Remove H_2S from gas samples

Each sampling kit includes:

- 1 H_2S IsoScrubber®
- 1 60 ml syringe (valve & needle included)
- 1 gas sampling bag
- Connector (to attach IsoScrubber to gas bag)
- Shipper (including paint can) for return shipment to the lab
- Sampling instructions
- Guidelines for return shipment

For questions, please call us at (877) 362-4190.

Strips toxic hydrogen sulfide (H_2S) from natural gas for easier shipping to the lab, and allows for chemical and isotopic analysis of the light hydrocarbons

CAUTION: HYDROGEN SULFIDE IS A HIGHLY TOXIC GAS EVEN AT LOW CONCENTRATIONS. ALL NECESSARY PRECAUTIONS ASSOCIATED WITH THE COLLECTION OF SAMPLES CONTAINING HYDROGEN SULFIDE, MUST BE TAKEN PRIOR TO COLLECTING SAMPLES USING THE H_2S ISOSCRUBBER.

Encountering natural gases that contain H_2S is an increasingly common occurrence. Unfortunately, collecting samples of these gases in the field and getting them back to the laboratory for analysis can be very problematic as H_2S is highly toxic and cannot be transported by air. Similarly, some laboratories will not accept samples containing H_2S above certain concentrations (e.g. Isotech's limit for accepting samples containing H_2S is 50 ppm). Additionally, samples containing H_2S often require expensive, specially treated containers for shipment as hydrogen sulfide is also quite corrosive.

Isotech's H_2S IsoScrubber® provides a solution to these challenges:

- Removes hydrogen sulfide from a gas sample without adversely affecting either the light hydrocarbon isotope values, or the ratios of one light hydrocarbon to another.
- By flushing gas through the H_2S IsoScrubber, the resulting sample can then be packaged in the provided shipper, and safely returned to the laboratory without need for HAZMAT shipping.
- Up to 180 milliliters of H_2S laden gas can be flushed through an H_2S IsoScrubber into the provided gas bag (maximum H_2S concentration: 50% H_2S. NOTE: CO_2 will be affected both chemically and isotopically.)

Effects on $\delta^{13}C$ (‰)

	C_1	C_2	C_3	iC_4	nC_4	iC_5	nC_5
BEFORE	-39.7	-29.9	-33.4	-31.8	-34.4	-29.0	-28.4
AFTER	-39.8	-29.9	-33.5	-31.8	-34.1	-28.6	-27.9
Difference	-0.1	0.0	-0.1	0.0	0.3	0.4	0.5

C_1, C_2 & C_3 are unaffected isotopically (+/- 0.3 ‰). C_4 & C_5 showed some isotopic change (+/- 1 ‰). C_1 & C_2 were unaffected chemically. C_3 showed some depletion in concentration and C_4' and C_5 showed significant decline in concentration. General rule: the higher the hydrocarbon concentration, the more reliable the result isotopically.

Effects on Hydrocarbon Ratios

	$C_1/(C_2+C_3)$	iC_4/nC_4
BEFORE	20.61	1.06
AFTER	21.57	1.15
Difference	0.96	0.09

The effect of the IsoScrubber on hydrocarbon ratios is minimal.

ISOTECH
a Stratum Reservoir brand