

Appendix D

Listings and Photos of Monitoring Wells and Seeps

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Contents

| | | |
|-----|---|------|
| 1.0 | Parcel 6, 7, and 8 Remedy Wells and Seeps | D-1 |
| 2.0 | OU-1 (Parcel 9) Wells | D-6 |
| 3.0 | Phase I Remedy Wells and Seeps | D-11 |

Figures

| | | |
|-----------|---|------|
| Figure 1. | Parcel 6, 7, and 8 Groundwater and Seep Monitoring Locations..... | D-2 |
| Figure 2. | OU-1 wells..... | D-7 |
| Figure 3. | Phase I MNA Remedy Monitoring Well Location..... | D-12 |

Tables

| | | |
|----------|--|------|
| Table 1. | Parcel 6, 7, and 8 Monitoring Wells and Seeps | D-1 |
| Table 2. | Photos of Parcel 6, 7, and 8 Wells and Seeps | D-3 |
| Table 3. | OU-1 Wells | D-6 |
| Table 4. | Photos of OU-1 Wells..... | D-8 |
| Table 5. | Monitoring Wells and Seeps Included in Phase I Remedy..... | D-11 |
| Table 6. | Photos of Phase I Parcel Wells and Seeps | D-13 |

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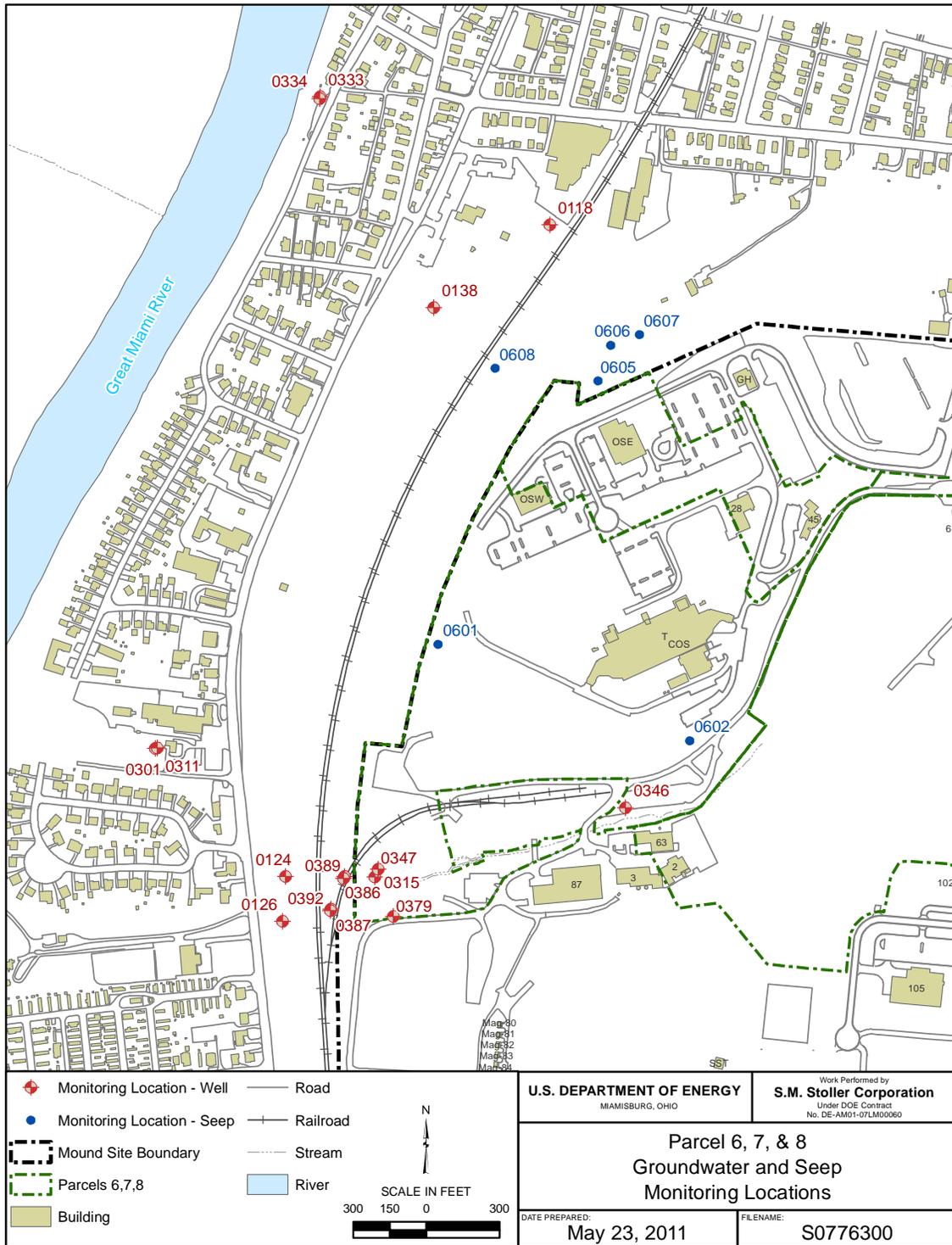
1.0 Parcel 6, 7, and 8 Remedy Wells and Seeps

Table 1 and Figure 1 show the Parcel 6, 7, and 8 groundwater monitoring wells and seep locations. Table 2 contains photos of all wells and seeps. All of the Parcel 6, 7, and 8 wells were locked and in good condition.

Because the groundwater monitoring is not an IC, the annual IC assessment only verifies the conditions of the wells and seeps, and it does not determine the effectiveness of the MNA remedy. The remedy for the Parcels 6, 7, and 8 includes ICs for the land and MNA which includes groundwater monitoring requirements described in the *Parcel 6, 7, and 8 Remedy (Monitored Natural Attenuation) Groundwater Monitoring Plan, Final* (DOE 2006b). The *Parcel 6, 7, and 8 Groundwater Monitoring Report Calendar Year 2010* (DOE 2010) includes an analysis of the groundwater monitoring. Both of these documents are available on the LM website at <http://www.lm.doe.gov/mound/Sites.aspx>.

Table 1. Parcel 6, 7, and 8 Monitoring Wells and Seeps

| Well/Seep ID | Located in Parcel 8 | Off-site |
|--------------|---------------------|------------|
| 0118 | | X |
| 0124 | | X |
| 0126 | | X |
| 0138 | | X |
| 0301 | | X |
| 0311 | | X |
| 0315 | X | |
| 0333 | | X inactive |
| 0334 | | X inactive |
| 0346 | X | |
| 0347 | X | |
| 0379 | X | |
| 0386 | | X |
| 0387 | | X |
| 0389 | | X |
| 0392 | | X |
| Seep 0601 | X | |
| Seep 0602 | X | |
| Seep 0605 | | X |
| Seep 0606 | | X |
| Seep 0607 | | X |
| Seep 0608 | | X |



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Figure 1. Parcel 6, 7, and 8 Groundwater and Seep Monitoring Locations

Table 2. Photos of Parcel 6, 7, and 8 Wells and Seeps



Well 0118, Off Site



Well 0124, Off Site



Well 0126, Off Site



Well 0138, Off Site



Wells 0301 and 0311, Off Site



Wells 0333 and 0334, Off Site (removed from active monitoring program in 2009)



Wells 0386 and 0389, Off Site



Wells 0387 and 0392, Off Site



Well 0315



Well 0346



Well 0347



Well 0379



Seep 0601, On Site



Seep 0602, On Site



Seep 0605 Off-Site



Seep 0606 Off-Site



Seep 0607, Off Site



Seep 0608, Off Site, On Hillside

2.0 OU-1 (Parcel 9) Wells

Table 3 and Figure 2 list and show the locations of the OU-1 monitoring wells. Table 4 contains photos of all wells. All wells were locked and in good condition.

Because the groundwater monitoring is not an IC, the annual IC assessment only verifies the conditions of the wells and seeps, and it does not determine the effectiveness of the remedy. The ER Monthly Report provides data on the OU-1 pump and treat system and the results of groundwater monitoring. Historical water quality and water level data for existing wells can be found on the U.S. Department of Energy Office of Legacy Management website: http://gems.lm.doe.gov/imf/ext/gems/jsp/launch.jsp?default_site=MND. Photographs, maps, and physical features can also be viewed on this website.

Table 3. OU-1 Wells

| Well ID |
|------------------------|
| P015 |
| P027 |
| P031 |
| P053 |
| P054 |
| P056 |
| 0305 |
| 0410 |
| 0416 |
| 0417 |
| 0418 |
| 0419 |
| 0422 |
| 0423 |
| 0424 |
| 0425 |
| 0449 – extraction well |
| 0450 – extraction well |

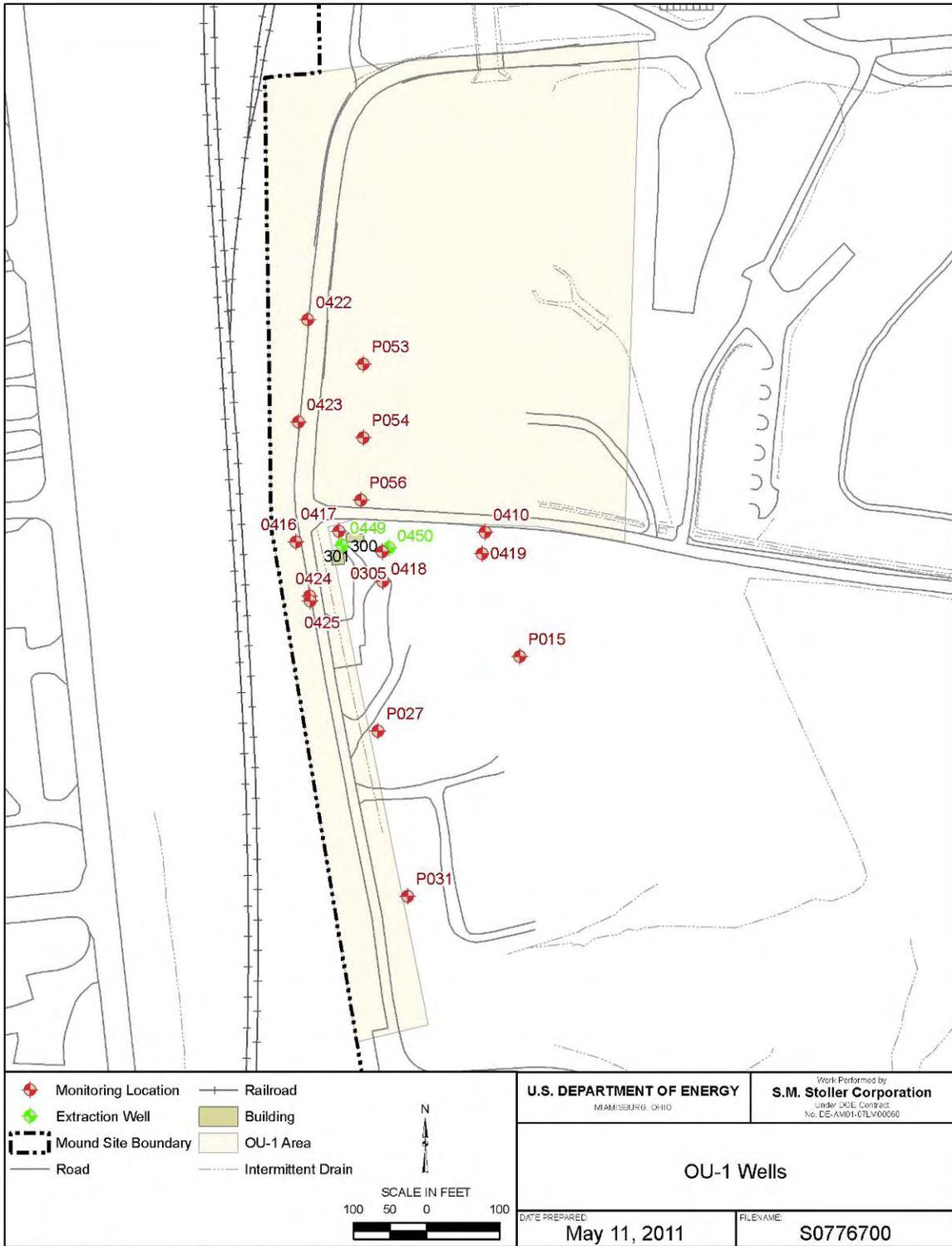


Figure 2. OU-1 wells

Table 4. Photos of OU-1 Wells



Well P015



Well P027



Well P031



Wells P053, P054, P056



Well 0305



Well 0410



Well 0416



Well 0417



Well 0418



Well 0419



Well 0422



Well 0423



Wells 0424 and 0425



Extraction Well 0449



Extraction Well 0550

3.0 Phase I Remedy Wells and Seeps

The Phase I remedy includes ICs and MNA which includes groundwater monitoring requirements.

Table 5 and Figure 3 give the locations of the 10 wells and one seep monitored for the Phase I parcel. The *Phase I Remedy (Monitored Natural Attenuation) Groundwater Monitoring Plan, Final* (DOE 2004b) can be found on the Mound website at <http://www.lm.doe.gov/mound/Sites.aspx>.

Because the groundwater monitoring is not an IC, the annual IC assessment only verifies the conditions of the wells and seeps, and it does not determine the effectiveness of the MNA remedy. The Phase I remedy includes ICs and MNA which includes groundwater monitoring requirements describe in the *Phase I Remedy (Monitored Natural Attenuation) Groundwater Monitoring Plan, Final* (DOE 2004b) The *Phase I Groundwater Monitoring Report Calendar Year 2010* (2010) includes an analysis of the groundwater monitoring. Both of these documents are available on the LM website at <http://www.lm.doe.gov/mound/Sites.aspx>.

Table 5. Monitoring Wells and Seeps Included in Phase I Remedy

| Well/Seep # | Located in Parcel | | | | |
|-------------|-------------------|----|------------|------------|---|
| | 4 | IA | IB | IC | 9 |
| Well P033 | | | | X | |
| Well 0319 | | | | X inactive | |
| Well 0353 | | | | | X |
| Well 0400 | | | | X | |
| Well 0402 | | | | | X |
| Well 0411 | | | X | | |
| Well 0442 | | | X inactive | | |
| Well 0443 | | | X | | |
| Well 0444 | X | | | | |
| Well 0445 | | | | X | |
| Seep 0617 | | | X | | |

All wells were locked, had permanent markers, and were in good condition.

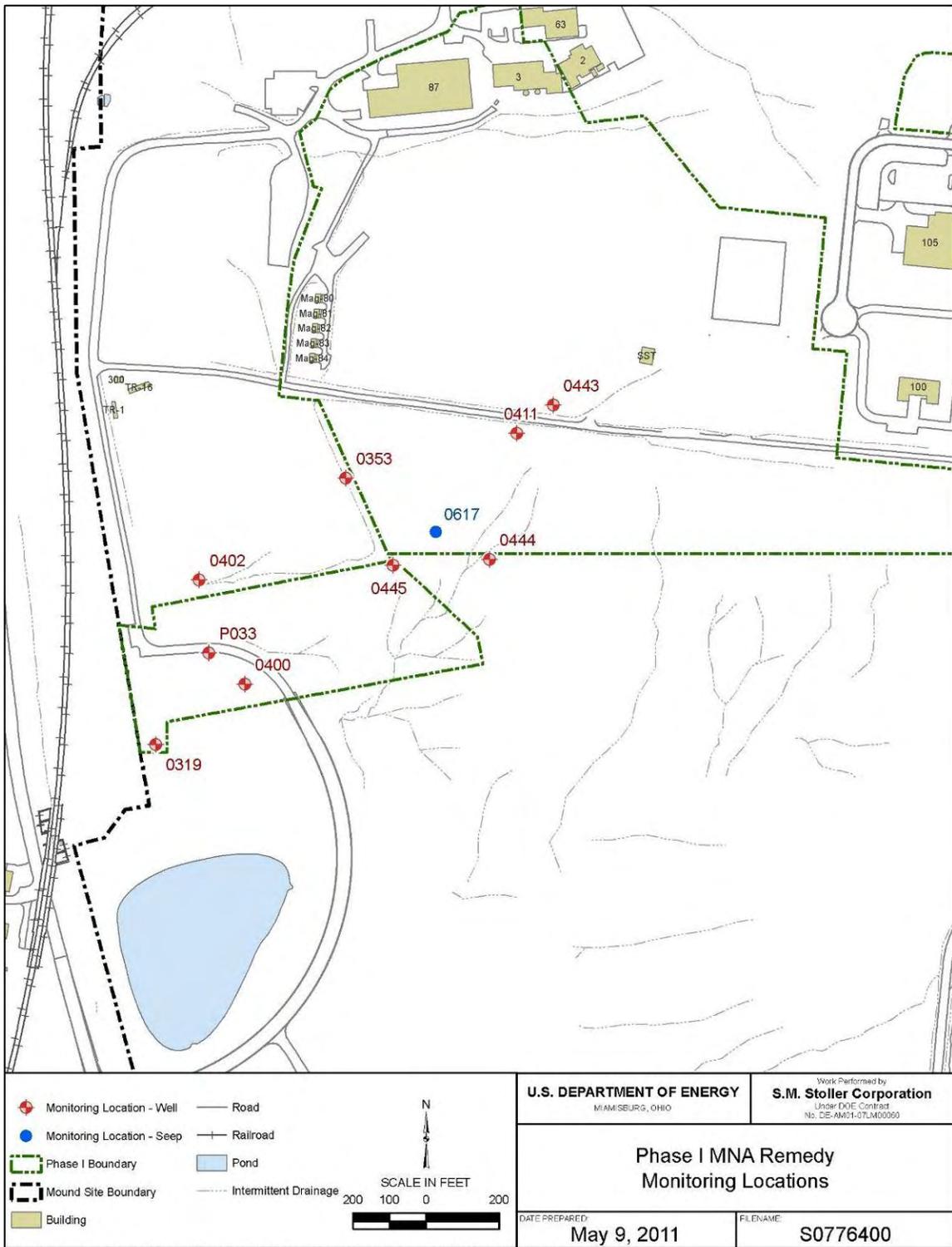


Figure 3. Phase I MNA Remedy Monitoring Well Location

Table 6. Photos of Phase I Parcel Wells and Seeps



Well P033



Well 0319 (inactive)



Well 0353



Well 0400



Well 0402



Well 0411



Well 0442 (inactive)



Well 0443



Seep 0617