

SL. NO.	PARAMETER	HAZARDOUS IMPACT
<b>MAIN PANEL: Heavy Metal Screening &amp; Quantification by ICP-OES or ICP-MS</b>		
01	Lead	Acute Exposure: Encephalopathy (headache, seizures), nausea & vomiting Chronic exposure: Encephalopathy, anemia, abdominal pain, nephropathy
02	Mercury	Acute Exposure: Fever, diarrhoea, MOTS, acute lung injury (inhaled) & caustic gastroenteritis (ingested) Chronic exposure: Neurasthenia, nephrotic syndrome, hypersensitivity (Pink disease)
03	Arsenic	Acute Exposure: Encephalopathy, diarrhoea, MOTS, painful neuropathy & LoQTS Chronic exposure: Encephalopathy, diabetes, cancer: lung, skin, bladder, hyperkeratosis
04	Cadmium	Acute Exposure: Pneumonitis (oxide fumes) Chronic exposure: Proteinuria, lung cancer & osteomalacia
05	Chromium	Acute Exposure: GI hemorrhage, hemolysis, acute renal failure Chronic exposure: Pulmonary fibrosis, lung cancer (inhaled)
<b>DETAILED PANEL: Trace Metal Analysis/Toxic Elements Profile by ICP-OES or ICP-MS</b>		
06	Aluminum	Acute Exposure: Affects nervous, respiratory & skeletal systems Chronic Exposure: Osteomalacia
07	Antimony	Acute Exposure: Irritation of eyes, lungs & skin Chronic Exposure: Lung diseases, heart problems, severe vomiting & stomach ulcers
08	Barium	Acute Exposure: Cardiac arrhythmia, respiratory failure, gastrointestinal dysfunction, paralysis Chronic Exposure: Kidney damage, respiratory failure, cardiac arrest
09	Beryllium	Acute Exposure: Lung damage, pneumonia & berylliosis (dangerous & persistent lung disorder) Chronic Exposure: Chronic Beryllium Disease (CBD), cancer development & DNA damage
10	Bismuth	Acute Exposure: Nausea, loss of appetite & weight Chronic Exposure: Anemia, ulcerative stomatitis, liver & kidney damage
11	Thallium	Acute Exposure: Nerve pain, joint pain, leg pain, headache Chronic Exposure: Tiredness, trembling, paralysis, loss of appetite & disturbance of sight
12	Nickel	Acute Exposure: Dermatitis, encephalopathy, myocarditis, acute lung disease Chronic Exposure: Pulmonary fibrosis (inhaled), low sperm count, nasopharyngeal tumors
13	Silver	Acute Exposure: Bone marrow suppression, hepatorenal necrosis, pulmonary edema Chronic Exposure: Argyria
14	Tin	Acute Exposure: Eye & skin irritation, headache, breathlessness, sweating, urinary problems Chronic Exposure: Liver damage, debilitated immune system & chromosomal damage
15	Titanium	Acute Exposure: Coughing, tightness in chest, breathing difficulty (inhalation) Chronic Exposure: N/A
16	Cobalt	Acute Exposure: Cardiomyopathy Chronic Exposure: Goiter, Pneumoconiosis (inhaled)
17	Manganese	Acute Exposure: MFF (inhaled) Chronic Exposure: Parkinson-like syndrome, respiratory illness, neuropsychiatric illness
18	Molybdenum	Acute Exposure: N/A Chronic Exposure: Liver dysfunction (hyperbilirubinemia), gout
<b>COMPREHENSIVE PANEL: Essential Minerals by ICP-OES or ICP-MS</b>		
19	Calcium	Acute Exposure: Lethargy, mental imbalance, constipation, bone weakness Chronic Exposure: Heart arrhythmia, cancer
20	Magnesium	Acute Exposure: Electrolyte disturbance Chronic Exposure: Decreased breathing rate, kidney failure, cardiac arrest
21	Sodium	Acute Exposure: Eye, nose, skin & throat irritation (exposure in air) Chronic Exposure: Kidney damage, breathing difficulty & chemical bronchitis (exposure in air)
22	Potassium	Acute Exposure: Stomach cramps, fatigue, diarrhea, irritability, vomiting Chronic Exposure: Kidney failure, cardiac arrhythmia
23	Copper	Acute Exposure: MOTS (ingested), MFF (inhaled) Chronic Exposure: Vineyard sprayer's lung (inhaled), Wilson disease
24	Zinc	Acute Exposure: MFF (oxide fumes), diarrhea, vomiting, abdominal pain (ingestion) Chronic Exposure: Anemia, osteoporosis, neurologic degeneration
25	Lithium	Acute Exposure: Eye, skin & lung irritation Chronic Exposure: Kidney damage & disorder, lung edema
26	Phosphorus	Acute Exposure: N/A Chronic Exposure: Kidney damage & osteoporosis
27	Selenium	Acute Exposure: Pneumonitis, hypotension, caustic burns Chronic Exposure: Parasthesia, red skin, hemiplegia, brittle nails & hair
28	Iron	Acute Exposure: GI hemorrhage, cardiac depression, metabolic acidosis Chronic Exposure: Hepatic cirrhosis
<b>Lowest Detection Limit (LDL) is 100 parts per trillion (ppt)</b>		