| | FIELD BOREHOLE LOG | |
|--|--|--|
| | BOREHOLE NO.: MW-202A | |
| agievering-enforcemental Management, Inc. | TOTAL DEPTH: 198 ft. | |
| PROJECT INFORMATION | DRILLING INFORMATION | |
| PROJECT: DDMT - Main Installation, New Plume Wells | DRILLING CO.: Prosonic | |
| PROJECT NO.: 3202-019 | DRILLER: A. Marshall | |
| SITE LOCATION: MI | DRILLING METHOD/RIG: Sonic | |
| PROJECT MANAGER: T. Holmes | BOREHOLE DIAMETER: 6-in. | |
| FIELD STAFF: D. Whitesides | GROUND SURFACE ELEVATION: 299.69 (ft, msl) | |
| BOREHOLE STARTED: 8/16/2006 8:40:00 AM | WATER DEPTH/ DATE: 125.73 ft.toc - 8/24/06 | |
| BOREHOLE FINISHED: 8/22/2006 | BOREHOLE USE: Monitoring Well | |

NOTES:

| Depth | Soil Symbol | Soil Description | Well Completion | Well Description |
|---------------|---------------------------------|---|--------------------|---------------------|
| _ | 202202202202202 202202202202 | Gravel | | |
| - | | No Recovery | | |
| | | CL Clay - light gray (10YR 7/1) high plasticity, mottled brown gray, moist | | |
| 10- | | | | Grouted Annulu |
| - | | | | |
| - | | CL Clay - light gray (10YR 7/1) high plasticity, mottled brown gray, moist | | |
| 20- | | | | |
| - | | | | |
| _ | | | | |
| - | | Clay - light gray (2.5YR 7/1) high plasticity, sandy, | | |
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BOREHOLE NO.: MW-202A TOTAL DEPTH: 198 ft.

| 60 CL Sand - red (7.5YR 5/6) silly, fine grained, moist 90 SM Sand - red (7.5YR 5/6) silly, fine grained, moist 90 Sand - red (7.5YR 5/6) silly, fine grained, moist 91 Sand - red (7.5YR 5/6) silly, fine grained, moist 92 Sand - red (7.5YR 5/6) silly, fine grained, moist 93 Sand - red (7.5YR 5/6) silly, fine grained, moist 940 Sand - very pale brown (10YR 6/4) medium to fine, round, quartz, dry 95 Sand - very pale brown (10YR 8/3) medium, sub rounded to rounded, quartz, minor gravel, dry 96 SP Sand - light gray (2.5YR 7/1) silty, medium to fine, dry 90 SM Sand - light gray (2.5YR 7/1) silty, medium to fine, dry 90 SM Sand - light gray (2.5YR 7/1) silty, medium to fine, dry | epth Soil Symbol | Soil Description | Well Completion | Well Description |
|---|---------------------|--|--------------------|---------------------|
| Sand - red (7.5YR 5/6) silty, fine grained, moist SM Sand - red (7.5YR 5/6) silty, fine grained, moist SF Sand - light yellowish brown (10YR 6/4) medium to fine, round, quartz, dry SP Sand - very pale brown (10YR 8/3) medium, sub rounded to rounded, quartz, minor gravel, dry SP Sand - yellowish brown (7.5YR 6/6) medium, sub rounded to rounded, quartz, minor gravel, dry SP Sand - light gray (2.5YR 7/1) silty, medium to fine, dry SM Sand - light gray (2.5YR 7/1) silty, medium to fine, dry | - | | | |
| Sand - red (7.5YR 5/6) silty, fine grained, moist SM Sand - red (7.5YR 5/6) silty, fine grained, moist SP SP Sand - iight yellowish brown (10YR 6/4) medium to fine, round, quartz, dry SP Sand - very pale brown (10YR 8/3) medium, sub rounded to rounded, quartz, minor gravel, dry SP Sand - yellowish brown (7.5YR 6/6) medium, sub rounded to rounded, quartz, minor gravel, dry SP Sand - yellowish brown (7.5YR 6/6) medium, sub rounded to rounded, quartz, minor gravel, dry SP Sand - ight gray (2.5YR 7/1) silty, medium to fine, dry SM Sand - ight gray (2.5YR 7/1) silty, medium to fine, dry | | Sand - red (7.5YR 5/6) silty, fine grained, | | |
| Sand - red (7.5YR 5/6) silty, fine grained, moist SP Sand - light yellowish brown (10YR 6/4) medium to fine, round, quartz, dry SP Sand - very pale brown (10YR 8/3) medium, sub rounded to rounded, quartz, minor gravel, dry SSAnd - yellowish brown (7.5YR 6/6) medium, sub rounded to rounded, quartz, minor gravel, dry SP Sand - light gray (2.5YR 7/1) silty, medium to fine, dry SM Sand - light gray (2.5YR 7/1) silty, medium to fine, dry | | Sand - red (7.5YR 5/6) silty, fine grained, moist | | |
| 40 Sand - light yellowish brown (10YR 6/4) medium to fine, round, quartz, dry 50 SP 51 SP 52 Sand - light gray (2.5YR 7/1) silty, medium to fine, dry 50 SM 51 Sand - light gray (2.5YR 7/1) silty, medium to fine, dry | | Sand - red (7.5YR 5/6) silty, fine grained, moist | | |
| Sand - very pale brown (10YR 8/3) medium, sub rounded to rounded, quartz, minor gravel, dry SP Sand - yellowish brown (7.5YR 6/6) medium, sub rounded to rounded, quartz, minor gravel, dry SP Sand - ilight gray (2.5YR 7/1) silty, medium to fine, dry SM Sand - light gray (2.5YR 7/1) silty, medium to fine, dry | 40 | Sand - light yellowish brown (10YR 6/4) | | |
| Sand - yellowish brown (7.5YR 6/6) medium, sub rounded to rounded, quartz, minor gravel, dry SP Sand - light gray (2.5YR 7/1) silty, medium to fine, dry SM Sand - light gray (2.5YR 7/1) silty, medium to fine, dry SM Sand - light gray (2.5YR 7/1) silty, medium to fine, dry | | Sand - very pale brown (10YR 8/3) medium, sub rounded to rounded, quartz, minor | | |
| SP Sand - light gray (2.5YR 7/1) silty, medium to fine, dry SM Sand - light gray (2.5YR 7/1) silty, medium to fine, dry | | Sand - yellowish brown (7.5YR 6/6) medium, sub rounded to rounded, quartz, minor | | |
| Sand - light gray (2.5YR 7/1) silty, medium to fine, dry | 50 | Sand - light gray (2.5YR 7/1) silty, medium to | | |
| 60- | | Sand - light gray (2.5YR 7/1) silty, medium to | | |
| | 60- | | | |

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BOREHOLE NO.: MW-202A TOTAL DEPTH: 198 ft.

| Depth | Soil Symbol | Soil Description | Well Completion | Well Description |
|-----------------------------------|----------------|---|--------------------|---------------------|
| | | SP Sand - strong brown to reddish yellow (7.5YR 4/6) to (7.5YR 7/8) gravelly up to 25%, fine coarse grained, cobbles up to 4-in., moist | | |
| - - - 70- - - - | - | SW Sand - strong brown to reddish yellow (7.5YR 4/6) to (7.5YR 7/8) gravelly up to 25%, fine coarse grained, cobbles up to 4-in., moist | | |
| - | | SW Sand - dark yellowish brown (10YR 4/4) silty, gravelly, fine to coarse, moist | | |
| - 80- - | | SP Sand - olive brown (2.5YR 4/3) silty, gravelly, fine to coarse, moist No Recovery | | |
| - - - - - - 90- | | CL Clay - strong brown (7.5YR 4/6) massive, dry | | |
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BOREHOLE NO.: MW-202A TOTAL DEPTH: 198 ft.

| Depth | Soil Symbol | Soil Description | Well Completion | Well Description |
|--|----------------|---|--------------------|---------------------|
| | | CL Clay - dark grey (2.5Y 4/1) massive, very plastic dry | | |
| - - - 100 - - - - | | CL Clay - dark grey (2.5Y 4/1) massive, very plastic dry | | |
| - | | CL Sand - white (gley1 8/) to yellowish red (5YR5/8) fine grained, moist | | |
| 110- - - - - | | SP Sand - white (gley1 8/) to yellowish red (5YR5/8) fine grained, moist | | |
| - - - 120- | | SP Sand - white (gley1 8/) to yellowish red (5YR5/8) fine grained, moist | | |
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| Depth | Soil Symbol | Soil Description | Well Completion | Well Description |
|--|--------------------------|--|--------------------|---------------------|
| | | SP Sand - white (5YR 8/1) fine grained, wet | i¶ 125.73 | |
| - - - 140- - - - - - | | SP Sand - white (5YR 8/1) fine grained, wet SP Sand - white (5YR 8/1) fine grained, wet | | |
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BOREHOLE NO.: MW-202A TOTAL DEPTH: 198 ft.

| Depth | Soil Symbol | Soil Description | Well Completion | Well Description |
|-------|--------------------------|---|--------------------|---------------------|
| | | SP Sand - white (5YR 8/1) fine grained, wet SP Sand - white (5YR 8/1) fine grained, wet SP Sand - reddish brown (2.5YR 4/3) fine grained, wet SM Sand - black (5YR 2.5/1) silty, coarse to fine grained, | | Bentonite Plug |
| 180- | 240178240178240178240017 | | | |

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BOREHOLE NO.: MW-202A TOTAL DEPTH: 198 ft.

| Depth | Soil Symbol | Soil Description | Well Completion | Well Description |
|----------------|----------------|---|--------------------|---------------------|
| | | SP Sand - reddish brown (2.5YR 4/3) fine grained, | | |
| - | | SP Sand - white (2.5YR 8/1) | | Screened Interval |
| - | | | | Sand Pack |
| - - 190- | | SP Sand - reddish yellow (7.5YR 6/8) fine grained, clay stringers, wet | | |
| - | | CL Clay - light gray (7.5YR 7/1) massive, plastic with sand stringers, fine grained sand | | |
| - | | CL Clay - gray (7.5YR 6/1) massive, very plastic, wet | | |
| - | | | | Bentonite Backfill |
| | | End of Log | E//=/~// | |
| 200- | | | | |
| - | | | | |
| _ | | | | |
| - | | | | |
| - 210- | | | | |
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