# GEOSCIENCES AND ENGINEERING DIVISION NONCONFORMANCE REPORT

Project No. <u>06∞2</u> .01.22 2	NCR No. 2005 - 29				
PART 1: DESCRIPTION OF NONCONFORMANCE					
Acceptance criterion not met for a defined ±0.5 permil criterion. Some	Il duplicate analyses. Procurement plan différences were greater.				
Initiated by: David Rickett	Date: 9/1/05				
Action Required by: David Pickett	Response Due Date: 9/2/05				
PART 2: PROPOSED DISPOSITION AND CORRECTIVE	E ACTION				
Disposition: Accept cesults and pay invoices: Purchase Orders 5759515, 5759525, 5760625, and 5760615.  (Purchase loquisitions 05025169, 05025190, 05029563, 05029545)  Basis of Disposition: Scientific Noteback 172, pp 96-102. For one type of analysis, criterian should have been I permil. For others, sample Leterogeneity is probably a factor. Results will be reflected in reporting analytical uncertainty.  Action to Correct Nonconformance: None.					
	Target date for completion: <u>VA</u>				
Proposed by: David Vickett	Date: 9/2/05				
Manager: Date:					
PART 4: CLOSE OUT  Comments:  No action was recessor  Verified by: RB Let Date: 9/23 los	Distribution: Original-CENTER QA Records ORIGINATOR PRINCIPAL INVESTIGATOR MANAGER ASSISTANT DIRECTOR				
Verified by: Verified by: Date: 9/23 los					

Sample	Type	calcite d13C (PDB)	repeat	calcite d180 (SMOW)	repeat	weight % calcite	repeat	silicate d180 (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			
NO5-13		-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

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Sample	Туре	calcite d13C	repeat	calcite d180	repeat	weight %	repeat	silicate d180	repeat
		(PDB)		(SMOW)		calcite		(SMOW)	
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	

Keg No: 05025169

## **CNWRA PROCUREMENT PLAN**

The following information is required when purchasing quality affecting items, services, or materials from a supplier not listed on the SwRI Approved Suppliers List.

Item or Activity to Be Procured	Action or Tests Required to Assure Quality		
Laboratory Analysis	☐ Provide blind samples with known compositions to the non-ASL supplier to provide confidence in reported results (Preferred approach)		
	Provide duplicate samples to the non-ASL supplier to provide confidence in reported results		
	Other (describe)		
<ul><li>Metals, Chemical Standards or other samples</li></ul>	☐ Perform confirmatory sample analysis with an ASL supplier in accordance with QAP-018		
☐ Special Processes	☐ (describe)		
☐ Other (explain)	□ (describe)		
Reason for not using an ASL supplier or for n  No ASL supplier is capable of providing th  Desired supplier does not have a quality p  Other:	ne required items/services.		
Approved: Nach Emstrom  Director of CNWRA Quality Assurance  Director of CNWRA Quality Assurance  Director of CNWRA Quality Assurance  To the control of CNWRA Quality Assurance  The control of CNWRA Quality Assurance of CNWRA Quality Ass			
Results of Receipt Inspection: 🖂 Accept 🗆 Reject NCR Number:			
Reference Documentation Location: Scien	itific notebook 172, pp 96-102.		
Performed By: David Pickett	Date:		
CNWRA Form QAP-18 (5/2004)			

Keg No 05025/10 (18/05

## **CNWRA PROCUREMENT PLAN**

The following information is required when purchasing quality affecting items, services, or materials from a supplier not listed on the SwRI Approved Suppliers List.

Item or Activity to Be Procured	Action or Tests Required to Assure Quality			
Laboratory Analysis	☐ Provide blind samples with known compositions to the non-ASL supplier to provide confidence in reported results (Preferred approach)			
	Provide duplicate samples to the non-ASL supplier to provide confidence in reported results			
	☐ Other (describe)			
☐ Metals, Chemical Standards or other samples	☐ Perform confirmatory sample analysis with an ASL supplier in accordance with QAP-018			
☐ Special Processes	☐ (describe)			
☐ Other (explain)	☐ (describe)			
Reason for not using an ASL supplier or for not a No ASL supplier is capable of providing the Desired supplier does not have a quality produced of the Control of the Cont	ne required items/services.			
Approved: Majak. Shutton  Diffector of CNWRA Quality Assurance  Approved: Approved: Shutton  Diffector of CNWRA Quality Assurance  Son RDB				
/	☐ Reject NCR Number:			
Reference Documentation Location: Scien	tific notebook 172, pp 96-102			
Performed By: David Pickett	Date: 9/1/05			
CNWRA Form QAP-18 (5/2004)				

### **CNWRA PROCUREMENT PLAN**

The following information is required when purchasing quality affecting items, services, or materials from a supplier not listed on the SwRI Approved Suppliers List.

Item or Activity to Be Procured	Action or Tests Required to Assure Quality
Laboratory Analysis	☐ Provide blind samples with known compositions to the non-ASL supplier to provide confidence in reported results (Preferred approach)
	Provide duplicate samples to the non-ASL supplier to provide confidence in reported results
	☐ Other (describe)
☐ Metals, Chemical Standards or other samples	☐ Perform confirmatory sample analysis with an ASL supplier in accordance with QAP-018
☐ Special Processes	(describe)
☐ Other (explain)	(describe)
Proposed Supplier: THE STABLE I SOUTHERN MET  Reason for not using an ASL supplier or for n  No ASL supplier is capable of providing th Desired supplier does not have a quality p Other:  Acceptance Criteria: Use duplicate  From purchase requisition	not placing this supplier on the ASL:  ne required items/services.
Procurement Plan Initiated By: BRADLEY	WERLING Date: 7-20-05
Approved: (approved electronically) Philipson Director of CNWRA Quality Assuran	
Results of Receipt Inspection:   Accept	Reject NCR Number:
Reference Documentation Location: $S_{C,e_{N}}$	tific notebook 172, pp 96-102.
Performed By: David Pickett	Date: 9/1/05
CNWRA Form QAP-18 (5/2004)	

Ry# 05029563

### **CNWRA PROCUREMENT PLAN**

The following information is required when purchasing quality affecting items, services, or materials from a supplier not listed on the SwRI Approved Suppliers List.

Item or Activity to Be Procured	Action or Tests Required to Assure Quality
Laboratory Analysis	☐ Provide blind samples with known compositions to the non-ASL supplier to provide confidence in reported results (Preferred approach)
	Provide duplicate samples to the non-ASL supplier to provide confidence in reported results
	☐ Other (describe)
☐ Metals, Chemical Standards or other samples	☐ Perform confirmatory sample analysis with an ASL supplier in accordance with QAP–018
☐ Special Processes	☐ (describe)
☐ Other (explain)	☐ (describe)
Reason for not using an ASL supplier or for n  No ASL supplier is capable of providing the Desired supplier does not have a quality potential.  Other:  Acceptance Criteria: Use duplicate of the purchase requision of CNWRA Quality Assurance Cniteria desired by the provided of the Company of the Company of the provided of the Company	tion 05025169  2 WERLING Date: 7-20-05  Date:
Results of Receipt Inspection:   Accept	Reject NCR Number:
Reference Documentation Location: Saint	lific notebook 172, pp = 21/1/2 96-102.
Performed By: David Pickett	Date:9/1/05

CNWRA Form QAP-18 (5/2004)