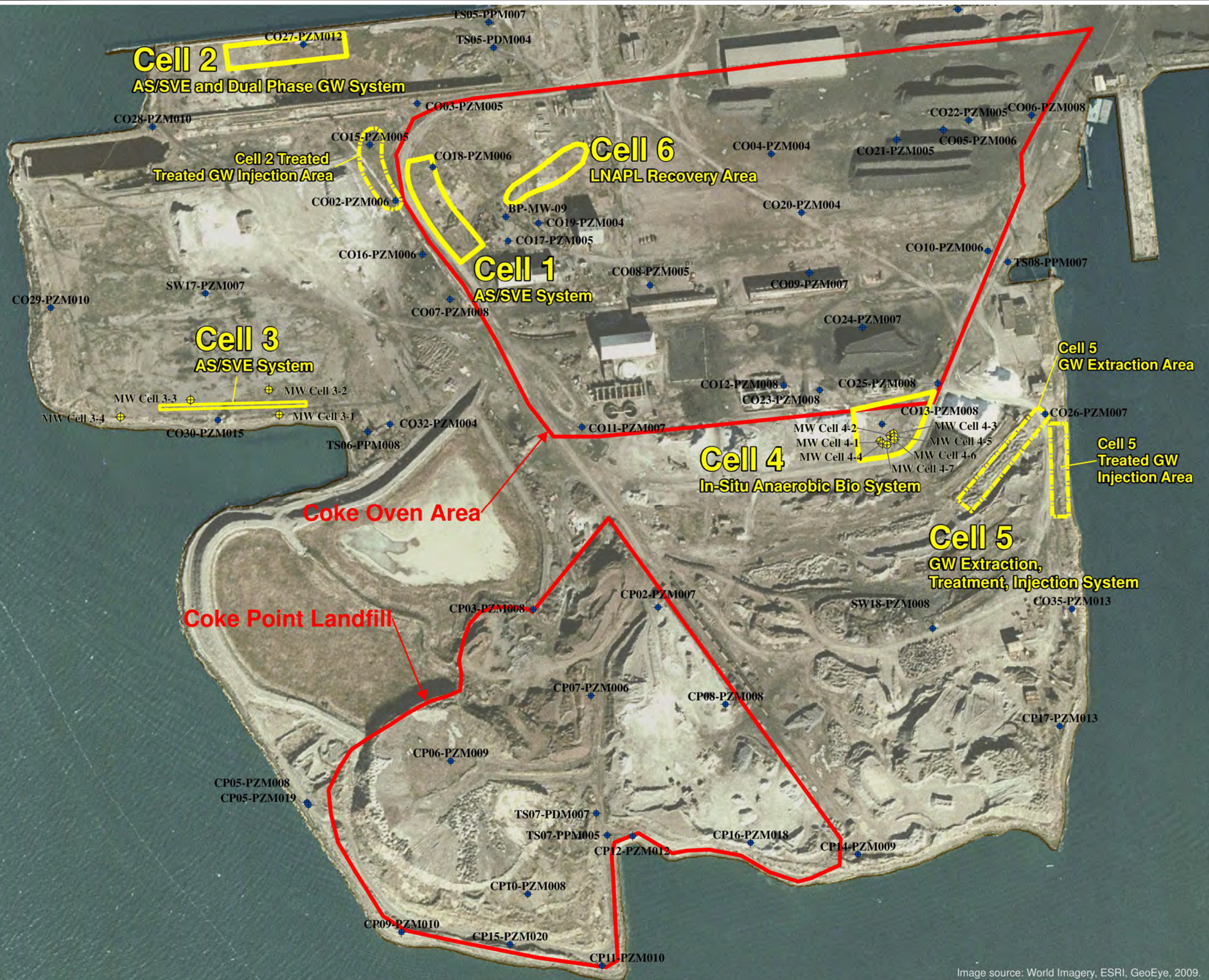


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**LEGEND**

- + New Monitoring Well
- + Existing Monitoring Well
- AS/SVE Treatment Area
- Special Study Area

**INTERIM MEASURES TREATMENT CELLS**

"Cell 1": Prototype AS/SVE System in Benzol Area



"Cell 2": AS/SVE and Dual Phase GW Treatment/Injection System in the Former Coal Storage Area

"Cell 3": AS/SVE System in the "Cove" Area

"Cell 4": In-Situ Anaerobic Bio-treatment System in the Coal Tar Area

"Cell 5": Groundwater Extraction/Treatment/Injection at the Turning Basin Area

"Cell 6": LNAPL Recovery at the Former Benzol Processing Area

APPROXIMATE SCALE



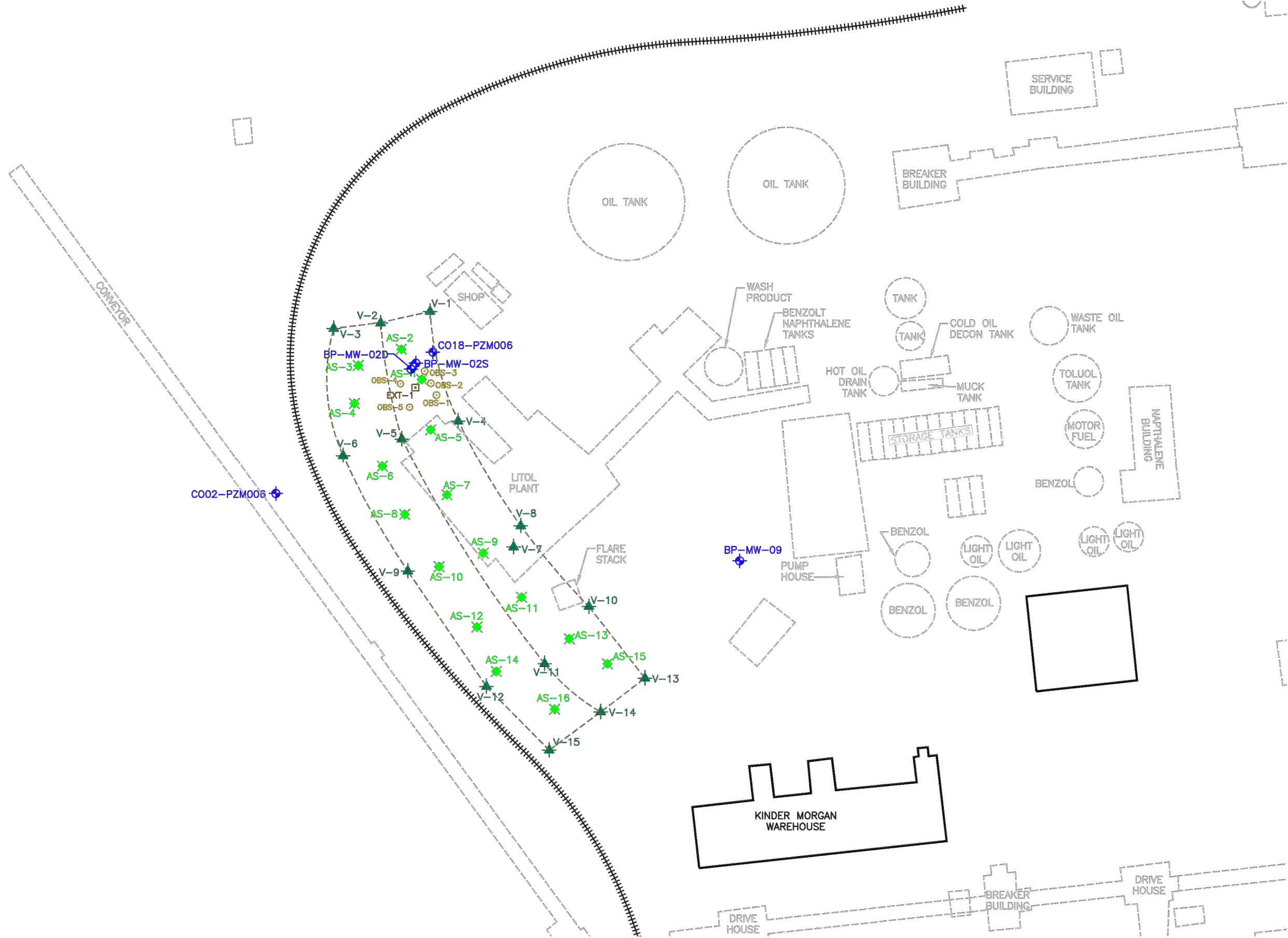
Project  
 Sparrows Point, LLC  
 Baltimore, Maryland

**INTERIM MEASURES TREATMENT AREAS**

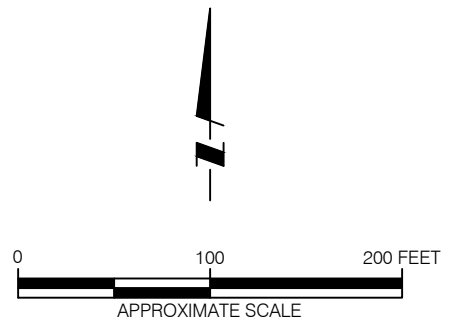
Project Number E-2439.01		File Number E2439-2012-11-01	
Date December 31, 2012			Figure <b>1</b>
PE/PG MZ	PM DB	Drafter SS	

Image source: World Imagery, ESRI, GeoEye, 2009.

Y:\GIS\_CAD\_DBELT\_SparrowsPoint\Maps\2012\Monthly Report November\E2439-2012-11-02 - 12/31/2012



- LEGEND**
- V-1 TRENCH VAPOR EXTRACTION RISER
  - EXT-1 SVE PILOT TEST EXTRACTION WELL
  - OBS-1 SVE PILOT TEST OBSERVATION WELL
  - CO18-PZM006 EXISTING MONITORING WELL
  - AS-2 AIR SPARGE WELL
  - - - - - VAPOR COLLECTION TRENCHES
  - - - - - FORMER STRUCTURES (DEMOLISHED)



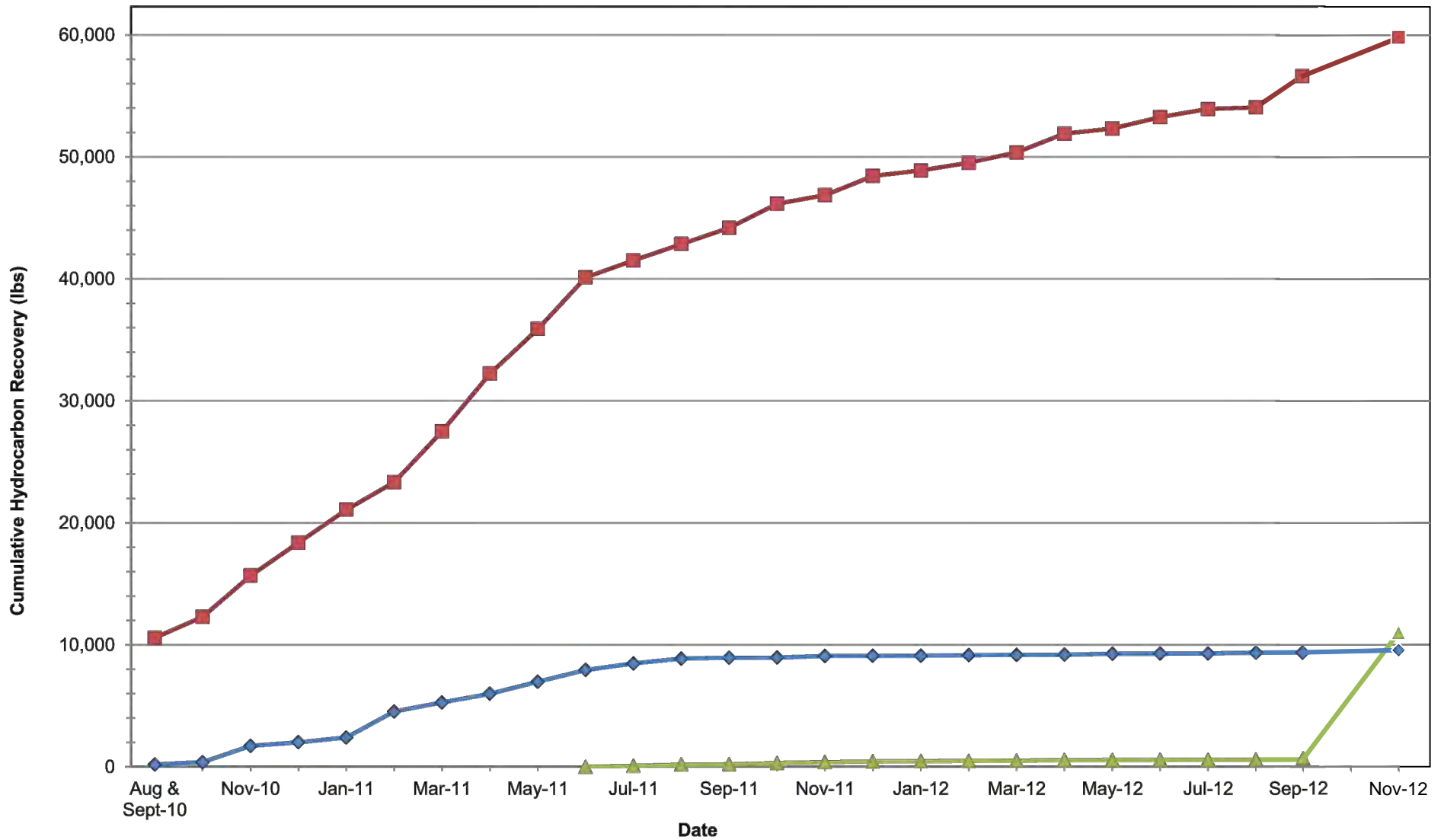
Project  
Sparrows Point, LLC  
Baltimore, Maryland

**AS-BUILT LAYOUT PLAN CELL 1 FORMER BENZOL PROCESSING AREA**

Project Number E-2439.01 File Number E2439-2012-11-02

Date December 31, 2012 Figure 2

PE/PG MZ	PM DB	Drafter SS
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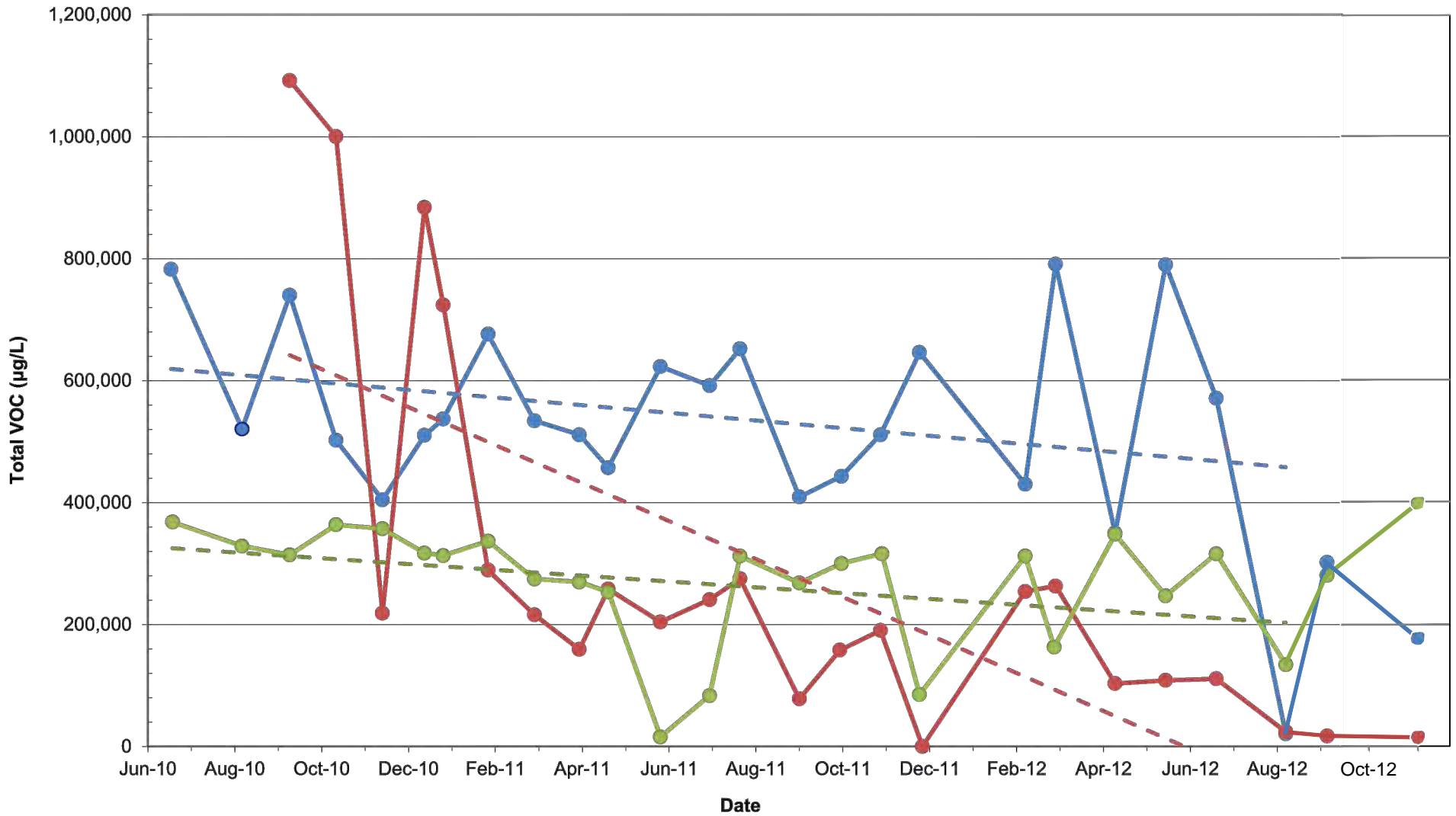
**Cumulative Summary of Estimated Hydrocarbon Recovery  
Former Coke Oven Area Interim Remedial Measures  
Sparrows Point, LLC**

**CUMULATIVE SUMMARY OF  
ESTIMATED HYDROCARBON  
RECOVERY  
Sparrows Point, LLC  
---  
Baltimore, Maryland**

◆ Cell 1    ■ Cell 6    ▲ Cell 3

Date	Drafter
December 31, 2012	SS

PE/PG	Project Number	Figure
MZ	E-2439.01	
Project Manager	File	3
DB	E2439-2012-11-03	



**Measured Groundwater VOC Concentration by Month  
Cell 1: Prototype AS/SVE System in the "Cove" Area  
Sparrows Point, LLC**

**MEASURED GROUNDWATER  
VOC CONCENTRATION BY  
MONTH  
Sparrows Point, LLC  
---  
Baltimore, Maryland**

● CO02-PZM006     
 ● CO18-PZM006     
 ● BP-MW-09

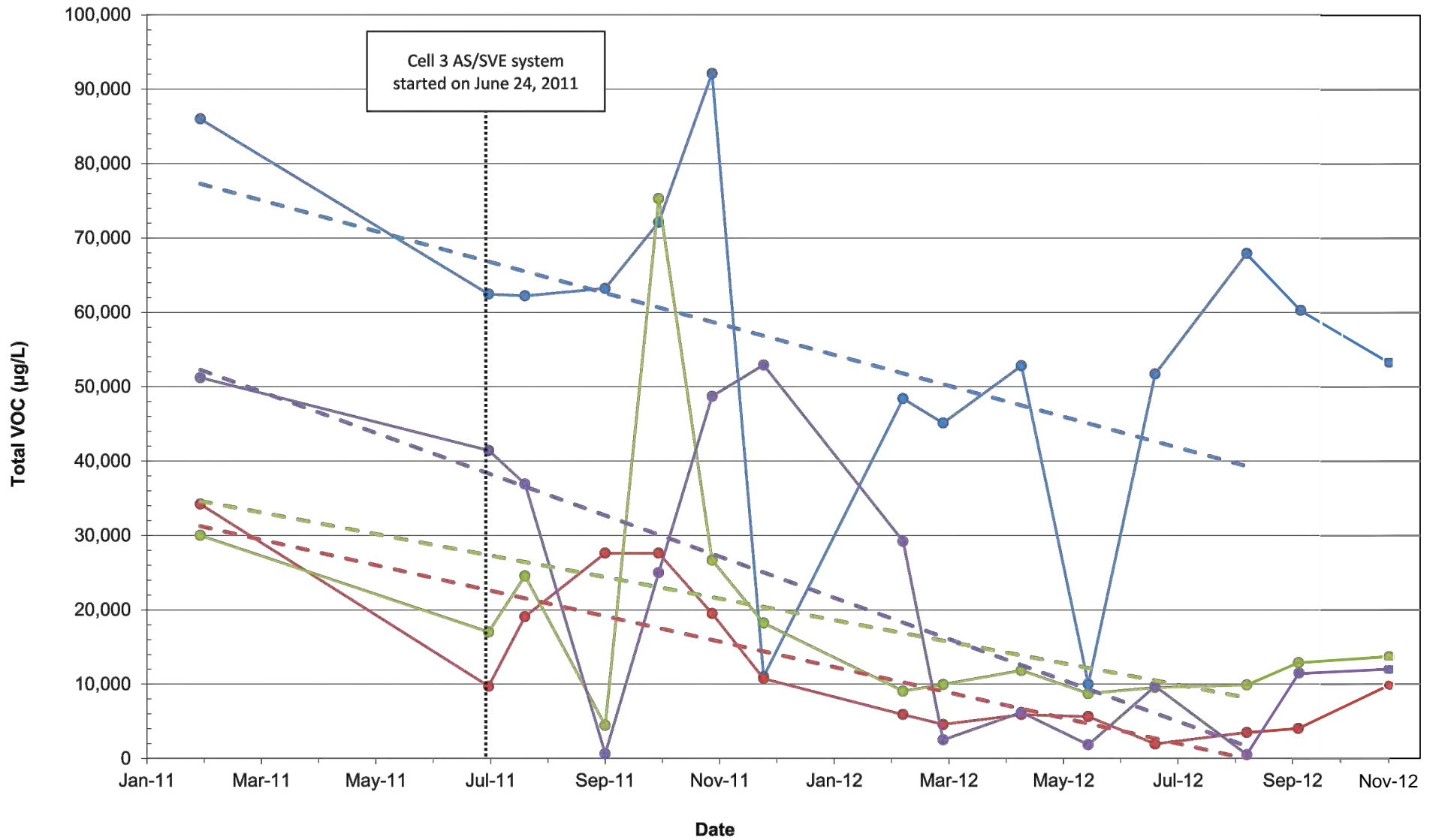
Date  
December 31, 2012

Drafter  
SS

PE/PG  
MZ  
Project Manager  
DB

Project Number  
E-2439.01  
File  
E2439-2012-11-04

Figure



**Measured Groundwater VOC Concentration by Month  
Cell 3: Prototype AS/SVE System in the "Cove" Area  
Sparrows Point, LLC**

**MEASURED GROUNDWATER  
VOC CONCENTRATION BY  
MONTH**  
Sparrows Point, LLC  
---  
Baltimore, Maryland

● CO30-PZM015    ● MW-CELL 3-1    ● MW-CELL 3-2    ● MW-CELL 3-3

Date  
December 31, 2012

Drafter  
SS

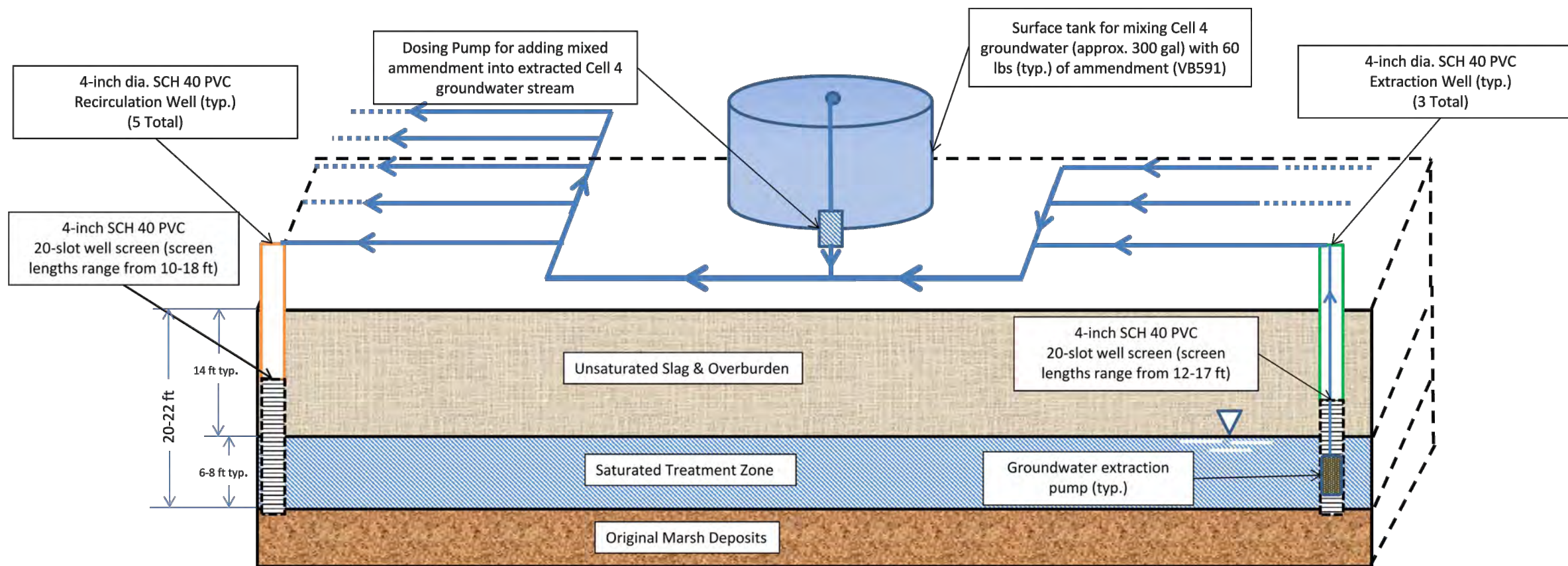
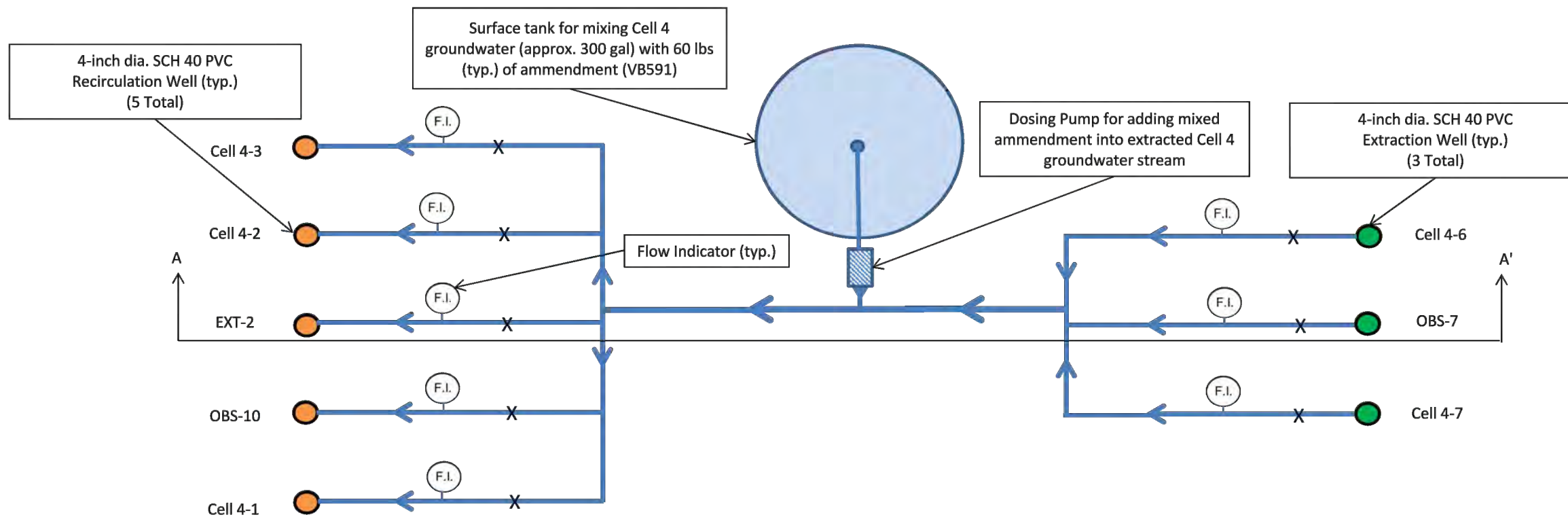
PE/PG  
MZ  
Project Manager  
DB

Project Number  
E-2439.01  
File  
E2439-2012-11-05

Figure

5

**Schematic Layout and Sections  
Cell 4 In-Situ Anaerobic Bio-Treatment System  
Former Coke Oven Area Interim Remedial Measures  
Sparrows Point, LLC**



Section A-A' (not to scale)



Project  
Sparrows Point, LLC  
-----  
Baltimore, Maryland

**SCHEMATIC LAYOUT AND SECTIONS**

Project Number E-2439.01 File Number E2439-2012-11-06

Date December 31, 2012

Figure

PE/PG MZ PM DB Drafter SS

# Cell 4

## In-Situ Anaerobic Bio-System



### Legend

- Extraction Well (Existing)
- Extraction Well (New)
- Recirculation Well (Existing)
- Recirculation Well (New)
- ⊕ Monitoring Well (Existing)
- ⊕ Monitoring Well (New)
- ➔ Groundwater Flow Direction

0 20 40 80 Feet

Image source: World Imagery, ESRI, GeoEye, 2009.



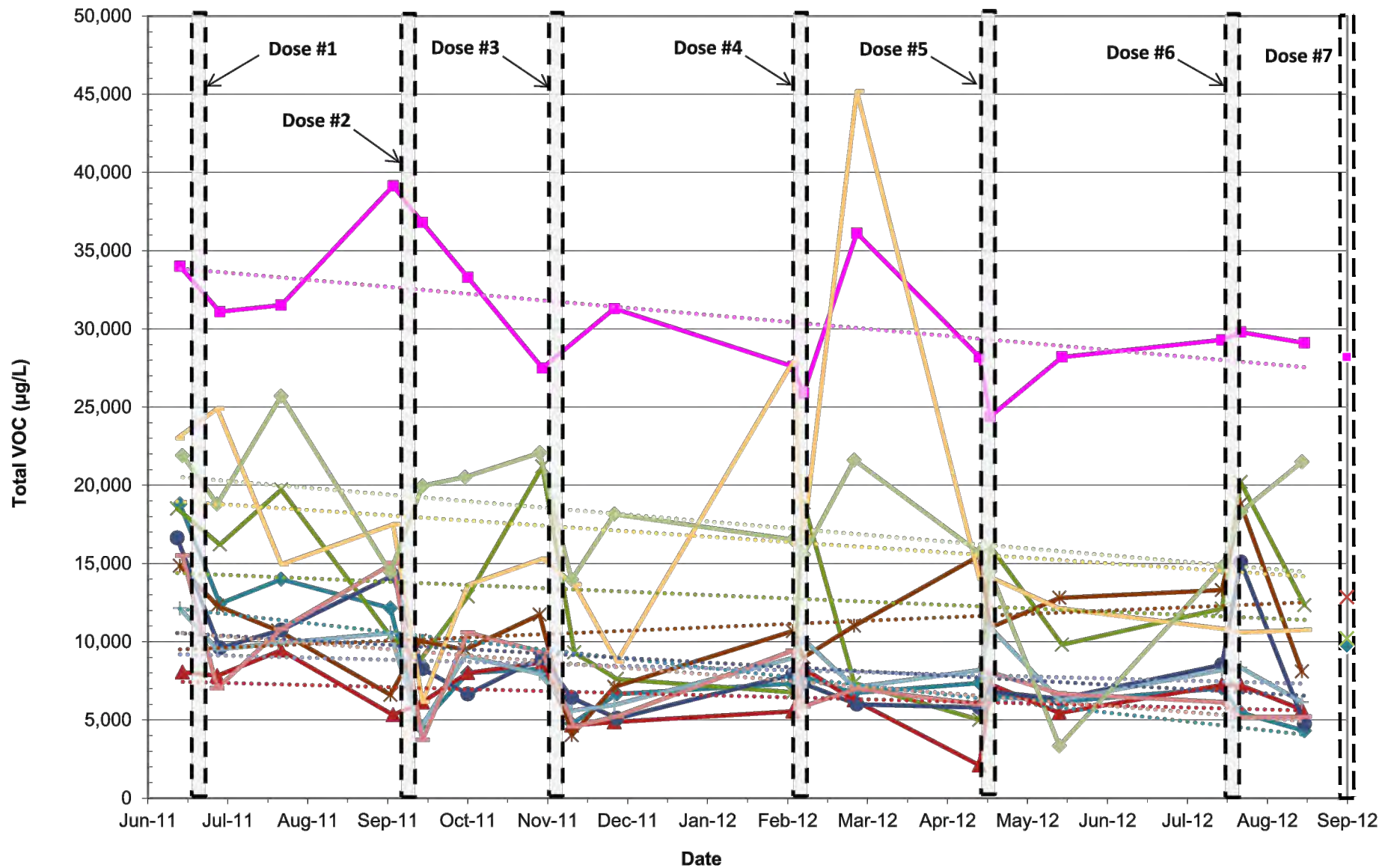
### CELL 4 WELLS

Sparrows Point, LLC  
 ----  
 Baltimore, Maryland



Date	Drafter
December 31, 2012	SS

PE/PG	Project Number	Figure
MZ	E-2439.01	7
Project Manager	File	
DB	E2439-2012-11-07	



**Measured Groundwater VOC Concentration by Month  
Cell 4: In-Situ Anaerobic Bio-Treatment Area  
Sparrows Point, LLC**

**MEASURED GROUNDWATER  
VOC CONCENTRATION BY  
MONTH  
Sparrows Point, LLC  
---  
Baltimore, Maryland**

- AS-2
- EXT-2
- OBS-6
- OBS-8
- Cell 4-1
- Cell 4-3
- Cell 4-4
- Cell 4-5
- Cell 4-6
- Cell 4-7

Date  
December 31, 2012

Drafter  
SS

PE/PG MZ	Project Number E-2439.01
Project Manager DB	File E2439-2012-11-08

Figure

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