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Title: LANL Site Report, JOWOG 39/IMOG Measurement Subgroup, Spring 2011

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Intended for: JOWOG 39/IMOG Measurement Subgroup



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LANL-Quality Assurance – Dimensional Inspection (QA-DI)

Randy Flores

06/16/2011



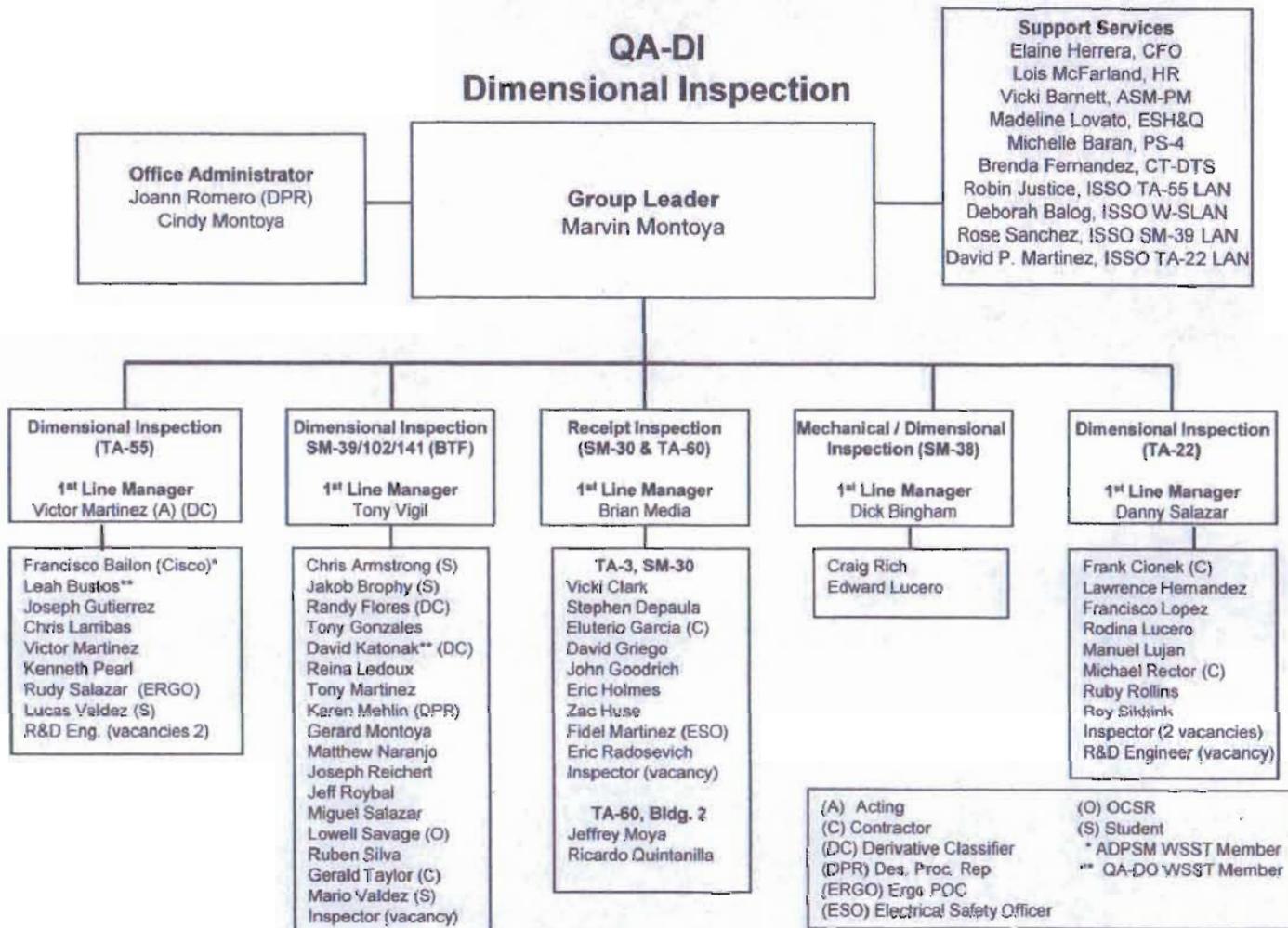
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05/06/2011

QA-DI Dimensional Inspection



Personnel Changes

- **Josh Montano left group**
- **Gerard Montoya, Roy Sikkink, Jim Shipley, Rueben Silva**
- **Inspector and Engineering positions available (see org chart)**

Organization Changes

- Receipt Inspection and Mechanical/Dimensional Inspection teams joined group.

Process Development

- **CMM shell inspection**
 - Presentation by Josh Montano and Randy Flores.
 - Procured and installed a Reference CMM to develop higher accuracy shell measurement.
- **Surface Defect Characterization**
 - TA-55 Engineer and Reina LeDoux to develop and quantify capability. Possible topic for next IMOOG
- **PIT Measurement**
 - Presentation by Tony Gonzales on mock PIT

TA-3 SM39/102 Inspection Team

- **Shell Measuring Machine**
 - Running well. Minor relay issue.
- **Sheffield #1**
 - Calibration completed. No Issues.
- **JTA**
 - Next build in May. Three processes must be requalified due to computer change on CMM
- **Enduring Stockpile**
 - Reference CMM installed
 - MarSurf procured and installed for surface defect characterization.
- **Hydro**
 - Four builds continuing
 - Scaling project ramping-up

TA-3 SM39/102 Inspection Team (Cont)

- **Leitz Reference CMM at SM39**

- Received 2/2011
- Installed
- Laser Mapped
- Corrected
- Currently on hold for connection of controller to classified computer. (Discuss B4/classified network issue)

- **HVAC maintenance**

- Maintenance performed by Precision Environmental.
- HVAC maintenance overdue, but no issues in SM39. SM102 maintenance not yet performed.

TA-3 SM39/102 Inspection Team (Cont)

■ BTF Facility Restart

- Abandoned inspection lab in 8/2009
- Restarting in four major steps
 - Equipment evaluation
 - Equipment maintenance and calibration
 - Non-Be inspection
 - Be Inspection
- Known issues
 - Roof leak caused equipment damage
 - Building chillers to be replace. Currently non-functional. No HVAC control.
 - Project accuracy requirement exceeds equipment capability
 - Additional space required for increased accuracy capability (2 years min)

TA-55 Inspection Team

- **W-88 project finishing**
- **Sheffield #1**
 - Calibration completed. No Issues.
 - 4/2011-tilt encoder replacement. Plan the work...work the plan. Completed in 2.5 weeks.
- **Investigation of surface defect measurement**
 - MarSurf topographic-procured and installed at SM39. Study to be developed for surface defect characterization.

TA-22 Inspection Team

- **Detonator Process**
 - Continuing development for 1E33, 1E34, 1E38, plus others.
- **Quest 650**
 - Installed and calibrated.

Future work

- **PMM-C at SM39**

- upgrade with B4 retrofit with LSP-S4 probe head.
- For support of Scaling project.

- **MicroExcel at SM141-BTF**

- B3-CLC upgrade
- Continue effort to standardize equipment

- **SM141-BTF**

- Acquire/expand inspection capability
- Possible: move SM102 Fabrication/Inspection activities to SM141-BTF