

New Containerized Sample Preparation and Analytical Analysis Laboratory

Summary

The system is a new, fully-operational, containerized, sample preparation and analytical laboratory. The laboratory is housed in two 40-foot shipping containers. One container holds the sample preparation equipment. A second container holds the sample staging and analysis equipment. And a third container holds all of the utilities for the other two units and provides additional room for an optional manual preparation station.

The sample preparation unit houses a 4-stage, linear sample preparation system. This system integrates the functions of a jaw crusher, sample splitter, pulverizing mill, and rotary sample divider. The system enables a single technician to process 10 samples per hour. The section includes drying facilities and movable tray racks to simplify handling of the dried samples.

The analytical unit supports chemical analysis. It includes a 6-foot scrub-down, fume hood for sample digestion. The unit provides room for such equipment as sample balances, microwave digestion units, sample dilution, neutralization equipment, and chemical analysis equipment (such as AA, ICP, and LECO).

The utility unit includes a dust collector, HVAC, water deionization, water heater, and power stabilization units.

The units are located near Eureka, Nevada.

Specifications

Fully inspected and immediate operational, having been fully pre-commissioned by owner and supplier. Immediate availability. Housed in (2) 40ft. and (1) 20ft Shipping Container.

1. UNIT A (40ft) Container holds the Sample Preparation Equipment:
 - 1.1. 4-Stage Linear Sample Preparation System, which integrates the functions of the following:
 - 1.1.1. FLSmidth Essa JC2501 Jaw Crusher
 - 1.1.2. FLSmidth Essa LAS402 Linear Automation System
 - 1.1.3. FLSmidth Variable Sample Splitter
 - 1.1.4. Essa ABM2000 Autobatch Mill
 - 1.1.5. Pulverizing Mill - FLSmidth Essa Model LM2 Laboratory Ring Mill with workstation
 - 1.1.6. Rotary Sample Divider - Essa VSRTS & Infeed Hopper
 - 1.2. Enables a Single Technician to process 10 samples per hour
 - 1.3. Includes drying facilities and movable tray racks to simplify handling of the dried samples
2. UNIT B (40ft) Container holds the Sample Staging and Analysis Equipment
 - 2.1. Includes 6-foot Scrub-Down, Fume Hood for Sample Digestion
 - 2.2. Provides room for such equipment as:
 - 2.2.1. Sample Balances
 - 2.2.2. Microwave Digestion Units
 - 2.2.3. Sample Dilution
 - 2.2.4. Neutralization Equipment

- 2.2.5. Chemical Analysis Equipment such as AA, ICP and LECO Analytical Instruments Lab Equip.
- 3. UNIT C (20ft) Container holds all of the Utilities for the other (2) Units and Provides Additional Room for an Optional Manual Preparation Station
 - 3.1. Includes the following:
 - 3.1.1. Dust Collector
 - 3.1.2. HVAC
 - 3.1.3. Water Deionization
 - 3.1.4. Water Heater
 - 3.1.5. Power Stabilization Units