# INTERNAL AUDITS BY STAR YUAN GREEN COUNTRY TESTING, INC.

### NELAC SAYS THIS ABOUT INTERNAL AUDITS

### PERFORM INTERNAL AUDITS YEARLY

4.14 INTERNAL AUDITS (ISO/IEC 17025:2005(E), CLAUSE 4.14)



## PREDETERMINED SCHEDULE

January	QA Manual
February	Wet Chemistry
March	Sample Reporting
April	GC/MS Analysis
May	GC Analysis
June	Field
July	QC Processes
August	SOP's
September	Wet Chemistry
October	Sample Log-in
November	Metals
December	Misc.



### TEST VERSUS PROCESS

- TESTS ARE ANALYTICAL TESTS
- PROCESSES ARE ALL OTHER PROCEDURES CONDUCTED IN THE LABORATORY THAT ARE NOT TESTS SUCH AS; SAMPLE LOG-IN, INFORMATION TECHNOLOGIES, FIELD WORK, TRAINING RECORDS, CONTROL CHARTS, AND OTHER QA FUNCTIONS.



### INTERNAL AUDIT FOR TESTS

- UTILIZE A CHECKLIST OR A FORM
- START AT LOG-IN AND REVIEW LOG-IN AND THE CHAIN OF CUSTODY
- REVIEW SOP'S INCLUDING ANALYTICAL SOP, PREP SOP'S, AND INSTRUMENT SOP'S
- IF YOU HAVE A DATA INTEGRITY CHECKLIST, USE IT.
- VERIFY TRAINING RECORDS
- REVIEW THE FINAL REPORT

### INTERNAL AUDIT FOR TESTS CONTINUED

- REVIEW LOGBOOKS THIS IS THE LARGEST PART OF THE REVIEW
- ANALYSIS LOGBOOKS
- PREPARATION LOGBOOKS
- STANDARDS PREPARATION LOGBOOKS TRACEABILITY
- BALANCE / PIPETTE LOGBOOKS
- METHOD SPECIFIC CHECKS TUNING, SPECIAL BLANKS, ETC...
- ERROR CORRECTION



### INTERNAL AUDIT FOR PROCESSES

• CHECKLISTS DON'T REALLY APPLY TO PROCESSES AS THEY ARE VERY DIFFERENT. SO, YOU HAVE TO RECORD THE PERTINENT INFORMATION AND SUPPORTING DOCUMENTATION IN A LOGICAL WAY SO THAT AN OUTSIDE PERSON CAN FOLLOW WHAT YOU DID.



### INTERNAL AUDIT

- WHEN YOU'RE FINISHED, RECORD ALL THE PERTINENT INFORMATION AND MAKE COPIES AS REQUIRED. THE IDEA IS THAT AN OUTSIDE PERSON CAN FOLLOW WHAT YOU DID.
- IF ISSUES ARE UNCOVERED, INCLUDE WHAT ACTIVITIES ARE REQUIRED (CORRECTIVE ACTION, SOP UPDATE, TRAINING, ETC...) BY WHOM AND WHEN THEY WILL BE COMPLETED. INCLUDE A COPY OF THE COMPLETED ACTIVITIES.





# STAR YUAN

**QA OFFICER** 

GREEN COUNTRY TESTING, INC.

TULSA, OK

STARY@GREENCOUNTRYTESTING.COM