



# Mining



## Modular LST facility

IHC Mining offers a complete LST Heavy Liquid Separations (HLS) laboratory as a customisable package, tailored to suit the requirements of any operation.

The facility is modular in design and containerised so is easily relocatable, only requiring a supply of power, fresh water and compressed air (optional). All required parts are provided, including a stock of LST Heavy Liquid, with replacement items available off-the-shelf as required.

This unit is capable of processing up to 100 samples per day in a safe and efficient environment, or can be expanded to suit client needs.

Over years of operation, IHC Mining has developed a vacuum-assisted LST recovery system which is included in the facility. Our own metallurgical laboratory employs this user-friendly reclamation system with great success in order to optimise LST recovery to >99% per use.



## Heavy liquid separations (HLS)

Heavy Liquid Separations (HLS), also known as float-sink tests, are a standardised analytical procedure that allows for controlled separation of materials by their density. The fluid medium in which the separations occur defines the specific gravity (SG) 'cut-point'. Particles with a SG higher than the medium will sink, while lower-SG particles (usually silica and other gangue particles) will float.

HLS is a useful tool for mineral exploration as well as for metallurgical evaluations. Ultimately, it is a fast, inexpensive and repeatable method to determine the Heavy Mineral (HM) content of a sample.

## LST heavy liquid

Traditional heavy liquids, such as bromoform and TBE, are highly toxic, volatile substances and in some cases are considered to be carcinogenic. LST Heavy Liquid is a non-toxic and stable alternative.

Chemically, LST Heavy Liquid is a solution of lithium heteropolytungstates in water. It is most commonly used at 2.85 SG, though this can be altered by evaporation or dilution to suit the application.

## Feed preparation laboratory

An optional counterpart to the LST Heavy Liquid Laboratory is IHC Mining's modular Feed Preparation Laboratory. This package allows samples to be prepared for HLS while concurrently determining slimes particle (<45µm or <38µm) and oversize particles (>1.0mm or >2.0mm).

The Feed Preparation Laboratory is highly recommended for mineral exploration operations.

## Delivery

The Modular LST Facility includes:

- customised design (if required)
- fabrication and assembly
- delivery to site
- commissioning
- on-site training, including a full user manual.

