

Price Schedule, ISL UofC - 2023

For more info please contact: Stephen Taylor (ISL Lab Manager): (p) 403 210-6003, steve.taylor@ucalgary.ca

2023

Analysis	Material	Comments	Instrument
Oxygen	water	clean, natural abundance	Los Gatos Research DLT-100
	brine	>15000 ppm TDS	DeltaV + Gas Bench
	production or "plunged" water	contaminated waters requiring clean-up	DeltaV + Gas Bench
	solids	¹⁸ O-bulk: inorganic (eg. BaSO ₄) or organic (eg. plant tissue)	DeltaPlusXL+ HEKATECH
Hydrogen	water	clean, natural abundance	Los Gatos Research DLT-100
	brines	>15000 ppm TDS	DeltaV + Gas Bench
	solids	eg. collagen	DeltaV+ HEKATECH
	production or "plunged" water	contaminated waters requiring clean-up	DeltaV + Gas Bench
	CH ₄	> 5000 ppmv	Thermo 253 + GC IsoLink
	CH ₄	< 5000 ppmv done using a Purge & Trap preconcentration	Thermo 253 + GC IsoLink
	CH ₄ - C ₃	natural gas	Thermo 253 + GC IsoLink
Carbon	carbonate minerals	pure mineral phases	DeltaV + Gas Bench
	Dissolved Inorganic Carbon (DIC)	submitted as water or SrCO ₃ ppt	DeltaV + Gas Bench
	CO ₂ (δ ¹³ C only)	gas	Thermo 253 + GC IsoLink
	CO ₂ (δ ¹³ C + δ ¹⁸ O)	gas (off-line purification then DI-IRMS)	DeltaV + DI
	CH ₄	> 3000 ppmv can be direct injection	Thermo 253 + GC IsoLink
	CH ₄	< 3000 ppmv done using a Purge & Trap preconcentration	Thermo 253 + GC IsoLink
	CH ₄ - C ₅ & CO ₂	natural gas	Thermo 253 + GC IsoLink
Sulfur	solid	pure BaSO ₄ or Ag ₂ S precipitate (minimum of 1mg must be provided)	DeltaV+ NA1500
	dissolved S	precipitation of BaSO ₄ or CdS then ³⁴ S measurement	DeltaV+ NA1500
	organic S	Parr bomb to BaSO ₄ then ³⁴ S measurement **	DeltaV+ NA1500
	Total S (whole ground rock)	Br-HNO ₃ ** to BaSO ₄ then ³⁴ S measurement **	DeltaV+ NA1500
	soluble sulfate	hot DI extraction, precipitation of BaSO ₄ , then ³⁴ S measurement	DeltaV+ NA1500
	H ₂ S in gas	CdS or Ag ₂ S ppt from gas trapped in the field ** ** contact ISL prior to submitting samples	DeltaV+ NA1500
C/N	¹³ C, ¹⁵ N, %C, %N		DeltaV + IsotopeCUBE / Costech 4010
	¹³ C, %C	carbon only	DeltaV + IsotopeCUBE / Costech 4010
	¹⁵ N, %N	nitrogen only	DeltaV + IsotopeCUBE / Costech 4010
	¹⁵ N NH ₄	dissolved ammonium	DeltaV + IsotopeCUBE / Costech 4010
	%C/N, %C or %N		Isotope CUBE
Nitrates	¹⁵ N	dissolved nitrate	DeltaV + PreCon
	¹⁵ N + ¹⁸ O	dissolved nitrate	DeltaV + PreCon
	¹⁵ N + ¹⁸ O + ¹⁷ O	dissolved nitrate	DeltaV + PreCon
Water-pkg	¹⁸ O + DH	clean surface water	Los Gatos Research DLT-100
	¹⁸ O + DH	contaminated or brine water	DeltaV+Gas Bench or DeltaXL+TCEA
Sulfate-pkg	³⁴ S + ¹⁸ O	clean BaSO ₄	Delta+XL+NA1500 & Delta+XL+HEKA
	dissolved SO ₄ ⁼	precipitation of BaSO ₄ then ³⁴ S & ¹⁸ O measurement	Delta+XL+NA1500 & Delta+XL+HEKA
Hydrocarbon-pkg	composition, ¹³ C & ² H	natural gas (C1 to C5)	Thermo 253 + GC IsoLink
Dissolved gas-pkg	composition, ¹³ C & ² H	dissolved gases extracted from water. Must use specialized sample bottle (see next line)	Thermo 253 + GC IsoLink
	dissolved gas sample bottles	125mL serum bottles with biocide. Evacuated to 10-2 mbar)	
Strontium	^{87/86} Sr	Strontium concentration supplied by client	Triton
	^{87/86} Sr + [Sr]	[Sr] measured by isotope dilution	Triton
Boron	¹¹ B	Boron concentrations supplied by client	Triton
	¹¹ B + [B]	[B] measured by isotope dilution	Triton

CND Academic	Non-CND Academic & CND governments	Non-Academic (Industry)
\$ 15	\$ 25	\$ 40
\$ 30	\$ 40	\$ 70
\$ 35	\$ 50	\$ 100
\$ 30	\$ 50	\$ 80
\$ 15	\$ 25	\$ 40
\$ 30	\$ 40	\$ 70
\$ 30	\$ 40	\$ 70
\$ 35	\$ 50	\$ 100
\$ 50	\$ 80	\$ 180
\$ 75	\$ 125	\$ 200
\$ 120	\$ 180	\$ 400
\$ 30	\$ 40	\$ 50
\$ 30	\$ 40	\$ 50
\$ 30	\$ 50	\$ 150
\$ 50	\$ 75	\$ 175
\$ 30	\$ 50	\$ 150
\$ 75	\$ 125	\$ 200
\$ 120	\$ 200	\$ 400
\$ 25	\$ 45	\$ 90
\$ 40	\$ 80	\$ 150
\$ 75	\$ 100	\$ 170
\$ 75	\$ 100	\$ 170
\$ 60	\$ 80	\$ 170
\$ 40	\$ 50	\$ 100
\$ 25	\$ 35	\$ 55
\$ 20	\$ 25	\$ 30
\$ 20	\$ 25	\$ 30
\$ 85	\$ 140	\$ 200
\$ 15	\$ 20	\$ 30
\$ 75	\$ 100	\$ 150
\$ 100	\$ 150	\$ 200
\$ 120	\$ 200	\$ 300
\$ 30	\$ 60	\$ 80
\$ 60	\$ 80	\$ 120
\$ 60	\$ 100	\$ 170
\$ 80	\$ 120	\$ 185
\$ 250	\$ 350	\$ 700
\$ 275	\$ 375	\$ 725
\$ 25	\$ 25	\$ 25
\$ 110	\$ 165	\$ 275
\$ 220	\$ 330	\$ 550
\$ 110	\$ 165	\$ 275
\$ 220	\$ 330	\$ 550

Notes: All prices in CND dollars
All prices include UofC overhead of (15%)
GST not included