Appendix H

Noise Technical Report

NOISE TECHNICAL REPORT
FOR THE 1301 SHOREWAY ROAD PROJECT

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Acronyms and Abbreviations

μPa	microPascals
Caltrans	California Department of Transportation
CNEL	Community Noise Equivalent Level
CUP	Conditional Use Permit
dB	decibel
dBA	A-weighted decibel
FHWA	Federal Highway Administration
Hz	Hertz
in/sec	inch per second
kHz	kilohertz
L_{dn}	day-night sound level
L_{eq}	equivalent sound level
L_{max}	maximum sound level
L_{min}	minimum sound level
LT	long-term
L_V	vibration velocity level
L_{xx}	percentile-exceeded sound level
PDF	project design feature
PPV	peak particle velocity
PV	photovoltaic
rms	root-mean-square
SPL	sound pressure level
ST	short-term

Chapter 1
Introduction

The purpose of this Noise Technical Report is to identify noise or vibration impacts that may be associated with the 1301 Shoreway Road Project (proposed project). The analysis provided in this report evaluates the potential for short- and long-term noise and vibration impacts associated with construction and operation of the proposed project. The report includes a description of the environmental setting for the proposed project, including existing noise conditions, and applicable laws and regulations. It also documents the assumptions, methodologies, and findings used to evaluate noise and vibration impacts. The project is subject to environmental review pursuant to the California Environmental Quality Act (CEQA). It is anticipated that the City of Belmont, the lead agency for the project, will use this technical report to inform the project's CEQA analysis.

1.1 Project Location and Description

The proposed project is located at 1301 Shoreway Road in Belmont, California (project site). The approximate 6.9-acre project site is (301,130-square feet) bounded by existing commercial and industrial buildings to the north and south, with Shoreway Road to the west and Twin Dolphin Drive to the east. The assessor parcel number for the project site is 040-37-1110.

The project site includes an existing 148,919 square foot office building, a surface parking lot along the perimeter of the parcel, and a basketball court. The land designation and zoning district for the project site is Regional Commercial which allows for community-serving retail and services; visitor- and retail-serving auto-oriented commercial services, such as lodging, service stations, car dealerships, and commercial office uses. Some light industrial and research and development (R&D) uses may also be permitted. The maximum floor area ratio (FAR) for Regional Commercial is 1.8.

The project would demolish all existing on-site uses and construct an eight story 240,000square foot building, a seven story 305,000 square foot building, and a 469,000 square foot parking garage with 9 levels above grade. The total building footprint would be approximately 1,014,000 gross square feet. The parking garage and surface lots would provide approximately 1,626 parking stalls. No subterranean parking is proposed. The project would have a floor area ratio (FAR) of up to 1.8, consistent with the maximum FAR allowed in the Regional Commercial land use designation and zoning district. Project improvements would occur within the site boundary only. Onsite uses after project construction could include a combination of office and R&D.

Chapter 2
Noise Fundamentals

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is often defined as sound that is objectionable because it is unwanted, disturbing, or annoying.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and the obstructions or atmospheric factors, which affect the propagation path to the receptor, determine the sound level and the characteristics of the noise perceived by the receptor.

The following sections provide an explanation of key concepts and acoustical terms used in the analysis of environmental and community noise.

2.1 Frequency, Amplitude, and Decibels

Continuous sound can be described by its *frequency* (pitch) and *amplitude* (loudness). A low-frequency sound is perceived as low in pitch; a high-frequency sound is perceived as high-pitched. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

The amplitude of pressure waves generated by a sound source correlates with the loudness of that source. The amplitude of a sound is typically described in terms of *sound pressure level* (SPL), also referred to simply as the sound level. The SPL refers to the root-mean-square (rms)[1] pressure of a sound wave and is measured in units called microPascals (μPa). One μPa is approximately one hundred-billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to over 100,000,000 μPa. Because of this large range of values, sound is rarely expressed in terms of μPa. Instead, a logarithmic scale is used to describe the SPL in terms of decibels, abbreviated dB. The decibel is a logarithmic unit that describes the ratio of the actual sound pressure to a reference pressure (20 μPa is the standard reference pressure level for acoustical measurements in air). Specifically, an SPL, in dB, is calculated as follows:

$$SPL = 20 \times \log_{10}\left(\frac{X}{20\mu Pa}\right)$$

Where *X* is the actual sound pressure and 20 μPa is the reference pressure. The threshold of hearing for young people is about 0 dB, which corresponds to 20 μPa.

[1] Root-mean-square (rms) is defined as the square root of the mean (average) value of the squared amplitude of the noise signal.

2.1.1 Decibel Calculations

Because decibels represent noise levels using a logarithmic scale, SPLs cannot be added, subtracted, or averaged through ordinary arithmetic. On the dB scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, their combined sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one bulldozer produces an SPL of 80 dB, two bulldozers would not produce a combined sound level of 160 dB. Rather, they would combine to produce 83 dB. The cumulative sound level of any number of sources, such as excavators, can be determined using decibel addition. The same decibel addition is used for A-weighted decibels described below.

Similarly, the arithmetic mean (average) of a series of noise levels does not accurately represent the overall average noise level. Instead, the values must be averaged using a linear scale before converting the result back into a logarithmic (or dB) noise level. This method is typically referred to as calculating the "energy average" of the noise levels. Table 1 demonstrates the general results of adding noise from multiple sources, noting that the examples summarized in this table are rounded to the nearest whole number.

Table 1. Rules for Combining Sound Levels by Decibel Addition

When two decibel values differ by…	…add the following amount to the higher decibel value	Example
0 to 1 dB	3 dB	60 dB + 61 dB = 64 dB
2 to 3 dB	2 dB	60 dB + 63 dB = 65 dB
4 to 9 dB	1 dB	60 dB + 69 dB = 70 dB
10 dB or more	0 dB	60 dB + 75 dB = 75 dB

Source: California Department of Transportation, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013, https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf, accessed May 5, 2022.
dB = decibel

2.1.2 A-Weighting

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000 to 5,000 Hz and perceive sounds within that range better than sounds of the same amplitude at higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted (i.e., adjusted), depending on human sensitivity to those frequencies. The resulting SPL is expressed in A-weighted decibels, or dBA.

The A-weighting scale approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments regarding the relative loudness or annoyance of a sound, their judgments correlate well with the A-weighted sound levels of those sounds. Table 2 describes typical A-weighted sound levels for various noise sources.

Table 2. Typical A-Weighted Sound Levels

Common Outdoor Noise Source	Sound Level (dBA)	Common Indoor Noise Source
	— 110 —	Rock band
Jet flying at 1,000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower at 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher in next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol,* September 2013, *https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf*, accessed May 5, 2022.
dBA = A-weighted decibel

2.2 Noise Descriptors

Because sound levels can vary markedly over a short period of time, various descriptors or noise "metrics" have been developed to quantify environmental and community noise. These metrics generally describe either the average character of the noise or the statistical behavior of the variations in the noise level. Some of the most common metrics used to describe environmental noise, including those metrics used in this report, are described below.

- **Equivalent Sound Level (L_{eq})** is the most common metric used to describe short-term average noise levels. Many noise sources produce levels that fluctuate over time; examples include mechanical equipment that cycles on and off or construction work, which can vary sporadically. The L_{eq} describes the average acoustical energy content of noise for an identified period of time, commonly 1 hour. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustical energy over the duration of the exposure. For many noise sources, the L_{eq} will vary depending on the time of day. A prime example is traffic noise, which rises and falls depending on the amount of traffic on a given street or freeway.

- **Maximum Sound Level (L_{max})** and **Minimum Sound Level (L_{min})** refer to the maximum and minimum sound levels, respectively, that occur during the noise measurement period. More specifically, they describe the rms sound levels that correspond to the loudest and quietest 1-second intervals that occur during the measurement.
- **Percentile-Exceeded Sound Level (L_{xx})** describes the sound level exceeded for a given percentage of a specified period. For example, the L_{50} is the sound level exceeded 50 percent of the time (such as 30 minutes per hour), and L_{25} is the sound level exceeded 25 percent of the time (such as 15 minutes per hour).
- **Community Noise Equivalent Level (CNEL)** is a measure of the 24-hour average A-weighted noise level that is also time-weighted to "penalize" noise that occurs during the evening and nighttime hours when noise is generally recognized to be more disturbing (because people are trying to rest, relax, and sleep during these times). 5 dBA is added to the L_{eq} during the evening hours of 7 p.m. to 10 p.m.; 10 dBA is added to the L_{eq} during the nighttime hours of 10 p.m. to 7 a.m.; and the energy average is then taken for the whole 24-hour day.
- **Day-Night Sound Level (L_{dn})** is very similar to the CNEL described above. L_{dn} is also a time-weighted average of the 24-hour A-weighted noise level. The only difference is that no "penalty" is applied to the evening hours of 7 p.m. to 10 p.m. 10 dBA is added to the L_{eq} during the nighttime hours of 10 p.m. to 7 a.m., and the energy average is then taken for the whole 24-hour day.

It is noted that various federal, state, and local agencies have adopted CNEL or L_{dn} as the measure of community noise. While not identical, CNEL and L_{dn} are normally within 1 dBA of each other when measured in typical community environments, and many noise standards/regulations use the two interchangeably.

2.3 Sound Propagation

When sound propagates over a distance, it changes in both level and frequency content. The manner in which noise is reduced with distance depends on the following important factors (described below). In general, noise attenuates (decreases) with distance. Roadway noise sources tend to be arranged linearly. Therefore, noise from roadway vehicular traffic attenuates at a rate of approximately 3.0 to 4.5 dB per doubling of distance from the source, depending on the intervening surface (paved or vegetated, respectively).[2] Point sources of noise, such as stationary equipment or construction equipment, typically attenuate at a rate of approximately 6.0 to 7.5 dB per doubling of distance from the source.[3] For example, a sound level of 80 dBA at 50 feet from the noise source will

[2] Ibid.

[3] The 1.5 dB variation in attenuation rate (6 dB versus 7.5 dB) can result from ground-absorption effects, which occur as sound travels over soft surfaces such as earth or vegetation (7.5 dB attenuation rate) versus hard surfaces such as pavement or hard-packed earth (6 dB rate).

be reduced to 74 dBA at 100 feet, 68 dBA at 200 feet, and so on. Noise levels can also be attenuated by shielding the noise source or providing a barrier between the source and the receptor.

- **Geometric Spreading.** Sound from a single source (i.e., a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a general rate of 6 dBA for each doubling of distance. Highway noise is not a single stationary point source of sound. The movement of vehicles on a highway makes the source of the sound appear to emanate from a line (i.e., a "line" source) rather than from a point. This results in cylindrical spreading rather than the spherical spreading resulting from a point source. The change in sound level (i.e., attenuation or decrease) from a line source is generally 3 dBA per doubling of distance.

- **Ground Absorption.** The noise path between the source and the observer is usually close to the ground. The excess noise attenuation from ground absorption occurs due to acoustic energy losses on sound wave reflection. For acoustically "hard" sites (i.e., sites with a reflective surface, such as a parking lot or a smooth body of water, between the source and the receptor), no excess ground attenuation is assumed because the sound wave is reflected without energy losses. For acoustically absorptive or "soft" sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dBA per doubling of distance is normally assumed. When added to the geometric spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dBA per doubling of distance for a line source and 7.5 dBA per doubling of distance for a point source.

- **Atmospheric Effects.** Research by the California Department of Transportation (Caltrans) and others has shown that atmospheric conditions can have a major effect on noise levels. Factors include wind, air temperature (including vertical temperature gradients), humidity, and turbulence. Receptors downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas receptors upwind can have lower noise levels. Increased sound levels can also occur over relatively large distances because of temperature inversion conditions (i.e., increasing temperature with elevation).

- **Shielding by Natural or Human-Made Features.** A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receptor, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor with the specific purpose of reducing noise. In addition to the noise that diffracts over the top of a barrier, noise will also diffract around the ends of the barrier leading to "flanking" noise that can reduce the overall efficacy of the barrier. Assuming it is long enough to minimize the effects of flanking noise, a barrier that breaks the line of sight between a source and a receptor will typically result in at least 5 dB of noise reduction. A higher barrier may provide as much as 20 dB of noise reduction.

2.4 Human Response to Noise

Noise can have a range of effects on people including hearing damage, sleep interference, speech interference, performance interference, physiological responses, and annoyance. Each of these is briefly described below.

- **Hearing Damage.** A person exposed to high noise levels can suffer either gradual or traumatic hearing damage. Gradual hearing loss occurs with repeated exposure to excessive noise levels and is most commonly associated with occupational noise exposures in heavy industry or other very noisy work environments. Traumatic hearing loss is caused by sudden exposure to an extremely high noise level, such as a gunshot or explosion at very close range. The potential for noise-induced hearing loss is not generally a concern in typical community noise environments. Noise levels in neighborhoods, even in very noisy airport environs, are not sufficiently loud as to cause hearing loss.

- **Sleep Interference.** Exposure to excessive noise levels at night has been shown to cause sleep disturbance. Sleep disturbance refers not only to awakening from sleep, but also to effects on the quality of sleep such as altering the pattern and stages of sleep. World Health Organization guidelines recommend noise limits of 30 dBA L_{eq} (8-hour average) for continuous noise and 45 dBA L_{max} for single sound events inside bedrooms at night to minimize sleep disturbance (World Health Organization 1999).

- **Speech Interference.** Speech interference can be a problem in any situation where clear communication is desired, but is often of particular concern in learning environments (such as schools) or situations where poor communication could jeopardize safety. Normal conversational speech inside homes is typically in the range of 50 to 65 dBA (EPA 1977) and any noise in this range or louder may interfere with speech. As background noise levels rise, the intelligibility of speech decreases and the listener will fail to recognize an increasing percentage of the words spoken. A speaker may raise his or her voice in an attempt to compensate for higher background noise levels, but this in turn can lead to vocal fatigue for the speaker.

- **Performance Interference.** Excessive noise has been found to have various detrimental effects on human performance, including information processing, concentration, accuracy, reaction times, and academic performance. Intrusive noise from individual events can also cause distraction. These effects are of obvious concern for learning and work environments.

- **Physiological Responses.** Acute noise has been shown to cause measurable physiological responses in humans, including changes in stress hormone levels, pulse rate, and blood pressure. The extent to which these responses cause harm or are signs of harm is not clearly defined, but it has been postulated that they could contribute to stress-related diseases, such as hypertension, anxiety, and heart disease. However, research indicates links between environmental noise and permanent health effects are generally weak and inconsistent. Statistically significant health risks have been found for extended exposure to very high noise levels, such as for workers exposed to high levels of industrial noise for 5 to 30 years (World Health Organization 1999).

- **Annoyance.** The subjective effects of annoyance, nuisance, and dissatisfaction are possibly the most difficult to quantify, and no accurate method exists to measure these effects. This difficulty arises primarily from differences in individual sensitivity and habituation to sound, which can vary widely from person to person. What one person considers tolerable can be unbearable to another of equal hearing acuity. An important tool in estimating the likelihood of annoyance due to a new sound is by comparing it to the existing baseline or “ambient” environment to which that person has adapted. In general, the more the level or tonal (frequency) variations of a sound exceed the previously existing ambient sound level or tonal quality, the less acceptable the new sound will be.

In most cases, effects from sounds typically found in the natural environment would be limited to annoyance or interference. Physiological effects and hearing loss would be more commonly associated with human-made noise, such as in an industrial or occupational setting.

Studies have shown that under controlled conditions in an acoustics laboratory, a healthy human ear is able to discern changes in sound levels of 1 dBA. In the normal environment, the healthy human ear can detect changes of about 2 dBA; however, it is widely accepted that a doubling of sound energy, which results in a change of 3 dBA in the normal environment, is considered just noticeable to most people. A change of 5 dBA is readily perceptible, and a change of 10 dBA is perceived as being twice as loud. Accordingly, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) resulting in a 3 dBA increase in sound would generally be barely detectable.

2.5 Noise-Sensitive Land Uses

The City of Belmont General Plan Noise Element describes residences, schools, places of worship, and hospitals as noise-sensitive land uses. The nearest residential noise-sensitive land use to the project site is a mobile home community approximately 300 feet southwest of the project site, and a single family residential neighborhood starting at 560 feet west of the project site. Both areas are separated from the project site by US-101, and the ambient noise levels are highly influenced by US-101. Additionally, there are several hotels northwest of the project site, with the nearest one located approximately 100 feet . Hotels are not specifically noted in the City of Belmont General Plan Noise Element as being noise-sensitive land uses; however, noise may cause disturbance to people who are temporarily residing in hotels, especially during the nighttime hours. There are commercial and industrial land uses in the project vicinity, including offices, retail stores, and a power station. These uses are less sensitive to noise and vibration.

Chapter 3
Groundborne Vibration Fundamentals

This section describes basic concepts related to groundborne vibration. Groundborne vibration is a small, rapidly fluctuating motion transmitted through the ground. The effects of groundborne vibrations are typically limited to causing nuisance or annoyance to people, but at extreme vibration levels damage to buildings may also occur.

In contrast to airborne sound, groundborne vibration is not a phenomenon that most people experience every day. The ambient groundborne vibration level in residential areas is usually much lower than the threshold of human perception. Most perceptible indoor vibration is caused by sources within buildings, such as mechanical equipment while in operation, people moving, or doors slamming. Typical outdoor sources of perceptible groundborne vibration are heavy construction activity (such as blasting, pile driving, or earthmoving), steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible, even in locations close to major roads. The strength of groundborne vibration from typical environmental sources diminishes (or attenuates) fairly rapidly over distance.

For the prediction of groundborne vibration, the fundamental model consists of a vibration source, a receptor, and the propagation path between the two. The power of the vibration source and the characteristics and geology of the intervening ground, which affect the propagation path to the receptor, determine the groundborne vibration level and the characteristics of the vibration perceived by the receptor.

The following sections provide an explanation of key concepts and terms used in the analysis of environmental groundborne vibration.

3.1 Displacement, Velocity, and Acceleration

When a vibration source (blasting, dynamic construction equipment, train, etc.) impacts the ground it imparts energy to the ground, creating vibration waves that propagate away from the source along the surface and downward into the earth. As vibration waves travel outward from a source, they excite the particles of rock and soil through which they pass and cause them to oscillate. The distance that these particles move is referred to as the *displacement* and is typically very small, usually only a few ten-thousandths to a few thousandths of an inch. *Velocity* describes the instantaneous speed of the motion, and *acceleration* is the instantaneous rate of change of the speed. Each of these measures can be further described in terms of *frequency* and *amplitude*, as discussed below.

Although displacement is generally easier to understand than velocity or acceleration, it is rarely used to describe groundborne vibration because most transducers used to measure vibration directly measure velocity or acceleration, not displacement.

3.2 Frequency and Amplitude

The frequency of a vibrating object describes how rapidly it is oscillating. The unit of measurement for the frequency of vibration is Hz (the same as used in the measurement of noise), which describes the number of cycles per second.

The amplitude of displacement describes the distance that a particle moves from its resting (or equilibrium) position as it oscillates and can be measured in inches. The amplitude of vibration velocity (the speed of the movement) can be measured in inches per second (in/sec). The amplitude of vibration acceleration (the rate of change of the speed) can be measured in in/sec per second.

3.3 Vibration Descriptors

As noted above, there are various ways to quantify groundborne vibration based on its fundamental characteristics. Because vibration can vary markedly over a short period of time, various descriptors have been developed to quantify vibration. The two most common descriptors used in the analysis of groundborne vibration are peak particle velocity and vibration velocity level , each of which are described below:

- **Peak Particle Velocity (PPV)** is defined as the maximum instantaneous positive or negative peak amplitude of the vibration velocity. The unit of measurement for PPV is in/sec. Unlike many quantities used in the study of environmental acoustics, PPV is typically presented using linear values and does not employ a dB scale. Because it is related to the stresses that are experienced by buildings, PPV is generally accepted as the most appropriate descriptor for evaluating the potential for building damage (both Federal Transit Administration and Caltrans guidelines recommend using PPV for this purpose). It is also used in many instances to evaluate the human response to groundborne vibration (Caltrans guidelines recommend using PPV for this purpose).
- **Vibration Velocity Level (L_V)** describes the rms vibration velocity. Due to the typically small amplitudes of groundborne vibrations, vibration velocity is often expressed in decibels, calculated as follows.

$$L_V = 20 \times \log_{10}\left(\frac{V}{V_{ref}}\right)$$

where V is the actual rms velocity amplitude and V_{ref} is the reference velocity amplitude. It is important to note that there is no universally accepted value for V_{ref}, but the accepted reference quantity for vibration velocity in the U.S. is 1 micro-inch per second (1×10^{-6} in/sec). The abbreviation VdB is commonly used for vibration decibels to distinguish from noise level decibels. L_V is often used to evaluate human response to vibration levels (Federal Transit Administration guidelines recommend using L_V for this purpose).

3.4 Vibration Propagation

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations reduce much more rapidly than low frequencies so that low frequencies tend to dominate the spectrum at large distances from the source. The propagation of groundborne vibration is not as simple to model as airborne noise. This is because noise in the air travels through a relatively uniform medium while groundborne vibrations travel through the earth, which may contain significant geological differences. Geological factors that influence the propagation of groundborne vibration include the following:

- **Soil conditions.** The type of soil is known to have a strong influence on the levels of groundborne vibration. Among the most important factors are the stiffness and internal damping of the soil. Hard, dense, and compacted soil; stiff clay soil; and hard rock transmit vibration more efficiently than loose, soft soils; sand; or gravel.
- **Depth to bedrock.** Shallow depth to bedrock has been linked to efficient propagation of groundborne vibration. One possibility is that shallow bedrock acts to concentrate the vibration energy near the surface, reflecting vibration waves back toward the surface that would otherwise continue to propagate farther down into the earth.
- **Soil strata.** Discontinuities in the soil strata (i.e., soil layering) can also cause diffractions or channeling effects that affect the propagation of vibration over long distances.
- **Frost conditions.** Vibration waves typically propagate more efficiently in frozen soils than in unfrozen soils. Propagation also varies depending on the depth of the frost.
- **Water conditions.** The amount of water in the soil can affect vibration propagation. The depth of the water table in the path of the propagation also appears to have substantial effects on groundborne vibration levels.

Specific conditions at the source and receiver locations can also affect the vibration levels. For instance, how the source is connected to the ground (e.g., direct contact, through rails, or via a structure) will affect the amount of energy transmitted into the ground. There are also notable differences when the source is underground (such as in a tunnel) versus on the surface. At the receiver, vibration levels can be affected by variables such as the foundation type, building construction, and acoustical absorption inside the rooms where people are located. When vibration encounters a building, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under certain circumstances, the ground-to-foundation coupling may also amplify the vibration level due to structural resonances of the floors and walls.

3.5 Effects of Groundborne Vibration

Vibration can result in effects that range from annoyance to structural damage. Annoyance or disturbance of people may occur at vibration levels substantially below those that would pose a risk of damage to buildings. Each of these effects is discussed below.

3.5.1 Potential Building Damage

When groundborne vibration encounters a building, vibrational energy is transmitted to the structure, causing it to vibrate. If the vibration levels are high enough, damage to the building may occur. Depending on the type of building and the vibration levels, this damage could range from cosmetic architectural damage (e.g., cracked plaster, stucco, or tile) to more severe structural damage (e.g., cracking of floor slabs, foundations, columns, beams, or wells). Buildings can typically withstand higher levels of vibration from transient sources than from continuous or frequent intermittent sources. Transient sources are those that create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers (impact or vibratory), crack-and-seat equipment, and vibratory compaction equipment. Older, fragile buildings (which may include important historic buildings) are of particular concern. Modern commercial and industrial buildings can generally withstand much higher vibration levels before potential damage occurs.

3.5.2 Human Disturbance or Annoyance

Groundborne vibration can be annoying to people and can cause serious concern for nearby neighbors of vibration sources, even when vibration is well below levels that could cause physical damage to structures. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernible but there is less adverse reaction without the effects associated with the shaking of a building. The normal frequency range of most groundborne vibration that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz.

When groundborne vibration waves encounter a building, vibrational energy is transmitted to the building foundation and then propagates throughout the remainder of the structure, causing building surfaces (walls, floors, and ceilings) to vibrate. This movement may be felt directly by building occupants and may also generate a low-frequency rumbling noise as sound waves are radiated by the vibrating surfaces. At higher frequencies, building vibration can cause other audible effects, such as rattling of windows, building fixtures, or items on shelves or hanging on walls. These audible effects due to groundborne vibration are referred to as groundborne noise. Groundborne vibration levels that result in groundborne noise are often experienced as a combination of perceptible vibration and low-frequency noise. However, sources that have the potential to generate groundborne noise are likely to produce airborne noise impacts that mask the radiated groundborne noise. Any perceptible effect (vibration or groundborne noise) can lead to annoyance. The degree to which a person is annoyed depends on the activity in which they are participating at the time of the disturbance. For example, someone sleeping or reading will be more sensitive than someone who is engaged in any type of physical activity. Reoccurring vibration effects often lead people to believe that the vibration is damaging their home, although vibration levels are well below minimum thresholds for damage potential (Caltrans 2020).

Numerous studies have been conducted to characterize the human response to vibration, and, over the years, numerous vibration criteria and standards have been suggested by researchers, organizations, and governmental agencies. These studies suggest that the thresholds for perception and annoyance vary according to duration, frequency, and amplitude of vibration. For continuous or frequent intermittent vibration sources (such as construction activity, including the use of pile drivers or vibratory compaction equipment), the human response to vibration varies from barely perceptible at a PPV of 0.01 in/sec, to distinctly perceptible at a PPV of 0.04 in/sec, to strongly perceptible at a PPV of 0.1 in/sec, and severe at a PPV of 0.4 in/sec (Caltrans 2020).

3.6 Vibration-Sensitive Land Uses

As noted above, the potential effects of groundborne vibration can be divided into two categories: building damage and potential human annoyance. Because building damage would be considered a permanent negative effect at any building, regardless of land use, any type of building would typically be considered sensitive to this type of impact. Fragile structures, which often include historic buildings, are most susceptible to damage and are of particular concern.

Human annoyance effects from groundborne vibration are typically only considered inside occupied buildings and not at outside areas such as residential yards, parks, or open space. Buildings that would be considered sensitive to human annoyance caused by vibration are generally the same as those that would be sensitive to noise and typically include residences, schools, hospitals, assisted living facilities, mental care facilities, places of worship, libraries, performing arts facilities, and hotels and motels.

Chapter 4
Existing Noise Environment

The existing ambient noise levels in the vicinity of the project site are dominated largely by the traffic on major roadways in the area, such as US-101 and Shoreway Road. For this analysis, ambient noise has been measured to characterize ambient noise levels in the vicinity of the project, which will be used to establish a baseline representation of existing conditions when evaluating the project's noise impacts. To quantify existing ambient noise levels near the project site, short-term (15-minute) and long-term (48-hour) ambient noise measurements were conducted between Wednesday, April 23rd and Friday, April 25th, 2022. The short-term and long-term noise measurements are discussed in more detail in the following sections.

4.1 Short-Term Noise Monitoring

Measurements were conducted using a Larson Davis LxT Type-1 sound level meter, which measured L_{eq} for 15 minute intervals. Weather conditions during the measurements were clear skies, an average wind speed of 2.8 miles-per-hour, and temperatures ranging from 61 to 65.6 degrees Fahrenheit. Monitoring locations were selected to capture noise levels in areas that are sensitive to noise or representative of ambient noise levels near the project site.

Three monitoring locations near the Project site were selected as short-term ambient noise measurement sites (ST-1, ST-2, and ST-3). Refer to Figure 1 for a map showing the noise measurement locations, and Table 3 summarizes the short-term measurement results. As reflected in the data, existing noise levels in the project area vary between measurement locations based on the types of noise sources that are present. Refer to Appendix A for the complete dataset of measured noise.

ICF

Figure 1
Noise Measurement Locations

Table 3. Short-Term Noise Level Measurements Near the Project Site

Site	Site Description	Measurement Start Time	dBA Leq	dBA Lmax	dBA Lmin	Dominant Noise Source
ST-1	10 Twin Dolphin, walking path near SW corner of parking lot	03/23/2022 11:10 a.m.	59.4	75.6	47.7	Small aircraft
ST-2	230 Twin Dolphin Drive	03/23/2022 11:46 a.m.	66.5	87.8	50.6	Small aircraft
ST-3	1399 Shoreway Road	03/23/2022 12:13 p.m.	67.1	75.8	59.1	Small aircraft and US 101 Traffic

Note: See Appendix A for full noise measurement data.
ST = long-term (15-minute) ambient noise measurement.
dBA = A-weighted decibels.

4.2 Long-Term Noise Monitoring

Long-term measurements were conducted using Piccolo II Type 2 sound level meters. Three long-term monitoring locations near the project site were selected for collecting long-term ambient noise data. L_{dn} noise levels from the long-term measurements ranged from 62.5 to 71.2 dBA L_{dn}, with higher noise levels generally at the locations close to major roadways and lower noise levels generally at the areas farther from major roadways. Refer to Figure 1 for a map showing the noise measurement locations, and Table 4 summarizes the long-term measurement results. Refer to Appendix A for the complete dataset of measured noise.

Table 4. Representative Long-Term Ambient Noise Measurements from the Belmont General Plan EIR

Site	Site Description	Day 1 dBA Ldn	Day 2 dBA Ldn	Primary Noise Sources
LT-1	120 Sem Lane	68.1	67.0	Highway traffic and small aircraft
LT-2	1301 Shoreway Road	71.2	69.3	Highway traffic and small aircraft
LT-3	Karen Road, between Oneill Avenue and Harbor Boulevard	64.0	62.5	Highway traffic
LT-4	Southwest corner of Oneill Avenue and Kedith Street	63.8	62.8	Roadway traffic

Note: See Appendix A for full noise measurement data.
Noise measurements were conducted from March 23 to March 25, 2022.
LT- Long-term (24-hour) ambient noise measurement; dBA = A-weighted decibels; L_{dn}= day-night noise levels;

Chapter 5
Regulatory Framework

5.1 Federal

No federal laws, regulations, or policies for construction-related noise and vibration apply to the Proposed Project.

5.2 State

5.2.1 California Governor's Office of Planning and Research

The *State of California General Plan Guidelines,* published and updated by the Governor's Office of Planning and Research, provides guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. These are guidelines for general land use planning that describe noise acceptability categories for different types of land uses considered by the state. California also requires each local government entity to perform noise studies and implement a noise element as part of its general plan. The purpose of the noise element is to limit the exposure of the community to excessive noise levels; the noise element must be used to guide decisions concerning land use. A discussion of relevant noise-related policies in the City of Belmont 2035 General Plan is provided below, noting that the project site will be annexed into the City of Belmont as part of the proposed project.

5.2.2 California Department of Transportation

There are no state noise and vibration standards that directly apply to the proposed project. As noted below, there are also no quantitative local standards that can be used to assess project-related vibration. Therefore, while the proposed project would not be subject to Caltrans oversight, guidance published by the agency nonetheless provides groundborne vibration criteria that are useful in establishing thresholds for impact determinations. Caltrans' widely referenced *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020) provides guidance for two types of potential impact: (1) damage to structures, and (2) annoyance to people. Guideline criteria for each are provided in Tables 5 and 6.

Table 5. Caltrans Guidelines for Vibration-Related Damage

Structure and Condition	Maximum PPV (in/sec) Transient Sources	Maximum PPV (in/sec) Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation. 2020. *Transportation and Construction Vibration Guidance Manual*. April. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed: April 27, 2022.
Notes:
Transient sources create a single, isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include pile drivers (impact and vibratory), crack-and-seat equipment, and vibratory compaction equipment.
PPV = Peak Particle Velocity (vibration level) in inches per second.

Table 6. Caltrans Guideline for Vibration-Related Annoyance

Human Response	Maximum PPV (in/sec) Transient Sources	Maximum PPV (in/sec) Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: California Department of Transportation. 2020.
Notes: Transient sources create a single, isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include pile drivers (impact and vibratory), crack-and-seat equipment, and vibratory compaction equipment.
PPV = Peak Particle Velocity (vibration level) in inches per second.

5.3 Local

5.3.1 City of Belmont General Plan

The Noise Element of the City of Belmont General Plan, adopted in 2017, includes land use compatibility standards that outline acceptable outdoor noise environment noise levels for various land use categories in the City. In general, the purpose behind land use compatibility standards is to help jurisdictions determine if the existing ambient noise level in a given area would be compatible with a particular developed use.

The following summarizes the compatibility standards for single-family residential land uses included in the General Plan.

- Normally Acceptable: up to 60 dBA L_{dn}
- Conditionally Acceptable: 55–70 dBA L_{dn}
- Normally Unacceptable: 70–75 dBA L_{dn}
- Clearly Unacceptable: 75+ dBA L_{dn}

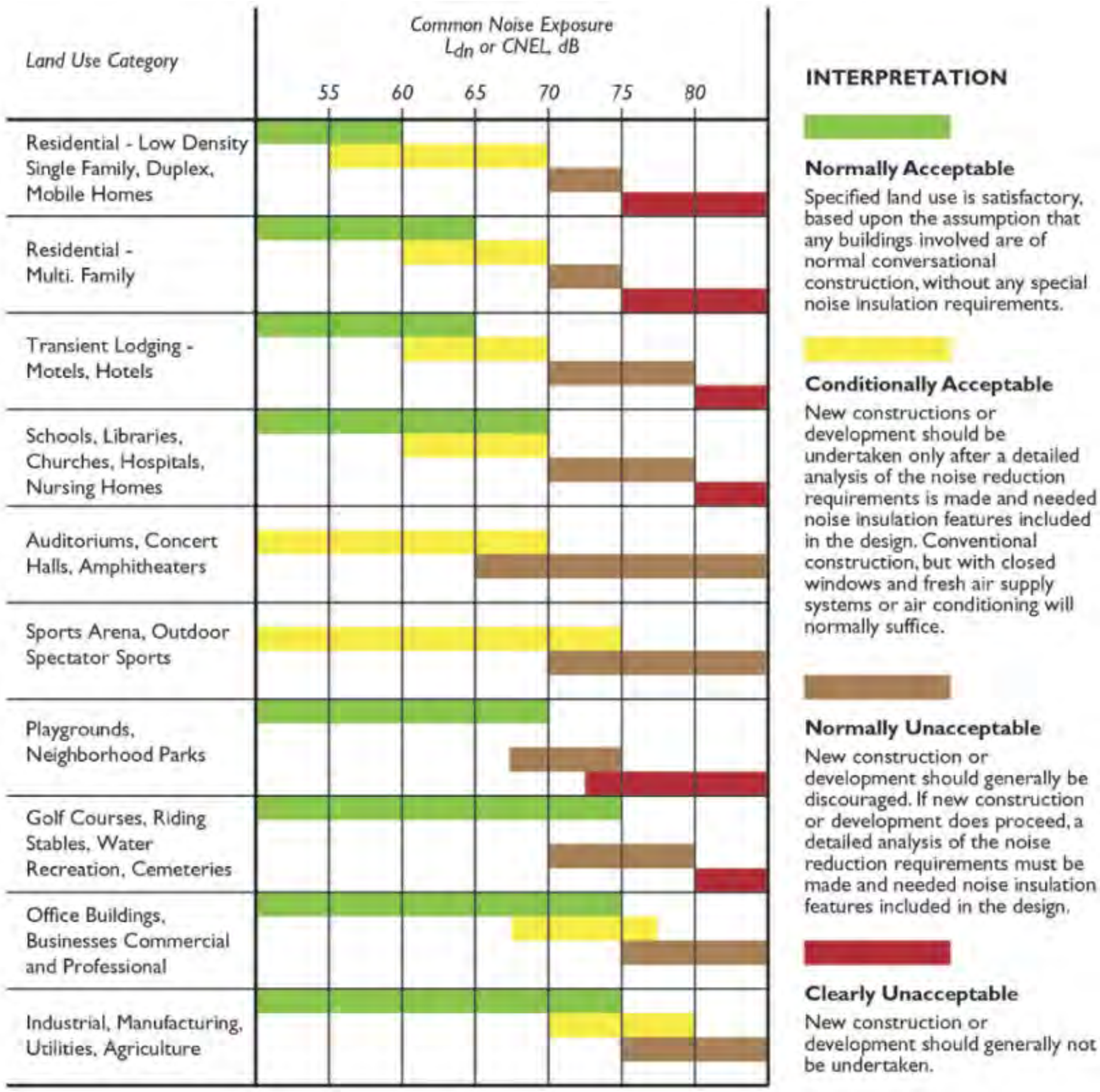
The following summarizes the compatibility standards for multi-family residential land uses included in the General Plan:

- Normally Acceptable: up to 65 dBA L_{dn}
- Conditionally Acceptable: 60–70 dBA L_{dn}
- Normally Unacceptable: 70–75 dBA L_{dn}
- Clearly Unacceptable: 75+ dBA L_{dn}

Refer to Table 7 (Table 7-1 of the General Plan) for land use compatibility guidelines for all land uses in the City of Belmont.[4]

[4] City of Belmont. 2017 (November 14). City of Belmont 2035 General Plan. Final Adopted General Plan. Available: https://www.belmont.gov/departments/community-development/2035-general-plan-update/final-adopted-general-plan. Accessed May 5, 2022.

Table 7. City of Belmont General Plan Community Noise Exposure Standards



Source: Office of Planning and Research, State of California Draft General Plan Guidelines, 2015.

In addition to the land use compatibility standards described above, the City of Belmont General Plan also establishes guidelines for non-aircraft transportation noise sources. Refer to Table 8 for the City noise standards for transportation noise sources at both outdoor activity areas and interior spaces.

Table 8. City of Belmont General Plan Noise Standards for Transportation (non-aircraft) Noise Sources

Noise-Sensitive Land Use[b]	Outdoor Activity Areas[a] L_{dn}/CNEL, dB	Interior Spaces L_{dn}/CNEL, dB	Interior Spaces L_{eq}, dB
Single-Family Residential	60	45	-
Multi-Family Residential	65	45	-
Transient Lodging	65	45	-
Hospitals, Nursing Homes	65	45	-
Theaters, Auditoriums, Music Halls	-	-	35
Churches, Meeting Halls	65	-	45
Office Buildings	-	-	45
Schools, Libraries, Museums	-	-	45

Notes:
[a] Outdoor activity areas generally include backyards of single-family residents and outdoor patios, decks, and common recreation areas of multi-family residences. Where the location of outdoor activity areas is unknown or is not applicable, the exterior noise level standard shall be applied to the property line of the receiving land use.
[b] As determined for a typical worst-case hour during periods of use.
CNEL = Community Noise Equivalent Level. CNEL is a measure of the 24-hour average A weighted noise level that is also time-weighted to "penalize" noise that occurs during the evening and nighttime hours when noise is generally recognized to be more disturbing.
L_{dn} = day night noise level. The 24-hour L_{dn} noise level has a penalty added to the nighttime hours only (not to the evening hours, as is done with the CNEL metric).

Noise criteria and guidelines for stationary sources of noise are also included in the City of Belmont General Plan (General Plan Table 7-3). Daytime noise levels (occurring from 8:00 a.m. to sunset on weekdays, or 10:00 a.m. to sunset on Saturday, Sunday, and holidays) are limited to 50 dBA L_{eq} and 70 dBA L_{max}. Nighttime noise levels are limited to 45 dBA L_{eq} and 65 dBA L_{max}. Refer to Table 9 for the General Plan transportation and stationary noise sources in the City of Belmont.

Table 9. City of Belmont General Plan Noise Standards for Stationary Noise Sources

Sound Level	Daytime[a,b]	Nighttime[a,c]
Hourly Equivalent Sound Level (L_{eq}), dBA	50	45
Maximum Sound Level (L_{max}), dBA	70	65

Notes:
[a] Sound level measurements shall be made at a point on the receiving property nearest where the sound source at issue generates the highest sound level
[b] Daytime is the period from 8:00 a.m. to sunset, Monday through Friday; and from 10:00 a.m. to sunset, Saturday, Sunday and Holidays.
[c] Nighttime is the period outside of the "daytime" hours above.

5.3.2 City of Belmont General Plan Policies

The General Plan includes goals, policies, and actions related to noise in the City of Belmont (City of Belmont 2017). The following goals, policies and actions are relevant to the proposed project:

- **Goal 7.1** Strive to achieve an acceptable noise environment for the environmental, health, and safety needs of present and future residents of Belmont.
- **Action 7.1-1.a:** Continue to limit hours for certain construction and demolition work to reduce construction-related noises.
- **Action 7.1-1.b:** Address sources of excessive neighborhood noise that can cause nuisances for residents, such as gas leaf blowers, wireless telecommunication facilities, power sources, ventilation, and cooling facilities**.**
- **Policy 7.1-2:** Use the Community Noise Level Exposure Standards, shown in [General Plan] Table 7-1 (Table 7 of this section), as review criteria for new land uses. Require all new development that would be exposed to noise greater than the "normally acceptable" noise level range to reduce interior noise through design, sound insulation, or other measures.
- **Policy 7.1-3:** Require noise-reducing mitigation to meet allowable outdoor and indoor noise exposure standards in [General Plan] Table 7-2 (Table 8 of this section). Noise mitigation measures that may be approved to achieve these noise level targets include but are not limited to the following:
    - Construct façades with substantial weight and insulation;
    - Use sound-rated windows for primary sleeping and activity areas;
    - Use sound-rated doors for all exterior entries at primary sleeping and activity areas;
    - Use minimum setbacks and exterior barriers;
    - Use acoustic baffling of vents for chimneys, attic and gable ends; and,
    - Install a mechanical ventilation system that provides fresh air under closed window conditions.
- **Policy 7.1-4:** Alternative acoustical designs that achieve the prescribed noise level reduction may be approved, provided a qualified Acoustical Consultant submits information demonstrating that the required reductions to meet the specific targets for outdoor activity areas and interior spaces can be achieved and maintained.
- **Policy 7.1-6:** Promote the use of noise attenuation measures to improve the acoustic environment inside residences where existing single-family residential development is located in a noise-impacted environment, such as along an arterial street or adjacent to a noise-producing use.
- **Policy 7.1-8:** Continue to enforce applicable Federal and State Noise Insulation Standards (CCR, Title 24) and noise requirements.
- **Policy 7.1-10**: Require developers of new development anticipated to generate a substantial amount of vibration during construction to implement mitigation practices to reduce vibration,

which can include: operating heavy equipment as far as practical from residential uses; using smaller bulldozers (operating weight less than 20,000 pounds) when grading must occur within approximately 50 feet of residential uses or other vibration sensitive uses; and using quiet pile driving technology when feasible.

5.3.3 City of Belmont City Code

The City of Belmont City Code contains noise regulations to protect the community from excessive noise. The code specifies how noise will be measured and regulated. Specifically, the City Code addresses noise issues and protects the community from substantial noise sources such as construction activity, animals, amplified sound. and stationary equipment.

Section 15-102(c) establishes day- and nighttime noise limits for various uses in the City. Daytime noise occurs from 8:00 a.m. to sunset on weekdays and 10:00 a.m. to sunset on Saturday, Sunday, and holidays. Nighttime noise occurs outside the hours of daytime noise. Continuous noise sources should use the average noise level (L_{eq}) while impulse noises should use the peak noise level (L_{max}). The limits by land use that may be relevant for the proposed project are included below:

1. *Residential*. For all sources of sound measured from any residential property:

   A) Nighttime Hours - 55 dBA

   B) Daytime Hours – 65 dBA

3. *Non-Residential.* For all sources of sound measured from any non-residential property:

   C) Nighttime Hours - 55 dBA

   D) Daytime Hours – 65 dBA

Regarding noise from construction and demolition activities, Section 15-102(d) of the City Code states that construction activity is not limited by these aforementioned noise standards and restricts the hours of construction activity to the hours between 8:00 a.m. and 5:00 p.m. Monday through Friday. Saturday is restricted to 10:00 a.m. to 5:00 p.m. No construction activity is permitted on Sunday or holidays without written approval from the City. During these allowable hours, the City Code does not include numerical thresholds that apply to construction noise. However, all gasoline-powered construction equipment must be equipped with an operating muffler or baffling system as originally provided by the manufacturer, and no modification to these systems is permitted. In addition, authorized land uses and construction activity established through the City's discretionary land use permit process may be subject to specific noise conditions of approval that may be more restrictive. Construction occurring outside of the daytime allowable hours for construction must be approved by the Building Official.

Section 15-102(e) of the City Municipal Code pertains to powered equipment used for non-construction activities, and states that noise from powered equipment must meet the previously stated noise thresholds of section 15-102(c) (e.g., 65 dBA during daytime hours and 55 during nighttime hours). Use of powered equipment is limited to 8:00 a.m. to 7:00 p.m., Monday through Friday, and 10:00 a.m. to 5:00 p.m. on Saturdays, Sundays, and holidays.

Chapter 6
Methodology and Results

6.1 Methodology

The noise impact analysis evaluates the potential for temporary noise and vibration impacts to result from Project construction activities, and for long-term operational noise impacts to result from project-related sound-generating equipment and on-site activities, or from Project-related changes in traffic patterns (resulting in increased traffic noise). The methodology used for the analysis of each noise or vibration source is included below.

6.1.1 Construction Noise

The analysis of construction noise considers the equipment that would be required for project demolition and construction, as identified by the project applicant (Four Corners Properties) based on available information at this time.

Noise from construction of a given project varies depending on the type of equipment in use, how many pieces of equipment are operating at any one time, the proximity of the equipment to a noise receptor, and the duration of equipment use. Estimates of combined construction and demolition noise levels for the proposed project were based on reference noise levels from the Federal Highway Administration (FHWA) roadway construction noise model,[5] the FTA general assessment construction noise analysis method,[6] and information provided by the project sponsor. The FTA recommends combining noise levels from the two loudest pieces of equipment expected to operate simultaneously in roughly the same location. For this analysis, the three loudest pieces of equipment expected to operate in a given construction phase were evaluated under the assumption they would operate simultaneously and in roughly the same location on the project site. This approach represents a reasonable worst-case scenario.

The FHWA noise source data used in the construction noise analysis include the A-weighted L_{max} noise levels measured at a distance of 50 feet from the construction equipment as well as the utilization factors for the equipment. The utilization factor is the percentage of time each piece of construction equipment is typically operating at full power and used to estimate L_{eq} values from L_{max} values. For example, the L_{eq} value for a piece of equipment that operates at full power over 50 percent of the time is 3 dB less than the L_{max} value.[7]

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[5] Federal Highway Administration. 2006. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. January. Available: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf. Accessed: May 5, 2022.

[6] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment,* FTA Report No. 0123, 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed April 26, 2022.

[7] Federal Highway Administration. 2006. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. January. Available: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf. Accessed: May 5, 2022.

An initial screening analysis was conducted to determine which subphases of project construction would require the use of the loudest equipment. It was determined that the Structural Concrete phase would use the loudest equipment. Combined L_{eq} noise levels from the three loudest pieces of equipment for this phase (e.g., two laser screeds and a gradall) are assessed to estimate reasonable worst-case combined noise levels from daytime project construction activities. Overall construction noise is analyzed below to determine if it would result in substantial temporary increases in noise that are not in compliance with applicable local regulations (e.g., timing restrictions in the City Code). Note that no nighttime construction is proposed for the project, so the construction noise analysis is focused on the potential for daytime construction noise impacts to occur.

6.1.2 Construction Haul Truck Noise

Construction haul truck noise was also considered in the analysis based on the estimated reasonable worst-case daily construction haul truck trips. According to the project applicant, up to 225 round-trip truck trips (or 450 total one-way truck trips to and from the project site) could occur on a reasonable worst-case construction day. Haul trucks would use US-101, exit at Holly Street, and turn north onto Shoreway Road to access the project site. A total of 450 one-way truck trips were added to the Existing ADT volumes for these roadway segments to create an “Existing plus Haul Truck” traffic scenario. Existing traffic noise levels were then compared to Existing plus Haul Truck traffic noise levels to estimate the potential haul truck-related increase in noise along these segments. Should a 3-dB, or “barely perceptible” increase in noise occur as a result of project haul trucks, haul truck noise impacts would be considered significant along that roadway segment. Due to its proximity to US 101, the haul truck discussion is also informed by actual noise levels using collected measurement data, to provide a more accurate representation of how haul truck noise would impact nearby noise-sensitive land uses.

6.1.3 Operational Noise

Operational Traffic Noise

Traffic noise levels were modeled for the following scenarios to determine if direct and cumulative noise impacts associated with Project-related increases in traffic would occur.

- Baseline (existing) conditions,
- Baseline (existing) plus-Project conditions,
- Cumulative no-Project conditions, and
- Cumulative plus-Project condition.

Traffic noise modeling was conducted using a spreadsheet based on the FHWA Traffic Noise Model, version 2.5. This spreadsheet calculates the traffic noise level at a fixed distance from the centerline of a roadway, based on the traffic volume, roadway speed, and vehicle mix for each roadway segment. Average daily traffic volumes, roadway speeds, and vehicle mix percentages (i.e., the proportion of automobiles, trucks, buses, and other vehicles) provided by Hexagon Transportation Consultants, Inc. (included in Appendix A) were used to model traffic noise levels with and without project implementation along the roadways in the vicinity of the project site. Traffic noise was evaluated in terms of how project-related traffic noise increases could affect existing noise-sensitive land uses in the project vicinity.

Stationary Equipment

Mechanical Heating, Cooling and Ventilation Equipment

The primary operational noise sources associated with the project would be mechanical equipment, such as ventilation fans and heating and cooling equipment on the roof, and equipment located in equipment rooms of the project buildings.

To evaluate the noise levels that would be generated by these noise sources, acoustical data (i.e., noise levels) for these items were derived from published literature and expert agencies, and general equipment information provided by the project applicant. Modeling was conducted to estimate noise from individual and combined equipment, based on estimated locations of project equipment as provided by the project applicant. Estimated noise levels are compared to the allowable noise levels in the City of Belmont.

The project also includes the installation of five diesel emergency generators (four 1,250 kW generators and one 500 kW generator). Although generator noise is typically considered exempt in the event of an actual emergency, noise during the testing of a potential emergency generator is evaluated. Estimated noise levels from the proposed project generators were compared to the allowable noise levels in the City of Belmont.

6.1.4 Construction Vibration

Building/Structure Damage

The operation of heavy-duty construction equipment can generate localized ground-borne vibration at buildings adjacent to the construction areas. Ground-borne vibration rarely causes damage to normal buildings. However, a structure's susceptibility to vibration-induced damage depends on its age, condition, distance from the vibration source, and the vibration level.

Construction-related vibration resulting from the proposed project was analyzed using data and modeling methodologies provided by Caltrans' *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020). This guidance manual provides typical vibration source levels for various types of construction equipment, as well as methods for estimating the propagation of groundborne vibration over distance. Table 10 provides the PPV levels of construction equipment expected to be used for the proposed project; the levels are provided for a reference distance of 25 feet. All of the analyzed equipment is classified as continuous/frequent intermittent vibration sources. The PPV vibration levels for analyzed equipment were calculated using methods provided in Caltrans' Transportation and Construction Vibration Guidance Manual (Caltrans 2020).

Table 10. Construction Equipment Vibration Levels

Equipment Item	Reference PPV at 25 feet, in/sec [a]
Vibratory roller	0.210
Auger Drill	0.089
Large bulldozer [b]	0.089
Loaded trucks [c]	0.076
Small bulldozer [d]	0.003

Source: California Department of Transportation. 2020. Transportation and Construction Vibration Guidance Manual. April. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed: April 27, 2022.
[a] Obtained from Caltrans 2020.
[b] Considered representative of other heavy earthmoving equipment such as excavators, graders, backhoes, etc.
[c] Considered representative of a dump truck and water truck.
[d] Considered representative of smaller equipment such as small a backhoe and front-end loader.

The following equation from the guidance manual was used to estimate the change in PPV levels over distance:

$$PPV_{rec} = PPV_{ref} \times (25/D)^n$$

where PPV_{rec} is the PPV at a receptor; PPV_{ref} is the reference PPV at 25 feet from the equipment; D is the distance from the equipment to the receiver, in feet; and n is a value related to the vibration attenuation rate through ground (the default recommended value for n is 1.5). This equation was used to estimate the PPV at each of the closest vibration-sensitive receivers based on an estimated worst-case (closest) distance between sources and receivers.

Annoyance/Sleep Disturbance

Regarding the potential for annoyance-related vibration impacts to occur, residential land uses are considered to be most sensitive to vibration during nighttime hours when people generally sleep. School land uses are considered to be somewhat sensitive during daytime hours, as well. Should strongly perceptible vibration levels (PPV of 0.1 inch per second [in/sec], per the Caltrans Guidelines for Vibration Annoyance Potential) occur at nearby residential land uses during nighttime hours, sleep disturbance could occur. Should strongly perceptible vibration levels occur at a school land use during daytime hours, annoyance-related vibration impacts could also occur. As shown in Table 6, vibration generated by continuous or frequent intermittent sources, such as construction activities, is considered to be strongly perceptible if the PPV vibration level is in excess of 0.1 in/sec.

6.2 Results

6.2.1 Construction Noise

The proposed project would consist of the following construction phases: 1) Demolition, site clearing, shoring, and mass excavation; 2) Structural concrete; 3) Building construction; 4) Building exterior; 5) Building interior and elevators; 6) On-site improvements, and; 7) Off-site improvements. Section

15.102(d) of Article VIII (Noise Control) of the City Code states construction activities may occur between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, except holidays, and 10:00 a.m. to 5:00 p.m. on Saturdays. The project applicant has confirmed that construction activities would occur only during these daytime hours, during which time there are no applicable quantitative noise criteria in the City.

Typical equipment that would be used during project construction includes concrete pumps, cranes, excavators, backhoes, etc. Reasonable worst-case construction noise levels were estimated by combining the three loudest pieces of equipment most likely to be used during the construction phases. Combining the noise level from the three loudest pieces of equipment, and assuming all three are all operating in close proximity near the closest off-site sensitive receptor, results in a reasonably representative worst-case noise level for project construction activities. This is the general approach recommended by the Federal Transit Administration, with a slight modification to make the analysis methodology more conservative (e.g., using the three loudest pieces of equipment rather than two).

At the nearest land use that could be conceivably considered sensitive to noise (i.e. a hotel 100 feet northwest of the Project site), modeled noise levels from project construction phases range from 78 to 83 dBA L_{eq} using the analysis method described above. Based on the equipment list provided by the project applicant, the Structural Concrete construction phase is expected to be the loudest. The three loudest equipment expected to be used during this phase include two laser screeds and a gradall. At a distance of 100 feet from the project site, where the hotel is located, noise during the Structural Concrete phase could result in noise levels of 83 dBA L_{max} and 80 dBA L_{eq}. At the nearest residential land uses 560 feet away from the Project site, noise levels would be 68 dBA L_{max} and 65 dBA L_{eq}; however, as noted above, the residential area is adjacent to US-101 and thus the project construction noise would likely be less noticeable due to the freeway noise. Modeled noise level results for the Structural Concrete construction phase are presented in Table 11, below.

Table 11. Reasonable Worst-Case Construction Noise, Demolition/Site Clearing/Shoring/Mass Excavation(L_{max} and L_{eq})

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	L_{eq} Sound Level (dBA)
Construction Condition: Structural Concrete			
Source 1: Laser Screed - Sound level (dBA) at 50 feet =	85	50%	82
Source 2: Laser Screed - Sound level (dBA) at 50 feet =	85	50%	82
Source 3: Gradall - Sound level (dBA) at 50 feet =	83	40%	79
Calculated Data			
All Sources Combined – L_{max} sound level (dBA) at 50 feet =			89 L_{max}
All Sources Combined – L_{eq} sound level (dBA) at 50 feet =			86 L_{eq}

Distance between Source and Receiver (feet)	Geometric Attenuation (dB)	Calculated L_{max} Sound Level (dBA)	Calculated L_{eq} Sound Level (dBA)
25	6	95	92
50	0	89	86
100	**-6**	**83**	**80**
200	-12	77	74

Source Data:		Maximum Sound Level (dBA)	Utilization Factor	L_{eq} Sound Level (dBA)
300	-16	74		70
400	-18	71		68
500	-20	69		66
560	**-21**	**68**		**65**
700	-23	66		63
800	-24	65		62
900	-25	64		61
1000	-26	63		60

Source: Federal Highway Administration. 2006. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. January. Available: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf. Accessed: May 5, 2022.
Notes:

- Geometric attenuation based on a 6 dB per doubling of distance.
- This calculation does not include the effects, if any, of local shielding or ground attenuation from walls, topography, or other barriers that may reduce sound levels further.
- Noise levels are based on source noise levels from the FHWA Roadway Construction Noise Model.
- **Bold** denotes distance and sound levels from the project site to nearest sensitive receivers. 100 foot distance = nearest hotel; 560 foot distance = nearest residential land uses.

Although temporary noise increases during daytime hours would occur during all phases of project construction, construction noise would be limited to the daytime hours when no numerical City noise criteria apply. Therefore, construction for the project would comply with local applicable construction criteria set forth in the City Code.

Based on the values in Table 11, the combined noise level could be 83 dBA L_{eq} and 86 dBA L_{max} at the hotel. Noise at the nearest residences would be 65 dBA L_{dn} and 68 dBA L_{max} At the hotel, noise levels range from 67 to 71 dBA L_{dn}, based on the data shown in Table 4; consequently, construction noise levels of 83 to 86 dBA would be more than 10 dB greater than the existing noise levels. Such an increase could be considered a substantial increase to people temporarily residing at the hotel. ICF recommends the project implement the following measure to reduce short term construction noise.

Prepare and Implement a Construction Noise Control Plan. The applicant shall develop a set of site-specific noise attenuation measures. Prior to commencement of construction activities, the applicant shall submit the construction noise control plan to the City for review and approval. Noise attenuation measures shall be identified in the plan and implemented to reduce noise levels to the greatest extent feasible. Noise measures may include, but are not limited to, the following:

- Using smaller equipment with lower horsepower or reducing the hourly utilization rate of equipment on the site to reduce noise levels at 50 feet to the allowable level.
- Locating construction equipment as far as feasible from noise-sensitive uses.
- Requiring that all construction equipment powered by gasoline or diesel engines have sound control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Prohibiting gasoline or diesel engines from having unmuffled exhaust systems.

- Not idling inactive construction equipment for prolonged periods (i.e., more than 5 minutes).
- Constructing a solid plywood barrier around the construction site and adjacent to operational businesses, residences, or other noise-sensitive land uses.
- Using temporary noise control blanket barriers.
- Monitoring the effectiveness of noise attenuation measures by taking noise measurements.
- Using “quiet” gasoline-powered compressors or electrically powered compressors and electric rather than gasoline- or diesel-powered forklifts for small lifting.

Construction Haul Truck Noise

Project construction would involve up to 450 one-way haul and vendor truck trips on a worst-case day. Note that during many construction days, there would be fewer than 450 truck trips. However, haul truck noise from a reasonable worst-case day is analyzed to provide a conservative assessment. Based on information from the project applicant, haul trucks would exist US-101 at Holly Street and turn north on Shoreway Road to access the project site. Trucks are also expected to use the same route in reverse when leaving the project site. The temporary addition of up to 450 haul truck trips per day on this route has been analyzed to determine if hauling activity would result in substantial increases to the ambient noise levels at nearby noise-sensitive uses. The City Code does not include a specific threshold pertaining to construction haul truck noise. Therefore, anticipated daily haul truck noise was assessed to determine if a 3-dB increase (considered to be a “barely perceptible” increase) over existing traffic noise levels would occur.

Modeling was conducted to estimate average daily traffic noise levels with and without the addition of haul truck trips (e.g., a comparison noise from “baseline” to the “baseline plus haul rucks” conditions). Table 12 shows estimated traffic noise levels along the roadway segments under “Baseline” and “Baseline plus Haul Truck Noise” conditions based on the assumptions described above.

Table 12. Existing and Existing plus Haul Truck Noise Levels

Roadway	Segment	Truck Trips on Segment (per day)	Modeled 2021 Baseline Traffic Noise (dBA L_{dn})	2021 Baseline + Haul Truck Noise (dBA L_{dn})	Delta (dBA L_{dn})[1]
Shoreway Road	South of Marine Parkway	450	61.2	65.2	4.0
Shoreway Road	North of Cormorant Drive	450	60.8	64.2	3.4
Shoreway Road	South of Cormorant Drive	450	61.0	64.3	3.3
Shoreway Road	North of Holly Street	450	61.3	65.3	4.0

[1] This table only includes traffic on Shoreway Road and does not account for the influence from US-101. The actual noise levels on Shoreway Road, based on LT-2 from Table 4, are greater than both the baseline and baseline + haul truck noise levels. The discussion below provides additional context on this assessment.

As shown in Table 12, the temporary increases in haul truck activity would cause noise increases on Shoreway Road that would be greater than 3-dB, or "barely perceptible," increase in traffic noise. Additional context needs to be included, however, because Shoreway Road is directly adjacent to US-101 and is heavily influenced by noise from that roadway. The baseline noise levels modeled above (60.8 – 61.3 dBA L_{dn}) only account for vehicles on Shoreway Road. Actual noise levels are higher, because US-101 noise is an adjacent major freeway. Noise levels from US-101 along Shoreway Road can be partially informed by referring to the data for long-term measurement site LT-2 from Table 4, which are 69 – 71 dBA L_{dn}. The measurement for LT-2 was conducted approximately 200 feet away from Shoreway Road; consequently, the noise levels adjacent or in close proximity to Shoreway Road (i.e., 50 feet) would be higher than 69 – 71 dBA L_{dn}, because the noise from US-101 would be even more predominant.

As such, noise levels along Shoreway Road are louder than 69 – 71 dBA L_{dn} due to the influence of US-101, even though the modeled noise level that only accounts for Shoreway Road traffic show values of 60.8 – 61.3 dBA L_{dn}. Thus, the increases shown above in Table 12 do not account for US-101 noise, and those increases would not likely be noticeable to land uses along Shoreway Road. The actual measured noise levels at LT-2 are louder than the modeled haul truck noise level shown in Table 12, which indicates that there would not be a noticeable increase on Shoreway Road. Therefore, noise effects from construction haul truck activity would not be considered substantial.

6.2.2 Operational Noise

Operational Traffic Noise

Once operational, the project would result in an increase in traffic in the vicinity of the project. Project-specific traffic data, including average daily traffic volumes, roadway speeds, and vehicle mix percentages (i.e., the proportion of automobiles, trucks, buses, and other vehicles) were provided by Hexagon. Modeling was conducted for Existing and Existing plus Project conditions to estimate traffic noise increases resulting from project operation along roadway segments in the project vicinity. Cumulative No Project and Cumulative plus Project scenarios were also modeled for informational purposes (although a cumulative analysis is not included in this report); the full modeling results are presented in Appendix A.

When assessing traffic noise impacts, the following thresholds are applied to determine the significance of project-related traffic noise increases:

1. An increase of more than 5 dBA is considered a significant traffic noise increase, regardless of the existing ambient noise level; and
2. In places where the existing or resulting noise environment is "conditionally acceptable," "normally unacceptable," or "clearly unacceptable," based on the City Land Use Compatibility Guidelines, any noise increase greater than 3 dBA is considered a significant traffic noise increase.

According to the General Plan Noise Element, a noise level of up to 65 dBA L_{dn} is considered normally acceptable for multi-family residential land uses, and 60 dBA L_{dn} is considered normally acceptable for single-family residential land uses.

Traffic noise modeling was conducted using a spreadsheet based on the FHWA Traffic Noise Model, version 2.5. This spreadsheet calculates the traffic noise level at a fixed distance from the centerline of a roadway, based on the traffic volume, roadway speed, and vehicle mix that is predicted to occur under each condition. Traffic noise was evaluated in terms of how project-related traffic noise increases could affect existing noise-sensitive land uses in the project vicinity. Refer to Table 13 for the traffic noise modeling results.

Table 13. Modeled Traffic Noise Levels

Roadway	Segment Location	2021 Baseline dBA L_{dn}	2021 Baseline plus Project dBA L_{dn}	Change (dB)
Shoreway Road	North of Marine Parkway	59.3	59.3	0.0
Shoreway Road	South of Marine Parkway	61.2	63.6	2.3
Shoreway Road	North of Cormorant Drive	60.8	61.5	0.7
Shoreway Road	South of Cormorant Drive	61.0	61.5	0.6
Shoreway Road	North of Holly Street	61.3	61.9	0.5
Shoreway Road	South of Holly Street	58.7	58.8	0.1
Marine Parkway	East of Shoreway Road	67.4	67.5	0.0
Marine Parkway	West of Shoreway Road	68.4	68.8	0.4
Cormorant Drive	East of Shoreway Road	55.7	57.6	1.8
Holly Street	East of Shoreway Road	68.6	68.6	0.0
Holly Street	West of Shoreway Road	69.6	69.7	0.1

Refer to Appendix A for the complete traffic noise modeling results, including modeling results for the Cumulative no Project and Cumulative Plus Project condition (which are not used in this analysis).
Note: Modeled noise levels at a fixed distance of 50-feet from the roadway centerline.

As shown in Table 13, modeling demonstrated that noise levels at roadway segments near the project site would increase by a maximum of 2.3 dB as a result of project operation. As described previously, a 3-dB increase is considered barely noticeable and would not constitute a significant increase in noise. An increase of 2.3 dB would not be considered substantial based on the thresholds defined previously. Therefore, project-related traffic noise increases would not be considered substantial.

Stationary Noise Sources

Heating, Cooling and Ventilation Equipment Noise

The proposed project would involve the use of HVAC systems and equipment. Although project equipment is not yet finalized, some equipment is expected to be located on the roofs of both buildings, while HVAC equipment for the parking garage will be located in internal equipment rooms. All equipment will be designed, selected and operated such that all property line noise ordinance requirements will be complied with.

On the two buildings, the roof area of the buildings are expected to consist of four direct outside air supply air handling units, two quad-sets of exhaust fans, a general exhaust air fan, and a stairwell pressurization fan. Additionally, there will be a central electric chilled water plant, consisting of two centrifugal chillers, one multi-cell cooling tower, and chilled and condenser water pumps; and a central natural gas-fired condensing boiler plant, consisting of eight heating hot water boilers, and heating hot water pumps.

All of the roof-mounted equipment noted above would be located behind a screen. Noise from equipment located behind a screened enclosure may be reduced slightly by the screen, but is typically not substantially reduced unless the screen is solid with no holes or gaps. Since details of the screen are not known at this time (and because it may be perforated), a reduction is not applied to noise sources located on the roof behind the screened enclosure.

Section 15-102(c) of the Belmont City Code establishes daytime and nighttime noise limits that apply to stationary sources of noise. Daytime hours are considered to be 8:00 a.m. to sunset on weekdays and 10:00 a.m. to sunset on Saturday, Sunday, and holidays. Nighttime hours are considered to be hours outside of the daytime hours defined above. When measuring noise from the receiving sensitive property, daytime noise is limited to 65 dBA and nighttime noise is limited to 55 dBA. Section 15-102(e) states that noise from powered equipment must meet the previously stated noise thresholds of section 15-102(c). Use of powered equipment is limited to 8:00 a.m. to 7:00 p.m., Monday through Friday, and 10:00 a.m. to 5:00 p.m. on Saturdays, Sundays, and holidays. Additionally, Table 7-3 in the City of Belmont General Plan (Table 9 in this report) provides standards for noise from stationary, non-transportation noise sources. During daytime hours, stationary source noise is limited to 50 dBA L_{eq} and 70 dBA L_{max} at the nearest noise-sensitive property. During nighttime hours, stationary source noise is limited to 45 dBA L_{eq} and 65 dBA L_{max}.

Air handling units and standard HVAC package units, such as the air handlers proposed for the Project, can produce sound levels in the range of about 70 to 75 dBA at 50 feet[8], depending on the size of the unit. A typical 100-horsepower propeller-driven cooling tower generates noise levels of

[8] Hoover and Keith. 2000. *Noise Control for Buildings, Manufacturing Plants, Equipment, and Products*. Houston, TX.

approximately 74 dBA at 50 feet.[9] Pumps can generate noise levels at 50 feet of approximately 81 dBA, while exhaust and ventilation fans can generate noise levels of approximately 79 dBA at 50 feet.[10] Boilers, such as the condensing boiler that is included in the project plans, can produce noise levels of approximately 67 dBA at 50 feet, and, lastly, a heat pump chiller can produce noise levels of up to 71 dBA at 50 feet[11].

If all of the equipment listed above were to operate simultaneously, which is unlikely to occur frequently or at all, the combined noise level would be 84 dBA, assuming the upper end of the noise levels listed above. This estimate of 84 dBA is an approximation, and the actual noise level could be higher or lower depending on the actual equipment models used, the type of screen and/or shielding present, intervening structures or barriers, and the individual quantities of equipment (i.e. multiple pumps).

The nearest noise-sensitive land use is located approximately 100 feet from the roofs of the buildings 1 and 2.[12] At this distance, would would attenuate by 8 dB from geometric attenuation alone, resulting in an approximate noise level of 78 dBA. The roof screen would likely cause additional attenuation to occur. Although there are many unknown variables, it is conservatively assumed that equipment noise levels could exceed the City's allowable levels at the nearest sensitive uses, because an estimated level of 78 dBA would exceed the City code limits and General Plan criteria. ICF recommends the project implement the following measure to reduce operational noise, which would ensure that noise from HVAC equipment is in compliance with all applicable limits.

Reduce Noise from Project Mechanical Equipment

To reduce potential noise effects resulting from project heating, cooling, and ventilation equipment as well as project emergency generators at the proposed project, a noise analysis shall be prepared to estimate the actual noise levels of project-specific equipment once the equipment models and design features to attenuate noise have been selected. The analysis shall be conducted prior to the issuance of building permits and shall be prepared by persons qualified in acoustical analysis and/or engineering, demonstrating with reasonable certainty that the mechanical equipment selected for the project and the attenuation features incorporated into project design would not result in an exceedance of the applicable City noise standards of 45 dBA L_{eq} and 65 dBA L_{max} during the nighttime and 55 dBA L_{eq} and 70 dBA L_{max} during the daytime.

Options to reduce noise from heating and cooling equipment include enclosing equipment in mechanical equipment rooms, shielding equipment with mechanical screens at least as tall as the equipment, and selecting quieter equipment models.

All recommendations from the acoustical analysis necessary to ensure that noise sources meet the above standards shall be incorporated into the building design and operations.

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[9] Ibid

[10] Federal Highway Administration. 2006. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. January. Available: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf. Accessed: May 5, 2022.

[11] Hoover and Keith. 2000. *Noise Control for Buildings, Manufacturing Plants, Equipment, and Products*. Houston, TX.

[12] The hotel is located approximately 100 feet from the boundary of the project site; however, the buildings roofs are set-back within the project site.

Emergency Generator Noise

Emergency generators included in the project could result in the generation of audible noise during testing. Noise from the operation of emergency generators during an emergency is typically exempt from local ordinances. However, even though the testing of emergency generators is a short-term (e.g., 30 minutes) and intermittent process (usually once per month), noise resulting from generator testing must comply with local noise limits for operational equipment noise. The project would include five emergency generators, all of which would be located outdoors. Two emergency generators would be located at the southern façade of Building 1 (between Building 1 and the proposed parking garage), while two other emergency generators would be in the northern corner of the project site, between Building 2 and Sem Lane. The fifth emergency generator would be between the proposed parking garage and US-101.. The generator testing for the project would be conducted monthly for 30 minutes. In the event of an emergency, generator noise would be considered except from the local noise standards. However, monthly testing activities would need to comply with the applicable local noise criteria.

At the location of the generators, the nearest sensitive land uses would be approximately 400 feet from the Building 1 generators, 150 feet from the Building 2 generators, and 350 feet from the garage generator. Any noise from the generator testing would be attenuated, by about 10 (over 150 feet) to 18 dB (over 400 feet),[13] to the nearest sensitive land uses. Furthermore, there is no direct line of site between the generators and the existing sensitive land uses, because the generators would be located within a walled-generator yard, and there are numerous intervening buildings that would cause additional noise attenuation. Additionally, the hotel and residences are located adjacent to US-101 and are predominantly influenced by the roadway noise. As such, the temporary use of a generator for 30 minutes per generator per month is unlikely to be noticeable at a distance of 150 to 400 feet in areas next to a major freeway with multiple intervening buildings.

Other Operational Noise Sources

The project would also include loading docks that would be located at the southwest corner of building 1 and the northeast corner of building 2. At building 2, the loading dock would be approximately 250 feet from the existing hotel, while, at building 1, the loading dock would be approximately 350 feet from the existing hotel and also 350 feet from the nearest residential land uses. Although some loading and unloading activities of larger trucks may occur, most deliveries are expected to be FedEx and UPS deliveries. The daily activities from UPS and FedEx deliveries would generate noise that would be similar to noise that is currently existing at the site and at the adjacent commercial and industrial land uses. Because loading and unloading noise is typical in the project area, and there are no sensitive receptors in the immediate vicinity of the loading docks, noise effects from this source of noise would not be substantial.

[13] This attenuation value is based on geometric attenuation of 6 dB per doubling of distance for point sources.

6.2.3 Construction Vibration

Damage to Structures

Construction of the proposed project would involve the use of construction equipment that could generate ground-borne vibration. Typical vibration levels associated with heavy-duty construction equipment at a reference distance of 25 feet are shown in Table 10. PPV vibration levels for project-specific equipment at a distance of 25 feet, and at other project-specific distances, are included in Table 14. Note that project construction would not involve the use of pile drivers.

Table 14. Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 Feet	PPV at 50 Feet	PPV at 75 Feet	PPV at 100 Feet	PPV at 175 Feet
Auger drill	0.089	0.0315	0.0171	0.0111	0.0048
Large bulldozer[a]	0.089	0.0315	0.0171	0.0111	0.0048
Loaded trucks[b]	0.076	0.0269	0.0146	0.0095	0.0041
Small bulldozer[c]	0.003	0.0011	0.0006	0.0004	0.0002

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, FTA Report No. 0123, 2018, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, accessed April 26, 2022.
[a] Representative of an excavator.
[b] Representative of a dump truck and water truck.
[c] Representative of a backhoe and front-end loader.

The most vibration-intensive types of construction equipment expected to be used for the project are an auger drill, and an excavator (which can generate a vibration level similar to that produced by a large bulldozer). Water trucks, dump trucks, backhoes, and front-end loaders would also be used, but these generate lower vibration levels than a vibratory roller, an auger drill and an excavator.

The potential for structural damage to occur at adjacent or nearby buildings can be evaluated by estimated vibration levels from construction equipment at nearby uses and comparing to appropriate damage criteria. As noted above, construction equipment for the project would operate at distances of 100 feet from the nearest noise-sensitive land use. However, the City of Belmont Corporation Yard is approximately 60 feet from the project site, which is the nearest neighboring building. The buildings at the City's corporation yard are likely best categorized as "Modern industrial/commercial buildings" under the Caltrans Guidelines for vibration-related damage, presented in Table 5 of this report.

Based on an attenuation equation published by Caltrans, and as shown in Table 14, estimated vibration level at a distance of 60 feet from the most vibration-intensive equipment proposed for the project (e.g., an excavator or drill rig) would be approximately 0.02 PPV in/sec. This level of vibration is less than the 0.5 PPV in/sec Caltrans criterion for modern industrial/commercial buildings.[14] Therefore, vibration-related damage effects would not occur at the corporation yard structures.

Although corporation yard is the closest group of buildings to the project site, other nearby buildings are located further away and would not experience structural damage from vibration. The nearby hotels are also likely best categorized as modern industrial/commercial buildings. The nearest residential buildings are approximately 300 feet away, and, at that distance, vibration from the excavator or drill rig would attenuate to 0.002 PPV in/sec, which is substantially below the damage thresholds for all categories of buildings.

General Plan Policy 7.1-10 requires developers of new development anticipated to generate a substantial amount of vibration during construction to implement mitigation practices to reduce vibration, which can include the following: operating heavy equipment as far as practical from residential uses; using smaller bulldozers (operating weight less than 20,000 pounds) when grading must occur within approximately 50 feet of residential uses or other vibration sensitive uses; and using quiet pile driving technology when feasible. These measures may not be applicable to project construction, given that residential uses are located approximately 300 feet from the project site.

Vibration-Related Annoyance

Typically, vibration-related annoyance is considered to be substantial if it is expected to result in sleep disturbance at nearby residences. Should vibration from project construction exceed the Caltrans “strongly perceptible” criterion at residential land uses during nighttime hours, impacts are often considered to be significant. The Caltrans “strongly perceptible” vibration-annoyance criterion is 0.1 PPV in/sec, as indicated in Table 6.

Note that construction activities for the proposed project would only occur during the daytime hours of 8:00 a.m. to 5:00 p.m. Monday through Friday, and 10:00 a.m. to 5:00 p.m. on Saturdays, with no construction proposed for nighttime hours. Therefore, no vibration-related annoyance impacts during nighttime hours, when people typically sleep, would occur. However, this analysis conservatively uses this “strongly perceptible” criterion to assess disturbance during daytime hours at the nearest educational land use. Temporary vibration-related annoyance effects to non-sensitive land uses, such as the corporation yard, are not generally considered to be substantial. Vibration-related annoyance at the hotel that is 100 feet from the project site could be considered substantial if vibration levels exceed the “strongly perceptible” threshold.

Although construction activities are not proposed for nighttime hours, when residential land uses are considered to be most sensitive to vibration-related annoyance, vibration levels at the hotel are estimated. The vibration level generated by an excavator or drill rig at 100 feet would be approximately 0.01 PPV in/sec. This vibration level is below the Caltrans “Strongly perceptible” criterion for vibration-related annoyance of 0.1 PPV in/sec.[15] The vibration level at the nearest residences, located approximately 300 feet from the project site, would be even lower. Therefore,

[14] California Department of Transportation. 2020. *Transportation and Construction Vibration Guidance Manual*. April. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed: April 27, 2022.

[15]California Department of Transportation. 2020. *Transportation and Construction Vibration Guidance Manual*. April. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed: April 27, 2022

daytime construction vibration levels would be below the strongly perceptible criterion at the nearest residential land uses, and the project would not cause expose people to substantial groundborne vibration during construction.

Noise From Public Airport or Private Airstrip Uses

The closest public airport to the project site is the San Carlos Airport, which is located approximately 0.8 miles north of the project site. This airport is within a 2-mile radius of the project site, and the 2015 Airport Land Use Compatibility Plan for the San Carlos Airport has been reviewed.[16] The project site is not located within the 60 CNEL contour for this airport based on the existing conditions from 2013 in the Compatibility Plan. Regardless of the project site's locations to the existing airport contours, based on the Compatibility Plan, commercial land uses are considered compatible with all noise levels. Additionally, there are no private airstrips near the project site. Therefore, the proposed project would not expose people working or residing in the project area to excessive noise levels resulting from either a public or public use airport or private airstrip.

[16] City/County Association of Governments of San Mateo County. Redwood City, California, *Comprehensive Airport Land Use Compatibility Plan For the Environs of San Carlos Airport*. Exhibit 4-1. Available: https://ccag.ca.gov/wp-content/uploads/2015/06/Draft-Final-ALUCP-San-Carlos-Airport-062515.pdf. Accessed: May 5, 2022.

Appendix A

Noise Measurements, Data, and Modeling Results

Appendix A. Noise Measurements, Data, and Modeling Results

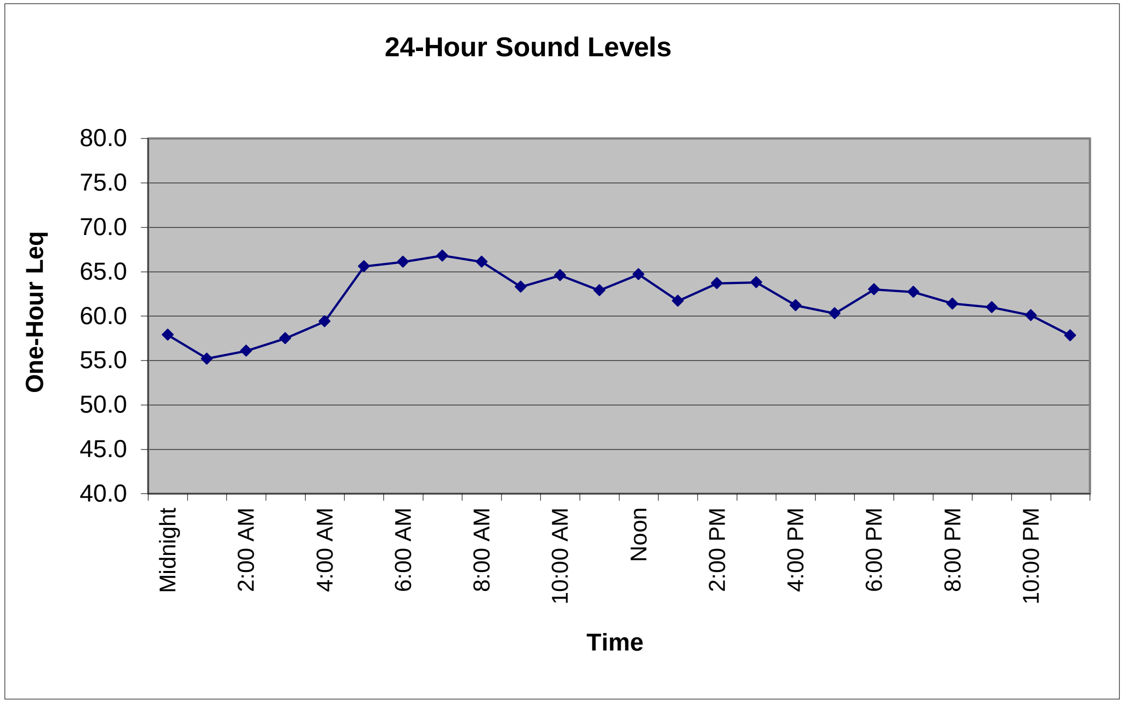
Noise Measurement Data

Noise Appendix

Long Term Measurement Data

Ldn/CNEL Calculation Spreadsheet

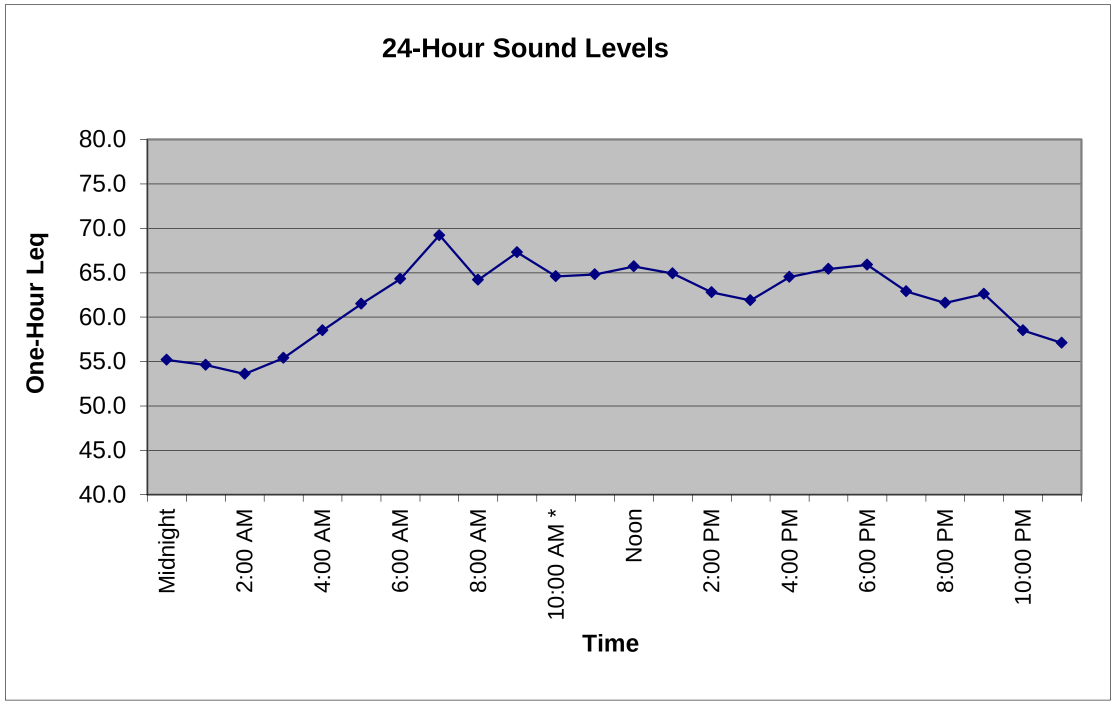
Project:	1301 Shoreway Road		Date:	3/23/2022	Analyst:	Schumaker, N		
Location:	LT-1							
Time	Wednesday 3/23/2022	Leq(24)	Ldn	CNEL	Worst Hour Leq	Ldn minus Worst Hour Leq	CNEL minus Ldn	Day
Midnight	57.9	62.8	68.1	68.4	66.8	1.3	0.3	Evening
1:00 AM	55.2		1.3	1.6				Night
2:00 AM	56.1							
3:00 AM	57.5							
4:00 AM	59.4							
5:00 AM	65.6							
6:00 AM	66.1							
7:00 AM	66.8							
8:00 AM	66.1							
9:00 AM	63.3							
10:00 AM	64.6							
11:00 AM	62.9							
Noon	64.7							
1:00 PM	61.7							
2:00 PM	63.7							
3:00 PM	63.8							
4:00 PM	61.2							
5:00 PM	60.3							
6:00 PM	63.0							
7:00 PM	62.7							
8:00 PM	61.4							
9:00 PM	61.0							
10:00 PM	60.1							
11:00 PM	57.8							



Ldn	68.1
Worst Hour Leq	66.8
Lowest Hour LEQ	55.2
12-hour Leq	63.9

Ldn/CNEL Calculation Spreadsheet

Project:	1301 Shoreway Road		Date:	3/24/2022	Analyst:	Schumaker, N			
Location:	LT-1								
Time	Thursday 3/24/2022	Leq(24)	Ldn	CNEL	Worst Hour Leq	Ldn minus Worst Hour Leq	CNEL minus Ldn		Day
Midnight	55.2	63.6	67.0	67.4	69.2	-2.2	0.4		Evening
1:00 AM	54.6		-2.2	-1.8					Night
2:00 AM	53.6								
3:00 AM	55.4								
4:00 AM	58.5								
5:00 AM	61.5								
6:00 AM	64.3								
7:00 AM	69.2								
8:00 AM	64.2								
9:00 AM	67.3								
10:00 AM *	64.6								
11:00 AM	64.8								
Noon	65.7								
1:00 PM	64.9								
2:00 PM	62.8								
3:00 PM	61.9								
4:00 PM	64.5								
5:00 PM	65.4								
6:00 PM	65.9								
7:00 PM	62.9								
8:00 PM	61.6								
9:00 PM	62.6								
10:00 PM	58.5								
11:00 PM	57.1								

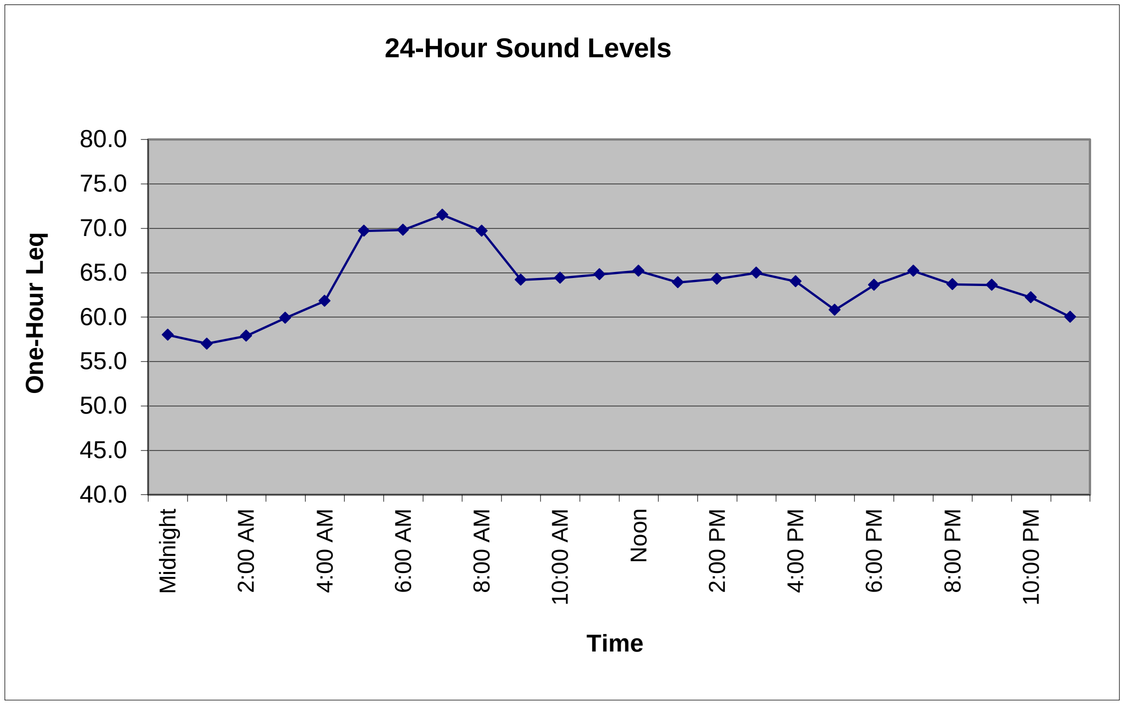


Ldn	67.0
Worst Hour Leq	69.2
Lowest Hour LEQ	53.6
12-hour Leq	65.5

*** This hours worth of data is pulled from the previous 24-hours data in order to calculate a complete Ldn**

Ldn/CNEL Calculation Spreadsheet

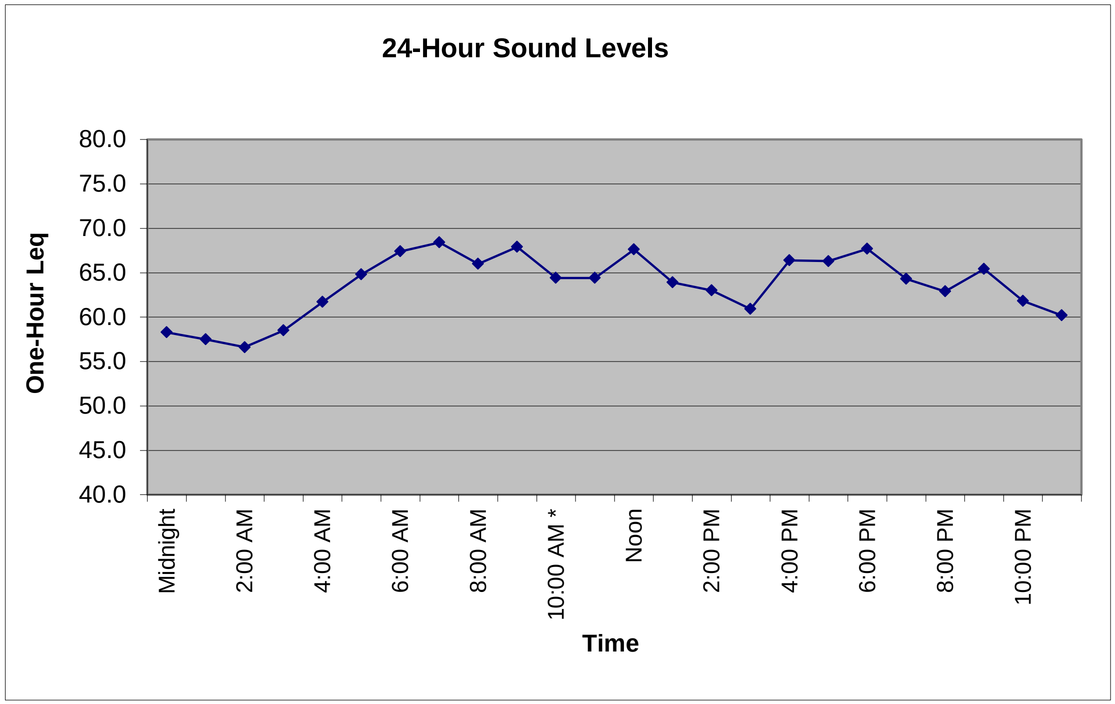
Project:	1301 Shoreway Road		Date:	9/23/2021	Analyst:	Schumaker, N		
Location:	LT-2							
	Wednesday				Worst Hour	Ldn minus	CNEL minus	
Time	9/23/2021	Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day
Midnight	58.0	65.4	71.2	71.4	71.5	-0.3	0.2	Evening
1:00 AM	57.0		-0.3	-0.1				Night
2:00 AM	57.9							
3:00 AM	59.9							
4:00 AM	61.8							
5:00 AM	69.7							
6:00 AM	69.8							
7:00 AM	71.5							
8:00 AM	69.7							
9:00 AM	64.2							
10:00 AM	64.4							
11:00 AM	64.8							
Noon	65.2							
1:00 PM	63.9							
2:00 PM	64.3							
3:00 PM	65.0							
4:00 PM	64.0							
5:00 PM	60.8							
6:00 PM	63.6							
7:00 PM	65.2							
8:00 PM	63.7							
9:00 PM	63.6							
10:00 PM	62.2							
11:00 PM	60.0							



Ldn	71.2
Worst Hour Leq	71.5
Lowest Hour LEQ	57.0
12-hour Leq	66.2

Ldn/CNEL Calculation Spreadsheet

Project:	1301 Shoreway Road		Date:	3/24/2022	Analyst:	Schumaker, N			
Location:	LT-2								
	Thursday				Worst Hour	Ldn minus	CNEL minus		
Time	3/24/2022	Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day	
Midnight	58.3	64.7	69.3	69.7	68.4	0.9	0.4	Evening	
1:00 AM	57.5		0.9	1.3				Night	
2:00 AM	56.6								
3:00 AM	58.5								
4:00 AM	61.7								
5:00 AM	64.8								
6:00 AM	67.4								
7:00 AM	68.4								
8:00 AM	66.0								
9:00 AM	67.9								
10:00 AM *	64.4								
11:00 AM	64.4								
Noon	67.6								
1:00 PM	63.9								
2:00 PM	63.0								
3:00 PM	60.9								
4:00 PM	66.4								
5:00 PM	66.3								
6:00 PM	67.7								
7:00 PM	64.3								
8:00 PM	62.9								
9:00 PM	65.4								
10:00 PM	61.8								
11:00 PM	60.2								



Ldn	69.3
Worst Hour Leq	68.4
Lowest Hour LEQ	56.6
12-hour Leq	66.1

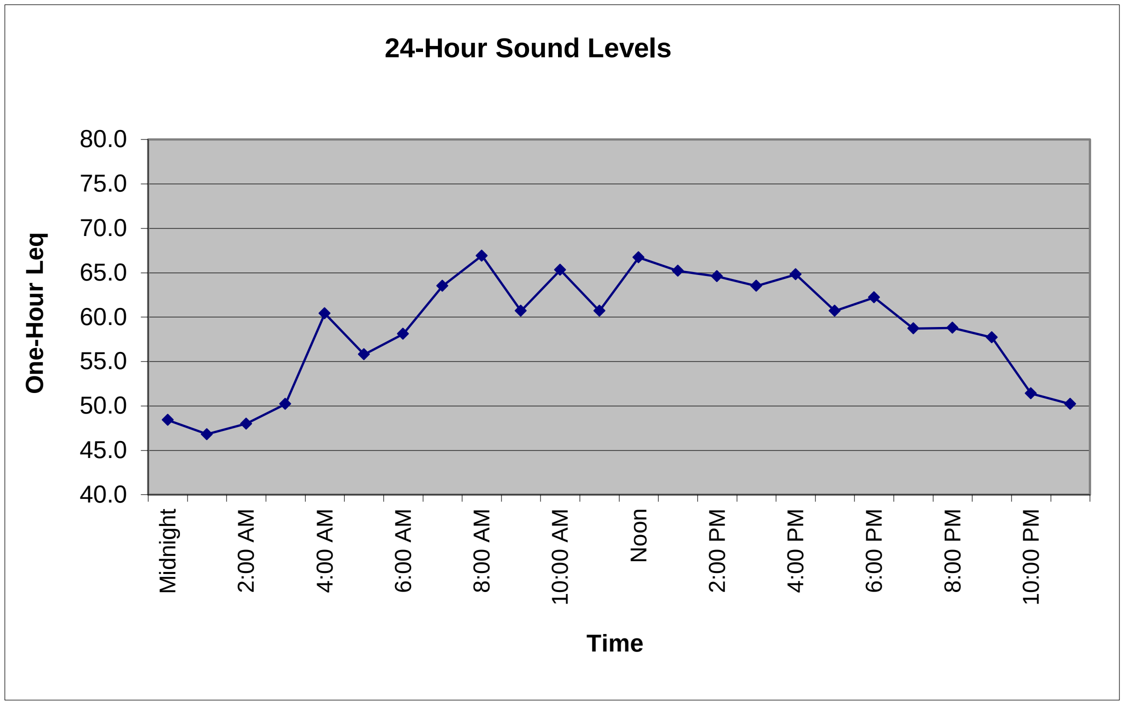
*** This hours worth of data is pulled from the previous 24-hours data in order to calculate a complete Ldn**

Ldn/CNEL Calculation Spreadsheet

Project: 1301 Shoreway Road   Date: 3/23/2022   Analyst: Schumaker, N

Location: LT-3

Time	Wednesday 3/23/2022	Leq(24)	Ldn	CNEL	Worst Hour Leq	Ldn minus Worst Hour Leq	CNEL minus Ldn	
								Day
Midnight	48.4	61.8	64.0	64.3	66.9	-2.9	0.3	Evening
1:00 AM	46.8		0.5	0.8				Night
2:00 AM	48.0							
3:00 AM	50.2							
4:00 AM	60.4							
5:00 AM	55.8							
6:00 AM	58.1							
7:00 AM	63.5							
8:00 AM	66.9							
9:00 AM	60.7							
10:00 AM	65.3							
11:00 AM	60.7							
Noon	66.7							
1:00 PM	65.2							
2:00 PM	64.6							
3:00 PM	63.5							
4:00 PM	64.8							
5:00 PM	60.7							
6:00 PM	62.2							
7:00 PM	58.7							
8:00 PM	58.8							
9:00 PM	57.7							
10:00 PM	51.4							
11:00 PM	50.2							



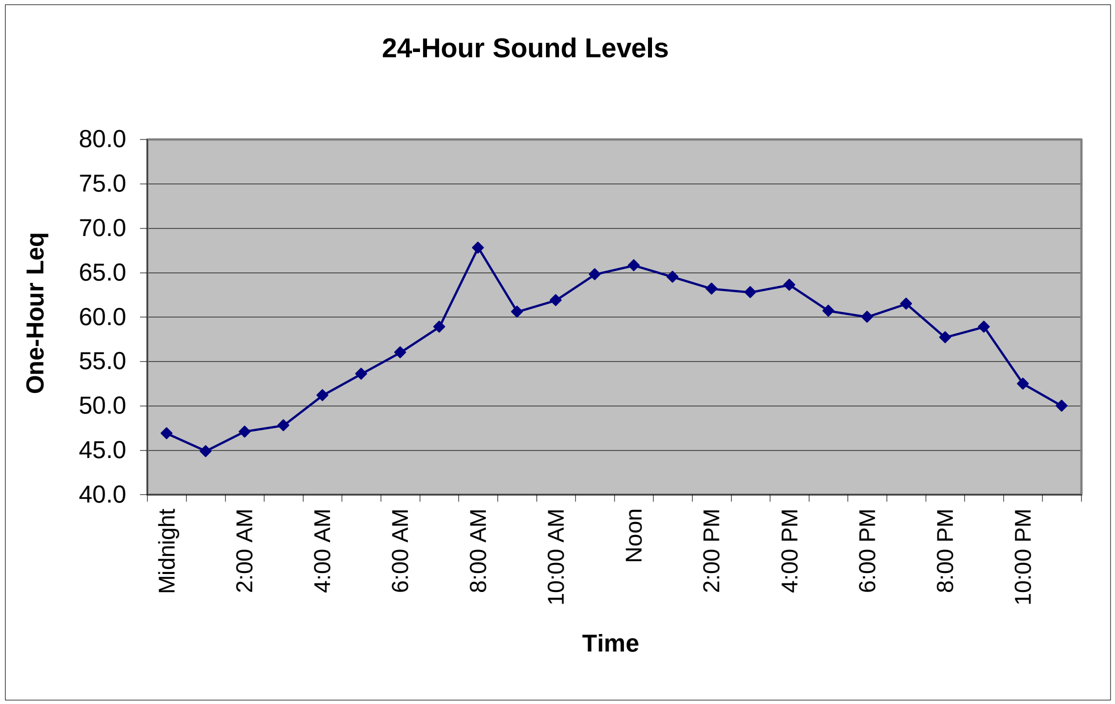
Ldn	64.0
Worst Hour Leq	66.9
Lowest Hour LEQ	46.8
12-hour Leq	64.2

Ldn/CNEL Calculation Spreadsheet

Project: 1301 Shoreway Road | Date: 3/24/2022 | Analyst: Schumaker, N

Location: LT-3

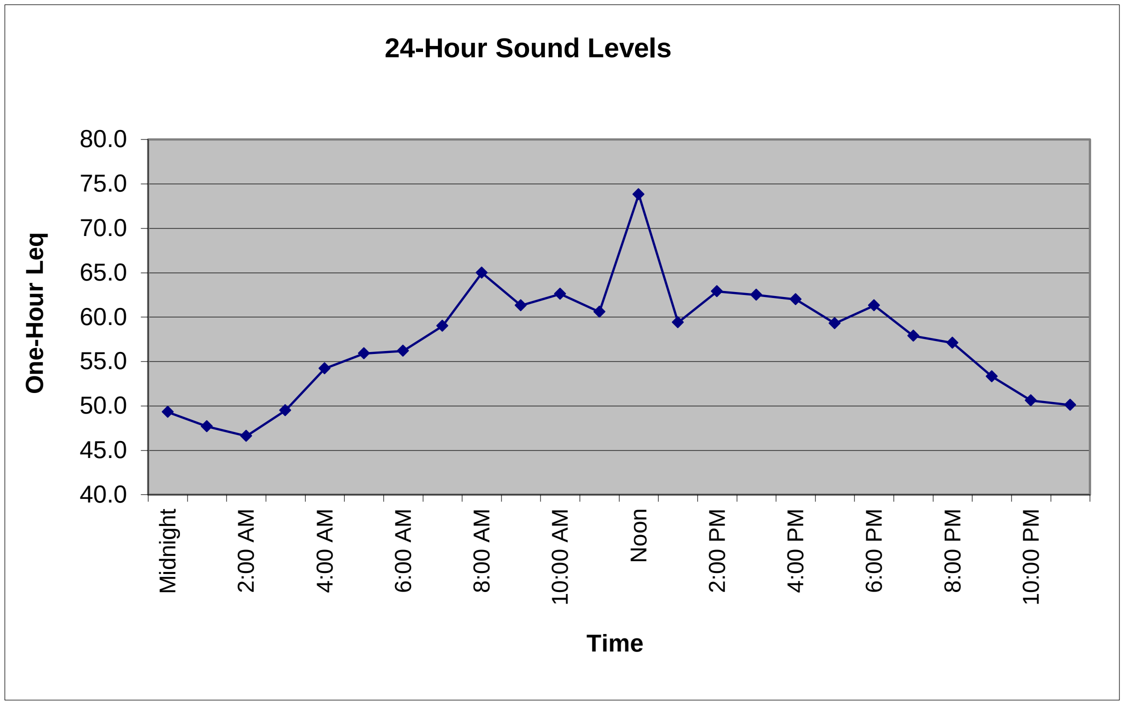
Time	Thursday 3/24/2022	Leq(24)	Ldn	CNEL	Worst Hour Leq	Ldn minus Worst Hour Leq	CNEL minus Ldn	
Midnight	46.9	61.2	62.5	63.1	67.8	-5.3	0.6	Day
1:00 AM	44.9		3.6	4.2				Evening
2:00 AM	47.1							Night
3:00 AM	47.8							
4:00 AM	51.2							
5:00 AM	53.6							
6:00 AM	56.0							
7:00 AM	58.9							
8:00 AM	67.8							
9:00 AM	60.6							
10:00 AM	61.9							
11:00 AM	64.8							
Noon	65.8							
1:00 PM	64.5							
2:00 PM	63.2							
3:00 PM	62.8							
4:00 PM	63.6							
5:00 PM	60.7							
6:00 PM	60.0							
7:00 PM	61.5							
8:00 PM	57.7							
9:00 PM	58.9							
10:00 PM	52.5							
11:00 PM	50.0							



Ldn	62.5
Worst Hour Leq	67.8
Lowest Hour LEQ	44.9
12-hour Leq	63.6

Ldn/CNEL Calculation Spreadsheet

Project:	1301 Shoreway Road		Date:	3/23/2022	Analyst:	Schumaker, N		
Location:	LT-4							
Time	Wednesday 3/23/2022	Leq(24)	Ldn	CNEL	Worst Hour Leq	Ldn minus Worst Hour Leq	CNEL minus Ldn	Day
Midnight	49.3	62.6	63.8	64.0	73.8	-10.0	0.2	Evening
1:00 AM	47.7		4.8	5.0				Night
2:00 AM	46.6							
3:00 AM	49.5							
4:00 AM	54.2							
5:00 AM	55.9							
6:00 AM	56.2							
7:00 AM	59.0							
8:00 AM	65.0							
9:00 AM	61.3							
10:00 AM	62.6							
11:00 AM	60.6							
Noon	73.8							
1:00 PM	59.4							
2:00 PM	62.9							
3:00 PM	62.5							
4:00 PM	62.0							
5:00 PM	59.3							
6:00 PM	61.3							
7:00 PM	57.9							
8:00 PM	57.1							
9:00 PM	53.3							
10:00 PM	50.6							
11:00 PM	50.1							



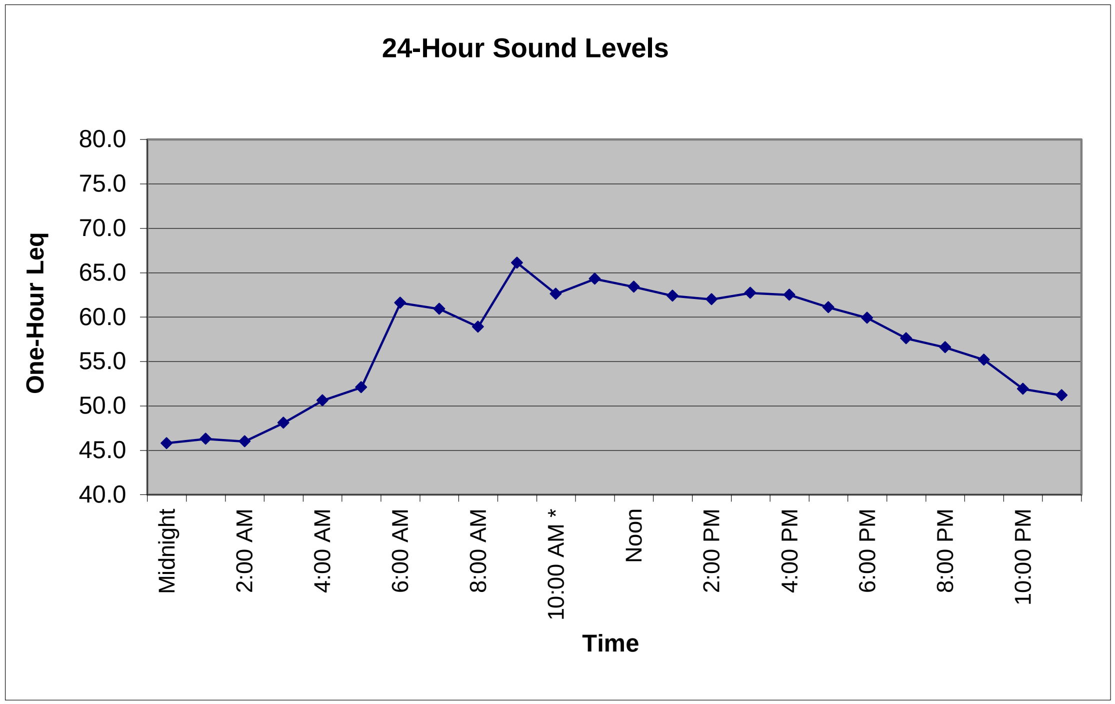
Ldn	63.8
Worst Hour Leq	73.8
Lowest Hour LEQ	46.6
12-hour Leq	65.3

Ldn/CNEL Calculation Spreadsheet

Project: 1301 Shoreway Road Date: 3/24/2022 Analyst: Schumaker, N

Location: LT-4

Time	Thursday 3/24/2022	Leq(24)	Ldn	CNEL	Worst Hour Leq	Ldn minus Worst Hour Leq	CNEL minus Ldn	
								Day
Midnight	45.8	60.3	62.8	63.0	66.1	-3.3	0.3	Evening
1:00 AM	46.3		1.9	2.1				Night
2:00 AM	46.0							
3:00 AM	48.1							
4:00 AM	50.6							
5:00 AM	52.1							
6:00 AM	61.6							
7:00 AM	60.9							
8:00 AM	58.9							
9:00 AM	66.1							
10:00 AM *	62.6							
11:00 AM	64.3							
Noon	63.4							
1:00 PM	62.4							
2:00 PM	62.0							
3:00 PM	62.7							
4:00 PM	62.5							
5:00 PM	61.1							
6:00 PM	59.9							
7:00 PM	57.6							
8:00 PM	56.6							
9:00 PM	55.2							
10:00 PM	51.9							
11:00 PM	51.2							



Ldn	62.8
Worst Hour Leq	66.1
Lowest Hour LEQ	45.8
12-hour Leq	62.6

*** This hours worth of data is pulled from the previous 24-hours data in order to calculate a complete Ldn**

LT-1 Time History

Number	Start Date	Start Time	End Time	Duration	Meas Mode	Input Range	Input Type	Sensitivity	LAeq
1	3/23/2022	10:08:20 AM	11:00:00 AM	0:51:40	Auto	High	Mic	13.36mV/Pa	65.6
2	3/23/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	62.9
3	3/23/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.7
4	3/23/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	61.7
5	3/23/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	63.7
6	3/23/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	63.8
7	3/23/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	61.2
8	3/23/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	60.3
9	3/23/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	63
10	3/23/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	62.7
11	3/23/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	61.4
12	3/23/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	61
13	3/23/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	60.1
14	3/23/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	57.8
15	3/24/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	57.9
16	3/24/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	55.2
17	3/24/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	56.1
18	3/24/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	57.5
19	3/24/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	59.4
20	3/24/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	65.6
21	3/24/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	66.1
22	3/24/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	66.8
23	3/24/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	66.1
24	3/24/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	63.3
25	3/24/2022	10:00:02 AM	11:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.6
26	3/24/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.8
27	3/24/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	65.7
28	3/24/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.9
29	3/24/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	62.8
30	3/24/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	61.9
31	3/24/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.5
32	3/24/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	65.4
33	3/24/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	65.9
34	3/24/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	62.9
35	3/24/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	61.6
36	3/24/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	62.6
37	3/24/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	13.36mV/Pa	58.5
38	3/24/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	57.1
39	3/25/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	55.2
40	3/25/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	54.6
41	3/25/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	53.6
42	3/25/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	55.4
43	3/25/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	58.5
44	3/25/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	61.5
45	3/25/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.3
46	3/25/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	69.2
47	3/25/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	64.2
48	3/25/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	13.36mV/Pa	67.3
49	3/25/2022	10:00:01 AM	10:50:55 AM	0:50:54	Auto	High	Mic	13.36mV/Pa	69.2
50	3/25/2022	10:50:59 AM	10:51:03 AM	0:00:04	Auto	High	Mic	13.36mV/Pa	70.2

LT-2 Time History

Number	Start Date	Start Time	End Time	Duration	Meas Mode	Input Range	Input Type	Sensitivity	LAeq
1	3/23/2022	10:16:02 AM	11:00:00 AM	0:43:58	Auto	High	Mic	16.82mV/Pa	67.5
2	3/23/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.8
3	3/23/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	65.2
4	3/23/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	63.9
5	3/23/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.3
6	3/23/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	65
7	3/23/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	64
8	3/23/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	60.8
9	3/23/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	63.6
10	3/23/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	65.2
11	3/23/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	63.7
12	3/23/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	63.6
13	3/23/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	62.2
14	3/23/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	60
15	3/24/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	58
16	3/24/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	57
17	3/24/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	57.9
18	3/24/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	59.9
19	3/24/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	61.8
20	3/24/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	69.7
21	3/24/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	69.8
22	3/24/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	71.5
23	3/24/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	69.7
24	3/24/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.2
25	3/24/2022	10:00:02 AM	11:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.4
26	3/24/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.4
27	3/24/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	67.6
28	3/24/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	63.9
29	3/24/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	63
30	3/24/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	60.9
31	3/24/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	66.4
32	3/24/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	66.3
33	3/24/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	67.7
34	3/24/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.3
35	3/24/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	62.9
36	3/24/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	65.4
37	3/24/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	16.82mV/Pa	61.8
38	3/24/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	60.2
39	3/25/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	58.3
40	3/25/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	57.5
41	3/25/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	56.6
42	3/25/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	58.5
43	3/25/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	61.7
44	3/25/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	64.8
45	3/25/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	67.4
46	3/25/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	68.4
47	3/25/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	66
48	3/25/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	16.82mV/Pa	67.9
49	3/25/2022	10:00:02 AM	10:56:26 AM	0:56:24	Auto	High	Mic	16.82mV/Pa	69.4

LT-3 Time History

Number	Start Date	Start Time	End Time	Duration	Meas Mode	Input Range	Input Type	Sensitivity	LAeq
1	3/23/2022	10:39:39 AM	11:00:00 AM	0:20:21	Auto	High	Mic	16.63mV/Pa	70.4
2	3/23/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	60.7
3	3/23/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	66.7
4	3/23/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	65.2
5	3/23/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	64.6
6	3/23/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	63.5
7	3/23/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	64.8
8	3/23/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	60.7
9	3/23/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	62.2
10	3/23/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	58.7
11	3/23/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	58.8
12	3/23/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	57.7
13	3/23/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	51.4
14	3/23/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	50.2
15	3/24/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	48.4
16	3/24/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	46.8
17	3/24/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	48
18	3/24/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	50.2
19	3/24/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	60.4
20	3/24/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	55.8
21	3/24/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	58.1
22	3/24/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	63.5
23	3/24/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	66.9
24	3/24/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	60.7
25	3/24/2022	10:00:02 AM	11:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	65.3
26	3/24/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	64.8
27	3/24/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	65.8
28	3/24/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	64.5
29	3/24/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	63.2
30	3/24/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	62.8
31	3/24/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	63.6
32	3/24/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	60.7
33	3/24/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	60
34	3/24/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	61.5
35	3/24/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	57.7
36	3/24/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	58.9
37	3/24/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	16.63mV/Pa	52.5
38	3/24/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	50
39	3/25/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	46.9
40	3/25/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	44.9
41	3/25/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	47.1
42	3/25/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	47.8
43	3/25/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	51.2
44	3/25/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	53.6
45	3/25/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	56
46	3/25/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	58.9
47	3/25/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	67.8
48	3/25/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	60.6
49	3/25/2022	10:00:02 AM	11:00:00 AM	0:59:58	Auto	High	Mic	16.63mV/Pa	61.9
50	3/25/2022	11:00:00 AM	11:16:55 AM	0:16:55	Auto	High	Mic	16.63mV/Pa	67.7

LT-4 Time History

Number	Start Date	Start Time	End Time	Duration	Meas Mode	Input Range	Input Type	Sensitivity	LAeq
1	3/23/2022	10:32:15 AM	11:00:00 AM	0:27:45	Auto	High	Mic	17.41mV/Pa	70.6
2	3/23/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	60.6
3	3/23/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	73.8
4	3/23/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	59.4
5	3/23/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62.9
6	3/23/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62.5
7	3/23/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62
8	3/23/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	59.3
9	3/23/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	61.3
10	3/23/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	57.9
11	3/23/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	57.1
12	3/23/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	53.3
13	3/23/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	50.6
14	3/23/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	50.1
15	3/24/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	49.3
16	3/24/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	47.7
17	3/24/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	46.6
18	3/24/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	49.5
19	3/24/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	54.2
20	3/24/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	55.9
21	3/24/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	56.2
22	3/24/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	59
23	3/24/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	65
24	3/24/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	61.3
25	3/24/2022	10:00:02 AM	11:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	62.6
26	3/24/2022	11:00:02 AM	12:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	64.3
27	3/24/2022	12:00:02 PM	1:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	63.4
28	3/24/2022	1:00:02 PM	2:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62.4
29	3/24/2022	2:00:02 PM	3:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62
30	3/24/2022	3:00:02 PM	4:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62.7
31	3/24/2022	4:00:02 PM	5:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	62.5
32	3/24/2022	5:00:02 PM	6:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	61.1
33	3/24/2022	6:00:02 PM	7:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	59.9
34	3/24/2022	7:00:02 PM	8:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	57.6
35	3/24/2022	8:00:02 PM	9:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	56.6
36	3/24/2022	9:00:02 PM	10:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	55.2
37	3/24/2022	10:00:02 PM	11:00:00 PM	0:59:58	Auto	High	Mic	17.41mV/Pa	51.9
38	3/24/2022	11:00:02 PM	12:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	51.2
39	3/25/2022	12:00:02 AM	1:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	45.8
40	3/25/2022	1:00:02 AM	2:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	46.3
41	3/25/2022	2:00:02 AM	3:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	46
42	3/25/2022	3:00:02 AM	4:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	48.1
43	3/25/2022	4:00:02 AM	5:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	50.6
44	3/25/2022	5:00:02 AM	6:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	52.1
45	3/25/2022	6:00:02 AM	7:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	61.6
46	3/25/2022	7:00:02 AM	8:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	60.9
47	3/25/2022	8:00:02 AM	9:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	58.9
48	3/25/2022	9:00:02 AM	10:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	66.1
49	3/25/2022	10:00:02 AM	11:00:00 AM	0:59:58	Auto	High	Mic	17.41mV/Pa	73.7
50	3/25/2022	11:00:01 AM	11:10:25 AM	0:10:24	Auto	High	Mic	17.41mV/Pa	67.1
51	3/25/2022	11:11:38 AM	11:11:59 AM	0:00:21	Auto	High	Mic	17.41mV/Pa	66

Noise Appendix

Short Term Measurement Data

ST-1 Summary

File Name on Meter	831_Data.026.s
File Name on PC	831_0003785-20220323 101000-831_Data.026.ldbin
Serial Number	0003785
Model	Model 831
Firmware Version	2.403
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2022-03-23 10:10:00
Stop	2022-03-23 10:25:00
Duration	00:15:00.4
Run Time	00:15:00.4
Pause	00:00:00.0
Pre-Calibration	2022-03-23 10:01:32
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamplifier	PRM831		
Microphone Correction	Off		
Integration Method	Linear		
OBA Range	Normal		
OBA Bandwidth	1/1 and 1/3		
OBA Frequency Weighting	A Weighting		
OBA Max Spectrum	Bin Max		
Gain	20.0 dB		
Overload	125.1 dB		
	A	**C**	**Z**
Under Range Peak	**57.6**	54.6	59.6 dB
Under Range Limit	**24.8**	25.6	33.6 dB
Noise Floor	15.7	16.5	21.9 dB

Results

LAeq	59.4	
LAE	89.0	
EA	88.073 µPa²h	
LApeak (max)	2022-03-23 10:13:11	91.3 dB
LASmax	2022-03-23 10:20:01	75.6 dB
LASmin	2022-03-23 10:11:21	47.7 dB
SEA	-99.9 dB	
LAS > 65.0 dB (Exceedance Counts / Duration)	3	53.4 s
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LApeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LApeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LApeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	59.4	59.4	-99.9	59.4	59.4	-99.9

LCeq	69.7 dB
LAeq	59.4 dB
LCeq - LAeq	10.3 dB
LAIeq	60.9 dB
LAeq	59.4 dB
LAIeq - LAeq	1.4 dB

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	59.4		69.7		74.6	
LS(max)	75.6	2022/03/23 10:20:01	87.3	2022/03/23 10:20:01	87.7	2022/03/23 10:20:02
LF(max)	77.2	2022/03/23 10:19:59	88.7	2022/03/23 10:20:01	88.8	2022/03/23 10:20:01
LI(max)	78.4	2022/03/23 10:13:11	89.1	2022/03/23 10:20:01	90.4	2022/03/23 10:16:11
LS(min)	47.7	2022/03/23 10:11:21	63.6	2022/03/23 10:11:25	66.9	2022/03/23 10:12:37
LF(min)	46.9	2022/03/23 10:11:25	61.8	2022/03/23 10:11:20	65.1	2022/03/23 10:12:37
LI(min)	47.3	2022/03/23 10:11:20	64.5	2022/03/23 10:12:36	68.5	2022/03/23 10:12:38
LPeak(max)	91.3	2022/03/23 10:13:11	95.2	2022/03/23 10:20:00	95.3	2022/03/23 10:20:01

Overload Count	0
Overload Duration	0.0 s
OBA Overload Count	0
OBA Overload Duration	0.0 s

Statistics

LA1.00	73.3 dB
LA10.00	57.5 dB
LA33.00	50.8 dB
LA50.00	50.1 dB
LA90.00	48.5 dB
LA99.00	47.9 dB

ST-2 Summary

File Name on Meter	831_Data.027.s
File Name on PC	831_0003785-20220323 114600-831_Data.027.ldbin
Serial Number	0003785
Model	Model 831
Firmware Version	2.403
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2022-03-23 11:46:00
Stop	2022-03-23 12:01:00
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre-Calibration	2022-03-23 10:35:36
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamplifier	PRM831		
Microphone Correction	Off		
Integration Method	Linear		
OBA Range	Normal		
OBA Bandwidth	1/1 and 1/3		
OBA Frequency Weighting	A Weighting		
OBA Max Spectrum	Bin Max		
Gain	20.0 dB		
Overload	125.3 dB		
	A	**C**	**Z**
Under Range Peak	**57.9**	54.9	59.9 dB
Under Range Limit	**24.9**	25.7	33.9 dB
Noise Floor	15.7	16.6	22.0 dB

Results

LAeq	66.5	
LAE	96.0	
EA	447.448 µPa²h	
LApeak (max)	2022-03-23 11:55:01	101.0 dB
LASmax	2022-03-23 11:55:01	87.8 dB
LASmin	2022-03-23 11:54:28	50.6 dB
SEA	-99.9 dB	
LAS > 65.0 dB (Exceedance Counts / Duration)	7	112.0 s
LAS > 85.0 dB (Exceedance Counts / Duration)	1	3.5 s
LApeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LApeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LApeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	66.5	66.5	-99.9	66.5	66.5	-99.9

LCeq	74.8 dB
LAeq	66.5 dB
LCeq - LAeq	8.3 dB
LAIeq	68.1 dB
LAeq	66.5 dB
LAIeq - LAeq	1.6 dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	66.5		74.8		77.6	
LS(max)	87.8	2022/03/23 11:55:01	92.8	2022/03/23 11:55:01	93.0	2022/03/23 11:55:01
LF(max)	89.4	2022/03/23 11:55:01	94.4	2022/03/23 11:55:01	94.6	2022/03/23 11:55:01
LI(max)	90.0	2022/03/23 11:55:00	95.0	2022/03/23 11:55:01	95.1	2022/03/23 11:55:01
LS(min)	50.6	2022/03/23 11:54:28	65.4	2022/03/23 11:54:18	69.3	2022/03/23 11:49:58
LF(min)	49.9	2022/03/23 11:54:24	63.5	2022/03/23 11:54:18	67.4	2022/03/23 11:48:37
LI(min)	50.5	2022/03/23 11:54:24	66.4	2022/03/23 11:54:17	70.5	2022/03/23 11:49:58
LPeak(max)	101.0	2022/03/23 11:55:01	105.7	2022/03/23 11:55:01	105.0	2022/03/23 11:55:01

Overload Count	0
Overload Duration	0.0 s
OBA Overload Count	0
OBA Overload Duration	0.0 s

Statistics

LA1.00	78.5 dB
LA10.00	66.0 dB
LA33.00	58.1 dB
LA50.00	55.0 dB
LA90.00	51.7 dB
LA99.00	50.9 dB

ST-3 Summary

File Name on Meter	831_Data.028.s
File Name on PC	831_0003785-20220323 121301-831_Data.028.ldbin
Serial Number	0003785
Model	Model 831
Firmware Version	2.403
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2022-03-23 12:13:01
Stop	2022-03-23 12:28:01
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre-Calibration	2022-03-23 12:09:51
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamplifier	PRM831		
Microphone Correction	Off		
Integration Method	Linear		
OBA Range	Normal		
OBA Bandwidth	1/1 and 1/3		
OBA Frequency Weighting	A Weighting		
OBA Max Spectrum	Bin Max		
Gain	20.0 dB		
Overload	125.1 dB		
	A	**C**	**Z**
Under Range Peak	**57.7**	54.7	59.7 dB
Under Range Limit	**24.8**	25.7	33.7 dB
Noise Floor	15.7	16.5	21.9 dB

Results

LA_{eq}	67.1	
LAE	96.6	
EA	511.241 µPa²h	
$LA_{peak\,(max)}$	2022-03-23 12:27:18	90.4 dB
LAS_{max}	2022-03-23 12:21:39	75.8 dB
LAS_{min}	2022-03-23 12:17:22	59.1 dB
SEA	-99.9 dB	
LAS > 65.0 dB (Exceedance Counts / Duration)	11	793.0 s
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LA_{peak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LA_{peak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LA_{peak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	67.1	67.1	-99.9	67.1	67.1	-99.9

LC_{eq}	76.7 dB
LA_{eq}	67.1 dB
LC_{eq} - LA_{eq}	9.6 dB
LAI_{eq}	68.0 dB
LA_{eq}	67.1 dB
LAI_{eq} - LA_{eq}	0.9 dB

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	67.1		76.7		79.0	
$L_{S(max)}$	75.8	2022/03/23 12:21:39	89.6	2022/03/23 12:25:54	90.8	2022/03/23 12:25:53
$L_{F(max)}$	78.4	2022/03/23 12:15:29	90.8	2022/03/23 12:25:53	93.6	2022/03/23 12:25:48
$L_{I(max)}$	80.1	2022/03/23 12:15:29	91.7	2022/03/23 12:25:53	96.3	2022/03/23 12:25:48
$L_{S(min)}$	59.1	2022/03/23 12:17:22	71.1	2022/03/23 12:17:20	73.4	2022/03/23 12:14:59
$L_{F(min)}$	58.5	2022/03/23 12:17:21	69.6	2022/03/23 12:17:19	71.1	2022/03/23 12:25:21
$L_{I(min)}$	58.8	2022/03/23 12:17:21	71.5	2022/03/23 12:17:19	74.0	2022/03/23 12:14:59
$L_{Peak(max)}$	90.4	2022/03/23 12:27:18	96.2	2022/03/23 12:25:53	99.1	2022/03/23 12:25:48

Overload Count	0
Overload Duration	0.0 s
OBA Overload Count	0
OBA Overload Duration	0.0 s

Statistics

LA1.00	73.6 dB
LA10.00	69.8 dB
LA33.00	66.8 dB
LA50.00	65.9 dB
LA90.00	63.5 dB
LA99.00	62.0 dB

ST-1 Time History

Record #	Record Type	Date	Time	LAeq	LApeak	LASmax	LASmin
1	Run	2022-03-23	10:10:00				
2		2022-03-23	10:10:00	49.0	61.3	54.9	52.2
3		2022-03-23	10:10:01	48.8	60.4	52.2	50.4
4		2022-03-23	10:10:02	49.1	63.3	50.4	49.6
5		2022-03-23	10:10:03	49.0	63.9	49.7	49.2
6		2022-03-23	10:10:04	48.8	61.8	49.3	48.9
7		2022-03-23	10:10:05	49.3	62.4	49.2	49.0
8		2022-03-23	10:10:06	48.9	62.1	49.1	49.0
9		2022-03-23	10:10:07	48.8	61.8	49.0	48.8
10		2022-03-23	10:10:08	48.7	60.8	48.9	48.7
11		2022-03-23	10:10:09	49.7	74.1	49.6	48.7
12		2022-03-23	10:10:10	48.8	61.6	49.3	49.0
13		2022-03-23	10:10:11	49.2	66.6	49.3	48.9
14		2022-03-23	10:10:12	49.4	61.3	49.4	49.2
15		2022-03-23	10:10:13	48.7	60.8	49.3	48.9
16		2022-03-23	10:10:14	49.3	66.7	49.2	48.8
17		2022-03-23	10:10:15	49.3	66.3	49.3	49.1
18		2022-03-23	10:10:16	49.4	69.8	49.5	49.2
19		2022-03-23	10:10:17	49.1	60.9	49.4	49.2
20		2022-03-23	10:10:18	49.1	60.7	49.3	49.1
21		2022-03-23	10:10:19	48.7	63.3	49.2	48.9
22		2022-03-23	10:10:20	48.7	61.4	48.9	48.7
23		2022-03-23	10:10:21	48.9	60.8	48.9	48.7
24		2022-03-23	10:10:22	48.9	60.2	48.9	48.8
25		2022-03-23	10:10:23	49.0	60.7	49.0	48.8
26		2022-03-23	10:10:24	49.4	61.2	49.4	49.0
27		2022-03-23	10:10:25	48.8	60.6	49.2	48.9
28		2022-03-23	10:10:26	48.7	60.9	49.1	48.7
29		2022-03-23	10:10:27	48.2	60.2	48.7	48.4
30		2022-03-23	10:10:28	48.5	60.4	48.5	48.4
31		2022-03-23	10:10:29	48.5	60.6	48.5	48.4
32		2022-03-23	10:10:30	48.5	63.0	48.6	48.4
33		2022-03-23	10:10:31	48.6	61.9	48.6	48.3
34		2022-03-23	10:10:32	48.6	59.9	48.6	48.5
35		2022-03-23	10:10:33	48.7	61.0	48.8	48.6
36		2022-03-23	10:10:34	48.5	60.7	48.7	48.6
37		2022-03-23	10:10:35	48.4	60.6	48.6	48.4
38		2022-03-23	10:10:36	48.3	61.8	48.4	48.3
39		2022-03-23	10:10:37	48.3	60.3	48.4	48.2
40		2022-03-23	10:10:38	48.8	60.6	48.6	48.3
41		2022-03-23	10:10:39	48.9	59.9	48.8	48.6
42		2022-03-23	10:10:40	48.8	60.6	48.9	48.7
43		2022-03-23	10:10:41	48.7	61.8	48.9	48.7
44		2022-03-23	10:10:42	48.6	60.4	48.7	48.5
45		2022-03-23	10:10:43	48.8	61.5	48.9	48.6
46		2022-03-23	10:10:44	48.2	62.9	48.7	48.4
47		2022-03-23	10:10:45	48.7	73.4	48.8	48.3
48		2022-03-23	10:10:46	53.4	85.7	53.4	48.7
49		2022-03-23	10:10:47	48.1	61.0	51.0	49.5
50		2022-03-23	10:10:48	48.5	60.5	49.5	48.9
51		2022-03-23	10:10:49	48.6	59.8	48.9	48.7
52		2022-03-23	10:10:50	48.7	65.0	48.8	48.6
53		2022-03-23	10:10:51	49.0	61.9	48.9	48.7
54		2022-03-23	10:10:52	48.3	59.7	48.9	48.5
55		2022-03-23	10:10:53	48.2	59.7	48.5	48.3
56		2022-03-23	10:10:54	49.0	73.8	49.4	48.5
57		2022-03-23	10:10:55	47.8	59.5	48.5	48.1
58		2022-03-23	10:10:56	47.8	59.9	48.1	47.8
59		2022-03-23	10:10:57	47.8	59.5	48.0	47.8

60	2022-03-23	10:10:58	48.1	60.0	48.0	47.8
61	2022-03-23	10:10:59	48.1	59.3	48.1	48.0
62	2022-03-23	10:11:00	48.2	62.7	48.2	48.0
63	2022-03-23	10:11:01	48.2	60.4	48.3	48.1
64	2022-03-23	10:11:02	48.8	61.8	48.7	48.3
65	2022-03-23	10:11:03	48.8	60.5	48.9	48.7
66	2022-03-23	10:11:04	48.5	65.2	48.7	48.5
67	2022-03-23	10:11:05	49.0	61.7	48.9	48.5
68	2022-03-23	10:11:06	50.0	74.5	49.8	48.9
69	2022-03-23	10:11:07	48.5	69.5	49.3	48.8
70	2022-03-23	10:11:08	48.1	62.6	48.8	48.4
71	2022-03-23	10:11:09	48.5	67.3	48.5	48.3
72	2022-03-23	10:11:10	48.0	59.8	48.5	48.1
73	2022-03-23	10:11:11	48.7	63.6	48.5	48.2
74	2022-03-23	10:11:12	49.0	60.7	48.8	48.4
75	2022-03-23	10:11:13	48.4	61.8	48.9	48.5
76	2022-03-23	10:11:14	48.4	60.4	48.6	48.4
77	2022-03-23	10:11:15	48.4	61.5	48.5	48.4
78	2022-03-23	10:11:16	48.2	59.7	48.4	48.2
79	2022-03-23	10:11:17	48.7	61.0	48.6	48.2
80	2022-03-23	10:11:18	48.9	61.3	49.0	48.6
81	2022-03-23	10:11:19	47.8	60.9	48.6	48.1
82	2022-03-23	10:11:20	47.5	61.2	48.1	47.7
83	2022-03-23	10:11:21	47.8	59.4	47.8	47.7
84	2022-03-23	10:11:22	47.8	64.2	47.9	47.7
85	2022-03-23	10:11:23	47.9	60.3	47.9	47.7
86	2022-03-23	10:11:24	48.1	60.3	48.0	47.8
87	2022-03-23	10:11:25	47.8	59.8	48.0	47.7
88	2022-03-23	10:11:26	48.0	60.2	48.0	47.8
89	2022-03-23	10:11:27	48.4	60.7	48.3	48.0
90	2022-03-23	10:11:28	48.0	60.0	48.3	48.1
91	2022-03-23	10:11:29	48.4	62.6	48.3	48.1
92	2022-03-23	10:11:30	47.8	59.5	48.3	48.0
93	2022-03-23	10:11:31	48.1	60.5	48.1	48.0
94	2022-03-23	10:11:32	48.2	60.4	48.2	48.0
95	2022-03-23	10:11:33	48.1	59.6	48.3	48.1
96	2022-03-23	10:11:34	47.9	60.1	48.2	47.9
97	2022-03-23	10:11:35	48.5	60.7	48.4	48.0
98	2022-03-23	10:11:36	48.0	59.8	48.4	48.2
99	2022-03-23	10:11:37	48.1	60.8	48.2	48.1
100	2022-03-23	10:11:38	48.1	60.2	48.2	48.0
101	2022-03-23	10:11:39	48.8	59.7	48.5	48.2
102	2022-03-23	10:11:40	48.9	60.5	48.8	48.6
103	2022-03-23	10:11:41	48.6	60.9	48.7	48.6
104	2022-03-23	10:11:42	48.6	61.4	48.7	48.6
105	2022-03-23	10:11:43	48.4	60.5	48.6	48.4
106	2022-03-23	10:11:44	48.5	60.2	48.6	48.5
107	2022-03-23	10:11:45	48.2	61.3	48.5	48.3
108	2022-03-23	10:11:46	48.3	60.1	48.4	48.2
109	2022-03-23	10:11:47	48.0	61.2	48.3	48.1
110	2022-03-23	10:11:48	47.9	62.2	48.1	48.0
111	2022-03-23	10:11:49	48.2	59.9	48.2	48.0
112	2022-03-23	10:11:50	48.5	60.3	48.4	48.2
113	2022-03-23	10:11:51	48.9	60.8	48.7	48.4
114	2022-03-23	10:11:52	48.7	60.6	48.8	48.6
115	2022-03-23	10:11:53	48.8	66.3	48.9	48.7
116	2022-03-23	10:11:54	48.8	61.0	48.9	48.7
117	2022-03-23	10:11:55	48.6	60.4	48.8	48.6
118	2022-03-23	10:11:56	48.8	61.3	48.9	48.7
119	2022-03-23	10:11:57	49.4	61.8	49.2	48.8
120	2022-03-23	10:11:58	49.4	60.6	49.3	49.2

121	2022-03-23	10:11:59	49.1	66.5	49.5	49.1
122	2022-03-23	10:12:00	48.5	61.4	49.1	48.8
123	2022-03-23	10:12:01	49.0	59.9	48.9	48.8
124	2022-03-23	10:12:02	49.0	61.6	49.0	48.8
125	2022-03-23	10:12:03	49.1	60.7	49.1	48.9
126	2022-03-23	10:12:04	49.2	61.2	49.2	49.0
127	2022-03-23	10:12:05	49.3	60.8	49.3	49.1
128	2022-03-23	10:12:06	49.5	61.8	49.4	49.2
129	2022-03-23	10:12:07	49.3	61.9	49.5	49.3
130	2022-03-23	10:12:08	49.0	61.6	49.3	49.1
131	2022-03-23	10:12:09	49.1	60.6	49.3	49.1
132	2022-03-23	10:12:10	49.3	61.1	49.3	49.0
133	2022-03-23	10:12:11	49.5	60.8	49.5	49.3
134	2022-03-23	10:12:12	49.0	61.7	49.4	49.1
135	2022-03-23	10:12:13	49.1	61.7	49.2	49.1
136	2022-03-23	10:12:14	49.1	61.0	49.2	49.0
137	2022-03-23	10:12:15	49.4	61.3	49.4	49.0
138	2022-03-23	10:12:16	48.6	60.0	49.3	48.9
139	2022-03-23	10:12:17	51.8	80.8	51.7	48.8
140	2022-03-23	10:12:18	49.0	62.7	50.8	49.8
141	2022-03-23	10:12:19	49.6	64.4	49.8	49.6
142	2022-03-23	10:12:20	51.1	70.0	50.6	49.8
143	2022-03-23	10:12:21	50.3	72.9	51.0	50.2
144	2022-03-23	10:12:22	49.4	61.5	50.2	49.7
145	2022-03-23	10:12:23	49.0	63.2	49.7	49.2
146	2022-03-23	10:12:24	48.2	61.0	49.4	48.6
147	2022-03-23	10:12:25	48.3	59.8	48.7	48.4
148	2022-03-23	10:12:26	48.2	60.5	48.5	48.3
149	2022-03-23	10:12:27	48.2	60.6	48.3	48.2
150	2022-03-23	10:12:28	48.1	60.7	48.2	48.1
151	2022-03-23	10:12:29	49.1	61.3	48.8	48.1
152	2022-03-23	10:12:30	51.0	62.8	50.3	48.8
153	2022-03-23	10:12:31	50.4	62.9	50.5	50.3
154	2022-03-23	10:12:32	50.2	61.9	50.4	50.2
155	2022-03-23	10:12:33	50.5	68.9	50.5	50.3
156	2022-03-23	10:12:34	49.9	60.6	50.4	50.1
157	2022-03-23	10:12:35	49.9	61.5	50.0	49.9
158	2022-03-23	10:12:36	49.7	61.8	50.0	49.8
159	2022-03-23	10:12:37	49.5	62.5	49.8	49.6
160	2022-03-23	10:12:38	49.9	61.9	49.8	49.6
161	2022-03-23	10:12:39	51.1	73.6	51.0	49.8
162	2022-03-23	10:12:40	50.1	69.4	50.9	50.4
163	2022-03-23	10:12:41	49.7	66.8	50.5	49.9
164	2022-03-23	10:12:42	50.1	61.5	50.1	49.9
165	2022-03-23	10:12:43	50.4	64.3	50.3	50.1
166	2022-03-23	10:12:44	50.2	67.1	50.3	50.1
167	2022-03-23	10:12:45	50.6	62.1	50.5	50.3
168	2022-03-23	10:12:46	50.5	63.2	50.5	50.4
169	2022-03-23	10:12:47	51.6	64.1	51.3	50.5
170	2022-03-23	10:12:48	52.2	64.7	51.8	51.3
171	2022-03-23	10:12:49	53.1	69.4	52.7	51.8
172	2022-03-23	10:12:50	53.9	74.4	53.6	52.7
173	2022-03-23	10:12:51	53.3	65.8	53.6	53.3
174	2022-03-23	10:12:52	55.3	78.2	54.9	53.3
175	2022-03-23	10:12:53	54.8	73.9	54.9	54.6
176	2022-03-23	10:12:54	56.7	73.5	56.3	54.8
177	2022-03-23	10:12:55	58.5	71.4	57.9	56.3
178	2022-03-23	10:12:56	56.3	68.6	57.5	56.8
179	2022-03-23	10:12:57	57.1	73.3	57.3	56.4
180	2022-03-23	10:12:58	57.5	68.9	57.6	57.3
181	2022-03-23	10:12:59	58.0	73.1	57.9	57.3

182	2022-03-23	10:13:00	61.7	75.3	60.7	57.9
183	2022-03-23	10:13:01	61.2	88.4	61.1	60.4
184	2022-03-23	10:13:02	63.1	76.9	62.6	61.1
185	2022-03-23	10:13:03	63.9	77.3	63.4	62.5
186	2022-03-23	10:13:04	65.5	80.5	64.9	63.4
187	2022-03-23	10:13:05	69.2	84.2	68.6	64.8
188	2022-03-23	10:13:06	71.1	82.8	70.3	68.6
189	2022-03-23	10:13:07	72.1	85.9	71.6	70.2
190	2022-03-23	10:13:08	71.8	83.9	71.8	71.5
191	2022-03-23	10:13:09	74.2	89.3	73.7	71.7
192	2022-03-23	10:13:10	74.5	91.3	74.4	73.4
193	2022-03-23	10:13:11	73.7	87.5	74.1	73.6
194	2022-03-23	10:13:12	72.7	86.6	74.1	73.1
195	2022-03-23	10:13:13	72.8	88.2	73.3	72.8
196	2022-03-23	10:13:14	70.8	86.4	72.8	71.7
197	2022-03-23	10:13:15	69.8	85.6	71.7	70.5
198	2022-03-23	10:13:16	67.7	82.2	70.5	69.0
199	2022-03-23	10:13:17	66.7	81.6	68.9	67.6
200	2022-03-23	10:13:18	65.5	80.0	67.6	66.3
201	2022-03-23	10:13:19	65.7	81.1	66.2	65.7
202	2022-03-23	10:13:20	66.4	83.7	66.5	65.6
203	2022-03-23	10:13:21	66.1	82.4	66.8	65.9
204	2022-03-23	10:13:22	64.7	82.5	66.5	65.2
205	2022-03-23	10:13:23	61.0	78.4	65.3	63.0
206	2022-03-23	10:13:24	59.5	73.4	63.0	61.0
207	2022-03-23	10:13:25	60.1	74.7	61.0	60.4
208	2022-03-23	10:13:26	62.5	77.1	61.9	60.5
209	2022-03-23	10:13:27	62.1	78.2	63.0	61.6
210	2022-03-23	10:13:28	57.1	71.3	61.6	59.3
211	2022-03-23	10:13:29	58.0	74.7	59.3	58.4
212	2022-03-23	10:13:30	56.5	74.3	58.5	57.1
213	2022-03-23	10:13:31	52.9	65.4	57.1	55.0
214	2022-03-23	10:13:32	54.3	70.1	55.0	54.4
215	2022-03-23	10:13:33	53.6	66.8	54.6	54.1
216	2022-03-23	10:13:34	54.6	70.6	54.6	53.9
217	2022-03-23	10:13:35	55.0	70.0	54.9	54.5
218	2022-03-23	10:13:36	54.0	68.3	54.8	54.3
219	2022-03-23	10:13:37	51.9	63.8	54.3	53.0
220	2022-03-23	10:13:38	52.4	65.5	53.0	52.6
221	2022-03-23	10:13:39	52.9	65.1	52.9	52.6
222	2022-03-23	10:13:40	52.3	64.3	52.9	52.5
223	2022-03-23	10:13:41	51.9	64.7	52.5	52.1
224	2022-03-23	10:13:42	52.4	66.1	52.5	52.2
225	2022-03-23	10:13:43	52.5	65.1	52.5	52.3
226	2022-03-23	10:13:44	54.3	66.9	53.8	52.3
227	2022-03-23	10:13:45	53.9	68.2	54.0	53.8
228	2022-03-23	10:13:46	53.9	66.6	53.9	53.8
229	2022-03-23	10:13:47	51.8	64.9	53.8	52.7
230	2022-03-23	10:13:48	53.0	66.2	53.0	52.6
231	2022-03-23	10:13:49	53.4	65.7	53.3	52.9
232	2022-03-23	10:13:50	52.1	65.5	53.2	52.5
233	2022-03-23	10:13:51	52.4	69.8	52.5	52.3
234	2022-03-23	10:13:52	53.5	66.8	53.2	52.4
235	2022-03-23	10:13:53	55.7	69.1	55.2	53.1
236	2022-03-23	10:13:54	53.1	65.2	55.2	53.8
237	2022-03-23	10:13:55	52.5	64.0	53.8	53.0
238	2022-03-23	10:13:56	55.8	70.6	55.1	53.0
239	2022-03-23	10:13:57	51.9	64.1	54.7	53.2
240	2022-03-23	10:13:58	53.3	66.7	53.5	52.8
241	2022-03-23	10:13:59	53.6	66.5	53.9	53.4
242	2022-03-23	10:14:00	53.1	81.0	53.6	52.9

243	2022-03-23	10:14:01	52.1	63.3	53.3	52.6
244	2022-03-23	10:14:02	53.2	64.7	53.0	52.4
245	2022-03-23	10:14:03	52.0	63.3	53.0	52.4
246	2022-03-23	10:14:04	52.9	65.6	52.8	52.2
247	2022-03-23	10:14:05	51.5	62.9	52.8	51.8
248	2022-03-23	10:14:06	50.5	62.8	51.8	51.1
249	2022-03-23	10:14:07	51.1	63.8	51.2	51.0
250	2022-03-23	10:14:08	53.8	68.8	53.2	51.1
251	2022-03-23	10:14:09	52.7	67.9	53.3	52.8
252	2022-03-23	10:14:10	53.1	77.0	53.4	52.7
253	2022-03-23	10:14:11	52.5	78.9	53.3	52.6
254	2022-03-23	10:14:12	52.0	64.1	52.7	52.2
255	2022-03-23	10:14:13	52.7	64.4	52.6	52.1
256	2022-03-23	10:14:14	53.5	67.1	53.4	52.4
257	2022-03-23	10:14:15	51.5	63.6	53.3	52.2
258	2022-03-23	10:14:16	51.3	63.9	52.2	51.7
259	2022-03-23	10:14:17	51.5	64.0	51.8	51.5
260	2022-03-23	10:14:18	50.9	63.6	51.5	51.1
261	2022-03-23	10:14:19	51.0	63.3	51.1	51.0
262	2022-03-23	10:14:20	50.9	62.7	51.2	50.9
263	2022-03-23	10:14:21	50.9	63.3	51.0	50.9
264	2022-03-23	10:14:22	51.1	64.7	51.1	50.9
265	2022-03-23	10:14:23	51.8	63.7	51.6	51.0
266	2022-03-23	10:14:24	51.9	65.3	51.9	51.6
267	2022-03-23	10:14:25	51.1	67.3	51.7	51.2
268	2022-03-23	10:14:26	51.7	76.1	51.8	51.0
269	2022-03-23	10:14:27	51.5	67.4	51.8	51.6
270	2022-03-23	10:14:28	51.7	66.8	51.7	51.5
271	2022-03-23	10:14:29	51.2	69.3	51.8	51.3
272	2022-03-23	10:14:30	52.0	77.5	52.1	51.3
273	2022-03-23	10:14:31	50.8	64.1	51.6	51.1
274	2022-03-23	10:14:32	50.2	62.7	51.1	50.6
275	2022-03-23	10:14:33	50.6	62.0	50.7	50.5
276	2022-03-23	10:14:34	51.4	62.6	51.1	50.7
277	2022-03-23	10:14:35	50.8	62.9	51.1	50.9
278	2022-03-23	10:14:36	50.8	62.8	51.1	50.8
279	2022-03-23	10:14:37	51.0	63.2	51.0	50.7
280	2022-03-23	10:14:38	51.5	63.9	51.3	50.9
281	2022-03-23	10:14:39	50.5	63.0	51.2	50.7
282	2022-03-23	10:14:40	50.6	62.5	50.8	50.6
283	2022-03-23	10:14:41	50.4	62.0	50.6	50.4
284	2022-03-23	10:14:42	50.7	65.2	50.7	50.5
285	2022-03-23	10:14:43	50.4	61.6	50.6	50.4
286	2022-03-23	10:14:44	50.9	70.8	50.9	50.4
287	2022-03-23	10:14:45	50.6	64.3	50.9	50.7
288	2022-03-23	10:14:46	50.1	62.5	50.7	50.3
289	2022-03-23	10:14:47	50.8	74.9	50.7	50.3
290	2022-03-23	10:14:48	50.5	62.2	50.6	50.5
291	2022-03-23	10:14:49	50.9	62.5	50.8	50.5
292	2022-03-23	10:14:50	50.3	62.9	50.8	50.5
293	2022-03-23	10:14:51	50.3	62.4	50.5	50.4
294	2022-03-23	10:14:52	50.5	63.2	50.5	50.4
295	2022-03-23	10:14:53	50.5	62.9	50.6	50.4
296	2022-03-23	10:14:54	50.5	63.7	50.6	50.4
297	2022-03-23	10:14:55	50.2	61.9	50.5	50.3
298	2022-03-23	10:14:56	50.5	62.1	50.5	50.3
299	2022-03-23	10:14:57	50.1	66.0	50.3	50.1
300	2022-03-23	10:14:58	50.5	65.3	50.5	50.2
301	2022-03-23	10:14:59	49.9	63.0	50.4	50.1
302	2022-03-23	10:15:00	50.1	67.9	50.2	50.0
303	2022-03-23	10:15:01	50.1	65.0	50.2	50.0

304	2022-03-23	10:15:02	50.7	66.7	50.5	50.2
305	2022-03-23	10:15:03	50.2	63.7	50.5	50.3
306	2022-03-23	10:15:04	49.8	61.9	50.3	50.0
307	2022-03-23	10:15:05	49.6	61.7	50.0	49.7
308	2022-03-23	10:15:06	50.0	62.6	49.9	49.8
309	2022-03-23	10:15:07	50.2	62.6	50.1	50.0
310	2022-03-23	10:15:08	50.0	62.2	50.1	50.1
311	2022-03-23	10:15:09	50.1	62.1	50.1	50.0
312	2022-03-23	10:15:10	50.4	62.1	50.4	50.0
313	2022-03-23	10:15:11	50.9	63.8	50.7	50.4
314	2022-03-23	10:15:12	50.5	62.9	50.7	50.5
315	2022-03-23	10:15:13	50.3	62.2	50.5	50.3
316	2022-03-23	10:15:14	50.4	63.3	50.5	50.3
317	2022-03-23	10:15:15	50.1	62.2	50.4	50.1
318	2022-03-23	10:15:16	50.4	63.5	50.4	50.1
319	2022-03-23	10:15:17	50.4	61.8	50.5	50.3
320	2022-03-23	10:15:18	50.3	62.5	50.4	50.3
321	2022-03-23	10:15:19	50.5	62.5	50.5	50.3
322	2022-03-23	10:15:20	50.3	61.7	50.5	50.4
323	2022-03-23	10:15:21	50.3	61.7	50.4	50.3
324	2022-03-23	10:15:22	50.8	62.6	50.7	50.3
325	2022-03-23	10:15:23	50.7	63.1	50.8	50.6
326	2022-03-23	10:15:24	50.8	62.9	50.8	50.6
327	2022-03-23	10:15:25	50.7	62.7	50.7	50.7
328	2022-03-23	10:15:26	50.8	62.7	50.8	50.5
329	2022-03-23	10:15:27	51.0	62.5	50.9	50.8
330	2022-03-23	10:15:28	51.6	64.4	51.4	50.9
331	2022-03-23	10:15:29	50.8	62.5	51.3	51.0
332	2022-03-23	10:15:30	51.0	64.7	51.2	50.9
333	2022-03-23	10:15:31	50.6	62.3	50.9	50.7
334	2022-03-23	10:15:32	51.1	62.6	51.1	50.6
335	2022-03-23	10:15:33	51.3	63.6	51.4	51.1
336	2022-03-23	10:15:34	50.1	62.1	51.1	50.5
337	2022-03-23	10:15:35	50.2	62.2	50.5	50.3
338	2022-03-23	10:15:36	50.0	61.1	50.3	50.1
339	2022-03-23	10:15:37	50.6	64.2	50.5	50.1
340	2022-03-23	10:15:38	52.1	64.4	51.6	50.5
341	2022-03-23	10:15:39	51.4	64.4	51.7	51.4
342	2022-03-23	10:15:40	51.0	62.6	51.4	51.1
343	2022-03-23	10:15:41	50.9	63.5	51.1	50.8
344	2022-03-23	10:15:42	51.2	63.3	51.2	51.1
345	2022-03-23	10:15:43	51.7	63.6	51.5	51.1
346	2022-03-23	10:15:44	53.7	65.5	53.2	51.5
347	2022-03-23	10:15:45	54.6	67.2	54.2	53.2
348	2022-03-23	10:15:46	52.4	64.9	54.0	53.0
349	2022-03-23	10:15:47	54.0	66.3	53.7	52.9
350	2022-03-23	10:15:48	53.7	65.0	53.8	53.6
351	2022-03-23	10:15:49	53.5	72.4	53.7	53.4
352	2022-03-23	10:15:50	53.8	65.5	53.7	53.5
353	2022-03-23	10:15:51	53.0	66.7	53.7	53.3
354	2022-03-23	10:15:52	53.3	65.0	53.3	53.2
355	2022-03-23	10:15:53	53.8	68.6	53.7	53.3
356	2022-03-23	10:15:54	53.1	65.9	53.6	53.2
357	2022-03-23	10:15:55	52.3	64.7	53.2	52.7
358	2022-03-23	10:15:56	51.5	64.6	52.7	51.9
359	2022-03-23	10:15:57	49.9	62.0	51.9	50.8
360	2022-03-23	10:15:58	50.1	62.0	50.8	50.3
361	2022-03-23	10:15:59	50.5	62.7	50.5	50.3
362	2022-03-23	10:16:00	49.9	62.3	50.5	50.1
363	2022-03-23	10:16:01	49.6	61.3	50.1	49.8
364	2022-03-23	10:16:02	50.1	62.4	50.1	49.6

365	2022-03-23	10:16:03	49.8	62.3	50.1	49.8
366	2022-03-23	10:16:04	50.0	62.6	50.0	49.6
367	2022-03-23	10:16:05	50.1	61.8	50.1	50.0
368	2022-03-23	10:16:06	50.5	61.9	50.4	50.0
369	2022-03-23	10:16:07	50.7	62.3	50.6	50.4
370	2022-03-23	10:16:08	51.0	63.5	50.9	50.6
371	2022-03-23	10:16:09	51.1	62.8	51.0	50.8
372	2022-03-23	10:16:10	52.1	63.4	51.8	51.0
373	2022-03-23	10:16:11	51.0	63.2	51.8	51.3
374	2022-03-23	10:16:12	51.1	64.0	51.3	51.1
375	2022-03-23	10:16:13	52.9	64.7	52.5	51.2
376	2022-03-23	10:16:14	53.8	65.6	53.4	52.5
377	2022-03-23	10:16:15	53.8	65.1	53.7	53.4
378	2022-03-23	10:16:16	52.8	64.7	53.6	53.0
379	2022-03-23	10:16:17	54.4	65.7	54.1	53.3
380	2022-03-23	10:16:18	54.0	66.6	54.0	53.9
381	2022-03-23	10:16:19	52.5	65.9	54.0	53.0
382	2022-03-23	10:16:20	52.6	66.7	53.1	52.2
383	2022-03-23	10:16:21	52.0	63.9	53.0	52.4
384	2022-03-23	10:16:22	50.8	63.5	52.4	51.4
385	2022-03-23	10:16:23	50.1	61.9	51.4	50.6
386	2022-03-23	10:16:24	50.1	61.7	50.7	50.2
387	2022-03-23	10:16:25	50.4	61.5	50.4	50.3
388	2022-03-23	10:16:26	50.8	65.4	50.7	50.4
389	2022-03-23	10:16:27	50.7	62.3	50.8	50.6
390	2022-03-23	10:16:28	50.2	63.6	50.8	50.4
391	2022-03-23	10:16:29	49.8	62.4	50.4	50.0
392	2022-03-23	10:16:30	50.5	62.1	50.4	50.0
393	2022-03-23	10:16:31	49.8	63.0	50.4	49.9
394	2022-03-23	10:16:32	49.7	61.9	50.0	49.7
395	2022-03-23	10:16:33	50.4	68.1	50.2	49.7
396	2022-03-23	10:16:34	50.5	64.2	50.6	50.2
397	2022-03-23	10:16:35	49.9	61.9	50.3	50.0
398	2022-03-23	10:16:36	49.4	61.1	50.0	49.6
399	2022-03-23	10:16:37	50.1	62.5	50.0	49.6
400	2022-03-23	10:16:38	50.8	64.1	50.5	49.9
401	2022-03-23	10:16:39	50.5	61.6	50.6	50.4
402	2022-03-23	10:16:40	51.1	68.4	51.0	50.5
403	2022-03-23	10:16:41	50.0	67.3	50.9	50.3
404	2022-03-23	10:16:42	50.0	61.7	50.4	50.1
405	2022-03-23	10:16:43	49.8	66.5	50.2	49.8
406	2022-03-23	10:16:44	49.1	60.8	49.8	49.4
407	2022-03-23	10:16:45	49.2	60.9	49.4	49.2
408	2022-03-23	10:16:46	49.6	65.1	49.6	49.3
409	2022-03-23	10:16:47	49.6	67.6	49.6	49.5
410	2022-03-23	10:16:48	49.6	66.0	49.7	49.5
411	2022-03-23	10:16:49	49.4	62.3	49.6	49.4
412	2022-03-23	10:16:50	50.0	66.0	49.9	49.4
413	2022-03-23	10:16:51	50.5	62.7	50.4	49.9
414	2022-03-23	10:16:52	50.4	65.1	50.4	50.1
415	2022-03-23	10:16:53	50.3	64.7	50.5	50.3
416	2022-03-23	10:16:54	49.3	60.6	50.3	49.7
417	2022-03-23	10:16:55	49.6	61.3	49.8	49.6
418	2022-03-23	10:16:56	49.7	69.0	49.8	49.5
419	2022-03-23	10:16:57	49.5	62.1	49.7	49.5
420	2022-03-23	10:16:58	49.7	64.1	49.8	49.6
421	2022-03-23	10:16:59	50.0	62.1	49.9	49.7
422	2022-03-23	10:17:00	49.8	61.0	49.9	49.8
423	2022-03-23	10:17:01	49.4	60.7	49.8	49.5
424	2022-03-23	10:17:02	49.4	62.4	49.6	49.4
425	2022-03-23	10:17:03	49.3	62.8	49.5	49.3

426	2022-03-23	10:17:04	49.2	62.0	49.3	49.2
427	2022-03-23	10:17:05	49.1	60.8	49.3	49.1
428	2022-03-23	10:17:06	49.0	60.8	49.2	49.0
429	2022-03-23	10:17:07	49.2	68.3	49.2	48.9
430	2022-03-23	10:17:08	48.8	64.3	49.2	49.0
431	2022-03-23	10:17:09	49.1	68.0	49.2	48.9
432	2022-03-23	10:17:10	48.9	61.2	49.1	48.9
433	2022-03-23	10:17:11	49.0	61.6	49.1	49.0
434	2022-03-23	10:17:12	49.0	61.2	49.0	48.9
435	2022-03-23	10:17:13	48.9	61.7	49.1	48.9
436	2022-03-23	10:17:14	48.9	61.5	48.9	48.8
437	2022-03-23	10:17:15	49.1	60.8	49.0	48.8
438	2022-03-23	10:17:16	49.2	60.9	49.1	49.0
439	2022-03-23	10:17:17	49.0	60.8	49.1	48.9
440	2022-03-23	10:17:18	48.8	61.3	49.1	48.9
441	2022-03-23	10:17:19	49.0	62.0	49.0	48.8
442	2022-03-23	10:17:20	49.4	60.7	49.4	49.0
443	2022-03-23	10:17:21	50.1	62.5	49.9	49.4
444	2022-03-23	10:17:22	49.5	61.5	50.1	49.6
445	2022-03-23	10:17:23	48.4	60.0	49.6	48.9
446	2022-03-23	10:17:24	48.8	60.6	48.9	48.7
447	2022-03-23	10:17:25	48.9	61.6	48.9	48.8
448	2022-03-23	10:17:26	49.5	65.3	49.4	48.8
449	2022-03-23	10:17:27	50.1	61.9	49.8	49.4
450	2022-03-23	10:17:28	51.1	63.7	50.6	49.8
451	2022-03-23	10:17:29	50.9	64.0	51.1	50.5
452	2022-03-23	10:17:30	51.0	69.4	51.1	50.6
453	2022-03-23	10:17:31	49.5	61.2	50.8	50.0
454	2022-03-23	10:17:32	49.5	62.3	50.0	49.7
455	2022-03-23	10:17:33	49.3	66.6	49.8	49.4
456	2022-03-23	10:17:34	49.2	65.8	49.4	49.2
457	2022-03-23	10:17:35	49.4	61.0	49.4	49.3
458	2022-03-23	10:17:36	49.4	68.8	49.5	49.3
459	2022-03-23	10:17:37	49.9	64.9	49.8	49.3
460	2022-03-23	10:17:38	51.1	68.2	50.8	49.8
461	2022-03-23	10:17:39	49.0	62.2	50.8	49.7
462	2022-03-23	10:17:40	49.1	65.6	49.7	49.3
463	2022-03-23	10:17:41	49.1	62.5	49.3	49.2
464	2022-03-23	10:17:42	49.2	62.8	49.3	49.1
465	2022-03-23	10:17:43	49.0	62.6	49.2	49.1
466	2022-03-23	10:17:44	49.0	60.6	49.2	48.9
467	2022-03-23	10:17:45	49.4	60.5	49.3	49.0
468	2022-03-23	10:17:46	50.0	63.0	49.9	49.2
469	2022-03-23	10:17:47	49.2	60.6	49.7	49.4
470	2022-03-23	10:17:48	49.5	61.4	49.5	49.4
471	2022-03-23	10:17:49	49.6	60.7	49.6	49.5
472	2022-03-23	10:17:50	49.5	61.9	49.7	49.5
473	2022-03-23	10:17:51	49.5	60.9	49.5	49.4
474	2022-03-23	10:17:52	49.6	61.3	49.6	49.5
475	2022-03-23	10:17:53	49.8	61.2	49.7	49.5
476	2022-03-23	10:17:54	50.0	64.0	49.9	49.7
477	2022-03-23	10:17:55	49.8	61.1	50.0	49.8
478	2022-03-23	10:17:56	49.6	61.7	49.8	49.6
479	2022-03-23	10:17:57	49.8	61.8	49.8	49.6
480	2022-03-23	10:17:58	50.0	61.7	49.9	49.7
481	2022-03-23	10:17:59	50.2	73.0	50.2	49.9
482	2022-03-23	10:18:00	50.7	71.8	50.5	50.0
483	2022-03-23	10:18:01	51.8	79.9	51.7	50.3
484	2022-03-23	10:18:02	49.6	63.0	51.5	50.4
485	2022-03-23	10:18:03	50.0	64.7	50.4	50.1
486	2022-03-23	10:18:04	51.2	75.9	51.2	50.2

487	2022-03-23	10:18:05	51.7	76.8	51.8	50.5
488	2022-03-23	10:18:06	50.7	74.3	51.9	51.0
489	2022-03-23	10:18:07	50.7	74.1	51.1	50.6
490	2022-03-23	10:18:08	50.1	61.5	50.9	50.4
491	2022-03-23	10:18:09	50.4	62.2	50.7	50.3
492	2022-03-23	10:18:10	49.9	61.7	50.3	50.1
493	2022-03-23	10:18:11	50.0	61.6	50.1	49.9
494	2022-03-23	10:18:12	50.5	62.7	50.4	50.0
495	2022-03-23	10:18:13	51.1	63.4	50.9	50.3
496	2022-03-23	10:18:14	51.3	63.6	51.2	50.9
497	2022-03-23	10:18:15	51.9	64.6	51.6	51.1
498	2022-03-23	10:18:16	52.1	65.4	51.9	51.6
499	2022-03-23	10:18:17	51.3	63.1	52.0	51.5
500	2022-03-23	10:18:18	51.0	63.5	51.5	51.1
501	2022-03-23	10:18:19	50.7	62.9	51.1	50.9
502	2022-03-23	10:18:20	52.7	65.1	52.2	50.9
503	2022-03-23	10:18:21	52.7	65.6	52.5	52.2
504	2022-03-23	10:18:22	52.6	64.2	52.6	52.4
505	2022-03-23	10:18:23	52.7	65.2	52.8	52.6
506	2022-03-23	10:18:24	52.7	65.1	52.7	52.5
507	2022-03-23	10:18:25	55.0	66.9	54.4	52.7
508	2022-03-23	10:18:26	55.1	66.0	54.9	54.4
509	2022-03-23	10:18:27	56.7	69.1	56.2	54.9
510	2022-03-23	10:18:28	54.8	67.4	56.2	55.2
511	2022-03-23	10:18:29	54.4	65.9	55.2	54.6
512	2022-03-23	10:18:30	56.6	69.2	56.2	54.8
513	2022-03-23	10:18:31	59.5	70.2	58.6	56.3
514	2022-03-23	10:18:32	62.6	73.4	61.7	58.7
515	2022-03-23	10:18:33	64.6	76.7	64.0	61.7
516	2022-03-23	10:18:34	65.3	79.5	65.0	64.0
517	2022-03-23	10:18:35	67.5	78.9	66.8	64.7
518	2022-03-23	10:18:36	68.4	81.3	68.0	66.8
519	2022-03-23	10:18:37	70.5	83.6	69.9	67.8
520	2022-03-23	10:18:38	73.8	87.4	72.7	69.9
521	2022-03-23	10:18:39	73.5	86.2	73.4	72.7
522	2022-03-23	10:18:40	72.9	85.8	73.4	72.8
523	2022-03-23	10:18:41	70.7	82.8	72.8	71.7
524	2022-03-23	10:18:42	69.4	82.8	71.6	70.5
525	2022-03-23	10:18:43	70.0	84.0	70.7	70.0
526	2022-03-23	10:18:44	69.6	82.8	70.0	69.7
527	2022-03-23	10:18:45	70.2	85.7	70.2	69.8
528	2022-03-23	10:18:46	67.7	83.2	70.1	68.6
529	2022-03-23	10:18:47	67.0	86.8	68.6	67.5
530	2022-03-23	10:18:48	70.2	88.6	69.4	68.0
531	2022-03-23	10:18:49	72.2	88.4	71.3	69.6
532	2022-03-23	10:18:50	68.6	87.8	71.1	69.3
533	2022-03-23	10:18:51	63.7	79.8	69.3	66.7
534	2022-03-23	10:18:52	60.8	75.2	66.6	63.8
535	2022-03-23	10:18:53	57.0	68.0	63.8	60.9
536	2022-03-23	10:18:54	57.2	68.6	60.8	59.0
537	2022-03-23	10:18:55	58.9	69.3	59.0	58.8
538	2022-03-23	10:18:56	58.4	69.2	59.1	58.5
539	2022-03-23	10:18:57	55.2	67.7	58.5	56.7
540	2022-03-23	10:18:58	55.0	67.8	56.7	55.6
541	2022-03-23	10:18:59	53.9	66.1	55.6	54.6
542	2022-03-23	10:19:00	52.8	63.6	54.6	53.5
543	2022-03-23	10:19:01	53.0	64.5	53.5	53.2
544	2022-03-23	10:19:02	53.5	67.8	53.5	53.1
545	2022-03-23	10:19:03	55.8	71.5	55.2	53.6
546	2022-03-23	10:19:04	53.5	68.7	55.1	54.2
547	2022-03-23	10:19:05	54.6	68.4	54.5	54.1

548	2022-03-23	10:19:06	54.7	68.7	54.8	54.5
549	2022-03-23	10:19:07	53.5	67.1	54.5	53.9
550	2022-03-23	10:19:08	58.0	74.3	57.3	54.1
551	2022-03-23	10:19:09	56.9	72.8	57.7	56.8
552	2022-03-23	10:19:10	55.3	70.4	56.9	55.7
553	2022-03-23	10:19:11	52.1	65.1	55.6	53.8
554	2022-03-23	10:19:12	52.2	66.1	53.8	52.9
555	2022-03-23	10:19:13	52.1	64.5	52.9	52.4
556	2022-03-23	10:19:14	52.0	64.5	52.4	51.9
557	2022-03-23	10:19:15	52.5	67.1	52.6	52.2
558	2022-03-23	10:19:16	52.3	64.5	52.5	52.2
559	2022-03-23	10:19:17	52.1	63.5	52.2	52.1
560	2022-03-23	10:19:18	52.6	63.9	52.5	52.2
561	2022-03-23	10:19:19	51.9	63.4	52.4	52.0
562	2022-03-23	10:19:20	51.9	66.3	52.0	51.8
563	2022-03-23	10:19:21	51.7	64.3	52.3	51.7
564	2022-03-23	10:19:22	50.7	63.3	51.7	51.0
565	2022-03-23	10:19:23	50.4	64.9	51.0	50.6
566	2022-03-23	10:19:24	50.5	63.6	50.6	50.5
567	2022-03-23	10:19:25	51.9	65.1	51.7	50.5
568	2022-03-23	10:19:26	52.7	66.8	52.5	51.7
569	2022-03-23	10:19:27	51.2	63.8	52.1	51.4
570	2022-03-23	10:19:28	49.8	61.7	51.4	50.5
571	2022-03-23	10:19:29	49.7	63.2	50.5	50.0
572	2022-03-23	10:19:30	49.5	60.8	50.0	49.7
573	2022-03-23	10:19:31	49.5	60.6	49.7	49.6
574	2022-03-23	10:19:32	49.6	61.9	49.7	49.5
575	2022-03-23	10:19:33	49.9	63.1	49.8	49.6
576	2022-03-23	10:19:34	50.2	62.2	50.1	49.8
577	2022-03-23	10:19:35	51.0	72.9	50.8	50.1
578	2022-03-23	10:19:36	51.6	71.9	51.3	50.7
579	2022-03-23	10:19:37	52.4	66.3	52.1	51.3
580	2022-03-23	10:19:38	52.8	64.9	52.6	52.0
581	2022-03-23	10:19:39	53.0	64.6	52.9	52.5
582	2022-03-23	10:19:40	55.7	74.0	55.0	52.9
583	2022-03-23	10:19:41	58.1	70.2	57.4	55.0
584	2022-03-23	10:19:42	58.8	71.8	58.3	57.4
585	2022-03-23	10:19:43	57.4	69.6	58.2	57.7
586	2022-03-23	10:19:44	60.4	73.4	59.9	57.7
587	2022-03-23	10:19:45	59.5	71.3	60.0	59.5
588	2022-03-23	10:19:46	58.5	70.2	59.5	58.9
589	2022-03-23	10:19:47	59.0	71.4	59.1	58.8
590	2022-03-23	10:19:48	62.2	74.3	61.5	58.9
591	2022-03-23	10:19:49	62.0	74.3	61.9	61.5
592	2022-03-23	10:19:50	63.9	75.9	63.2	61.9
593	2022-03-23	10:19:51	65.7	76.2	65.0	63.3
594	2022-03-23	10:19:52	67.0	76.9	66.3	65.1
595	2022-03-23	10:19:53	66.1	77.9	66.7	65.9
596	2022-03-23	10:19:54	67.4	78.2	67.1	65.9
597	2022-03-23	10:19:55	69.6	84.5	69.1	67.1
598	2022-03-23	10:19:56	69.5	86.3	69.6	68.8
599	2022-03-23	10:19:57	71.1	85.2	71.0	69.2
600	2022-03-23	10:19:58	76.1	88.7	74.8	71.0
601	2022-03-23	10:19:59	75.1	87.7	75.1	74.8
602	2022-03-23	10:20:00	76.0	87.6	75.6	75.0
603	2022-03-23	10:20:01	74.2	85.0	75.6	74.7
604	2022-03-23	10:20:02	73.9	87.9	74.7	74.2
605	2022-03-23	10:20:03	71.7	85.9	74.3	72.7
606	2022-03-23	10:20:04	68.5	82.8	72.7	70.6
607	2022-03-23	10:20:05	66.0	84.6	70.5	68.1
608	2022-03-23	10:20:06	63.8	76.8	68.0	66.0

609	2022-03-23	10:20:07	63.1	78.4	66.0	64.5
610	2022-03-23	10:20:08	60.2	72.6	64.5	62.2
611	2022-03-23	10:20:09	58.8	71.7	62.2	60.5
612	2022-03-23	10:20:10	61.3	76.0	61.4	59.9
613	2022-03-23	10:20:11	59.4	74.4	61.5	60.0
614	2022-03-23	10:20:12	59.1	70.9	60.0	59.4
615	2022-03-23	10:20:13	55.9	68.5	59.4	57.5
616	2022-03-23	10:20:14	56.8	84.7	57.5	56.7
617	2022-03-23	10:20:15	56.2	84.2	58.1	56.1
618	2022-03-23	10:20:16	54.9	69.7	56.1	55.4
619	2022-03-23	10:20:17	55.1	79.1	55.6	55.1
620	2022-03-23	10:20:18	52.6	69.1	55.3	53.8
621	2022-03-23	10:20:19	52.6	68.8	53.8	53.0
622	2022-03-23	10:20:20	52.6	65.9	53.7	52.5
623	2022-03-23	10:20:21	52.0	64.3	52.6	52.2
624	2022-03-23	10:20:22	50.7	72.5	52.4	51.2
625	2022-03-23	10:20:23	50.9	63.7	51.2	51.0
626	2022-03-23	10:20:24	50.0	70.1	51.0	50.3
627	2022-03-23	10:20:25	51.2	64.4	51.0	50.4
628	2022-03-23	10:20:26	51.1	64.5	51.1	50.7
629	2022-03-23	10:20:27	49.8	60.8	51.0	50.3
630	2022-03-23	10:20:28	49.3	62.7	50.3	49.7
631	2022-03-23	10:20:29	49.8	62.1	49.8	49.7
632	2022-03-23	10:20:30	50.9	63.0	50.6	49.7
633	2022-03-23	10:20:31	50.7	63.3	50.7	50.6
634	2022-03-23	10:20:32	52.0	65.6	51.6	50.7
635	2022-03-23	10:20:33	51.6	63.8	51.6	51.3
636	2022-03-23	10:20:34	50.5	62.5	51.6	50.8
637	2022-03-23	10:20:35	51.8	63.3	51.5	50.9
638	2022-03-23	10:20:36	50.5	64.6	51.5	50.8
639	2022-03-23	10:20:37	50.1	66.0	50.8	50.4
640	2022-03-23	10:20:38	51.2	71.0	51.0	50.3
641	2022-03-23	10:20:39	50.2	62.7	51.0	50.5
642	2022-03-23	10:20:40	50.5	71.3	50.8	50.4
643	2022-03-23	10:20:41	51.2	72.1	51.0	50.3
644	2022-03-23	10:20:42	50.9	63.0	51.0	50.9
645	2022-03-23	10:20:43	49.6	60.9	50.9	50.1
646	2022-03-23	10:20:44	49.7	60.9	50.1	49.8
647	2022-03-23	10:20:45	50.1	61.8	50.0	49.9
648	2022-03-23	10:20:46	50.2	61.8	50.1	49.9
649	2022-03-23	10:20:47	50.1	63.7	50.3	50.0
650	2022-03-23	10:20:48	50.1	65.6	50.2	50.0
651	2022-03-23	10:20:49	50.4	66.2	50.5	50.0
652	2022-03-23	10:20:50	49.8	62.5	50.2	49.9
653	2022-03-23	10:20:51	49.4	61.3	49.9	49.6
654	2022-03-23	10:20:52	49.5	60.7	49.6	49.5
655	2022-03-23	10:20:53	50.3	64.2	50.1	49.6
656	2022-03-23	10:20:54	50.5	65.6	50.4	50.0
657	2022-03-23	10:20:55	50.4	62.7	50.4	50.3
658	2022-03-23	10:20:56	50.1	63.1	50.5	50.1
659	2022-03-23	10:20:57	49.9	67.9	50.1	49.9
660	2022-03-23	10:20:58	49.9	69.1	50.1	49.9
661	2022-03-23	10:20:59	49.3	60.8	49.9	49.6
662	2022-03-23	10:21:00	49.8	63.0	49.8	49.5
663	2022-03-23	10:21:01	49.5	63.4	49.8	49.6
664	2022-03-23	10:21:02	49.4	61.5	49.6	49.4
665	2022-03-23	10:21:03	48.7	60.3	49.4	49.0
666	2022-03-23	10:21:04	48.4	61.3	48.9	48.6
667	2022-03-23	10:21:05	48.9	67.3	48.9	48.6
668	2022-03-23	10:21:06	48.8	68.5	48.9	48.6
669	2022-03-23	10:21:07	48.6	60.6	48.9	48.7

670	2022-03-23	10:21:08	48.3	60.3	48.7	48.4
671	2022-03-23	10:21:09	49.0	64.0	49.1	48.4
672	2022-03-23	10:21:10	48.6	59.6	48.9	48.7
673	2022-03-23	10:21:11	49.1	61.6	49.0	48.7
674	2022-03-23	10:21:12	48.7	61.5	49.0	48.8
675	2022-03-23	10:21:13	48.8	60.9	48.9	48.7
676	2022-03-23	10:21:14	48.7	60.8	48.8	48.7
677	2022-03-23	10:21:15	48.6	61.4	48.8	48.6
678	2022-03-23	10:21:16	48.5	61.3	48.6	48.5
679	2022-03-23	10:21:17	48.7	60.8	48.7	48.6
680	2022-03-23	10:21:18	49.3	61.1	49.1	48.7
681	2022-03-23	10:21:19	48.8	61.8	49.1	48.9
682	2022-03-23	10:21:20	48.3	60.0	48.9	48.5
683	2022-03-23	10:21:21	48.6	60.9	48.7	48.5
684	2022-03-23	10:21:22	48.9	60.7	48.8	48.6
685	2022-03-23	10:21:23	49.1	61.2	49.0	48.7
686	2022-03-23	10:21:24	48.9	61.3	49.1	48.9
687	2022-03-23	10:21:25	49.0	61.7	49.0	48.9
688	2022-03-23	10:21:26	48.4	60.0	48.9	48.5
689	2022-03-23	10:21:27	48.3	59.9	48.6	48.3
690	2022-03-23	10:21:28	48.5	59.9	48.6	48.4
691	2022-03-23	10:21:29	48.7	62.2	48.7	48.5
692	2022-03-23	10:21:30	48.5	61.7	48.7	48.5
693	2022-03-23	10:21:31	48.4	60.2	48.5	48.4
694	2022-03-23	10:21:32	48.4	59.7	48.5	48.4
695	2022-03-23	10:21:33	49.1	67.2	48.9	48.4
696	2022-03-23	10:21:34	48.6	61.0	48.9	48.6
697	2022-03-23	10:21:35	48.5	60.8	48.7	48.5
698	2022-03-23	10:21:36	48.2	64.6	48.5	48.3
699	2022-03-23	10:21:37	48.4	59.8	48.4	48.2
700	2022-03-23	10:21:38	48.6	61.2	48.5	48.4
701	2022-03-23	10:21:39	48.8	59.9	48.7	48.4
702	2022-03-23	10:21:40	48.9	70.4	49.0	48.5
703	2022-03-23	10:21:41	48.9	63.7	49.0	48.9
704	2022-03-23	10:21:42	48.8	60.6	49.0	48.8
705	2022-03-23	10:21:43	48.7	64.9	48.9	48.7
706	2022-03-23	10:21:44	48.5	61.1	48.8	48.6
707	2022-03-23	10:21:45	49.6	72.5	49.4	48.5
708	2022-03-23	10:21:46	49.7	66.4	49.6	49.3
709	2022-03-23	10:21:47	49.4	62.5	49.7	49.4
710	2022-03-23	10:21:48	49.6	69.6	49.7	49.4
711	2022-03-23	10:21:49	49.6	63.7	49.7	49.5
712	2022-03-23	10:21:50	50.5	76.3	50.6	49.5
713	2022-03-23	10:21:51	49.3	67.8	50.0	49.5
714	2022-03-23	10:21:52	49.2	61.1	49.6	49.3
715	2022-03-23	10:21:53	49.0	61.7	49.3	49.1
716	2022-03-23	10:21:54	49.4	61.1	49.4	49.2
717	2022-03-23	10:21:55	49.5	69.7	49.5	49.3
718	2022-03-23	10:21:56	52.1	83.7	51.8	49.3
719	2022-03-23	10:21:57	48.9	60.9	51.0	49.8
720	2022-03-23	10:21:58	49.0	65.4	49.8	49.3
721	2022-03-23	10:21:59	49.7	68.3	49.8	49.1
722	2022-03-23	10:22:00	50.1	70.7	50.1	49.4
723	2022-03-23	10:22:01	50.1	70.4	50.2	49.8
724	2022-03-23	10:22:02	49.4	62.2	50.2	49.7
725	2022-03-23	10:22:03	49.8	63.0	49.8	49.7
726	2022-03-23	10:22:04	49.9	62.7	49.9	49.7
727	2022-03-23	10:22:05	50.3	63.7	50.2	49.9
728	2022-03-23	10:22:06	49.9	61.2	50.3	49.9
729	2022-03-23	10:22:07	49.6	61.1	50.0	49.7
730	2022-03-23	10:22:08	49.8	65.4	49.8	49.7

731	2022-03-23	10:22:09	49.7	61.7	49.8	49.7
732	2022-03-23	10:22:10	49.5	61.5	49.7	49.5
733	2022-03-23	10:22:11	49.6	62.5	49.8	49.5
734	2022-03-23	10:22:12	49.6	60.4	49.6	49.5
735	2022-03-23	10:22:13	49.7	63.0	49.7	49.6
736	2022-03-23	10:22:14	51.5	72.5	51.0	49.6
737	2022-03-23	10:22:15	50.2	67.0	50.8	50.4
738	2022-03-23	10:22:16	51.5	72.5	51.1	50.4
739	2022-03-23	10:22:17	50.4	62.6	51.1	50.7
740	2022-03-23	10:22:18	50.1	62.4	50.7	50.3
741	2022-03-23	10:22:19	50.1	68.3	50.3	50.1
742	2022-03-23	10:22:20	50.0	65.5	50.2	50.0
743	2022-03-23	10:22:21	50.1	63.5	50.2	50.0
744	2022-03-23	10:22:22	51.8	78.4	51.8	50.0
745	2022-03-23	10:22:23	49.6	61.0	51.2	50.3
746	2022-03-23	10:22:24	49.6	61.0	50.3	49.9
747	2022-03-23	10:22:25	49.7	61.7	49.9	49.8
748	2022-03-23	10:22:26	50.4	62.2	50.2	49.8
749	2022-03-23	10:22:27	50.2	62.7	50.2	50.0
750	2022-03-23	10:22:28	50.2	62.4	50.3	50.2
751	2022-03-23	10:22:29	51.8	76.3	51.5	50.1
752	2022-03-23	10:22:30	50.9	63.0	51.4	51.0
753	2022-03-23	10:22:31	50.4	63.5	51.0	50.7
754	2022-03-23	10:22:32	50.8	70.9	50.9	50.6
755	2022-03-23	10:22:33	50.3	66.7	50.8	50.4
756	2022-03-23	10:22:34	52.4	77.9	52.3	50.3
757	2022-03-23	10:22:35	50.8	76.4	51.7	51.0
758	2022-03-23	10:22:36	50.1	61.7	51.2	50.5
759	2022-03-23	10:22:37	50.0	62.1	50.5	50.2
760	2022-03-23	10:22:38	49.7	62.1	50.2	49.9
761	2022-03-23	10:22:39	49.7	68.0	49.9	49.6
762	2022-03-23	10:22:40	50.0	64.5	50.1	49.7
763	2022-03-23	10:22:41	50.8	65.2	50.6	49.9
764	2022-03-23	10:22:42	50.2	71.7	50.7	50.2
765	2022-03-23	10:22:43	49.8	67.9	50.3	49.8
766	2022-03-23	10:22:44	50.2	62.9	50.3	50.0
767	2022-03-23	10:22:45	50.6	64.4	50.6	50.2
768	2022-03-23	10:22:46	50.0	61.7	50.4	50.2
769	2022-03-23	10:22:47	50.3	66.6	50.4	49.9
770	2022-03-23	10:22:48	49.5	65.6	50.3	49.8
771	2022-03-23	10:22:49	50.6	73.7	50.4	49.8
772	2022-03-23	10:22:50	49.5	64.5	50.3	49.8
773	2022-03-23	10:22:51	49.7	66.7	49.9	49.7
774	2022-03-23	10:22:52	49.4	63.8	49.8	49.5
775	2022-03-23	10:22:53	49.1	62.0	49.5	49.2
776	2022-03-23	10:22:54	49.0	66.1	49.3	49.0
777	2022-03-23	10:22:55	48.9	60.3	49.2	48.9
778	2022-03-23	10:22:56	48.8	60.6	48.9	48.8
779	2022-03-23	10:22:57	49.3	61.1	49.2	48.9
780	2022-03-23	10:22:58	49.4	64.1	49.4	49.1
781	2022-03-23	10:22:59	49.7	65.8	49.7	49.4
782	2022-03-23	10:23:00	49.6	62.5	49.7	49.5
783	2022-03-23	10:23:01	49.6	61.8	49.7	49.6
784	2022-03-23	10:23:02	49.7	66.3	49.7	49.6
785	2022-03-23	10:23:03	49.7	63.6	49.7	49.5
786	2022-03-23	10:23:04	49.8	60.9	49.8	49.7
787	2022-03-23	10:23:05	49.9	62.6	49.9	49.8
788	2022-03-23	10:23:06	49.7	61.7	49.8	49.7
789	2022-03-23	10:23:07	49.8	61.6	49.8	49.6
790	2022-03-23	10:23:08	50.5	65.1	50.3	49.8
791	2022-03-23	10:23:09	50.4	62.2	50.4	50.3

792	2022-03-23	10:23:10	50.3	68.3	50.4	50.2
793	2022-03-23	10:23:11	50.2	66.6	50.4	50.2
794	2022-03-23	10:23:12	50.0	71.3	50.5	50.0
795	2022-03-23	10:23:13	49.9	66.8	50.1	49.8
796	2022-03-23	10:23:14	52.1	81.0	52.2	49.9
797	2022-03-23	10:23:15	49.5	62.5	51.4	50.3
798	2022-03-23	10:23:16	49.5	63.4	50.3	49.8
799	2022-03-23	10:23:17	50.1	64.7	50.1	49.9
800	2022-03-23	10:23:18	50.1	66.3	50.1	49.9
801	2022-03-23	10:23:19	49.7	62.8	50.1	49.8
802	2022-03-23	10:23:20	50.3	73.4	50.3	49.7
803	2022-03-23	10:23:21	49.8	66.9	50.4	49.9
804	2022-03-23	10:23:22	49.4	61.5	49.9	49.6
805	2022-03-23	10:23:23	49.5	66.0	49.7	49.4
806	2022-03-23	10:23:24	49.9	71.1	49.9	49.3
807	2022-03-23	10:23:25	49.3	62.7	49.9	49.5
808	2022-03-23	10:23:26	50.1	73.6	50.1	49.5
809	2022-03-23	10:23:27	49.3	60.8	49.9	49.5
810	2022-03-23	10:23:28	49.8	71.5	49.9	49.4
811	2022-03-23	10:23:29	50.1	71.7	50.1	49.5
812	2022-03-23	10:23:30	50.0	67.9	50.1	50.0
813	2022-03-23	10:23:31	49.8	62.5	50.1	49.8
814	2022-03-23	10:23:32	49.1	60.4	49.8	49.4
815	2022-03-23	10:23:33	49.3	62.0	49.6	49.3
816	2022-03-23	10:23:34	50.5	76.6	50.4	49.3
817	2022-03-23	10:23:35	52.8	85.5	53.1	49.7
818	2022-03-23	10:23:36	49.8	73.2	53.1	51.1
819	2022-03-23	10:23:37	49.5	61.3	51.2	50.1
820	2022-03-23	10:23:38	50.2	74.0	50.4	49.9
821	2022-03-23	10:23:39	49.4	65.0	50.4	49.7
822	2022-03-23	10:23:40	49.0	61.1	49.7	49.2
823	2022-03-23	10:23:41	49.3	60.7	49.3	49.2
824	2022-03-23	10:23:42	49.5	60.9	49.4	49.3
825	2022-03-23	10:23:43	49.3	60.5	49.4	49.3
826	2022-03-23	10:23:44	49.5	61.7	49.5	49.4
827	2022-03-23	10:23:45	49.5	61.5	49.5	49.3
828	2022-03-23	10:23:46	49.6	61.1	49.6	49.5
829	2022-03-23	10:23:47	49.4	62.1	49.5	49.4
830	2022-03-23	10:23:48	50.0	70.5	49.9	49.5
831	2022-03-23	10:23:49	48.9	62.1	49.9	49.3
832	2022-03-23	10:23:50	49.4	61.0	49.5	49.3
833	2022-03-23	10:23:51	49.2	61.3	49.4	49.2
834	2022-03-23	10:23:52	49.3	60.8	49.4	49.2
835	2022-03-23	10:23:53	49.9	62.3	49.7	49.2
836	2022-03-23	10:23:54	49.4	61.5	49.7	49.5
837	2022-03-23	10:23:55	49.8	62.7	49.8	49.5
838	2022-03-23	10:23:56	50.1	65.8	50.0	49.7
839	2022-03-23	10:23:57	50.9	71.6	50.7	50.0
840	2022-03-23	10:23:58	50.8	63.4	50.8	50.7
841	2022-03-23	10:23:59	50.3	63.5	50.7	50.4
842	2022-03-23	10:24:00	52.1	78.2	52.0	50.6
843	2022-03-23	10:24:01	50.5	63.5	51.2	50.7
844	2022-03-23	10:24:02	50.0	64.8	50.7	50.2
845	2022-03-23	10:24:03	50.8	75.5	50.8	50.1
846	2022-03-23	10:24:04	49.8	62.0	50.6	50.0
847	2022-03-23	10:24:05	49.5	62.2	50.0	49.7
848	2022-03-23	10:24:06	50.3	80.3	50.4	49.6
849	2022-03-23	10:24:07	49.0	61.2	50.1	49.4
850	2022-03-23	10:24:08	49.3	60.7	49.4	49.3
851	2022-03-23	10:24:09	49.1	66.4	49.4	49.2
852	2022-03-23	10:24:10	48.9	60.0	49.2	49.0

853		2022-03-23	10:24:11	49.2	60.7	49.2	49.0
854		2022-03-23	10:24:12	49.1	61.6	49.3	49.0
855		2022-03-23	10:24:13	49.0	61.0	49.1	49.0
856		2022-03-23	10:24:14	49.2	61.2	49.2	48.9
857		2022-03-23	10:24:15	49.5	61.2	49.4	49.1
858		2022-03-23	10:24:16	49.7	62.2	49.6	49.3
859		2022-03-23	10:24:17	49.5	60.9	49.7	49.5
860		2022-03-23	10:24:18	49.2	61.1	49.5	49.2
861		2022-03-23	10:24:19	49.4	61.8	49.4	49.2
862		2022-03-23	10:24:20	50.3	62.2	50.0	49.4
863		2022-03-23	10:24:21	49.2	60.8	49.9	49.4
864		2022-03-23	10:24:22	48.8	60.7	49.4	49.0
865		2022-03-23	10:24:23	48.6	60.3	49.0	48.8
866		2022-03-23	10:24:24	48.8	61.8	48.9	48.7
867		2022-03-23	10:24:25	48.4	63.2	48.8	48.5
868		2022-03-23	10:24:26	48.4	60.8	48.7	48.4
869		2022-03-23	10:24:27	49.0	62.5	48.9	48.4
870		2022-03-23	10:24:28	50.3	62.6	49.8	48.9
871		2022-03-23	10:24:29	49.3	60.7	49.8	49.4
872		2022-03-23	10:24:30	48.6	61.8	49.4	48.9
873		2022-03-23	10:24:31	48.8	72.6	49.1	48.6
874		2022-03-23	10:24:32	47.9	61.6	48.9	48.3
875		2022-03-23	10:24:33	48.2	69.5	48.6	48.1
876		2022-03-23	10:24:34	48.3	70.2	48.4	48.0
877		2022-03-23	10:24:35	48.0	60.2	48.3	48.1
878		2022-03-23	10:24:36	48.1	60.3	48.1	48.0
879		2022-03-23	10:24:37	48.5	60.9	48.4	48.1
880		2022-03-23	10:24:38	48.2	60.0	48.3	48.2
881		2022-03-23	10:24:39	47.9	59.7	48.3	48.0
882		2022-03-23	10:24:40	48.0	59.2	48.1	48.0
883		2022-03-23	10:24:41	47.9	59.2	48.1	47.9
884		2022-03-23	10:24:42	47.9	59.9	48.0	47.9
885		2022-03-23	10:24:43	48.2	59.4	48.1	48.0
886		2022-03-23	10:24:44	48.1	60.1	48.2	48.0
887		2022-03-23	10:24:45	48.2	61.6	48.2	48.0
888		2022-03-23	10:24:46	48.5	60.1	48.5	48.1
889		2022-03-23	10:24:47	48.8	62.0	48.9	48.5
890		2022-03-23	10:24:48	48.4	60.6	48.6	48.4
891		2022-03-23	10:24:49	48.7	60.3	48.6	48.5
892		2022-03-23	10:24:50	48.9	60.6	48.9	48.5
893		2022-03-23	10:24:51	48.3	61.2	48.8	48.5
894		2022-03-23	10:24:52	48.3	60.8	48.5	48.4
895		2022-03-23	10:24:53	48.6	60.5	48.6	48.4
896		2022-03-23	10:24:54	48.3	67.3	48.6	48.4
897		2022-03-23	10:24:55	48.6	60.3	48.5	48.3
898		2022-03-23	10:24:56	50.5	77.1	50.3	48.5
899		2022-03-23	10:24:57	48.9	61.5	50.0	49.4
900		2022-03-23	10:24:58	48.9	60.8	49.4	49.1
901		2022-03-23	10:24:59	49.0	64.5	49.2	49.0
902		2022-03-23	10:25:00	50.5	68.4	49.6	49.0
903	Stop	2022-03-23	10:25:01				

ST-2 Time History

Record #	Record Type	Date	Time	LAeq	LApeak	LASmax	LASmin
1	Run	2022-03-23	11:46:00				
2		2022-03-23	11:46:00	58.8	70.5	62.6	60.6
3		2022-03-23	11:46:01	56.6	68.5	60.6	58.5
4		2022-03-23	11:46:02	55.4	67.5	58.4	56.8
5		2022-03-23	11:46:03	54.5	66.7	56.8	55.5
6		2022-03-23	11:46:04	56.8	76.7	56.8	55.4
7		2022-03-23	11:46:05	54.0	66.3	56.3	55.0
8		2022-03-23	11:46:06	55.0	66.5	55.1	54.9
9		2022-03-23	11:46:07	54.6	66.6	55.1	54.7
10		2022-03-23	11:46:08	55.1	67.3	55.1	54.6
11		2022-03-23	11:46:09	56.2	67.8	55.8	55.1
12		2022-03-23	11:46:10	54.5	67.9	55.8	55.0
13		2022-03-23	11:46:11	54.8	68.2	55.0	54.8
14		2022-03-23	11:46:12	55.4	68.0	55.2	54.9
15		2022-03-23	11:46:13	54.8	67.6	55.2	54.9
16		2022-03-23	11:46:14	54.7	66.9	55.0	54.7
17		2022-03-23	11:46:15	54.6	66.1	54.8	54.6
18		2022-03-23	11:46:16	54.7	66.2	54.8	54.6
19		2022-03-23	11:46:17	55.5	67.4	55.3	54.7
20		2022-03-23	11:46:18	55.6	67.4	55.5	55.3
21		2022-03-23	11:46:19	55.7	67.0	55.7	55.5
22		2022-03-23	11:46:20	55.8	68.4	55.7	55.6
23		2022-03-23	11:46:21	55.7	67.1	55.8	55.6
24		2022-03-23	11:46:22	54.5	65.6	55.7	55.0
25		2022-03-23	11:46:23	54.7	66.1	55.1	54.8
26		2022-03-23	11:46:24	54.2	66.3	54.8	54.4
27		2022-03-23	11:46:25	54.6	67.5	54.5	54.3
28		2022-03-23	11:46:26	54.0	64.6	54.6	54.2
29		2022-03-23	11:46:27	54.1	66.2	54.3	54.1
30		2022-03-23	11:46:28	53.5	65.4	54.1	53.7
31		2022-03-23	11:46:29	54.0	65.5	53.9	53.7
32		2022-03-23	11:46:30	53.7	65.9	53.9	53.7
33		2022-03-23	11:46:31	54.1	65.6	54.2	53.8
34		2022-03-23	11:46:32	53.7	65.2	54.0	53.7
35		2022-03-23	11:46:33	52.7	63.7	53.7	53.2
36		2022-03-23	11:46:34	52.6	64.3	53.2	52.8
37		2022-03-23	11:46:35	52.1	63.8	52.8	52.4
38		2022-03-23	11:46:36	52.1	64.7	52.5	52.2
39		2022-03-23	11:46:37	52.5	65.4	52.5	52.2
40		2022-03-23	11:46:38	52.3	65.1	52.4	52.2
41		2022-03-23	11:46:39	52.4	64.0	52.5	52.3
42		2022-03-23	11:46:40	52.4	63.3	52.5	52.3
43		2022-03-23	11:46:41	52.2	63.9	52.4	52.3
44		2022-03-23	11:46:42	52.1	70.9	52.3	52.0
45		2022-03-23	11:46:43	52.7	64.3	52.5	52.3
46		2022-03-23	11:46:44	52.9	65.8	52.8	52.5
47		2022-03-23	11:46:45	53.3	64.8	53.2	52.7
48		2022-03-23	11:46:46	55.0	68.1	54.5	53.2
49		2022-03-23	11:46:47	56.3	71.0	55.8	54.5
50		2022-03-23	11:46:48	58.1	70.2	57.4	55.8
51		2022-03-23	11:46:49	57.6	69.9	57.6	57.3
52		2022-03-23	11:46:50	56.9	68.2	57.5	57.1
53		2022-03-23	11:46:51	56.2	68.7	57.1	56.5
54		2022-03-23	11:46:52	56.0	67.8	56.6	56.2
55		2022-03-23	11:46:53	55.2	67.3	56.3	55.5
56		2022-03-23	11:46:54	54.5	67.3	55.5	54.9
57		2022-03-23	11:46:55	55.0	68.1	55.1	54.9
58		2022-03-23	11:46:56	55.4	67.2	55.2	55.0
59		2022-03-23	11:46:57	54.0	65.6	55.2	54.4

60	2022-03-23	11:46:58	54.0	65.9	54.7	54.0
61	2022-03-23	11:46:59	53.0	66.6	54.0	53.4
62	2022-03-23	11:47:00	52.5	64.5	53.4	52.8
63	2022-03-23	11:47:01	52.6	64.3	52.8	52.6
64	2022-03-23	11:47:02	52.1	64.7	52.7	52.3
65	2022-03-23	11:47:03	52.3	65.2	52.4	52.3
66	2022-03-23	11:47:04	52.2	64.9	52.3	52.2
67	2022-03-23	11:47:05	52.0	63.9	52.2	52.1
68	2022-03-23	11:47:06	52.0	63.3	52.2	52.0
69	2022-03-23	11:47:07	51.6	63.1	52.0	51.7
70	2022-03-23	11:47:08	51.6	62.9	51.8	51.6
71	2022-03-23	11:47:09	51.6	62.9	51.7	51.5
72	2022-03-23	11:47:10	51.9	64.1	51.9	51.6
73	2022-03-23	11:47:11	52.0	64.2	51.9	51.8
74	2022-03-23	11:47:12	51.7	63.4	51.9	51.8
75	2022-03-23	11:47:13	51.7	62.9	51.8	51.7
76	2022-03-23	11:47:14	51.9	63.6	51.9	51.8
77	2022-03-23	11:47:15	52.0	64.3	52.0	51.7
78	2022-03-23	11:47:16	52.4	64.5	52.3	51.9
79	2022-03-23	11:47:17	52.9	64.7	52.7	52.2
80	2022-03-23	11:47:18	53.0	64.8	52.9	52.6
81	2022-03-23	11:47:19	54.1	66.4	53.7	52.9
82	2022-03-23	11:47:20	55.2	67.5	54.7	53.7
83	2022-03-23	11:47:21	57.5	71.1	56.9	54.7
84	2022-03-23	11:47:22	60.4	72.7	59.5	56.9
85	2022-03-23	11:47:23	59.6	72.2	59.8	59.5
86	2022-03-23	11:47:24	58.7	71.0	59.5	58.9
87	2022-03-23	11:47:25	57.7	70.8	58.9	58.1
88	2022-03-23	11:47:26	56.7	68.3	58.1	57.2
89	2022-03-23	11:47:27	56.7	69.8	57.2	56.9
90	2022-03-23	11:47:28	55.4	68.1	56.9	55.9
91	2022-03-23	11:47:29	54.5	65.8	55.9	55.1
92	2022-03-23	11:47:30	54.7	67.3	55.1	54.8
93	2022-03-23	11:47:31	54.3	66.5	54.8	54.5
94	2022-03-23	11:47:32	53.6	65.9	54.5	53.9
95	2022-03-23	11:47:33	52.8	64.1	53.9	53.2
96	2022-03-23	11:47:34	52.4	64.6	53.2	52.7
97	2022-03-23	11:47:35	52.5	64.6	52.7	52.6
98	2022-03-23	11:47:36	52.3	65.6	52.6	52.4
99	2022-03-23	11:47:37	52.7	67.0	52.7	52.4
100	2022-03-23	11:47:38	53.3	65.4	53.1	52.7
101	2022-03-23	11:47:39	52.7	65.3	53.1	52.8
102	2022-03-23	11:47:40	52.4	64.8	52.8	52.5
103	2022-03-23	11:47:41	52.5	64.7	52.6	52.5
104	2022-03-23	11:47:42	52.5	65.0	52.6	52.5
105	2022-03-23	11:47:43	52.3	63.8	52.6	52.3
106	2022-03-23	11:47:44	51.9	62.9	52.4	52.1
107	2022-03-23	11:47:45	51.9	63.3	52.1	51.9
108	2022-03-23	11:47:46	51.7	63.7	52.0	51.7
109	2022-03-23	11:47:47	52.3	63.7	52.1	51.9
110	2022-03-23	11:47:48	52.1	63.6	52.2	51.9
111	2022-03-23	11:47:49	52.4	64.7	52.4	52.1
112	2022-03-23	11:47:50	53.9	64.2	53.4	52.4
113	2022-03-23	11:47:51	54.8	66.5	54.4	53.4
114	2022-03-23	11:47:52	56.4	71.2	55.9	54.4
115	2022-03-23	11:47:53	58.7	70.8	58.0	55.9
116	2022-03-23	11:47:54	56.6	68.3	58.0	57.1
117	2022-03-23	11:47:55	55.5	67.5	57.2	56.1
118	2022-03-23	11:47:56	54.0	66.4	56.1	54.9
119	2022-03-23	11:47:57	54.1	72.7	55.0	54.3
120	2022-03-23	11:47:58	53.9	66.1	54.4	54.0

121	2022-03-23	11:47:59	53.4	66.7	54.0	53.5
122	2022-03-23	11:48:00	53.4	67.0	53.7	53.3
123	2022-03-23	11:48:01	54.0	67.4	53.9	53.7
124	2022-03-23	11:48:02	54.4	65.7	54.3	53.6
125	2022-03-23	11:48:03	54.7	67.6	54.6	54.4
126	2022-03-23	11:48:04	53.6	66.5	54.5	53.9
127	2022-03-23	11:48:05	54.3	66.7	54.3	53.8
128	2022-03-23	11:48:06	54.2	66.1	54.4	53.9
129	2022-03-23	11:48:07	56.0	68.7	55.6	54.4
130	2022-03-23	11:48:08	55.3	69.0	55.6	55.4
131	2022-03-23	11:48:09	57.1	69.0	56.6	55.4
132	2022-03-23	11:48:10	56.0	69.2	56.6	55.9
133	2022-03-23	11:48:11	58.0	70.5	57.4	56.3
134	2022-03-23	11:48:12	62.0	74.1	61.1	57.4
135	2022-03-23	11:48:13	62.7	75.2	62.1	61.1
136	2022-03-23	11:48:14	62.8	74.8	62.9	62.1
137	2022-03-23	11:48:15	63.0	76.0	63.0	62.2
138	2022-03-23	11:48:16	63.5	75.1	63.5	63.1
139	2022-03-23	11:48:17	62.5	74.0	63.3	62.7
140	2022-03-23	11:48:18	59.9	72.2	62.7	61.1
141	2022-03-23	11:48:19	62.3	75.1	62.1	60.9
142	2022-03-23	11:48:20	60.4	73.7	62.1	61.1
143	2022-03-23	11:48:21	58.3	70.8	61.0	59.5
144	2022-03-23	11:48:22	57.7	69.7	59.5	58.4
145	2022-03-23	11:48:23	57.4	69.2	58.4	57.7
146	2022-03-23	11:48:24	55.5	67.8	57.8	56.5
147	2022-03-23	11:48:25	55.3	69.7	56.8	55.7
148	2022-03-23	11:48:26	55.1	67.7	55.7	55.3
149	2022-03-23	11:48:27	54.3	65.4	55.3	54.7
150	2022-03-23	11:48:28	54.3	66.5	54.8	54.3
151	2022-03-23	11:48:29	54.1	67.8	54.4	54.2
152	2022-03-23	11:48:30	54.0	66.0	54.2	53.9
153	2022-03-23	11:48:31	54.2	67.2	54.3	54.1
154	2022-03-23	11:48:32	53.4	64.0	54.2	53.6
155	2022-03-23	11:48:33	53.3	65.4	53.7	53.4
156	2022-03-23	11:48:34	53.0	64.8	53.4	53.1
157	2022-03-23	11:48:35	52.8	65.4	53.2	52.9
158	2022-03-23	11:48:36	52.7	74.6	52.9	52.7
159	2022-03-23	11:48:37	52.1	64.0	52.8	52.4
160	2022-03-23	11:48:38	52.7	64.6	52.7	52.3
161	2022-03-23	11:48:39	54.8	68.1	54.1	52.7
162	2022-03-23	11:48:40	53.3	65.1	54.1	53.6
163	2022-03-23	11:48:41	53.9	67.4	54.0	53.6
164	2022-03-23	11:48:42	52.6	65.0	53.8	53.0
165	2022-03-23	11:48:43	52.4	65.1	53.0	52.6
166	2022-03-23	11:48:44	52.6	63.7	52.7	52.6
167	2022-03-23	11:48:45	52.4	64.5	52.6	52.4
168	2022-03-23	11:48:46	53.3	66.5	53.1	52.4
169	2022-03-23	11:48:47	52.7	64.9	53.1	52.8
170	2022-03-23	11:48:48	52.2	64.9	52.8	52.4
171	2022-03-23	11:48:49	53.3	65.4	53.0	52.4
172	2022-03-23	11:48:50	53.9	66.6	53.6	53.0
173	2022-03-23	11:48:51	56.6	69.5	55.9	53.7
174	2022-03-23	11:48:52	61.0	74.4	59.9	56.0
175	2022-03-23	11:48:53	58.7	72.0	60.0	59.1
176	2022-03-23	11:48:54	58.1	70.5	59.0	58.5
177	2022-03-23	11:48:55	56.3	69.3	58.5	57.2
178	2022-03-23	11:48:56	55.0	68.1	57.2	55.9
179	2022-03-23	11:48:57	53.2	65.7	55.9	54.3
180	2022-03-23	11:48:58	52.3	64.0	54.3	53.1
181	2022-03-23	11:48:59	51.7	65.1	53.1	52.3

182	2022-03-23	11:49:00	52.0	65.3	52.4	52.0
183	2022-03-23	11:49:01	51.5	63.3	52.0	51.7
184	2022-03-23	11:49:02	52.0	64.5	52.0	51.7
185	2022-03-23	11:49:03	51.9	64.5	52.0	51.9
186	2022-03-23	11:49:04	52.5	65.3	52.3	51.9
187	2022-03-23	11:49:05	53.1	66.6	52.8	52.3
188	2022-03-23	11:49:06	53.4	66.5	53.2	52.8
189	2022-03-23	11:49:07	53.7	65.9	53.6	53.2
190	2022-03-23	11:49:08	53.3	65.2	53.5	53.4
191	2022-03-23	11:49:09	53.8	65.6	53.7	53.3
192	2022-03-23	11:49:10	56.4	68.7	55.8	53.8
193	2022-03-23	11:49:11	60.4	73.6	59.4	55.8
194	2022-03-23	11:49:12	59.3	72.6	59.9	59.2
195	2022-03-23	11:49:13	56.2	72.7	59.2	57.4
196	2022-03-23	11:49:14	53.4	68.1	57.4	55.3
197	2022-03-23	11:49:15	52.5	65.8	55.3	53.7
198	2022-03-23	11:49:16	52.5	64.0	53.7	53.0
199	2022-03-23	11:49:17	53.1	64.7	53.1	52.8
200	2022-03-23	11:49:18	53.1	65.8	53.2	53.0
201	2022-03-23	11:49:19	54.1	65.6	53.7	53.2
202	2022-03-23	11:49:20	54.6	66.8	54.3	53.7
203	2022-03-23	11:49:21	55.3	69.5	55.1	54.3
204	2022-03-23	11:49:22	57.9	70.7	57.0	55.1
205	2022-03-23	11:49:23	59.0	75.0	58.6	57.0
206	2022-03-23	11:49:24	59.1	71.6	59.1	58.4
207	2022-03-23	11:49:25	62.1	74.3	61.4	59.1
208	2022-03-23	11:49:26	62.3	74.9	62.1	61.4
209	2022-03-23	11:49:27	58.9	69.6	61.8	60.2
210	2022-03-23	11:49:28	60.9	73.9	60.9	59.8
211	2022-03-23	11:49:29	63.2	75.1	62.5	60.9
212	2022-03-23	11:49:30	64.7	76.0	64.0	62.5
213	2022-03-23	11:49:31	66.1	77.5	65.5	63.9
214	2022-03-23	11:49:32	67.3	80.7	66.8	65.5
215	2022-03-23	11:49:33	67.0	79.0	67.2	66.6
216	2022-03-23	11:49:34	65.6	77.6	66.8	66.1
217	2022-03-23	11:49:35	69.3	83.3	68.4	66.0
218	2022-03-23	11:49:36	69.2	82.3	69.1	68.2
219	2022-03-23	11:49:37	72.0	86.6	71.3	69.1
220	2022-03-23	11:49:38	73.6	87.3	73.0	71.3
221	2022-03-23	11:49:39	75.5	89.6	74.8	73.0
222	2022-03-23	11:49:40	79.5	93.3	78.5	74.8
223	2022-03-23	11:49:41	78.3	91.6	78.7	78.2
224	2022-03-23	11:49:42	75.5	89.5	78.2	76.6
225	2022-03-23	11:49:43	72.9	86.4	76.6	74.6
226	2022-03-23	11:49:44	71.7	84.6	74.5	72.9
227	2022-03-23	11:49:45	68.0	82.5	72.9	70.3
228	2022-03-23	11:49:46	64.8	78.5	70.3	67.7
229	2022-03-23	11:49:47	63.0	78.1	67.7	65.4
230	2022-03-23	11:49:48	61.1	77.6	65.4	63.1
231	2022-03-23	11:49:49	58.1	71.4	63.1	60.6
232	2022-03-23	11:49:50	59.8	76.2	60.6	60.0
233	2022-03-23	11:49:51	59.5	74.3	60.2	59.7
234	2022-03-23	11:49:52	54.3	66.6	59.7	57.1
235	2022-03-23	11:49:53	55.1	68.6	57.1	55.8
236	2022-03-23	11:49:54	54.7	66.6	55.9	55.1
237	2022-03-23	11:49:55	53.4	67.0	55.2	54.1
238	2022-03-23	11:49:56	52.8	65.2	54.1	53.3
239	2022-03-23	11:49:57	52.8	65.4	53.3	52.8
240	2022-03-23	11:49:58	53.3	66.2	53.3	52.9
241	2022-03-23	11:49:59	53.5	65.8	53.5	53.1
242	2022-03-23	11:50:00	55.3	68.1	54.9	53.5

243	2022-03-23	11:50:01	58.7	70.9	57.7	54.9
244	2022-03-23	11:50:02	60.3	72.8	59.5	57.7
245	2022-03-23	11:50:03	57.1	70.4	59.6	58.1
246	2022-03-23	11:50:04	55.2	66.4	58.0	56.5
247	2022-03-23	11:50:05	53.8	65.7	56.5	55.0
248	2022-03-23	11:50:06	53.0	66.3	55.0	53.8
249	2022-03-23	11:50:07	52.5	64.6	53.8	53.0
250	2022-03-23	11:50:08	52.1	66.6	53.0	52.4
251	2022-03-23	11:50:09	51.5	63.0	52.4	51.8
252	2022-03-23	11:50:10	52.2	65.6	52.1	51.8
253	2022-03-23	11:50:11	51.8	63.4	52.1	51.9
254	2022-03-23	11:50:12	51.4	63.4	51.9	51.6
255	2022-03-23	11:50:13	51.4	63.9	51.7	51.5
256	2022-03-23	11:50:14	51.2	62.5	51.5	51.3
257	2022-03-23	11:50:15	51.8	64.8	51.7	51.3
258	2022-03-23	11:50:16	52.1	64.2	52.0	51.6
259	2022-03-23	11:50:17	52.7	65.5	52.5	52.0
260	2022-03-23	11:50:18	52.5	64.6	52.5	52.4
261	2022-03-23	11:50:19	52.9	64.9	52.8	52.5
262	2022-03-23	11:50:20	53.1	65.1	53.0	52.8
263	2022-03-23	11:50:21	53.9	65.6	53.6	53.0
264	2022-03-23	11:50:22	53.6	65.3	53.8	53.5
265	2022-03-23	11:50:23	53.9	67.0	53.7	53.5
266	2022-03-23	11:50:24	53.3	65.1	53.7	53.5
267	2022-03-23	11:50:25	53.2	67.6	53.5	53.3
268	2022-03-23	11:50:26	53.0	65.9	53.3	53.1
269	2022-03-23	11:50:27	52.3	64.4	53.1	52.6
270	2022-03-23	11:50:28	52.2	64.0	52.6	52.3
271	2022-03-23	11:50:29	52.4	64.2	52.4	52.2
272	2022-03-23	11:50:30	53.3	64.8	53.1	52.4
273	2022-03-23	11:50:31	55.6	68.8	55.0	53.1
274	2022-03-23	11:50:32	60.6	75.8	59.6	55.0
275	2022-03-23	11:50:33	60.2	74.1	60.5	59.6
276	2022-03-23	11:50:34	56.2	71.2	59.6	57.7
277	2022-03-23	11:50:35	53.5	66.6	57.7	55.6
278	2022-03-23	11:50:36	52.5	63.6	55.6	53.9
279	2022-03-23	11:50:37	52.3	63.5	53.9	52.9
280	2022-03-23	11:50:38	52.2	64.7	52.9	52.4
281	2022-03-23	11:50:39	52.3	64.8	52.5	52.3
282	2022-03-23	11:50:40	52.9	68.2	52.7	52.4
283	2022-03-23	11:50:41	52.4	64.5	52.8	52.5
284	2022-03-23	11:50:42	52.3	65.1	52.5	52.3
285	2022-03-23	11:50:43	52.5	65.8	52.5	52.4
286	2022-03-23	11:50:44	52.5	63.7	52.5	52.4
287	2022-03-23	11:50:45	53.2	76.7	53.0	52.5
288	2022-03-23	11:50:46	53.4	66.2	53.3	53.0
289	2022-03-23	11:50:47	52.7	64.9	53.3	52.9
290	2022-03-23	11:50:48	53.6	72.8	53.6	52.9
291	2022-03-23	11:50:49	52.9	64.2	53.3	53.0
292	2022-03-23	11:50:50	53.6	66.7	53.6	53.2
293	2022-03-23	11:50:51	52.6	64.8	53.4	52.9
294	2022-03-23	11:50:52	52.6	64.9	52.9	52.7
295	2022-03-23	11:50:53	52.9	65.3	52.9	52.7
296	2022-03-23	11:50:54	53.7	73.6	53.5	52.8
297	2022-03-23	11:50:55	53.0	64.8	53.4	53.2
298	2022-03-23	11:50:56	52.7	64.6	53.2	52.8
299	2022-03-23	11:50:57	53.2	65.3	53.2	52.8
300	2022-03-23	11:50:58	53.2	65.7	53.3	53.1
301	2022-03-23	11:50:59	52.6	64.2	53.1	52.8
302	2022-03-23	11:51:00	52.8	66.0	52.9	52.7
303	2022-03-23	11:51:01	52.8	65.3	52.9	52.7

304	2022-03-23	11:51:02	52.9	64.0	52.9	52.7
305	2022-03-23	11:51:03	53.0	66.1	53.1	52.8
306	2022-03-23	11:51:04	53.9	74.5	53.9	53.0
307	2022-03-23	11:51:05	52.6	64.6	53.5	52.9
308	2022-03-23	11:51:06	52.6	64.1	53.0	52.7
309	2022-03-23	11:51:07	52.2	64.2	52.7	52.4
310	2022-03-23	11:51:08	52.4	65.0	52.4	52.4
311	2022-03-23	11:51:09	52.7	63.5	52.6	52.4
312	2022-03-23	11:51:10	52.5	67.0	52.6	52.5
313	2022-03-23	11:51:11	53.0	66.1	52.8	52.6
314	2022-03-23	11:51:12	54.0	66.7	53.7	52.8
315	2022-03-23	11:51:13	58.4	71.5	57.6	53.7
316	2022-03-23	11:51:14	63.9	79.4	62.7	57.7
317	2022-03-23	11:51:15	60.7	73.9	62.7	61.5
318	2022-03-23	11:51:16	56.7	69.7	61.5	59.0
319	2022-03-23	11:51:17	54.5	72.5	59.0	56.7
320	2022-03-23	11:51:18	53.7	65.9	56.7	55.1
321	2022-03-23	11:51:19	53.8	65.8	55.1	54.3
322	2022-03-23	11:51:20	52.9	69.3	54.3	53.5
323	2022-03-23	11:51:21	53.2	65.3	53.6	53.3
324	2022-03-23	11:51:22	52.9	64.1	53.3	53.0
325	2022-03-23	11:51:23	53.2	66.8	53.1	52.9
326	2022-03-23	11:51:24	54.8	67.9	54.4	53.2
327	2022-03-23	11:51:25	57.9	69.7	57.1	54.4
328	2022-03-23	11:51:26	60.5	74.5	59.7	57.1
329	2022-03-23	11:51:27	57.9	70.2	59.7	58.6
330	2022-03-23	11:51:28	56.4	70.6	58.6	57.3
331	2022-03-23	11:51:29	53.4	64.8	57.3	55.2
332	2022-03-23	11:51:30	52.8	66.4	55.2	53.9
333	2022-03-23	11:51:31	53.5	66.2	53.9	53.5
334	2022-03-23	11:51:32	53.7	66.9	53.8	53.6
335	2022-03-23	11:51:33	52.7	64.6	53.7	53.1
336	2022-03-23	11:51:34	53.1	64.4	53.1	53.0
337	2022-03-23	11:51:35	54.2	67.4	53.8	53.1
338	2022-03-23	11:51:36	54.6	66.1	54.3	53.8
339	2022-03-23	11:51:37	54.7	67.7	54.6	54.2
340	2022-03-23	11:51:38	55.0	66.6	54.9	54.7
341	2022-03-23	11:51:39	56.4	69.0	56.0	54.9
342	2022-03-23	11:51:40	58.6	70.4	58.0	56.0
343	2022-03-23	11:51:41	63.0	75.0	62.1	58.1
344	2022-03-23	11:51:42	70.6	84.2	69.2	62.2
345	2022-03-23	11:51:43	73.0	84.3	72.0	69.2
346	2022-03-23	11:51:44	75.6	88.2	75.2	72.0
347	2022-03-23	11:51:45	64.9	77.8	74.1	70.5
348	2022-03-23	11:51:46	60.7	72.3	70.5	67.0
349	2022-03-23	11:51:47	61.0	73.5	66.9	64.2
350	2022-03-23	11:51:48	61.3	73.3	64.2	62.6
351	2022-03-23	11:51:49	62.9	76.0	62.8	62.5
352	2022-03-23	11:51:50	62.5	74.1	62.9	62.5
353	2022-03-23	11:51:51	62.0	73.8	62.7	62.1
354	2022-03-23	11:51:52	61.1	78.5	62.2	61.4
355	2022-03-23	11:51:53	60.0	71.2	61.4	60.5
356	2022-03-23	11:51:54	58.1	69.8	60.5	59.1
357	2022-03-23	11:51:55	57.4	69.8	59.1	58.1
358	2022-03-23	11:51:56	56.9	68.4	58.1	57.4
359	2022-03-23	11:51:57	56.7	68.4	57.4	56.9
360	2022-03-23	11:51:58	57.5	84.1	57.8	56.4
361	2022-03-23	11:51:59	55.1	67.0	57.5	56.1
362	2022-03-23	11:52:00	56.0	68.2	56.3	56.0
363	2022-03-23	11:52:01	53.9	67.1	56.0	54.8
364	2022-03-23	11:52:02	52.5	64.6	54.8	53.5

365	2022-03-23	11:52:03	51.9	63.0	53.5	52.5
366	2022-03-23	11:52:04	51.5	62.6	52.5	51.8
367	2022-03-23	11:52:05	51.4	64.2	52.0	51.5
368	2022-03-23	11:52:06	52.0	64.8	51.9	51.5
369	2022-03-23	11:52:07	52.3	64.3	52.1	51.9
370	2022-03-23	11:52:08	52.2	63.8	52.2	52.1
371	2022-03-23	11:52:09	52.0	64.6	52.2	52.0
372	2022-03-23	11:52:10	52.0	64.9	52.1	52.0
373	2022-03-23	11:52:11	52.4	64.3	52.3	52.0
374	2022-03-23	11:52:12	52.6	65.3	52.6	52.3
375	2022-03-23	11:52:13	53.2	65.3	52.9	52.4
376	2022-03-23	11:52:14	53.1	65.0	53.1	52.8
377	2022-03-23	11:52:15	51.8	65.1	53.0	52.2
378	2022-03-23	11:52:16	51.3	63.7	52.3	51.7
379	2022-03-23	11:52:17	51.3	62.6	51.7	51.4
380	2022-03-23	11:52:18	51.0	63.5	51.4	51.1
381	2022-03-23	11:52:19	51.4	64.3	51.3	51.2
382	2022-03-23	11:52:20	51.3	64.1	51.4	51.3
383	2022-03-23	11:52:21	51.7	63.9	51.6	51.3
384	2022-03-23	11:52:22	52.5	65.4	52.3	51.5
385	2022-03-23	11:52:23	52.9	66.8	52.7	52.2
386	2022-03-23	11:52:24	51.7	62.9	52.6	52.1
387	2022-03-23	11:52:25	51.6	63.6	52.1	51.8
388	2022-03-23	11:52:26	52.9	78.1	52.9	51.7
389	2022-03-23	11:52:27	52.0	64.3	52.3	52.1
390	2022-03-23	11:52:28	52.4	64.3	52.4	52.2
391	2022-03-23	11:52:29	52.2	65.4	52.5	52.2
392	2022-03-23	11:52:30	51.9	63.5	52.2	51.9
393	2022-03-23	11:52:31	51.9	65.1	52.0	51.9
394	2022-03-23	11:52:32	52.1	64.0	52.2	51.8
395	2022-03-23	11:52:33	51.5	62.9	51.9	51.6
396	2022-03-23	11:52:34	51.7	63.0	51.8	51.6
397	2022-03-23	11:52:35	51.4	63.8	51.7	51.5
398	2022-03-23	11:52:36	51.1	62.6	51.5	51.2
399	2022-03-23	11:52:37	51.2	63.2	51.3	51.2
400	2022-03-23	11:52:38	51.4	64.4	51.4	51.2
401	2022-03-23	11:52:39	51.5	63.1	51.4	51.3
402	2022-03-23	11:52:40	51.2	62.9	51.5	51.2
403	2022-03-23	11:52:41	51.6	64.2	51.5	51.2
404	2022-03-23	11:52:42	50.8	61.8	51.5	51.1
405	2022-03-23	11:52:43	51.2	62.8	51.2	51.1
406	2022-03-23	11:52:44	51.4	63.2	51.3	51.2
407	2022-03-23	11:52:45	51.7	64.6	51.6	51.3
408	2022-03-23	11:52:46	52.3	64.6	52.1	51.6
409	2022-03-23	11:52:47	52.5	64.1	52.4	52.0
410	2022-03-23	11:52:48	53.3	65.0	53.0	52.4
411	2022-03-23	11:52:49	53.7	65.7	53.5	53.0
412	2022-03-23	11:52:50	54.3	71.3	54.1	53.4
413	2022-03-23	11:52:51	54.6	66.7	54.6	54.2
414	2022-03-23	11:52:52	53.8	65.3	54.4	54.0
415	2022-03-23	11:52:53	53.2	65.5	54.0	53.5
416	2022-03-23	11:52:54	52.9	64.1	53.5	53.1
417	2022-03-23	11:52:55	52.6	64.9	53.1	52.8
418	2022-03-23	11:52:56	52.4	64.4	52.8	52.5
419	2022-03-23	11:52:57	52.1	66.5	52.7	52.2
420	2022-03-23	11:52:58	51.7	63.3	52.2	51.9
421	2022-03-23	11:52:59	51.4	62.9	51.9	51.6
422	2022-03-23	11:53:00	51.6	63.3	51.7	51.6
423	2022-03-23	11:53:01	51.2	63.2	51.7	51.4
424	2022-03-23	11:53:02	51.4	64.9	51.5	51.2
425	2022-03-23	11:53:03	51.5	65.3	51.8	51.4

426	2022-03-23	11:53:04	54.9	84.4	54.6	51.4
427	2022-03-23	11:53:05	52.8	66.1	53.5	53.0
428	2022-03-23	11:53:06	52.1	65.7	53.2	52.4
429	2022-03-23	11:53:07	51.7	64.6	52.4	52.0
430	2022-03-23	11:53:08	51.2	63.8	52.0	51.5
431	2022-03-23	11:53:09	52.1	72.1	52.1	51.3
432	2022-03-23	11:53:10	51.3	65.0	52.1	51.6
433	2022-03-23	11:53:11	51.7	63.5	51.7	51.5
434	2022-03-23	11:53:12	51.8	66.0	51.8	51.6
435	2022-03-23	11:53:13	51.4	64.7	51.7	51.5
436	2022-03-23	11:53:14	51.9	63.0	51.9	51.5
437	2022-03-23	11:53:15	52.7	68.3	52.5	51.8
438	2022-03-23	11:53:16	54.2	67.1	53.8	52.5
439	2022-03-23	11:53:17	54.9	66.9	54.4	53.8
440	2022-03-23	11:53:18	54.6	67.8	54.6	54.4
441	2022-03-23	11:53:19	54.7	65.9	54.7	54.5
442	2022-03-23	11:53:20	56.3	68.5	55.9	54.7
443	2022-03-23	11:53:21	61.9	75.9	60.9	55.9
444	2022-03-23	11:53:22	62.7	75.0	62.5	61.0
445	2022-03-23	11:53:23	58.2	70.9	61.7	59.7
446	2022-03-23	11:53:24	53.5	66.7	59.7	56.9
447	2022-03-23	11:53:25	53.2	64.9	56.9	55.0
448	2022-03-23	11:53:26	53.5	65.9	55.0	54.1
449	2022-03-23	11:53:27	54.7	67.5	54.6	53.9
450	2022-03-23	11:53:28	57.7	69.8	57.1	54.6
451	2022-03-23	11:53:29	61.4	73.0	60.2	57.1
452	2022-03-23	11:53:30	59.9	72.8	60.2	60.0
453	2022-03-23	11:53:31	58.3	69.6	60.1	59.0
454	2022-03-23	11:53:32	54.8	70.6	59.0	56.8
455	2022-03-23	11:53:33	52.8	65.8	56.8	54.8
456	2022-03-23	11:53:34	52.5	64.9	54.7	53.6
457	2022-03-23	11:53:35	52.7	65.2	53.6	53.1
458	2022-03-23	11:53:36	53.7	67.3	53.6	53.1
459	2022-03-23	11:53:37	53.7	65.4	53.7	53.5
460	2022-03-23	11:53:38	55.0	67.0	54.7	53.7
461	2022-03-23	11:53:39	57.8	70.3	57.1	54.7
462	2022-03-23	11:53:40	61.7	74.4	60.7	57.1
463	2022-03-23	11:53:41	66.2	79.4	65.1	60.8
464	2022-03-23	11:53:42	67.2	79.4	66.4	65.1
465	2022-03-23	11:53:43	65.9	78.3	66.7	66.0
466	2022-03-23	11:53:44	65.1	76.5	66.0	65.4
467	2022-03-23	11:53:45	60.6	73.4	65.5	63.0
468	2022-03-23	11:53:46	56.0	69.6	63.0	59.9
469	2022-03-23	11:53:47	53.9	65.7	59.9	57.1
470	2022-03-23	11:53:48	53.4	65.4	57.1	55.2
471	2022-03-23	11:53:49	56.0	70.5	55.8	55.1
472	2022-03-23	11:53:50	57.7	70.5	57.3	55.8
473	2022-03-23	11:53:51	56.9	68.1	57.4	57.0
474	2022-03-23	11:53:52	55.9	69.6	57.0	56.3
475	2022-03-23	11:53:53	54.1	67.0	56.3	55.0
476	2022-03-23	11:53:54	53.2	66.7	55.0	53.9
477	2022-03-23	11:53:55	52.9	65.7	53.9	53.3
478	2022-03-23	11:53:56	51.6	62.8	53.3	52.3
479	2022-03-23	11:53:57	51.4	64.4	52.3	51.7
480	2022-03-23	11:53:58	52.8	66.7	52.6	51.8
481	2022-03-23	11:53:59	51.5	63.8	52.4	51.8
482	2022-03-23	11:54:00	51.6	64.0	51.9	51.7
483	2022-03-23	11:54:01	51.5	67.3	51.7	51.5
484	2022-03-23	11:54:02	51.0	62.9	51.5	51.2
485	2022-03-23	11:54:03	50.8	61.9	51.2	51.0
486	2022-03-23	11:54:04	51.1	62.9	51.1	50.9

487	2022-03-23	11:54:05	51.6	67.6	51.4	51.0
488	2022-03-23	11:54:06	51.3	63.0	51.4	51.2
489	2022-03-23	11:54:07	51.2	64.1	51.5	51.2
490	2022-03-23	11:54:08	51.0	62.6	51.3	51.0
491	2022-03-23	11:54:09	50.9	64.0	51.1	50.9
492	2022-03-23	11:54:10	51.1	63.0	51.1	51.0
493	2022-03-23	11:54:11	51.3	62.9	51.2	51.0
494	2022-03-23	11:54:12	51.4	62.8	51.3	51.1
495	2022-03-23	11:54:13	51.4	64.5	51.5	51.3
496	2022-03-23	11:54:14	50.8	62.4	51.4	51.0
497	2022-03-23	11:54:15	51.6	63.4	51.5	51.0
498	2022-03-23	11:54:16	51.8	65.7	51.9	51.4
499	2022-03-23	11:54:17	50.7	62.5	51.5	51.0
500	2022-03-23	11:54:18	51.0	63.2	51.1	50.9
501	2022-03-23	11:54:19	51.0	63.5	51.1	50.9
502	2022-03-23	11:54:20	52.5	66.9	52.1	51.0
503	2022-03-23	11:54:21	52.4	65.7	52.5	51.8
504	2022-03-23	11:54:22	50.9	63.5	52.3	51.5
505	2022-03-23	11:54:23	50.7	62.6	51.5	50.9
506	2022-03-23	11:54:24	50.8	62.4	50.9	50.8
507	2022-03-23	11:54:25	50.8	63.5	50.9	50.7
508	2022-03-23	11:54:26	51.0	63.0	51.0	50.8
509	2022-03-23	11:54:27	50.5	63.1	50.9	50.6
510	2022-03-23	11:54:28	50.8	64.3	50.8	50.7
511	2022-03-23	11:54:29	51.0	64.1	50.9	50.7
512	2022-03-23	11:54:30	51.1	63.3	51.1	50.9
513	2022-03-23	11:54:31	51.5	63.1	51.4	51.1
514	2022-03-23	11:54:32	51.6	63.1	51.5	51.3
515	2022-03-23	11:54:33	51.9	63.5	51.8	51.5
516	2022-03-23	11:54:34	52.0	63.7	52.0	51.6
517	2022-03-23	11:54:35	52.0	65.1	52.1	51.9
518	2022-03-23	11:54:36	52.1	64.0	52.1	52.0
519	2022-03-23	11:54:37	52.3	65.4	52.3	52.0
520	2022-03-23	11:54:38	52.9	66.1	52.7	52.3
521	2022-03-23	11:54:39	53.8	66.0	53.6	52.6
522	2022-03-23	11:54:40	56.2	66.9	55.4	53.6
523	2022-03-23	11:54:41	58.0	71.3	57.2	55.5
524	2022-03-23	11:54:42	56.5	68.2	57.3	56.8
525	2022-03-23	11:54:43	58.6	72.5	58.1	56.7
526	2022-03-23	11:54:44	60.0	73.6	59.6	58.0
527	2022-03-23	11:54:45	62.5	74.9	61.6	59.7
528	2022-03-23	11:54:46	62.5	75.3	62.3	61.6
529	2022-03-23	11:54:47	63.7	77.1	63.4	62.0
530	2022-03-23	11:54:48	66.2	77.9	65.3	63.4
531	2022-03-23	11:54:49	67.9	80.4	67.4	65.3
532	2022-03-23	11:54:50	71.5	82.9	70.4	67.5
533	2022-03-23	11:54:51	68.8	81.2	70.4	69.2
534	2022-03-23	11:54:52	68.8	82.2	69.2	68.9
535	2022-03-23	11:54:53	69.3	82.8	69.3	69.0
536	2022-03-23	11:54:54	73.3	87.2	72.4	69.2
537	2022-03-23	11:54:55	74.3	86.0	73.8	72.5
538	2022-03-23	11:54:56	75.2	86.3	74.9	73.8
539	2022-03-23	11:54:57	77.5	91.3	76.8	75.0
540	2022-03-23	11:54:58	83.1	97.0	82.1	76.8
541	2022-03-23	11:54:59	85.5	100.3	84.8	82.1
542	2022-03-23	11:55:00	88.7	101.0	87.5	84.8
543	2022-03-23	11:55:01	86.3	99.3	87.8	86.5
544	2022-03-23	11:55:02	81.3	94.2	86.4	83.9
545	2022-03-23	11:55:03	78.1	89.4	83.9	81.1
546	2022-03-23	11:55:04	72.8	83.0	81.1	77.8
547	2022-03-23	11:55:05	71.4	81.7	77.8	74.9

548	2022-03-23	11:55:06	68.4	79.6	74.9	71.9
549	2022-03-23	11:55:07	64.4	76.8	71.9	68.8
550	2022-03-23	11:55:08	61.7	74.9	68.8	65.7
551	2022-03-23	11:55:09	60.6	72.9	65.7	63.3
552	2022-03-23	11:55:10	60.0	71.8	63.3	61.5
553	2022-03-23	11:55:11	60.9	72.8	61.5	60.9
554	2022-03-23	11:55:12	61.3	73.8	61.6	61.2
555	2022-03-23	11:55:13	59.5	71.4	61.2	60.1
556	2022-03-23	11:55:14	60.0	72.9	60.2	59.6
557	2022-03-23	11:55:15	60.2	70.3	60.3	60.1
558	2022-03-23	11:55:16	58.5	70.2	60.2	59.1
559	2022-03-23	11:55:17	58.5	70.2	59.1	58.7
560	2022-03-23	11:55:18	58.9	70.4	59.3	58.6
561	2022-03-23	11:55:19	55.4	67.8	58.6	56.8
562	2022-03-23	11:55:20	55.9	67.8	56.8	56.2
563	2022-03-23	11:55:21	55.5	67.4	56.4	55.9
564	2022-03-23	11:55:22	56.1	67.0	56.1	55.7
565	2022-03-23	11:55:23	56.7	68.4	56.7	56.1
566	2022-03-23	11:55:24	55.0	66.5	56.3	55.6
567	2022-03-23	11:55:25	56.1	67.6	56.0	55.5
568	2022-03-23	11:55:26	56.9	69.1	56.8	55.8
569	2022-03-23	11:55:27	57.6	70.0	57.6	56.8
570	2022-03-23	11:55:28	56.2	68.3	57.1	56.6
571	2022-03-23	11:55:29	56.7	68.5	56.7	56.5
572	2022-03-23	11:55:30	56.9	69.4	56.9	56.6
573	2022-03-23	11:55:31	57.9	69.2	57.6	56.9
574	2022-03-23	11:55:32	59.8	71.7	59.0	57.6
575	2022-03-23	11:55:33	59.2	71.1	59.2	58.9
576	2022-03-23	11:55:34	59.5	71.0	59.5	59.2
577	2022-03-23	11:55:35	59.5	71.3	59.5	59.2
578	2022-03-23	11:55:36	62.3	75.3	61.7	59.4
579	2022-03-23	11:55:37	63.0	75.5	62.5	61.7
580	2022-03-23	11:55:38	63.2	75.8	63.1	62.5
581	2022-03-23	11:55:39	62.8	74.9	63.0	62.7
582	2022-03-23	11:55:40	59.7	71.7	62.7	61.1
583	2022-03-23	11:55:41	61.8	74.7	61.8	60.7
584	2022-03-23	11:55:42	63.4	76.3	62.9	61.7
585	2022-03-23	11:55:43	62.0	74.7	62.8	62.0
586	2022-03-23	11:55:44	64.8	76.0	63.9	62.4
587	2022-03-23	11:55:45	64.3	77.8	64.4	63.8
588	2022-03-23	11:55:46	60.2	73.8	64.2	62.0
589	2022-03-23	11:55:47	59.0	72.9	61.9	60.3
590	2022-03-23	11:55:48	59.4	74.8	60.3	59.5
591	2022-03-23	11:55:49	64.3	80.0	63.1	60.1
592	2022-03-23	11:55:50	59.4	71.2	62.9	61.1
593	2022-03-23	11:55:51	61.4	74.1	61.4	61.1
594	2022-03-23	11:55:52	57.5	70.5	61.1	59.1
595	2022-03-23	11:55:53	56.7	68.9	59.1	57.6
596	2022-03-23	11:55:54	57.0	71.0	57.6	57.1
597	2022-03-23	11:55:55	58.9	71.3	58.6	57.4
598	2022-03-23	11:55:56	60.9	73.3	60.1	58.6
599	2022-03-23	11:55:57	56.8	69.3	60.0	58.2
600	2022-03-23	11:55:58	55.7	67.3	58.2	56.8
601	2022-03-23	11:55:59	56.1	67.9	56.8	56.4
602	2022-03-23	11:56:00	56.3	69.1	56.5	56.2
603	2022-03-23	11:56:01	57.4	70.0	57.2	56.3
604	2022-03-23	11:56:02	59.5	71.9	58.9	57.2
605	2022-03-23	11:56:03	57.7	69.3	58.9	58.1
606	2022-03-23	11:56:04	58.4	69.6	58.4	58.2
607	2022-03-23	11:56:05	59.8	71.3	59.3	58.3
608	2022-03-23	11:56:06	60.4	73.3	60.2	59.3

609	2022-03-23	11:56:07	62.6	74.0	61.7	60.2
610	2022-03-23	11:56:08	64.9	77.3	64.3	61.7
611	2022-03-23	11:56:09	68.1	81.9	67.0	64.3
612	2022-03-23	11:56:10	67.2	78.8	67.3	67.0
613	2022-03-23	11:56:11	65.8	77.9	67.1	66.2
614	2022-03-23	11:56:12	68.1	81.7	67.8	66.5
615	2022-03-23	11:56:13	67.3	81.0	67.8	67.3
616	2022-03-23	11:56:14	70.2	83.0	69.3	67.6
617	2022-03-23	11:56:15	70.9	83.3	70.2	69.3
618	2022-03-23	11:56:16	72.6	86.7	72.0	70.2
619	2022-03-23	11:56:17	73.1	87.1	73.0	71.9
620	2022-03-23	11:56:18	75.0	87.2	74.4	73.0
621	2022-03-23	11:56:19	76.3	91.0	75.8	74.4
622	2022-03-23	11:56:20	76.1	90.7	76.5	75.6
623	2022-03-23	11:56:21	66.7	82.9	75.6	72.1
624	2022-03-23	11:56:22	61.5	73.0	72.0	68.4
625	2022-03-23	11:56:23	59.7	72.9	68.4	65.0
626	2022-03-23	11:56:24	59.1	72.0	65.0	62.3
627	2022-03-23	11:56:25	57.5	70.2	62.2	60.0
628	2022-03-23	11:56:26	57.2	71.4	59.9	58.4
629	2022-03-23	11:56:27	57.0	68.3	58.4	57.5
630	2022-03-23	11:56:28	56.8	68.5	57.5	56.9
631	2022-03-23	11:56:29	56.3	69.0	57.2	56.6
632	2022-03-23	11:56:30	55.7	66.3	56.7	56.0
633	2022-03-23	11:56:31	55.7	72.1	56.0	55.7
634	2022-03-23	11:56:32	54.4	66.8	55.7	54.9
635	2022-03-23	11:56:33	53.6	65.7	54.9	54.2
636	2022-03-23	11:56:34	53.8	67.3	54.3	53.9
637	2022-03-23	11:56:35	52.7	65.2	54.0	53.2
638	2022-03-23	11:56:36	52.6	65.0	53.2	52.8
639	2022-03-23	11:56:37	52.3	64.3	52.8	52.5
640	2022-03-23	11:56:38	52.4	67.5	52.7	52.4
641	2022-03-23	11:56:39	51.4	62.7	52.4	51.8
642	2022-03-23	11:56:40	51.7	63.1	51.8	51.7
643	2022-03-23	11:56:41	51.5	67.8	51.7	51.6
644	2022-03-23	11:56:42	51.3	63.0	51.5	51.4
645	2022-03-23	11:56:43	51.6	65.0	51.6	51.3
646	2022-03-23	11:56:44	52.3	66.1	52.1	51.6
647	2022-03-23	11:56:45	52.2	65.3	52.3	52.0
648	2022-03-23	11:56:46	51.6	63.3	52.0	51.7
649	2022-03-23	11:56:47	52.4	66.1	52.2	51.6
650	2022-03-23	11:56:48	53.0	65.7	52.7	52.2
651	2022-03-23	11:56:49	53.1	65.9	53.0	52.7
652	2022-03-23	11:56:50	54.7	68.9	54.3	53.0
653	2022-03-23	11:56:51	61.6	75.6	60.5	54.4
654	2022-03-23	11:56:52	62.9	75.8	62.4	60.5
655	2022-03-23	11:56:53	58.1	71.0	61.8	59.8
656	2022-03-23	11:56:54	58.1	71.1	59.8	58.7
657	2022-03-23	11:56:55	59.8	72.2	59.7	59.0
658	2022-03-23	11:56:56	57.0	69.3	59.4	58.0
659	2022-03-23	11:56:57	55.4	67.3	58.0	56.5
660	2022-03-23	11:56:58	53.8	66.1	56.4	55.0
661	2022-03-23	11:56:59	53.1	64.3	54.9	53.9
662	2022-03-23	11:57:00	52.4	63.7	53.9	53.1
663	2022-03-23	11:57:01	53.0	64.9	53.1	53.0
664	2022-03-23	11:57:02	52.7	65.6	53.0	52.8
665	2022-03-23	11:57:03	51.8	63.2	52.8	52.1
666	2022-03-23	11:57:04	51.0	62.2	52.1	51.5
667	2022-03-23	11:57:05	51.1	64.6	51.5	51.3
668	2022-03-23	11:57:06	51.3	64.1	51.4	51.2
669	2022-03-23	11:57:07	51.8	70.2	51.7	51.3

670	2022-03-23	11:57:08	52.3	70.5	52.0	51.7
671	2022-03-23	11:57:09	53.1	64.6	52.8	52.0
672	2022-03-23	11:57:10	53.8	66.1	53.5	52.8
673	2022-03-23	11:57:11	54.9	66.8	54.5	53.5
674	2022-03-23	11:57:12	54.3	66.2	54.6	54.3
675	2022-03-23	11:57:13	54.3	65.6	54.4	54.2
676	2022-03-23	11:57:14	54.2	68.4	54.3	54.2
677	2022-03-23	11:57:15	54.0	65.6	54.2	54.0
678	2022-03-23	11:57:16	54.4	67.2	54.3	54.1
679	2022-03-23	11:57:17	54.5	66.8	54.5	54.3
680	2022-03-23	11:57:18	54.1	67.0	54.7	54.1
681	2022-03-23	11:57:19	53.7	66.0	54.1	53.8
682	2022-03-23	11:57:20	56.8	70.1	56.2	53.8
683	2022-03-23	11:57:21	59.4	71.0	58.5	56.2
684	2022-03-23	11:57:22	60.1	73.7	59.6	58.5
685	2022-03-23	11:57:23	54.6	67.2	59.4	57.0
686	2022-03-23	11:57:24	58.4	70.8	58.1	56.8
687	2022-03-23	11:57:25	61.8	74.0	60.7	58.1
688	2022-03-23	11:57:26	58.9	71.1	60.6	59.6
689	2022-03-23	11:57:27	56.7	69.2	59.6	57.9
690	2022-03-23	11:57:28	53.8	65.5	57.9	55.7
691	2022-03-23	11:57:29	52.5	64.6	55.7	54.0
692	2022-03-23	11:57:30	53.5	66.1	54.0	53.7
693	2022-03-23	11:57:31	55.1	66.9	54.8	53.8
694	2022-03-23	11:57:32	56.1	67.6	55.7	54.8
695	2022-03-23	11:57:33	56.5	67.6	56.2	55.7
696	2022-03-23	11:57:34	56.3	68.5	56.4	56.2
697	2022-03-23	11:57:35	55.4	67.6	56.2	55.8
698	2022-03-23	11:57:36	55.3	67.9	55.8	55.5
699	2022-03-23	11:57:37	55.6	68.0	55.6	55.4
700	2022-03-23	11:57:38	57.1	69.7	56.7	55.7
701	2022-03-23	11:57:39	59.7	72.1	59.0	56.7
702	2022-03-23	11:57:40	64.2	75.8	63.1	59.1
703	2022-03-23	11:57:41	65.0	78.8	64.6	63.1
704	2022-03-23	11:57:42	62.3	74.1	64.1	62.9
705	2022-03-23	11:57:43	61.1	73.2	62.9	61.9
706	2022-03-23	11:57:44	61.5	73.0	62.1	61.6
707	2022-03-23	11:57:45	60.7	72.2	61.6	61.0
708	2022-03-23	11:57:46	60.1	72.1	61.0	60.4
709	2022-03-23	11:57:47	63.2	75.3	62.6	60.4
710	2022-03-23	11:57:48	63.7	75.2	63.3	62.6
711	2022-03-23	11:57:49	66.7	77.2	65.8	63.3
712	2022-03-23	11:57:50	67.3	78.5	66.9	65.9
713	2022-03-23	11:57:51	69.6	80.5	68.7	66.9
714	2022-03-23	11:57:52	69.7	81.6	69.6	68.7
715	2022-03-23	11:57:53	68.0	80.5	69.0	68.4
716	2022-03-23	11:57:54	68.7	81.5	68.7	68.4
717	2022-03-23	11:57:55	72.0	86.8	71.4	68.7
718	2022-03-23	11:57:56	73.8	86.4	73.1	71.5
719	2022-03-23	11:57:57	75.2	87.8	74.6	73.2
720	2022-03-23	11:57:58	75.4	87.9	75.2	74.7
721	2022-03-23	11:57:59	76.7	90.6	76.5	75.0
722	2022-03-23	11:58:00	76.9	91.3	77.0	76.5
723	2022-03-23	11:58:01	75.1	88.7	76.6	75.7
724	2022-03-23	11:58:02	73.0	87.8	75.7	74.2
725	2022-03-23	11:58:03	69.9	83.5	74.2	72.1
726	2022-03-23	11:58:04	70.0	84.6	72.1	70.9
727	2022-03-23	11:58:05	68.8	84.8	70.9	69.7
728	2022-03-23	11:58:06	67.0	83.9	69.7	68.1
729	2022-03-23	11:58:07	64.5	77.8	68.1	66.2
730	2022-03-23	11:58:08	64.3	77.9	66.1	65.1

731	2022-03-23	11:58:09	63.5	77.9	65.3	64.0
732	2022-03-23	11:58:10	63.0	76.6	63.9	63.4
733	2022-03-23	11:58:11	64.1	79.6	64.1	63.3
734	2022-03-23	11:58:12	65.6	81.3	65.0	64.1
735	2022-03-23	11:58:13	63.0	77.0	65.0	63.7
736	2022-03-23	11:58:14	60.1	71.5	63.7	61.8
737	2022-03-23	11:58:15	61.6	77.6	61.9	61.2
738	2022-03-23	11:58:16	63.2	76.5	62.8	61.9
739	2022-03-23	11:58:17	59.5	72.0	62.8	60.9
740	2022-03-23	11:58:18	57.6	70.2	60.9	59.1
741	2022-03-23	11:58:19	59.5	73.8	59.5	59.0
742	2022-03-23	11:58:20	62.0	74.0	61.3	59.6
743	2022-03-23	11:58:21	59.7	73.8	61.1	60.3
744	2022-03-23	11:58:22	57.9	71.8	60.3	58.8
745	2022-03-23	11:58:23	62.2	78.3	61.6	59.1
746	2022-03-23	11:58:24	60.6	74.7	62.0	60.7
747	2022-03-23	11:58:25	57.6	71.4	60.7	58.8
748	2022-03-23	11:58:26	55.7	69.9	58.8	57.3
749	2022-03-23	11:58:27	54.9	67.4	57.3	55.9
750	2022-03-23	11:58:28	54.5	66.7	55.9	55.0
751	2022-03-23	11:58:29	55.1	69.7	55.6	54.9
752	2022-03-23	11:58:30	52.3	64.2	54.9	53.5
753	2022-03-23	11:58:31	54.7	67.9	54.4	53.4
754	2022-03-23	11:58:32	52.4	64.5	54.4	53.2
755	2022-03-23	11:58:33	51.6	62.7	53.2	52.3
756	2022-03-23	11:58:34	52.6	67.0	52.6	52.3
757	2022-03-23	11:58:35	55.6	69.2	54.8	52.6
758	2022-03-23	11:58:36	52.3	64.6	54.8	53.3
759	2022-03-23	11:58:37	51.8	63.9	53.3	52.4
760	2022-03-23	11:58:38	51.9	63.7	52.4	52.0
761	2022-03-23	11:58:39	51.6	63.3	52.2	51.8
762	2022-03-23	11:58:40	51.5	65.8	51.8	51.5
763	2022-03-23	11:58:41	51.5	65.9	51.7	51.4
764	2022-03-23	11:58:42	51.1	62.9	51.5	51.2
765	2022-03-23	11:58:43	51.5	63.4	51.5	51.3
766	2022-03-23	11:58:44	52.0	64.5	51.9	51.4
767	2022-03-23	11:58:45	51.6	63.3	51.9	51.7
768	2022-03-23	11:58:46	51.4	63.6	51.7	51.5
769	2022-03-23	11:58:47	51.4	64.9	51.6	51.4
770	2022-03-23	11:58:48	51.8	62.7	51.7	51.5
771	2022-03-23	11:58:49	51.8	65.8	51.8	51.6
772	2022-03-23	11:58:50	52.0	64.1	51.9	51.8
773	2022-03-23	11:58:51	51.9	63.3	51.9	51.8
774	2022-03-23	11:58:52	52.6	64.2	52.4	52.0
775	2022-03-23	11:58:53	53.2	67.3	53.0	52.4
776	2022-03-23	11:58:54	53.5	66.2	53.3	53.0
777	2022-03-23	11:58:55	54.7	66.5	54.3	53.3
778	2022-03-23	11:58:56	55.2	66.9	54.9	54.4
779	2022-03-23	11:58:57	57.0	68.6	56.4	54.8
780	2022-03-23	11:58:58	60.3	72.7	59.4	56.4
781	2022-03-23	11:58:59	62.3	76.8	61.5	59.4
782	2022-03-23	11:59:00	62.1	73.0	62.0	61.4
783	2022-03-23	11:59:01	63.6	76.1	63.3	62.0
784	2022-03-23	11:59:02	65.6	77.5	64.9	63.3
785	2022-03-23	11:59:03	62.9	75.3	64.9	63.7
786	2022-03-23	11:59:04	64.3	76.3	64.3	63.6
787	2022-03-23	11:59:05	64.9	76.8	64.8	63.9
788	2022-03-23	11:59:06	67.8	80.7	67.1	64.8
789	2022-03-23	11:59:07	68.7	82.2	68.2	67.2
790	2022-03-23	11:59:08	71.2	83.1	70.5	68.1
791	2022-03-23	11:59:09	71.2	82.8	71.0	70.5

792	2022-03-23	11:59:10	73.2	85.9	72.5	70.9
793	2022-03-23	11:59:11	73.9	89.1	73.6	72.5
794	2022-03-23	11:59:12	77.0	93.5	76.2	73.6
795	2022-03-23	11:59:13	78.9	92.6	78.1	76.2
796	2022-03-23	11:59:14	80.1	93.6	79.5	78.2
797	2022-03-23	11:59:15	78.6	91.8	79.5	79.0
798	2022-03-23	11:59:16	75.9	89.5	79.0	77.1
799	2022-03-23	11:59:17	73.2	85.0	77.1	75.1
800	2022-03-23	11:59:18	70.5	83.4	75.0	72.7
801	2022-03-23	11:59:19	67.5	81.2	72.7	70.2
802	2022-03-23	11:59:20	65.7	81.0	70.2	67.9
803	2022-03-23	11:59:21	64.9	77.0	67.9	66.4
804	2022-03-23	11:59:22	66.1	80.7	66.4	65.9
805	2022-03-23	11:59:23	64.2	78.2	66.3	65.0
806	2022-03-23	11:59:24	62.9	75.4	65.0	63.8
807	2022-03-23	11:59:25	65.4	78.6	64.9	63.8
808	2022-03-23	11:59:26	64.7	79.4	64.8	64.4
809	2022-03-23	11:59:27	60.9	73.9	64.7	62.7
810	2022-03-23	11:59:28	59.8	73.9	62.7	61.1
811	2022-03-23	11:59:29	62.6	78.1	62.5	60.7
812	2022-03-23	11:59:30	62.6	77.5	62.8	62.2
813	2022-03-23	11:59:31	59.5	72.4	62.6	60.8
814	2022-03-23	11:59:32	60.4	72.8	60.8	60.3
815	2022-03-23	11:59:33	59.6	72.8	60.9	59.9
816	2022-03-23	11:59:34	62.4	75.2	61.6	59.9
817	2022-03-23	11:59:35	63.0	79.1	63.1	61.6
818	2022-03-23	11:59:36	58.2	70.8	62.1	60.1
819	2022-03-23	11:59:37	56.1	69.3	60.0	58.0
820	2022-03-23	11:59:38	59.0	71.9	58.8	58.0
821	2022-03-23	11:59:39	57.7	70.2	58.8	58.1
822	2022-03-23	11:59:40	58.0	71.3	58.3	57.9
823	2022-03-23	11:59:41	59.8	72.7	59.4	58.0
824	2022-03-23	11:59:42	58.7	73.3	59.5	58.6
825	2022-03-23	11:59:43	61.4	76.2	60.6	58.6
826	2022-03-23	11:59:44	60.8	75.5	61.1	60.5
827	2022-03-23	11:59:45	59.4	73.8	60.7	59.7
828	2022-03-23	11:59:46	56.3	70.3	59.7	57.9
829	2022-03-23	11:59:47	59.5	76.4	59.2	57.6
830	2022-03-23	11:59:48	60.6	74.6	60.2	59.2
831	2022-03-23	11:59:49	65.0	78.4	64.1	60.2
832	2022-03-23	11:59:50	63.6	77.8	64.7	63.5
833	2022-03-23	11:59:51	59.7	72.7	63.5	61.4
834	2022-03-23	11:59:52	58.4	70.7	61.4	59.9
835	2022-03-23	11:59:53	59.0	75.0	59.9	58.9
836	2022-03-23	11:59:54	59.8	74.2	59.9	59.6
837	2022-03-23	11:59:55	59.2	75.0	60.0	59.2
838	2022-03-23	11:59:56	55.7	68.7	59.2	57.4
839	2022-03-23	11:59:57	57.8	70.2	57.7	57.4
840	2022-03-23	11:59:58	59.4	72.2	58.8	57.7
841	2022-03-23	11:59:59	57.6	72.5	58.7	58.0
842	2022-03-23	12:00:00	56.4	71.2	58.0	56.7
843	2022-03-23	12:00:01	57.9	70.8	57.7	57.3
844	2022-03-23	12:00:02	58.8	73.7	58.5	57.6
845	2022-03-23	12:00:03	56.3	68.9	58.4	57.3
846	2022-03-23	12:00:04	55.8	67.7	57.2	56.4
847	2022-03-23	12:00:05	56.2	67.4	56.4	56.2
848	2022-03-23	12:00:06	57.9	69.1	57.5	56.3
849	2022-03-23	12:00:07	62.3	75.2	61.3	57.5
850	2022-03-23	12:00:08	62.1	74.7	62.1	61.4
851	2022-03-23	12:00:09	62.5	73.7	62.3	61.6
852	2022-03-23	12:00:10	64.8	76.5	64.1	62.3

853		2022-03-23	12:00:11	62.5	75.0	63.9	63.0
854		2022-03-23	12:00:12	57.9	71.2	63.0	60.4
855		2022-03-23	12:00:13	54.1	66.1	60.4	57.6
856		2022-03-23	12:00:14	53.3	65.0	57.6	55.4
857		2022-03-23	12:00:15	53.0	64.9	55.4	54.1
858		2022-03-23	12:00:16	52.8	65.1	54.0	53.3
859		2022-03-23	12:00:17	52.8	64.6	53.3	52.9
860		2022-03-23	12:00:18	52.7	63.5	53.0	52.8
861		2022-03-23	12:00:19	52.6	64.0	52.8	52.6
862		2022-03-23	12:00:20	52.8	65.4	52.8	52.7
863		2022-03-23	12:00:21	52.8	64.7	52.9	52.7
864		2022-03-23	12:00:22	52.2	63.3	52.7	52.4
865		2022-03-23	12:00:23	52.4	64.0	52.4	52.3
866		2022-03-23	12:00:24	52.4	65.0	52.5	52.3
867		2022-03-23	12:00:25	52.1	65.3	52.4	52.2
868		2022-03-23	12:00:26	52.2	66.6	52.3	52.2
869		2022-03-23	12:00:27	52.1	63.7	52.2	52.1
870		2022-03-23	12:00:28	52.6	64.2	52.4	52.1
871		2022-03-23	12:00:29	52.5	64.3	52.5	52.4
872		2022-03-23	12:00:30	52.5	65.8	52.5	52.5
873		2022-03-23	12:00:31	52.5	65.0	52.6	52.5
874		2022-03-23	12:00:32	53.1	65.0	52.9	52.5
875		2022-03-23	12:00:33	54.0	65.6	53.7	52.9
876		2022-03-23	12:00:34	55.4	68.4	54.9	53.7
877		2022-03-23	12:00:35	55.0	67.2	55.0	54.8
878		2022-03-23	12:00:36	55.0	67.2	55.1	54.9
879		2022-03-23	12:00:37	55.6	67.9	55.4	54.9
880		2022-03-23	12:00:38	57.1	73.2	56.6	55.4
881		2022-03-23	12:00:39	59.7	73.5	58.9	56.6
882		2022-03-23	12:00:40	58.3	72.1	59.2	58.4
883		2022-03-23	12:00:41	57.5	69.2	58.4	57.8
884		2022-03-23	12:00:42	55.4	68.6	57.8	56.3
885		2022-03-23	12:00:43	53.8	65.6	56.3	54.9
886		2022-03-23	12:00:44	53.5	66.0	54.9	54.1
887		2022-03-23	12:00:45	55.6	68.9	55.3	54.0
888		2022-03-23	12:00:46	59.9	73.9	59.0	55.4
889		2022-03-23	12:00:47	61.4	75.0	60.9	59.1
890		2022-03-23	12:00:48	58.9	71.9	60.3	59.4
891		2022-03-23	12:00:49	55.6	68.8	59.3	57.3
892		2022-03-23	12:00:50	52.8	64.2	57.3	55.0
893		2022-03-23	12:00:51	52.3	64.4	55.0	53.5
894		2022-03-23	12:00:52	51.6	64.1	53.5	52.4
895		2022-03-23	12:00:53	51.3	64.5	52.4	51.8
896		2022-03-23	12:00:54	51.2	63.0	51.8	51.4
897		2022-03-23	12:00:55	50.7	62.4	51.5	51.0
898		2022-03-23	12:00:56	50.8	63.1	51.0	50.8
899		2022-03-23	12:00:57	50.8	62.4	50.9	50.8
900		2022-03-23	12:00:58	51.1	63.6	51.1	50.9
901		2022-03-23	12:00:59	51.1	66.3	51.1	50.8
902	Stop	2022-03-23	12:01:00				

ST-3 Time History

Record #	Record Type	Date	Time	LAeq	LApeak	LASmax	LASmin
1	Run	2022-03-23	12:13:01				
2		2022-03-23	12:13:01	74.7	88.0	75.4	74.9
3		2022-03-23	12:13:02	74.0	88.0	75.3	74.2
4		2022-03-23	12:13:03	72.5	85.2	74.2	73.2
5		2022-03-23	12:13:04	72.5	86.3	73.3	72.6
6		2022-03-23	12:13:05	69.3	81.4	72.6	70.8
7		2022-03-23	12:13:06	69.0	82.5	70.7	69.8
8		2022-03-23	12:13:07	68.7	82.3	69.8	69.1
9		2022-03-23	12:13:08	69.1	82.4	69.3	68.9
10		2022-03-23	12:13:09	67.5	81.3	69.2	68.2
11		2022-03-23	12:13:10	67.6	80.8	68.1	67.8
12		2022-03-23	12:13:11	68.7	80.4	68.5	67.9
13		2022-03-23	12:13:12	68.1	79.9	68.5	68.2
14		2022-03-23	12:13:13	67.4	80.0	68.2	67.6
15		2022-03-23	12:13:14	66.8	77.9	67.6	67.1
16		2022-03-23	12:13:15	66.3	78.6	67.1	66.6
17		2022-03-23	12:13:16	66.2	80.0	66.7	66.2
18		2022-03-23	12:13:17	65.7	77.8	66.3	65.9
19		2022-03-23	12:13:18	65.4	76.7	65.9	65.6
20		2022-03-23	12:13:19	66.3	78.6	66.0	65.5
21		2022-03-23	12:13:20	66.7	78.6	66.6	66.0
22		2022-03-23	12:13:21	65.7	77.5	66.4	65.9
23		2022-03-23	12:13:22	65.6	77.5	66.0	65.7
24		2022-03-23	12:13:23	65.9	80.0	66.0	65.6
25		2022-03-23	12:13:24	66.1	78.5	66.1	65.9
26		2022-03-23	12:13:25	65.5	77.2	66.0	65.7
27		2022-03-23	12:13:26	65.1	77.8	65.7	65.3
28		2022-03-23	12:13:27	65.4	77.0	65.5	65.3
29		2022-03-23	12:13:28	64.9	76.9	65.4	65.0
30		2022-03-23	12:13:29	64.1	75.7	65.0	64.5
31		2022-03-23	12:13:30	64.0	76.8	64.5	64.2
32		2022-03-23	12:13:31	64.0	76.1	64.2	64.1
33		2022-03-23	12:13:32	63.1	74.9	64.1	63.5
34		2022-03-23	12:13:33	63.6	76.4	63.6	63.4
35		2022-03-23	12:13:34	64.3	75.2	64.1	63.6
36		2022-03-23	12:13:35	64.6	76.9	64.5	64.0
37		2022-03-23	12:13:36	65.6	76.6	65.3	64.5
38		2022-03-23	12:13:37	64.7	76.7	65.5	64.8
39		2022-03-23	12:13:38	64.8	76.0	64.9	64.6
40		2022-03-23	12:13:39	65.0	76.7	65.0	64.8
41		2022-03-23	12:13:40	64.5	77.1	64.9	64.6
42		2022-03-23	12:13:41	65.2	77.0	65.1	64.7
43		2022-03-23	12:13:42	65.7	78.3	65.5	65.0
44		2022-03-23	12:13:43	66.4	79.5	66.1	65.5
45		2022-03-23	12:13:44	69.4	81.4	68.6	66.2
46		2022-03-23	12:13:45	67.2	79.2	68.6	67.6
47		2022-03-23	12:13:46	67.0	79.3	67.6	67.2
48		2022-03-23	12:13:47	66.9	79.3	67.4	67.0
49		2022-03-23	12:13:48	65.5	77.4	67.0	66.2
50		2022-03-23	12:13:49	65.9	78.6	66.3	66.0
51		2022-03-23	12:13:50	65.3	77.3	66.0	65.5
52		2022-03-23	12:13:51	64.2	78.5	65.5	64.7
53		2022-03-23	12:13:52	64.3	76.2	64.7	64.4
54		2022-03-23	12:13:53	63.5	75.0	64.3	63.8
55		2022-03-23	12:13:54	64.2	76.6	64.1	63.9
56		2022-03-23	12:13:55	63.3	74.2	64.1	63.6
57		2022-03-23	12:13:56	63.9	79.9	63.9	63.6
58		2022-03-23	12:13:57	64.7	78.9	64.5	63.8
59		2022-03-23	12:13:58	63.5	75.7	64.3	63.8

60	2022-03-23	12:13:59	63.8	75.8	63.9	63.6
61	2022-03-23	12:14:00	64.5	76.2	64.3	63.9
62	2022-03-23	12:14:01	64.6	76.8	64.5	64.3
63	2022-03-23	12:14:02	63.8	75.3	64.5	64.0
64	2022-03-23	12:14:03	64.0	76.1	64.1	63.9
65	2022-03-23	12:14:04	63.8	75.4	64.1	63.8
66	2022-03-23	12:14:05	63.9	78.4	64.0	63.9
67	2022-03-23	12:14:06	64.2	76.9	64.1	63.8
68	2022-03-23	12:14:07	63.7	75.8	64.2	63.7
69	2022-03-23	12:14:08	63.1	74.7	63.7	63.3
70	2022-03-23	12:14:09	62.8	74.9	63.4	63.0
71	2022-03-23	12:14:10	62.5	74.4	63.0	62.6
72	2022-03-23	12:14:11	64.2	76.4	63.8	62.8
73	2022-03-23	12:14:12	63.1	74.6	63.8	63.3
74	2022-03-23	12:14:13	62.6	74.7	63.3	62.8
75	2022-03-23	12:14:14	63.0	75.4	63.0	62.8
76	2022-03-23	12:14:15	65.4	80.1	64.9	63.0
77	2022-03-23	12:14:16	67.9	79.5	67.0	64.9
78	2022-03-23	12:14:17	66.0	80.4	67.0	66.2
79	2022-03-23	12:14:18	64.7	76.8	66.2	65.4
80	2022-03-23	12:14:19	64.8	77.5	65.4	64.9
81	2022-03-23	12:14:20	64.0	76.5	64.9	64.4
82	2022-03-23	12:14:21	66.1	78.3	65.7	64.4
83	2022-03-23	12:14:22	65.9	79.1	66.1	65.7
84	2022-03-23	12:14:23	63.6	78.0	65.7	64.5
85	2022-03-23	12:14:24	64.2	76.7	64.5	64.2
86	2022-03-23	12:14:25	63.7	74.6	64.2	63.9
87	2022-03-23	12:14:26	64.1	77.4	64.1	63.9
88	2022-03-23	12:14:27	63.9	75.8	64.2	63.9
89	2022-03-23	12:14:28	64.4	76.8	64.3	63.9
90	2022-03-23	12:14:29	63.7	75.7	64.4	63.8
91	2022-03-23	12:14:30	62.3	74.4	63.8	62.9
92	2022-03-23	12:14:31	64.3	78.4	64.0	62.9
93	2022-03-23	12:14:32	63.6	75.8	64.0	63.7
94	2022-03-23	12:14:33	64.5	76.4	64.3	63.8
95	2022-03-23	12:14:34	64.4	78.1	64.4	64.0
96	2022-03-23	12:14:35	65.0	77.5	64.8	64.4
97	2022-03-23	12:14:36	64.6	76.5	64.7	64.6
98	2022-03-23	12:14:37	68.0	79.5	67.1	64.7
99	2022-03-23	12:14:38	69.2	81.8	68.7	67.1
100	2022-03-23	12:14:39	70.2	82.6	69.7	68.7
101	2022-03-23	12:14:40	72.2	84.1	71.6	69.8
102	2022-03-23	12:14:41	72.1	84.7	72.0	71.6
103	2022-03-23	12:14:42	73.0	86.8	72.8	71.7
104	2022-03-23	12:14:43	73.6	86.7	73.6	72.8
105	2022-03-23	12:14:44	71.2	83.1	73.1	72.0
106	2022-03-23	12:14:45	69.4	81.3	72.0	70.5
107	2022-03-23	12:14:46	68.5	79.9	70.5	69.3
108	2022-03-23	12:14:47	66.2	77.8	69.3	67.6
109	2022-03-23	12:14:48	65.2	78.1	67.6	66.2
110	2022-03-23	12:14:49	65.0	77.0	66.2	65.5
111	2022-03-23	12:14:50	65.2	81.4	65.8	65.3
112	2022-03-23	12:14:51	64.7	77.4	65.3	64.9
113	2022-03-23	12:14:52	64.7	77.0	64.9	64.7
114	2022-03-23	12:14:53	65.7	79.0	65.5	64.7
115	2022-03-23	12:14:54	67.0	78.4	66.5	65.6
116	2022-03-23	12:14:55	65.6	76.8	66.5	65.9
117	2022-03-23	12:14:56	64.5	76.9	65.9	65.0
118	2022-03-23	12:14:57	64.7	76.8	65.0	64.8
119	2022-03-23	12:14:58	64.2	76.9	64.9	64.4
120	2022-03-23	12:14:59	64.2	76.5	64.5	64.2

121	2022-03-23	12:15:00	65.1	77.2	64.9	64.4
122	2022-03-23	12:15:01	64.9	78.0	65.2	64.7
123	2022-03-23	12:15:02	65.0	76.5	65.0	64.8
124	2022-03-23	12:15:03	65.5	77.6	65.3	64.9
125	2022-03-23	12:15:04	66.1	77.6	65.8	65.2
126	2022-03-23	12:15:05	66.7	79.0	66.5	65.8
127	2022-03-23	12:15:06	66.5	78.1	66.6	66.4
128	2022-03-23	12:15:07	66.3	78.9	66.4	66.2
129	2022-03-23	12:15:08	66.9	78.3	66.7	66.4
130	2022-03-23	12:15:09	65.8	78.2	66.7	66.1
131	2022-03-23	12:15:10	65.7	78.2	66.1	65.9
132	2022-03-23	12:15:11	65.6	77.7	66.0	65.6
133	2022-03-23	12:15:12	65.4	78.1	65.6	65.4
134	2022-03-23	12:15:13	66.2	78.2	66.0	65.6
135	2022-03-23	12:15:14	66.5	78.1	66.4	66.0
136	2022-03-23	12:15:15	66.2	78.6	66.3	66.2
137	2022-03-23	12:15:16	65.8	77.0	66.3	65.9
138	2022-03-23	12:15:17	65.0	76.4	65.9	65.4
139	2022-03-23	12:15:18	66.8	80.1	66.5	65.4
140	2022-03-23	12:15:19	69.4	82.7	68.5	66.6
141	2022-03-23	12:15:20	71.0	84.4	70.3	68.5
142	2022-03-23	12:15:21	71.2	83.3	70.9	70.4
143	2022-03-23	12:15:22	71.4	83.3	71.2	70.9
144	2022-03-23	12:15:23	71.0	82.0	71.3	71.0
145	2022-03-23	12:15:24	70.9	83.0	71.1	70.9
146	2022-03-23	12:15:25	69.7	81.7	70.9	70.1
147	2022-03-23	12:15:26	69.3	81.1	70.2	69.6
148	2022-03-23	12:15:27	68.8	81.0	69.6	69.0
149	2022-03-23	12:15:28	75.2	90.0	74.4	69.2
150	2022-03-23	12:15:29	69.3	81.8	73.7	71.5
151	2022-03-23	12:15:30	74.1	87.1	73.9	71.5
152	2022-03-23	12:15:31	67.6	79.0	73.2	70.6
153	2022-03-23	12:15:32	66.2	78.0	70.6	68.4
154	2022-03-23	12:15:33	65.8	78.3	68.4	67.0
155	2022-03-23	12:15:34	65.0	77.0	67.0	65.8
156	2022-03-23	12:15:35	64.6	76.5	65.8	65.1
157	2022-03-23	12:15:36	64.0	75.7	65.1	64.5
158	2022-03-23	12:15:37	63.1	74.6	64.5	63.6
159	2022-03-23	12:15:38	62.2	74.0	63.6	62.8
160	2022-03-23	12:15:39	62.1	75.2	62.8	62.3
161	2022-03-23	12:15:40	62.0	74.2	62.3	62.0
162	2022-03-23	12:15:41	62.0	75.0	62.2	61.9
163	2022-03-23	12:15:42	62.2	74.6	62.3	61.9
164	2022-03-23	12:15:43	63.5	75.2	63.0	62.3
165	2022-03-23	12:15:44	62.1	73.5	63.0	62.4
166	2022-03-23	12:15:45	62.1	74.5	62.5	62.1
167	2022-03-23	12:15:46	62.5	74.4	62.5	62.1
168	2022-03-23	12:15:47	62.3	76.7	62.6	62.2
169	2022-03-23	12:15:48	62.2	73.8	62.3	62.1
170	2022-03-23	12:15:49	62.8	75.3	62.7	62.2
171	2022-03-23	12:15:50	64.3	76.9	63.9	62.5
172	2022-03-23	12:15:51	64.2	76.6	64.2	63.9
173	2022-03-23	12:15:52	64.7	77.1	64.6	63.9
174	2022-03-23	12:15:53	66.2	78.7	65.8	64.6
175	2022-03-23	12:15:54	65.8	77.7	66.1	65.7
176	2022-03-23	12:15:55	66.0	81.1	66.5	65.6
177	2022-03-23	12:15:56	64.9	77.3	65.7	65.2
178	2022-03-23	12:15:57	65.0	76.2	65.3	65.0
179	2022-03-23	12:15:58	65.3	77.3	65.3	65.0
180	2022-03-23	12:15:59	66.9	78.9	66.5	65.3
181	2022-03-23	12:16:00	68.4	81.2	67.8	66.5

182	2022-03-23	12:16:01	67.7	79.8	68.0	67.7
183	2022-03-23	12:16:02	66.0	78.2	67.7	66.7
184	2022-03-23	12:16:03	66.6	78.9	66.9	66.6
185	2022-03-23	12:16:04	65.3	77.4	66.6	65.8
186	2022-03-23	12:16:05	65.8	77.1	65.9	65.7
187	2022-03-23	12:16:06	66.2	78.3	66.2	65.7
188	2022-03-23	12:16:07	67.1	78.4	66.8	66.3
189	2022-03-23	12:16:08	66.3	78.5	66.8	66.5
190	2022-03-23	12:16:09	66.9	78.8	66.8	66.5
191	2022-03-23	12:16:10	69.1	82.9	68.4	66.8
192	2022-03-23	12:16:11	67.7	79.9	68.5	67.8
193	2022-03-23	12:16:12	66.2	78.8	67.8	66.8
194	2022-03-23	12:16:13	66.9	79.6	66.9	66.7
195	2022-03-23	12:16:14	66.8	79.4	66.9	66.7
196	2022-03-23	12:16:15	66.4	78.2	67.0	66.5
197	2022-03-23	12:16:16	65.3	77.8	66.5	65.9
198	2022-03-23	12:16:17	64.9	83.0	65.9	65.2
199	2022-03-23	12:16:18	65.3	77.3	65.4	65.0
200	2022-03-23	12:16:19	66.2	77.8	66.0	65.3
201	2022-03-23	12:16:20	66.0	77.4	66.1	65.9
202	2022-03-23	12:16:21	65.7	78.0	66.0	65.7
203	2022-03-23	12:16:22	66.1	78.1	66.1	65.7
204	2022-03-23	12:16:23	67.2	78.9	66.9	66.1
205	2022-03-23	12:16:24	66.2	78.0	66.8	66.4
206	2022-03-23	12:16:25	66.3	79.1	66.5	66.2
207	2022-03-23	12:16:26	66.4	77.9	66.4	66.1
208	2022-03-23	12:16:27	66.4	79.7	66.5	66.4
209	2022-03-23	12:16:28	65.8	79.0	66.4	66.0
210	2022-03-23	12:16:29	65.5	78.2	66.0	65.6
211	2022-03-23	12:16:30	65.9	78.8	65.9	65.5
212	2022-03-23	12:16:31	66.7	78.3	66.4	66.0
213	2022-03-23	12:16:32	67.4	78.5	67.1	66.4
214	2022-03-23	12:16:33	66.8	78.6	67.1	66.8
215	2022-03-23	12:16:34	65.3	77.9	66.8	65.9
216	2022-03-23	12:16:35	65.1	76.8	66.0	65.4
217	2022-03-23	12:16:36	64.7	76.1	65.4	64.9
218	2022-03-23	12:16:37	64.4	78.3	64.9	64.5
219	2022-03-23	12:16:38	64.1	77.4	64.7	64.2
220	2022-03-23	12:16:39	64.9	77.6	64.8	64.2
221	2022-03-23	12:16:40	64.8	76.8	64.9	64.8
222	2022-03-23	12:16:41	65.3	77.9	65.2	64.8
223	2022-03-23	12:16:42	64.1	75.5	65.1	64.4
224	2022-03-23	12:16:43	64.6	76.8	64.6	64.3
225	2022-03-23	12:16:44	64.0	75.2	64.5	64.2
226	2022-03-23	12:16:45	63.6	75.6	64.2	63.8
227	2022-03-23	12:16:46	63.7	75.7	64.0	63.7
228	2022-03-23	12:16:47	63.7	75.3	63.8	63.5
229	2022-03-23	12:16:48	63.9	77.2	63.9	63.7
230	2022-03-23	12:16:49	64.2	78.0	64.1	63.8
231	2022-03-23	12:16:50	64.8	76.6	64.6	64.1
232	2022-03-23	12:16:51	64.8	76.3	64.8	64.4
233	2022-03-23	12:16:52	65.1	77.6	65.0	64.7
234	2022-03-23	12:16:53	64.9	76.6	65.0	64.9
235	2022-03-23	12:16:54	64.5	75.9	64.9	64.6
236	2022-03-23	12:16:55	65.0	78.0	64.9	64.6
237	2022-03-23	12:16:56	66.2	77.9	65.9	64.9
238	2022-03-23	12:16:57	67.1	79.3	66.7	65.9
239	2022-03-23	12:16:58	65.8	77.0	66.7	66.2
240	2022-03-23	12:16:59	66.8	78.1	66.6	66.1
241	2022-03-23	12:17:00	66.9	77.9	66.8	66.6
242	2022-03-23	12:17:01	66.5	78.3	66.7	66.5

243	2022-03-23	12:17:02	66.3	77.7	66.6	66.4
244	2022-03-23	12:17:03	66.3	79.6	66.4	66.3
245	2022-03-23	12:17:04	65.6	77.1	66.3	65.8
246	2022-03-23	12:17:05	65.0	77.6	65.8	65.2
247	2022-03-23	12:17:06	65.3	78.3	65.6	65.3
248	2022-03-23	12:17:07	65.2	77.1	65.3	65.1
249	2022-03-23	12:17:08	65.3	77.4	65.4	65.2
250	2022-03-23	12:17:09	64.1	78.0	65.3	64.5
251	2022-03-23	12:17:10	63.8	77.6	64.5	64.0
252	2022-03-23	12:17:11	64.0	77.5	64.3	64.0
253	2022-03-23	12:17:12	64.0	76.3	64.1	63.8
254	2022-03-23	12:17:13	64.4	75.9	64.3	64.1
255	2022-03-23	12:17:14	63.4	75.7	64.3	63.7
256	2022-03-23	12:17:15	63.6	75.3	63.7	63.4
257	2022-03-23	12:17:16	62.8	74.9	63.8	63.1
258	2022-03-23	12:17:17	62.1	75.1	63.1	62.4
259	2022-03-23	12:17:18	60.2	72.3	62.4	61.1
260	2022-03-23	12:17:19	58.8	70.4	61.1	59.8
261	2022-03-23	12:17:20	58.8	70.7	59.8	59.2
262	2022-03-23	12:17:21	59.3	72.5	59.4	59.1
263	2022-03-23	12:17:22	62.6	75.1	61.7	59.3
264	2022-03-23	12:17:23	63.0	76.8	62.7	61.7
265	2022-03-23	12:17:24	66.9	80.4	65.7	62.7
266	2022-03-23	12:17:25	65.6	79.9	65.8	65.5
267	2022-03-23	12:17:26	66.4	78.4	66.1	65.6
268	2022-03-23	12:17:27	64.9	76.9	66.1	65.4
269	2022-03-23	12:17:28	65.3	77.1	65.5	65.3
270	2022-03-23	12:17:29	65.7	77.5	65.6	65.4
271	2022-03-23	12:17:30	65.5	78.4	65.7	65.4
272	2022-03-23	12:17:31	65.5	78.7	65.5	65.3
273	2022-03-23	12:17:32	66.0	80.2	65.8	65.5
274	2022-03-23	12:17:33	65.5	79.4	65.9	65.6
275	2022-03-23	12:17:34	65.8	77.3	65.8	65.6
276	2022-03-23	12:17:35	66.0	77.9	66.0	65.6
277	2022-03-23	12:17:36	67.5	79.6	67.0	66.0
278	2022-03-23	12:17:37	68.4	79.7	68.0	67.0
279	2022-03-23	12:17:38	69.6	82.5	69.1	68.0
280	2022-03-23	12:17:39	68.4	80.8	69.1	68.6
281	2022-03-23	12:17:40	67.5	79.0	68.6	67.9
282	2022-03-23	12:17:41	66.8	79.3	67.9	67.2
283	2022-03-23	12:17:42	65.3	76.3	67.2	66.1
284	2022-03-23	12:17:43	65.9	78.3	66.1	65.8
285	2022-03-23	12:17:44	65.4	78.4	66.0	65.6
286	2022-03-23	12:17:45	65.8	77.7	65.8	65.6
287	2022-03-23	12:17:46	65.4	77.0	65.8	65.4
288	2022-03-23	12:17:47	64.9	76.8	65.4	65.1
289	2022-03-23	12:17:48	64.5	77.5	65.1	64.7
290	2022-03-23	12:17:49	64.4	75.9	64.8	64.5
291	2022-03-23	12:17:50	64.3	77.8	64.5	64.3
292	2022-03-23	12:17:51	63.7	75.4	64.4	63.9
293	2022-03-23	12:17:52	63.9	76.8	64.0	63.9
294	2022-03-23	12:17:53	63.4	74.9	63.9	63.6
295	2022-03-23	12:17:54	62.7	74.2	63.6	63.1
296	2022-03-23	12:17:55	63.6	74.9	63.4	63.0
297	2022-03-23	12:17:56	62.7	74.0	63.4	63.0
298	2022-03-23	12:17:57	62.9	76.0	63.0	62.8
299	2022-03-23	12:17:58	64.3	76.0	63.9	63.0
300	2022-03-23	12:17:59	64.1	76.5	64.0	63.9
301	2022-03-23	12:18:00	65.1	77.7	64.8	64.0
302	2022-03-23	12:18:01	64.3	76.6	64.6	64.2
303	2022-03-23	12:18:02	65.1	77.5	64.9	64.5

304	2022-03-23	12:18:03	65.1	76.4	65.1	64.9
305	2022-03-23	12:18:04	65.5	76.7	65.4	65.0
306	2022-03-23	12:18:05	66.3	78.5	66.0	65.4
307	2022-03-23	12:18:06	67.9	81.9	67.4	66.0
308	2022-03-23	12:18:07	67.6	79.8	67.8	67.4
309	2022-03-23	12:18:08	66.6	78.5	67.4	66.9
310	2022-03-23	12:18:09	66.8	80.7	66.9	66.7
311	2022-03-23	12:18:10	68.3	81.3	68.0	66.9
312	2022-03-23	12:18:11	66.9	78.2	68.0	67.3
313	2022-03-23	12:18:12	67.1	78.9	67.4	67.1
314	2022-03-23	12:18:13	67.3	78.5	67.3	67.0
315	2022-03-23	12:18:14	68.3	81.1	68.1	67.3
316	2022-03-23	12:18:15	67.4	78.8	68.1	67.5
317	2022-03-23	12:18:16	66.3	78.0	67.5	66.8
318	2022-03-23	12:18:17	66.6	78.7	66.9	66.6
319	2022-03-23	12:18:18	67.1	78.7	67.0	66.7
320	2022-03-23	12:18:19	67.5	79.4	67.3	66.9
321	2022-03-23	12:18:20	66.8	79.5	67.4	66.9
322	2022-03-23	12:18:21	66.6	78.4	67.0	66.7
323	2022-03-23	12:18:22	66.6	79.1	66.7	66.5
324	2022-03-23	12:18:23	67.0	79.1	67.0	66.6
325	2022-03-23	12:18:24	66.6	79.0	67.1	66.6
326	2022-03-23	12:18:25	66.6	78.6	66.9	66.6
327	2022-03-23	12:18:26	66.0	77.6	66.6	66.2
328	2022-03-23	12:18:27	65.5	78.0	66.2	65.7
329	2022-03-23	12:18:28	65.3	77.7	65.7	65.5
330	2022-03-23	12:18:29	65.1	77.0	65.5	65.2
331	2022-03-23	12:18:30	63.8	75.8	65.2	64.4
332	2022-03-23	12:18:31	64.0	75.3	64.4	64.1
333	2022-03-23	12:18:32	64.0	75.7	64.2	64.0
334	2022-03-23	12:18:33	64.6	76.8	64.5	64.0
335	2022-03-23	12:18:34	64.4	76.4	64.6	64.4
336	2022-03-23	12:18:35	64.8	77.4	64.8	64.4
337	2022-03-23	12:18:36	64.1	77.1	64.6	64.1
338	2022-03-23	12:18:37	65.7	77.1	65.3	64.4
339	2022-03-23	12:18:38	65.0	77.9	65.4	65.0
340	2022-03-23	12:18:39	65.0	78.4	65.0	64.9
341	2022-03-23	12:18:40	65.2	77.6	65.2	64.9
342	2022-03-23	12:18:41	65.0	76.4	65.2	64.9
343	2022-03-23	12:18:42	65.2	76.3	65.3	65.1
344	2022-03-23	12:18:43	66.6	78.7	66.2	65.2
345	2022-03-23	12:18:44	67.4	79.7	67.0	66.2
346	2022-03-23	12:18:45	66.2	79.3	67.0	66.5
347	2022-03-23	12:18:46	66.0	78.6	66.6	66.2
348	2022-03-23	12:18:47	67.0	79.6	66.8	66.1
349	2022-03-23	12:18:48	66.3	78.9	66.9	66.4
350	2022-03-23	12:18:49	65.9	77.3	66.3	66.1
351	2022-03-23	12:18:50	65.2	77.0	66.1	65.5
352	2022-03-23	12:18:51	64.9	76.3	65.5	65.1
353	2022-03-23	12:18:52	64.7	76.2	65.1	64.7
354	2022-03-23	12:18:53	67.0	79.9	66.7	64.8
355	2022-03-23	12:18:54	68.2	80.6	67.7	66.7
356	2022-03-23	12:18:55	67.1	79.2	67.5	67.2
357	2022-03-23	12:18:56	66.5	78.5	67.3	66.8
358	2022-03-23	12:18:57	67.1	79.2	67.0	66.8
359	2022-03-23	12:18:58	67.1	78.5	67.1	66.9
360	2022-03-23	12:18:59	67.8	80.9	67.6	67.1
361	2022-03-23	12:19:00	67.5	79.3	67.6	67.4
362	2022-03-23	12:19:01	66.5	79.3	67.6	66.9
363	2022-03-23	12:19:02	65.8	77.8	66.9	66.2
364	2022-03-23	12:19:03	65.8	78.2	66.2	65.9

365	2022-03-23	12:19:04	65.4	76.7	66.0	65.6
366	2022-03-23	12:19:05	67.2	81.8	66.8	65.6
367	2022-03-23	12:19:06	66.8	77.7	66.9	66.7
368	2022-03-23	12:19:07	66.1	78.4	66.7	66.2
369	2022-03-23	12:19:08	65.9	77.6	66.2	65.8
370	2022-03-23	12:19:09	67.2	78.7	66.9	66.1
371	2022-03-23	12:19:10	69.5	82.0	68.8	66.9
372	2022-03-23	12:19:11	69.0	82.2	69.1	68.8
373	2022-03-23	12:19:12	69.3	80.7	69.2	68.8
374	2022-03-23	12:19:13	70.3	83.6	70.1	69.1
375	2022-03-23	12:19:14	69.3	82.3	70.0	69.6
376	2022-03-23	12:19:15	68.4	80.8	69.7	68.8
377	2022-03-23	12:19:16	69.2	81.6	69.1	68.6
378	2022-03-23	12:19:17	69.5	84.7	69.5	68.9
379	2022-03-23	12:19:18	70.3	85.6	70.0	69.5
380	2022-03-23	12:19:19	70.6	85.7	70.6	70.0
381	2022-03-23	12:19:20	71.0	85.2	71.0	70.3
382	2022-03-23	12:19:21	72.2	85.5	71.8	70.6
383	2022-03-23	12:19:22	71.3	84.4	71.9	71.4
384	2022-03-23	12:19:23	70.1	82.5	71.4	70.6
385	2022-03-23	12:19:24	69.4	81.1	70.6	69.8
386	2022-03-23	12:19:25	68.7	83.0	69.9	69.1
387	2022-03-23	12:19:26	67.6	80.3	69.1	68.3
388	2022-03-23	12:19:27	66.1	77.7	68.3	67.0
389	2022-03-23	12:19:28	67.0	80.6	67.1	66.9
390	2022-03-23	12:19:29	67.6	81.6	67.5	67.0
391	2022-03-23	12:19:30	67.9	79.5	67.8	67.3
392	2022-03-23	12:19:31	67.3	79.3	67.8	67.4
393	2022-03-23	12:19:32	66.2	79.1	67.5	66.7
394	2022-03-23	12:19:33	66.3	78.9	66.7	66.3
395	2022-03-23	12:19:34	66.0	78.2	66.7	66.1
396	2022-03-23	12:19:35	65.1	75.6	66.1	65.4
397	2022-03-23	12:19:36	65.4	77.8	65.5	65.3
398	2022-03-23	12:19:37	66.6	78.7	66.2	65.5
399	2022-03-23	12:19:38	65.9	77.3	66.1	66.0
400	2022-03-23	12:19:39	66.6	78.6	66.4	66.0
401	2022-03-23	12:19:40	67.1	81.8	66.9	66.4
402	2022-03-23	12:19:41	67.2	79.9	67.2	66.7
403	2022-03-23	12:19:42	67.1	79.7	67.3	67.1
404	2022-03-23	12:19:43	66.8	78.8	67.1	66.9
405	2022-03-23	12:19:44	66.7	78.3	67.0	66.7
406	2022-03-23	12:19:45	66.3	77.9	66.8	66.4
407	2022-03-23	12:19:46	65.9	79.1	66.4	66.1
408	2022-03-23	12:19:47	66.0	78.5	66.3	66.1
409	2022-03-23	12:19:48	66.5	79.0	66.3	66.1
410	2022-03-23	12:19:49	66.9	79.9	66.8	66.3
411	2022-03-23	12:19:50	66.9	78.3	66.9	66.7
412	2022-03-23	12:19:51	67.4	79.0	67.2	66.8
413	2022-03-23	12:19:52	66.8	78.0	67.2	66.8
414	2022-03-23	12:19:53	66.7	77.9	67.0	66.8
415	2022-03-23	12:19:54	67.4	80.3	67.2	66.8
416	2022-03-23	12:19:55	68.7	81.5	68.2	67.2
417	2022-03-23	12:19:56	69.7	82.2	69.3	68.2
418	2022-03-23	12:19:57	70.1	82.7	69.8	69.3
419	2022-03-23	12:19:58	70.0	82.0	70.0	69.8
420	2022-03-23	12:19:59	69.7	81.2	70.0	69.8
421	2022-03-23	12:20:00	70.4	83.7	70.3	69.7
422	2022-03-23	12:20:01	67.8	79.9	70.2	68.8
423	2022-03-23	12:20:02	69.2	84.7	69.5	68.3
424	2022-03-23	12:20:03	66.6	79.1	69.2	67.8
425	2022-03-23	12:20:04	66.0	77.4	67.8	66.7

426	2022-03-23	12:20:05	65.5	79.1	66.7	66.0
427	2022-03-23	12:20:06	65.7	79.3	66.0	65.8
428	2022-03-23	12:20:07	65.2	78.4	65.8	65.5
429	2022-03-23	12:20:08	66.1	78.3	65.9	65.4
430	2022-03-23	12:20:09	66.6	79.2	66.4	65.9
431	2022-03-23	12:20:10	65.7	78.6	66.3	65.9
432	2022-03-23	12:20:11	67.2	79.9	66.8	65.9
433	2022-03-23	12:20:12	68.1	79.7	67.8	66.7
434	2022-03-23	12:20:13	69.9	82.4	69.2	67.8
435	2022-03-23	12:20:14	69.6	83.6	69.5	69.2
436	2022-03-23	12:20:15	69.1	81.7	69.5	69.2
437	2022-03-23	12:20:16	69.6	80.9	69.5	69.2
438	2022-03-23	12:20:17	69.8	81.6	69.7	69.4
439	2022-03-23	12:20:18	68.4	80.5	69.6	68.9
440	2022-03-23	12:20:19	68.5	80.7	68.9	68.6
441	2022-03-23	12:20:20	69.5	82.9	69.4	68.6
442	2022-03-23	12:20:21	69.8	83.7	69.9	69.4
443	2022-03-23	12:20:22	70.3	84.4	70.2	69.4
444	2022-03-23	12:20:23	70.9	84.6	70.7	70.2
445	2022-03-23	12:20:24	72.1	87.2	71.6	70.6
446	2022-03-23	12:20:25	72.8	87.2	72.4	71.4
447	2022-03-23	12:20:26	72.7	86.2	73.0	72.3
448	2022-03-23	12:20:27	71.5	85.3	72.4	71.7
449	2022-03-23	12:20:28	71.1	83.0	71.6	71.4
450	2022-03-23	12:20:29	72.2	84.1	72.0	71.3
451	2022-03-23	12:20:30	68.6	79.9	71.8	70.1
452	2022-03-23	12:20:31	67.2	80.0	70.1	68.5
453	2022-03-23	12:20:32	68.4	81.3	68.7	68.3
454	2022-03-23	12:20:33	67.0	79.3	68.4	67.5
455	2022-03-23	12:20:34	66.2	79.4	67.5	66.7
456	2022-03-23	12:20:35	66.1	78.6	66.7	66.2
457	2022-03-23	12:20:36	66.9	78.9	66.8	66.5
458	2022-03-23	12:20:37	66.3	78.7	66.9	66.4
459	2022-03-23	12:20:38	65.2	77.4	66.4	65.6
460	2022-03-23	12:20:39	63.9	75.2	65.6	64.6
461	2022-03-23	12:20:40	63.0	75.1	64.6	63.7
462	2022-03-23	12:20:41	63.1	75.9	63.7	63.3
463	2022-03-23	12:20:42	63.7	75.8	63.6	63.3
464	2022-03-23	12:20:43	63.1	75.0	63.6	63.2
465	2022-03-23	12:20:44	62.7	75.5	63.2	62.8
466	2022-03-23	12:20:45	63.5	75.7	63.4	63.0
467	2022-03-23	12:20:46	63.7	76.2	63.7	63.2
468	2022-03-23	12:20:47	65.1	77.7	64.6	63.8
469	2022-03-23	12:20:48	65.1	76.9	65.0	64.4
470	2022-03-23	12:20:49	66.7	79.7	66.2	65.1
471	2022-03-23	12:20:50	67.9	80.7	67.4	66.2
472	2022-03-23	12:20:51	67.2	79.7	67.2	67.1
473	2022-03-23	12:20:52	67.5	78.4	67.4	67.1
474	2022-03-23	12:20:53	68.3	80.2	67.9	67.4
475	2022-03-23	12:20:54	69.5	80.9	69.0	67.9
476	2022-03-23	12:20:55	68.0	81.9	69.0	68.3
477	2022-03-23	12:20:56	66.7	78.9	68.4	67.3
478	2022-03-23	12:20:57	66.9	79.0	67.3	67.1
479	2022-03-23	12:20:58	66.9	80.7	67.1	66.9
480	2022-03-23	12:20:59	66.8	78.2	66.9	66.8
481	2022-03-23	12:21:00	66.4	78.5	66.9	66.5
482	2022-03-23	12:21:01	66.5	78.7	66.6	66.4
483	2022-03-23	12:21:02	66.1	79.4	66.7	66.2
484	2022-03-23	12:21:03	64.6	76.5	66.1	65.3
485	2022-03-23	12:21:04	65.5	77.1	65.5	65.2
486	2022-03-23	12:21:05	64.3	78.1	65.4	64.7

487	2022-03-23	12:21:06	64.4	76.6	64.7	64.4
488	2022-03-23	12:21:07	63.2	75.8	64.4	63.7
489	2022-03-23	12:21:08	64.7	77.3	64.5	63.6
490	2022-03-23	12:21:09	65.4	77.2	65.1	64.5
491	2022-03-23	12:21:10	66.2	77.8	65.9	65.0
492	2022-03-23	12:21:11	65.7	78.0	66.1	65.7
493	2022-03-23	12:21:12	64.7	77.0	65.7	65.1
494	2022-03-23	12:21:13	65.1	78.2	65.3	65.0
495	2022-03-23	12:21:14	63.8	78.5	65.0	64.2
496	2022-03-23	12:21:15	63.1	75.7	64.1	63.5
497	2022-03-23	12:21:16	63.3	76.2	63.5	63.3
498	2022-03-23	12:21:17	63.4	75.5	63.5	63.4
499	2022-03-23	12:21:18	64.5	77.1	64.2	63.4
500	2022-03-23	12:21:19	64.3	76.1	64.4	64.2
501	2022-03-23	12:21:20	63.8	76.5	64.2	63.9
502	2022-03-23	12:21:21	65.7	77.8	65.2	64.0
503	2022-03-23	12:21:22	66.7	79.5	66.3	65.2
504	2022-03-23	12:21:23	68.4	79.7	67.8	66.3
505	2022-03-23	12:21:24	67.0	78.4	67.7	67.3
506	2022-03-23	12:21:25	67.0	78.9	67.3	67.1
507	2022-03-23	12:21:26	67.4	81.1	67.3	67.1
508	2022-03-23	12:21:27	66.7	78.8	67.4	66.9
509	2022-03-23	12:21:28	65.9	77.4	66.9	66.2
510	2022-03-23	12:21:29	65.4	78.8	66.2	65.7
511	2022-03-23	12:21:30	68.5	81.1	67.7	65.8
512	2022-03-23	12:21:31	67.8	79.1	67.8	67.5
513	2022-03-23	12:21:32	68.5	81.3	68.4	67.7
514	2022-03-23	12:21:33	70.4	82.1	69.8	68.4
515	2022-03-23	12:21:34	72.7	85.1	72.0	69.9
516	2022-03-23	12:21:35	74.3	85.9	73.5	72.0
517	2022-03-23	12:21:36	74.9	86.0	74.5	73.5
518	2022-03-23	12:21:37	76.1	89.0	75.7	74.5
519	2022-03-23	12:21:38	72.9	88.2	75.8	73.9
520	2022-03-23	12:21:39	67.7	79.4	73.8	71.0
521	2022-03-23	12:21:40	66.7	79.5	71.0	68.9
522	2022-03-23	12:21:41	66.4	78.3	68.9	67.5
523	2022-03-23	12:21:42	64.4	77.8	67.5	65.8
524	2022-03-23	12:21:43	64.6	76.5	65.8	65.2
525	2022-03-23	12:21:44	65.5	77.6	65.4	65.2
526	2022-03-23	12:21:45	65.4	76.8	65.5	65.3
527	2022-03-23	12:21:46	64.9	77.4	65.4	65.1
528	2022-03-23	12:21:47	64.5	75.5	65.1	64.8
529	2022-03-23	12:21:48	64.3	77.4	64.7	64.3
530	2022-03-23	12:21:49	64.1	76.6	64.5	64.2
531	2022-03-23	12:21:50	64.5	77.7	64.5	64.3
532	2022-03-23	12:21:51	63.9	76.2	64.5	64.1
533	2022-03-23	12:21:52	64.8	76.8	64.6	64.1
534	2022-03-23	12:21:53	64.8	78.9	64.8	64.6
535	2022-03-23	12:21:54	65.8	79.5	65.5	64.5
536	2022-03-23	12:21:55	67.3	79.3	66.8	65.5
537	2022-03-23	12:21:56	67.2	79.6	67.2	66.8
538	2022-03-23	12:21:57	66.6	78.7	67.0	66.7
539	2022-03-23	12:21:58	68.7	80.9	68.3	66.8
540	2022-03-23	12:21:59	68.7	83.1	68.9	68.3
541	2022-03-23	12:22:00	66.1	78.3	68.3	67.0
542	2022-03-23	12:22:01	65.5	78.4	67.0	66.1
543	2022-03-23	12:22:02	65.3	77.0	66.1	65.5
544	2022-03-23	12:22:03	63.8	75.7	65.5	64.6
545	2022-03-23	12:22:04	64.6	75.8	64.7	64.5
546	2022-03-23	12:22:05	64.9	77.0	64.8	64.7
547	2022-03-23	12:22:06	65.9	77.8	65.5	64.8

548	2022-03-23	12:22:07	65.1	77.0	65.4	65.2
549	2022-03-23	12:22:08	65.3	77.7	65.5	65.2
550	2022-03-23	12:22:09	64.3	75.6	65.2	64.6
551	2022-03-23	12:22:10	64.2	76.1	64.7	64.3
552	2022-03-23	12:22:11	64.9	76.7	64.7	64.4
553	2022-03-23	12:22:12	64.2	75.6	64.8	64.3
554	2022-03-23	12:22:13	63.5	75.5	64.3	63.8
555	2022-03-23	12:22:14	63.1	75.5	63.8	63.4
556	2022-03-23	12:22:15	63.3	79.9	63.5	63.3
557	2022-03-23	12:22:16	63.0	75.2	63.3	63.1
558	2022-03-23	12:22:17	62.6	74.7	63.1	62.8
559	2022-03-23	12:22:18	62.8	75.6	62.9	62.6
560	2022-03-23	12:22:19	62.3	74.0	62.8	62.4
561	2022-03-23	12:22:20	62.7	74.8	62.7	62.3
562	2022-03-23	12:22:21	63.5	76.0	63.2	62.7
563	2022-03-23	12:22:22	64.0	76.0	63.8	63.2
564	2022-03-23	12:22:23	63.9	78.3	63.9	63.6
565	2022-03-23	12:22:24	63.9	76.2	64.0	63.8
566	2022-03-23	12:22:25	64.0	76.4	64.1	63.9
567	2022-03-23	12:22:26	63.4	76.8	64.1	63.5
568	2022-03-23	12:22:27	62.8	74.6	63.5	63.0
569	2022-03-23	12:22:28	62.1	75.4	63.0	62.4
570	2022-03-23	12:22:29	63.4	77.9	63.3	62.6
571	2022-03-23	12:22:30	64.1	76.0	63.8	63.3
572	2022-03-23	12:22:31	63.0	75.0	63.8	63.3
573	2022-03-23	12:22:32	64.1	76.5	63.9	63.3
574	2022-03-23	12:22:33	63.0	73.9	63.8	63.2
575	2022-03-23	12:22:34	63.4	74.7	63.4	63.2
576	2022-03-23	12:22:35	63.6	75.3	63.6	63.3
577	2022-03-23	12:22:36	63.2	75.0	63.6	63.3
578	2022-03-23	12:22:37	63.2	75.9	63.5	63.2
579	2022-03-23	12:22:38	62.3	74.3	63.2	62.6
580	2022-03-23	12:22:39	61.5	73.0	62.6	62.0
581	2022-03-23	12:22:40	62.0	74.7	62.1	61.7
582	2022-03-23	12:22:41	62.3	75.1	62.4	62.1
583	2022-03-23	12:22:42	62.1	74.2	62.2	61.9
584	2022-03-23	12:22:43	63.6	77.0	63.3	62.2
585	2022-03-23	12:22:44	65.1	75.8	64.5	63.3
586	2022-03-23	12:22:45	65.0	77.8	64.9	64.5
587	2022-03-23	12:22:46	65.4	77.0	65.2	64.9
588	2022-03-23	12:22:47	64.4	77.6	65.2	64.7
589	2022-03-23	12:22:48	65.5	78.7	65.3	64.7
590	2022-03-23	12:22:49	65.1	77.8	65.4	65.0
591	2022-03-23	12:22:50	66.0	78.4	65.7	65.1
592	2022-03-23	12:22:51	66.0	78.7	66.1	65.5
593	2022-03-23	12:22:52	65.4	77.1	65.9	65.5
594	2022-03-23	12:22:53	65.6	78.5	65.6	65.5
595	2022-03-23	12:22:54	65.7	78.5	65.8	65.6
596	2022-03-23	12:22:55	65.0	77.2	65.7	65.2
597	2022-03-23	12:22:56	64.6	77.5	65.2	64.8
598	2022-03-23	12:22:57	65.1	77.6	65.1	64.7
599	2022-03-23	12:22:58	66.0	78.7	65.8	65.1
600	2022-03-23	12:22:59	63.7	77.1	65.5	64.4
601	2022-03-23	12:23:00	64.3	77.0	64.5	64.2
602	2022-03-23	12:23:01	65.8	77.9	65.4	64.5
603	2022-03-23	12:23:02	65.3	78.0	65.5	65.3
604	2022-03-23	12:23:03	65.4	78.0	65.4	65.2
605	2022-03-23	12:23:04	65.4	77.0	65.5	65.3
606	2022-03-23	12:23:05	66.2	77.3	66.0	65.4
607	2022-03-23	12:23:06	65.7	76.8	66.0	65.7
608	2022-03-23	12:23:07	65.7	77.8	65.8	65.6

609	2022-03-23	12:23:08	65.2	76.7	65.8	65.3
610	2022-03-23	12:23:09	65.0	76.4	65.5	65.1
611	2022-03-23	12:23:10	65.1	77.2	65.4	65.0
612	2022-03-23	12:23:11	64.4	76.5	65.0	64.5
613	2022-03-23	12:23:12	65.3	76.8	65.1	64.8
614	2022-03-23	12:23:13	65.2	79.1	65.2	65.0
615	2022-03-23	12:23:14	65.2	78.0	65.5	65.1
616	2022-03-23	12:23:15	66.4	77.7	66.1	65.2
617	2022-03-23	12:23:16	66.8	80.6	66.7	65.9
618	2022-03-23	12:23:17	66.8	78.8	67.1	66.7
619	2022-03-23	12:23:18	65.8	78.0	66.7	66.1
620	2022-03-23	12:23:19	66.0	78.0	66.1	66.0
621	2022-03-23	12:23:20	65.8	78.6	66.1	65.8
622	2022-03-23	12:23:21	65.9	77.2	66.0	65.9
623	2022-03-23	12:23:22	65.3	76.6	65.9	65.5
624	2022-03-23	12:23:23	65.1	76.8	65.5	65.3
625	2022-03-23	12:23:24	65.5	77.4	65.4	65.3
626	2022-03-23	12:23:25	67.1	79.0	66.6	65.5
627	2022-03-23	12:23:26	69.2	81.0	68.5	66.6
628	2022-03-23	12:23:27	68.8	81.2	68.8	68.5
629	2022-03-23	12:23:28	67.8	80.4	68.6	68.0
630	2022-03-23	12:23:29	68.2	79.8	68.3	68.0
631	2022-03-23	12:23:30	68.5	79.3	68.5	68.1
632	2022-03-23	12:23:31	67.5	79.8	68.2	67.8
633	2022-03-23	12:23:32	67.7	80.5	68.1	67.6
634	2022-03-23	12:23:33	65.9	78.0	67.6	66.6
635	2022-03-23	12:23:34	66.0	77.5	66.6	66.2
636	2022-03-23	12:23:35	67.8	80.1	67.6	66.2
637	2022-03-23	12:23:36	69.9	81.9	69.3	67.6
638	2022-03-23	12:23:37	66.9	79.2	68.8	67.7
639	2022-03-23	12:23:38	66.5	79.0	67.7	67.0
640	2022-03-23	12:23:39	66.9	78.8	67.0	66.8
641	2022-03-23	12:23:40	67.0	78.6	67.1	66.9
642	2022-03-23	12:23:41	66.9	78.5	67.0	66.8
643	2022-03-23	12:23:42	66.2	77.8	67.0	66.5
644	2022-03-23	12:23:43	66.3	76.9	66.5	66.3
645	2022-03-23	12:23:44	65.8	79.3	66.4	66.0
646	2022-03-23	12:23:45	65.3	76.4	66.0	65.5
647	2022-03-23	12:23:46	66.1	78.6	66.0	65.6
648	2022-03-23	12:23:47	64.7	77.3	65.9	65.1
649	2022-03-23	12:23:48	63.9	75.8	65.1	64.3
650	2022-03-23	12:23:49	63.4	76.1	64.3	63.7
651	2022-03-23	12:23:50	62.5	74.7	63.7	63.0
652	2022-03-23	12:23:51	62.3	74.2	63.0	62.5
653	2022-03-23	12:23:52	61.4	75.2	62.5	61.9
654	2022-03-23	12:23:53	62.9	75.2	62.7	61.9
655	2022-03-23	12:23:54	62.0	74.2	62.7	62.2
656	2022-03-23	12:23:55	62.2	74.3	62.4	62.2
657	2022-03-23	12:23:56	62.0	73.2	62.2	61.9
658	2022-03-23	12:23:57	62.8	74.6	62.7	61.8
659	2022-03-23	12:23:58	63.5	76.2	63.3	62.7
660	2022-03-23	12:23:59	63.6	77.2	63.7	63.1
661	2022-03-23	12:24:00	62.4	73.5	63.3	62.7
662	2022-03-23	12:24:01	63.2	76.1	63.2	62.7
663	2022-03-23	12:24:02	62.6	75.5	63.2	62.7
664	2022-03-23	12:24:03	61.4	73.8	62.7	61.9
665	2022-03-23	12:24:04	62.4	74.2	62.4	61.8
666	2022-03-23	12:24:05	63.4	75.5	63.0	62.4
667	2022-03-23	12:24:06	64.4	76.2	64.0	63.0
668	2022-03-23	12:24:07	65.2	76.4	64.7	64.1
669	2022-03-23	12:24:08	65.4	76.7	65.2	64.7

670	2022-03-23	12:24:09	65.2	77.3	65.2	65.0
671	2022-03-23	12:24:10	66.9	80.5	66.6	65.2
672	2022-03-23	12:24:11	69.1	82.5	68.3	66.6
673	2022-03-23	12:24:12	67.5	79.9	68.3	67.7
674	2022-03-23	12:24:13	67.6	80.3	67.7	67.6
675	2022-03-23	12:24:14	67.9	79.5	67.9	67.7
676	2022-03-23	12:24:15	67.9	79.9	68.0	67.8
677	2022-03-23	12:24:16	67.7	79.6	67.9	67.7
678	2022-03-23	12:24:17	69.1	80.6	68.7	67.8
679	2022-03-23	12:24:18	68.0	79.7	68.7	68.2
680	2022-03-23	12:24:19	67.2	81.1	68.2	67.5
681	2022-03-23	12:24:20	67.3	83.0	67.7	67.4
682	2022-03-23	12:24:21	66.5	79.4	67.3	66.9
683	2022-03-23	12:24:22	66.1	77.9	66.9	66.4
684	2022-03-23	12:24:23	65.8	79.4	66.4	66.0
685	2022-03-23	12:24:24	65.2	78.2	66.0	65.5
686	2022-03-23	12:24:25	65.6	78.0	65.6	65.5
687	2022-03-23	12:24:26	66.3	77.5	66.2	65.5
688	2022-03-23	12:24:27	66.7	79.5	66.6	66.1
689	2022-03-23	12:24:28	67.4	78.9	67.1	66.6
690	2022-03-23	12:24:29	66.6	79.0	67.1	66.7
691	2022-03-23	12:24:30	66.6	78.3	66.9	66.6
692	2022-03-23	12:24:31	65.6	77.1	66.5	66.0
693	2022-03-23	12:24:32	64.8	75.9	66.0	65.3
694	2022-03-23	12:24:33	64.4	77.5	65.2	64.7
695	2022-03-23	12:24:34	65.2	76.8	65.1	64.7
696	2022-03-23	12:24:35	65.0	77.2	65.1	65.0
697	2022-03-23	12:24:36	64.3	76.3	65.0	64.5
698	2022-03-23	12:24:37	63.8	76.0	64.5	64.0
699	2022-03-23	12:24:38	65.4	77.5	65.0	64.1
700	2022-03-23	12:24:39	64.1	76.2	64.9	64.3
701	2022-03-23	12:24:40	63.6	75.8	64.4	63.9
702	2022-03-23	12:24:41	62.7	75.0	63.9	63.2
703	2022-03-23	12:24:42	63.8	75.2	63.6	63.2
704	2022-03-23	12:24:43	64.0	75.4	63.9	63.6
705	2022-03-23	12:24:44	63.3	75.2	63.9	63.5
706	2022-03-23	12:24:45	64.6	77.5	64.4	63.5
707	2022-03-23	12:24:46	65.0	77.2	64.7	64.4
708	2022-03-23	12:24:47	65.2	76.5	65.1	64.7
709	2022-03-23	12:24:48	65.2	77.1	65.2	65.1
710	2022-03-23	12:24:49	65.0	76.0	65.2	65.0
711	2022-03-23	12:24:50	66.4	77.9	66.0	65.1
712	2022-03-23	12:24:51	66.1	78.7	66.2	66.0
713	2022-03-23	12:24:52	67.2	79.7	66.9	65.9
714	2022-03-23	12:24:53	67.6	80.4	67.3	66.9
715	2022-03-23	12:24:54	69.1	80.9	68.6	67.3
716	2022-03-23	12:24:55	69.8	85.7	69.5	68.6
717	2022-03-23	12:24:56	68.7	81.3	69.2	68.7
718	2022-03-23	12:24:57	70.2	83.5	69.9	68.9
719	2022-03-23	12:24:58	70.0	82.8	70.1	69.8
720	2022-03-23	12:24:59	69.7	82.6	70.0	69.8
721	2022-03-23	12:25:00	70.0	82.7	70.1	69.5
722	2022-03-23	12:25:01	72.5	87.3	71.9	70.1
723	2022-03-23	12:25:02	72.3	86.7	72.2	71.9
724	2022-03-23	12:25:03	74.6	88.7	73.8	72.2
725	2022-03-23	12:25:04	73.5	87.1	73.8	73.6
726	2022-03-23	12:25:05	71.3	85.8	73.6	72.4
727	2022-03-23	12:25:06	70.3	84.9	72.4	71.1
728	2022-03-23	12:25:07	68.5	82.5	71.1	69.7
729	2022-03-23	12:25:08	67.8	81.6	69.7	68.6
730	2022-03-23	12:25:09	67.8	81.5	68.7	68.1

731	2022-03-23	12:25:10	66.6	79.6	68.1	67.2
732	2022-03-23	12:25:11	65.8	78.8	67.2	66.3
733	2022-03-23	12:25:12	65.4	79.9	66.3	65.7
734	2022-03-23	12:25:13	64.5	78.4	65.8	65.0
735	2022-03-23	12:25:14	65.2	78.5	65.3	64.7
736	2022-03-23	12:25:15	66.5	79.5	66.2	65.2
737	2022-03-23	12:25:16	66.4	81.0	66.6	66.2
738	2022-03-23	12:25:17	64.1	77.7	66.1	64.9
739	2022-03-23	12:25:18	63.6	76.2	64.9	64.2
740	2022-03-23	12:25:19	64.2	77.3	64.2	64.1
741	2022-03-23	12:25:20	63.3	75.6	64.3	63.4
742	2022-03-23	12:25:21	62.6	74.7	63.4	62.7
743	2022-03-23	12:25:22	63.5	75.7	63.7	63.1
744	2022-03-23	12:25:23	61.4	73.6	63.2	62.2
745	2022-03-23	12:25:24	62.9	74.4	62.7	62.2
746	2022-03-23	12:25:25	62.6	73.8	62.7	62.5
747	2022-03-23	12:25:26	64.9	76.2	64.2	62.6
748	2022-03-23	12:25:27	64.6	76.0	64.7	64.2
749	2022-03-23	12:25:28	65.0	76.8	64.8	64.2
750	2022-03-23	12:25:29	65.6	78.8	65.5	64.8
751	2022-03-23	12:25:30	64.5	76.3	65.2	64.7
752	2022-03-23	12:25:31	64.3	76.3	64.7	64.5
753	2022-03-23	12:25:32	64.0	78.0	64.6	64.2
754	2022-03-23	12:25:33	63.8	75.8	64.2	63.9
755	2022-03-23	12:25:34	65.6	78.5	65.5	63.9
756	2022-03-23	12:25:35	68.7	80.9	67.8	65.5
757	2022-03-23	12:25:36	65.6	78.2	67.7	66.3
758	2022-03-23	12:25:37	64.6	77.8	66.3	65.3
759	2022-03-23	12:25:38	64.0	75.9	65.3	64.6
760	2022-03-23	12:25:39	63.7	76.8	64.6	64.0
761	2022-03-23	12:25:40	64.5	77.5	64.5	64.1
762	2022-03-23	12:25:41	63.7	78.3	64.4	63.8
763	2022-03-23	12:25:42	62.7	74.9	63.8	63.2
764	2022-03-23	12:25:43	62.4	74.6	63.1	62.7
765	2022-03-23	12:25:44	64.4	76.0	63.9	62.8
766	2022-03-23	12:25:45	63.9	77.1	64.1	63.8
767	2022-03-23	12:25:46	63.9	79.0	64.0	63.7
768	2022-03-23	12:25:47	63.1	74.6	64.0	63.3
769	2022-03-23	12:25:48	63.1	75.4	63.5	63.2
770	2022-03-23	12:25:49	63.7	75.7	63.5	63.2
771	2022-03-23	12:25:50	64.9	76.8	64.5	63.5
772	2022-03-23	12:25:51	66.8	77.8	66.2	64.5
773	2022-03-23	12:25:52	68.3	80.7	67.7	66.2
774	2022-03-23	12:25:53	67.7	78.7	67.8	67.6
775	2022-03-23	12:25:54	66.8	77.5	67.6	67.0
776	2022-03-23	12:25:55	65.8	76.8	67.0	66.3
777	2022-03-23	12:25:56	65.6	78.7	66.3	65.8
778	2022-03-23	12:25:57	65.6	77.1	65.9	65.6
779	2022-03-23	12:25:58	65.2	76.3	65.6	65.3
780	2022-03-23	12:25:59	65.4	76.4	65.4	65.3
781	2022-03-23	12:26:00	66.0	78.1	65.8	65.4
782	2022-03-23	12:26:01	64.9	76.4	65.7	65.2
783	2022-03-23	12:26:02	66.0	77.3	65.8	65.2
784	2022-03-23	12:26:03	66.6	78.3	66.3	65.8
785	2022-03-23	12:26:04	67.1	79.2	66.9	66.3
786	2022-03-23	12:26:05	67.8	80.8	67.7	66.7
787	2022-03-23	12:26:06	68.7	81.0	68.5	67.7
788	2022-03-23	12:26:07	70.8	83.6	70.2	68.5
789	2022-03-23	12:26:08	69.0	80.3	69.9	69.2
790	2022-03-23	12:26:09	70.2	84.6	70.0	69.5
791	2022-03-23	12:26:10	71.3	83.6	70.9	69.9

792	2022-03-23	12:26:11	71.0	84.5	71.1	70.8
793	2022-03-23	12:26:12	70.2	84.3	71.0	70.5
794	2022-03-23	12:26:13	71.9	89.5	71.5	70.5
795	2022-03-23	12:26:14	70.7	85.7	71.3	70.9
796	2022-03-23	12:26:15	70.6	83.6	70.9	70.6
797	2022-03-23	12:26:16	72.7	86.3	72.1	70.7
798	2022-03-23	12:26:17	71.1	84.9	72.0	71.5
799	2022-03-23	12:26:18	71.3	84.3	71.5	71.3
800	2022-03-23	12:26:19	71.6	85.6	71.8	71.4
801	2022-03-23	12:26:20	68.9	83.3	71.4	69.9
802	2022-03-23	12:26:21	68.0	79.6	69.9	68.8
803	2022-03-23	12:26:22	68.5	80.2	68.9	68.6
804	2022-03-23	12:26:23	69.6	82.0	69.3	68.6
805	2022-03-23	12:26:24	69.7	83.0	69.6	69.3
806	2022-03-23	12:26:25	69.4	82.1	69.6	69.5
807	2022-03-23	12:26:26	70.2	82.6	70.0	69.5
808	2022-03-23	12:26:27	71.1	84.2	70.8	70.0
809	2022-03-23	12:26:28	70.2	82.1	70.8	70.4
810	2022-03-23	12:26:29	69.2	81.1	70.4	69.7
811	2022-03-23	12:26:30	70.0	82.9	70.0	69.8
812	2022-03-23	12:26:31	70.2	81.5	70.1	69.9
813	2022-03-23	12:26:32	70.5	82.4	70.4	70.0
814	2022-03-23	12:26:33	71.4	84.0	71.2	70.4
815	2022-03-23	12:26:34	72.2	84.8	71.9	71.2
816	2022-03-23	12:26:35	73.4	85.9	73.2	71.2
817	2022-03-23	12:26:36	71.1	84.0	73.3	71.9
818	2022-03-23	12:26:37	69.1	81.9	71.8	70.3
819	2022-03-23	12:26:38	68.2	80.1	70.3	69.1
820	2022-03-23	12:26:39	67.1	79.0	69.0	67.9
821	2022-03-23	12:26:40	67.1	84.4	68.3	67.3
822	2022-03-23	12:26:41	65.9	78.4	67.3	66.5
823	2022-03-23	12:26:42	66.2	79.1	66.5	66.2
824	2022-03-23	12:26:43	66.4	80.2	66.5	66.3
825	2022-03-23	12:26:44	66.0	79.0	66.4	66.1
826	2022-03-23	12:26:45	67.1	80.8	66.9	66.2
827	2022-03-23	12:26:46	67.7	79.8	67.5	66.7
828	2022-03-23	12:26:47	67.5	79.5	67.6	67.4
829	2022-03-23	12:26:48	67.3	78.7	67.5	67.3
830	2022-03-23	12:26:49	67.3	80.1	67.4	67.2
831	2022-03-23	12:26:50	67.1	79.2	67.4	67.1
832	2022-03-23	12:26:51	68.1	79.9	67.9	67.2
833	2022-03-23	12:26:52	68.1	80.8	68.1	67.8
834	2022-03-23	12:26:53	67.2	80.3	67.9	67.4
835	2022-03-23	12:26:54	66.7	78.7	67.4	66.9
836	2022-03-23	12:26:55	65.5	77.6	67.0	66.1
837	2022-03-23	12:26:56	65.8	78.2	66.1	65.9
838	2022-03-23	12:26:57	66.1	78.4	66.2	65.8
839	2022-03-23	12:26:58	65.1	77.1	66.2	65.5
840	2022-03-23	12:26:59	64.3	76.5	65.5	64.8
841	2022-03-23	12:27:00	65.5	77.9	65.3	64.8
842	2022-03-23	12:27:01	64.7	77.0	65.4	64.9
843	2022-03-23	12:27:02	65.2	77.6	65.1	64.9
844	2022-03-23	12:27:03	65.8	77.4	65.7	65.0
845	2022-03-23	12:27:04	66.0	78.3	65.9	65.7
846	2022-03-23	12:27:05	66.5	78.8	66.3	65.8
847	2022-03-23	12:27:06	66.3	78.4	66.6	66.2
848	2022-03-23	12:27:07	66.9	78.9	66.7	66.1
849	2022-03-23	12:27:08	68.3	79.9	67.8	66.7
850	2022-03-23	12:27:09	68.7	81.6	68.5	67.7
851	2022-03-23	12:27:10	70.1	82.4	69.6	68.5
852	2022-03-23	12:27:11	69.0	82.2	69.7	69.1

853		2022-03-23	12:27:12	70.1	82.6	69.8	69.1
854		2022-03-23	12:27:13	69.5	82.1	70.0	69.4
855		2022-03-23	12:27:14	69.3	81.9	69.4	69.3
856		2022-03-23	12:27:15	71.2	84.8	70.8	69.4
857		2022-03-23	12:27:16	72.1	88.0	71.7	70.8
858		2022-03-23	12:27:17	75.1	90.4	74.2	71.7
859		2022-03-23	12:27:18	73.8	89.9	74.4	73.8
860		2022-03-23	12:27:19	72.6	85.9	73.8	73.1
861		2022-03-23	12:27:20	71.6	84.6	73.1	72.2
862		2022-03-23	12:27:21	72.3	83.7	72.4	72.2
863		2022-03-23	12:27:22	71.7	83.6	72.2	71.9
864		2022-03-23	12:27:23	69.1	84.3	71.9	70.3
865		2022-03-23	12:27:24	68.9	81.2	70.3	69.5
866		2022-03-23	12:27:25	69.4	82.6	69.9	69.3
867		2022-03-23	12:27:26	67.8	80.0	69.3	68.4
868		2022-03-23	12:27:27	67.4	78.8	68.4	67.8
869		2022-03-23	12:27:28	67.6	79.5	67.8	67.6
870		2022-03-23	12:27:29	66.4	77.5	67.7	66.9
871		2022-03-23	12:27:30	65.9	78.4	66.9	66.2
872		2022-03-23	12:27:31	66.6	80.0	66.6	66.3
873		2022-03-23	12:27:32	67.2	78.6	67.0	66.6
874		2022-03-23	12:27:33	66.9	78.7	67.0	66.8
875		2022-03-23	12:27:34	67.3	78.8	67.2	67.0
876		2022-03-23	12:27:35	67.4	79.4	67.5	67.2
877		2022-03-23	12:27:36	67.5	80.4	67.5	67.2
878		2022-03-23	12:27:37	65.7	77.0	67.4	66.4
879		2022-03-23	12:27:38	65.8	78.0	66.4	66.0
880		2022-03-23	12:27:39	66.1	80.1	66.2	65.9
881		2022-03-23	12:27:40	66.2	77.9	66.3	66.0
882		2022-03-23	12:27:41	65.8	78.1	66.1	65.9
883		2022-03-23	12:27:42	65.4	78.9	65.9	65.6
884		2022-03-23	12:27:43	66.2	78.7	66.0	65.6
885		2022-03-23	12:27:44	66.5	77.4	66.4	66.0
886		2022-03-23	12:27:45	66.1	78.1	66.3	66.1
887		2022-03-23	12:27:46	67.1	81.3	66.8	66.2
888		2022-03-23	12:27:47	66.9	79.5	67.0	66.8
889		2022-03-23	12:27:48	66.3	77.4	66.8	66.5
890		2022-03-23	12:27:49	65.9	76.9	66.5	66.1
891		2022-03-23	12:27:50	65.5	77.5	66.3	65.7
892		2022-03-23	12:27:51	65.4	77.4	65.8	65.5
893		2022-03-23	12:27:52	65.2	77.2	65.6	65.3
894		2022-03-23	12:27:53	64.3	76.1	65.4	64.6
895		2022-03-23	12:27:54	64.2	76.0	64.6	64.3
896		2022-03-23	12:27:55	65.0	77.0	64.8	64.4
897		2022-03-23	12:27:56	64.6	76.9	64.9	64.6
898		2022-03-23	12:27:57	65.2	77.2	65.1	64.6
899		2022-03-23	12:27:58	65.2	77.4	65.3	65.1
900		2022-03-23	12:27:59	64.0	75.5	65.1	64.5
901		2022-03-23	12:28:00	64.0	76.4	64.4	64.1
902	Stop	2022-03-23	12:28:01				

Noise Appendix

Field Sheets

Meter Locations

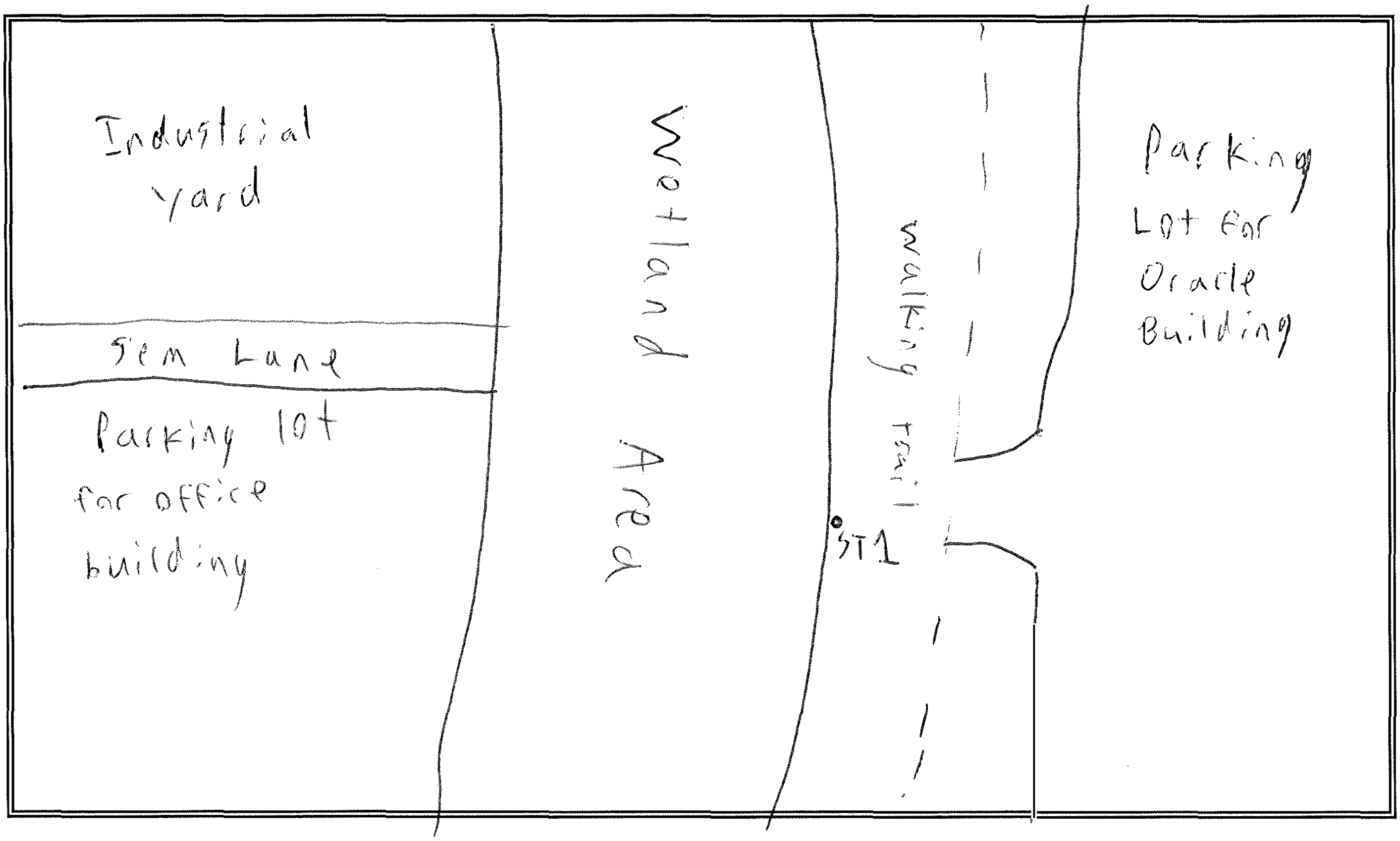
Site #	Meter #	Start		Stop		Start Cal	End Cal	Lock #	Location Description
		Time	Date	Time	Date				
LT1	Piccolo II A	10:10 am	03/23/2022	10:45	2022 03 25				Pole #6 On Extend Stay property. Sem Lane westbound. Large equipment seen entering driveway ~200 feet east.
LT2	Piccolo II J	10:15am	03/23/2022	10:55	2022 03 25				Pole #3 on Project property Sem Lane eastbound.
LT4	Piccolo II I	10:35am	03/23/2022	11:05	2022 03 25				Utility pole on the NW corner of O'Neill and Kedith St. UHaul driveway ~100ft south
LT3	Piccolo II D	10:45am	03/23/2022	11:15	2022 03 25				~50 feet south of third driveway to mobile home park.

NOISE MEASUREMENT SITE INFORMATION SHEET

ICF

PROJECT NAME: 1301 Shoreway Road
PROJECT #:
SITE NUMBER: ST 1
DATE/TIME: 03/23/2022, 11:30AM
LOCATION/ADDRESS: 10 Twin Dolphin Dr, Redwood City
ENGINEERS: Noah Schumaker, Zachary Sorango

SITE SKETCH: Show microphone location, nearby residences/buildings, potential reflective surfaces, project roadways, local roadways, driveways, ground type, trees. Indicate reference distances between objects, arrows showing wind direction, North, and camera locations/directions. Describe the line-of-sight and topography/elevation changes relative to noise sources.



WEATHER DATA: (temperature, wind speed/direction, sky conditions, relative humidity)

61°F, 2.2 mph from SE, Clear Skies, 67% humidity

EQUIPMENT DATA: (sound level meter, microphone, preamp, calibrator, factory cal. date) – meter has not been updated for daylight savings

File number - Data.026, Larson-Davis 831

ESTIMATED CONSTRUCTION DATE OF RESIDENCES: (Pre-1978, or new construction) N/A

POSTED SPEED: N/A COMMENTS: Engine start

TRAFFIC COUNTS:

Roadway/Direction	Autos	Medium	Heavy		Speed	Start Time	Duration

NOISE MEASUREMENT LOG SHEET (20)

PROJECT NAME: 1301 Shoreway Road
PROJECT #:
SITE NUMBER: ST 1
DATE/TIME: 03/23/2022, 11:10 AM
LOCATION/ADDRESS: 10 Twin Dolphin Dr, Redwood City
ENGINEERS: Noah Schumaker, Zachary Corona

#	Minute Starting	Measured Leq (dBA)	O or X	Autos	Medium Trucks	Heavy Trucks	Other Noise Sources/Comments (include SLM equipment, Calibration Data)	
1	11:13						Engine starting up in industrial yard and single engine plane flies overhead	
2	11:14						Industrial yard engine noise and reverse alarm	
3	11:16						Industrial yard engine noise stops	
4	11:18						Single engine propeller plane flies overhead	
5	11:19						Another single engine propeller plane flies overhead	
6								
7								
8								
9								
10								
11								
12								
13								
14								Leq 54.4
15								Lmax 75.6
16								Lmin 47.7
17								L10 57.5
18								L33 50.8
19								L50 50.1
20								L90 48.5

Overall Leq (Include "O" minutes, Exclude "X" minutes) = dBA
Subset Leq (Exclude "O" and "X" minutes) = dBA

"O" = other characteristic sources that contributed to the Leq

"X" = exclude from Leq calculation; a non-typical source contaminated the measurement

NOISE MEASUREMENT SITE INFORMATION SHEET

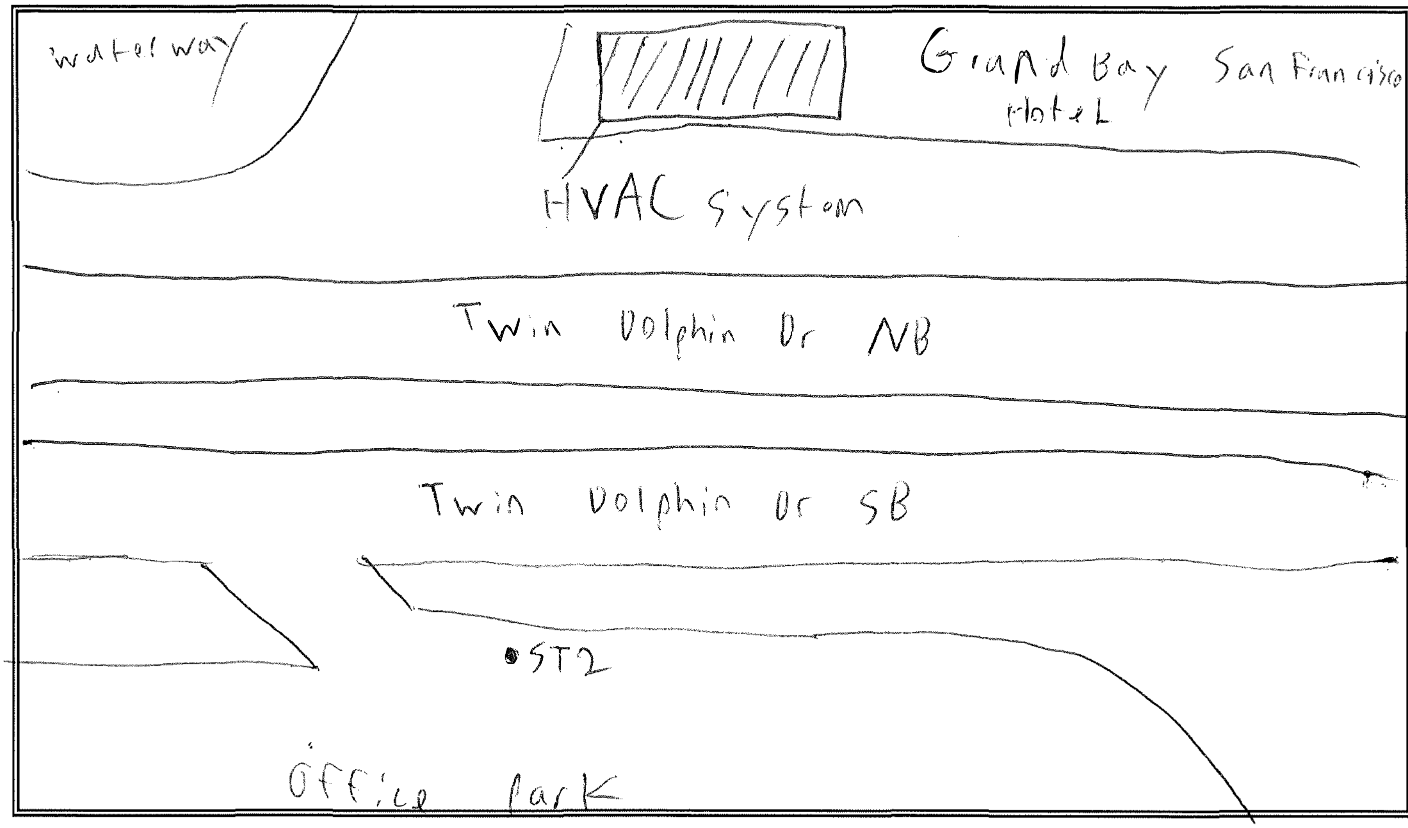
ICF

PROJECT NAME: 1301 Shoreway Road project　　PROJECT #:

SITE NUMBER: ST2　　DATE/TIME: 03/23/2022, 11:46am

LOCATION/ADDRESS: 230 Twin Dolphin Dr, Redwood City　　ENGINEERS: Noah Schumaker, Zachary Cornejo

SITE SKETCH: Show microphone location, nearby residences/buildings, potential reflective surfaces, project roadways, local roadways, driveways, ground type, trees. Indicate reference distances between objects, arrows showing wind direction, North, and camera locations/directions. Describe the line-of-sight and topography/elevation changes relative to noise sources.



WEATHER DATA: (temperature, wind speed/direction, sky conditions, relative humidity)

~~61~~ 63°F, 3 mph from SE, clear sky, 67% humidity

EQUIPMENT DATA: (sound level meter, microphone, preamp, calibrator, factory cal. date)

File # - Data.027

ESTIMATED CONSTRUCTION DATE OF RESIDENCES: (Pre-1978, or new construction) N/A

POSTED SPEED: ______　　COMMENTS: ______

TRAFFIC COUNTS:

Roadway/Direction	Autos	Medium	Heavy	Speed	Start Time	Duration

NOISE MEASUREMENT LOG SHEET (20)

ICF

PROJECT NAME: 1301 Shoreway Road project
PROJECT #:
SITE NUMBER: ST2
DATE/TIME: 03/23/2022, 11 46am
LOCATION/ADDRESS: 230 Twin Dolphin
ENGINEERS: Noah Schumaker, Zachary Cornejo

#	Minute Starting	Measured Leq (dBA)	O or X	Autos	Medium Trucks	Heavy Trucks	Other Noise Sources/Comments (include SLM equipment, Data)	Calibration
1	11:44						Single engine propeller plane flies overhead	
2	11:45						Single engine propeller plane flies overhead	
3	11:46							
4	47						Single engine propeller plane flies overhead	
5	48							
6	49						Single engine propeller plane flies overhead	
7	50							
8	51						Medium truck drove by SB	
9	52							
10	53						Light truck drove by SB	
11	54						Single engine propeller plane flies overhead	
12	55							
13	56						Single engine propeller planes flies overhead	
14	57						Modified car drives SB	Leq 66.5
15	58						Single engine propeller plane flies overhead	Lmax 87.8
16	59						Single engine propeller plane flies overhead	Lmin 50.6
17	12:00							L10 66.0
18								L33 58.1
19								L50 55.0
20								L90 51.7

Overall Leq (Include "O" minutes, Exclude "X" minutes) = [ ] **dBA**

Subset Leq (Exclude "O" and "X" minutes) = [ ] **dBA**

"O" = other characteristic sources that contributed to the Leq

"X" = exclude from Leq calculation; a non-typical source contaminated the measurement

NOISE MEASUREMENT SITE INFORMATION SHEET

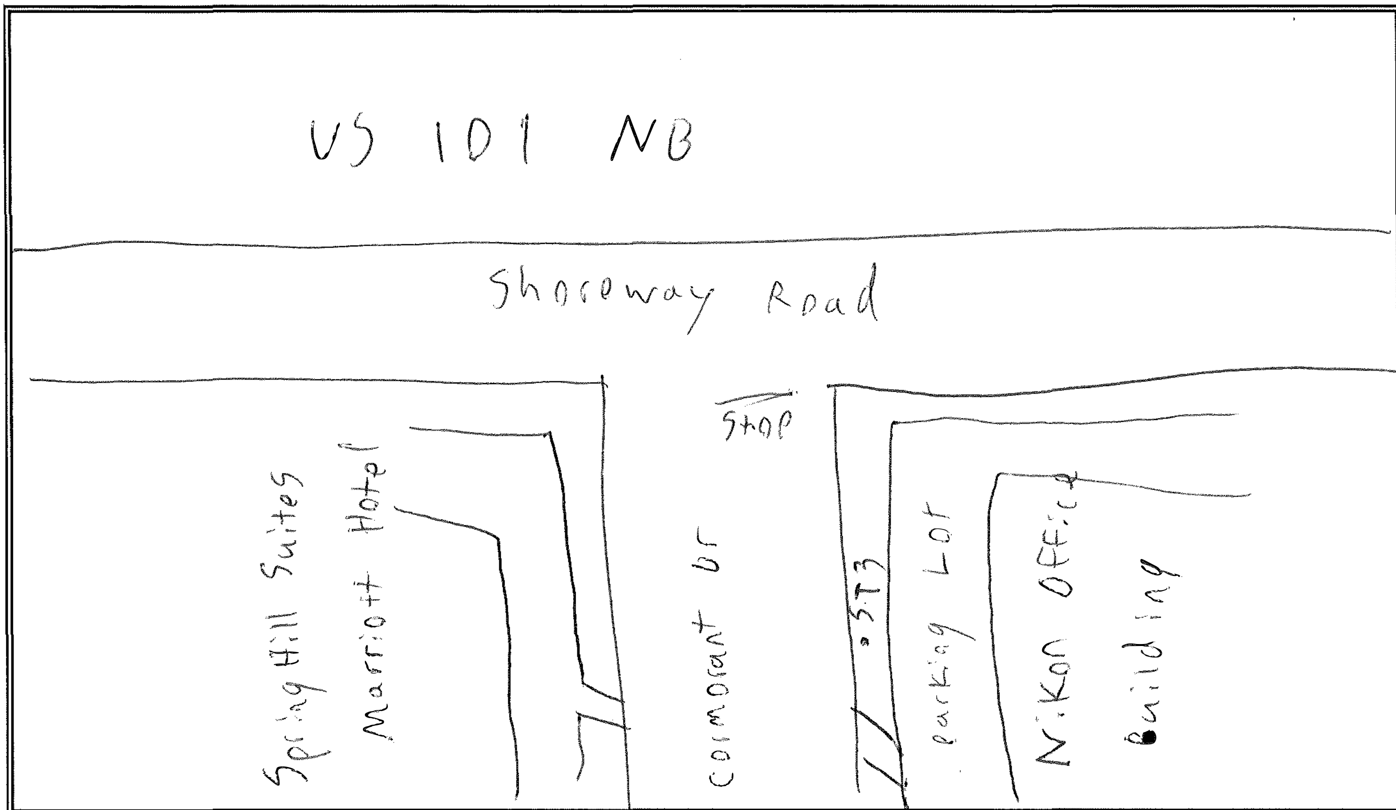
ICF

PROJECT NAME: 1301 Shoreway Road Project PROJECT #: ____________

SITE NUMBER: ST3 DATE/TIME: 03/23/2022, 12:13

LOCATION/ADDRESS: 1399 Shoreway Rd, Belmont ENGINEERS: Noah Schumaker, Zachary Cornejo

SITE SKETCH: Show microphone location, nearby residences/buildings, potential reflective surfaces, project roadways, local roadways, driveways, ground type, trees. Indicate reference distances between objects, arrows showing wind direction, North, and camera locations/directions. Describe the line-of-sight and topography/elevation changes relative to noise sources.



WEATHER DATA: (temperature, wind speed/direction, sky conditions, relative humidity)

65.6°F, 3.3 mph windspeed, clear sky, 66%

EQUIPMENT DATA: (sound level meter, microphone, preamp, calibrator, factory cal. date)

File name - Data.028

ESTIMATED CONSTRUCTION DATE OF RESIDENCES: (Pre-1978, or new construction) N/A

POSTED SPEED: 25 mph COMMENTS: ____________

TRAFFIC COUNTS:

Roadway/Direction	Autos	Medium	Heavy		Speed	Start Time	Duration

NOISE MEASUREMENT LOG SHEET (20)

ICF

PROJECT NAME:

SITE NUMBER: ST-3

PROJECT #:

DATE/TIME: 03/23/2022, 12:13

ENGINEERS: Noah Schumaker, Zachary Cornejo

#	Minute Starting	Measured Leq (dBA)	O or X	Autos	Medium Trucks	Heavy Trucks	Other Noise Sources/Comments (include SLM equipment, Data)	Calibration
1	12:13						Single engine plane flew overhead	
2	14						Garbage truck drives WB on Cormorant Dr	
3	15						Large truck drive WB on Cormorant Dr	
4	16							
5	17						Garbage truck drives WB on Cormorant Dr	
6	18						Medium truck drives WB on Cormorant Dr	
7	19						Single engine propeller plane flew overhead	
8	20						Large truck drives WB on Cormorant Dr. Single engine plane overhead	
9	21						Garbage truck drives WB on Cormorant Dr.	
10	22						Light truck EB on Cormorant Dr.	
11	23							
12	24							
13	25						Single engine propeller plane flew overhead	
14	26						Single engine flew overhead, large, garbage WB Cormorant Dr.	Leq 67.1
15	27						Single engine propeller plane flew overhead	Lmax 75.8
16	28							Lmin 59.1
17								L10 64.8
18								L33 66.6
19								L50 65.9
20								L90 63.5

Overall Leq (Include "O" minutes, Exclude "X" minutes) = [ ] **dBA**

Subset Leq (Exclude "O" and "X" minutes) = [ ] **dBA**

"O" = other characteristic sources that contributed to the Leq

"X" = exclude from Leq calculation; a non-typical source contaminated the measurement

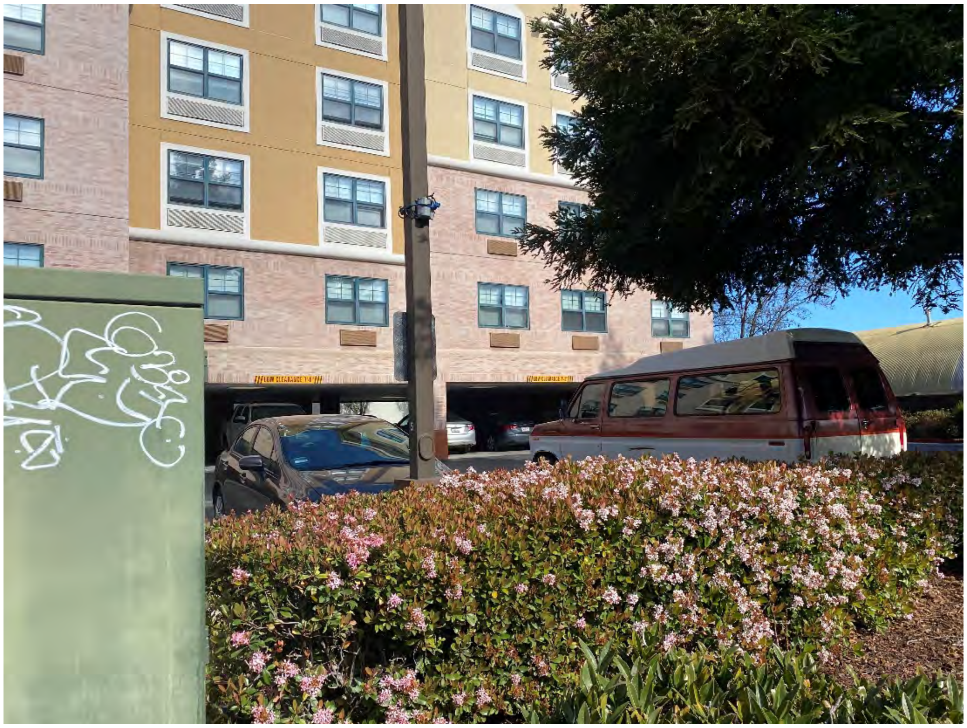
Noise Appendix

Field Pictures

Noise Monitoring Site LT-1
Location: 120 Sem Lane

Looking southwest along Sem Lane, SLM is ~260 feet from Shoreway Road.

Looking northeast, SLM attached to light post 6 in the Extended Stay America parking lot.



Standing on Sem Lane, looking north at the SLM.

Noise Monitoring Site LT-2
Location: 1301 Shoreway Road

Looking southwest towards Shoreway Road. ~15 feet from Sem Lane.

Facing north, SLM is ~220 feet north of Shoreway Road.

Looking southwest, Extended Stay America hotel can be seen off to the right.

Looking northeast, 1301 Shoreway Road can be seen on the right edge of the frame.

Noise Monitoring Site LT-3
Location: Across Karen Road from 31 Karen Road.

Standing on Karen Road, looking northwest towards Oniell Ave, which is ~320 feet west of the SLM.

Looking northeast, Harbor Boulevard is ~ 480 feet east (off camera to the right).

Noise Monitoring Site LT-4
Location: Southwest corner of Oniell Avenue and Kedith Street

Standing at the intersection of Kedith Street and Oniell Avenue, looking southwest.

Standing on Oniell Avenue, looking northwest down Kedith Street.

Noise Monitoring Site ST-1
Location: 10 Twin Dolphin Drive

Looking west towards 1301 Shoreway Road and Extended Stay America Hotel.

Facing north, SLM is set up on the edge of a walking path in the southwest corner of the 10 Twin Dolphin Drive parking lot.

Facing south, off camera to the left is the southwest corner of the 10 Twin Dolphin Drive parking lot.

Noise Monitoring Site ST-2

Location: 230 Twin Dolphin Drive

Looking northeast toward Twin Dolphin Drive.

Looking south, 230 Twin Dolphin Drive is behind the SLM.

Noise Monitoring Site ST-3

Location: 1399 Shoreway Road

Facing southwest, ~ 130 feet northeast of Shoreway Road.

Looking northwest, 1399 Shoreway Road pictured behind the SLM.

Facing northeast, ~30 west of Cormorant Drive.

Standing in the parking lot of 1399 Shoreway Road, looking southeast.

Construction Noise Data and Analysis

	Demolition/Site Clearing/Shoring/Mas	Structural Concrete	Building Construction	Building Exterior	Building Interior	On-Site Improvements	Off-Site Improvements
2 Loudest Pieces @ 50 Feet							
L_{max}	89	89	87	85	84	85	85
L_{eq}	85	86	82	81	80	81	82
L_{max} @ distances (feet):							
25	95	95	93	91	90	91	91
50	89	89	87	85	84	85	85
100	83	83	81	79	78	79	79
200	77	77	75	73	72	73	73
300	74	74	71	70	69	69	70
400	71	71	68	67	66	66	67
500	69	69	67	65	64	65	65
560	68	68	66	64	63	64	64
700	67	66	64	62	61	62	62
800	65	65	62	61	60	60	61
900	64	64	61	60	59	59	60
1000	63	63	61	59	58	59	59
1200	62	62	59	58	57	57	58
1400	61	60	58	56	55	56	56
1600	59	59	56	55	54	54	55
1800	58	58	55	54	53	53	54
2000	57	57	55	53	52	53	53
L_{eq} @ distances (feet):							
25	92	92	88	87	86	87	88
50	85	86	82	81	80	81	82
100	79	80	76	75	74	75	76
200	73	74	70	69	68	69	70
300	70	70	67	66	64	65	66
400	67	68	64	63	62	63	64
500	65	66	62	61	60	61	62
560	64	65	61	60	59	60	61
700	63	63	59	58	57	58	59
800	61	62	58	57	56	57	58
900	60	61	57	56	55	56	57
1000	59	60	56	55	54	55	56
1200	58	58	55	54	52	53	54
1400	57	57	53	52	51	52	53
1600	55	56	52	51	50	51	52
1800	54	55	51	50	49	50	50
2000	53	54	50	49	48	49	50

Qty	Description	Hours/day
	Demolition/Site Clearing/Shoring/Mass Excavation	**Total phase:**
2	Excavator	8
2	Scraper	8
1	Compactor	8
1	Dozer	8
2	Grader	8
1	Water Truck	8
2	Dump Truck	8
1	Drill Rig	8
1	Crane	8
1	Street Sweeper	8
1	Gradall	8
	Structural Concrete	**Total phase:**
45	Concrete Trucks	8
1	Concrete Pump	8
1	Crane	8
1	Gradall	8
2	Laser Screed	8
	Building Construction	**Total phase:**
1	Crane	4
1	Gradall	4
1	Concrete Pump	8
2	Welders	8
	Building Exterior	**Total phase:**
1	Crane	8
2	Gradall	4
1	Welders	8
6	Boomlift	8
1	Loader	8
1	Backhoe	8
	Building Interior	**Total phase:**
4	JLG Manlift	8
1	Gradall	4
	On-Site Improvements	**Total phase:**
1	Backhoe	8
1	Excavator	8

2	Dump Truck	8
5	Concrete Trucks	8
1	Concrete Pump	8
1	Skip Loader	8
1	Paver	8
	Off-Site Improvements	**Total phase:**
1	Backhoe	8
1	Excavator	8
2	Dump Truck	8
5	Concrete Trucks	8
1	Concrete Pump	8
1	Skip Loader	8
1	Paver	8

Construction Noise

Demolition/Site Clearing/Shoring/Mass Excavation

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Grader	85	40%	81.0
Grader	85	40%	81.0
Scraper	84	40%	80.0

Calculated Data:

All Sources Combined - Lmax sound level (dBA) at 50 feet =	89
All Sources Combined - Leq sound level (dBA) at 50 feet =	85

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	95	92
50	0	0.0	89	85
100	-6	0.0	83	79
200	-12	0.0	77	73
300	-16	0.0	74	70
400	-18	0.0	71	67
500	-20	0.0	69	65
560	-21	0.0	68	64
700	-23	0.0	67	63
800	-24	0.0	65	61
900	-25	0.0	64	60
1000	-26	0.0	63	59
1200	-28	0.0	62	58
1400	-29	0.0	61	57
1600	-30	0.0	59	55
1800	-31	0.0	58	54
2000	-32	0.0	57	53

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

Construction Noise

Structural Concrete

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Laser Screed	85	50%	82.0
Laser Screed	85	50%	82.0
Gradall	83	40%	79.0

Calculated Data:

All Sources Combined - Lmax sound level (dBA) at 50 feet =	89
All Sources Combined - Leq sound level (dBA) at 50 feet =	86

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	95	92
50	0	0.0	89	86
100	-6	0.0	83	80
200	-12	0.0	77	74
300	-16	0.0	74	70
400	-18	0.0	71	68
500	-20	0.0	69	66
560	-21	0.0	68	65
700	-23	0.0	66	63
800	-24	0.0	65	62
900	-25	0.0	64	61
1000	-26	0.0	63	60
1200	-28	0.0	62	58
1400	-29	0.0	60	57
1600	-30	0.0	59	56
1800	-31	0.0	58	55
2000	-32	0.0	57	54

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.

Construction Noise

Building Construction

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Gradall	83	40%	79.0
Concrete Pump	81	50%	78.0
Crane	81	16%	73.0

Calculated Data:	
All Sources Combined - Lmax sound level (dBA) at 50 feet =	87
All Sources Combined - Leq sound level (dBA) at 50 feet =	82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	93	88
50	0	0.0	87	82
100	-6	0.0	81	76
200	-12	0.0	75	70
300	-16	0.0	71	67
400	-18	0.0	68	64
500	-20	0.0	67	62
560	-21	0.0	66	61
700	-23	0.0	64	59
800	-24	0.0	62	58
900	-25	0.0	61	57
1000	-26	0.0	61	56
1200	-28	0.0	59	55
1400	-29	0.0	58	53
1600	-30	0.0	56	52
1800	-31	0.0	55	51
2000	-32	0.0	55	50

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.

Construction Noise

Building Exterior

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Gradall	83	40%	79.0
Loader	79	40%	75.0
Backhoe	78	40%	74.0

Calculated Data:

All Sources Combined - Lmax sound level (dBA) at 50 feet =	85
All Sources Combined - Leq sound level (dBA) at 50 feet =	81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	91	87
50	0	0.0	85	81
100	-6	0.0	79	75
200	-12	0.0	73	69
300	-16	0.0	70	66
400	-18	0.0	67	63
500	-20	0.0	65	61
560	-21	0.0	64	60
700	-23	0.0	62	58
800	-24	0.0	61	57
900	-25	0.0	60	56
1000	-26	0.0	59	55
1200	-28	0.0	58	54
1400	-29	0.0	56	52
1600	-30	0.0	55	51
1800	-31	0.0	54	50
2000	-32	0.0	53	49

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.

Construction Noise

Building Interior

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Gradall	83	40%	79.0
JLG Manlift	75	20%	68.0
JLG Manlift	75	20%	68.0

Calculated Data:

All Sources Combined - Lmax sound level (dBA) at 50 feet =	84
All Sources Combined - Leq sound level (dBA) at 50 feet =	80

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	90	86
50	0	0.0	84	80
100	-6	0.0	78	74
200	-12	0.0	72	68
300	-16	0.0	69	64
400	-18	0.0	66	62
500	-20	0.0	64	60
560	-21	0.0	63	59
700	-23	0.0	61	57
800	-24	0.0	60	56
900	-25	0.0	59	55
1000	-26	0.0	58	54
1200	-28	0.0	57	52
1400	-29	0.0	55	51
1600	-30	0.0	54	50
1800	-31	0.0	53	49
2000	-32	0.0	52	48

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.

Construction Noise

On-Site Improvements

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Concrete Pump	81	50%	78.0
Concrete Trucks	79	40%	75.0
Concrete Trucks	79	40%	75.0

Calculated Data:

All Sources Combined - Lmax sound level (dBA) at 50 feet =	85
All Sources Combined - Leq sound level (dBA) at 50 feet =	81

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	91	87
50	0	0.0	85	81
100	-6	0.0	79	75
200	-12	0.0	73	69
300	-16	0.0	69	65
400	-18	0.0	66	63
500	-20	0.0	65	61
560	-21	0.0	64	60
700	-23	0.0	62	58
800	-24	0.0	60	57
900	-25	0.0	59	56
1000	-26	0.0	59	55
1200	-28	0.0	57	53
1400	-29	0.0	56	52
1600	-30	0.0	54	51
1800	-31	0.0	53	50
2000	-32	0.0	53	49

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.

Construction Noise

Off-Site Improvements

Source Data:	Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Concrete Pump	81	50%	78.0
Excavator	81	40%	77.0
Concrete Trucks	79	40%	75.0

Calculated Data:

All Sources Combined - Lmax sound level (dBA) at 50 feet =	85
All Sources Combined - Leq sound level (dBA) at 50 feet =	82

Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	0.0	91	88
50	0	0.0	85	82
100	-6	0.0	79	76
200	-12	0.0	73	70
300	-16	0.0	70	66
400	-18	0.0	67	64
500	-20	0.0	65	62
560	-21	0.0	64	61
700	-23	0.0	62	59
800	-24	0.0	61	58
900	-25	0.0	60	57
1000	-26	0.0	59	56
1200	-28	0.0	58	54
1400	-29	0.0	56	53
1600	-30	0.0	55	52
1800	-31	0.0	54	50
2000	-32	0.0	53	50

Geometric attenuation based on 6 dB per doubling of distance.
Ground affect attenuation based on 1.5 dB per doubling of distance
Note: This calculation does not include the effects, if any, of local shielding
from walls, topography or other barriers which may reduce sound levels further.

Traffic Data for Operational Noise Analysis

Road	Segment	ADT				Truck%	Speed
		Existing or Baseline Conditions	Existing or Baseline + Project	Cumulative No Project	Cumulative + Project	Percent Truck (H&M)	Posted Speeds
Shoreway Road	North of Marine Parkway	6,350	6,350	8,940	8,940	2%	25
	South of Marine Parkway	5,040	8,730	6,880	10,570	2%	35
	North of Cormorant Drive	4,560	5,390	5,500	6,330	2%	35
	South of Cormorant Drive	4,740	5,430	5,140	5,830	2%	35
	North of Holly Street	5,200	5,890	7,000	7,690	2%	35
	South of Holly Street	3,760	3,760	4,760	4,760	4%	25
Marine Parkway	East of Shoreway Road	30,670	30,820	32,320	32,470	2%	30
	West of Shoreway Road	37,940	41,690	44,330	47,880	2%	30
Cormorant Drive	East of Shoreway Road	1,080	1,230	2,460	2,610	10%	25
Holly Street	East of Shoreway Road	27,990	27,990	35,770	35,770	2%	35
	West of Shoreway Road	35,220	35,910	45,350	46,040	2%	35