
								1145.9': Planar rough	C	100	78	
								1148.8': 60° Undulating				

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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								rough				
								1151': Planar smooth				
								1152': Planar smooth				
								1153.9': Planar undulating				
								1154.5': 70° Planar smooth				
1410	1160							1156': 50° Undulating slickenside				
								1157': Planar smooth				
								1158.5': Planar undulating				
								1159.3': Planar rough	C	100	81	
1405	1165							1159.8': 80° Stepped rough				
								From 1160.7' to 1161': Multiple breaks				
1400	1170											
1395	1175											
	1176	QTZ MONZONITE, light gray to white, phaneritic, massive										
								1178': Planar smooth	C	100	84	
1390	1180							From 1181' to 1182': 61° Planar smooth along veins				
								1184.1': 7° Undulating rough				
1385	1185											
								1186.8': 39° Planar smooth				
								1188.7': 7° Planar smooth	C	100	67	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
		From 1192' to 1195': Qtz feldspar pegmatite						From 1192' to 1195': (9) 20°-49° Planar smooth, (1) Rough				
1375	1195	DOLERITE										
	1197							1198.1': 39° Planar smooth	C	100	86	
1370	1200											
								1203.4': 6° Planar smooth				
1365	1205							From 1204' to 1206': (2) 37° Planar smooth, heckled veins				
								1208.1': 44° Planar smooth	C	100	78	
								1208.2': 17° Planar smooth				
1360	1210							1209.9': 67° Planar smooth				
								From 1210.7' to 1211.5': (3)17°-47° Planar smooth				
								1211.8': 19° Undulating smooth				
1355	1215							1212.9': 47° Planar smooth				
	1216	DOLERITE, with intrusive pegmatite						1214.5': Irregular planar				
								1215.7': 11° Undulating rough				
								From 1216' to 1220': (7) 0°-11° Planar smooth, (1) 45° planar smooth	C	100	63	
1350	1220											
								From 1221' to 1230': Rubble				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
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	1229								C	100	48	
1340	1230							1230.2': 41° Undulating rough 1231.9': 10° Irregular From 1233' to 1234.5': 84° Undulating rough				
1335	1235							From 1236.2' to 1236.5': (2) 42° J. planar smooth From 1237' to 1238.3': 90° Stepped rough 1239': 57° Planar smooth	C	100	40	
1330	1240							From 1241' to 1246': 90°-70° Undulating stepped smooth rubble				
1325	1245											
	1246	DOLERITE						1248': 48° Undulating smooth 1249.3': 2° Planar smooth 1250': (2) 45°-47° Planar smooth	C	100	55	
1320	1250											
	1251							1253.75': 45° Undulating smooth 1255': 38° Planar smooth From 1256' to 1262': Rubble				
1315	1255											
	1258	CORE LOSS							C	40	19	

BORING TYPE: HQ3
DRILLER: Crux
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HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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	1264							1264': 4° Planar smooth				
1305	1265							1265': 3° Planar rough				
								1268.2': 12° Planar smooth	C	100	89	
								1269': 17° Planar smooth				
1300	1270							1269.75': 71° Stepped smooth				
								1272.3': 45° Planar smooth				
1295	1275							From 1275' to 1277': Rubble				
								1278.25': 9° Undulating smooth	C	100	68	
1290	1280							1279.9': 42° Planar smooth				
								From 1281' to 1284': Rubble, 90° vertical S. along veins				
1285	1285							From 1285.5' to 1294': Rubble				
									C	100	27	
1280	1290											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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								From 1297.35' to 1298.6': 81° and 74° Planar smooth	C	100	64	
1270	1300							1300': 17° Planar rough				
								1302.45': 41° Undulating rough				
								1304': 79° Planar rough				
1265	1305								C	100	43	
1260	1310											
								From 1313' to 1314': (3) 45° Planar smooth				
1255	1315	From 1316' to 1318': Qtz feldspar						From 1316' to 1325': Rubble	C	100	19	
1250	1320											
	1321	DOLERITE										
1245	1325											
	1328							1327.6': 40° Planar smooth 1328.1': 42° Planar smooth	C	100	61	

BORING TYPE: HQ3
DRILLER: Crux
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HOLE DEPTH (ft): 3014.7
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CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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								1328.4': 39° Planar smooth 1330.4': 45° Planar smooth				
	1335							From 1333.9' to 1335': (2) 0°-4° Planar rough 1335': 90° Undulating rough				
1235		From 1338' to 1343': Qtz feldspar pegmatite							C	100	60	
	1340							1342': 69° Undulating rough 1342.75': 74° Undulating rough 1343.8': 90° Vertical fracture				
1230												
	1345							1345.8': Irregular				
1225		From 1345.75' to 1347': Qtz feldspar pegmatite						From 1346.5' to 1347': Rubble 1348.3': 21° Undulating smooth	C	100	77	
	1350											
1220								1351.3': 39° Planar smooth From 1353.7' to 1354': 50° Planar smooth				
	1355											
1215	1356	QTZ MONZONITE, light gray, phaneritic, massive						1357.8': 45° Planar smooth 1359.3': Planar smooth				
	1360											
1210								1360.7': 82° S. From 1361' to 1361.9': Multiple breaks, J. From 1362' to 1364.7': Multiple breaks	C	100	45	

BORING TYPE: HQ3
DRILLER: Crux
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								1365.5': 75° Undulating rough 1366.2': 45° Undulating smooth 1367': 65° Undulating smooth 1369.6': 7°-0° Undulating rough 1369.9': 35° Planar smooth From 1371.5' to 1375': 70° Planar rough From 1372.4' to 1373.1': J., rubble 1373.6': Planar rough 1374.4': 65° Planar rough 1375.5': 30° Planar smooth 1376': 50° Planar rough 1376.9': 60° Planar rough From 1377' to 1378': Decomposed, rubble	C	100	25	
								1378.5': 72° Planar rough From 1379' to 1380': Rubble From 1380.5' to 1381': J. From 1381' to 1383.7': Decomposed, rubble 1384.2': Planar rough 1384.7': 60° Planar rough 1385.8': Stepped rough From 1386' to 1388': Decomposed, multiple fractures	C	100	11	
								1388.1': 40° Planar rough From 1388.8' to 1389.3': 50° J. 1390.3': Planar smooth 1390.5': 78° Undulating rough From 1391' to 1392': Decomposed 1392.9': 35° Planar smooth 1393.4': 50° Planar smooth	C	100	26	

1370 (1200), 1375 (1195), 1380 (1190), 1385 (1185), 1390 (1180), 1395 (1175)

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
PROJECT: Hydrostor Zevsar
PROJECT LOCATION: Rosamod, CA

SURFACE ELEVATION (ft): 2570
NORTHING: 2154809.152
EASTING: 6514431.756

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								1393.8': 60° Undulating rough				
								1394': 55° Planar smooth				
								1394.3': 70° Planar smooth	C	100	37	
								1394.5': Planar rough				
1165	1405							From 1395' to 1396.3': Decomposed				
								1400.5': Planar smooth				
								1400.9': 60° Planar smooth				
								From 1404' to 1406.8': Rubble				
1160	1410							1407.3': 45° Undulating rough				
								From 1407.8' to 1408': J.				
								From 1408.5' to 1409.7': 85°-90° S.	C	100	39	
								1414.3': Planar rough				
1155	1415							1415': Undulating rough				
								1416.5': 90° Stepped rough				
								1417': Planar rough				
								1418': Planar rough				
								1418.2': Planar rough				
1150	1420							1419.4': 35° Planar rough				
								From 1420' to 1427.6': Multiple breaks, decomposed	C	100	23	
1145	1425											
								1428.7': Planar rough				
1140	1430											
									C	90	46	
								1434.5': 35° Undulating				

BORING TYPE: HQ3
HOLE DEPTH (ft): 3014.7
REMARKS:

DRILLER: Crux
WATER OBSERVATIONS: 711 ft

LOGGED BY: Chris Messenger
CASING: HW to 171 ft

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								smooth				
								1436.3': Planar rough				
								1436.9': 30° Planar rough				
								From 1437' to 1439.4': Rubble				
	1439.4	CORE LOSS										
1130	1440											
	1440.4											
								1442': Undulating rough	C	100	49	
1125	1445							1444.7': J.				
								1445.3': 40° Planar smooth				
								From 1446' to 1447': Decomposed				
								1447.7': J.				
								1448.6': 40° Undulating rough				
1120	1450							1449.2': 25° Undulating rough				
								From 1449.7' to 1450': Rubble				
								1451.8': Planar rough	C	100	38	
								1453.4': 30° Planar smooth				
1115	1455							1454.6': 35° Planar smooth				
								From 1456' to 1461': Highly fractured, decomposed				
1110	1460											
								From 1461' to 1462.5': Rubble				
	1462.5	CORE LOSS										
	1463							From 1463' to 1471.6': Multiple fractures	C	95	5	
1105	1465											

BORING TYPE: HQ3
DRILLER: Crux
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 1472' to 1473': J.				
	1474							1473.5': Planar rough	C	97	37	
	1474.3	CORE LOSS						1473.8': 35° Planar rough				
1095	1475							1474.8': 40° Planar smooth				
								1475.3': J.				
								1476.4': Planar smooth				
								1476.6': J.				
1090	1480							1478.2': 45° Planar smooth				
								1478.5': 20° Planar rough				
								1479': 35° Planar smooth				
								1479.2': Planar smooth	C	100	10	
								From 1480' to 1481.7': J.				
1085	1485							1481.7': 50° Undulating rough				
								1482.5': Planar smooth				
								1482.8': 30° Planar smooth				
								From 1483.2' to 1406': Multiple fractures				
1080	1490							From 1486' to 1506': Multiple fractures, rubble				
								1494': Planar rough	C	100	10	
1075	1495							1494.7': 60° Undulating rough				
								1495': J.				
								1497.5': 35° Planar smooth				
1070	1500											
								1503.6': Planar rough				
								1504.4': Planar rough				

BORING TYPE: HQ3
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EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
	1506	QTZ MONZONITE, light gray to white, phaneritic, massive, with plagioclase and K feldspar, quartz, and biotite						From 1506' to 1536': Rubble				
								1508.9': 47° Undulating rough	C	100	8	
1060	1510											
1055	1515											
									C	100	13	
1050	1520											
								1522.9': 38° Planar smooth				
1045	1525											
									C	100	20	
1040	1530											
1035	1535											
								1537': 45° Planar smooth				
									C	100	36	PL(A) = 104

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 1541' to 1551': Rubble				
1025	1545											
									C	100	32	
1020	1550											
	1551	QTZ MONZONITE, light gray to white, phaneritic, massive, with Na-Ca-K rich feldspar, quartz, and biotite, trace muscovite, pyrite, and chlorite						From 1551' to 1552': Rubble From 1554' to 1557': (9) 30°-45° Undulating rough				
1015	1555											
								1557.9': 17° Planar smooth 1558.9': 41° Planar rough 1559.8': 32° Planar rough 1560': 48° Undulating rough From 1562.9' to 1564': (4) 32°-41° Undulating smooth	C	100	48	ITS = 1,366
1010	1560											
1005	1565							1565.8': 67° Undulating smooth				
								1568.78': 43° Planar smooth 1569': 0° Planar smooth 1569.9': Planar smooth From 1570' to 1571': 90° Stepped rough 1571.6': 90° and 89° Undulating rough	C	100	40	
1000	1570											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
PROJECT: Hydrostor Zevsar
PROJECT LOCATION: Rosamod, CA

SURFACE ELEVATION (ft): 2570
NORTHING: 2154809.152
EASTING: 6514431.756

PROJECT No: 951-20
DATE: 8/5/2023 - 10/21/2023
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 1575' to 1576': (5) 20°-38° Planar smooth				
												PL(A) = 1,288
								1578': 27° Undulating smooth From 1578.1' to 1581': (5) 35°-45° Planar smooth	C	100	45	
990	1580							1582': 42° Planar smooth, rubble				
								1584.1': 31°				
985	1585											
								1587': 38° Planar smooth 1588': 61° Stepped smooth 1588.9': 52° Undulating rough 1589.9': 7° Planar smooth From 1591' to 1594': (5) 27°-42° Planar smooth	C	100	70	UCS = 24,992
980	1590											
								From 1594.1' to 1596': Rubble				
975	1595							From 1596.1' to 1598.75': (8) 17° Planar smooth				
									C	100	50	PL(A) = 824
970	1600							1600': 38° Planar smooth				
								1602': 42° Undulating 1603.1': 32° Planar smooth From 1604.6' to 1605': (2) 41° Planar smooth				
965	1605											
								From 1609' to 1611': 90° Vertical planar rough	C	100	60	

BORING TYPE: HQ3
HOLE DEPTH (ft): 3014.7
REMARKS:

DRILLER: Crux
WATER OBSERVATIONS: 711 ft

LOGGED BY: Chris Messenger
CASING: HW to 171 ft

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 1611' to 1613': Rubble				
955	1615											
									C	100	70	PL(A) = 1,140 PL(A) = 1,093 PL(A) = 488
								1619.2': 38° Undulating smooth				
950	1620											
945	1625											
									C	100	80	
940	1630							1631.4': 45° Planar smooth				UCS = 15,188 ITS = 1,338
935	1635											
								1636.8': 31° Planar smooth 1638': 41° Planar rough From 1638.9' to 1641': (5) 40°-42° Planar smooth	C	100	50	
930	1640							1641.25': 21° Planar smooth 1643': 7° Planar smooth				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
920	1650							1648.2': 12° Planar rough 1648.3': 21° Planar smooth 1652.2': Planar rough	C	100	74	
915	1654 1655	QTZ MONZONITE, light gray to white to pink, phaneritic, massive						From 1654' to 1656': Highly fractured				
910	1660							1656.3': 55° Planar smooth 1657.4': 7° Planar smooth 1658.4': 72° Planar slickenside 1661.75': Planar irregular 1663.15': 12° Planar smooth	C	100	78	
905	1665							From 1666' to 1671': Rubble				
900	1670							From 1671' to 1681': Rubble	C	100	18	
895	1675								C	100	40	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 1683.1' to 1683.45': (2) 45°-40° Planar smooth				
885	1685							1685': Planar irregular				
									C	100	22	
880	1690											
875	1695											
									C	100	41	
870	1700											PL(A) = 1,282
								1702.4': 39° Planar smooth				PL(A) = 717
								1704': 49° at Ca+2 infill				
865	1705											
								From 1708' to 1710': (4) 32°-49° Planar smooth with K feldspar Ca+2 infill	C	100	37	
860	1710											
								From 1711.75' to 1712.2': 42°-31° Planar smooth				
								1713': 29° Planar smooth				
								From 1713.5' to 1714':				

BORING TYPE: HQ3
DRILLER: Crux
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HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								Rubble				
								1714.3': 27° Planar smooth				
								1715': 48° Planar smooth, Ca+2				
								From 1715.5' to 1717': Rubble	C	100	61	
850	1720							From 1717.65' to 1719': (2) 45° Planar smooth				
								From 1719.1' to 1721': Multiple healed 70°-90° fractures				UCS = 15,017
								1720.9': 61° Undulating rough				ITS = 927
								From 1723.4' to 1723.6': 27°-10° Planar smooth				
845	1725							From 1724' to 1731': Crescent healed fracture				
								1726.2': 41° Planar smooth				
								1728.4': 6° Planar smooth	C	100	46	
840	1730							1729.3': 42° Planar smooth				
								1730.33': 22°-71° Stepped rough				
								1731.2': 51° Planar smooth Ca+2 infill				
								1732.9': 31° Planar smooth Ca+2 infill				
835	1735							1733.4': 67° Planar smooth Ca+2 infill				
								From 1734.5' to 1736.7': Rubble				
								1737.9': 45° Planar smooth with Ca+2 and K	C	100	32	
830	1740											
825	1745											
									C	100	16	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
815	1755											
									C	100	20	
810	1760											
								1763.4': J.				
805	1765							1765.5': Planar rough				
								1765.8': J.				
								1766.4': 25° Planar rough				
								1766.6': 35° Planar smooth	C	100	24	
800	1770							From 1767' to 1768': Rubble				
								From 1769' to 1769.4': Multiple fractures, J.				
								1769.8': 35° Planar rough				
								1770': 40° Planar rough, J.				
795	1775							From 1771' to 1772.4': Rubble				
								1772.6': J.				
								1773.2': 50° Planar smooth				
								1773.8': Planar rough	C	90	22	PL(A) = 900
790	1780							1773.9': 55° Undulating rough				
								1774.4': 65° Stepped rough				
								From 1774.5' to 1775.4': Rubble				
	1784	CORE LOSS						From 1775.5' to 1776': Multiple breaks				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
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	1785							From 1776.5' to 1777': Multiple fractures				
								1777.6': 10° Undulating smooth				
								1778': 30° Planar rough				
								1778.2': 25° Planar rough	C	100	17	
780	1790							1779.2': Planar rough				
								1779.4': 45° Planar smooth				
								From 1781.6' to 1784.9': Rubble				
								From 1785.9' to 1786.6': Rubble				
775	1795							1787': J.				
								1787.6': 25° Planar smooth				
								1787.7': 30° Planar smooth				
								From 1787.8' to 1788.2': Multiple breaks	C	100	12	
770	1800							1788.2': 35° Planar rough				
								From 1788.4' to 1785': Rubble				
								1789.3': 50° Planar rough				
								1789.9': 40° Planar rough				
765	1805							From 1791' to 1792.6': Rubble, multiple fractures				
								1792.9': 60° Planar rough				
								From 1793.7' to 1794': J.				
								1794.5': 50° Undulating rough	C	100	18	
760	1810							From 1795' to 1795.6': Multiple breaks				
								1795.9': 60° Planar rough				
								From 1796' to 1797': Multiple breaks, (1) at 53°				
								From 1797' to 1799': Rubble				
755	1815							From 1799' to 1799.7': Decomposed				
								From 1799.8' to 1802': Rubble, multiple fractures				
								1803': 60° Planar rough	C	100	33	
								1803.2': J.				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 1804.4' to 1806': Rubble, multiple fractures				
								From 1806' to 1810.4': Rubble				
								1810.6': Planar rough				
								1810.8': 20° Undulating smooth				
745	1825							1810.9': 30° Planar rough				
								1811': Planar rough				
								1811.5': 30° Undulating rough	C	100	47	
								1812': Planar smooth				
740	1830							1813': J.				
								From 1813.6' to 1821': Rubble, high K feldspar and chlorite				
								1821.5': J.				UCS = 14,797
								1824': Planar rough				
								1824.8': 75° Planar rough				
735	1835							1825.4': 90° S.				
								1827': 27° Planar smooth				
								1828': Planar rough				
								1829.5': 30° Planar rough	C	100	23	
730	1840							1830': J.				
								1831': Planar rough				
								1831.8': Stepped rough				
								1832': Planar smooth				
								From 1834' to 1836': 90° S.				
725	1845							1835': Planar rough				
								1836': 75° Planar rough				
								1837': 70° Planar rough				
								1837.8': Planar rough				
								From 1838.8' to 1839.2': J. at 60° and 45°-35°				
720	1850							1839.8': 60° J.				
	1851	QTZ MONZONITE, light gray to white, massive						1840.5': 70° Undulating rough				PL(A) = 438
								1840.9': 60° Planar smooth				
								From 1841' to 1841.5': Multiple breaks	C	100	15	
								From 1842.5' to 1842.7':				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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SURFACE ELEVATION (ft): 2570
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DIP/AZIMUTH: -90 /

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								J.				
								1843': 70° S.				
								From 1843.2' to 1843.8': 90° S.				
								1843.9': 55° Planar rough				
								1844.2': 30° Planar rough				
710	1860							1844.6': 45° Planar rough				
								1844.8': 35° Planar smooth				
								1845': J.	C	100	21	
								1846': J.				
705	1865							1846.5': 45° Undulating rough				
								1847.5': Planar rough				
								From 1848' to 1849': J.				
								From 1850' to 1851': J. at 50° and 50°-55°				
								1851.75': 45° Undulating smooth Ca+2				PL(A) = 914
700	1870											PL(A) = 880
								From 1853' to 1855.2': (6) 42°-57° Planar smooth J.				
	1873	CORE LOSS						From 1856' to 1862': Rubble				
	1873.7							1863': 22° Planar smooth	C	93	14	
695	1875							From 1864.2' to 1864.75': 67°-51° Wedge, undulating rough				
								From 1864.8' to 1866': (5) 45°-50° Planar smooth				
								From 1866.1' to 1877': Rubble				ITS = 384
690	1880							From 1877.5' to 1878.8': (3) 42° Planar smooth				
	1881	QTZ MONZONITE, light gray to white, massive, with plagioclase, K feldspar, quartz, and biotite, trace chlorite, pyrite, and muscovite						From 1880' to 1881': Rubble				
								From 1882' to 1882.4': (2) 48° Undulating smooth	C	100	36	
685	1885							1884': 67° fracturing				
	1886	DIORITE						From 1886' to 1895': Rubble				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
									C	100	0	
675	1896 1895							1895': 69° Stepped rough From 1896' to 1897': Rubble				SLK = Type I TRI = 27,157
670	1900							1899.7': 17° Undulating smooth 1900.3': 46° Planar rough				TRI = 45,641 TRI = 34,683
								1902.9': 49° Planar smooth From 1903' to 1905': Vertical 90°, 71° undulating rough	C	100	56	
665	1905							From 1905.6' to 1907': Rubble From 1907.75' to 1908.1': 61° Planar smooth				
660	1910							1910': 7° Planar irregular, smooth-rough From 1911' to 1914': Rubble				UCS = 7,909
									C	100	28	ITS = 1,163
655	1915							1914.8': 2° Planar smooth 1915': 46° Planar smooth 1916.85': 32° Planar smooth From 1918' to 1921.3': (5) 80°-90° 12" long planar smooth K feldspar and Ca+2 veins-healed				
650	1920											
												PL(A) = 1,123 PL(A) = 1,459
								1923.3': 0° Planar smooth 1924': 90°-45°	C	100	30	PL(A) = 1,179

BORING TYPE: HQ3
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HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								Undulating rough, rubble				
								1926': 79° Planar rough				
								1927': 82° Planar smooth				
								From 1927.6' to 1931': (5) 70°-80° Short planar rough J.				
640	1930											
								From 1932.4' to 1933': (2) 51°-63° Planar smooth	C	100	57	
								1933.1': 17° Planar rough				
635	1935							1934.1': 0° Planar rough				
								From 1935' to 1936': (2) 80°-90° Planar smooth				
								From 1937.3' to 1938.2': 71° K infilled smooth				
630	1940											
	1941	QTZ MONZONITE, light gray to white to pink, phaneritic, massive						From 1941' to 1956': Rubble	C	100	0	
625	1945											
620	1950											
									C	100	0	
615	1955											
								1957.9': 45° Planar smooth				
								From 1958' to 1963': Multidirectional				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
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PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								fractures, rubble				
								1964.1': 49° Ca+2 infill undulating smooth 1965.2': 40° Planar smooth 1966.5': 42° Planar rough 1969': 29° Planar smooth From 1970' to 1970.3': (2) 38°-42° Undulating smooth	C	100	40	
605	1965											
600	1970											
	1971	QTZ MONZONITE, light gray to white, phaneritic, massive, with Ca-Na-K rich feldspar, biotite, and quartz, trace pyrite, chlorite, and muscovite						1972': 6° Planar rough	C	100	90	
595	1975							1975.8': 0° Planar smooth 1976.4': 17° Undulating rough 1978': 35° Planar smooth				
590	1980											
								1982.45': 4° Planar rough 1983.7': Undulating rough	C	100	67	
585	1985							From 1986' to 1987': Rubble 1987.4': 12° Planar smooth 1989.15': 61° Planar smooth				
580	1990							From 1990.5' to 1991.5': Rubble From 1992' to 1992.7': 90° Undulating rough				
								1993.8': 38° Planar smooth	C	100	47	

BORING TYPE: HQ3
DRILLER: Crux
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								1994.6': 44° Planar smooth 1996.3': 45° Planar rough 1997.2': 61° Planar rough 1998.78': 52° Planar smooth From 1999.6' to 2011': Rubble				
570	2000								C	100	0	
565	2005											
560	2010								C	100	30	
555	2015							From 2017.8' to 2018.4': (2) 61° Stepped rough				
550	2020											UCS = 20,362 ITS = 1,028 PL(A) = 1,034 SLK = Type I
									C	100	50	
545	2025											

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
									C	100	50	
535	2035											
530	2040	QTZ MONZONITE, light gray to white to pink to green, phaneritic						From 2040' to 2061': Rubble				
									C	100	7	
525	2045											
520	2050											
									C	100	0	
515	2055											
510	2060							2062': 67° Undulating smooth				
									C	100	17	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 2066' to 2070': (10) Double angle 59° J.				
500	2070							From 2070' to 2072': Rubble				
								From 2072.9' to 2073.7': (3) Planar rough 59°-42°-71°	C	100	32	
495	2075							From 2074.2' to 2074.4': 38°-42° Planar smooth				ITS = 1,127 SLK = Type I UCS = 6,646 PL(A) = 1,050
								2078': Planar irregular				
								2078.8': 73° Undulating rough				
490	2080							From 2079' to 2080': 80°-90° S. stepped rough				
								From 2081' to 2092': Rubble	C	100	0	
485	2085											
480	2090											
								From 2092.6' to 2092.8': 0°-4° Planar rough	C	100	11	ITS = 1,122 SLK = Type I
								2093.4': 21° Undulating rough				
475	2095							From 2094' to 2101.6': Rubble				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								2103': (2) 20°-22° Undulating rough 2104': 43° Undulating smooth 2105.2': 67° Undulating smooth From 2106' to 2121': Rubble	C	100	39	UCS = 1,475 PL(A) = 621
									C	100	27	ITS = 1,258 PL(A) = 912 SLK = Type I UCS = 19,550
									C	100	0	
									C	90	30	

465, 460, 455, 450, 445, 440

2105, 2110, 2115, 2120, 2125, 2130

2134.4 CORE LOSS

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

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	2135.4							From 2136' to 2143': (5) 60°-70° Undulating rough				
430	2140											
								From 2143.1' to 2151': Rubble	C	100	0	
425	2145											
420	2150							From 2151.1' to 2181': Rubble				SLK = Type I
									C	100	0	
415	2155											
410	2160											
									C	100	0	
405	2165											

BORING TYPE: HQ3
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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									C	100	13	
395	2175											ITS = 600 PL(A) = 349
390	2180											
	2181.5	CORE LOSS										
	2183							From 2183' to 2187': Rubble	C	85	13	
385	2185											SLK = Type II
								From 2188.4' to 2189.3': 90° Planar smooth				
380	2190							2190': 67° Undulating smooth				UCS = 3,583
								From 2192.15' to 2193': 49°-51°-78° Undulating rough				
								2193.5': 61° Undulating rough	C	100	9	ITS = 478
375	2195							From 2193.6' to 2196': Rubble				
								From 2196.5' to 2197': (3) 17°-21°-39° Undulating rough				PL(A) = 190
								From 2197' to 2198': Rubble				
370	2200							From 2198.6' to 2199.3': S. undulating stepped rough 81°				
								From 2199.3' to 2207': Rubble, 90° stress	C	100	8	

BORING TYPE: HQ3
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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								2207.45': 13° Planar smooth 2208': 17° Planar smooth From 2209' to 2211': 70°-90° Planar smooth S. fracture				
360	2210							2211.1': 45° Planar smooth 2211.3': 67° Planar smooth	C	100	51	UCS = 16,257
355	2215							2213.9': 79° Stepped rough 2214': 70°-90° Undulating healed/opened rough From 2214.5' to 2215': 47°-44° Rev angle wedge planar smooth From 2215.1' to 2215.3': 17° Rev angle smooth				ITS = 1,370 PL(A) = 1,086
350	2220							2216.4': 17° Planar smooth From 2217.25' to 2217.8': (3) 80°-85° Stress undulating rough				
	2223.3 2223.7	CORE LOSS						From 2219' to 2220': (3) 17°-44° Planar rough 2220.9': Planar irregular rough 2221.55': 38° Planar smooth 2222.9': 7° Planar rough	C	96	50	UCS = 18,589
345	2225							From 2223.4' to 2224': 42°-38° Planar smooth From 2224.8' to 2225.3': 11° Planar smooth, 79° S. planar smooth				
340	2230							From 2227.9' to 2234': Rubble	C	100	35	
335	2235							From 2235' to 2237': 70°-90° S. planar rough - undulating rough 2238': (2) 11°-14° Planar smooth 2238.6': 31° Planar smooth				PL(A) = 1,385

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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
	2241	QTZ MONZONITE, light gray to white, phaneritic, massive, with K-Na-Ca rich feldspar, quartz, hornblende, and biotite, trace muscovite, chlorite, and pyrite						2240.45': 78° Undulating rough				
								2241.5': 39° Planar smooth				
								From 2242.1' to 2245': (10) 20°-22° Stress planar smooth	C	100	29	
325	2245											SLK = Type I
												TRI = 50,516
												TRI = 47,212
								From 2248' to 2251': 90° Planar rough				TRI = 59,658
320	2250											
								2251.8': 17° Planar smooth				
								From 2252.6' to 2253': 32°-43° Rev angle wedge planar rough	C	100	67	
								From 2253.1' to 2253.4': 81° Undulating rough				ITS = 1,172
315	2255											PL(A) = 773
								2255.8': 42° Planar smooth Ca+2				UCS = 16,103
								2257': 49° Undulating smooth				
								2258': 12° Planar smooth				
310	2260							2258.9': 2° Planar smooth				
								From 2260' to 2262': (3) 59°-71° Undulating rough				
								From 2263' to 2264': 85°-71° J., stress fracture planar smooth	C	100	40	
305	2265							2265': 42° Planar smooth				
								From 2267' to 2268': 69° Undulating rough				
								From 2269' to 2270': 90° S. planar smooth				
300	2270											
								From 2271' to 2272': Rubble				PL(A) = 299
								From 2273' to 2274': (6) 49°-61° Stress planar rough, (1) 80° stepped and smooth	C	100	37	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 2276.2' to 2277': 17°-21° Planar smooth				ITS = 816 SLK = Type I
								2279': 41° Planar smooth				UCS = 19,470
290	2280							From 2280' to 2281': (4) 38° Planar smooth				
								From 2281.1' to 2283': (2) 17°-32° Planar smooth				
								2283.1': 42° and 90° undulating smooth	C	100	32	
285	2285							From 2284.4' to 2285': (2) 27° Planar smooth				
280	2290											
									C	100	14	
275	2295											
270	2300											
	2301	CORE LOSS							C	44	30	
265	2305											
	2306.6											ITS = 1,393 PL(A) = 695 SLK = Type I
								From 2309.4' to 2310': 81° Planar smooth				UCS = 15,069

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
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CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
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NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 2311.9' to 2313': (5) 17°-32° Planar smooth	C	100	42	
255	2315							From 2316' to 2321': 90°-70° Continuous planar undulating smooth fracturing				
250	2320							2322': 42° Planar smooth 2323': 44° Undulating smooth From 2323.5' to 2325.5': Rubble From 2326' to 2331': 40°-50° Stress J. planar rough	C	100	30	ITS = 1,194 PL(A) = 1,116 UCS = 25,541
245	2325											
240	2330							2331.5': 42° Planar rough From 2333.5' to 2335': (2) 90° Vertical S. stresses planar rough	C	100	38	SLK = Type I
235	2335							From 2338' to 2339': Rubble From 2340' to 2341': (2) 38° Planar smooth				
230	2340							2342': 10° Planar rough From 2342.3' to 2344': 69°-74° Undulating rough From 2344.5' to 2346':	C	100	35	

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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								(7) Undulating rough				
								2347': 42°				
								From 2349' to 2350': (3) 20°-24° Planar smooth				
220	2350							From 2350' to 2359': 61°-74° Planar smooth Ca+2				
								2354.3': 7° Undulating rough, K feldspar	C	100	71	ITS = 1,265 PL(A) = 1,014 UCS = 18,181
215	2355							2357': 79° S. undulating rough				
210	2360											SLK = Type I
								2361.9': 45° Planar smooth From 2362.2' to 2367.6': Stepped 38°-42° wedge From 2363.3' to 2366': 90° Planar smooth S.	C	100	45	
205	2365											
		From 2369' to 2370': Qtz feldspar pegmatite						2369.2': Planar smooth				
200	2370											
								2372.1': 2° Planar smooth 2372.9': 3° Planar smooth	C	100	62	
195	2375							From 2375' to 2375.45': 84° Undulating rough 2375.9': 80° Undulating rough				
								2378': 49° Undulating smooth 2379': 38° Planar smooth				

BORING TYPE: HQ3
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								2382': 11° Undulating rough From 2383' to 2383.7': 31° Planar smooth	C	100	77	
185	2385							2385.75': 49° Stepped rough From 2386' to 2387': 90° Stepped rough, Ca+2 and K From 2387.1' to 2388': (4) 67°-79° Planar rough				ITS = 1,521 UCS = 17,945 PL(A) = 1,180
180	2390							2390': 2° Planar rough				SLK = Type I
								2392': 59° Planar smooth Ca+2	C	100	84	
175	2395							2394.6': 7° Planar smooth From 2395' to 2396': (2) 61° Planar smooth				
170	2400							2400': 67° Planar rough From 2400.1' to 2407': 71° Undulating rough	C	100	67	
165	2405							From 2408.2' to 2408.78': 82° Planar smooth From 2409' to 2411': 90° S. undulating smooth				
160	2410								C	100	63	ITS = 491 UCS = 15,661

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HOLE DEPTH (ft): 3014.7
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REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								2417': 0° Planar smooth				PL(A) = 1,013 SLK = Type I
								From 2418.8' to 2419.3': 81° Planar smooth				
150	2420							2419.7': 23° Undulating rough				
								From 2421' to 2424.6': 90° fractures, rubble				
									C	100	45	
145	2425							2425.6': 32° Planar smooth				
								2429': 61° Undulating smooth				
140	2430											
								2432.1': 11° Planar rough				
								From 2434' to 2436': Healed/open undulating 90° fracture	C	100	91	
135	2435											
								2437.9': (2) 77° Stress planar rough				ITS = 1,293
130	2440							2440.7': 42° Planar smooth				
								2441.25': 27°-41° Planar rough				
								From 2443.6' to 2444': 40° Planar smooth	C	100	68	UCS = 14,006
125	2445							From 2444.75' to 2446.5': 90°-70° S. undulating rough				
								From 2447' to 2448.5': (3) 30°-38° Planar smooth				

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C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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												PL(A) = 161 SLK = Type I
									C	100	62	
115	2455							2454.9': 49° Planar smooth From 2456' to 2458': 90°-45° S. planar smooth 2458.3': 47° Undulating smooth				
110	2460							From 2460' to 2461': Rubble, 90° stepped rough				UCS = 7,179
								2462.1': 71° Undulating rough From 2463' to 2463.1': 27°-49° Undulating rough From 2464' to 2466': Stepped 90° S. rough	C	100	47	
105	2465											
												TRI = 30,236 TRI = 37,313 TRI = 32,387
100	2470											
	2473	QTZ MONZONITE, light gray to white, phaneritic, massive							C	100	25	
95	2475							From 2474' to 2476': Rubble From 2476.1' to 2477': 69° Planar smooth				PL(A) = 1,220
90	2480							From 2479.8' to 2481': (4) 61° Undulating rough From 2481' to 2496': Multiple 74°-90° undulating rough				
									C	100	17	

BORING TYPE: HQ3
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 2486' to 2488': (3) 39° Planar smooth				SLK = Type I
								From 2488.1' to 2489': 90° Undulating rough				
								From 2489.1' to 2491': (6) 30°-34° Planar smooth				
80	2490							From 2491.1' to 2506': Rubble				
									C	100	0	
75	2495											
	2496	DIORITE										
70	2500											
									C	100	0	
65	2505											
								2506.3': 42° Planar rough				
								2507': 22° Planar smooth Ca+2				
								From 2508' to 2511': Multiple 90°-60° vertical level fractures				
60	2510											
								From 2511.1' to 2526': Rubble				
									C	100	0	
55	2515											

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	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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	2523	CORE LOSS							C	82	21	
	2524.8											
45	2525							From 2526' to 2526.8': (2) 47° Planar smooth 2527': 38° Planar smooth From 2528' to 2532': Rubble				ITS = 1,047 UCS = 9,224
40	2530											
								From 2532.1' to 2532.8': (6) 18°-27° Planar slickenside/ smooth 2532.9': 78° Planar smooth From 2536' to 2556': Rubble, high % of 90° vertical S. multi fractured	C	100	20	SLK = Type II PL(A) = 301
35	2535											
30	2540											
									C	100	0	
25	2545											
20	2550											
									C	100	14	

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C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								From 2556.4' to 2559.4': (7) 40°-60° Stress fracture undulating rough				
10	2560											ITS = 1,640
								From 2561' to 2565': 90° Undulating rough				
									C	100	13	SLK = Type I
5	2565											
								From 2567' to 2570': (8) 32°-49° Undulating rough				
0	2570											
								From 2571' to 2572': 90° Planar smooth				
								From 2572.6' to 2574': 90° Stepped smooth	C	100	39	
-5	2575							2575.3': 46° Planar smooth				UCS = 19,333
								2577.8': 32° Planar rough				PL(A) = 1,342
								2578.7': 45° Stepped smooth				ITS = 1,232
-10	2580							From 2579.9' to 2580.5': (2) 47° Planar smooth				
								From 2581' to 2586': Rubble				
									C	100	16	
-15	2585											
								2587.2': 32° Planar smooth				
								2587.5': 41° Planar smooth				
								2587.8': 67° Planar				

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								smooth From 2588.6' to 2592': 80°-90° Vertical S. undulating rough From 2592.9' to 2593.5': 90° S. undulating planar smooth From 2594' to 2596': 90°-78° S. undulating rough From 2596' to 2597': Rubble	C	100	27	
-25	2595											
-30	2600							2599.4': Planar irregular smooth From 2600' to 2600.7': 0° Planar smooth 2601.5': 74° Planar smooth 2603.6': 8° Undulating smooth From 2606' to 2607': Rubble From 2609' to 2610.8': Rubble	C	100	41	PL(A) = 214 UCS = 3,493 SLK = Type II
-35	2605											
-40	2610							2613.4': 7° Planar smooth 2613.7': 89° Planar smooth 2617.9': Planar irregular From 2618.7' to 2620': Rubble From 2621' to 2623': Rubble	C	100	52	
-45	2615											
-50	2620							From 2623.1' to 2625.6': Multiple 90° S. 42° (2) 20° smooth	C	100	8	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 2626.4' to 2629': Rubble				
								2629.35': 7° Planar smooth				
-60	2630							2629.65': 13° Planar smooth				
								2629.85': 32° Planar smooth				PL(A) = 441
								2630': 22° Planar rough	C	100	44	
								From 2630.25' to 2631': 79° Planar smooth				
-65	2635							2631.45': 22° Planar smooth				
								From 2632.9' to 2633.7': 90° Undulating rough				
								2634.1': 22° Planar smooth				
								From 2635' to 2636': (2) 38° Planar smooth				
-70	2640							From 2636.5' to 2639': 90° Undulating rough, healed and open K				
								2640': 42° Planar smooth				
								From 2641' to 2642.2': (3) 0° Planar smooth	C	100	32	
-75	2645							From 2644.72' to 2646': Rubble				
								From 2646.1' to 2648': (4) 0° Planar smooth/ rubble				
								From 2646.9' to 2652.2': (6) 50°-67° Planar smooth				SLK = Type I UCS = 22,748
-80	2650											
								From 2652.5' to 2653.7': 90° S. planar smooth, mineralized	C	100	22	
								2654': 3° Planar smooth				ITS = 1,535
-85	2655							2654.9': 3° Planar smooth				PL(A) = 913
								From 2655' to 2656.4': Rubble				
								2657': 71° Undulating smooth				
								From 2658' to 2659.6': Multiple 90° undulating				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								fractures				
								From 2660' to 2661': Rubble				
								2661.5': 67° Planar smooth	C	100	55	
								From 2664' to 2666': (3) 50°-60° Planar smooth				
-95	2665											
								2667': 57° Planar smooth				
								2668.5': 66° Undulating smooth				
-100	2670							2670': 69° Planar smooth/ undulating				
								From 2671' to 2690': (4) 60°-70° Planar smooth				
								From 2671.1' to 2672': (3) 38° Planar smooth	C	100	45	
								From 2672.6' to 2673.8': Rubble				
-105	2675							2674.45': 26° Planar smooth				SLK = Type I
								2675.9': Planar smooth				
								2677': 22° Planar smooth				ITS = 1,405
								From 2678.7' to 2679': (3) 20°-26° Planar smooth				UCS = 22,096
-110	2680							From 2680' to 2681': Rubble				
								From 2681.1' to 2682': 90° S. undulating smooth				
								2683': 81° Undulating smooth	C	100	60	PL(A) = 655
-115	2685							2684': 31° Planar smooth				TRI = 29,762
								2685.3': 38° Planar smooth				
								2686.5': 13° Planar smooth				
								2687.7': 45° Planar smooth				TRI = 38,095
-120	2690							2689': 31° Undulating smooth				
								From 2691' to 2696': (8) 45° Undulating, (7) 0°-10° Planar rough	C	100	20	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								From 2696.1' to 2706': Rubble				TRI = 29,827
-130	2700											
									C	100	23	UCS = 1,014
-135	2705											
	2707	DIORITE						2706.78': 44° Planar smooth From 2707.5' to 2717': Rubble				ITS = 1,481
-140	2710											
									C	100	30	
-145	2715											
	2716											SLK = Type I
								2718': 90° S. planar rough				
-150	2720							2719.7': 42° Undulating smooth 2720': 67° Planar smooth				PL(A) = 1,170
								2721.7': 61° Planar smooth From 2722' to 2723.3': (4) 0°-11° Planar smooth	C	100	45	TRI = 17,136 TRI = 24,185
-155	2725							2724.65': 61° Planar rough 2725': 61° and 74° Planar rough From 2726' to 2727': (1) 51° Undulating rough stepped, (1) 86° stepped rough From 2727.1' to 2729.4':				UCS = 6,744

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
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EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								Rubble				
								From 2729.4' to 2736': (13) 60°-90° Undulating planar smooth J.	C	100	14	
-165	2735							From 2736.1' to 2740': 90° Vertical and 79° stepped undulating rough				
-170	2740							From 2741' to 2742.7': Rubble	C	100	18	ITS = 1,053 UCS = 8,318
-175	2745	DIABASE 2745.5						From 2746' to 2752': 20°-45° and 90° Undulating				
-180	2750							2751': 69°-74° Undulating smooth 2753': 90° Stepped smooth From 2754' to 2755': 90° Healed	C	100	38	PL(A) = 75
-185	2755							From 2756' to 2757': Rubble 2758': 47° Undulating smooth From 2759' to 2760': 90° S. planar rough				SLK = Type I
-190	2760							2760': 42° Planar smooth From 2761' to 2763': Rubble From 2763.1' to 2765': 90°-0° Stepped rough	C	100	27	ITS = 542

BORING TYPE: HQ3
DRILLER: Crux
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HOLE DEPTH (ft): 3014.7
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CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
	2760	QTZ MONZONITE, light gray, phaneritic, massive						2765.5': 32° Planar smooth From 2766' to 2777': Rubble				
-200	2770											
-205	2775								C	100	0	TRI = 2,732
-210	2780	From 2781' to 2811': Chlorite and epidote						From 2780' to 2790': Multiple fractures, veins				
-215	2785								C	100	25	
-220	2790							From 2790' to 2800': Multiple fractures, veins				
-225	2795								C	100	58	SLK = Type II

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
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PROJECT LOCATION: Rosamod, CA
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
								From 2800' to 2810': Multiple fractures, veins				
-235	2805											
									C	100	71	
-240	2810	From 2811' to 2826': Chlorite and epidote						From 2810' to 2820': Multiple fractures, veins				
-245	2815											
									C	100	43	
-250	2820							From 2820' to 2830': Multiple fractures, veins				
-255	2825											
									C	100	56	
-260	2830							From 2830' to 2840': Multiple fractures, veins				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Sampling & In Situ Testing: Type	Core Rec. %	RQD %	Test Results & Comments
												PL(A) = 1,033
									C	100	50	
-270	2840											
	2841	From 2841' to 2861': Calcite, chlorite, and epidote present QTZ MONZONITE, light gray to white, phaneritic, with biotite, K-Na-Ca feldspar, and quartz, trace epidote, chlorite, pyrite, and calcite						2841.8': 45° Stepped rough From 2842' to 2842.6': J. From 2842.7' to 2843.5': 90° S. fracture	C	100	15	
-275	2845							2844.2': 70° Undulating rough/ slickenside 2844.8': 65° Undulating rough From 2845' to 2847': Multiple J. 2848.3': J.				
-280	2850							2848.8': 65° Planar smooth 2848.9': 65° Planar smooth From 2849.7' to 2053': Multiple J.				PL(A) = 828
-285	2855							2853.7': 50° Stepped rough 2853.9': 60° Undulating rough From 2854' to 2856': Rubble From 2856' to 2858.3': Multiple fractures	C	100	38	
-290	2860							2858.4': Planar rough 2858.6': Planar rough 2858.8': 53° Undulating slickenside 2859': Stepped rough 2859.6': Planar rough From 2859.7' to 2861': Rubble				
-295	2865							2863.3': 55° Stepped rough 2863.8': 55° Stepped rough 2865.5': Planar rough 2865.8': Planar rough 2867.8': 20° Undulating				SLK = Type II

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
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								rough				
								2868.5': J.				
								2869.9': 20° Planar smooth				
								From 2870' to 2870.5': Multiple J.	C	100	40	
								2870.8': 7° Planar smooth				
-305	2875							2870.9': 10° Undulating smooth				UCS = 1,345
								From 2871' to 2871.5': J.				
								From 2872' to 2874': Multiple fractures				
								From 2874.1' to 2874.8': High K feldspar veining, healed fractures				PL(A) = 35
-310	2880							2874.8': 75° Stepped rough				UCS = 1,426
								2877.8': Planar rough				
								2878.6': 35° Stepped slickenside				
								From 2880' to 2881': Multiple J.				
-315	2885							2881.1': Planar smooth				
								From 2882' to 2883.6': Rubble				
								2884': Planar rough				
								2884.6': 50° Undulating rough	C	100	6	
-320	2890							From 2884.7' to 2884.9': Rubble				
								2885': 90° S. fracture				
								2886.6': Planar rough				
								2886.9': 70° Planar rough				
								From 2887' to 2888': Multiple fractures				
-325	2895							2888.5': Planar rough				
								From 2889.4' to 2891': Multiple fractures				
								From 2891.5' to 2891.9': Rubble				
								2892.6': J.				
-330	2900							2893.4': 45° Undulating rough				
	2901	QTZ MONZONITE, light gray to white, porphyritic, phaneritic, massive, with biotite, rich Na-Ca K feldspar, chlorite, epidote, calcite, and quartz						From 2893.7' to 2901': Multiple fractures planar, S., J., rubble				
								2901.7': Planar smooth	C	100	3	
								2901.9': 90° S.				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
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EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								2902': 25° Planar smooth 2902.4': 75° Planar rough From 2902.5' to 2906': 55°-75° Planar rough, rubble From 2906.1' to 2911': Rubble				
-340	2910							From 2911.1' to 2916.5': Rubble				
-345	2915							2917.4': Planar rough 2917.7': J. 2919.6': Planar rough From 2920.8' to 2926': Rubble, high K feldspar and chlorite	C	100	13	SLK = Type III
-350	2920											
-355	2925							2926.5': 70° Stepped rough 2927.3': Planar smooth 2928': J. 2929.3': Planar rough 2930': Undulating rough				
-360	2930											
	2931	QTZ MONZONITE, light gray to white, porphyritic, phaneritic, massive, with biotite, rich Na-Ca K feldspar, trace chlorite, epidote, calcite, and quartz						2930.3': Planar rough 2930.8': 30° Undulating rough 2931.4': J. 2932.4': Planar rough 2932.7': 40° Stepped rough 2933': Undulating rough 2933.4': 50° Stepped rough 2933.6': 25° Undulating rough	C	100	15	ITS = 822
-365	2935											

BORING TYPE: HQ3
DRILLER: Crux
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SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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								2934.5': 25° Planar smooth				PL(A) = 565
								2934.9': 30° Undulating rough				
								From 2935' to 2935.2': 90° S.				UCS = 9,375
								From 2936' to 2936.5': Rubble				
-375	2945							From 2937' to 2939': Rubble				
								2939.5': 65° Undulating rough				ITS = 1,485
								2940': 20° Planar smooth	C	100	14	
								From 2940.1' to 2941': Multiple breaks				PL(A) = 308
-380	2950							2941.8': 25° Planar rough				
								2942.5': 70° Planar rough				
								2943.2': 65° Planar smooth				
								From 2944' to 2945': J.				
-385	2955							2945.1': Planar rough				
								2947.2': Planar rough				
								2947.4': 60° Planar smooth and J.				
								2948': 35° Planar rough				
								2948.6': 50° Planar rough, slightly stepped				
-390	2960							2949.3': Planar rough				
								2950': 55° Undulating rough				
								From 2950.3' to 2951': Rubble	C	100	3	
								2951.8': 50° Undulating rough				
-395	2965							2952.3': Planar smooth				
								2952.6': J.				
								2952.8': 40° Undulating				
	2968	QTZ MONZONITE, light gray to white, porphyritic, phaneritic, massive, with biotite, plagioclase feldspar, and quartz, trace chlorite, epidote, and calcite						2953': Planar rough				
								2953.6': Planar rough				
-400	2970							2953.9': 50° Planar rough				
								2954.2': 35° Planar rough				
								2954.9': 35° Planar rough				
								From 2955.3' to 2956': Multiple J.				

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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Agapito Associates, Inc.
ENGINEERS & GEOLOGISTS

CLIENT: Lane Power & Energy Solutions
SURFACE ELEVATION (ft): 2570
PROJECT No: 951-20
PROJECT: Hydrostor Zevsar
NORTHING: 2154809.152
DATE: 8/5/2023 - 10/21/2023
PROJECT LOCATION: Rosamod, CA
EASTING: 6514431.756
DIP/AZIMUTH: -90 /

EL	DEPTH (ft)	Description of Strata	Degree of Alteration (Fr, SA, MA, HA, CA)	Graphic Log	Rock Strength (Very Soft, Soft, Med-Hard, Hard, Very Hard, Ex Hard)	Water	Fracture Spacing (ft) (0.05, 0.25, 0.50, 2.50, 5.00)	Discontinuities (B - Bedding, S - Shear, J - Joint, F- Fault)	Type	Core Rec. %	RQD %	Test Results & Comments
								2956.5': Planar rough				
								2956.8': J.				
								2957.8': 60° Undulating rough				
								From 2958' to 2961': Multiple 60° fractures, 20°-30° planar smooth	C	100	8	
-410	2980							From 2968.8' to 2969.1': Multiple J.				
								2969.6': 30° Undulating rough				
								2969.7': 30° Undulating rough				
								From 2970' to 2972.4': Rubble				SLK = Type I
-415	2985							2972.7': 79° S.				UCS = 15,773
								2973': Multiple fractures				
								From 2973.1' to 2974': Multiple J., 55° planar rough				
								From 2974.5' to 2976': Rubble				
-420	2990							From 2976.1' to 2976.8': Rubble				
								2977': 20° Planar smooth				
								From 2977.1' to 2977.5': Rubble				
								2977.8': 50° Undulating rough	C	100	5	
-425	2995							2978.3': 25° Planar smooth				
								2978.7': 40° Planar smooth				
								From 2979' to 2981': Rubble				
								2981.9': 60° Planar rough				
-430	3000							2982.2': Planar rough				
								From 2982.5' to 2983': Rubble				
								From 2983' to 2991': Rubble				
								2983.5': 30° Planar rough				
-435	3005							From 2991.1' to 2993': Rubble				
								2993.1': 40° Undulating slickenside				
								2994': J.				
								From 2994.1' to 2995': Rubble	C	100	4	

BORING TYPE: HQ3
DRILLER: Crux
LOGGED BY: Chris Messenger
HOLE DEPTH (ft): 3014.7
WATER OBSERVATIONS: 711 ft
CASING: HW to 171 ft
REMARKS:

SAMPLING & IN SITU TESTING LEGEND

C	Core drilling	ITS	Indirect tensile strength (Brazilian) test (psi)	SLK	Slake durability test (Type __)
	Water seep	PL(A)	Point load axial test Is(50) (psi)	TRI	Triaxial stress test (psi)
	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)

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ENGINEERS & GEOLOGISTS

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								2995.1': 45° Planar rough 2995.5': J. 2996.3': 55° Planar rough 2996.9': 65° S./J. 2997.1': 55° Planar rough From 2997.6' to 2998.4': Rubble 2998.4': 45° Planar rough 2999.5': 63° Planar smooth From 3000' to 3004.7': Multiple fractures, J., planar, and S. 3006.6': 60° Undulating rough From 3006.7' to 3007.6': Rubble 3008.2': Planar rough 3008.4': 50° J. 3008.8': J. From 3009' to 3014.7': Multiple fractures, J., 50°-70°, rubble				
-445		Bottom of borehole at 3014.7 feet.										
-450												
-455												
-460												
-465												
-470												

BORING TYPE: HQ3
DRILLER: Crux
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SAMPLING & IN SITU TESTING LEGEND

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	Water level	PL(D)	Point load diametral test Is(50) (psi)	UCS	Uniaxial stress test (psi)