# TABLE 1
## SUMMARY OF EXISTING WELLS
Phase II Investigation Work Plan, SOCs 1-3 and 6-8
UMore Mining Area
Dakota County, Minnesota

<table>
<thead>
<tr>
<th>MN Unique Well ID</th>
<th>PLLS Location</th>
<th>Listed Well Use</th>
<th>Ground Surface Elev (ft MSL)</th>
<th>Well Depth (ft bgs)</th>
<th>Aquifer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Township Range Sec subSec</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>185278</td>
<td>114 19 4</td>
<td>BDCDCBC</td>
<td>Irrigation</td>
<td>951</td>
<td>310</td>
</tr>
<tr>
<td>207605</td>
<td>114 19 3</td>
<td>BBAADD</td>
<td>Domestic</td>
<td>943</td>
<td>206</td>
</tr>
<tr>
<td>207606</td>
<td>114 19 4</td>
<td>BBABCBB</td>
<td>Sealed</td>
<td>954</td>
<td>429</td>
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<td>207607</td>
<td>114 19 4</td>
<td>AAACBC</td>
<td>Domestic</td>
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<td>170</td>
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<td>207608</td>
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<td>DACADD</td>
<td>Public</td>
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<td>415</td>
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<tr>
<td>207615</td>
<td>115 19 33</td>
<td>ADBACC</td>
<td>Domestic</td>
<td>955</td>
<td>432</td>
</tr>
<tr>
<td>207616</td>
<td>115 19 33</td>
<td>ABBBBBC</td>
<td>Irrigation</td>
<td>954</td>
<td>221</td>
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<tr>
<td>207617</td>
<td>115 19 33</td>
<td>CDBBAAD</td>
<td>Domestic</td>
<td>950</td>
<td>434</td>
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<td>208402</td>
<td>115 19 33</td>
<td>DDDCC</td>
<td>Domestic</td>
<td>950</td>
<td>166</td>
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<tr>
<td>208405</td>
<td>115 19 34</td>
<td>CCCCD</td>
<td>Domestic</td>
<td>953</td>
<td>236</td>
</tr>
<tr>
<td>543862</td>
<td>114 19 4</td>
<td></td>
<td>Sealed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>543863</td>
<td>114 19 4</td>
<td></td>
<td>Sealed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>543864</td>
<td>114 19 4</td>
<td></td>
<td>Sealed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>575906</td>
<td>114 19 4</td>
<td>ADA</td>
<td>Monitor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>635497</td>
<td>114 19 4</td>
<td>DAA</td>
<td>Sealed</td>
<td></td>
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<tr>
<td>635498</td>
<td>114 19 4</td>
<td>DAA</td>
<td>Sealed</td>
<td></td>
<td>50</td>
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<td>635499</td>
<td>114 19 4</td>
<td>DAA</td>
<td>Sealed</td>
<td></td>
<td>59</td>
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<tr>
<td>769429</td>
<td>114 19 4</td>
<td>Monitor</td>
<td>939</td>
<td>77</td>
<td>SP</td>
</tr>
<tr>
<td>769482</td>
<td>115 19 33</td>
<td>Monitor</td>
<td>950</td>
<td>147</td>
<td>Q</td>
</tr>
<tr>
<td>769483</td>
<td>114 19 4</td>
<td>Monitor</td>
<td>947</td>
<td>127</td>
<td>Q</td>
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<tr>
<td>769488</td>
<td>114 19 4</td>
<td>Monitor</td>
<td>948</td>
<td>70</td>
<td>Q</td>
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<tr>
<td>769489</td>
<td>115 19 33</td>
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<td>950</td>
<td>146</td>
<td>Q</td>
</tr>
<tr>
<td>769490</td>
<td>114 19 3</td>
<td>Monitor</td>
<td>944</td>
<td>72</td>
<td>Q</td>
</tr>
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<td>769493</td>
<td>115 19 33</td>
<td>Monitor</td>
<td>950</td>
<td>77</td>
<td>Q</td>
</tr>
<tr>
<td>769796</td>
<td>115 19 33</td>
<td>Monitor</td>
<td>948</td>
<td>84</td>
<td>Q</td>
</tr>
</tbody>
</table>

**Notes:**
- Blank indicates information not reported
- Domestic - indicates well is used for domestic water supply
- Sealed - indicates well has been sealed/decommissioned
- Irrigation - well used for crop irrigation water supply
- Monitor - well used for monitoring purposes
- Q - Quaternary
- SP - St. Peter Formation
- PDC - Prairie du Chien Group
- Jordan - Jordan Formation
## TABLE 2
### SITES OF CONCERN
Phase II Investigation Work Plan, SOCs 1-3 and 6-8
UMore Mining Area
Dakota County, Minnesota

<table>
<thead>
<tr>
<th>Site of Concern</th>
<th>Name</th>
<th>Map Location</th>
<th>Description</th>
<th>Previously Identified Sites</th>
<th>Potentially Affected Media</th>
<th>Anticipated Constituents of Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 1</td>
<td>Former Railroad &quot;Y&quot;</td>
<td>A2</td>
<td>Heavy gauge railroad junction that was a major gateway for delivery of construction materials and raw materials supplies for manufacture of smokeless gunpowder. Outbound shipments likely included manufactured gunpowder, oleum, and nitric acid. During GOW decommission, salvaged materials would have been shipped out along the rails.</td>
<td>Barr Site ID# 6001. Was visited by Army but not included in scope of Focused Site Investigation. No previous investigations.</td>
<td>Soil and Groundwater</td>
<td>SVOCs from railroad ties including PAHs. Possible spills from railcars including SVOCs (DNT, DBP, DPA), NC, and VOCs. Arsenic-based herbicides may have been used along tracks.</td>
</tr>
<tr>
<td>SOC 2</td>
<td>Forestry Research</td>
<td>C3</td>
<td>Wooded area transected by the railroad south of the &quot;Y&quot;. GOW era loading platform and storehouses located in cluster with storage buildings south of the GOW lumber yard. The area appears to have disturbed ground on the 1945 air photo and scattered concrete and brick fragments were observed at the surface during 9/2008 field visit. RR tie visible in woods.</td>
<td>Barr Site ID# 6004 and ID# 6005, Dakota County Site ID# 5262 and ID# 5263, Storage buildings 126-T, 127-T1, T2, and S-7-T1. No previous investigations.</td>
<td>Soil</td>
<td>ACM, SVOCs, metals</td>
</tr>
<tr>
<td>SOC 3</td>
<td>Ag Engineering/Former &quot;K&quot; Street Dump</td>
<td>D3</td>
<td>Former Kane farmstead. West and central side of this area is the Ag Engineering Complex. University staff indicate that the well in building 1010 is believed to be impacted by pesticides and is not potable. East central includes a former animal waste lagoon and associated outlet structures and east side is former dump. Dump is currently wooded with some rubble visible, was borrow area for GOW, appears to have been filled with GOW demolition debris.</td>
<td>Barr Site ID# 6014, Dakota County Site ID# 5225, ID# 5859 and ID# 5012. Possibly associated with LEAK 7504, no known previous investigations.</td>
<td>Soil and Groundwater</td>
<td>ACM, pesticides, herbicides, metals, SVOCs (including DNT, DBP, DPA)</td>
</tr>
<tr>
<td>SOC 6</td>
<td>Southern Complex Storage Buildings and Wash Pads</td>
<td>E2</td>
<td>Pesticide release sites closed 2002. University staff suspect some impacts may remain in groundwater.</td>
<td>Barr Site ID# 6006, Dakota County Site ID# 5874</td>
<td>Soil and Groundwater</td>
<td>Pesticides, herbicides</td>
</tr>
<tr>
<td>SOC 7</td>
<td>Former Dairy Complex Suspected Dump Area</td>
<td>D1</td>
<td>Suspect dump area. Some evidence of concrete and plastic in surface soils.</td>
<td>Dakota County Site ID# 5152 (in 2006 Peer Phase I)</td>
<td>Soil</td>
<td>ACM, metals, SVOCs</td>
</tr>
<tr>
<td>SOC 8</td>
<td>Undetermined Use Area West of Patrol Road (South of CR 46)</td>
<td>D2</td>
<td>Suspect hay bale area. Possible debris/material stockpile area in 1945 aerial photo.</td>
<td>NA</td>
<td>Soil</td>
<td>NA</td>
</tr>
</tbody>
</table>

### Abbreviations
- **ACM** - Asbestos-containing material
- **DNT** - 2,4-dinitrotoluene and 2,6-dinitrotoluene, a type of SVOC used as a burn rate modifier for smokeless gunpowder (NC)
- **DPA** - Diphenylamine, an SVOC used as a stabilizer added to smokeless gunpowder
- **DBP** - Di-n-butyl Phthalate, an SVOC used as a plasticizer for smokeless gunpowder
- **GOW** - Gopher Ordnance Works
- **NC** - Nitrocellulose, smokeless gunpowder or gun cotton. A single base explosive and propellant
- **PAH** - Polycyclic Aromatic Hydrocarbons, a type of SVOC
- **SOC** - Site of Concern
- **SVOCs** - Semivolatile Organic Compounds
- **VOCs** - Volatile Organic Compounds

Bay West, 2008
<table>
<thead>
<tr>
<th>Site of Concern &amp; Rationale</th>
<th>Soil Sampling Plan</th>
<th>Groundwater Sampling Plan</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Former railroad &quot;Y&quot; (#6001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GP1 80 0-4</td>
<td>1 1 1</td>
<td>1 1 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>GP2 20 0-4</td>
<td>1 1 1</td>
<td>1 1 1 1 1 1</td>
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<tr>
<td>GP3 20 0-4</td>
<td>1 1 1</td>
<td>1 1 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>Surface samples will be collected in transects across former railroad bed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Former/ surface impacts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GP4 20 0-4</td>
<td>1 1 1</td>
<td>1 1 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>Soil sample to 20'; blind advance to WT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SS-1A 0.5 0-0.5</td>
<td>1 1</td>
<td>1 1 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>SS-1B 0.5 0-0.5</td>
<td>1 1</td>
<td>1 1 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>SS-1C 0.5 0-0.5</td>
<td>1 1</td>
<td>1 1 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>SS-1D 0.5 0-0.5</td>
<td>1 1</td>
<td>1 1 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>SS-2A 0.5 0-0.5</td>
<td>1 1</td>
<td>1 1 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>SS-2B 0.5 0-0.5</td>
<td>1 1</td>
<td>1 1 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>SS-2C 0.5 0-0.5</td>
<td>1 1</td>
<td>1 1 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>SS-3A 0.5 0-0.5</td>
<td>1 1</td>
<td>1 1 1 1 1 1</td>
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<tr>
<td>SS-3B 0.5 0-0.5</td>
<td>1 1</td>
<td>1 1 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>SS-3C 0.5 0-0.5</td>
<td>1 1</td>
<td>1 1 1 1 1 1</td>
<td></td>
</tr>
</tbody>
</table>

**Additional samples may be collected for SOC #2 parameters if evidence of soil impacts are observed during test trench excavation.**
<table>
<thead>
<tr>
<th>Site of Concern &amp; Reference Location</th>
<th>Sampling Target</th>
<th>Soil Sampling Plan</th>
<th>Groundwater Sampling Plan</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stripsnake (State Park)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sampling ID</td>
<td>Target Depth (feet bgs)</td>
<td>Sample Interval (feet bgs)</td>
<td>VOCs</td>
<td>SVOCs</td>
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</tr>
<tr>
<td>MW-BT-001</td>
<td>4</td>
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</tr>
<tr>
<td>MW-E2-009</td>
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<td></td>
</tr>
<tr>
<td>MW-E2-209</td>
<td>4</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Minimum # of Samples</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

Notes:
1. Continuous soil sampling conducted in borings to target depth for soil description and screening purposes. Test trenches to extend 2 feet into unimpacted geologic deposit below modern soil or filled material, if possible. 
2. Default soil sample collection depths for chemical analysis. Metals sample default will be from 2 to 6 inches below ground surface. If impacted soils are encountered an additional metals sample will be collected. 
3. Individual compounds and analytical methods for each parameter list are included in the Sampling and Analysis Plan (SAP). 
4. VOC samples will be collected where soil exhibits evidence that VOCs are present. For example, elevated headspace, staining and strong odor. 
5. Formerly included as "Explosives." SVOC analyte list includes the following compounds considered as "Explosives": 2,4-dinitrotoluene, 2,6-dinitrotoluene and diphenylamine. 
6. List 1 & 2 - Pest: includes Minnesota Department of Agriculture Pesticides List 1 (neutral) and List 2 (acid) pesticides. 
7. OC-Pest: includes organochlorine pesticides listed in EPA method 8081A. 
8. Approximate distance to groundwater. Actual depth to be determined in the field. 
9. Nitrates can include Nitrate (NO3) and Total Kjeldahl Nitrogen (TKN). 
10. VOCs - Volatile organic compounds. 
11. SVOCs - Semi-volatile organic compounds. 
12. PPL Metals - Priority Pollutant List metals. 
13. WT - Water table. 

*Bold and Italicics font indicates addition/revision from original WP scope. 
*Indicates that a sample will be collected if potential Asbestos Containing Material is observed during test trenching.
Figures
Figure 1

SITE LOCATION

Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, MN

Source: MnDOT, MN DNR, Dakota County, Barr, SEH, HKGi.
USGS topographic map background downloaded from the U.S.
Department of Agriculture, Natural Resources Conservation Service.

UMore Mining Area (UMA)
UMore Park Boundary
Figure 2

UMA PROJECT AREA
AND CURRENT LAND USE

Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, MN

Source: Metropolitan Council, Dakota County, Barr, SEH, HKGi.
Figure 3
FORMER GOW STRUCTURES AND SEWERS
Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, MN

Source: Dakota County, SEH, Barr, HKGi.
Background: 2008 Aerials Express imagery for the Twin Cities.
Figure 4

EXISTING CONDITIONS AND TOPOGRAPHY

Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, MN

Source: Metropolitan Council, MnDOT, MN DNR, Dakota County, USGS, Barr, SEH
**Figure 5**

**UMA SURFACE SOILS**

**Phase II Investigation Work Plan**

**Sites of Concern 1-3, 6-8**

**UMore Mining Area**

**Dakota County, MN**

Source: MnDOT, MN DNR, Dakota County, USGS, Barr, SEH.

Soil data is Soil Survey Geographic (SSURGO) database for Dakota County from the U.S. Department of Agriculture, Natural Resources Conservation Service.

<table>
<thead>
<tr>
<th>Map Unit Symbol</th>
<th>Map Unit Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>Kennebec silt loam</td>
</tr>
<tr>
<td>301B</td>
<td>Lindstrom silt loam, 1 to 4 % slopes</td>
</tr>
<tr>
<td>39B</td>
<td>Wadena loam, 2 to 6 % slopes</td>
</tr>
<tr>
<td>39D</td>
<td>Wadena loam, 12 to 18 % slopes</td>
</tr>
<tr>
<td>411A</td>
<td>Waukegan silt loam, 0 to 1 % slopes</td>
</tr>
<tr>
<td>411B</td>
<td>Waukegan silt loam, 1 to 6 % slopes</td>
</tr>
<tr>
<td>411C</td>
<td>Waukegan silt loam, 6 to 12 % slopes</td>
</tr>
<tr>
<td>415B</td>
<td>Kanaranzi loam, 2 to 6 % slopes</td>
</tr>
<tr>
<td>41B</td>
<td>Estherville sandy loam, 2 to 6 % slopes</td>
</tr>
<tr>
<td>611C</td>
<td>Hawick coarse sandy loam, 6 to 12 % slopes</td>
</tr>
<tr>
<td>611D</td>
<td>Hawick coarse sandy loam, 12 to 18 % slopes</td>
</tr>
<tr>
<td>857A</td>
<td>Urban land-Waukegan complex, 0 to 1 % slopes</td>
</tr>
<tr>
<td>858C</td>
<td>Urban land-Chetek complex, 1 to 15 % slopes</td>
</tr>
<tr>
<td>865B</td>
<td>Urban land-Hubbard complex, 0 to 6 % slopes</td>
</tr>
</tbody>
</table>

---

**Map Unit Symbol**

- **250**: Kennebec silt loam
- **301B**: Lindstrom silt loam, 1 to 4 % slopes
- **39B**: Wadena loam, 2 to 6 % slopes
- **39D**: Wadena loam, 12 to 18 % slopes
- **411A**: Waukegan silt loam, 0 to 1 % slopes
- **411B**: Waukegan silt loam, 1 to 6 % slopes
- **411C**: Waukegan silt loam, 6 to 12 % slopes
- **415B**: Kanaranzi loam, 2 to 6 % slopes
- **41B**: Estherville sandy loam, 2 to 6 % slopes
- **611C**: Hawick coarse sandy loam, 6 to 12 % slopes
- **611D**: Hawick coarse sandy loam, 12 to 18 % slopes
- **857A**: Urban land-Waukegan complex, 0 to 1 % slopes
- **858C**: Urban land-Chetek complex, 1 to 15 % slopes
- **865B**: Urban land-Hubbard complex, 0 to 6 % slopes

---

**Legend**

- **Red**: UMore Mining Area (UMA)
- **Yellow**: Soil Data (SSURGO)
GRAVEL ASSESSMENT BORINGS AND CROSS SECTION LOCATION

Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, MN
Cross Section Location Map

Legend

- Approximate Water Table Elevation (Dashed where inferred)
- Approximate Groundwater Elevation (04-03-09)
- Soil Boring
- Well Screen
- Open Hole Interval (for pre-existing wells)

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Generalized Field Descriptions</th>
<th>Predominant USCS Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topsoil/Loess</td>
<td>Surface Deposit - Organic Topsoil at Depth - Silt</td>
<td>OL, ML</td>
</tr>
<tr>
<td>Outwash</td>
<td>Poorly Graded Sand with Gravel (content ranging from 0 to 30%)</td>
<td>SP, SW, GP</td>
</tr>
<tr>
<td>Diamicton</td>
<td>Lean Clay Matrix with Sand and Gravel (content ranging from 10% to 40%)</td>
<td>CL, SC</td>
</tr>
<tr>
<td>Fluvial/low energy/Lacustrine</td>
<td>Sandy SW, Silt or Interbedded Clays</td>
<td>ML, SM, SM/CL</td>
</tr>
<tr>
<td>St. Peter Sandstone</td>
<td>Fine Grained Sandstone (Bedrock)</td>
<td>NA</td>
</tr>
<tr>
<td>Prairie du Chien</td>
<td>Dolomite (Bedrock)</td>
<td>NA</td>
</tr>
</tbody>
</table>

Figure 7
CROSS SECTION A-A'
Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, Minnesota
Figure 8

GROUNDWATER FLOW MAP
Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, MN

Water levels used for this map are from wells completed in the uppermost saturated unit and within 25 feet of the water table. Most of the wells used are completed in Quaternary deposits or the St Peter formation, except W1, which is completed in the Prairie du Chien formation, and T00020, which is completed across Quaternary deposits and the Prairie du Chien formation.

* The water level at well 539515 was measured on 3-4-2009. All others were measured on 3-3-2009.
Figure 9
EXISTING AND SEALED WELLS
Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, MN

Source: Dakota County, SEH, Barr, HKGi.
Well data is from the Dakota County Well and Water Management System (WELLMAN) and from Barr.

Active Well
Sealed Well
UMore Mining Area (UMA)
UMore Park Boundary
Figure 10
SITE OF CONCERN LOCATIONS
Phase II Investigation Work Plan
Sites of Concern
1-3, 6-8
UMore Mining Area
Dakota County, MN

SOC #1     Former Railroad "Y"
SOC #2     Forestry Research/Former GOW Storage
SOC #3     Ag. Engineering/K Street Dump
SOC #4     Former DNT Platform and AOC 3-DA1
SOC #5     Central Services/Former DNT Bunkers (AOC 5)
SOC #6     Southern Complex Storage Buildings and Wash Pads
SOC #7     Susp. Disposal Area
SOC #8     Undet. Use Area

Source:  Dakota County, Barr, SEH, HRSI
Access roads to be cleared with heavy equipment.

SOC #1:

- SOC1-SS1A, 1B, 1C
- SOC1-SS3A, 3B, 3C
- SOC1-SS2A, 2B, 2C
- SOC1-GP3
- SOC1-GP1
- SOC1-GP2

Notes:
1. Based on field observation, test trenches may consist of discontinuous test pits excavated throughout the planned trench limits.
2. Sample locations are approximate and may vary depending on site conditions.

Source: Dakota County, Barr, SEH, HKGi.
Figure 12
SOC #2 - FORESTRY RESEARCH/FORMER GOW STORAGE
SAMPLING LOCATIONS
Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, MN

Notes:
1. Based on field observations, test trenches may consist of discontinuous test pits excavated throughout the planned trench limits.
2. Sample locations are approximate and may vary depending on site conditions.
Source: Dakota County, Barr, SEH, HKGi.

SOC #2
Area with visible rubble at surface
SOC2-TT1 ... throughout the planned trench limits.
2. Sample locations are approximate and may vary depending on site conditions.
Source: Dakota County, Barr, SEH, HKGi.
Access road to be cleared with heavy equipment. Possible buried electric in area (location to be determined prior to investigation).

**Notes:**
1. Based on field observation, test trenches may consist of discontinuous test pits excavated throughout the planned trench limits.
2. Sample locations are approximate and may vary depending on site conditions.
3. WSW = water supply well.
4. Test trenches 9-16 will be used to determine extent of buried debris as needed.

Source: Dakota County, Barr, SEH, HKGi.
Figure 14

SOC #6 - SOUTHERN COMPLEX
STORAGE BUILDINGS AND WASH PADS
SAMPLING LOCATIONS

Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, MN

Notes:
1. Sample locations are approximate and may vary depending on site conditions.

Source: Dakota County, Barr, SEH, HKGi.
Figure 15
SOC #7 - SUSPECTED DUMP AREA
SAMPLING LOCATIONS

Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, MN

Notes:
1. Based on field observation, test trenches may consist of discontinuous test pits excavated throughout the planned trench limits.
2. Sample locations are approximate and may vary depending on site conditions.
Source: Dakota County, Barr, SEH, HKGi.
Figure 16

SOC #8 - UNDETERMINED USE AREA
WEST OF PATROL ROAD (SOUTH OF CR 46)

Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, MN

Notes:
1. Based on field observation, test trenches may consist of discontinuous test pits excavated throughout the planned trench limits.
2. Sample locations are approximate and may vary depending on site conditions.

Source: Dakota County, Barr, SEH, HKGi.
BACKGROUND SOIL AND GROUNDWATER SAMPLING LOCATIONS

Phase II Investigation Work Plan
Sites of Concern 1-3, 6-8
UMore Mining Area
Dakota County, MN

Figure 17

Source: HKGi, MnDOT, Dakota County, Barr, SEH

UMore Mining Area (UMA)
UMore Park Boundary
Site of Concern (SOC) Boundary
Surface Soil Sampling
Monitoring Well Location