



Department of Energy

Washington, DC 20585

NOV 05 1997

QA: L

L. D. Foust, Technical Project Officer
for Yucca Mountain Site
Characterization Project
TRW Environmental Safety Systems, Inc.
1180 Town Center Drive, M/S 423
Las Vegas, NV 89134

ISSUANCE OF SURVEILLANCE RECORD LBNL-SR-98-001 RESULTING FROM
THE OFFICE OF QUALITY ASSURANCE (OQA) SURVEILLANCE OF SCOTT
SPECIALTY GASES INC. (SSG)

Enclosed is the record of Surveillance LBNL-SR-98-001, conducted by the OQA of
SSG's facility in Longmont, Colorado.

The purpose of the surveillance was to verify compliance with SSG technical procedures
for blending and analyzing of gases and purchase order requirements. There were no
deficiencies identified as a result of the surveillance.

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

If you have any questions, please contact either James Blaylock at (702) 794-1420 or
Daniel A. Klimas at (702) 794-1495.

Donald G. Horton, Director
Office of Quality Assurance

OQA:JB-0259

Enclosure:
Surveillance Record LBNL-SR-98-001

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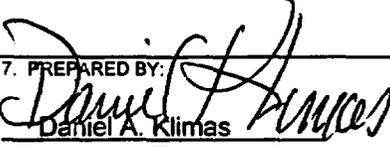
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**OFFICE OF CIVILIAN
RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.**

Surveillance No. LBNL-SR-98-001

QUALITY ASSURANCE SURVEILLANCE RECORD

SURVEILLANCE DATA

| | | |
|---|---|---|
| 1. ORGANIZATION/LOCATION: Lawrence Berkeley National Laboratory (LBNL) / Scott Specialty Gases (SSG), Longmont, Colorado | 2. SUBJECT: Gas Analysis | 3. DATE: October 6-7, 1997 |
| 4. SURVEILLANCE OBJECTIVE: To determine compliance with LBNL subcontract #6464286 requirements. | | |
| 5. SURVEILLANCE SCOPE: The scope of the surveillance includes the gases procured by LBNL from SSG. | | 6. SURVEILLANCE TEAM: Team Leader: Daniel A. Klimas Additional Team Members: N/A |
| 7. PREPARED BY:  Daniel A. Klimas Surveillance Team Leader | 8. CONCURRENCE:  Donald G. Horton Director, OQA | |
| 10/1/97 Date | 10/1/97 Date | |

SURVEILLANCE RESULTS

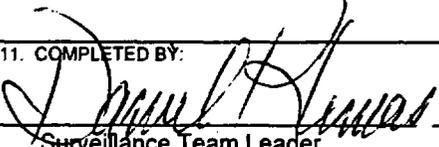
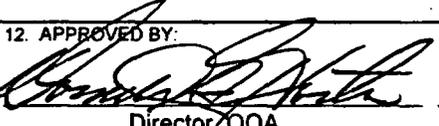
9. BASIS OF EVALUATION/DESCRIPTION OF OBSERVATIONS:

A surveillance was conducted October 6-7, 1997, at SSG's facility in Longmont, Colorado. SSG is on the Office of Civilian Radioactive Waste Management (OCRWM) Qualified Suppliers List (QSL) for a supplier of analytical gases, but is under a restriction and cannot provide gas without a source verification until full implementation of SSG's Quality Assurance (QA) Program. The purpose of the surveillance was to verify the method of acceptance requirements that were established in LBNL's subcontract number 6464286 to SSG. SSG blends gases by gravimetric methods for use in analyzing gas samples for composition by chromatography.

See Page 2 and 3 ...

10. SURVEILLANCE CONCLUSIONS:

Based upon the results of the surveillance, the overall blending and gas analysis processes were determined to be satisfactorily accomplished in accordance with SSG's technical procedures. There were no deficiencies issued as a result of this surveillance. However, contrary to purchase order requirements, the weight set serial number 06VN purchased from Rice Lake was also calibrated by Rice Lake who is not an OCRWM qualified supplier. This issue was determined to be acceptable for this surveillance as the balance used by SSG for blending and weighing of the gases were also tested with weight set serial number SSG-K-1 that was calibrated by the CDA. SSG management committed to sending the new weight set to CDA for calibration. During the analysis of the Sulfur Hexafluoride SF₆, Cylinder #C-003053, the analytical results were found to be unacceptable and the cylinder was rejected by SSG's laboratory technician. This condition was documented on Reject Report #98-010, the cylinder was red tagged, segregated and reported to LBNL as required by purchase order requirements.

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|---|--|
| 11. COMPLETED BY:  Surveillance Team Leader | 12. APPROVED BY:  Director, OQA |
| 10/24/97 Date | 11/5/97 Date |

9. BASIS FOR EVALUATION/DESCRIPTION OF OBSERVATIONS: (Cont'd)

The following acceptance criteria was delineated in LBNL's subcontract for these procured blends of gases: Sulfur Hexafluoride (SF6), Neon, Krypton, and Xenon:

- (1) Verify the gas blending process is accomplished in accordance with SSG's procedures.
- (2) Verify the gas analyzation process is accomplished in accordance with SSG's procedures.
- (3) Verify that the supplier uniquely identifies the delivered gas to assure traceability.
- (4) Review the calibration documentation to assure that the Colorado Department of Agriculture (CDA), who is listed on the OCRWM QSL, was used for calibration and that calibration dates are acceptable.
- (5) Review the Certificate of Analysis for compliance with purchase order requirements.
- (6) Verify that LBNL's technical manager has reviewed the supplier's procedures for blending and analyzing the gases.

The blending of gases for the SF6, Neon, Krypton and Xenon was observed to be processed in accordance with SSG's Procedure 8-P, "Making GravStat Component Additions with the Gravimetric Distribution Panel," by the blending technician. The blending technician's certification and training records were verified as being documented in accordance with SSG's QA Program requirements.

The analysis of the above-mentioned gases were observed to be accomplished by the laboratory analysts in accordance with SSG's Procedure Reference 5-R, "Rules for 1%, 2% and 5% Analysis." The certification and training records of the laboratory analysts were verified to be satisfactorily documented.

The gas reference standards, blended gases and the delivered gases are all uniquely identified for traceability by cylinder number. The cylinder numbers for the blended gases procured by LBNL were verified to be SF6, Cylinder #C003053; Krypton #C1733; Neon #C002751 and Xenon #A113204.

The calibration documentation for the weight set serial number SSG-K-1, and weight set serial number 06VN were verified to be current with calibration due dates and traceable to National Institute of Standards and Technology (NIST) standards. Weight set serial number SSG-K-1 was calibrated by the CDA and weight set serial number 06VN was calibrated by Rice Lake. The weight set serial number 06VN was used in the processing of the gases procured by LBNL; however, the balance used for the blending process was checked against both weight sets.

The Certificate of Analysis for the gases for this purchase had not been prepared by the conclusion of this surveillance. These certificates were verified for acceptance to purchase order requirements by the Office of Quality Assurance representative at LBNL and found to be acceptable.

The blending and analyzing procedures were verified as being reviewed for adequacy by the technical manager at LBNL on June 18, 1997, and were found to be acceptable.

Section 10 provides the overall evaluation of the gases that were blended and analyzed by SSG for LBNL and details of the surveillance conclusions.

PERSONAL CONTACTED:

Name

Organization

Ric Schmeltekoph

QA Manager, SSG

Scott Anderson

Blender, SSG

Diana Beehler

Laboratory Analyst, SSG