

Price Schedule, ISL UofC - 2024

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2024

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 + δ ¹⁸ O)	gas (off-line purification then DI-IRMS)	DeltaV + DI
	CH ₄ or CO ₂	> 3000 ppmv (direct injection)	Thermo 253 + GC IsoLink
	CH ₄ or CO ₂	< 3000 ppmv (Purge & Trap preconcentration)	Thermo 253 + GC IsoLink
	CH ₄ - C ₃ & CO ₂	natural gas	Thermo 253 + GC IsoLink
	Sulfur	solid	pure BaSO ₄ or Ag ₂ S precipitate (<i>minimum of 1mg must be provided by client</i>)
dissolved S		precipitation of BaSO ₄ from groundwater then ³⁴ S measurement	DeltaV+ NA1500
disulfide-S (whole ground rock)		HNO ₃ digestion and BaSO ₄ precipitation then ³⁴ S measurement **	DeltaV+ NA1500
soluble sulfate		hot DIW extraction, precipitation of BaSO ₄ then ³⁴ S measurement **	DeltaV+ NA1500
H ₂ S in gas		CdS or Ag ₂ S ppt (<i>trapped in the field by client</i>) **	DeltaV+ NA1500
		** contact ISL prior to submitting samples	
C/N	¹³ C, ¹⁵ N, %C, %N		DeltaV + IsotopeCUBE / Costech 4010
	¹³ C, %C	carbon only	DeltaV + IsotopeCUBE / Costech 4010
	¹³ C-org, %C	decarbonation of WRP and EA-IRMS	DeltaV + IsotopeCUBE / Costech 4010
	¹⁵ N, %N	nitrogen only	DeltaV + IsotopeCUBE / Costech 4010
	¹⁵ N NH ₄	dissolved ammonium	DeltaV + IsotopeCUBE / Costech 4010
	wt%C or wt%N	weight% measurement only	isotope CUBE
	sample preparation/purification	drying/grinding/filtering/extracting	
Nitrates	¹⁵ N + ¹⁸ O	dissolved TON (nitrate + nitrite)	DeltaV + PreCon
	[TON]	dissolved TON (nitrate + nitrite) concentration only	Thermo-Gallery
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 gas sample bottles	dissolved gases extracted from water. <i>Must use specialized sample bottle (see next line)</i> 125mL serum bottles with biocide. Evacuated to 10-2 mbar)	Thermo 253 + GC IsoLink
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
\$ 35	\$ 55	\$ 85

\$ 15	\$ 25	\$ 40
\$ 30	\$ 40	\$ 70
\$ 35	\$ 45	\$ 85
\$ 35	\$ 50	\$ 100
\$ 50	\$ 80	\$ 180
\$ 75	\$ 125	\$ 200
\$ 120	\$ 180	\$ 400

\$ 30	\$ 40	\$ 60
\$ 30	\$ 40	\$ 60
\$ 75	\$ 150	\$ 250
\$ 30	\$ 60	\$ 160
\$ 75	\$ 125	\$ 200
\$ 120	\$ 180	\$ 400

\$ 25	\$ 50	\$ 100
\$ 40	\$ 80	\$ 150
\$ 75	\$ 100	\$ 170
\$ 60	\$ 80	\$ 170
\$ 45	\$ 70	\$ 120

\$ 30	\$ 40	\$ 60
\$ 20	\$ 25	\$ 30
\$ 30	\$ 50	\$ 75
\$ 20	\$ 25	\$ 30
\$ 85	\$ 140	\$ 200
\$ 20	\$ 25	\$ 30
\$ 10	\$ 20	\$ 45

\$ 100	\$ 150	\$ 200
\$ 20	\$ 30	\$ 50

\$ 30	\$ 60	\$ 80
\$ 60	\$ 80	\$ 120

\$ 60	\$ 100	\$ 170
\$ 80	\$ 140	\$ 200

\$ 250	\$ 350	\$ 700
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\$ 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