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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

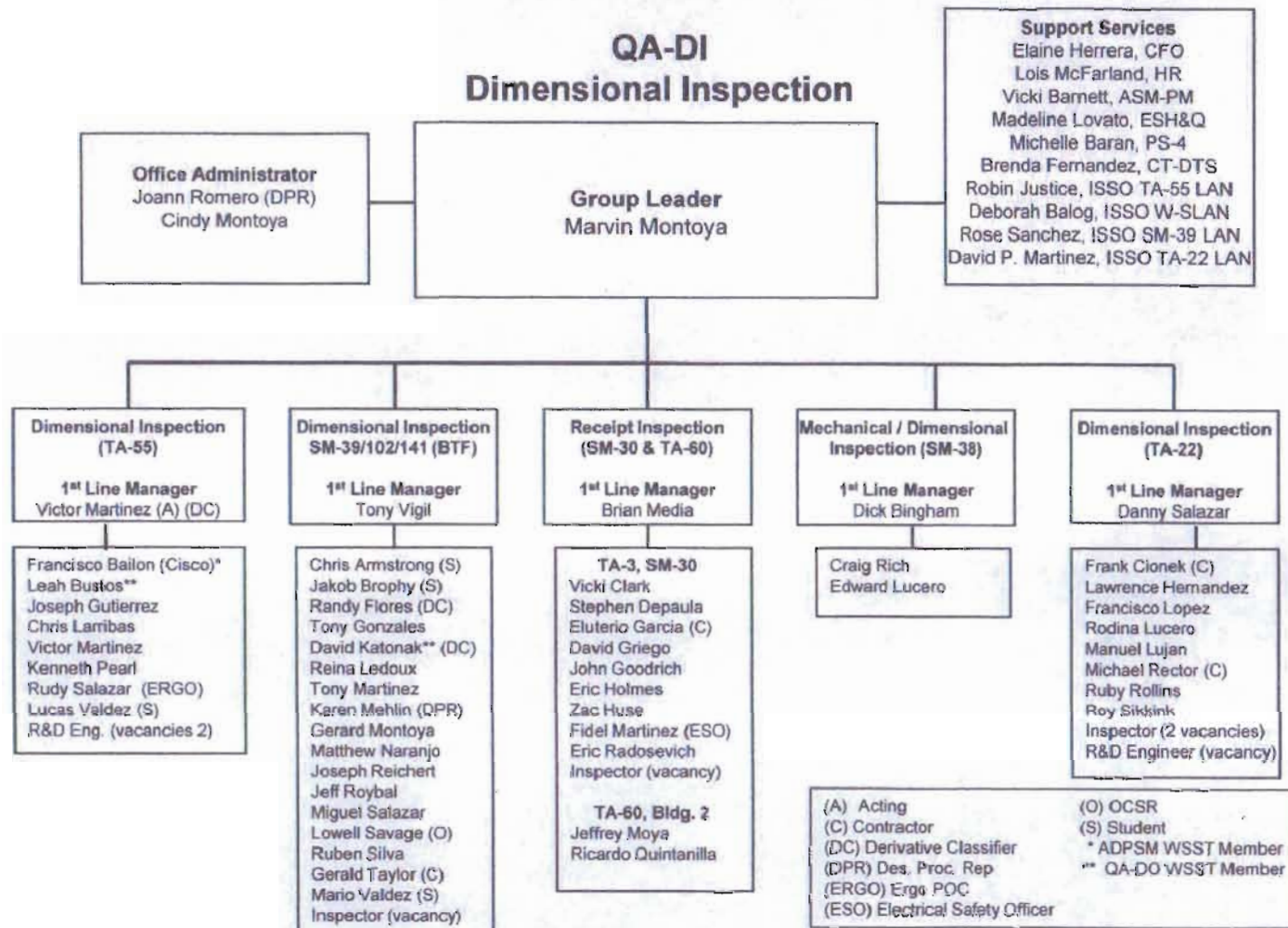


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05/06/2011



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 IMOG

■ 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