

Robert W. Craig, Technical Project Officer Yucca Mountain Project Branch U.S. Geological Survey 1180 Town Center Drive Las Vegas, NV 89144

BECHTEL SAIC COMPANY, LLC (BSC) QUALITY ASSURANCE (QA) SURVEILLANCE REPORT BSCQA-02-S-22 FOR THE REVIEW OF OUT OF CALIBRATION REPORTS (OCRs)

Enclosed is the Surveillance Report BSCQA-02-S-22, conducted by the BSC QA Organization on May 9 - June 3, 2002, at the U.S. Geological Survey offices in Denver, Colorado.

The scope of the surveillance was to review the USGS OCRs covering 2000-2002 to evaluate compliance with requirements in Administrative Procedure AP-12.1Q, *Control of Measuring and Test Equipment and Calibration Standards*.

The surveillance resulted in the issuance of one condition adverse to quality. Deficiency Report (DR) USGS(B)-02-D-137 identifies that contrary to AP-12.1Q, Revision 0, ICN 2, OCRs are not being adequately completed.

This surveillance is considered complete and closed as of the date of this letter. A response to this surveillance report is not required.

If you have any questions, please contact either Donna J. Sinks (303) 236-5050 Ext. 294 or Robert P. Keele at (702) 295-2808.

Q.T. Kisha

Donald T. Krisha, Manager Quality Assurance

6/14/02 Date Signed

Date Signed

RFH:bw-0613022978

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cc w/encl:

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T. H. Chaney, USGS, Denver, CO
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NM 5507

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1. Organization/Location U.S. Geological Survey (USGS)	2. Subject	ut of Calibration Reports (OCRs)	3. Date(s) Performed 05/09 through 06/03/2002		
Denver, CO 4. Surveillance Scope Evaluate compliance of USGS C	OCRs covering 2000-2002	2 to requirements of Administrative	Procedure (AP) AP-12.1Q		
5. Requirement(s) (Procedure, Spec	fication, Drawing, etc.)	<u></u>	6. Originator		
AP-12.1Q, Revision 0, ICN 2, C Standards, Sections 5.7, 5.8 & 6	ontrol of Measuring and 0, and Attachment 6	Test Equipment and Calibration	Donna J. Sinks, BSC/QA		
			Team Members 		
	SURV	EILLANCE RESULTS			
information, proper processing, maintained properly by the USC OCRs and that it was not necess already been submitted to the RI records package to the RPC and Information System (RIS). Non three of the OCRs were closed p was needed, it could not have be 2000-032, 2001-024 and 2001-0 Attachment 1 of this Surveillance each OCR Not all potential CA	and where appropriate, su S. After examining 20 o ary to examine anymore PC. These 12 were closed the accessioning (1 year e of the 20 OCRs examin rior to the equipment bei en determined. These th 032. The remaining 14 C e Report includes the OC Q were identified during m is identified, there were	f the 39 OCRs, it was determined the original sampling. Twelve of d on or before 01/11/2001 to allow + accessioning time). Only six of the indicated that a nonconformance ng recalibrated (2000-010, 2001-02) ree originally should have been init DCRs were properly evaluated for in the surveillance. Although there are several OCRs initiated weeks or n	Center (RPC). The log of OCRs is being nat there were problems with all 20 the 20 OCRs examined should have for submittal of the OCR as part of a hese 12 could be found in the Records e report (NCR) was needed, however, 5 and 2002-010), therefore if a NCR iated as NCRs (prior to the OCR option):		
8. Persons (and their organizations) Contacted       M. Chornack, USGS         T. Chaney, USGS       M. Chornack, USGS         P. Sheaffer, USGS/Epsilon-Stoller Team       M. Chornack, USGS         M. Mustard, USGS       D. Hudson, USGS         B. Parks, USGS       B. Parks, USGS         P. Motyl, USGS/Epsilon-Stoller Team       M. Chornack, USGS         10. Surveillance Conclusions       SAT         ✓       Yes         No       N/A					
11. Completed By (Originator) (Print Donna J. Sinks	Name)	Signature Down J. Sing	Date 6/10/02		
12. Reviewed By (Appropriate QA M Robert P. Keele		Signature	Date 6/12/02		
13. Approved By (QVM) (Print Name Robert F. Hartstern	ə)	Signature	Date 6/12/02		
			Bev 03/25/2002		

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Attachment 1

OCR#	Closed	Instrument	Serial #	Accession #	Deficiencies/Comments
USGS-2000-003	3/29/2000	T&Rh probe	S0710019	MOL.20010531.0026	block 5 information partially obliterated by "Attachment G" sticker; imaging
(USGS OCR-					at RPC obliterated block #s 12-14; block 12 dated 2/18/00 & 3/29/00, &
2000-003)					indicates equipment being recalibrated, when it was really calibrated 1/18/00;
	0/00/0000		1		block 13 not dated (equipment was recalibrated); missing OCR # on pg. 2
USGS-2000-006	2/22/2000	Sopris cable	1532	MOL.20000830.0077	cable broke on 9/23/99, recalibrated on 10/99, but OCR initiated 5 months
				• •	later $(2/16/00)$ no reference to who did calibration and per what procedure; no
USGS-2000-010	5/19/2000		10400.1	11	indication of application of out of service tag or segregation
0303-2000-010	5/18/2000	balance	16400-1	could not find in RIS	OCR closed prior to equipment recal. (equipment to remain in place until
USGS-2000-015	4/20/2000		20250	1.001 00010010 0000	experiment over); block 12 signatures on incorrect lines
0505-2000-015	4/20/2000	T/Rh	28250	MOL.20010712.0008	header: QA designator missing in header; block 10: unknown where oven is
: : :		Recorder			located or what the oven was used for; block 13: no date; no indication of
		Recorder			application of out of service tag or segregation; OCR form submitted as part of calibration documentation, all as individual record. Either cal.
				, :	documentation should have been a records package (including the OCR), or
				· ·	the OCR sent as an individual record
USGS-2000-019	4/27/2000	21X	13554	could not find in RIS	QA designator missing in header; location, function/use and activity/job
	:	datalogger			information should be in block 10, not block 11
USGS-2000-024	6/12/2000		6/12/00	could not find in RIS	reference to OCR dated 6/2/00 in block 1, so this should have been Rev. 1 of
- - -	i	datalogger			OCR; location of equipment missing in block 10; function/use and activity/job
1 1 1			-	·	scope recorded in wrong block
USGS-2000-030	8/9/2000	transducers	9811 and	could not find in RIS	decision to not remove instrument to recalibrate: no reason stated, except 6
			9813	•	weeks left of test; OCR written 8 months after calibration due date passed:
1 					untimely initiation of OCR; location, job scope, function/use missing in block
			1.1.1. 1.001.7.		10
USGS-2000-032	8/10/2000	T/RH probe	28252	MOL.20010619.0109	OCR written for a problem that occurred in 1994: NCR should have been
			1		written in 1994; when discovered in 8/00, a DR should have been written for
			:		not initiating an NCR; location missing from block 10; function/use and
USGS-2000-036	8/21/2000	Contonius	10900849	MOL.20001030.0039	activity/job scope recorded in wrong block
0303-2000-030	8/21/2000	balance	10900849	MOL.20001030.0039	no reference to source of tolerance in block 10 (technical procedure? SN?);
		Datatice		t e e e e e e e e e e e e e e e e e e e	which procedure states that only reported to 2 decimal places?; recommendation missing from block 12; no indication of application of out of
					service tag or segregation
USGS-2000-039	8/24/2000	balance	80106554	could not find in RIS	QA designator in header missing; untimely initiation of OCR (6 months after
					cal. done); no designation of where "specified control limit" in block 10 is
	i			;	specified; location, activity/job scope missing from block 10; no approval in
				<u>}</u>	block 12; no approval in block 14

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Attachment 1

OCR#	Closed	Instrument	Serial#	Accession #	Deficiencies/Comments
USGS-2000-042		uranium spike concentrate	Uc	MOL.20010409.0062	location missing from block 10; block 12 lacks signature of RI; untimely initiation of OCR (4 months after calibration)
USGS-2001-003	1/11/2001	Campbell Scientific CR7 datalogger	1653	could not find in RIS	took 6 weeks to generate OCR: untimely initiation; function/use missing from block 10; what technical procedure or SN used?
USGS-2001-017	9/7/2001		SC-16	NA	block 4 incorrectly labeled as block 3; untimely initiation of OCR (6 months after calibration); location, activity/job scope missing in block 10
USGS-2001-024	4/18/2001	Paroscientific pressuere transducers	59666, 59653, 60460	MOL.20010712.0246	problem occurred in 1996-7; NCR should have been initiated; since NCR not initiated, DR should have been initiated, not an OCR (which was not available in 1996-97)
USGS-2001-025	5/2/2001	Vaisala T/rH probe	U0140009	NA	block 10 missing activity/job scope; block 12 recommendation should have stated that equipment will be calibrated and data checked after recalibrated; block 14 should not have been closed out until recalibration completed after removal of probe from behind bulkhead; no indication of application of out of service tag at bulkhead
USGS-2001-032	7/20/2001	Sartorius balance	3404009	NA	QA designator missing in header; untimely initiation of OCR (6 months after calibration); NCR should have been initiated for 6/29/99 calibration (prior to OCR process); block 10 missing location; no indication of application of out of service tag or segregation
USGS-2001-043	10/17/2001	Fluke digital thermometer & thermocouple	4560341, SV00002593	NA	block 12 block # missing; approval disposition on $10/17/01$ , after completion of block 13 (10/15/01), approval disposition date should have been on/before $10/15/01$ ; no indication of application of out of service tag or segregation
USGS-2002-003	2/6/2002	B-TEK/GSE scale	20018- 5/321685	MOL.20020214.0148	block 4 incorrectly labeled as block 3; block 12 should probably have stated that equipment would remain in use; no indication of application of out of service tag
USGS-2002-010	1/22/2002	mass spec	MAT251/kiel	MOL.20020416.0218	block 7 "Q" not checked; equipment not on USGS cal. register; block 10: when did acid delivery system fail?; which 200 analyses performed?; "approximately" 40 standards analyzed, can't exact # be provided, or a list?; block 12: no equipment recommendation provided; unlikely that equipment will undergo closing calibration
USGS-2002-011	2/6/2002	Keithley 182 nanovoltmeter	0567215	NA	block 11: lacks signature of Responsible Individual; out of service tag or segregation should have been done while calibration results evaluated

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