VISUAL SURVEY DATA SYSTEM

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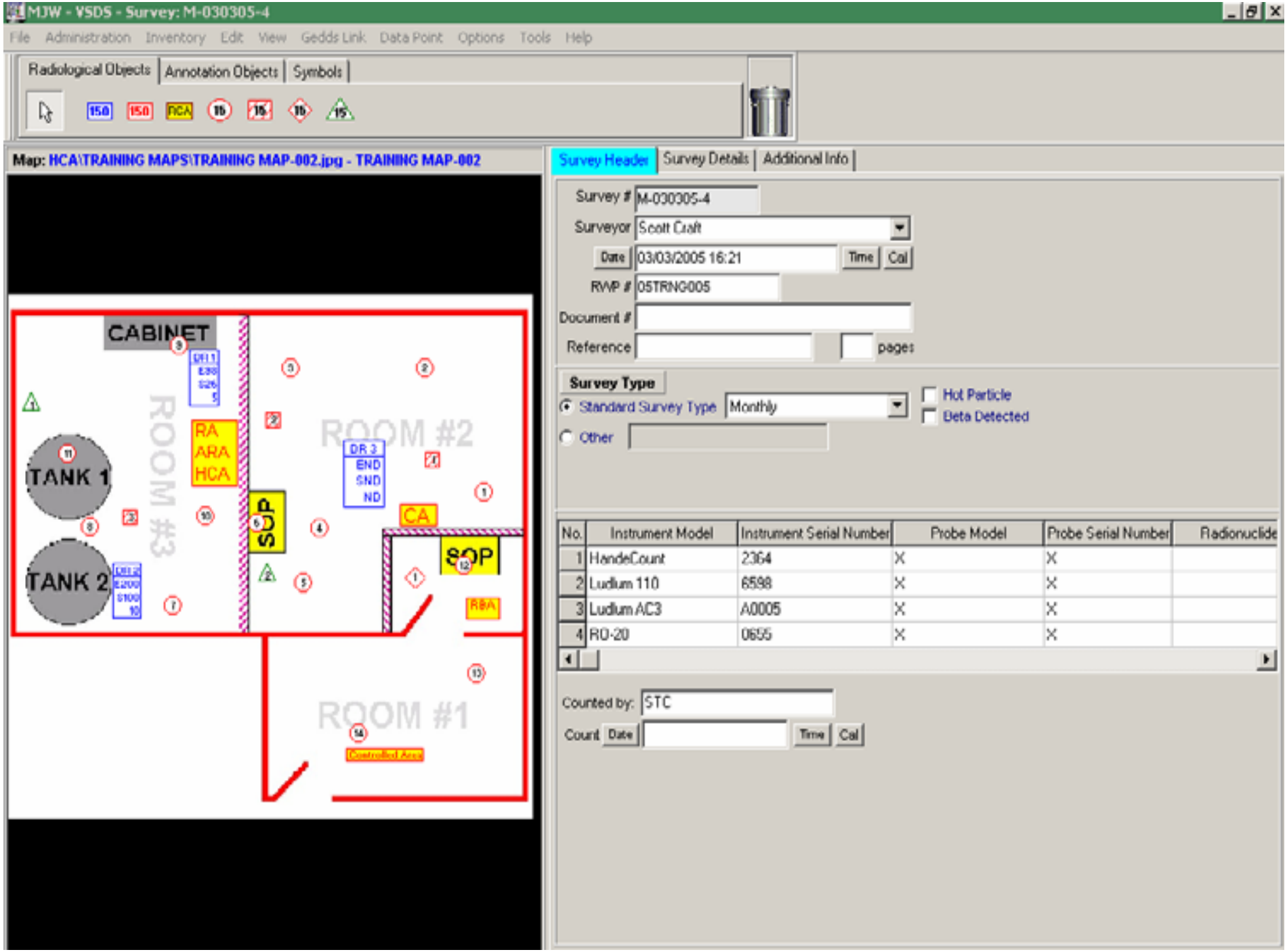
VSDS Core/Pilot Teams

- Tim Kerrigan
- Mike Matheny
- Bill Reed
- Tina Shake

- Mike Broome
- Scott Craft


MJW - VSDS - Survey: M-030305-4
File Administration Inventory Edit View Gedds Link Data Point Options Tools Help
Radiological Objects
Annotation Objects
Symbols
Map: HCA\TRAINING MAPS\TRAINING MAP-002.jpg - TRAINING MAP-002
CABINET
TANK 1
TANK 2
ROOM #3
ROOM #2
ROOM #1
RA
ARA
HCA
DR 3
END
SND
ND
SOP
CA
SOP
R&A
Survey Header
Survey Details
Additional Info
Survey # M-030305-4
Surveyor Scott Craft
Date 03/03/2005 16:21
Time
Cal
RWP # 05TRNG005
Document #
Reference
pages
Survey Type
Standard Survey Type Monthly
Other
Hot Particle
Beta Detected
No. Instrument Model Instrument Serial Number Probe Model Probe Serial Number Radionuclide
1 HandeCount 2364 X X
2 Ludlum 110 6598 X X
3 Ludlum AC3 A0005 X X
4 RO-20 0655 X X
Counted by: STC
Count Date
Time
Cal

MJW - VSDS - Survey: M-030905-1

File Administration Inventory Edit View Geddis Link Data Point Options Tools Help

Radiological Objects | Annotation Objects | Symbols

Map: Room 206 Valve 2

Room 206 - Valve 1 | Room 206 - Valve 2 | Room 206 - Valve 3 | Room 206 - Valve 4

Survey Header | Survey Data for Room 206 - Valve 2

General Info | Instruments | Analysis Data | Attachments/Comments

Attachments

Print Order	Description	Filename	Pages
1	Lab Analysis 103-293	la103-293.pdf	5
2	Lab Analysis 910-392	la910-392.pdf	3
3	Report 89	rpt89.pdf	10
4	Report 0291	rpt0291.pdf	2
5	File XYZ	XYZ.pdf	1

Add | Remove | Move Up | Move Down

Extended Comments

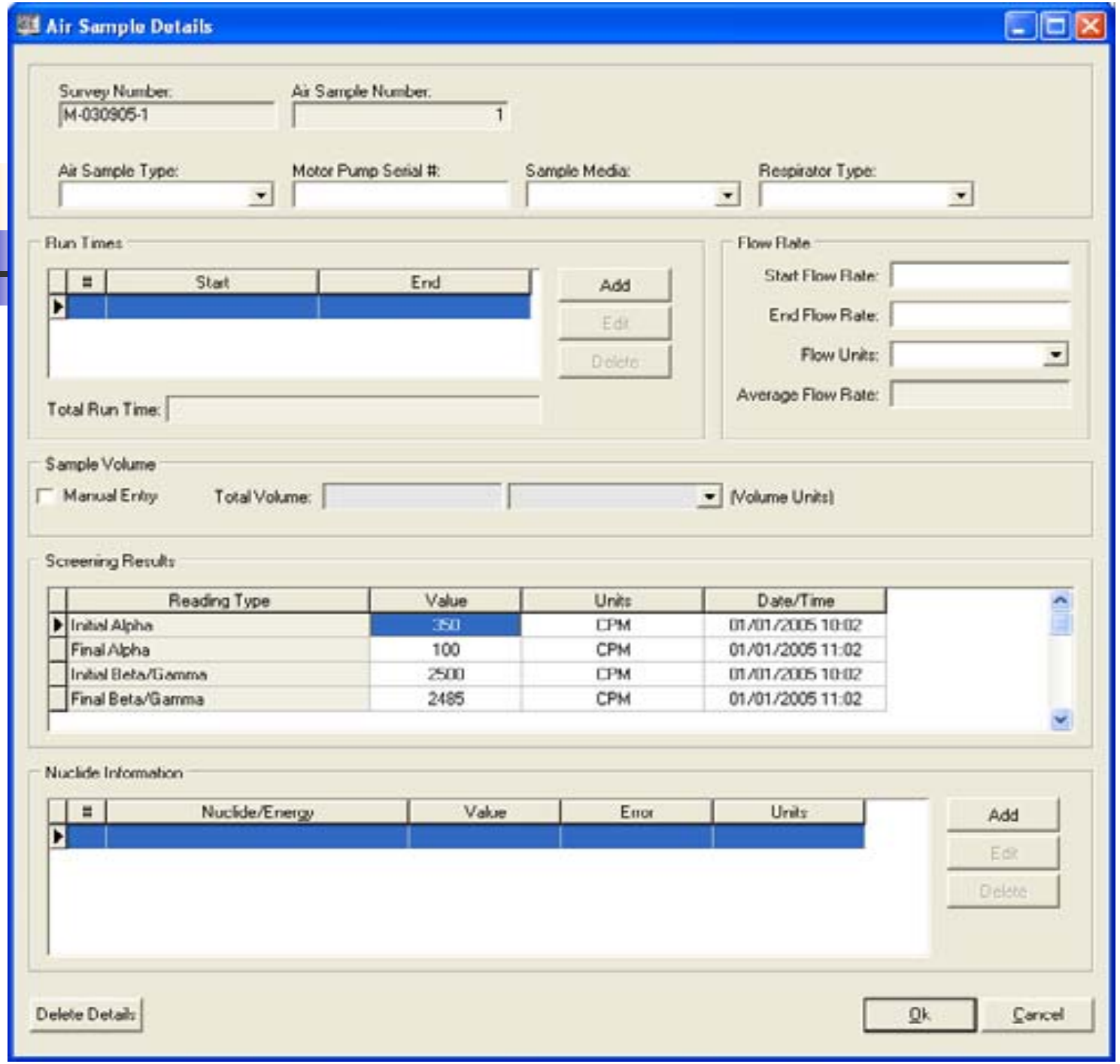
These are additional comments that may be added to the survey.

These comments are global to the survey, where the comments under the Additional Info tab are specific to a map.

You can place an unlimited amount of text in this area.

Since this field is a RichText field, you can modify the output to appear HOWEVER YOU WOULD LIKE IT TO.

Editing | In Process


Air Sample Details
Survey Number:
M-030905-1
Air Sample Number:
1
Air Sample Type:
Motor Pump Serial #:
Sample Media:
Respirator Type:
Run Times
#
Start
End
Add
Edit
Delete
Total Run Time:
Flow Rate
Start Flow Rate:
End Flow Rate:
Flow Units:
Average Flow Rate:
Sample Volume
Manual Entry
Total Volume:
(Volume Units)
Screening Results
Reading Type
Value
Units
Date/Time
Initial Alpha
350
CPM
01/01/2005 10:02
Final Alpha
100
CPM
01/01/2005 11:02
Initial Beta/Gamma
2500
CPM
01/01/2005 10:02
Final Beta/Gamma
2485
CPM
01/01/2005 11:02
Nuclide Information
#
Nuclide/Energy
Value
Error
Units
Add
Edit
Delete
Delete Details
Ok
Cancel

VSDS – What It Is

- COTS Software to document radiological surveys
- Designed by HPs
- Originally written for nuclear power industry
- Runs on multiple hardware & system types
- Newer versions have features for the DOE world
- Utilizes digital images
- Data captured in a relational database
- Electronic approvals

VSDS - Strengths

- Allows digital images of floor plans and pictures of equipment and spaces
- Templates allow survey repeatability
- Built in trending of routine surveys
- Electronic approvals
- Retrieval of past surveys
- Data accessible for reports/studies

VSDS - Drawbacks

- Significant culture change
  - Some COTS features not changeable
  - New format
  - New symbols
  - Not all inspectors PC literate
- IT support costs
- Additional computers needed
- Already had a nice FileMaker program

Why We Chose VSDS

- Survey point repeatability and trending
- Automatic, legible, paperless records
- Scales for site-wide use
- Future enhancements – data logging and remote operation
- Other DOE Sites already using VSDS
- MJW willing to make selected changes
- Avoids custom software programming and maintenance with limited IT resources

Changes We Requested

- Multiple maps (images)
- Multiple surveyors
- Expanded choices of measurement types and radionuclides
- Tritium symbols
- Initial/Final Probe
- Air sampler Serial No.
- Manual instrument entry
- Multiple instruments per inspector
- Larger main comment field and additional fields
- Survey title field
- Attachments in pdf
- Automatic pdf to external directory
- More control via the configuration file

Implementation Strategy

- Small core team (5)
- RadCon, HP, IT(2), Management
- Every major area has a lead person
- Separate procedure for electronic surveys
- Training/User Guide, Communication Materials & Startup Checklist
- Pilot in two facilities
- Rollout over 6 months
- Publicity to keep up interest
- Track training and rollouts to maintain consistency
- RadCon management progress reports

IT Implementation

- Areas, bldgs. and structures are grouped into 23 “Facilities”
- Six VSDS databases on one server
- Installation over the site network
- Security by Windows Log-On password
- Long-term, part time IT support

Pilots – The Leads

- Learn the VSDS product
- Develop pilot startup schedule
- Develop training packages (→Training)
- Develop catalog of images/maps (→Protocol)
- Train key personnel
- Oversee/finish remaining training
- Run the pilot
- Be the “Go-To” Person

Records

- Approved surveys are locked
- Multiple inspectors – check box
- Automatic pdf to external directory
- Automatic routing for security review (Lotus Notes)
- Automatic routing to site records (Lotus Notes)

ALARA

- Repeatable routine surveys – templates
- Easy, meaningful trending
- Prepared drawings/pictures usually make locating data more accurate
- Pictures clarify complicated situations
- Legibility

ALARA Cont'd

- Fewer mistakes with less review
- Ready access to past surveys
  - Faster research by work planners, RWP writers, ALARA Coordinators and engineers
  - Faster research for incident investigation
- Data available for performance indicators and technical studies