Overview of the First Quarter 2014 Surveillance and Maintenance Report for the LM Rocky Flats Site

January–March 2014

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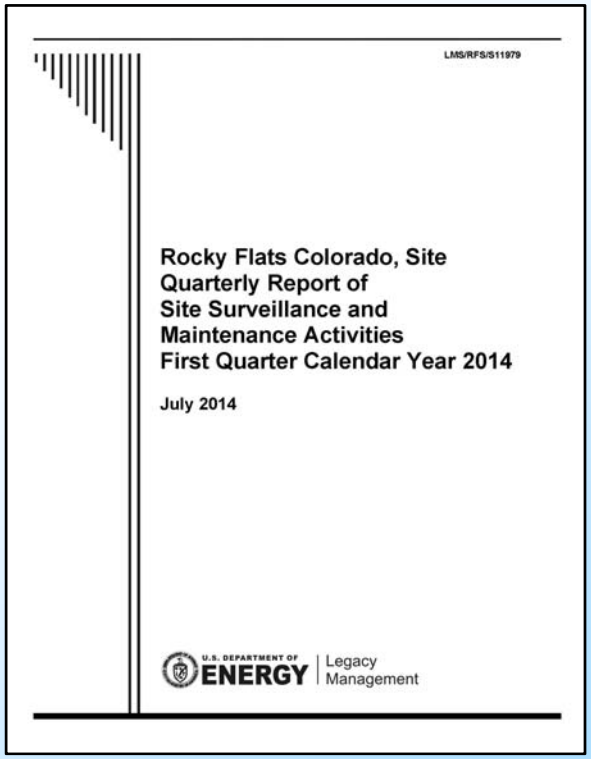
Quarterly Monitoring and Reporting

- Quarterly reports are required under the Rocky Flats Legacy Management Agreement (RFLMA) to document that the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedy continues to be protective
  - Primary goal is protection of surface water
- Response action under the final remedy for Rocky Flats
  - Maintain two landfill covers
  - Maintain four groundwater treatment systems
  - Surface water and groundwater monitoring
  - Physical controls
    - Signage
    - Restricted access
  - Institutional controls
    - No building construction or occupation
    - Restrictions on excavation and soil disturbance
    - No consumption or agricultural use of surface water
    - No groundwater wells except for monitoring
    - Protection of landfill covers and engineered remedy components



Surface Water Monitoring

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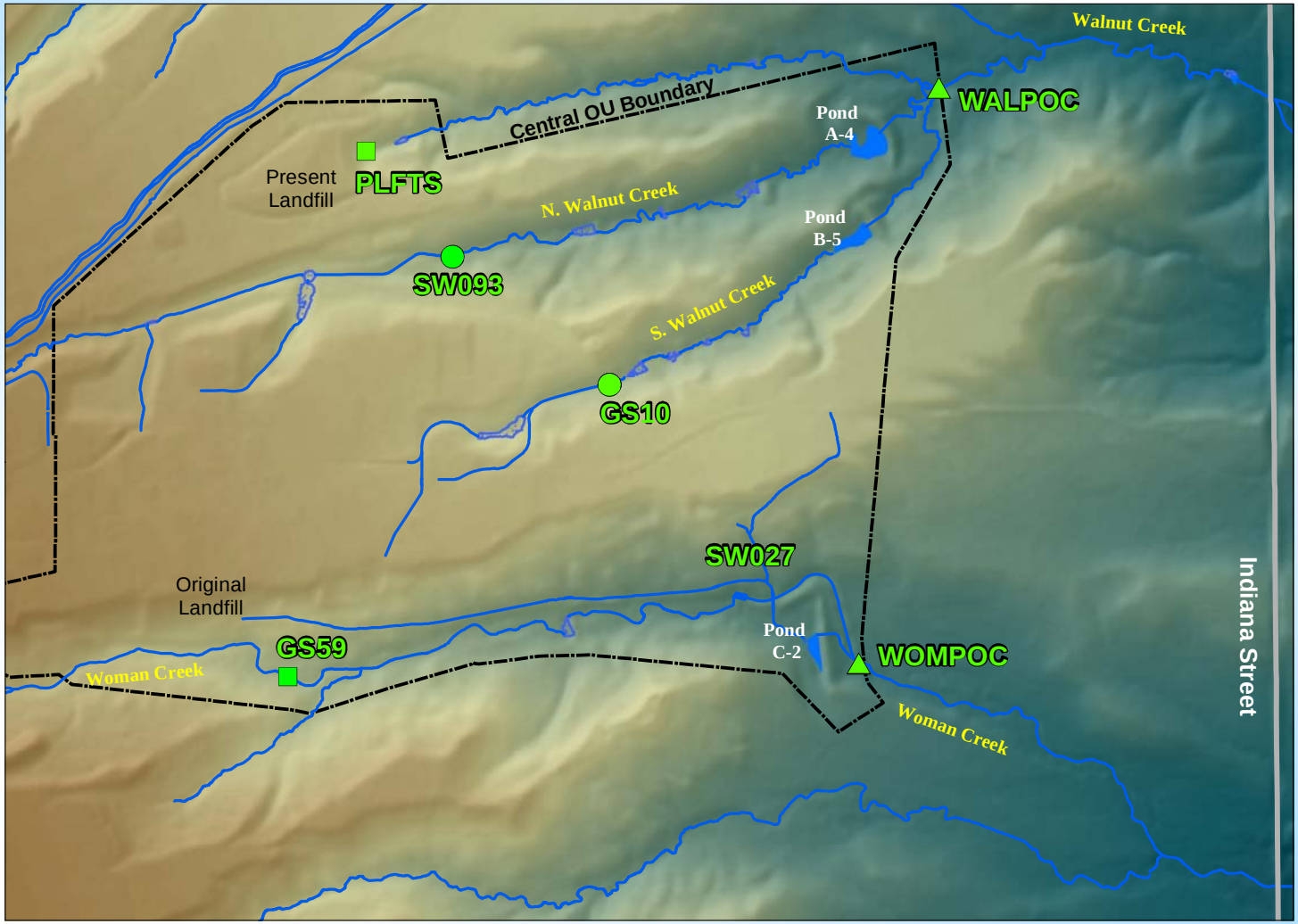
Selected RFLMA Surface Water Monitoring Locations



Performance Monitoring at OLF and PLF

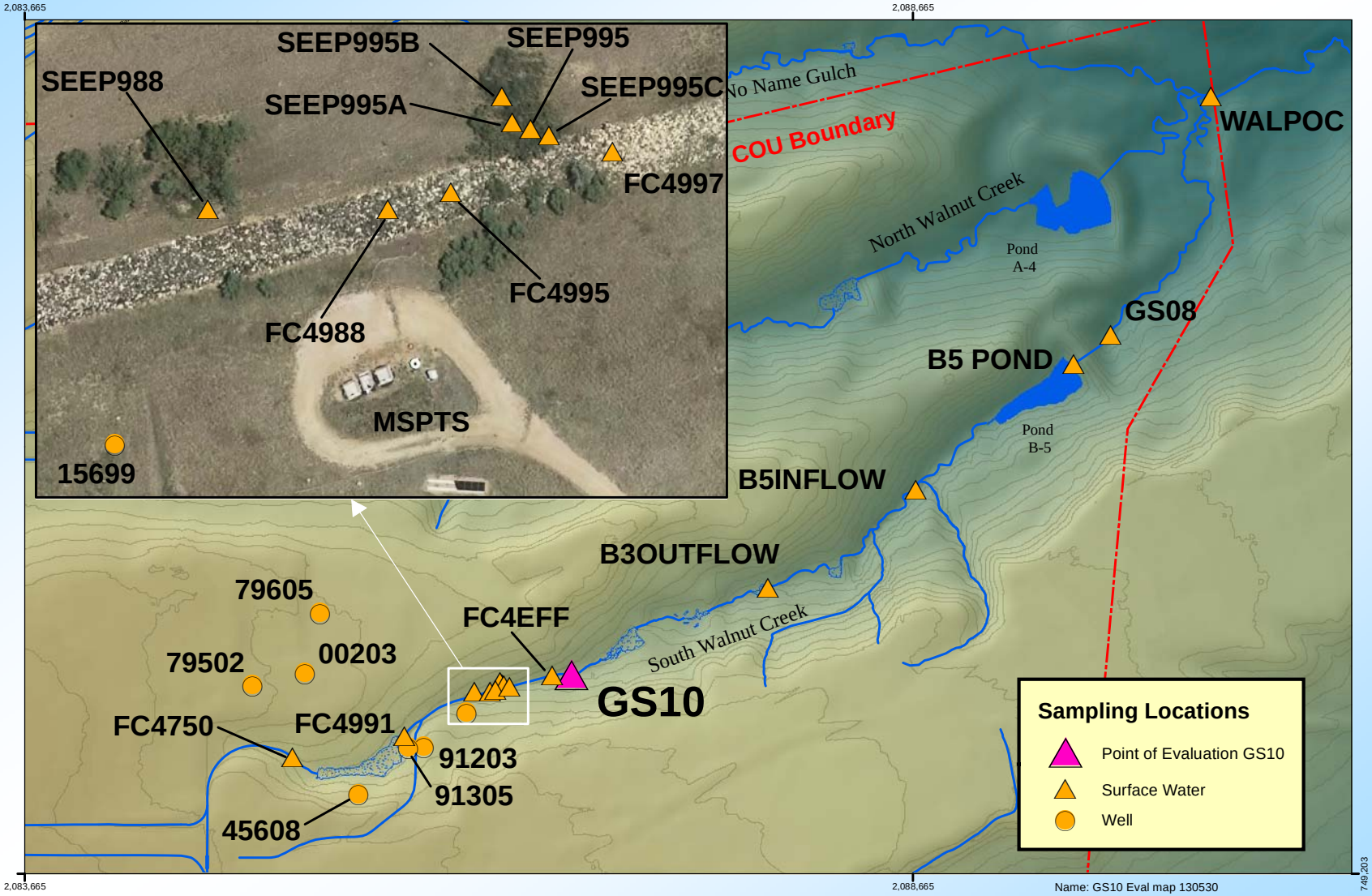
- OLF (Woman Creek)
  - All sampling results met water quality standards during the quarter
- PLF (System Effluent)
  - Fourth quarter calendar year (CY) 2013 sampling result for vinyl chloride was 0.21 μg/L, exceeding the standard of 0.2 μg/L, and triggering an increase in sampling frequency
  - Following three sample results (one in the 4th quarter, two in the 1st quarter) were also above the standard (0.29, 0.28, and 0.21 μg/L), triggering sampling of the former PLF Pond area (NNG01)
  - NNG01 was sampled on March 26, 2014
    - Vinyl chloride was not detected in that sample and routine quarterly sampling resumed

Point of Evaluation Monitoring – GS10

- Reportable 12-month rolling average values for americium and plutonium at GS10 were observed during the quarter
- All plutonium and americium results since August 2013 have been below the 0.15 pCi/L standard
- Additional sampling continues to be conducted downstream of GS10

- As of September 30, 2013, uranium was no longer reportable

GS10 Investigation Monitoring

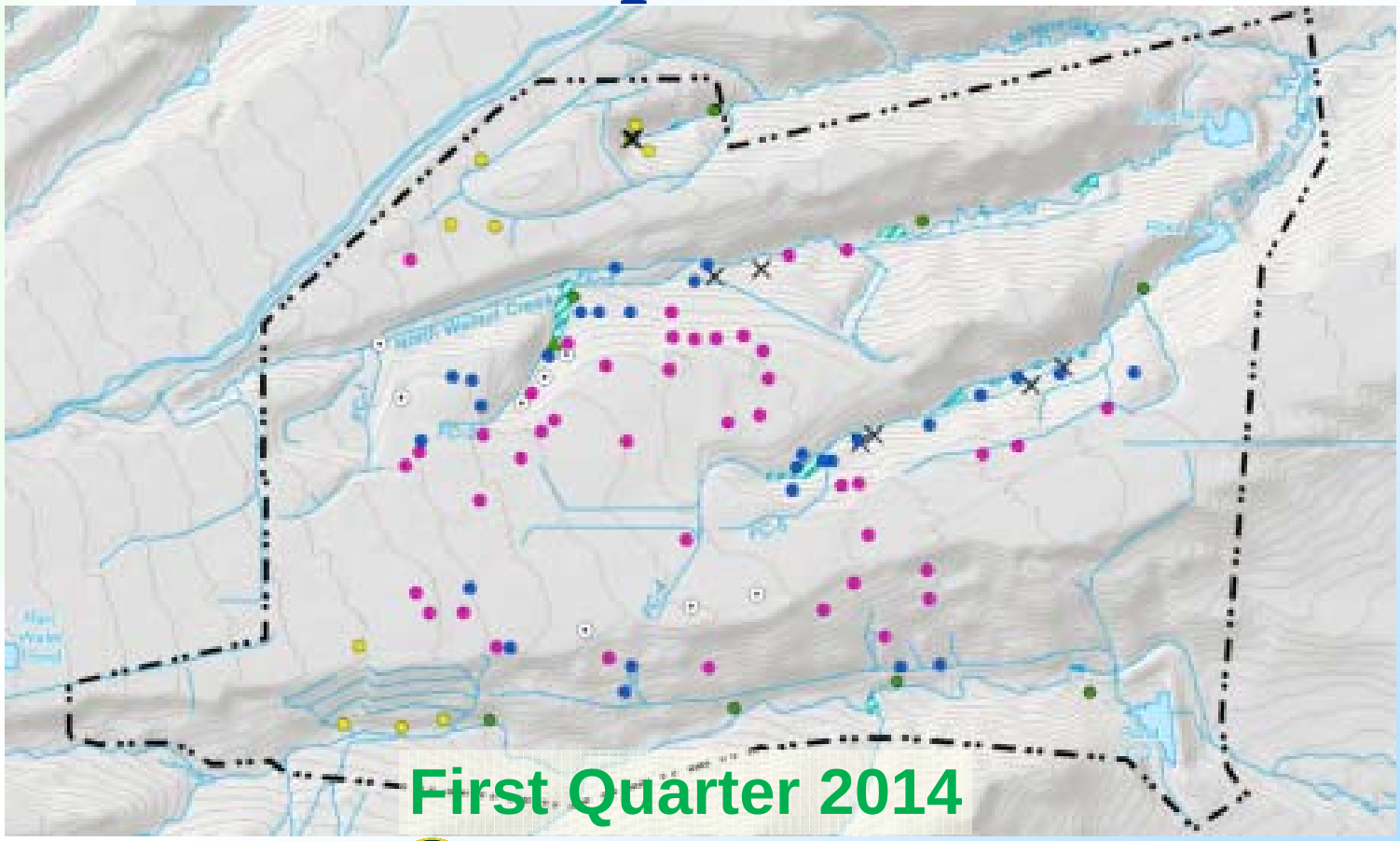


Point of Compliance Monitoring – WALPOC

- Reportable, 30-day average values for uranium at WALPOC were first observed during December 2013
- The 12-month rolling average remains below 16.8 μg/L
- Additional sampling is being conducted upstream of WALPOC

Questions?

Groundwater Monitoring and Operations



First Quarter 2014

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RFLMA Monitoring

- Light quarter
  - First quarter (same as third quarter)
  - Only sampled RCRA wells
    - PLF
    - OLF
- Statistical evaluation of results will be included in annual report for 2014

Non-RFLMA Monitoring

- Treatment systems
  - MSPTS: air stripper evaluations and optimization
  - ETPTS: air stripper evaluations and optimization
  - SPPTS: microcell and lagoon testing

Treatment System Activities

- MSPTS
  - Air stripper
    - Cleaned
    - Reconfigured nozzles
    - Replaced ventilation fans
    - Sampled
- ETPTS
  - Air stripper
    - Cleaned
    - Sampled
- SPPTS
  - Continued microcell tests
  - Continued pilot-scale lagoon tests
  - Sampled

ETPTS Reconfiguration Project

- Converts system from ZVI-based treatment to air stripper-based treatment
- Design completed in January 2014
- Existing solar/battery power, with minor additions and revisions
- Commercial air stripper in small enclosure built over existing vault
- Scheduled to be completed late CY 2014

Questions?

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Site Operations

First Quarter 2014

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Quarterly Sign Inspections

- RFLMA physical control
- All signs are in good condition

Site Operations – OLF

- Three monthly inspections performed; weekly inspections of slumping areas
- Eight settlement monuments and seven inclinometers monitored

Site Operations – OLF (continued)

- No significant cracking was noted within the landfill boundaries during the first quarter
- Cracking and slumping were noted on the east side of the East Perimeter Channel, outside of the landfill boundary
  - Cracks were filled as required by the M&M Plan

Site Operations – PLF

- One quarterly inspection performed
- Annual surveys of nine settlement monuments completed in December 2013
  - Next surveys to be completed in December 2014

Questions?