



Mark T. Peters, Manager Science & Engineering Testing Bechtel SAIC Company, LLC 1180 Town Center Drive Las Vegas, NV 89144

VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF DEFICIENCY REPORT (DR) BSC(V)-02-D-042 RESULTING FROM THE BECHTEL SAIC COMPANY, LLC (BSC) QUALITY ASSURANCE AUDIT BSC-SA-02-006 OF CAROLINA COMMERCIAL HEAT TREATING, INC. - REVISED

BSC Quality Assurance has verified implementation of corrective action for DR BSC(V)-02-D-042 and determined the results to be satisfactory. As a result, the DR has been closed.

This letter is being reissued, as Page 4 block 23 of the DR was inadvertently unsigned.

If you have any questions, please contact either Robert D. Habbe at (702) 295-1631 or Daniel A. Klimas at (702) 295-2665.

Donald T. Krisha, Manager **Ouality Assurance**

RDH:bw-0312021769

Enclosure: DR: BSC(V)-02-D-042

Nonssol WM-11 Add: Melissa

March 25, 2002 Page 2

cc: w/encl: L. H. Barrett, DOE/HQ (RW-2) FORS L. W. Bradshaw, Nye County, Pahrump, NV J. R. Dver, DOE/YMSCO, Las Vegas, NV W. J. Glasser, NQS, Las Vegas, NV S. H. Horton, BSC, Las Vegas, NV D. A. Klimas, BSC, Las Vegas, NV B. R. Kornegay/B.L. Wilson, BSC, Las Vegas, NV D. T. Krisha, BSC, Las Vegas, NV Robert Latta, NRC, Las Vegas, NV S. W. Lynch, State of Nevada, Carson City, NV Ram Murthy, DOE/OQA, Las Vegas, NV D. G. Opielowski, NQS, Las Vegas, NV J. M. Replogle, DOE/YMSCO, Las Vegas, NV N. K. Stablein, NRC, Rockville, MD D. D. von der Linden, BSC, Las Vegas, NV Engelbrecht von Tiesenhausen, Clark County, Las Vegas, NV

cc: w/encl:

R. W. Andrews, BSC Las Vegas, NV
K. O. Gilkerson, BSC Las Vegas, NV
R. D. Habbe, BSC Las Vegas, NV
R. E. Rucinski, BSC Las Vegas, NV
Roxanne Van Dillen, BSC Las Vegas, NV

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAG U.S. DEPARTMENT OF ENI		8. DEFICIENCY REPOR	
WASHINGTON, D.C.	ORIGI	NAL red	PAGE 1 OF \$ 44 QA: QA 3
DEFICIENCY/CORRECTIVE AC	TION REPOR	रा	
1. Controlling Document: Carolina Commercial Heat Treating (CCHT) Quality Policy Manua Revision 3	; I,	2. Related R BSC-SA-02	eport No.: 2-006
3. Responsible Organization: 4. BSC/ Carolina Commercial Heat Treating (CCHT) M	Discussed With: . Peters, BSC;	: G. Smith, C	CHT
5. Requirement:			·····
A. CCHT Quality Policy Manual, Section 4.11.2.5, states: "Equip show calibration status."	ment is identifie	ed with suita	able indicators or records to
B. CCHT Quality Procedure QSP-125E, Section 4.2 states: "Fur whose operating range is less than 1400 degrees F will be replaced	nace control a ced every 2 yea	nd over-tem ars…"	np device thermocouples
C. CCHT Quality Poilicy Manual, Section 4.11.2.1 states: "The s test equipment and SOFTWARE used to demonstrate the confo Section 4.11.2.3 states: "Documented calibration and/or verificat	cope of this po rmance of proc ion procedures	licy includes Juct to the s are mainta	s all inspection, measuring, pecified requirements. ined and used.
Contrary to the above: A. Thermocouples B-5996-5 and –8 used in Air Draw oven #3	and thermocou	uples B-751	5-5 and –6 used in the DO
 Contrary to the above: A. Thermocouples B-5996-5 and –8 used in Air Draw oven #3 oven did not have calibration status indicators. B. No objective evidence could be provided to indicate when th C. CCHT is using a software program "Surface Trend/Alarm Lo control and over-temp thermocouples in several ovens. The procustomer when requested. There is no objective evidence to de recording the temperature readings to specified requirements, i.e. 	and thermocou e thermocouple og" to record the gram is used to monstrate that e. no validate/ve	uples B-751 es were plac e temperatu o produce to the softwar erification re	5-5 and –6 used in the DO ced in service. ure readings of the furnace emperature charts for the e program is operating and ecords.
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TPE RESPONSE:				DR/CAR NO BSC/01-02-D-042
		PAGE 2 OF 56		
	U.S. DEPARTMENT OF ENERGY			Bull 3-
RIAL 2-25-02	WASHINGTO	N. D.C.		
<u>, , , , , , , , , , , , , , , , , , , </u>		,	ORIGINAL red	
	DEFICIENCY/CORRECTIVE A	CTION REP	ORT (RESPON	SE)
14a. Immediate Actions:				
N/A				
Compliance Date: N/	A WH. 1 2-95-02			
14. Remedial Actions:	MADY 2-25-02			
	aview of all overs to oncure they center	od cuitable indi	natore to show as like	ration status. All average trave
status indicator. See	e Attachment A. This Calibration Verifica	tion Status log v	will be date controlle	ed and updated each time a
new thermocouple is	s replaced.			
B. CCHT revised QSP- degrees E even 2 **	125E to remove the requirement to replace rears	ce thermocouple	es, whose operating	range is less than 1400
C. CCHT contacted out	iside service (Conrad Kacsik) to add Surf	ace Trend Syste	em to CCHT's instru	ment checklist. Unit was
calibrated on 1/14/02	2 and found to be in tolerance, in accorda	ance with QSP-1	25C, Rev. 2.	
			·< B4 LL	7-25-02-
15. Extent of Condition:	<u></u>			
15. Extent of Condition: The deficient conditions specimens, because the	stated in this DR did not have an impact of	on the heat treat	ing work performed	on Metal Samples Company
15. Extent of Condition: The deficient conditions s specimens, because the Trend System was found	stated in this DR did not have an impact of thermocouples used were in acceptable to be in tolerance on 1/14/02.	on the heat treat calibration statu	ing work performed s at the time of the l	on Metal Samples Company heat treating and the Surface
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OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.

\boxtimes	DR/CAR	
	Stop Work Order	r

NO. BSC(V)-02-D-042

ORIGINAL

8.

PAGE 3 OF 6 QA: QA

DEFICIENCY/CORRECTIVE ACTION REPORT/STOP WORK ORDER CONTINUATION PAGE

The Initial Response dated 2/14/02 is Partially Acceptable with the following comments:

The Immediate Actions, Remedial Actions and Extent of Condition responses are acceptable.

The Cause response provided appears to be additional support information to the remedial actions and does not address the cause of the deficient conditions. Please identify the cause of the deficiencies and resubmit as an amended response.

The Action to Preclude Recurrence should reflect the action taken to address the cause of the deficient conditions.

1 Hahler

Robert D. Habbe, 2/27/02

TYPE RESPONSE:				DR/CAR NO. BSC(V)-02-D-042
☐ Initial ⊠ Complete	RADIOACTIVE WAS	PAGE 4 OF 6		
Amended	U.S. DEPARTME	QA: Q/		
	WASHING	TON, D.C.	ORIGINAL red	
	DEFICIENCY/CORRECTIVE	ACTION RE	PORT (RESPO	DNSE)
14a. Immediate Action	S:			
N/A				
Compliance Date: N/A	N			
14 Remedial Actions:				
B. CCHT revised QS degrees F, every type thermocoupl service as well as device to be been been been been been been been	P-125E to remove the requirement to re 2 years. The service life of type K therm es, which are not re-calibrated or reused internal uniformity surveys performed a	ocouples is short I in any way. The s verification that	and all of CCHT to y are verified even the system is wor	hermocouples are expendable ry three months by an outside king. There is no need for service
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8. DR/CAR

NO. BSC(V)-02-D-042

PAGE 5 OF 6 QA: QA

DEFICIENCY/CORRECTIVE ACTION REPORT/STOP WORK ORDER CONTINUATION PAGE

Verification of corrective action and closure of DR BSC(V)-02-D-042.

This verification was based on a review of documentation provided by CCHT.

Verification of Remedial Actions

Item A. The QAR performed a review of Attachment A, which provides a listing of the calibration verification status of all thermocouples, and their respective ovens where they are used. All ovens/thermocouples functional operation were checked/calibrated on 1/14/02 and are next due on 4/14/02.

Item B. The QAR performed a review of CCHT procedure QSP-125E, Revision 3 revised on 12/28/01 and found that CCHT revised section 4.2 to state that thermocouples will be replaced as needed instead of every two years.

Item C. The QAR performed a review of Conrad Kacsik calibration documentation of the Surface Trend System performed on 1/14/02 and found that the Surface Trend System was found to be in calibration.

Verification of Action to Preclude Recurrence

The QAR performed a review of an internal CCHT training form documenting training to CCHT procedure QSP-125E, Revision 3 on 2/14/02.

The documentation provided and the corrective actions taken provide satisfactory implementation of correction actions for this DR. Based on the above this DR is considered closed.

Roburth . Habbe

Robert D. Habbe, 03/11/02

Exhibit AP-16.1Q.2

Rev. 06/01/1999

ATTACHMENT A PAGE 02 06 04 OF 05

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ORIGINAL red

CALIBRATION VERIFICATION STATUS

CALIBRATION VERIFICATION STATUS							
Furnace ID#'s	Instrument Cal Verified		Next Due	Thermocouple ID#'s		Out of	
	Control	High Limit	Date	Control	High Limit	Service	1-
Round Draw	1/14	/02	4/14/02	B-6169-5	<u>B6169-7</u>		
Box Draw	1/14	/02	4/14/02	B-7138-1	B-7138-9		
DOW	1/14	/02	4/14/02	B-7515-5	B-7515-6		
Air Draw #1	1/14	/02	4/14/02	AB-4474-5	B-4294-6		
Air Draw #2	1/14	/02	4/14/02	B-4474-3	<u>B-4474-4</u>		
Air Draw #3	1/14	/02	4/14/02	B-7205-12	B-720 5-10		
Air Draw #4	1/14	/02	4/14/02	B-4645-9	<u>B-4645-8</u>		
Air draw #5	1/14	/02	4/14/02	B-4645-11	<u>B-4645-2</u>		
Vac #1	1/14	/02	4/14/02	B-4714-B	B-4714-A		
Vac #2	1/14	/02	4/14/02	S-30-4	S-30-3		- -
Vac #3	1/14	/02	4/14/02	S-30-9	<u>S-30-10</u>		
Vac #4	1/14	1/02	4/14/02	070299B	072498B		
				041598C			
			. ·	052699A			5
				041598A			
Vac Temper #1	1/14	1/02	4/14/02	B-5323-D	B-3244-2		
Vac Temper #2	1/14	1/02	4/14/02	B-5323-A	B-5323-B		4
Uni-Draw #1	1/14	4/02	4/14/02	B-7138-4	B-7138-5		4
Uni-Draw #2	1/14	4/02	4/14/02	B-7515-1	B-7515-2		-
Super Temper #1	1/14	4/02	4/14/02	B-4645-2	B-4645-5		4
Super Temper #2	1/14	4/02	4/14/02	B-4645-6	B-4645-3		4
AllCase #1	1/14	4/02	4/14/02	B-7318-6	B-7318-8		-
AllCase #2	1/14	4/02	4/14/02	B-7205-5	B-7352-6		4
AllCase #3	1/14	4/02	4/14/02	B-7205-12	B-4474-4		J

Hardness Tester ID	CalibrationNextVerifiedDueDate		Dial Indicator ID	Calibration Verified	Next Due Date	
United (TB)- 87370	11/01	2/02	073561	11/01	11/02	
Wilson (#2)- 299	11/01	2/02	17993	11/01	11/02	
Wilson (#3) 959	Out of Service		CB053315	8/01	8/02	
New Age (Port)-751	11/01	2/02	Gage Blk 980327	7/01	7/02	
NewAge (Port)-2803	11/01	2/02	Gage Blk 923634	7/01	7/02	
Brinnel Scope-2322SD	11/01	2/02	Gage R&R	9/01	9/02	

Alnor Dewpointer ID	Date Calibrated	Next Due Date	Quench Oil Analysis Performed	Next Due Date
S/N 6221	1/02	1/03		
			1/01	4/02