

QC standards and % recovery from porewater nutrient sampling from pushcore samples at different depths at hydrothermal vents from RV/Atlantis cruise AT42-05, Nov. 2018.

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Guaymas porewater nutrients: nitrites plus nitrites, ammonium, phosphates

Quality Control Standards (10 uM)			
	<i>NO2 + NO3 (uM)</i>	<i>NH4 (uM)</i>	<i>PO4 (uM)</i>
QC	10.2	8.7	10.5
QC	10.2	8.7	10.6
QC	10.0	8.3	10.4
QC	9.5	8.5	10.4
QC	10.6	8.3	10.3
QC	10.9	8.4	
QC	10.7	8.5	
QC	10.7	8.4	
QC	10.5	8.5	
QC	10.7	8.4	

External Quality Control Standards			
	<i>NO2 + NO3 (uM)</i>	<i>NH4 (uM)</i>	<i>PO4 (uM)</i>
ICV	5.22	11.70	3.42
ICV	5.51	11.67	3.46
ICV	5.46	11.68	3.47
ICV	5.39	11.66	
ICV	5.53	11.68	
ICV		11.54	
ICV		11.50	
ICV		11.49	
ICV		11.47	
ICV QC check Limits			
	<i>NO2 + NO3 (uM)</i>	<i>NH4 (uM)</i>	<i>PO4 (uM)</i>
Actual	5.16	11.47	3.15
Lower Limit	4.58	9.81	2.81
Upper Limit	5.73	13.07	3.49
ICV QC (Independent Calibration Verification)			

% Recovery			
	<i>NO2 + NO3 (uM)</i>	<i>NH4 (uM)</i>	<i>PO4 (uM)</i>
X: 330-10	0.383	10.9	
S: 330-10	4.63	13.3	
	89%	78%	
X: 6214-21	0.405	13.5	
S: 6214-21	4.92	17.7	
	95%	104%	
X: 927-14	0.926	61.3	
S: 927-14	5.46	63.7	
	95%	82%	
X: 9314-21		10.9	
S: 9314-21		15.0	
		103%	
% Recovery = (S - X)*100/T			
where:			
S = Value after spike			
X = Value before spike			
T = Theoretical value of spike			