**Geologic Drill Hole Log & Piezometer As-Built**

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|---|---|---|---|
| Hole No. | 180-27 | Operation Name | Abandoned Nickle Plate Mine “Blowout”, McDonald, PA |
| Landowner | Aloe Family Limited Partners | Contract & OSM # | EP 3555440000-05-01; OSM 63(1441)101.1 |
| Sfc. Elev. | 1086.89 | Drilling Method(Date) | air-rotary; 4 3/4" carbide button bit (04/04/05) |
| Surveyed by | PA DEP, BAMR | Driller(License#) | McKay & Gould Drilling Co.(PA-0592); Mike Hollabaugh (driller) |
| Client | PA DEP, BAMR | Municipality/County | North Fayette Township/Allegheny County |
| Remarks | all dimensions in feet, unless noted | Quadrangle | 7½‘ Oakdale (PR1990) |
| Logged by | Margaret H. Dunn, PG (PA-000771) | Latitude | 40.37688679 Longitude -80.22959907 |

| Depth | Thick-ness | Scale | Lithology | Graphic Log | “As-Built” | Water Level Data DTW | WE | Date | Time | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| | | __0__ | | | | 41.02 | 1045.9 | 04/05/05 | 1045 | WE - rounding discrepancies |
| 0 | 1 ½ | | SBS; lt-brn & md-org, clayey, dry | / / / / / / / / / / / / | x~x~ x~x~x~x~ x~x~ | 40.96 | 1045.9 | 04/06/05 | 1522 | |
| 1 ½ | 2 | | STS & STSH; OD | -.-.-.-.-.-.-.-.-.- | ~x~x ~x~x~x~x ~x~x | 41.30 | 1045.6 | 04/07/05 | 1031 | |
| | | | | ---------- | x~x~ x~x~x~x~ x~x~ | 41.33 | 1045.6 | 04/09/05 | 0743 | monitored WL then bkfl bentontite & drill chips |
| 3½ | 1½ | | LS; OD & md-gy, v. arg., | I-I-I-I-I-I-I-I-I-I-I | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | sl. fizz, dry | I-I-I-I-I-I-I-I-I-I-I | x~x~ x~x~x~x~ x~x~ | | | | | |
| 5 | | | CS; md- to lt-gy & md-og wx, dry | ~~~~~~~~~~~ | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | | ~~~~~~~~~~~ | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | | ~~~~~~~~~~~ | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | | ~~~~~~~~~~~ | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | __10__ | | ~~~~~~~~~~~ | ~x~x ~x~x~x~x ~x~x | | | | | |
| | 10 | | | ~~~~~~~~~~~ | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | | ~~~~~~~~~~~ | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | | ~~~~~~~~~~~ | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | | ~~~~~~~~~~~ | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | (@ 15 add rod) | ..... | x~x~ x~x~x~x~ x~x~ | | | | | |
| 15 | | | LS(?)/SS; lt-gy & md-gy, v. arg., | I-I-I-I-I-I-I-I-I-I-I | ~x~x ~x~x~x~x ~x~x | | | | | |
| | 3 | | **dry** | ..... | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | | I-I-I-I-I-I-I-I-I-I-I | ~x~x ~x~x~x~x ~x~x | | | | | |
| 18 | | | SS; md-brn, fn-gn, dry | ..... | x~x~ x~x~x~x~ x~x~ | | | | | |
| | 3 | __20__ | | ..... | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | | ..... | x~x~ x~x~x~x~ x~x~ | | | | | |
| 21 | | | STS; md-gy, mc, dry | -.-.-.-.-.-.-.-.-.- | ~x~x ~x~x~x~x ~x~x | | | | | |
| | 3 | | | -.-.-.-.-.-.-.-.-.- | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | | -.-.-.-.-.-.-.-.-.- | ~x~x ~x~x~x~x ~x~x | | | | | |
| 24 | | | MS; dk-gy | ~.~.~.~.~.~.~.~ | x~x~ x~x~x~x~ x~x~ | | | | | |
| | 3 | | | ~.~.~.~.~.~.~.~ | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | | ~.~.~.~.~.~.~.~ | x~x~ x~x~x~x~ x~x~ | | | | | |
| 27 | | | carbonaceous zone | | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | @27-29 STSH; carb, dk-gy to blk | | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | __30__ | @29-30½ SH; blk, carb., dry | | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | @30½-32 STS; md-gy | -.-.-.-.-.-.-.-.-.- | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | | -.-.-.-.-.-.-.-.-.- | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | @32-36 STSH; md-gy | ---------- | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | | ---------- | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | (@ 35 add rod) | ---------- | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | @36-37 SH; carb | | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | @37-37½ SH; md-gy | ---------- | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | @37½-38 SH; lt- to md-gy | ---------- | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | @38-39 SH; md-gy | ---------- | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | __40__ | @39-42 SH; carb. & dk-gy, dry | | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | | | x~x~ x~x~x~x~ x~x~ | | | | | __WL__ before backfilling |
| | 30 | | @42-45 SH; md-gy | | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | | | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | | | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | (@ 45 add rod) | | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | @45-46½ coal & bony | IIIIIIIIIIIIIIIIIIII | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | @46½-47 SH; md-gy | ---------- | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | @47-48 coal | | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | @48-49 SH; carb | | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | __50__ | @49-57 coal; @50 SH(3") | | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | | | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | | | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | | | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | | | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | (@ 55 water ~1 gpm) | | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | | | ~x~x ~x~x~x~x ~x~x | | | | | |
| | | | [Pgh coalbed] | | x~x~ x~x~x~x~ x~x~ | | | | | |
| 57 | | | LS; lt-gy [Pgh Seatearth] | I-I-I-I-I-I-I-I-I-I-I | x~x~ x~x~x~x~ x~x~ | | | | | |
| | | | | TD 58 | | | | | | |
| | | __60__ | | | | | | | | |
| | | __70__ | | | | | | | | |
| | | __80__ | | | | | | | | |