

**Alicia Mullins**

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**From:** Ian Richards [irichard@mail.smu.edu]  
**Sent:** Friday, August 26, 2005 7:11 PM  
**To:** david.pickett@swri.org  
**Subject:** Stable isotope data  
**Attachments:** SWRI.xls

Hi-David,

Attached to this e-mail is a spreadsheet that contains all of the stable isotope data for the samples that you sent to us.

If you have any questions or concerns about any of the data please contact me.

Per your recent e-mail to Kurt, we will forward three separate invoices for the most recently completed work:

These will be sent out on Monday August 29, 2005 and will include a printed copy of the data.

Thank you,

Ian Richards

Stable Isotope Laboratory  
Department of Geological Sciences  
Southern Methodist University  
3225 Daniel Ave.  
Dallas, TX 75275  
(214)768-3528  
[irichard@mail.smu.edu](mailto:irichard@mail.smu.edu)

Properties Page

Return-path: <irichard@mail.smu.edu>  
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by rogain.cnwra.swri.edu (Sun ONE Messaging Server 6.0 (built Oct 29 2003))  
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Date: Fri, 26 Aug 2005 18:10:56 -0500  
From: Ian Richards <irichard@mail.smu.edu>  
Subject: Stable isotope data  
To: david.pickett@swri.org  
Message-id: <BF350BB2.34A3%irichard@mail.smu.edu>  
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Sample	Type	calcite d13C (PDB)	repeat	calcite d18O (SMOW)	repeat	weight % calcite	repeat	silicate d18O (SMOW)	repeat
N05-01	calcite	-0.8		17.3		78.2		20.1	
N05-02	calcite	0.0		20.9		69.0		5.6	
N05-03	calcite	-0.1		20.9		80.7		5.7	
N05-04	calcite	-1.3		18.8		76.6		21.6	
N05-05	calcite	-1.3		18.8		78.3			
N05-06	calcite	-1.6		19.8		91.5			
N05-07	calcite	-1.6		20.0		78.8			
N05-08	calcite	-3.1		22.1		36.4		14.1	14.0
N05-09	calcite	-3.4		21.7		49.8		14.0	
N05-10	calcite	-3.6		21.7		51.1		12.5	
N05-11	calcite	-3.6		21.7		60.3		14.1	
N05-12	calcite	-0.8		21.3		79.2			
N05-13		-1.4		19.1		80.5			
N05-14	calcite	-0.6		21.4		88.9			
N05-15	calcite	-4.9		21.7		63.6		16.2	
N05-16	calcite	-5.0	-5.2	21.7	21.8	76.6	66.2		
N05-17	caliche	-5.7		23.3		76.3		28.4	
N05-18	caliche	-5.7		23.7		79.8		29.3	29.6
N05-19	caliche	-5.5		24.1		33.7		28.2	
N05-20	caliche	-5.6		23.6		81.7		25.4	
N05-21	caliche	-6.4	-6.5	23.2	23.3	66.1	58.0	22.6	
N05-22	caliche	-6.3		23.0		80.0		22.2	
N05-23	caliche	-6.5	-6.4	23.1	23.3	71.0	74.7	24.1	23.9
N05-24	caliche	-6.5		23.3		75.8			
N05-25	caliche	-7.7		23.3		59.9		21.9	
N05-26	caliche	-7.6		23.5		61.8		22.2	22.0
N05-27	caliche	-7.6		23.4		66.6		19.5	
N05-28	caliche	-7.4		23.5		61.7		20.4	
N05-29	caliche	-10.4	-10.3	22.6	22.6	57.4	55.2	31.8	31.8
N05-30	caliche	-10.3		22.6		59.5		30.5	30.3
N05-31	caliche	-10.1	-10.1	22.6	22.5	59.2	58.7	29.6	
N05-32	caliche	-10.3		22.1		56.9		30.5	
N05-33	caliche	-6.2		23.6		60.9		31.9	
N05-34	caliche	-6.1		23.9		68.3		31.9	32.1
N05-35	caliche	-6.1	-6.1	23.7	23.8	70.6	68.5	32.2	
N05-36	calcite	-3.1		21.8		37.2		15.0	
N05-37	caliche	-6.0		23.8		70.2		30.5	
N05-38	caliche	-5.7		23.2		64.5		32.0	31.7

N05-39	caliche	-5.7		23.2		70.2		31.1	
N05-40	caliche	-6.5	-6.4	23.0	23.6	72.3	71.7	23.8	24.1
N05-41	caliche	-5.7		23.5		72.3		31.2	
N05-42	caliche	-5.7		23.3		75.1		31.3	31.6
N05-43	caliche	-7.8		22.2		52.4		30.7	
N05-44	caliche	-7.8		22.3		56.3		30.7	
N05-45	caliche	-7.8		22.5		57.0		31.0	
N05-46	caliche	-7.8		22.5		55.1			
N05-47	caliche	1.1	1.1	23.5	23.5	84.3	86.5	18.7	19.0
N05-48	caliche	1.1		23.4		81.5			
N05-49	caliche	-1.4		23.6		0.1		20.1	
N05-50	caliche	1.1	1.1	23.5	23.6	83.1	76.4	16.5	16.8
N05-51	caliche	1.1		23.5		81.3			
N05-52	calcite	1.2		17.3		93.9			
N05-53	calcite	-1.1		21.1		88.6			
N05-54	calcite	-1.1		21.3		92.8		17.6	
N05-55	calcite	-1.3	-1.3	21.5	21.4	83.1	79.7		
N05-56	calcite	-1.3		21.2		82.2			
N05-57	caliche	-0.6		20.5		0.5		21.4	
N05-58	caliche							20.8	21.1
N05-59	caliche							21.4	
N05-60	caliche	-5.7	-5.7	23.6	23.4	66.9		32.0	
N05-61	caliche							20.5	
N05-62	caliche	-10.4		22.8		63.4		30.2	
N05-63	caliche	-7.8		23.1		56.5		30.1	30.5
N05-64	calcite	-1.2		21.6		86.2		15.2	
N05-65	calcite	-0.6		21.3		84.0		13.0	