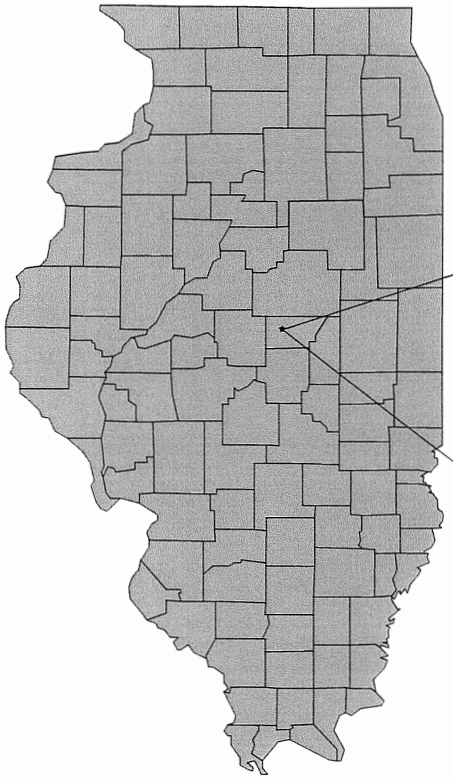
Clinton Landfill, Inc.



Addendum to IEPA Permit (Log No. 2008-054) Response to Draft Denial Points

Application for a Chemical Waste Unit at the Clinton Landfill No. 3

Submitted By:

Shaw® Shaw Environmental, Inc.

Volume I of III

January 2009

Submitted To:

Shaw® Shaw Environmental, Inc.

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January 13, 2009

Stephen F. Nightingale, P.E.
Permit Section Manager
Illinois Environmental Protection Agency
Bureau of Land
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

Re: 0390055036 – DeWitt County
Clinton Landfill No. 3
Log No. 2008-054
Responses to Draft Denial Points

Dear Mr. Nightingale:

Shaw Environmental, Inc. (Shaw) is submitting this response to comments received from the IEPA during the review of the application for the development of the Chemical Waste Unit (CWU) at Clinton Landfill No. 3. The following information responds to each of the groundwater impact assessment (GIA) and groundwater monitoring comments identified by the IEPA in the draft denial letter received on August 13, 2008. This submittal consists of 3 volumes. An original and 3 copies of this submittal are included.

Response to Comments

1. *IEPA Comment: Page 29 through 31 describe the site geology (Upper and Lower Radnor Sand and Organic Soil) based on borings and isopleths contained in another application (Log No. 2005-070), which was previously approved. The minimal requirements for a GIA require documentation of all input as part of the application. Such documentation of the site geology and site hydrogeology for the development of the conceptual model (e.g., borings, isopleths, and cross-sections) must be contained in the application.*

   Applicant Response: Documentation of the site geology and hydrogeology from Log No. 2005-070 (including borings, isopachs, and cross-sections) is provided in Attachment 1 of this submittal. The cross-sections are provided at the end of Attachment 1.

2. *IEPA Comment: Regarding the Upper Radnor Sand, the application states that it has a limited lateral extent, and will be "...removed from the landfill floor perimeter as shown on Drawings Nos. P-EX1 and P-EX2 (submitted previously under Log No. 2005-070). As stated above, a new GIA was not performed on this unit." Along with the cross-sections and isopleths, Drawings P-EX1 and P-EX2, documenting the removal of the Upper Radnor*

Sand, must be provided as part of this application. Please note, if the Sand is removed from beneath the landfill, but still exists adjacent to the sidewall, it still must be modeled.

Applicant Response: Drawing Nos. P-EX1 and P-EX2 have been provided in Attachment 2. Additionally, Drawing 1 which shows the estimated extent of the Upper Radnor Till Sand compared to the proposed mass excavation grades is provided in Attachment 2. Drawing 1 indicates that the Upper Radnor Till Sand is only present below the far east side of the CWU base grades. As shown on previously submitted Figure 812.314-14 (provided in Attachment 2), the Upper Radnor Till Sand is mainly present in the southeast corner of Clinton Landfill No. 3 and at its highest elevation (653.9 feet (ft.) mean sea level (msl)) it is two feet below the lowest elevation of the CWU mass excavtion grades (located in the sumps at 656 ft. msl on the west side of the CWU). Therefore, the Upper Radnor Till Sand will not exist adjacent to the sidewall of the CWU and will not need to be modeled.

As mentioned in the February 1, 2008 submittal, the proposed design for the facility calls for the installation of a minimum, 20-foot wide cut-off trench to be installed at the toe of the landfill invert sidewalls to restrict lateral migration in the Upper Radnor Till Sand unit. The Upper Radnor Till Sand will be adjacent to the cut-off trench (keyway). The cut-off trench (keyway) was modeled for the MSW unit to determine if lateral migration of contaminants will occur through the keyway. For purposes of the MSW study, it was very conservatively assumed that complete liner failure had occurred and that full-strength leachate is present in the Upper Radnor Till Sand directly beneath the landfill invert. The maximum surrogate concentration at the downgradient edge of the zone of attenuation at the end of the 145-year assessment period predicted by the Upper Radnor Till Sand baseline model for the MSW unit was 2.929×10^{-4}. The maximum surrogate concentration at the downgradient edge of the zone of attenuation at the end of the 135-year assessment period predicted by the Upper Radnor Till Sand baseline model for the MSW unit was 1.585×10^{-4}. Using this same assumption for the CWU would result in the same results as this model essentially neglects the effect of the landfill liner.

3. *IEPA Comment: The Agency does not concur with the wells used for the gradient calculations in the Lower Radnor Sand. EX-4 should be substituted for EX-15, based upon flow direction. Further, the Agency could not duplicate the gradient calculations between EX-7 and EX-15. Agency calculations between EX-4 and EX-7 indicate a mean of .009, as opposed to the mean of .007 provided in Table 812.314-9. However, since the model used a more conservative gradient of .01, no change to the model will be required. The calculations and Table should be updated.*

   Applicant Response: The gradients for the Lower Radnor Till Sand have been revised and are based on monitoring wells EX-4 and EX-7, as per the IEPA's request. The revised gradient table is provided in Attachment 3 which provides model documentation.

4. *IEPA Comment: The Agency does not concur with the gradient calculated for Upper Radnor Sand. Wells EX-22S and EX-23S should be used for the calculations, rather than EX-21S and EX-23S. Except for 1 quarter, EX-22S is not perpendicular to the potentiometric lines, whereas, G22S is always in the direct line of flow. Further, EX-22S to EX23S yields a more*

conservative result, (e.g., 0.011 for the first quarter, as opposed to the calculated .0078). The calculations and Table should be updated.

Applicant Response: The gradients for the Upper Radnor Till Sand have been revised and are based on monitoring wells EX-22S and EX-23S, as per the IEPA's request. The revised gradient table is provided in Attachment 3.

5. *IEPA Comment: The Agency does not concur with the gradient calculated for Organic Soil. Wells EX-14 and EX-20 should be used for the calculations, rather than EX-24 and EX-20. EX-24 to EX-20 is not perpendicular to the potentiometric lines. Further, EX-14 to EX20 yields a more conservative result. The calculations and Table should be updated. Also, this change will affect horizontal Darcy Velocity in the model.*

   Applicant Response: The gradients for the Organic Soil have been revised and are based on monitoring wells EX-14 and EX-20, as per the IEPA's request. The revised gradient table is provided in Attachment 3.

6. *IEPA Comment: The conceptual potentiometric map for the Lower Radnor Sand groundwater flow direction, which determines landfill length in the model was based on 2003-2007 groundwater level averages. This data was not provided. Groundwater flow is shown to be to the west southwest. However, 3 of the 4 current (2007) potentiometric maps show the flow to the southwest. This difference is significant in terms of how landfill length is developed, as the current data would indicate a landfill length along a diagonal from the northeast corner to the southwest corner. This would yield a greater landfill length, than what is currently conceptually represented.*

   Applicant Response: Revised hydrogeologic models for the Lower Radnor Till Sand and the Organic Soil have been provided in Attachment 3. This revised hydrogeologic model for the Lower Radnor Till Sand indicates a greater landfill length along a diagonal from the northeast corner of the CWU to the southwest corner of the CWU. This increased flow length is incorporated into the revised groundwater model for the Lower Radnor Till Sand.

7. *IEPA Comment: The information provided in Attachment 13 is not adequate documentation for layer thicknesses input into the models. Only calculations (division of volumes) were provided in this attachment; there was no information as to how the volumes were derived. If modeling was used to determine the volumes, the following information must be included: all model input and output, as well as discussion and documentation of all model input.*

   Applicant Response: In order to calculate the average thickness of the clay fill and Berry Clay/Radnor Till above the Lower Radnor Till Sand, the surfaces of the compacted clay liner subgrade and top of Lower Radnor Till Sand were modeled in a digital terrain model (DTM). The DTM software (AutoDesk Land Desktop Release 3) was used to create these surfaces. The Civil Design module of the DTM software was then used to calculate the volumes between the surfaces for the compacted clay liner subgrade and top of Lower Radnor Till Sand. In the previous submittal (February 1, 2008), the average thickness was obtained by dividing these volumes (by calculator) by the surface area of the compacted clay liner

subgrade. In this submittal, a revised average thickness was calculated using AutoCad and the Composite Method, which is considered a more precise way of calculating the average. The revised average thickness of clay fill and Berry Clay/Radnor Till from the compacted clay liner subgrade to the top of the Lower Radnor Till Sand is 22.77 feet (see Attachment 3 for the AutoCad print out for the revised average thickness). The same method discussed above was used to calculate the revised average thickness of clay fill between the compacted clay liner subgrade and top of the Berry Clay. The revised average thickness of clay fill between the compacted clay liner subgrade and top of the Berry Clay is 2.90 feet (see Attachment 3 for the AutoCad print out for the revised average thickness). In order to find the revised average thickness of the Berry Clay/Radnor Till above the Lower Radnor Till Sand, subtract 2.90 feet (revised average thickness of compacted clay fill) from 22.77 feet (revised average thickness of clay fill and Berry Clay/Radnor Till) to get 19.87 feet.

Isopachs for the clay fill and Berry Clay/Radnor Till combined and the clay fill are provided in Attachment 3. The isopach for the clay fill, by itself, indicates a maximum thickness of 10.0 feet and a minimum thickness of -4.0 feet. Clay fill thickness values of 0.0 feet and less are indicative of areas where the compacted clay liner is founded directly on the Berry Clay/Radnor Till unit. Negative clay fill thickness values, which are located near the lower elevations of the cell (i.e. near the leachate collection sumps), are indicative of areas where the upper portion of the Berry Clay/Radnor Till unit will be excavated to reach the compacted clay liner subgrade elevation. The isopach for the clay fill and Berry Clay/Radnor Till combined, indicates a maximum thickness of 32.0 feet and a minimum thickness of 16.0 feet. Once again, the minimum thickness is located in the sump areas of the CWU. This minimum thickness does not include the clay fill which is not present in the sump areas. A disc containing all of the AutoCad files is provided in Attachment 3.

It should be noted that as part of a response to the IEPA design draft denial points (to be submitted under a separate cover), the liner grades have been slightly modified since development of the GIA responses and the GIA presented in this response. While the liner grades were slightly modified, the sump elevations have not changed but the leachate pipe slope has increased. The modified liner grades did not change the maximum and minimum thickness of the clay fill and the Berry Clay/Radnor Till thicknesses discussed above, but do increase the average thickness of the clay fill and the Berry Clay/Radnor Till discussed above. With the average thickness of the clay fill and the Berry Clay/Radnor Till increasing with the modified liner grades, it was determined that the thicknesses calculated prior to the liner modification would conservatively be used for the GIA responses and GIA presented in this response.

As mentioned above in the response to IEPA Comment No. 6, revised hydrogeologic models for the Lower Radnor Till Sand and the Organic Soil have been provided in Attachment 3. The thickness information has be updated on these hydrogeologic models.

8. *IEPA Comment: The application (pages 32 and 33) states that the average thicknesses of the Lower Radnor Sand and Organic Soil are 2.8 feet and 3.42 feet, respectively, based on boring data submitted in a previous application 2005-070. This information must be provided with the application.*

Applicant Response: Table 812.316-1 from Log No. 2005-070 is provided in Attachment 3. Table 812.316-1 provides the average, maximum, and minimum thickness for the Lower Radnor Till Sand and the Organic Soil.

9. *IEPA Comment: The application states that site-specific total porosities were developed by laboratory testing. These laboratory test results should be provided in this application.*

Applicant Response: The laboratory test results used for the development of site-specific porosities are provided in Attachment 3.

10. *IEPA Comment: The applicant states that the mean total porosity for the recompacted clay liner is 0.288 and this value is input into the model. Similarly, the measured total porosity for the Barry Clay of 0.286 was input to the model. There is no justification for these input: page 35 states (and the Agency agrees) that effective porosity is less than total porosity. The model requires effective porosity input. Therefore, porosity input should be a fraction of the total porosity.*

Applicant Response: Table 812.314-2 which is provided in Attachment 3, has been revised to include estimated effective porosities. The estimated effective porosities were based on Sara, M. N. (1994). "Standard Handbook for Solid and Hazardous Waste Facility Assessments", Lewis Publishers, U.S., Page 5-57. The Sara 1994 text describing the different soil types and their respective total and effective porosities is also provided in Attachment 3. Based on the reported total and effective porosities for each soil type, a table was created that presents the percentage difference between the total and effective porosity for each soil type (See Attachment 3). The average percentage sand, silt, and clay values calculated for the Roxanna/Robein Member (used for the Organic Soil due to similar characteristics), Berry Clay, and Radnor Member were used to determine the USDA Soil Classification for each soil so they could be applied to the total and effective porosity table presented in Sara 1994. The respective soil types were Roxanna/Robein Member (Organic Soil)(silt loam), Berry Clay (clay), and Radnor Member (clay loam). The liner and clay fill will be built using a clay loam, therefore the liner and clay fill values were adjusted in the same manner as the Radnor Member. The Lower Radnor Till Sand was adjusted by the percentage difference between the total and effective porosity for the sand listed in the Sara 1994. With the USDA soil classification of each modeled layer determined, Table 812.314-2 was revised to include a column for estimated effective porosity. The liner and clay fill, Roxanna/Robein Member (Organic Soil), Berry Clay, Radnor Member, and Lower Radnor Till Sand had average estimated effective porosities of 0.24 (0.29 - 0.29 x 0.159), 0.40 (0.41 – 0.41 x 0.030), 0.26 (0.33 – 0.33 x 0.189), 0.21 (0.25 – 0.25 x 0.159), and 0.38 (0.40 – 0.40 x 0.046), respectively. The Berry Clay/Radnor Till are combined as a layer in the groundwater models and have a combined effective porosity of 0.24. As one would expect, due to the shape and size of the soil particles, the percentage difference between the total and effective porosities was higher in the clay loam and clay than in the sand and silt loam. Additionally, maximum and minimum estimated effective porosities were also created for the modeled unconsolidated deposits and will be evaluated in the sensitivity analyses discussed in Attachments 4 and 6 of this submittal.

11. *IEPA Comment: It cannot be determined if an effective porosity of 0.05 for the Lower Radnor Sand is representative. There is no section in this application that provides a detailed discussion of the site-specific geology, so it is unknown how much, if any, silt is in this sand unit. As no cross-sections are provided, it cannot be determined from the few boring logs included with the application what units are represented at what depth. Assuming that the Lower Radnor Sand unit is primarily sand, the effective porosity of 0.05 is too low. "Contaminant Transport in Groundwater" a chapter by Mercer and Waddell in Handbook of Hydrology, Maidment (1993), indicates an effective porosity for sand is 0.2. Other sources indicate a range from 0.1 to 0.55.*

    Applicant Response: A revised value (0.38) for the effective porosity of the Lower Radnor Till Sand has been provided in Attachment 3. Maximum (0.52) and minimum (0.24) effective porosities were also estimated for the Lower Radnor Till Sand and were used in sensitivity runs that are discussed in Attachments 4 and 6 of this submittal.

12. *IEPA Comment: The application is not consistent in the description of the witness zone design: in the conceptual model (Attachment 13) it is described as geocomposite, yet in the Attachment 14 calculations and HELP modeling a geonet is represented. In the Drawings (e.g. D8, the notations indicate that either geocomposite or geonet will be used). The scenario modeled is the only design that would be allowed by permitting. The application must specify the materials to be used in liner design and that scenario must be represented in calculations and modeling.*

    Applicant Response: The vertical seepage velocity used in the groundwater models has been revised (see IEPA Comment No. 13 below). The revised vertical seepage rate is based on the very conservative assumption that only the bottom 60-mil HDPE geomembrane exists, and ignores the effect of the overlying geomembrane and geocomposite drainage layer.

    Only a geocomposite will be used for the single layer witness zone under the entire CWU, as shown on Design Drawing D7. The revised HELP model modeled the geocomposite by calculating the equivalent hydraulic conductivity from required transmissivities listed in the CQA plan and associated specifications. All other HELP model parameters were considered to be the same as the HELP model default parameters for a geonet.

13. *IEPA Comment: Calculations for seepage through the liner in Attachment 14 yield a seepage rate, 1.42 x 10-7 m/y, that is approximately 3 orders of magnitude too low. The conceptual model assumes a constant head for the life of the facility + post-closure + 70 years. The most conservative seepage rate from that period of time must be used, and is usually based on seepage from the cumulative maximum leachate head from the 100 year period. The Attachment 14 calculations fail to take this into consideration: The Step 2 ymax (the daily maximum) of 0.0003 in. (0.00001 m.) cannot be used to represent the entire modeling period, as it has been used in Step 3 to develop the seepage rate. In Step 2, it first must be demonstrated that the daily max is static for active life and the 30 year post-closure period while leachate is actively removed. If so, then head for the 70 year period after closure must be calculated (e.g., .00001 m x 365 d + .00001 m x 365 d x 70 y = .26*

m). If the daily max from the active life and post-closure period is not static, any additional accumulation greater than .00001 (for the active life and 30 year post-closure period) must be added to the .26 m. This value of (.26 m or greater) would then be used in Step 3 to develop seepage. (If leachate is to be extracted for the entire modeling period, financial assurance for 100 years after closure must be provided.)

Applicant Response: The previously submitted model accounted for the significantly reduced vertical seepage velocity that would occur through the double composite liner system versus that which would occur through a single composite liner system typical of municipal solid waste landfills. The reduction in vertical seepage velocity results from the decreased hydraulic head acting on the bottom liner of the double composite liner system. The HELP model has been revised in response to IEPA Comment Nos. 23, 24, and 25, and assumes leachate is not extracted following the 30 year post-closure period. The effect of that the double composite liner system has on reducing the hydraulic head on the bottom liner is demonstrated by reviewing the revised HELP model output (refer to Attachment 10). The revised HELP model predicts the maximum hydraulic head (i.e. ymax) on the bottom liner at 0.0051 meters (0.20 inches). Regardless, in order to be very conservative, the vertical seepage velocity value used in the revised groundwater models is based on an assumed constant hydraulic head of 0.3048 meters (12 inches) on the bottom liner. The revised vertical seepage velocity calculation is provided in Attachment 3. The revised vertical seepage velocity is 3.08×10^{-4} m/yr. The revised vertical seepage velocity is approximately three orders of magnitude higher than the previously submitted vertical seepage velocity of 1.42×10^{-7} m/yr, and 40 times higher than that calculated using the maximum head from the revised HELP model.

14. *IEPA Comment: At this time, the Agency cannot agree to the horizontal Darcy velocities calculated for the Lower Radnor Sand and Organic Soils until gradient questions are resolved.*

    Applicant Response: As discussed above, the gradients for the Lower Radnor Till Sand and Organic Soil have been revised, as per the IEPA's request. The revised gradient table is provided in Attachment 3 which provides model documentation. The revised Darcy velocities for the Lower Radnor Till Sand and Organic Soil are discussed in Attachments 4 and 6 of this submittal.

15. *IEPA Comment: The Agency does not concur with the calculated "transverse" dispersivities for the following reasons: Gelhar should be used to determine transverse and vertical dispersivities, not 20% of the horizontal; vertical dispersivity is represented in the model, not transverse; and, vertical Darcy velocity is so low, that vertical dispersivity will be diffusion dominated.*

    Applicant Response: The transverse dispersivities have been revised and are addressed in Attachments 4 and 6 of this submittal.

16. *IEPA Comment: Although the correct equation was used calculating hydrodynamic dispersion, there are questions regarding gradient and effective porosity in the Lower Radnor Sand, and gradient in the Organic Soil. If changes are made to these parameters,*

resulting in different horizontal Darcy velocities, hydrodynamic dispersion will have to be recalculated.

Applicant Response: As mentioned earlier, the gradients for the Lower Radnor Till Sand and Organic Soil have been revised. Additionally, estimated effective porosities for all of the modeled layers have been determined. Therefore, new hydrodynamic dispersion values have been calculated and are discussed in Attachments 4 and 6 of this submittal.

17. *IEPA Comment: The Agency does not concur with the vertical dispersion. Vertical velocities are so low, vertical dispersion will be diffusion dominated. Further, vertical dispersivity was incorrectly determined. The vertical dispersion coefficient should reflect the diffusion coefficient.*

Applicant Response: The vertical dispersion has been revised and is addressed in Attachments 4 and 6 of this submittal.

18. *IEPA Comment: If the facility will be accepting PCBs at concentrations up to 500 mg/L (500,000 ug/L), 500,000 ug/L should be represented in the model, not 100 ug/L. The normalized leachate concentrations, multiplied by 500,000 ug/L, then compared to the AGQS in the revised models.*

Applicant Response: It appears that the text in the February 1, 2008 submittal may have not been clear on the type of PCB waste that will be accepted at the site. The CWU will accept PCB solid wastes exhibiting a total concentration no greater than 500 milligrams per kilogram (mg/kg) PCBs. The bulk of the PCB wastes anticipated to be disposed at the CWU will consist of PCB-contaminated soils and/or sediments. The facility will not accept liquid PCB wastes. PCBs are virtually insoluble in water and, therefore exhibit very low mobility. As a result, PCB concentrations in leachate will be much lower than their total concentrations in the landfilled wastes. As mentioned in the February 1, 2008 submittal, leachate data from two USEPA-permitted Chemical Waste Landfills that accept PCB waste were acquired via the Freedom of Information Act (FOIA). These two facilities, Wayne Disposal, Inc. (WDI) located in Michigan (USEPA Region 5) and Clean Harbors Grassy Mountain Facility located in Utah (USEPA Region 8) are also permitted as RCRA Subtitle C landfills. The leachate data from the facilities were reviewed and summarized. The WDI facility leachate data (monthly data from 2005 to 2007) indicated that PCBs were detected in only 7 of 231 samples analyzed for PCBs. The highest concentration of PCBs detected was 5.6 parts per billion (ppb). The Grassy Mountain facility leachate data (semi-annual from 2001 to 2007) indicated that PCBs were detected in only 2 of 1,575 samples analyzed for PCBs. The highest concentration of PCBs detected at this facility was 1.48 ppb. CLI notes that both of these facilities are allowed to dispose PCB wastes exhibiting concentrations greater than 500 ppm.

In addition to the leachate data discussed above, the Clinton Landfill No. 2 leachate data from 1995 to present was reviewed for PCB concentrations. Clinton Landfill No. 2 accepts a variety of PCB-wastes, notably auto shredder fluff. There is no limit to the PCB concentrations in the auto shredder fluff which can be accepted. A review of the Clinton Landfill No. 2 leachate data from 3rd quarter 1995 through 2nd quarter 2008 indicates a single

reported detection (L302E at 200 ppb during the May 24, 2001 sampling event) from the 66 samples analyzed for PCBs. With the exception of that sample, all other results (including subsequent results from L302E) were reported as not detected with detection limits ranging from 0.5 to 10 ppb. Based on this review, it is apparent that the single reported detection of PCBs in leachate samples from the Clinton Landfill No. 2 is an outlier and not representative of actual PCBs in leachate. Regardless, this value has been used for the PCB leachate concentration in the revised prediction tables in attachment 5. Additionally, the pentachlorophenol value presented in the previously submitted prediction tables seemed very high (1,000 *u*g/l). The 1,000 *u*g/l value was determined off of a high detection limit (100 *u*g/l) and was not based on any detections. Therefore, the Clinton Landfill No. 2 leachate data from 1995 to present was reviewed for detected concentrations of pentachlorophenol. The highest detected value was 0.76 *u*g/l. Based on this data, it appears that using the high detection limit (100 *u*g/l) is more than conservative. Therefore, this value has been used for the pentachlorophenol leachate concentration in the revised prediction tables in attachment 5.

19. *IEPA Comment: The model input for vertical velocity in the Sand units of both models is set to "0". There is no discussion within the text justifying this input. Vertical velocity should be consistent throughout the model layers unless it can be shown that an upward gradient exists.*

    Applicant Response: The groundwater models have been revised and the vertical velocity has been updated as requested by the IEPA. The revised groundwater models are provided in Attachments 4 and 6.

20. *IEPA Comment: Well spacing model input: For the Radnor Sand, dispersivity per Gelhar (1992) was said to be 44 ft and transverse dispersivity of 20 % of this value is 9 ft. These values are extremely high and unsupported by the sited document (Gelhar, 1992). Based on Gelhar text and Figure 3, horizontal dispersivity for 50 feet (15 m) is approximately 1 meter or 3 feet. Transverse dispersivity should be an order of magnitude less, or .3 feet. However, dispersivity should be determined by the entire flow length considered (50 feet + sidewall + distance to MAPC wells = 80 m). Based on 80 m and Gelhar, for the Radnor Till, horizontal and transverse dispersivity should be approximately 10 ft and 1 ft respectively. For the Organic Soil, they should be 7 ft and .7, respectively.*

    Applicant Response: A Monitoring Well Efficiency Model (MEMO) was created for both the Radnor Till Sand and the Organic Soil to evaluate the proposed monitoring well network adjacent to the CWU (refer to Attachment 8). As a result of the incorporation of the IEPA recommended dispersivity values, it was necessary to add an additional monitoring well nest along the western edge of the proposed CWU (G58) and to adjust the location of one of the previously proposed monitoring well nests (G47) in order to achieve an efficiency greater than 99.0%. The resulting calculated monitoring efficiencies were 100.0% and 99.0% for the Radnor Till Sand and Organic Soil, respectively. Additionally, as discussed in the response to IEPA Comment No. 22 below, proposed monitoring well nest G52 will be installed concurrent with the beginning of operations in the CWU.

The Monitoring Well Phasing Plan, which was previously provided within Attachment 20 of the February 1, 2008 submittal, has been updated and is provided within Attachment 9 of this response. Additionally, a revised Groundwater Monitoring Plan (Drawing No. P-GWMP) is also provided within Attachment 9.

21. *IEPA Comment: The application proposes to monitor only the 811 list, stating that the G1 list is representative of liner failure. This is true for only the MSW units, not the CWU. PNAs and PCBs are representative of the CWU waste, but are only proposed for monitoring if they are detected in leachate. This is not appropriate. The application should propose a monitoring schedule for the following parameters of concern in the downgradient CWU unit wells: PCBs, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthrene, Benzo(ghi)perylene, Benzo(k)fluoranthene, Chrysene, Pentachlorophenol, Dibenzo(a,h)anthracene, Fluoranthrene, Ideno (1,2,3-cd)pyrene, Phenanthrene and Pyrene.*

    Applicant Response: Groundwater from monitoring wells adjacent to the CWU and identified on the revised Groundwater Monitoring Plan (Drawing No. P-GWMP) will be analyzed for PCBs, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthrene, Benzo(ghi)perylene, Benzo(k)fluoranthene, Chrysene, Pentachlorophenol, Dibenzo(a,h)anthracene, Fluoranthrene, Ideno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene on a semi-annual basis in addition to the previously proposed G1 and G2 lists. The G2 list for the CWU monitoring wells has been revised to include the additional parameters and is included within Attachment 10 of this response.

22. *IEPA Comment: Review of the potentiometric maps, particularly the Lower Radnor Sand, indicate that the following wells should be included in the CWU phasing plan: G52M, G52D, G52R, G53M, G53D and G53R.*

    Applicant Response: As discussed within the response to IEPA Comment 20, the G52 well nest will be phased in with the CWU and will be monitored per the schedule and parameter list provided within Attachment 10 of this response. The G53 well nest is not proposed to be included within the CWU monitoring network as it is up- and/or side-gradient with respect to groundwater flow from G52. The MEMO models which have been created for both the Upper Radnor Till Sand and the Organic Soil both achieved efficiencies of 99.0% or greater without the inclusion of the G53 well nest.

23. *IEPA Comment: The final water volume from the 8th intermediate cover run was not input as the initial water content in the 30 year closure run for all layers. Specifically, Layers 12 and 14 from the last intermediate cover run correspond to Layers 10 and 12 in the 30 year closure run; however, the final water volume from the 8th intermediate run were not reflected as the initial soil water content in the 30 year closure run. This should be revised and the 30 year closure and 70 year post-closure period models should be re-run.*

    Applicant Response: The HELP model has been revised based on the IEPA design and groundwater comments. The revised HELP model results are provided in Attachment 10.

24. *IEPA Comment: The 70 year post-closure period HELP runs could not be completely reviewed. It appears that it was a 2-sided document that was only copied as 1-sided (e.g., every other page is missing).*

    Applicant Response: The HELP model has been revised and a complete copy is provided in Attachment 10.

25. *IEPA Comment: During the final 70 years, the leachate collection system is not operational; however, in the 70 year post-closure period HELP run, the lateral drainage layer, 14, is still active. (The page showing the input for the other lateral drainage layer, 10, is missing; however, it would appear from the daily values report that it had been converted to a vertical percolation unit.) Drainage layer 14 should be converted to a vertical percolation unit and the model re-run.*

    Applicant Response: The HELP model has been revised based on the IEPA comments. The revised HELP model results are provided in Attachment 10.

We look forward to working with the IEPA to resolve all the of IEPA concerns with this permit application in a timely manner. If you have any questions, please contact me at (630) 762-1400.

Sincerely,

Shaw Environmental, Inc.

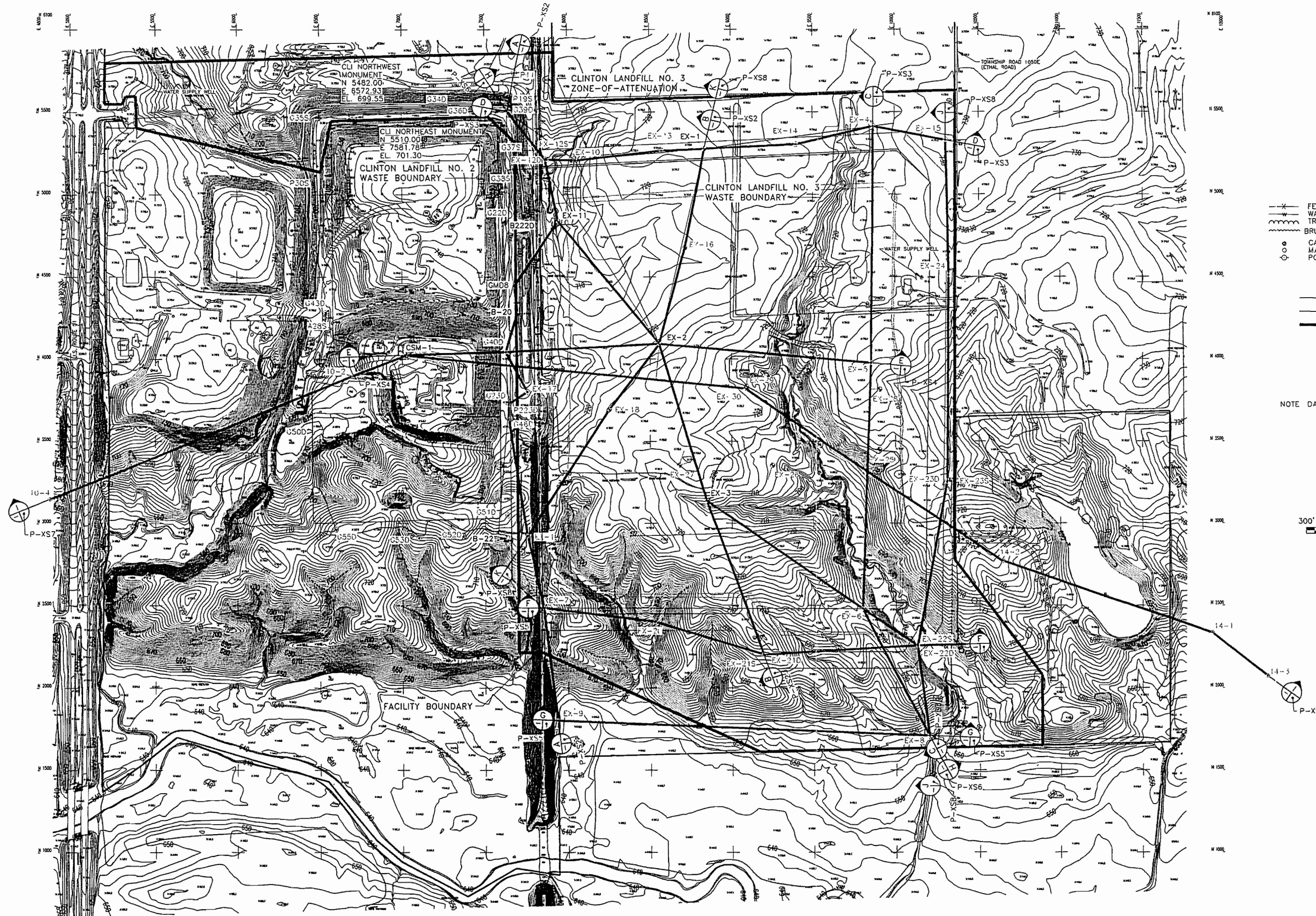
Jesse Varsho, P.E., P.G.
Geological Engineer

cc: George Armstrong, PDC Technical Services, Inc.

ATTACHMENTS

1. SITE GEOLOGY AND HYDROGEOLOGY AND SUPPORTING DOCUMENTATION
2. DRAWING No. P-EX1 AND P-EX2 AND OTHER DOCUMENTATION
3. MODEL DOCUMENTATION
4. LOWER RADNOR TILL SAND MODEL
5. REVISED PREDICTION TABLES
6. ORGANIC SOIL MODEL
7. SENSITIVITY ANALYSIS
8. WELL SPACING MODELS
9. REVISED CWU MONITORING WELL PHASING TABLE AND DRAWING
10. REVISED G1 AND G2 LISTS
11. REVISED HELP MODEL

Shaw®



LEGEND

- FENCE
- WALL
- TREE LINE
- BRUSH/SHRUB LINE
- CATCH BASIN
- MANHOLE
- POLE
- 320 INDEX CONTOUR
- INTERMEDIATE CONTOUR
- DEPRESSION CONTOUR
- GW MONITORING WELL/PIEZOMETER
- SOIL BORING
- WATER SUPPLY WELL
- WASTE BOUNDARY
- ZONE-OF-ATTENUATION
- FACILITY BOUNDARY
- P-XS5 (F) GEOLOGIC CROSS SECTION MARKER

NOTE: DASHED CONTOURS MAY BE UNRELIABLE

300' 150' 0 300' 600'

1"=300'

REFERENCES:

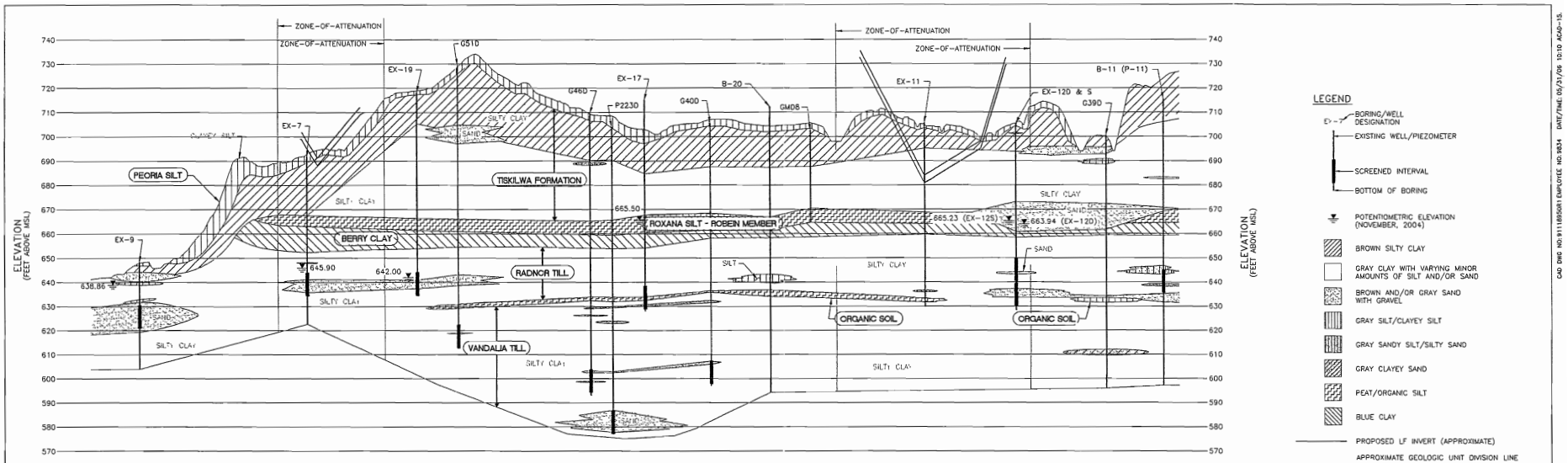
1. EXISTING TOPOGRAPHY BASED ON AERIAL PHOTOGRAMMETRY BY WALKER AND ASSOCIATES, ST. LOUIS, MISSOURI (MARCH 30, 1999 PHOTOGRAPHY DATE)
2. VERTICAL AND HORIZONTAL CONTROL BASED ON "CLI NORTHWEST MONUMENT" AND "CLI NORTHEAST MONUMENT". THESE MONUMENTS CONSIST OF IRON PINS SET IN CONCRETE.

REV. NO.	DATE OF REVISION	REVISION AND RECORD OF ISSUE	BY	APP
1	6-7-06	COORDINATE GRID, REFERENCE TO SURVEY MONUMENTS, ADDED EX-30 TO SECTION 1	JRH	GLA

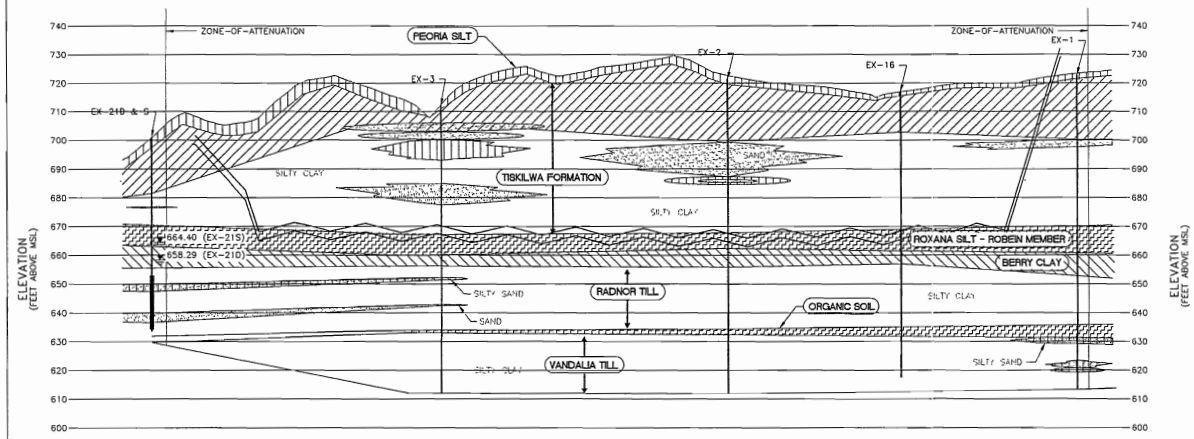
CLINTON LANDFILL NO. 3

PLAN OF SECTIONS FOR SITE GEOLOGIC CROSS SECTIONS

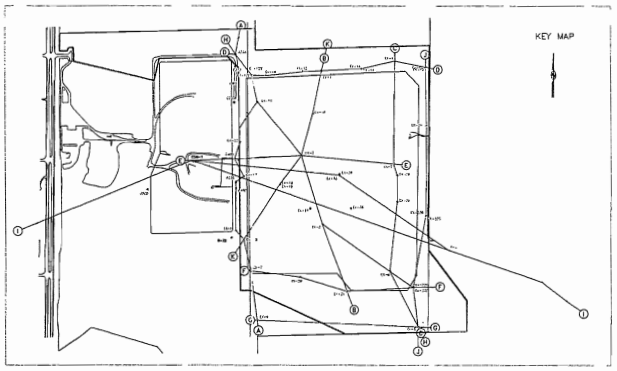
PDC PROJ.# 91-118.02	PDC TECHNICAL SERVICES, INC. PEORIA, ILLINOIS
DRAWN BY: M. CAMERON	ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM 184-001145
SCALE: 1"=300'	APPROVED BY:
DATE: 2-26-05	DRAWING NUMBER P-XS1



SECTION A
SCALE: 1"=200' HORIZ
1"=20' VERT
P-XS1



SECTION B
SCALE: 1"=200' HORIZ.
1"=20' VERT.
P-XS1



LEGEND

- EX-7 — BORING/WELL DESIGNATION
- EXISTING WELL/PIEZOMETER
- SCREENED INTERVAL
- BOTTOM OF BORING
- POTENTIOMETRIC ELEVATION (NOVEMBER, 2004)
- BROWN SILTY CLAY
- GRAY CLAY WITH VARYING MINOR AMOUNTS OF SILT AND/OR SAND
- BROWN AND/OR GRAY SAND WITH GRAVEL
- GRAY SILT/CLAYEY SILT
- GRAY SANDY SILT/SILTY SAND
- GRAY CLAYEY SAND
- PEAT/ORGANIC SILT
- BLUE CLAY
- PROPOSED LF INVERT (APPROXIMATE)
- APPROXIMATE GEOLOGIC UNIT DIVISION LINE

NOTE 4TH QUARTER 2004 DATA MEASURED ON 11-18-04

NOTES.

1. EXISTING GRADE SHOWN BASED ON AERIAL PHOTO TAKEN MARCH 30, 1999.
2. GEOLOGIC SECTIONS PRESENTED HEREIN ARE BASED ON BORING INFORMATION AND VISUAL OBSERVATIONS, ACTUAL CONDITIONS MAY VARY

20' 10' 0 20' 40'
1"=20'

200' 100' 0 200' 400'
1"=200'

REV. NO.	DATE OF REVISION	REVISION AND RECORD OF ISSUE	BY	APP
1	6-7-06	ADDED EX-30 TO SECTION I AND KEYMAP	MNC	GLA

CLINTON LANDFILL NO. 3

GEOLOGIC CROSS SECTIONS A & B

PDC PROJ.# 91-118
DRAWN BY J. HERRON
SCALE AS NOTED
DATE 2-25-05
APPROVED BY:

PDC TECHNICAL SERVICES, INC.
PEORIA, ILLINOIS
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM 184-001145

DRAWING NUMBER P-XS2

CAD DWG NO:911189SGR1 EMPLOYEE NO:3834 DATE/TIME:05/31/06 10:10 ACAD-15.

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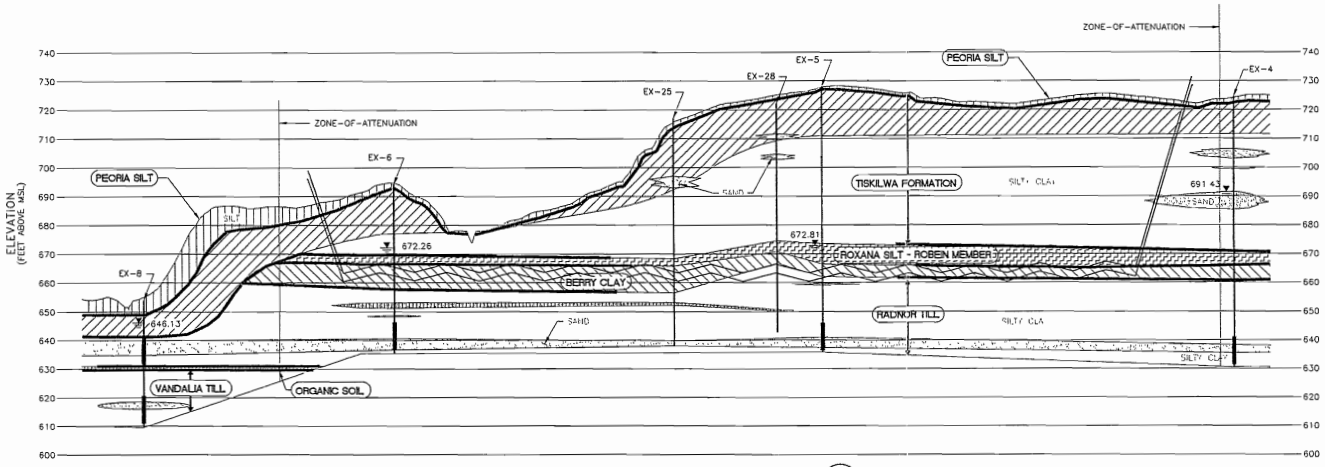
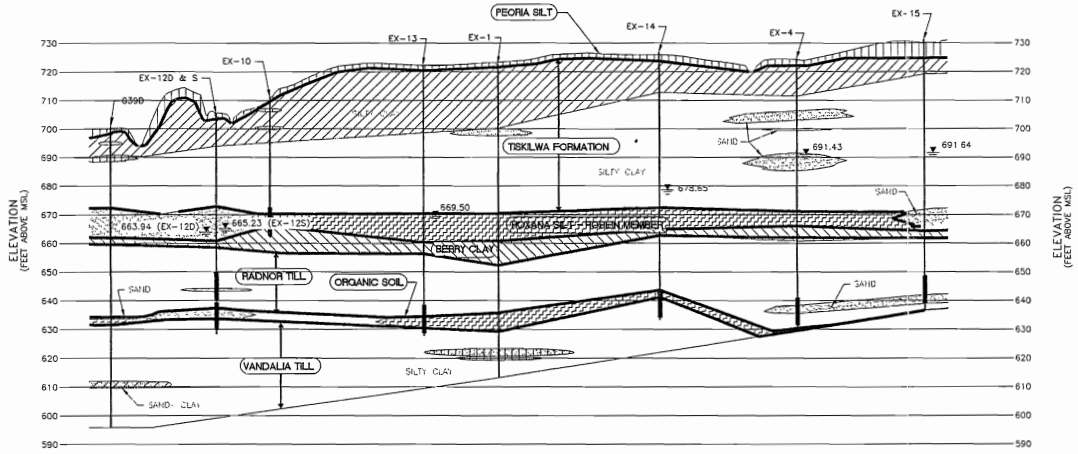


SECTION C
SCALE: 1"=200' HORIZ. 1"=20' VERT
P-XS1



SECTION D
SCALE: 1"=200' HORIZ. 1"=20' VERT
P-XS1

NOTES:

1. EXISTING GRADE SHOWN BASED ON AERIAL PHOTO TAKEN MARCH 30, 1999
2. GEOLOGIC SECTIONS PRESENTED HEREIN ARE BASED ON BORING INFORMATION AND VISUAL OBSERVATIONS, ACTUAL CONDITIONS MAY VARY.

200' 100' 0 200' 400'
1"=200'

20' 10' 0 20' 40'
1"=20'

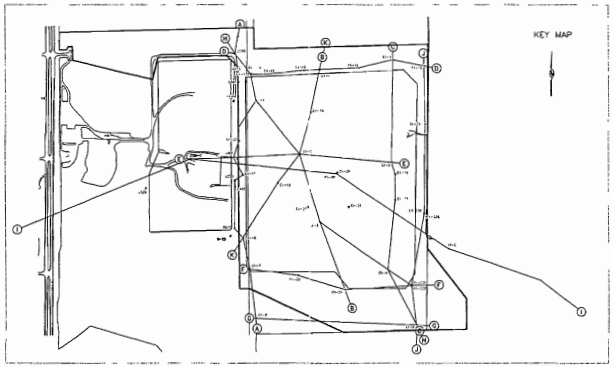
LEGEND

- EX-1 BORING/WELL DESIGNATION
- EXISTING WELL/PIEZOMETER
- SCREENED INTERVAL
- BOTTOM OF BORING
- POTENTIOMETRIC ELEVATION (NOVEMBER, 2004)

LEGEND (CONTINUED)

- BROWN SILTY CLAY
- GRAY CLAY WITH VARYING MINOR AMOUNTS OF SILT AND/OR SAND
- BROWN AND/OR GRAY SAND WITH GRAVEL
- GRAY SILT/CLAYEY SILT
- GRAY SANDY SILT/SILTY SAND
- GRAY CLAYEY SAND
- PEAT/ORGANIC SILT
- BLUE CLAY
- PROPOSED LF INVERT (APPROXIMATE)
- APPROXIMATE GEOLOGIC UNIT DIVISION LINE

NOTE: 4TH QUARTER 2004 DATA MEASURED ON 11-18-04



REV. NO.	DATE OF REVISION	REVISION AND RECORD OF ISSUE	BY	APP.
1	6-7-05	ADDED EX-30 TO SECTION I AND KEYMAP	MHC	GLA

CLINTON LANDFILL NO. 3

GEOLOGIC CROSS SECTIONS C & D

PDC PROJ.# 91-118
DRAWN BY: J. HERRON
SCALE: AS NOTED
DATE: 2-25-05
APPROVED BY:

PDC TECHNICAL SERVICES, INC.
PEORIA, ILLINOIS
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM 184-001145

DRAWING NUMBER: P-XS3

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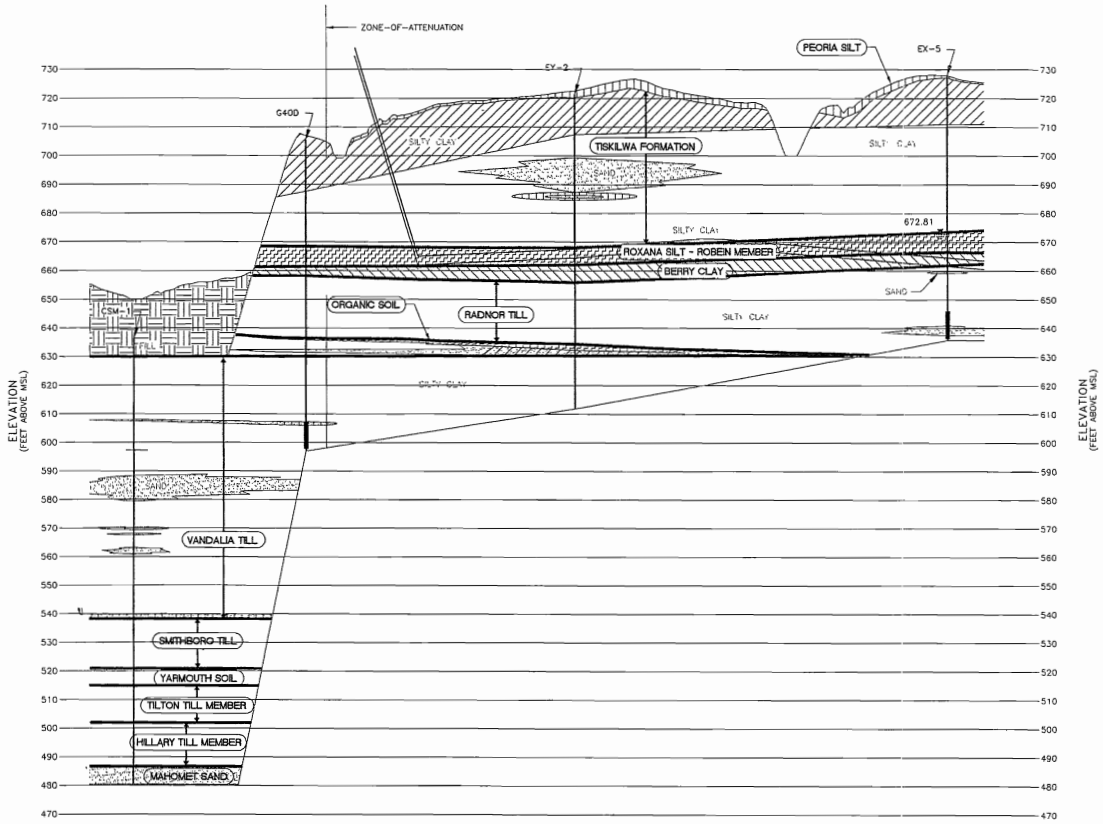
CAD DWG NO: 9118951R1 EMPLOYEE NO: 5834 DATE/TIME: 05/31/05 10:54 ACAD-15

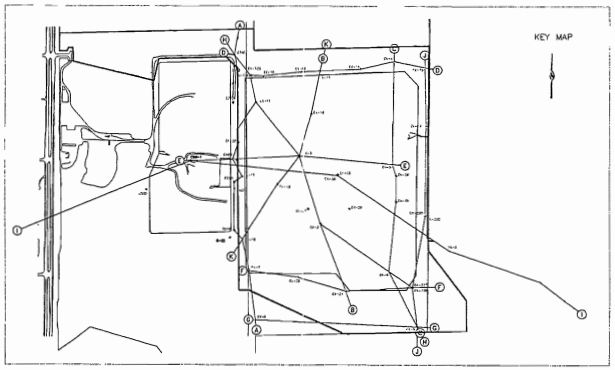


SECTION E
SCALE: 1"=200' HORIZ.
1"=20' VERT.
P-XS1

LEGEND

- EX-5 — BORING/WELL DESIGNATION
- EXISTING WELL/PIEZOMETER
- SCREENED INTERVAL
- BOTTOM OF BORING
- PIEZOMETRIC ELEVATION (NOVEMBER, 2004)
- BROWN SILTY CLAY
- GRAY CLAY WITH VARYING MINOR AMOUNTS OF SILT AND/OR SAND
- BROWN AND/OR GRAY SAND WITH GRAVEL
- GRAY SILT/CLAYEY SILT
- GRAY SANDY SILT/SILTY SAND
- GRAY CLAYEY SAND
- PEAT/ORGANIC SILT
- BLUE CLAY
- FILL
- PROPOSED LF INVERT (APPROXIMATE)
- APPROXIMATE GEOLOGIC UNIT DIVISION LINE

NOTE: 4TH QUARTER 2004 DATA MEASURED ON 11-18-04



NOTES.

1. EXISTING GRADE SHOWN BASED ON AERIAL PHOTO TAKEN MARCH 30, 1999.
2. GEOLOGIC SECTIONS PRESENTED HEREIN ARE BASED ON BORING INFORMATION AND VISUAL OBSERVATIONS, ACTUAL CONDITIONS MAY VARY.

200' 100' 0 200' 400'
1"=200'

20' 10' 0 20' 40'
1"=20'

REV. NO.	DATE OF REVISION	REVISION AND RECORD OF ISSUE	BY	APP.
1	6-7-06	ADDED EX-30 TO SECTION I AND KEYMAP	MNC	GLA

CLINTON LANDFILL NO. 3

GEOLOGIC CROSS SECTION E

PDC PROJ.# 91-118
DRAWN BY: M. CAMERON
SCALE: AS NOTED
DATE: 2-25-05
APPROVED BY:

PDC TECHNICAL SERVICES, INC.
PEORIA, ILLINOIS
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM 184-001145

DRAWING NUMBER P-XS4

CAD DWG NO:91118952R1 EMPLOYEE NO:9834 DATE/TIME: 05/31/06 10:30 ACAD-15.

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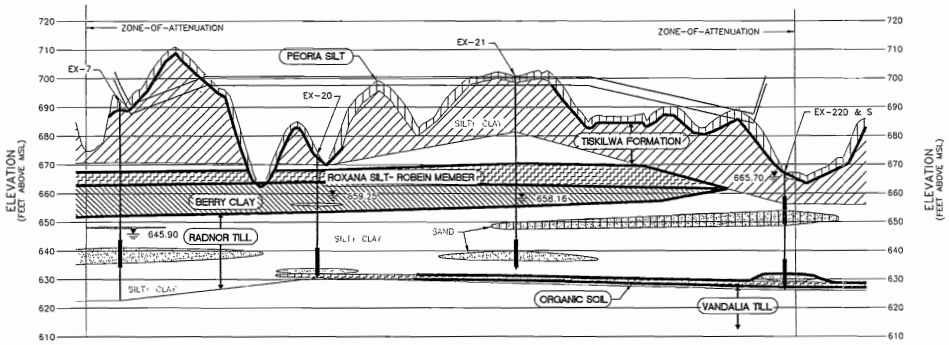
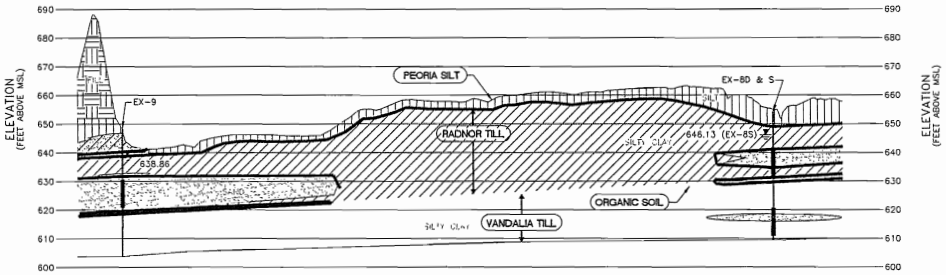
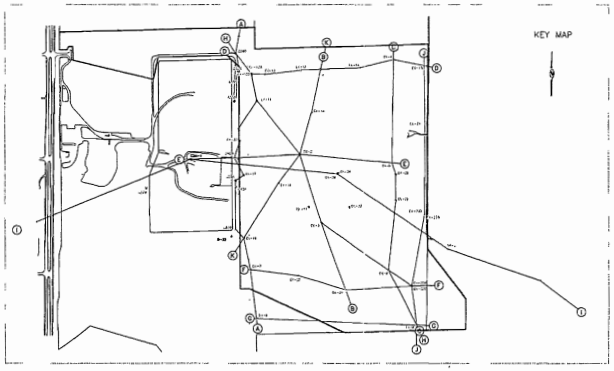


SECTION F
SCALE: 1"=200' HORIZ. 1"=20' VERT.
P-XS1



SECTION G
SCALE: 1"=200' HORIZ 1"=20' VERT.
P-XS1



LEGEND

- BORING/WELL DESIGNATION (E-9)
- EXISTING WELL/PIEZOMETER
- SCREENED INTERVAL
- BOTTOM OF BORING
- POTENTIOMETRIC ELEVATION (NOVEMBER, 2004)

LEGEND (CONTINUED)

- BROWN SILTY CLAY
- GRAY CLAY WITH VARYING MINOR AMOUNTS OF SILT AND/OR SAND
- BROWN AND/OR GRAY SAND WITH GRAVEL
- GRAY SILT/CLAYEY SILT
- GRAY SANDY SILT/SILTY SAND
- GRAY CLAYEY SAND
- PEAT/ORGANIC SILT
- BLUE CLAY
- FILL
- PROPOSED LF INVERT (APPROXIMATE)
- APPROXIMATE GEOLOGIC UNIT DIVISION LINE

NOTE. 4TH QUARTER 2004 DATA MEASURED ON 11-18-04

NOTES:

1. EXISTING GRADE SHOWN BASED ON AERIAL PHOTO TAKEN MARCH 30, 1999
2. GEOLOGIC SECTIONS PRESENTED HEREIN ARE BASED ON BORING INFORMATION AND VISUAL OBSERVATIONS, ACTUAL CONDITIONS MAY VARY.

20' 10' 0 20' 40' 1"=20'

200' 100' 0 200' 400' 1"=200'

REV. NO.	DATE OF REVISION	REVISION AND REGRD OF ISSUE	BY	APP.
1	6-7-06	ADDED EX-30 TO SECTION I AND KEYMAP	MNC	GLA

CLINTON LANDFILL NO. 3

GEOLOGIC CROSS SECTIONS F AND G

PDC PROJ # 91-118
DRAWN BY J HERRON
SCALE AS NOTED
DATE 2-25-05
APPROVED BY
DRAWING NUMBER P-XS5

PDC TECHNICAL SERVICES, INC.
PEORIA, ILLINOIS
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM 184-001145

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CAD DWG NO:91118954R1 EMPLOYEE NO:89239 DATE/TIME:05/02/06 14:10 ACAD-15

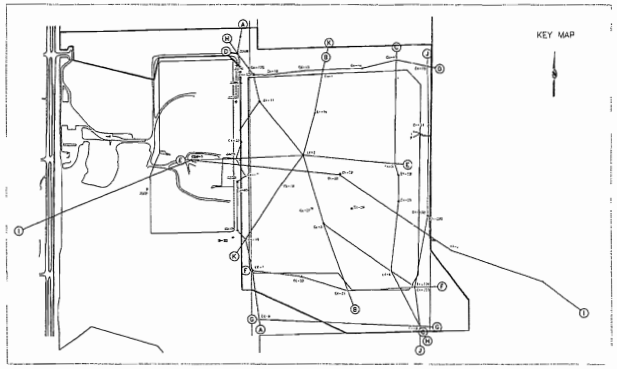
LEGEND

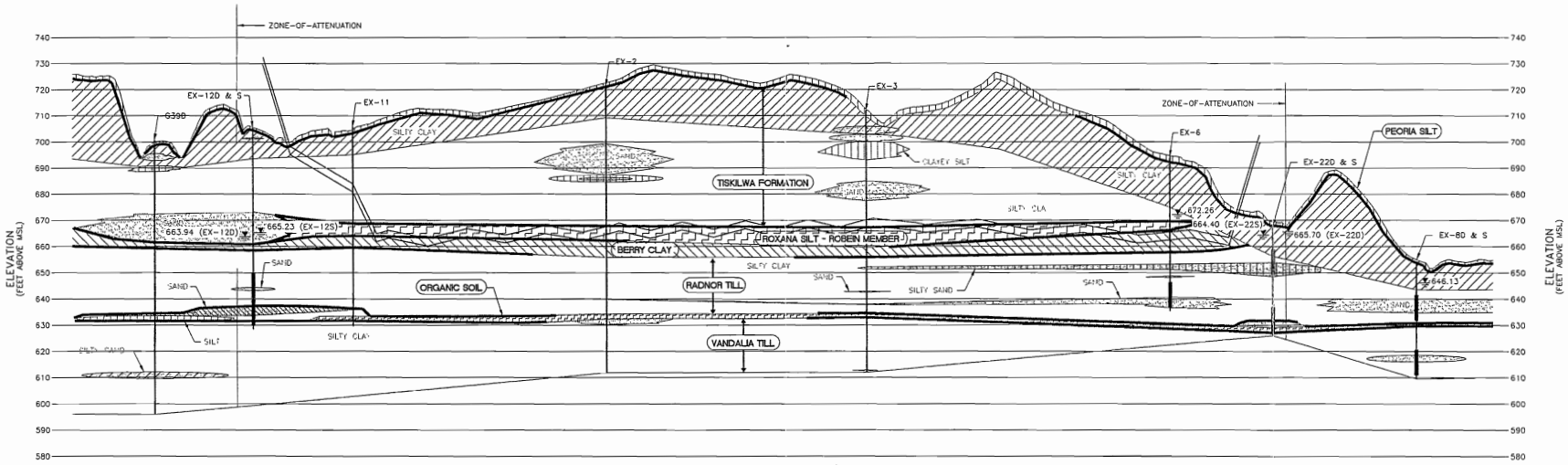
- EX-8 — BORING/WELL DESIGNATION
- EXISTING WELL/PIEZOMETER
- SCREENED INTERVAL
- BOTTOM OF BORING
- POTENTIOMETRIC ELEVATION (NOVEMBER, 2004)

LEGEND (CONTINUED)

- BROWN SILTY CLAY
- GRAY CLAY WITH VARYING MINOR AMOUNTS OF SILT AND/OR SAND
- BROWN AND/OR GRAY SAND WITH GRAVEL
- GRAY SILT/CLAYEY SILT
- GRAY SANDY SILT/SILTY SAND
- GRAY CLAYEY SAND
- PEAT/ORGANIC SILT
- BLUE CLAY
- PROPOSED LF INVERT (APPROXIMATE)
- APPROXIMATE GEOLOGIC UNIT DIVISION LINE

NOTE: 4TH QUARTER 2004 DATA MEASURED ON 11-18-04





SECTION H
SCALE: 1"=200' HORIZ.
1"=20' VERT.
P-XS1

NOTES:

1. EXISTING GRADE SHOWN BASED ON AERIAL PHOTO TAKEN MARCH 30, 1999.
2. GEOLOGIC SECTIONS PRESENTED HEREIN ARE BASED ON BORING INFORMATION AND VISUAL OBSERVATIONS, ACTUAL CONDITIONS MAY VARY.

20' 10' 0 20' 40'
1"=20'

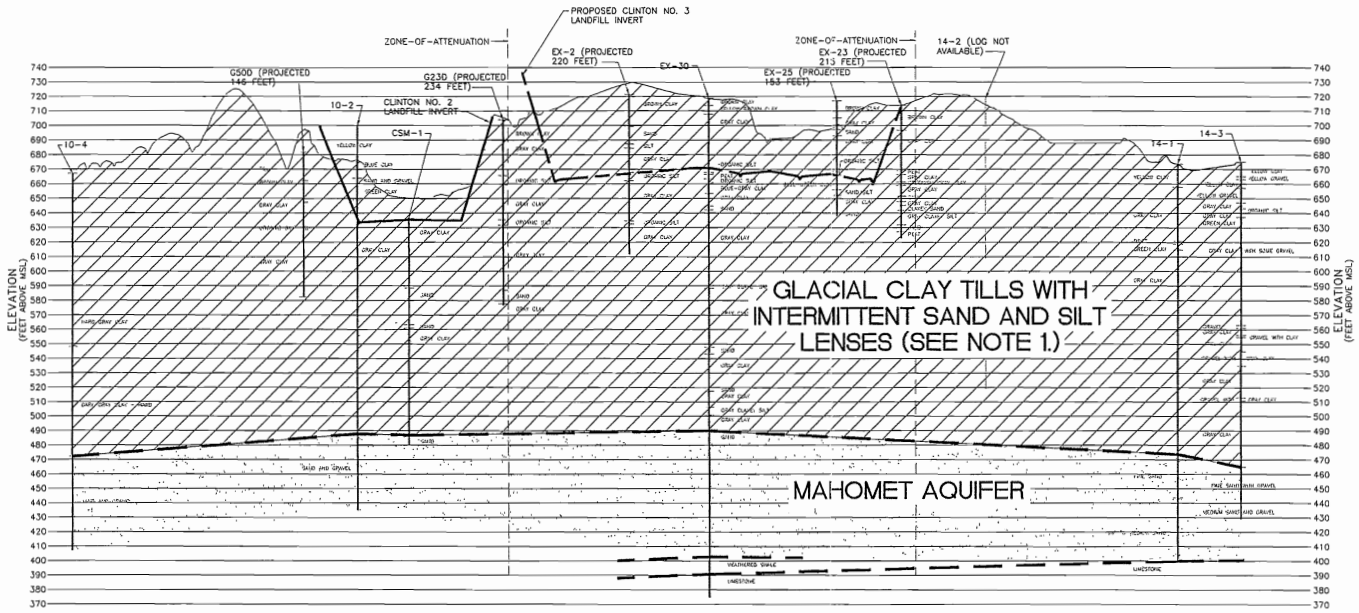
200' 100' 0 200' 400'
1"=200'

REV. NO.	DATE OF REVISION	REVISION AND RECORD OF ISSUE	BY	APP
1	6-7-06	ADDED EX-30 TO SECTION I AND KEYMAP	MHC	CLA

CLINTON LANDFILL NO. 3

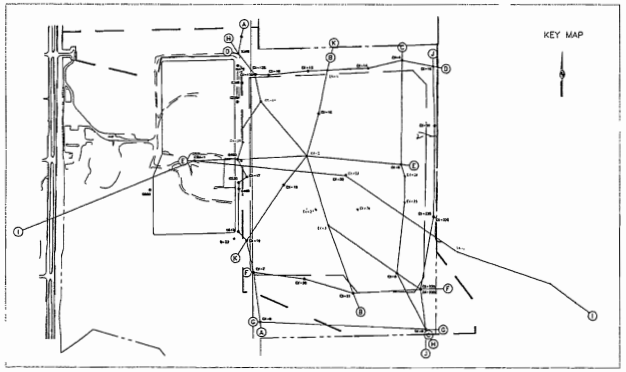
GEOLOGIC CROSS SECTION H

PDC PROJ.# 91-118	PDC TECHNICAL SERVICES, INC. PEORIA, ILLINOIS
DRAWN BY: J. HERRON	ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM 184-001145
SCALE: AS NOTED	APPROVED BY:
DATE: 2-25-05	DRAWING NUMBER: P-XS6



NOTE. 1. REGION IS OVERLAIN BY A VARIABLE THICKNESS OF LOESS, TYPICALLY DESCRIBED IN ONSITE BORINGS AS BROWN OR YELLOW BROWN SILTY CLAY.

SECTION
SCALE. 1"=400' HORIZ.
1"=40' VERT.
P-XS1



40' 20' 0 40' 80'
1"=40'

REV. NO.	DATE OF REVISION	REVISION AND RECORD OF ISSUE	BY	APP
1	6-07-06	ADDED EX-30 TO SECTION I AND KEYMAP	MNC	GLA

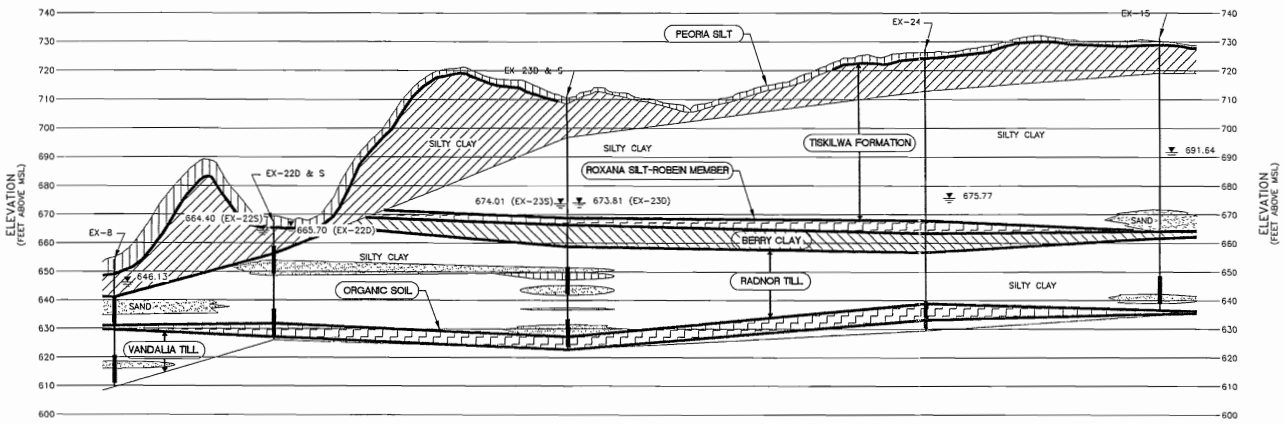
CLINTON LANDFILL NO. 3

GEOLOGIC CROSS SECTION I

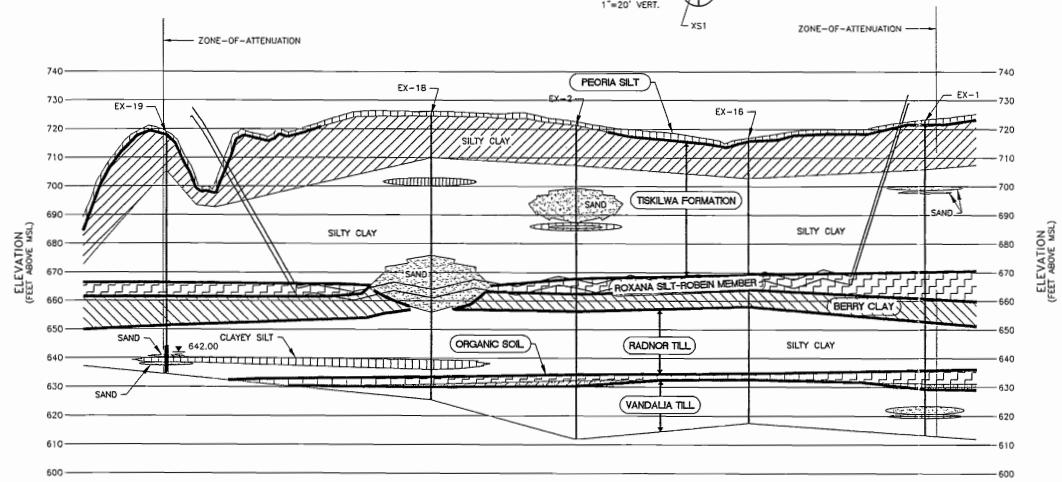
PDC PROJ.# 91-118.02
DRAWN BY: M. CAMERON
SCALE: AS NOTED
DATE: 2-25-06

PDC TECHNICAL SERVICES, INC.
PEORIA, ILLINOIS
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM 184-001145
APPROVED BY:
DRAWING NUMBER P-XS7

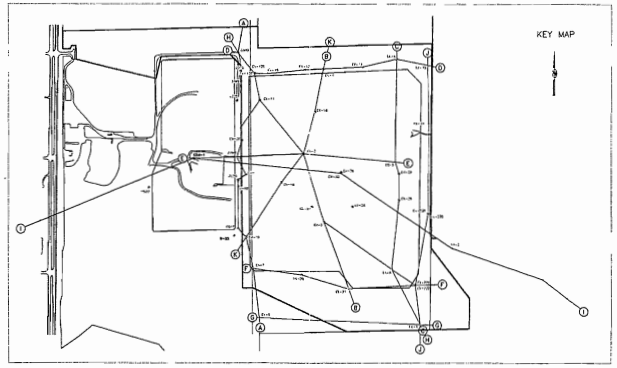
CAD DWG NO: 911189SSR1 EMPLOYEE NO: 9834 DATE/TIME: 06/02/06 09:04 ACAD-15



SECTION J
SCALE: 1"=200' HORIZ.
1"=20' VERT.
XS1



SECTION K
SCALE: 1"=200' HORIZ.
1"=20' VERT.
XS1



LEGEND

- EX-2 BORING/WELL DESIGNATION
- EXISTING WELL/PIEZOMETER
- SCREENED INTERVAL
- BOTTOM OF BORING
- POTENTIOMETRIC ELEVATION (NOVEMBER, 2004)
- BROWN SILTY CLAY
- GRAY CLAY WITH VARYING MINOR AMOUNTS OF SILT AND/OR SAND
- BROWN AND/OR GRAY SAND WITH GRAVEL
- GRAY SILT/CLAYEY SILT
- GRAY SANDY SILT/SILTY SAND
- GRAY CLAYEY SAND
- PEAT/ORGANIC SILT
- BLUE CLAY
- PROPOSED LF INVERT (APPROXIMATE)
- APPROXIMATE GEOLOGIC UNIT DIVISION LINE

NOTES:

1. EXISTING GRADE SHOWN BASED ON AERIAL PHOTO TAKEN MARCH 30, 1999.
2. GEOLOGIC SECTIONS PRESENTED HEREIN ARE BASED ON BORING INFORMATION AND VISUAL OBSERVATIONS, ACTUAL CONDITIONS MAY VARY.

20' 10' 0 20' 40'
1"=20'

200' 100' 0 200' 400'
1"=200'

REV. NO.	DATE OF REVISION	REVISION AND RECORD OF ISSUE	BY	APP.
1	6-7-06	ADDED EX-30 TO SECTION I AND KEYMAP	MNC	GLA

CLINTON LANDFILL NO. 3

GEOLOGIC CROSS SECTIONS J AND K

PDC PROJ.# 91-118
DRAWN BY: J. HERRON
SCALE: AS NOTED
DATE: 2-25-05

PDC TECHNICAL SERVICES, INC.
PEORIA, ILLINOIS
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM 184-001145

APPROVED BY:

DRAWING NUMBER P-XS8

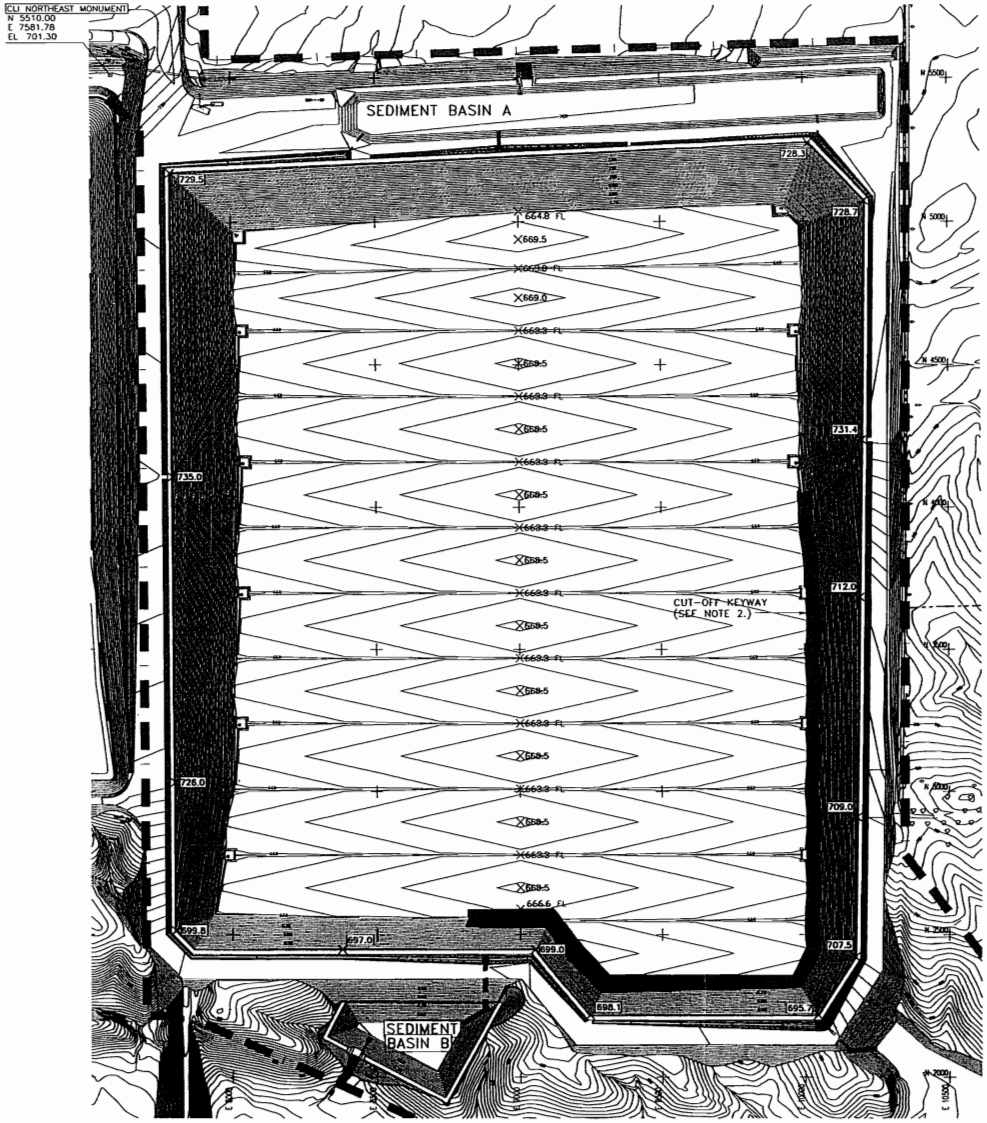
CAD DWG NO. 911181038R1 EMPLOYEE NO: 86239 DATE/TIME: 06/02/06 14:41 ACAD-15.

T:\AutoCAD\Pr \128017\dwg\Clinton Landfill No 3 X_ Sections IEPA 2005\911181038R1.dwg 10/ 3 12:04:05 PM CDT

ATTACHMENT 2

DRAWING NO. P-EX1 AND P-EX2 AND OTHER DOCUMENTATION

Shaw®



200' 100' 0 200' 400'

1"=200'

LEGEND

———	WASTE BOUNDARY
▬ ▬ ▬	FACILITY BOUNDARY
— — —	CULVERT
×668.5	DESIGN EARTH LINER SUBGRADE ELEVATION (FEET-MSL), SEE NOTE 1
×663.3 FL	DESIGN EARTH LINER SUBGRADE ELEVATION - LEACHATE COLLECTION TRENCH FLOWLINE (FEET-MSL)
———	PROPOSED ELEVATION CONTOUR (FEET-MSL)
———	EXISTING ELEVATION CONTOUR (FEET-MSL)

NOTES. 1. NONCONFORMING FOUNDATION SOILS SHALL BE OVEREXCAVATED AS REQUIRED BY ENGINEER TO ENSURE SUITABLE LANDFILL FOUNDATION.

2. SEE CUT-OFF KEYWAY DETAILS ON DWG. NO. P-EX2

REFERENCES:

1. EXISTING TOPOGRAPHY BASED ON AERIAL PHOTOGRAMMETRY BY WALKER AND ASSOCIATES, ST. LOUIS, MISSOURI (MARCH 30, 1999 PHOTOGRAPHY DATE)
2. VERTICAL AND HORIZONTAL CONTROL BASED ON "CLI NORTHWEST MONUMENT" AND "CLI NORTHEAST MONUMENT" THESE MONUMENTS CONSIST OF IRON PINS SET IN CONCRETE.

REV. NO.	DATE OF REVISION	REVISION AND RECORD OF ISSUE	BY	APP.
1	6-7-06	COORDINATE GRID, ADDED BENCHMARK, SPOT ELEVATION CALL-OUTS AND FLOOR CONTOURS. REVISED EAST LF ROAD.	LAK	GLA

CLINTON LANDFILL NO. 3

MASS EXCAVATION PLAN

PDC PROJ.# 91-118.02

DRAWN BY: M. CAMERON

SCALE: 1"=200'

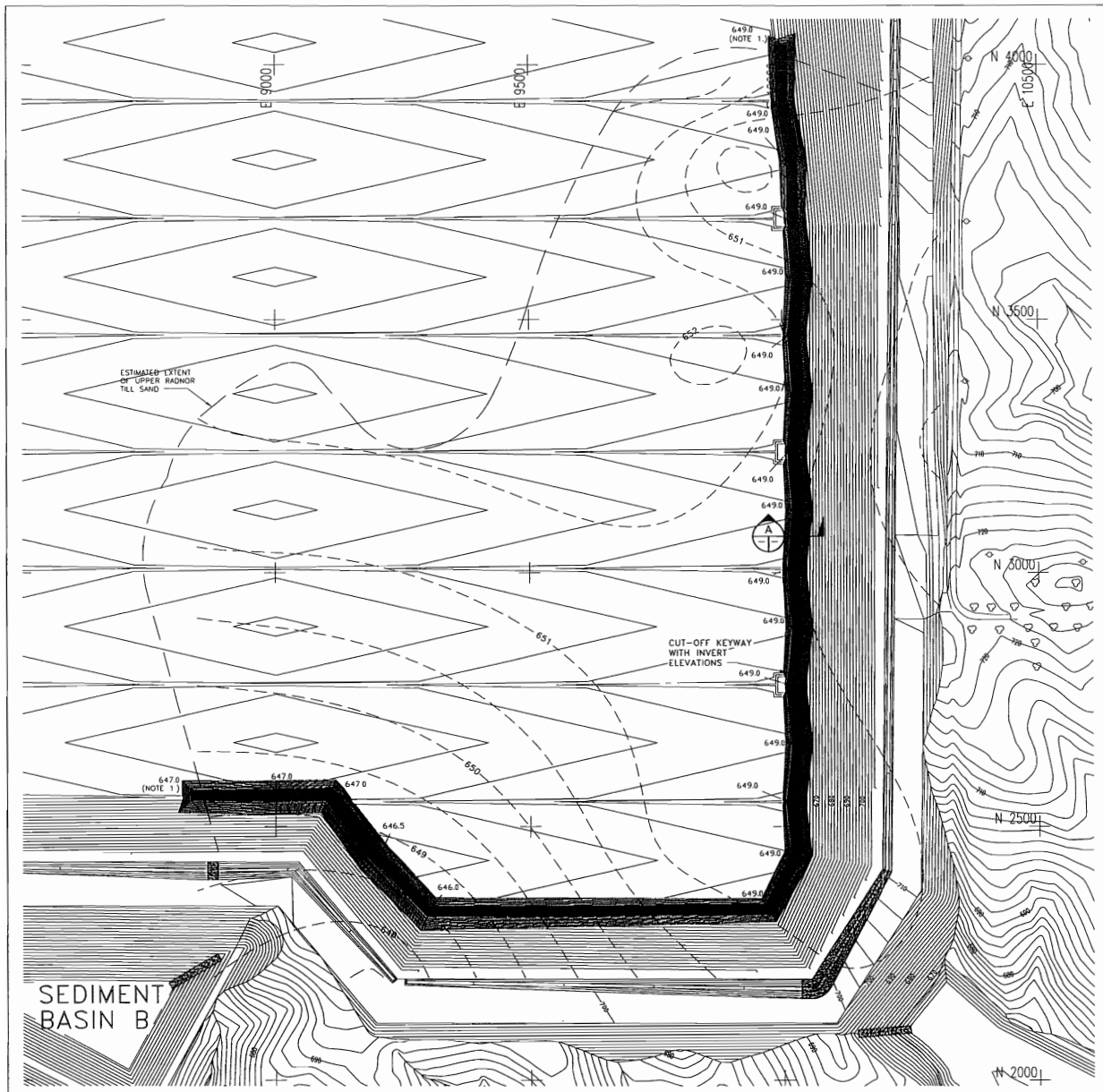
DATE: 02-25-05

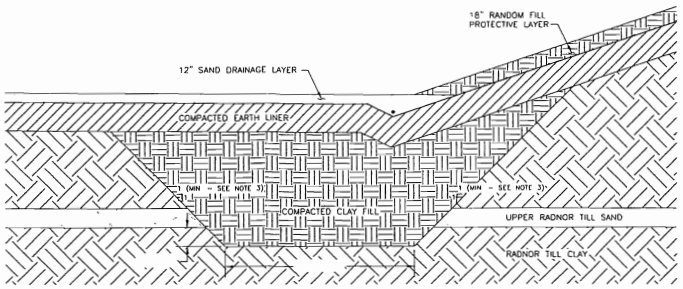
PDC TECHNICAL SERVICES, INC.
PEORIA, ILLINOIS
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM 184-001145

APPROVED BY:

DRAWING NUMBER P-EX1

CAD DWG NO:91115985DR1 EMPLOYEE NO:89239 DATE/TIME:06/02/06 13:06 ACAD-15.





TYPICAL CUT-OFF KEYWAY SECTION (A)
SCALE: 1"=6'

LEGEND

EXCAVATION SUBGRADE ELEVATION CONTOUR (FEET-MSL)

650.5 ESTIMATED CONTOUR - BOTTOM OF UPPER RADNOR TILL SAND (FEET-MSL)

NOTES

1. THE NORTHERN AND WESTERN EXTENTS OF THE CUT-OFF KEYWAY ARE ESTIMATED BASED ON AVAILABLE SOIL BORING DATA. EXTEND THE CUT-OFF KEYWAY AT LEAST 20 FEET BEYOND THE NORTHERN AND WESTERN EDGES OF THE UPPER RADNOR TILL SAND WHERE ENCOUNTERED.
2. THE BASE ELEVATION OF THE UPPER RADNOR TILL SAND IS ESTIMATED BASED ON AVAILABLE SOIL BORING DATA. AT A MINIMUM, CONSTRUCT THE CUT-OFF KEYWAY TO THE INVERT ELEVATIONS AS SHOWN. DEEPEN THE CUT-OFF KEYWAY AS NECESSARY TO ENSURE THAT THE INVERT OF THE CUT-OFF KEYWAY EXTENDS AT LEAST 2 FEET INTO COMPETENT CLAY.
3. EXCAVATE CUT-OFF KEYWAY WITH SLOPES NO STEEPER THAN 1:1 (HORIZONTAL TO VERTICAL) UNLESS COA OFFICER DETERMINES STEEPER SLOPES ARE STABLE.

6' 3' 0 6' 12'
1"=6'

100' 0 100' 200'
1"=100'

REFERENCE:

EXISTING TOPOGRAPHY BASED ON AERIAL PHOTOGRAMMETRY BY WALKER AND ASSOCIATES, ST. LOUIS, MISSOURI (MARCH 30, 1999 PHOTOGRAPHY DATE)

REV. NO.	DATE OF REVISION	REVISION AND RECORD OF ISSUE	BY	APP.
1	6-7-06	COORD GRID, ADDED INDEX CONTOUR LABELS, AND FLOOR CONTOURS	MNC	GLA

CLINTON LANDFILL NO. 3

UPPER SAND CUT-OFF KEYWAY PLAN AND SECTION

PDC PROJ # 91-118.02

DRAWN BY: M. CAMERON

SCALE: AS NOTED

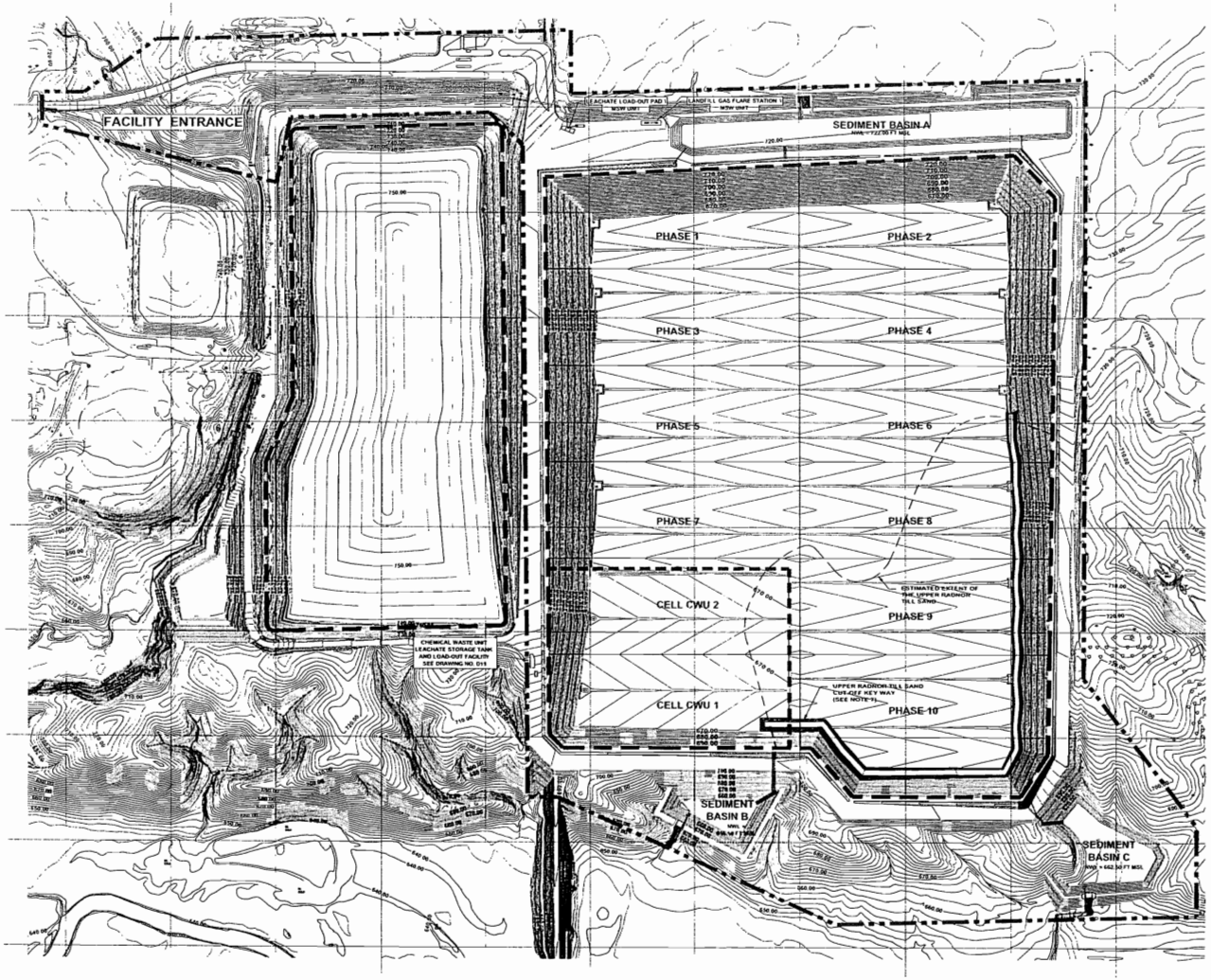
DATE: 02-25-05

APPROVED BY:

PDC TECHNICAL SERVICES, INC.
PEORIA, ILLINOIS
ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM 184-001145

DRAWING NUMBER: P-EX2

CAD DWG NO:B1181049R1 EMPLOYEE NO:69239 DATE/TIME:09/02/09 13:51 ACAD-15.



GRAPHIC SCALE

200 0 200

LEGEND

- APPROXIMATE FACILITY BOUNDARY
- APPROXIMATE EXISTING WASTE BOUNDARY
- APPROXIMATE INTERMEDIATE WASTE BOUNDARIES
- 690.00 ELEVATION CONTOUR-FEET, MSL (SEE NOTE 6)
- APPROXIMATE CELL BOUNDARY

NOTES

1. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN
2. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN
3. THE NEED FOR FLEXIBILITY TO ACCOMMODATE ADJUSTMENTS AND MODIFICATIONS IS ANTICIPATED CONSIDERING THE SIZE, COMPLEXITY, AND LIFE OF THE PROJECT
4. PERIMETER STORMWATER CONTROL WILL BE CONSTRUCTED AS FILLING PROGRESSES TO PREVENT "RUN-ON" ONTO THE LANDFILL AND TO PROPERLY CONTROL RUN-OFF FROM DISTURBED AREAS
5. SITE DEVELOPMENT IS EXPECTED TO PROCEED ACCORDING TO THE NUMERICAL SEQUENCE OF CELLS SHOWN ON THIS PLAN, BUT IS SUBJECT TO CHANGE. THE EXCAVATION OF THE SUBSEQUENT CELLS WILL OCCUR AS THE PREVIOUS CELL IS FILLED
6. THE PROPOSED CONTOURS WITHIN THE CLINTON LANDFILL NO. 3 WASTE BOUNDARY ON THIS DRAWING REPRESENT THE APPROXIMATE EXCAVATION GRADES
7. THE DESIGN OF THE CUT-OFF KEY WAY IS SHOWN ON PDC TECHNICAL SERVICES, INC DRAWING P-EX-2, AS APPROVED BY ILLINOIS EPA PERMIT

REV NO	DATE	DESCRIPTION
1	JAN 2009	CHANGED LEACHATE COLLECTION PIPE SLOPE TO 1%

Clinton Landfill, Inc.

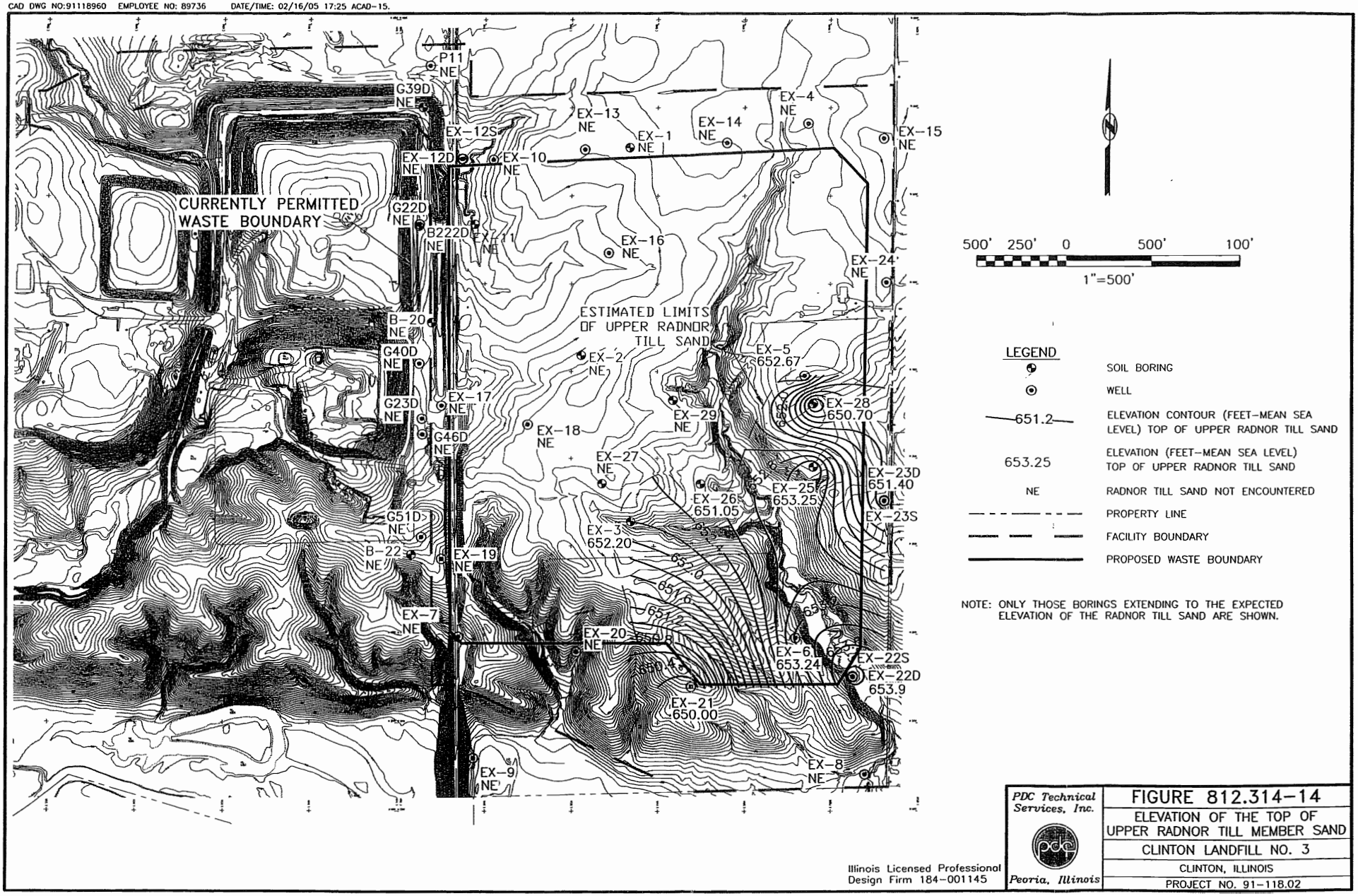
Shaw® Shaw Environmental, Inc.

CLINTON LANDFILL NO. 3 CHEMICAL WASTE UNIT
DEWITT COUNTY, ILLINOIS

ESTIMATED EXTENT OF UPPER RADNOR TILL SAND COMPARED TO MASS EXCAVATION GRADES

PROJ. NO.:	128017	DATE:	JANUARY 2009
DESIGNED BY:	JPV	DRAWING NO.	1
DRAWN BY:	TDS		
CHECKED BY:	JPV		
APPROVED BY:	DAM		1 OF 1 SHEETS

CAD DWG NO:91118960 EMPLOYEE NO: 89736 DATE/TIME: 02/16/05 17:25 ACAD-15.



NOTE: ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE RADNOR TILL SAND ARE SHOWN.

Illinois Licensed Professional Design Firm 184-001145

PDC Technical Services, Inc.
Peoria, Illinois

FIGURE 812.314-14
ELEVATION OF THE TOP OF UPPER RADNOR TILL MEMBER SAND
CLINTON LANDFILL NO. 3
CLINTON, ILLINOIS
PROJECT NO. 91-118.02

ATTACHMENT 3

MODEL DOCUMENTATION

REVISED TABLE 812.314-9
FLOW RATES IN THE WATER BEARING UNITS
(with revised gradients and calculations as per the IEPA)

Shaw®

TABLE 812.314-9
Flow Rates in the Water Bearing Units
Clinton Landfill No. 3

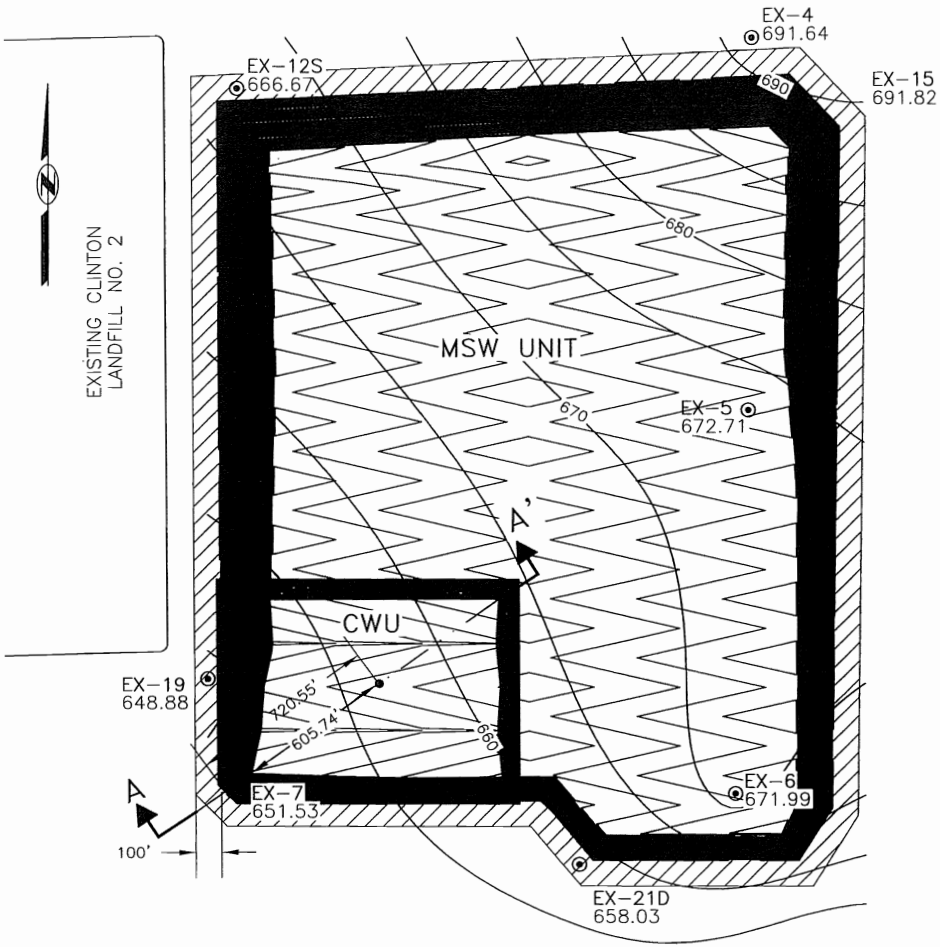
Quarter Water Table Elevation Measured	Groundwater Gradient (i)	Groundwater Flow Velocity (V) (feet/day)	Groundwater Flow Velocity (V) (meters/year)
Upper Radnor Till			
1st Quarter of 2007	1.07E-02	4.43E-03	4.93E-01
2nd Quarter of 2007	1.12E-02	4.64E-03	5.16E-01
3rd Quarter of 2007	1.48E-02	6.14E-03	6.83E-01
4th Quarter of 2007	1.13E-02	4.69E-03	5.22E-01
Average =	1.20E-02	4.97E-03	5.53E-01
Lower Radnor Till			
1st Quarter of 2007	8.82E-03	1.45E-02	1.62
2nd Quarter of 2007	8.94E-03	1.47E-02	1.64
3rd Quarter of 2007	9.06E-03	1.49E-02	1.66
4th Quarter of 2007	8.85E-03	1.46E-02	1.62
Average =	8.92E-03	1.47E-02	1.63
Organic Soil			
1st Quarter of 2007	5.83E-03	1.07E-03	1.20E-01
2nd Quarter of 2007	5.85E-03	1.08E-03	1.20E-01
3rd Quarter of 2007	6.76E-03	1.25E-03	1.39E-01
4th Quarter of 2007	6.69E-03	1.23E-03	1.37E-01
Average =	6.28E-03	1.16E-03	1.29E-01

Notes:

1. Hydraulic gradients (i) for the Upper Radnor Till sand are estimated using potentiometric data from wells EX-22S and EX-23S.
   Hydraulic gradients (i) for the Lower Radnor Till sand are estimated using potentiometric data from wells EX-4 and EX-7.
   Hydraulic gradients (i) for the Organic Soil are estimated using potentiometric data data from wells EX-14 and EX-20.
2. Average groundwater flow velocity, V = K i/n.
3. Average hydraulic conductivity (K): Upper Radnor Till sand = 1.58E-01 feet per day;
   Lower Radnor Till sand = 0.626 feet per day;
   Organic Soil = 7.37E-02 feet per day;
4. n = Estimated effective porosity of the Upper and Lower Radnor Till sands = 0.38 (published ranges).
   n = Estimated effective porosity of the Organic Soil = 0.40 (from Roxana/Robein results).

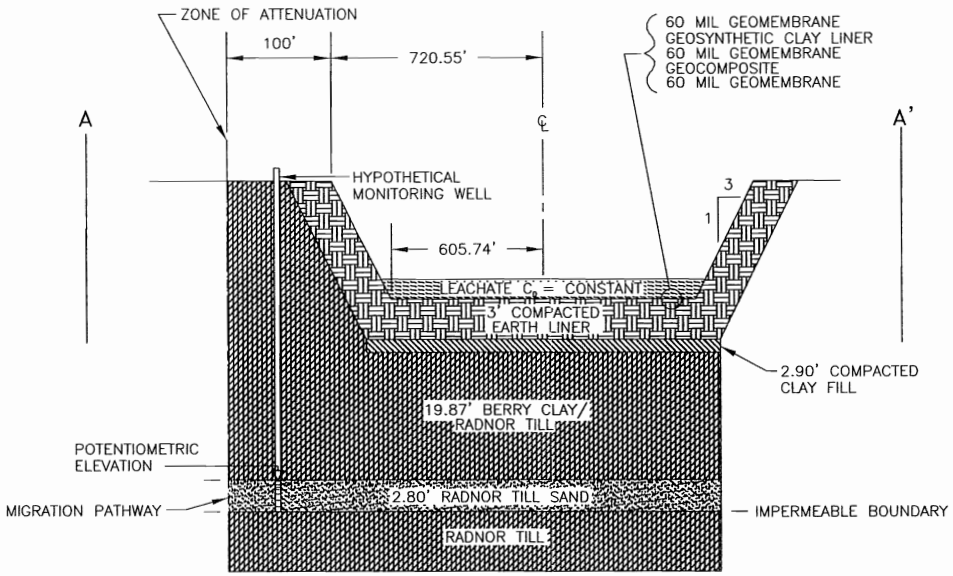
REVISED HYDROGEOLOGIC MODELS FOR THE LOWER RADNOR TILL SAND AND ORGANIC SOIL

Shaw®



LANDFILL INVERT PLAN

NOT TO SCALE



SECTION A-A'

NOT TO SCALE

LEGEND

- ⊙ PIEZOMETER SCREENED IN LOWER RADNOR TILL SAND
- 671.99 MEAN POTENTIOMETRIC ELEVATION (LOWER RADNOR TILL SAND, FEET – MSL)
- —670— MEAN POTENTIOMETRIC ELEVATION CONTOUR LINE (LOWER RADNOR TILL SAND, FEET – MSL)
- ▨ ZONE OF ATTENUATION

NOTE: MEAN POTENTIOMETRIC ELEVATIONS BASED ON 2003-2007 MONITORING DATA

Illinois Licensed Professional Design Firm 184-001145

PDC Technical Services, Inc.
Peoria, Illinois

FIGURE 812.316-6

HYDROGEOLOGIC MODEL
LOWER RADNOR TILL SAND

CLINTON LANDFILL NO. 3 CWU

CLINTON, ILLINOIS

PROJECT NO. 91-118.02

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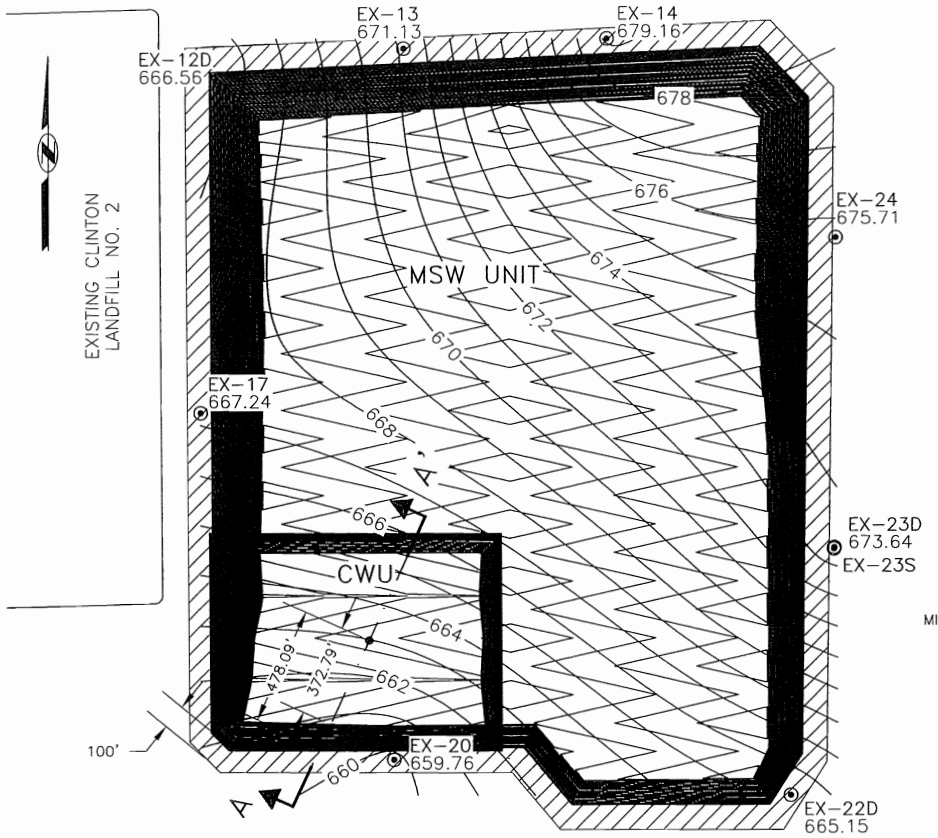
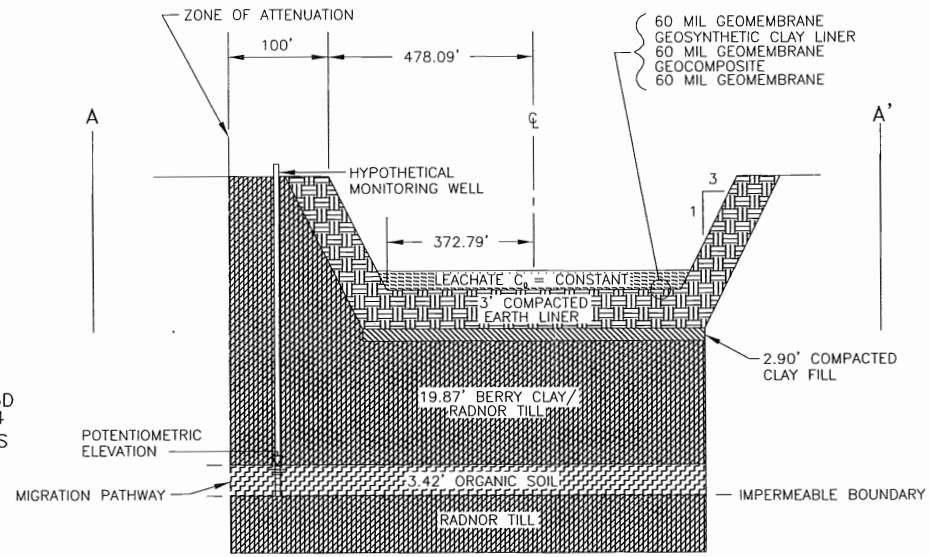


LANDFILL INVERT PLAN

NOT TO SCALE



SECTION A-A'

NOT TO SCALE

LEGEND

- ⊙ PIEZOMETER SCREENED IN ORGANIC SOIL
- 665.15 MEAN POTENTIOMETRIC ELEVATION (ORGANIC SOIL, FEET – MSL)
- —660— MEAN POTENTIOMETRIC ELEVATION CONTOUR LINE (ORGANIC SOIL, FEET – MSL)
- ZONE OF ATTENUATION

NOTE: MEAN POTENTIOMETRIC ELEVATIONS BASED ON 2003-2007 MONITORING DATA

Illinois Licensed Professional Design Firm 184-001145

PDC Technical Services, Inc.
Peoria, Illinois

FIGURE 812.316-7
HYDROGEOLOGIC MODEL
ORGANIC SOIL
CLINTON LANDFILL NO. 3 CWU
CLINTON, ILLINOIS
PROJECT NO. 91-118.02

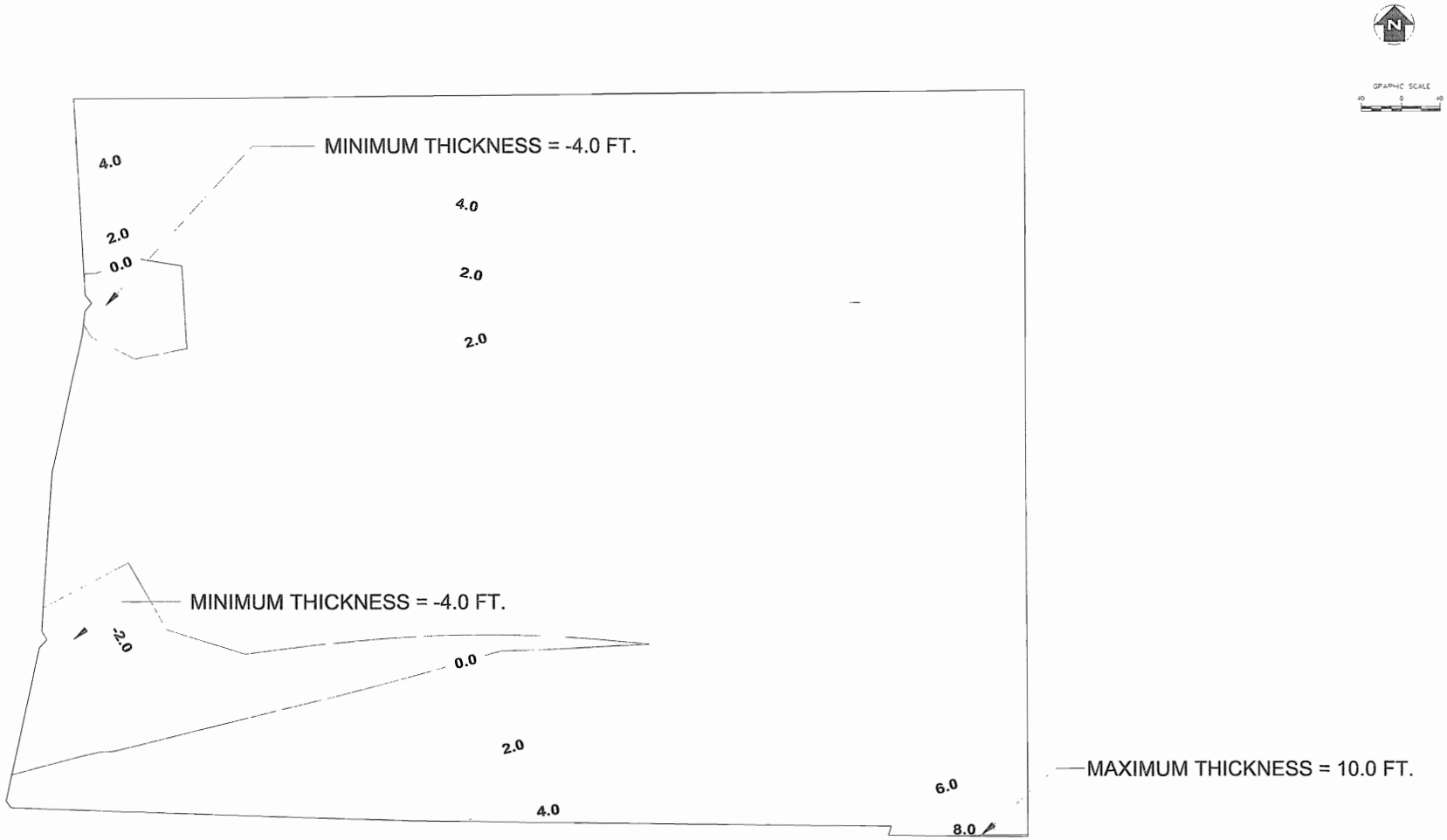
LAYER THICKNESS DOCUMENTATION

Shaw®

MEAN THICKNESS OF CLAY FILL BETWEEN THE CHEMICAL WASTE UNIT CLAY LINER SUBGRADE AND THE BERRY CLAY

Number of triangles: 1532
Mean thickness: 2.90 ft.
Minimum triangle area: 0.01
Maximum triangle area: 13700.38
2D surface area: 652511.78
3D surface area: 653319.66
Minimum grade: 0.00%
Maximum grade: 438.95%
Average grade: 3.13%

Maximum thickness = 10.0 ft.
Minimum thickness = -4.0 ft.



REV NO	DATE	DESCRIPTION

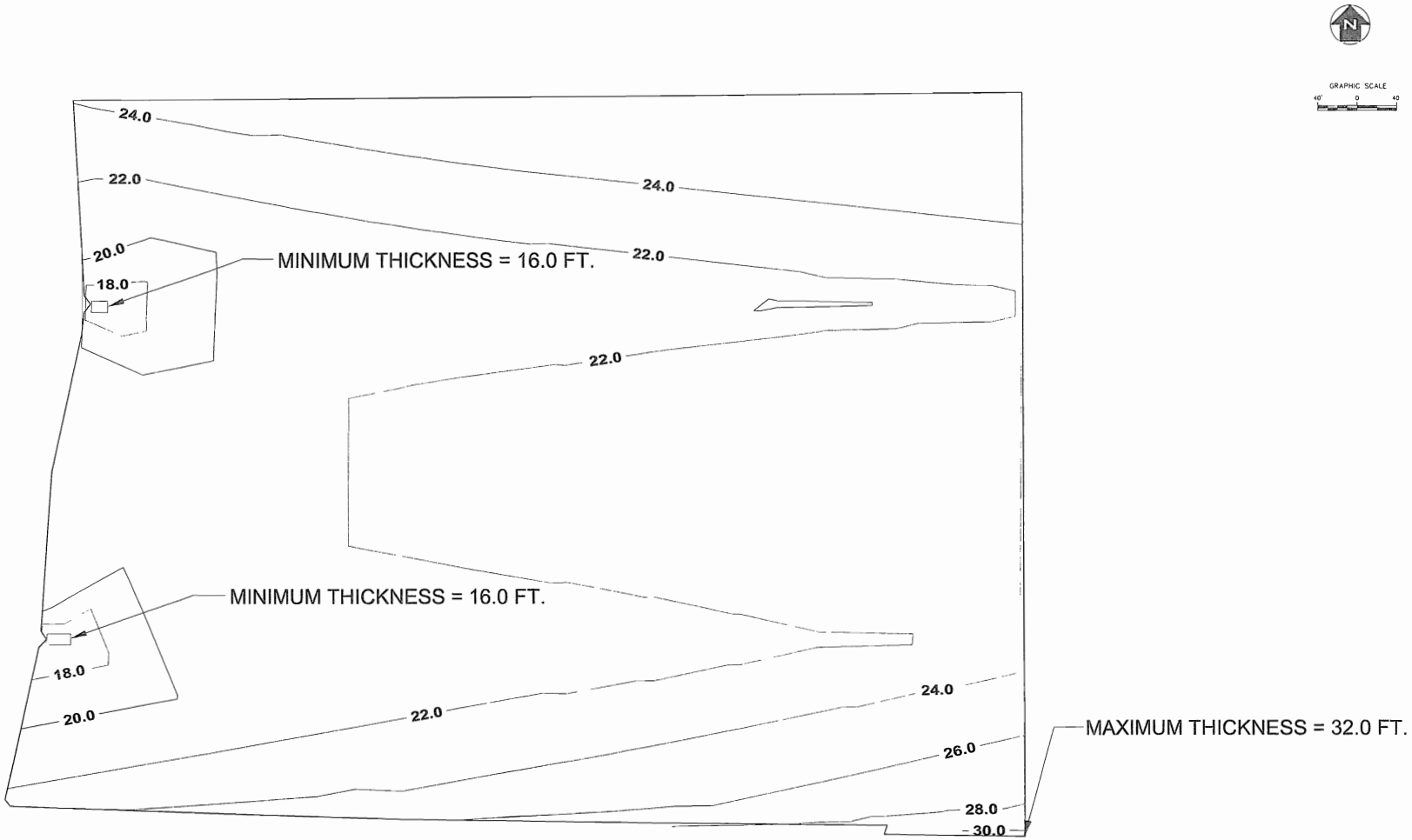
Clinton Landfill, Inc.

Shaw® Shaw Environmental, Inc.

CLINTON LANDFILL NO. 3 CHEMICAL WASTE UNIT
DEWITT COUNTY, ILLINOIS

ISOPACH OF CLAY FILL

PROJ NO	128017	DATE	NOVEMBER 2008
DESIGNED BY:	JPV	DRAWING NO	1
DRAWN BY	TDS		
CHECKED BY:	JPV		
APPROVED BY:	DAM		1 OF 2 SHEETS



REV NO	DATE	DESCRIPTION

Clinton Landfill, Inc.

Shaw Environmental, Inc.

CLINTON LANDFILL NO. 3 CHEMICAL WASTE UNIT
DEWITT COUNTY, ILLINOIS

ISOPACH OF THE CLAY FILL AND BERRY CLAY/RADNOR TILL

PROJ. NO.:	128017	DATE:	NOVEMBER 2008
DESIGNED BY:	JPV	DRAWING NO.	2
DRAWN BY:	TDS		
CHECKED BY:	JPV		
APPROVED BY:	DAM		2 OF 2 SHEETS

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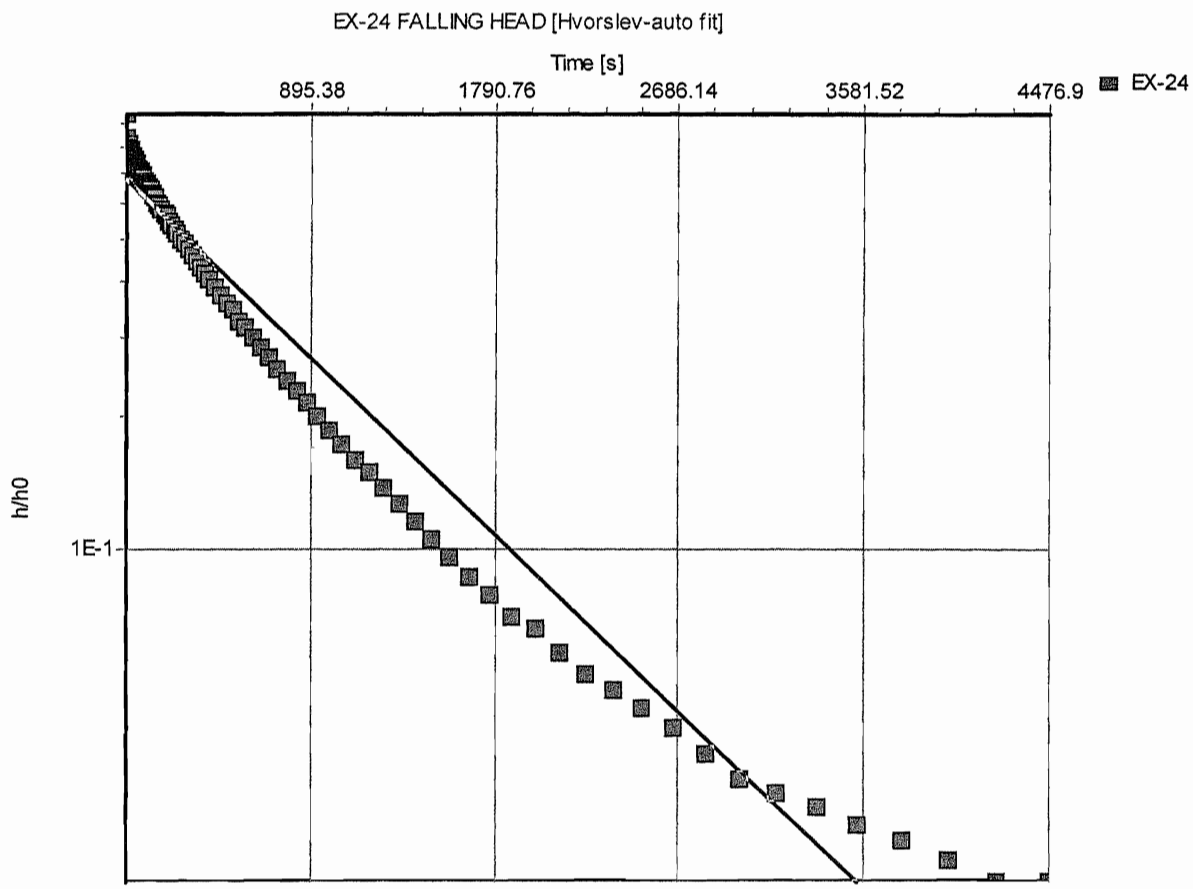
PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 3.9-676-4893

Slug Test Analysis Report

Project: CLI #3 Expansion well slug tests

Number: 91-0118

Client: Clinton Landfill, Inc.



Slug Test: **EX-24 FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 3.79E-5 [cm/s]

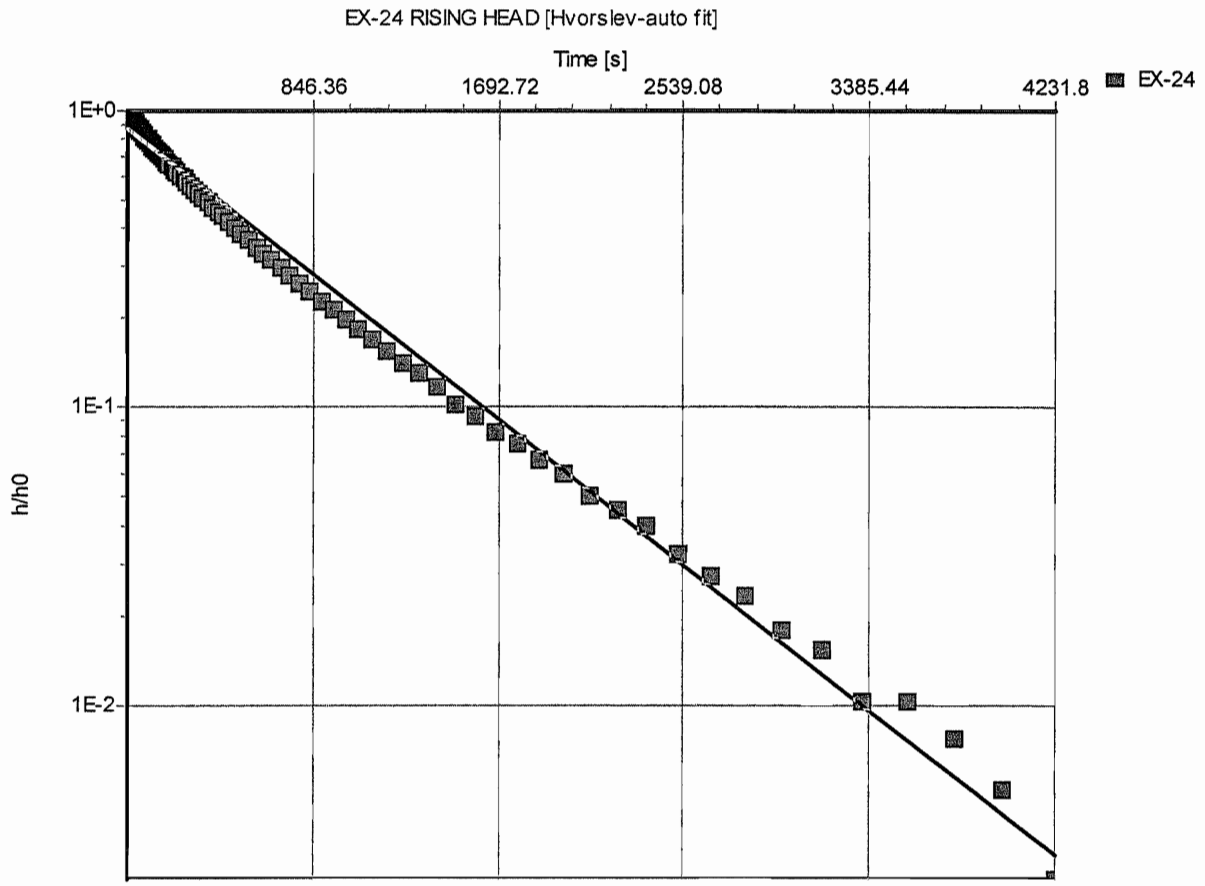
Test parameters:				
	Test Well:	EX-24	Aquifer Thickness:	5.1 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.69 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 11/30/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report** Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.



Slug Test: **EX-24 RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 4.94E-5 [cm/s]

Test parameters:				
	Test Well:	EX-24	Aquifer Thickness:	5.1 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.69 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 11/30/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	**Slug Test Data Report** Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-24**	**Slug Test:**	**EX-24 FALLING HEAD**
		Test Well:	EX-24
Depth to Static WL:	53.96 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.69 [ft]
Date:	11/18/2004	Aquifer Thickness:	5.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	53.01	-0.95
2	1.1	53.16	-0.80
3	2.2	53.24	-0.72
4	3.4	53.20	-0.76
5	4.6	53.06	-0.90
6	6	53.19	-0.77
7	7.4	53.22	-0.74
8	8.9	53.20	-0.76
9	10.4	53.22	-0.74
10	12	53.20	-0.76
11	13.7	53.21	-0.75
12	15.5	53.21	-0.75
13	17.4	53.22	-0.74
14	19.5	53.22	-0.74
15	21.7	53.23	-0.73
16	24	53.23	-0.73
17	26.5	53.23	-0.73
18	29.1	53.24	-0.72
19	31.9	53.24	-0.72
20	34.8	53.25	-0.71
21	37.9	53.25	-0.71
22	41.2	53.26	-0.70
23	44.7	53.26	-0.70
24	48.4	53.27	-0.69
25	52.3	53.27	-0.69
26	56.5	53.28	-0.68
27	60.9	53.28	-0.68
28	65.6	53.29	-0.67
29	70.6	53.30	-0.66
30	75.9	53.31	-0.66
31	81.5	53.31	-0.65

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-24**	**Slug Test:**	**EX-24 FALLING HEAD**
		Test Well:	EX-24
Depth to Static WL:	53.96 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.69 [ft]
Date:	11/18/2004	Aquifer Thickness:	5.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	87.4	53.32	-0.64
33	93.7	53.33	-0.63
34	100.3	53.33	-0.63
35	107.3	53.34	-0.62
36	114.8	53.35	-0.61
37	122.7	53.36	-0.60
38	131.1	53.37	-0.59
39	140	53.37	-0.59
40	149.4	53.39	-0.57
41	159.4	53.40	-0.56
42	170	53.41	-0.55
43	181.2	53.42	-0.54
44	193.1	53.43	-0.53
45	205.7	53.44	-0.52
46	219	53.45	-0.51
47	233.1	53.46	-0.50
48	248	53.47	-0.49
49	263.8	53.49	-0.47
50	280.6	53.50	-0.46
51	298.4	53.51	-0.45
52	317.2	53.52	-0.44
53	337.1	53.54	-0.42
54	358.2	53.55	-0.41
55	380.6	53.56	-0.40
56	404.3	53.58	-0.38
57	429.4	53.59	-0.37
58	456	53.60	-0.36
59	484.2	53.62	-0.34
60	514.1	53.63	-0.33
61	545.7	53.65	-0.31
62	579.2	53.66	-0.30

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-24**	**Slug Test:**	**EX-24 FALLING HEAD**
		Test Well:	EX-24
Depth to Static WL:	53.96 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.69 [ft]
Date:	11/18/2004	Aquifer Thickness:	5.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	614.7	53.68	-0.29
64	652.3	53.69	-0.27
65	692.1	53.70	-0.26
66	734.3	53.72	-0.24
67	779	53.73	-0.23
68	826.4	53.74	-0.22
69	876.6	53.76	-0.20
70	929.7	53.77	-0.19
71	986	53.78	-0.18
72	1045.6	53.80	-0.16
73	1108.8	53.81	-0.15
74	1175.7	53.82	-0.14
75	1246.6	53.83	-0.13
76	1321.7	53.84	-0.12
77	1401.2	53.85	-0.11
78	1485.5	53.86	-0.10
79	1574.8	53.87	-0.09
80	1669.3	53.88	-0.08
81	1769.4	53.89	-0.08
82	1875.5	53.89	-0.07
83	1987.9	53.90	-0.06
84	2106.9	53.90	-0.06
85	2233	53.91	-0.05
86	2366.6	53.91	-0.05
87	2508.1	53.92	-0.04
88	2658	53.92	-0.04
89	2816.8	53.93	-0.03
90	2985	53.93	-0.03
91	3163.1	53.93	-0.03
92	3351.8	53.94	-0.02
93	3551.7	53.94	-0.02

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-24**	**Slug Test:**	**EX-24 FALLING HEAD**
		Test Well:	EX-24
Depth to Static WL:	53.96 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.69 [ft]
Date:	11/18/2004	Aquifer Thickness:	5.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	3763.4	53.94	-0.02
95	3987.7	53.94	-0.02
96	4225.3	53.94	-0.02
97	4476.9	53.94	-0.02

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	**Slug Test Data Report** Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-24**	**Slug Test:**	**EX-24 RISING HEAD**
		Test Well:	EX-24
Depth to Static WL:	53.96 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.69 [ft]
Date:	11/18/2004	Aquifer Thickness:	5.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	54.74	0.78
2	0.6	54.74	0.78
3	1.3	54.73	0.77
4	2.1	54.73	0.77
5	2.9	54.73	0.77
6	3.7	54.73	0.77
7	4.6	54.72	0.76
8	5.5	54.72	0.76
9	6.5	54.72	0.76
10	7.6	54.72	0.76
11	8.7	54.71	0.75
12	9.9	54.71	0.75
13	11.1	54.71	0.75
14	12.5	54.71	0.74
15	13.9	54.70	0.74
16	15.4	54.70	0.74
17	16.9	54.70	0.73
18	18.5	54.69	0.73
19	20.2	54.69	0.73
20	22	54.69	0.73
21	23.9	54.68	0.72
22	26	54.68	0.72
23	28.2	54.67	0.71
24	30.5	54.67	0.71
25	33	54.67	0.71
26	35.6	54.66	0.70
27	38.4	54.66	0.70
28	41.3	54.65	0.69
29	44.4	54.65	0.69
30	47.7	54.64	0.68
31	51.2	54.63	0.67

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-24**	**Slug Test:**	**EX-24 RISING HEAD**
		Test Well:	EX-24
Depth to Static WL:	53.96 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.69 [ft]
Date:	11/18/2004	Aquifer Thickness:	5.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	54.9	54.63	0.67
33	58.8	54.62	0.66
34	63	54.62	0.66
35	67.4	54.61	0.65
36	72.1	54.61	0.64
37	77.1	54.60	0.64
38	82.4	54.59	0.63
39	88	54.58	0.62
40	93.9	54.58	0.62
41	100.2	54.57	0.61
42	106.8	54.56	0.60
43	113.8	54.55	0.59
44	121.3	54.54	0.58
45	129.2	54.53	0.57
46	137.6	54.52	0.56
47	146.5	54.51	0.55
48	155.9	54.51	0.55
49	165.9	54.49	0.53
50	176.5	54.48	0.52
51	187.7	54.48	0.52
52	199.6	54.46	0.50
53	212.2	54.45	0.49
54	225.5	54.44	0.48
55	239.6	54.43	0.47
56	254.5	54.42	0.46
57	270.3	54.41	0.45
58	287.1	54.39	0.43
59	304.9	54.38	0.42
60	323.7	54.37	0.41
61	343.6	54.35	0.39
62	364.7	54.34	0.38

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-24**	**Slug Test:**	**EX-24 RISING HEAD**
		Test Well:	EX-24
Depth to Static WL:	53.96 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.69 [ft]
Date:	11/18/2004	Aquifer Thickness:	5.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	387.1	54.33	0.37
64	410.8	54.31	0.35
65	435.9	54.30	0.34
66	462.5	54.29	0.33
67	490.7	54.27	0.31
68	520.6	54.26	0.30
69	552.2	54.25	0.28
70	585.7	54.23	0.27
71	621.2	54.22	0.26
72	658.8	54.20	0.24
73	698.6	54.19	0.23
74	740.8	54.18	0.22
75	785.5	54.16	0.20
76	832.9	54.15	0.19
77	883.1	54.14	0.18
78	936.2	54.13	0.17
79	992.5	54.11	0.15
80	1052.1	54.10	0.14
81	1115.3	54.09	0.13
82	1182.2	54.08	0.12
83	1253.1	54.07	0.11
84	1328.2	54.06	0.10
85	1407.7	54.05	0.09
86	1492	54.04	0.08
87	1581.3	54.03	0.07
88	1675.8	54.02	0.06
89	1775.9	54.02	0.06
90	1882	54.01	0.05
91	1994.4	54.01	0.05
92	2113.4	54.00	0.04
93	2239.5	54.00	0.03

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-24**	**Slug Test:**	**EX-24 RISING HEAD**
		Test Well:	EX-24
Depth to Static WL:	53.96 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.69 [ft]
Date:	11/18/2004	Aquifer Thickness:	5.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	2373.1	53.99	0.03
95	2514.6	53.99	0.02
96	2664.5	53.98	0.02
97	2823.3	53.98	0.02
98	2991.5	53.97	0.01
99	3169.6	53.97	0.01
100	3358.3	53.97	0.01
101	3558.2	53.97	0.01
102	3769.9	53.97	0.01
103	3994.2	53.96	0.00
104	4231.8	53.96	0.00
105	4483.4	53.96	0.00

APPENDIX 812.314-E: SOILS LABORATORY DATA

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Report Cover Page

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 23-Dec-02
Date Reported: 19-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 02123018

This report includes information regarding the following described samples as received by the laboratory and is only valid for the parameters tested. This report contains 3 results page(s) not including the cover page(s).

Sample No.	Client ID	Site	Locator
02123018-1	PROJECT #91-0118	EX-13; ELEV 671	GRAB
02123018-2	PROJECT #91-0118	EX-13; ELEV 655.5	GRAB
02123018-3	PROJECT #91-0118	EX-13; ELEV 661.5	GRAB

Certified by: Dorothy W. Rothert
Dorothy W. Rothert, Project Manager

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 23-Dec-02
Date Reported: 19-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 02123018

Sample No: 02123018-1
Client ID: PROJECT #91-0118
Site: EX-13; ELEV 671
Locator: GRAB
Collect Date: 19-DEC-02 15:10

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.8	%	26-Dec-02 15:12	KD

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Clinton Landfill

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Attn: Mr. John Berry

Date Received: 23-Dec-02
Date Reported: 19-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 02123018

Sample No: 02123018-2
Client ID: PROJECT #91-0118
Site: EX-13; ELEV 655.5
Locator: GRAB
Collect Date: 20-DEC-02 09:45

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.8	%	26-Dec-02 15:12	KD

Report revised to correct sample description.

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Clinton Landfill

PO Box 9071
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Attn: Mr. John Berry

Date Received: 23-Dec-02
Date Reported: 19-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 02123018

Sample No: 02123018-3
Client ID: PROJECT #91-0118
Site: EX-13; ELEV 661.5
Locator: GRAB
Collect Date: 20-DEC-02 09:00

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	10.	%	26-Dec-02 15:12	KD

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FAX # 309-692-9689

CHAIN OF CUSTODY RECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1			
CLIENT: CLI #3	PROJECT NUMBER: 91-0118	P.O. NUMBER:	MEANS SHIPPED: HD
ADDRESS:	PHONE NUMBER:	FAX NUMBER:	DATE SHIPPED: 12/23/02
CITY / STATE / ZIP:	SAMPLER (PLEASE PRINT): John Berry		MATRIX TYPES: WW-WASTEWATER, DW-DRINKING WATER, GW-GROUND WATER, WWSL-SLUDGE, NAS-SOLID, OTHER:
CONTACT PERSON: John Berry	SAMPLER'S SIGNATURE: John Berry		

3 ANALYSIS REQUESTED: Total Organic Carbon

4 (FOR LAB USE ONLY)
LOGIN # 0212 3018-3
LOGGED BY: kp
LAB PROJ. #:
TEMPLATE:
PROJ. MGR.:

2 SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT.	Total Organic Carbon	REMARKS
EX-13; ELEV. 671	12/19/02	3:10p	X		SOIL	1	X	
EX-13; ELEV. 655.5	12/20/02	9:45a	X		SOIL	1	X	
EX-13; ELEV. 661.5	12/20/02	9:00a	X		SOIL	1	X	

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.* _____

7			
RELINQUISHED BY: (SIGNATURE) John R. Berry	DATE: 12/20/02 TIME: 10:49	RECEIVED BY: (SIGNATURE)	DATE: TIME:
RELINQUISHED BY: (SIGNATURE) Joseph L. Kelly	DATE: 12/23/02 TIME: 10:45	RECEIVED AT LAB BY: (SIGNATURE) Gina Peterson	DATE: 12/23/02 TIME: 10:45am

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT	6 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT	Y OR N
SAMPLE(S) RECEIVED ON ICE	Y OR N
BOTTLES RECEIVED IN GOOD CONDITION	Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME	Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S)	Y OR N

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Report Cover Page

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 17-Dec-02
Date Reported: 26-Dec-02
PO #: Clinton
PDC Cust. # : 280105

Login No. 02122537

This report includes information regarding the following described samples as received by the laboratory and is only valid for the parameters tested. This report contains 2 results page(s) not including the cover page(s).

Sample No.	Client ID	Site	Locator
02122537-1	SOIL	EX-14 ELEV 659	GRAB
02122537-2	SOIL	EX-14 ELEV 642	GRAB

Certified by: Dorothy W. Rothert
Dorothy W. Rothert, Project Manager

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Wastewater Certifications: Arkansas; Iowa (240); Kansas (E-10338); Wisconsin (998294430)
Hazardous/Solid Waste Certifications: Arkansas; Kansas (E-10338); Wisconsin (998294430)
UST Certification: Iowa (240)
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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 17-Dec-02
Date Reported: 26-Dec-02
PO #: Clinton
PDC Cust. # : 280105

Login No. 02122537

Sample No: 02122537-1
Client ID: SOIL
Site: EX-14 ELEV 659
Locator: GRAB
Collect Date: 16-DEC-02 09:30

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	8.8	%	23-Dec-02 15:30	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 17-Dec-02
Date Reported: 26-Dec-02
PO #: Clinton
PDC Cust. # : 280105

Login No. 02122537

Sample No: 02122537-2
Client ID: SOIL
Site: EX-14 ELEV 642
Locator: GRAB
Collect Date: 16-DEC-02 11:15

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.4	%	23-Dec-02 15:30	KD

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FAX # 309-692-9689

CHAIN OF CUSTOD RECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT: CLI #3

ADDRESS:

CITY / STATE / ZIP:

CONTACT PERSON: JOHN BERRY

PROJECT NUMBER:

PHONE NUMBER:

P.O. NUMBER:

FAX NUMBER:

MEANS SHIPPED:

DATE SHIPPED:

SAMPLER (PLEASE PRINT): John Berry

SAMPLER'S SIGNATURE: John Berry

MATRIX TYPES:
WW-WASTEWATER
DW-DRINKING WATER
GW-GROUND WATER
WWSL-SLUDGE
NAS-SOLID
OTHER: _____

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # 021225312
LOGGED BY: RP
LAB PROJ. #:
TEMPLATE:
PROJ. MGR.:

2

SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT.	TOC (Total Organic Content)							REMARKS
EX-14 Elevation 659	12/16	9:30	X		SOIL	1	X							
EX-14 ELEVATION 642	12/16	11:15	X		SOIL	1	X							

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE:
PHONE # IF DIFFERENT FROM ABOVE:

6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.* _____

7 RELINQUISHED BY: (SIGNATURE) John R Berry — DATE 12/17/02 — TIME 1:50
RECEIVED BY: (SIGNATURE) — DATE — TIME
RELINQUISHED BY: (SIGNATURE) — DATE — TIME
RECEIVED AT LAB BY: (SIGNATURE) S. Riggs — DATE 12/17/02 — TIME 13:50

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 20 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

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Report Cover Page

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 30-Dec-02
Date Reported: 09-Jan-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 02123221

This report includes information regarding the following described samples as received by the laboratory and is only valid for the parameters tested. This report contains 1 results page(s) not including the cover page(s).

Sample No.	Client ID	Site	Locator
02123221-1	PROJECT #91-0118	EX-13;ELEV 633	GRAB

Certified by: Dorothy W. Rothert
Dorothy W. Rothert, Project Manager

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Hazardous/Solid Waste Certifications: Arkansas; Kansas (E-10338); Wisconsin (998294430)
UST Certification: Iowa (240)
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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 30-Dec-02
Date Reported: 09-Jan-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 02123221

Sample No: 02123221-1
Client ID: PROJECT #91-0118
Site: EX-13;ELEV 633
Locator: GRAB
Collect Date: 23-DEC-02 11:05

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	3.0	%	07-Jan-03 15:35	KD

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PEORIA, IL 61615

PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY RECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1			
CLIENT: CLI #3	PROJECT NUMBER: 91-0118	P. O. NUMBER:	MEANS SHIPPED:
ADDRESS:	PHONE NUMBER:	FAX NUMBER:	DATE SHIPPED:
CITY / STATE / ZIP:	SAMPLER (PLEASE PRINT): John Berry	MATRIX TYPES: WW-WASTEWATER, DW-DRINKING WATER, GW-GROUND WATER, WWSL-SLUDGE, NAS-SOLID, OTHER:	
CONTACT PERSON: John Berry	SAMPLER'S SIGNATURE: John Berry		

3 ANALYSIS REQUESTED: Total Organic Content

4 (FOR LAB USE ONLY)
LOGIN # 02125221-1
LOGGED BY: BP
LAB PROJ. #:
TEMPLATE:
PROJ. MGR.:

2 SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT	Total Organic Content	REMARKS
EX-B; Elevation 633	12/23/02	11:05	X		SOIL	1		

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.* _____

7			
RELINQUISHED BY: (SIGNATURE) John R. Berry	DATE 12-24-02 TIME 09:26	RECEIVED BY: (SIGNATURE) Joseph L. Kelly	DATE 12-24-02 TIME 08:26
RELINQUISHED BY: (SIGNATURE) Joseph L. Kelly	DATE 12/30/02 TIME 8:15	RECEIVED AT LAB BY: (SIGNATURE) [illegible] Patterson	DATE 12/31/02 TIME 8:15 am

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 14 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

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Report Cover Page

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 06-Jan-03
Date Reported: 09-Jan-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03011254

This report includes information regarding the following described samples as received by the laboratory and is only valid for the parameters tested. This report contains 2 results page(s) not including the cover page(s).

Sample No.	Client ID	Site	Locator
03011254-1	PROJECT #91-011	EX-12:ELEV 660	GRAB
03011254-2	PROJECT #91-011	EX-~~12~~ 17:ELEV 657	GRAB

Certified by: Dorothy W. Rothert
Dorothy W. Rothert, Project Manager

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Wastewater Certifications: Arkansas; Iowa (240); Kansas (E-10338); Wisconsin (998294430)
Hazardous/Solid Waste Certifications: Arkansas; Kansas (E-10338); Wisconsin (998294430)
UST Certification: Iowa (240)
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ACCREDITED IN ACCORDANCE WITH nelac

Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 06-Jan-03
Date Reported: 09-Jan-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03011254

Sample No: 03011254-1
Client ID: PROJECT #91-011
Site: EX-12:ELEV 660
Locator: GRAB
Collect Date: 27-DEC-02 10:00

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	2.0	%	08-Jan-03 18:03	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 06-Jan-03
Date Reported: 09-Jan-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03011254

Sample No: 03011254-2
Client ID: PROJECT #91-011
Site: EX-~~12~~ 17 ELEV 657
Locator: GRAB
Collect Date: 03-JAN-03 09:15

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	2.0	%	08-Jan-03 18:03	KD

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PDC LABORATORIES, INC.
2231 WEST ALTORFER DRIVE
PEORIA, IL 61615

PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY RECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1			
CLIENT: CLI	PROJECT NUMBER:	P.O. NUMBER:	MEANS SHIPPED: HD.
ADDRESS:	PHONE NUMBER:	FAX NUMBER:	DATE SHIPPED: 1/6/03
CITY / STATE / ZIP:	SAMPLER (PLEASE PRINT): JOHN BERRY		MATRIX TYPES: WW-WASTEWATER, DW-DRINKING WATER, GW-GROUND WATER, WWSL-SLUDGE, NAS-SOLID, OTHER:
CONTACT PERSON: John Berry	SAMPLER'S SIGNATURE: John Berry		

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # 03011254-2
LOGGED BY: [illegible]
LAB PROJ. #
TEMPLATE:
PROJ. MGR.:

2 SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT	TOTAL ORGANIC CONTENT (TOC)							REMARKS
EX-12: ELEVATION 660	12/27/02	10:00	X		SOIL	1	X							
EX-17. ELEVATION 657	1/3/02	9:15	X		SOIL	1	X							

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.*

7			
RELINQUISHED BY: (SIGNATURE) John R. Berry	DATE / TIME	RECEIVED BY: (SIGNATURE) Jennifer Eyes	DATE 1/6 / TIME
RELINQUISHED BY: (SIGNATURE) Jennifer Eyes	DATE 1/6 / TIME 4:05	RECEIVED AT LAB BY: (SIGNATURE) Gina Peterson	DATE 1/6/03 / TIME 16:05

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 9 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

PDC [illegible]ORATORIES, INC.
2231 [illegible]T ALTORFER DRIVE
PEORIA, IL 61615

PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY [illegible]CORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1			
CLIENT: CLE	PROJECT NUMBER	P.O. NUMBER	MEANS SHIPPED
ADDRESS	PHONE NUMBER	FAX NUMBER	DATE SHIPPED
CITY STATE ZIP	SAMPLER (PLEASE PRINT): [illegible]		MATRIX TYPES: WW-WASTEWATER DW-DRINKING WATER GW-GROUND WATER WWSL-SLUDGE NAS-SOLID OTHER:
CONTACT PERSON: JOHN BERRY	SAMPLER'S SIGNATURE: [illegible]		

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN #
LOGGED BY:
LAB PROJ. #
TEMPLATE:
PROJ. MGR.:

2 SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP.	MATRIX TYPE	TOTAL # OF CONT	ANALYSIS	REMARKS
Ex-15 [illegible]	[illegible]	[illegible]	X		[illegible]	1	X	
Ex 15 [illegible]	[illegible]	[illegible]	X		[illegible]	1	X	
[illegible]	[illegible]	[illegible]	X			1	X	
[illegible]	[illegible]	[illegible]	X		[illegible]	1	X	
[illegible]	[illegible]	[illegible]	X		[illegible]	1	X	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	1	X	
[illegible]	[illegible]	[illegible]	[illegible]			1	X	
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	1	X	
[illegible]	[illegible]	[illegible]	X		[illegible]	1	X	
[illegible]	[illegible]	[illegible]	X			1	X	
[illegible]	[illegible]	[illegible]	X		[illegible]	1	X	
[illegible]	[illegible]	[illegible]	X		[illegible]	1	X	

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.*

7			
RELINQUISHED BY: (SIGNATURE) [illegible]	DATE [illegible]	RECEIVED BY: (SIGNATURE) [illegible]	DATE [illegible]
	TIME [illegible]		TIME [illegible]
RELINQUISHED BY: (SIGNATURE) [illegible]	DATE [illegible]	RECEIVED AT LAB BY: (SIGNATURE) [illegible]	DATE [illegible]
	TIME [illegible]		TIME [illegible]

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT [illegible] °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

PDC LABORATORIES, INC.
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PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY RECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1			
CLIENT: CLT	PROJECT NUMBER	P.O. NUMBER	MEANS SHIPPED
ADDRESS	PHONE NUMBER	FAX NUMBER	DATE SHIPPED
CITY STATE ZIP	SAMPLER (PLEASE PRINT): [illegible]		MATRIX TYPES: WW-WASTEWATER, DW-DRINKING WATER, GW-GROUND WATER, WWSL-SLUDGE, NAS-SOLID, OTHER:
CONTACT PERSON: [illegible]	SAMPLER'S SIGNATURE: [illegible]		

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN #
LOGGED BY:
LAB PROJ. #
TEMPLATE:
PROJ. MGR.:

2 SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT	[illegible]							REMARKS
[illegible] 63[illegible]	1/2[illegible]	[illegible]	X		[illegible]	1	X							
[illegible] 632	1/2[illegible]	[illegible]	X			"	X							
EX-14 ELEVATION 66[illegible]	1/22	[illegible]	X			"	X							
EX-14: ELEVATION 646.0	1/22	11[illegible]	X			"	X							

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.*

7			
RELINQUISHED BY: (SIGNATURE) [illegible]	DATE / TIME	RECEIVED BY: (SIGNATURE) [illegible]	DATE [illegible] / TIME 910
RELINQUISHED BY: (SIGNATURE) [illegible]	DATE / TIME [illegible]	RECEIVED AT LAB BY: (SIGNATURE) [illegible]	DATE [illegible] / TIME [illegible]

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT	[illegible] °C
CHILL PROCESS STARTED PRIOR TO RECEIPT	Y OR N
SAMPLE(S) RECEIVED ON ICE	Y OR N
BOTTLES RECEIVED IN GOOD CONDITION	Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME	Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S)	Y OR N

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Report Cover Page

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

This report includes information regarding the following described samples as received by the laboratory and is only valid for the parameters tested. This report contains 16 results page(s) not including the cover page(s).

Sample No.	Client ID	Site	Locator
03012929-1	CLINTON	EX-15	ELEVATION 673
03012929-2	CLINTON	EX-15	ELEVATION 662
03012929-3	CLINTON	EX-15	ELEVATION 657
03012929-4	CLINTON	EX-15	ELEVATION 646
03012929-5	CLINTON	EX-24	ELEVATION 643
03012929-6	CLINTON	EX-24	ELEVATION 636
03012929-7	CLINTON	EX-16	ELEVATION 672.5
03012929-8	CLINTON	EX-16	ELEVATION 669.5
03012929-9	CLINTON	EX-16	ELEVATION 668
03012929-10	CLINTON	EX-16	ELEVATION 634
03012929-11	CLINTON	EX-18	ELEVATION 649
03012929-12	CLINTON	EX-18	ELEVATION 641
03012929-13	CLINTON	EX-18	ELEVATION 638
03012929-14	CLINTON	EX-18	ELEVATION 632

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Report Cover Page

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

This report includes information regarding the following described samples as received by the laboratory and is only valid for the parameters tested. This report contains 16 results page(s) not including the cover page(s).

Sample No.	Client ID	Site	Locator
03012929-15	CLINTON	EX-19	ELEVATION 663
03012929-16	CLINTON	EX-19	ELEVATION 646

Certified by: Dorothy W. Rothert
Dorothy W. Rothert, Project Manager

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State of Illinois Certification for Bacteriological Analysis in Drinking Water -Lab Registry No. 17533
Drinking Water Certifications: Indiana (C-IL-04); Kansas (E-10338); Kentucky (90058); Missouri (00870); Wisconsin (998294430
Wastewater Certifications: Arkansas; Iowa (240); Kansas (E-10338); Wisconsin (998294430)
Hazardous/Solid Waste Certifications: Arkansas; Kansas (E-10338); Wisconsin (998294430)
UST Certification: Iowa (240)
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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-1
Client ID: CLINTON
Site: EX-15
Locator: ELEVATION 673
Collect Date: 07-JAN-03 10:25

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	0.94	%	31-Jan-03 08:35	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-2
Client ID: CLINTON
Site: EX-15
Locator: ELEVATION 662
Collect Date: 07-JAN-03 11:25

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.8	%	31-Jan-03 08:35	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-3
Client ID: CLINTON
Site: EX-15
Locator: ELEVATION 657
Collect Date: 07-JAN-03 11:35

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	0.93	%	31-Jan-03 08:35	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-4
Client ID: CLINTON
Site: EX-15
Locator: ELEVATION 646
Collect Date: 07-JAN-03 13:35

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	0.53	%	31-Jan-03 08:35	KD

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Laboratory Results

Clinton Landfill

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Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-5
Client ID: CLINTON
Site: EX-24
Locator: ELEVATION 643
Collect Date: 09-JAN-03 11:45

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	0.54	%	31-Jan-03 08:35	KD

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Laboratory Results

Clinton Landfill

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Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-6
Client ID: CLINTON
Site: EX-24
Locator: ELEVATION 636
Collect Date: 09-JAN-03 11:45

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	3.7	%	31-Jan-03 08:35	KD

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Laboratory Results

Clinton Landfill

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Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-7
Client ID: CLINTON
Site: EX-16
Locator: ELEVATION 672.5
Collect Date: 15-JAN-03 10:05

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.0	%	31-Jan-03 08:35	KD

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Laboratory Results

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Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-8
Client ID: CLINTON
Site: EX-16
Locator: ELEVATION 669.5
Collect Date: 15-JAN-03 10:05

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.1	%	31-Jan-03 08:35	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
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Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-9
Client ID: CLINTON
Site: EX-16
Locator: ELEVATION 668
Collect Date: 15-JAN-03 10:05

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	7.9	%	31-Jan-03 08:35	KD

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Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-10
Client ID: CLINTON
Site: EX-16
Locator: ELEVATION 634
Collect Date: 15-JAN-03 10:05

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	7.3	%	31-Jan-03 08:35	KD

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Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-11
Client ID: CLINTON
Site: EX-18
Locator: ELEVATION 649
Collect Date: 20-JAN-03 11:25

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.2	%	06-Feb-03 14:50	KD

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Laboratory Results

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Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-12
Client ID: CLINTON
Site: EX-18
Locator: ELEVATION 641
Collect Date: 20-JAN-03 11:25

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	0.56	%	31-Jan-03 08:35	KD

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Laboratory Results

Clinton Landfill

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Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-13
Client ID: CLINTON
Site: EX-18
Locator: ELEVATION 638
Collect Date: 20-JAN-03 11:25

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	0.49	%	31-Jan-03 08:35	KD

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Laboratory Results

Clinton Landfill

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Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-14
Client ID: CLINTON
Site: EX-18
Locator: ELEVATION 632
Collect Date: 20-JAN-03 11:25

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.9	%	31-Jan-03 08:35	KD

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Laboratory Results

Clinton Landfill

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Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-15
Client ID: CLINTON
Site: EX-19
Locator: ELEVATION 663
Collect Date: 22-JAN-03 10:30

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	2.5	%	31-Jan-03 08:35	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 23-Jan-03
Date Reported: 07-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03012929

Sample No: 03012929-16
Client ID: CLINTON
Site: EX-19
Locator: ELEVATION 646
Collect Date: 22-JAN-03 10:30

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	0.57	%	31-Jan-03 08:35	KD

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PDC LABORATORIES, INC.
2231 EAST ALTORFER DRIVE
PEORIA, IL 61615

PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY RECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

(1) CLIENT: CLI	PROJECT NUMBER	P.O. NUMBER	MEANS SHIPPED
ADDRESS	PHONE NUMBER	FAX NUMBER	DATE SHIPPED
CITY / STATE / ZIP	SAMPLER (PLEASE PRINT): John Berry		MATRIX TYPES: WW-WASTEWATER, DW-DRINKING WATER, GW-GROUND WATER, WWSL-SLUDGE, NAS-SOLID, OTHER:
CONTACT PERSON: JOHN BERRY	SAMPLER'S SIGNATURE: John R Berry		

(3) ANALYSIS REQUESTED: Total Organic Content (TOC)

(4) (FOR LAB USE ONLY)
LOGIN # 03012928
LOGGED BY: JM
LAB PROJ. #
TEMPLATE:
PROJ. MGR.:

(2) SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT	Total Organic Content (TOC)	REMARKS
EX-15; ELEVATION 673	1/7/03	10:25	X		SOIL	1	X	
EX-15; ELEVATION 662	1/7/03	11:25	X		SOIL	1	X	
EX-15; ELEVATION 657	1/7/03	11:35	X		SOIL	1	X	
EX-15; ELEVATION 646	1/7/03	1:35	X		"	1	X	
EX-24; ELEVATION 643	1/9/03	11:45	X		"	1	X	
EX-24; ELEVATION 636	1/9/03	2:30p	X		"	1	X	
EX-16; ELEVATION 672.5	1/15/03	10:45	X		"	1	X	
EX-16; ELEVATION 669.5	1/15/03	10:45	X		"	1	X	
EX-16; ELEVATION 668	1/15/03	10:45	X		"	1	X	
EX-16; ELEVATION 634	1/15/03	2:45	X		"	1	X	
EX-18; ELEVATION 649	1/20/03	11:25	X		"	1	X	
EX-18; ELEVATION 641	1/20/03	12:00	X		"	1	X	

(5) TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

(6) *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.* _____

(7) RELINQUISHED BY: (SIGNATURE)	DATE	RECEIVED BY: (SIGNATURE)	DATE
John R Berry	1-23-03	[signature]	1-23-03
	TIME 900		TIME 900
RELINQUISHED BY: (SIGNATURE)	DATE	RECEIVED AT LAB BY: (SIGNATURE)	DATE
[signature]	1-23-03	J Stanton	1/23/03
	TIME 1400		TIME 14:00

(8) COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT -2 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

PDC LABORATORIES, INC.
2231 WEST ALTORFER DRIVE
PEORIA, IL 61615

PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY RECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1

CLIENT: CLI	PROJECT NUMBER	P.O. NUMBER	MEANS SHIPPED
ADDRESS	PHONE NUMBER	FAX NUMBER	DATE SHIPPED
CITY STATE ZIP	SAMPLER (PLEASE PRINT): JOHN BERRY		
CONTACT PERSON: JOHN BERRY	SAMPLER'S SIGNATURE: John Berry		

MATRIX TYPES:
WW-WASTEWATER
DW-DRINKING WATER
GW-GROUND WATER
WWSL-SLUDGE
NAS-SOLID
OTHER: _____

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # 03012929
LOGGED BY: TH
LAB PROJ. # _____
TEMPLATE: _____
PROJ. MGR.: _____

2

SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT	TOTAL ORGANIC CONTENT (TOC)							REMARKS
EX-19, ELEVATION: 638	1/20/03	2:25	X		SOIL	1	X							
EX-19; ELEVATION 632	1/20/03	2:35	X		"	"	X							
EX-19: ELEVATION 663.0	1/22/03	10 30	X		"	"	X							
EX-19: ELEVATION 646.0	1/22/03	1130	X		"	"	X							

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.* _____

7

RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	DATE / TIME
John R. Berry	1-23-03 / 900	[signature]	1-23-03 / 400
RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED AT LAB BY: (SIGNATURE)	DATE / TIME
[signature]	1-23-03 / 1400	J Stanton	1/23/03 / 14:00

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT -2 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

PDC LABORATORIES, INC.
2231 EAST ALTORFER DRIVE
PEORIA, IL 61615

PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY RECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1			
CLIENT: CLT	PROJECT NUMBER: 91-114	P.O. NUMBER	MEANS SHIPPED
ADDRESS	PHONE NUMBER	FAX NUMBER	DATE SHIPPED
CITY STATE ZIP	SAMPLER (PLEASE PRINT)		MATRIX TYPES: WW-WASTEWATER DW-DRINKING WATER GW-GROUND WATER WWSL-SLUDGE NAS-SOLID OTHER:
CONTACT PERSON: John Perry	SAMPLER'S SIGNATURE		

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN #
LOGGED BY:
LAB PROJ. #
TEMPLATE:
PROJ. MGR.:

2 SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT								REMARKS
EX 12 [illegible]	[illegible]	[illegible]	X		[illegible]	1	X							
EX 12 [illegible]	[illegible]	[illegible]	X		[illegible]	1	X							
EX 12 648	[illegible]	[illegible]	X		[illegible]	1	X							
EX 27 644	[illegible]	11	X		[illegible]	1	X							
~~EX 21 [illegible]~~	~~1-24~~		~~X~~			~~1~~	~~X~~							
EX 21 [illegible]	1-24	[illegible]	X		[illegible]	1	X							
EX 21 675	1-24	425	X			1	X							
EX 21 [illegible]	1-26	1140	X		[illegible]	1	X							
EX 21 [illegible]	1-26	1020	X		[illegible]	1	X							
EX 21 643	[illegible]	1040	X		[illegible]	1	X							
EX 10 [illegible]			X		[illegible]	[illegible]	X							
EX 10 [illegible]			X			1	X							

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.*

7			
RELINQUISHED BY: (SIGNATURE) [signature]	DATE [illegible]	RECEIVED BY: (SIGNATURE)	DATE TIME
	TIME 2:10		
RELINQUISHED BY: (SIGNATURE)	DATE	RECEIVED AT LAB BY: (SIGNATURE) [signature]	DATE 2/7/03
	TIME		TIME 2:20

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 2 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

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ACCREDITED IN ACCORDANCE WITH nelac

Report Cover Page

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

This report includes information regarding the following described samples as received by the laboratory and is only valid for the parameters tested. This report contains 11 results page(s) not including the cover page(s).

Sample No.	Client ID	Site	Locator
03021695-1	PROJECT# 91-118	EX-22	660
03021695-2	PROJECT# 91-118	EX-22	655
03021695-3	PROJECT# 91-118	EX-22	648
03021695-4	PROJECT# 91-118	EX-22	644
03021695-5	PROJECT# 91-118	EX-21	690
03021695-6	PROJECT# 91-118	EX-21	675
03021695-7	PROJECT# 91-118	EX-21	670
03021695-8	PROJECT# 91-118	EX-21	652
03021695-9	PROJECT# 91-118	EX-21	643
03021695-10	PROJECT# 91-118	EX-20	665
03021695-11	PROJECT# 91-118	EX-20	645

Certified by: Dorothy W. Rothert
Dorothy W. Rothert, Project Manager

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State of Illinois Certification for Bacteriological Analysis in Drinking Water -Lab Registry No. 17533
Drinking Water Certifications: Indiana (C-IL-04); Kansas (E-10338); Kentucky (90058); Missouri (00870); Wisconsin (998294430
Wastewater Certifications: Arkansas; Iowa (240); Kansas (E-10338); Wisconsin (998294430)
Hazardous/Solid Waste Certifications: Arkansas; Kansas (E-10338); Wisconsin (998294430)
UST Certification: Iowa (240)
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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-1
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 660
Collect Date: 28-JAN-03 10:10

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.4	%	11-Feb-03 15:03	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-2
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 655
Collect Date: 28-JAN-03 10:30

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	2.5	%	10-Feb-03 14:25	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-3
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 648
Collect Date: 28-JAN-03 11:05

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.3	%	10-Feb-03 14:25	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-4
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 644
Collect Date: 28-JAN-03 11:30

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.4	%	10-Feb-03 14:25	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
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Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-3
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 648
Collect Date: 28-JAN-03 11:05

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.3	%	10-Feb-03 14:25	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
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Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-4
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 644
Collect Date: 28-JAN-03 11:30

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.4	%	10-Feb-03 14:25	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
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Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-3
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 648
Collect Date: 28-JAN-03 11:05

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.3	%	10-Feb-03 14:25	KD

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Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-4
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 644
Collect Date: 28-JAN-03 11:30

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.4	%	10-Feb-03 14:25	KD

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Laboratory Results

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Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-3
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 648
Collect Date: 28-JAN-03 11:05

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.3	%	10-Feb-03 14:25	KD

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Clinton Landfill

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Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-4
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 644
Collect Date: 28-JAN-03 11:30

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.4	%	10-Feb-03 14:25	KD

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Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-3
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 648
Collect Date: 28-JAN-03 11:05

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.3	%	10-Feb-03 14:25	KD

recycled paper

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Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-4
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 644
Collect Date: 28-JAN-03 11:30

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.4	%	10-Feb-03 14:25	KD

recycled paper

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Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-3
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 648
Collect Date: 28-JAN-03 11:05

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.3	%	10-Feb-03 14:25	KD

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Laboratory Results

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Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-4
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 644
Collect Date: 28-JAN-03 11:30

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.4	%	10-Feb-03 14:25	KD

recycled paper

PDC Laboratories, Inc.
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ACCREDITED IN ACCORDANCE WITH nelac

Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-5
Client ID: PROJECT# 91-118
Site: EX-21
Locator: 690
Collect Date: 29-JAN-03 16:00

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.4	%	10-Feb-03 14:25	KD

recycled paper

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ACCREDITED IN ACCORDANCE WITH nelac

Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-6
Client ID: PROJECT# 91-118
Site: EX-21
Locator: 675
Collect Date: 29-JAN-03 16:25

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.6	%	10-Feb-03 14:25	KD

recycled paper

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ACCREDITED IN ACCORDANCE WITH nelac

Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-3
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 648
Collect Date: 28-JAN-03 11:05

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.3	%	10-Feb-03 14:25	KD

recycled paper

PDC Laboratories, Inc.
P.O. Box 9071 • Peoria, IL 61612-9071
(309) 692-9688 • (800) 752-6651 • FAX (309) 692-9689

ACCREDITED IN ACCORDANCE WITH nelac

Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-4
Client ID: PROJECT# 91-118
Site: EX-22
Locator: 644
Collect Date: 28-JAN-03 11:30

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.4	%	10-Feb-03 14:25	KD

recycled paper

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-5
Client ID: PROJECT# 91-118
Site: EX-21
Locator: 690
Collect Date: 29-JAN-03 16:00

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.4	%	10-Feb-03 14:25	KD

recycled paper

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-6
Client ID: PROJECT# 91-118
Site: EX-21
Locator: 675
Collect Date: 29-JAN-03 16:25

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.6	%	10-Feb-03 14:25	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-7
Client ID: PROJECT# 91-118
Site: EX-21
Locator: 670
Collect Date: 30-JAN-03 09:40

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	5.7	%	10-Feb-03 14:25	KD

recycled paper

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-8
Client ID: PROJECT# 91-118
Site: EX-21
Locator: 652
Collect Date: 30-JAN-03 10:20

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.0	%	10-Feb-03 14:25	KD

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-9
Client ID: PROJECT# 91-118
Site: EX-21
Locator: 643
Collect Date: 30-JAN-03 10:40

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	0.93	%	10-Feb-03 14:25	KD

recycled paper

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-10
Client ID: PROJECT# 91-118
Site: EX-20
Locator: 665
Collect Date: 30-JAN-03

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	2.2	%	10-Feb-03 14:25	KD

recycled paper

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Laboratory Results

Clinton Landfill

PO Box 9071
Peoria, IL 61612

Attn: Mr. John Berry

Date Received: 07-Feb-03
Date Reported: 13-Feb-03
PO #: Clinton
PDC Cust. # : 280105

Login No. 03021695

Sample No: 03021695-11
Client ID: PROJECT# 91-118
Site: EX-20
Locator: 645
Collect Date: 30-JAN-03

Parameter	Result	Units	Date	By
ASTM STANDARD D2974				
Total Organic Content	1.1	%	11-Feb-03 15:03	KD

recycled paper

PDC LABORATORIES, INC.
2231 WEST ALTORFER DRIVE
PEORIA, IL 61615

PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY RECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT: CLI

ADDRESS:

CITY / STATE / ZIP:

CONTACT PERSON: John Berry

PROJECT NUMBER: 91-118

P. O. NUMBER:

MEANS SHIPPED:

PHONE NUMBER:

FAX NUMBER:

DATE SHIPPED:

SAMPLER (PLEASE PRINT): Monte Kuhn

SAMPLER'S SIGNATURE: [signature]

MATRIX TYPES:
WW-WASTEWATER
DW-DRINKING WATER
GW-GROUND WATER
WWSL-SLUDGE
NAS-SOLID
OTHER: _____

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # 03021695
LOGGED BY: TM
LAB PROJ. # _____
TEMPLATE: _____
PROJ. MGR.: _____

2 SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT	TOC (Total Organic Carbon)							REMARKS
EX-22 660	1-28-03	1010	X		Soil	1	X							
EX-22 655	1-28-03	1030	X		"	1	X							
EX-22 648	1-28-03	1105	X		"	1	X							
EX-22 644	1-28-03	1130	X		"	1	X							
~~EX-21 MK 1-30-03~~	1-29		X		"	1	X							
EX-21 690	1-29-03	400	X		"	1	X							
EX-21 675	1-29-03	425	X		"	1	X							
EX-21 670	1-30-03	940	X		"	1	X							
EX-21 652	1-30-03	1020	X		"	1	X							
EX-21 643	1-30-03	1040	X		"	1	X							
EX-20 665			X		"	1	X							
EX-20 645			X		"	1	X							

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE:
PHONE # IF DIFFERENT FROM ABOVE:

6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.* _____

7 RELINQUISHED BY: (SIGNATURE) [signature] DATE 2-7-03 TIME 2:20
RECEIVED BY: (SIGNATURE) DATE TIME

RELINQUISHED BY: (SIGNATURE) DATE TIME
RECEIVED AT LAB BY: (SIGNATURE) J Stanlin DATE 2/7/03 TIME 2:20

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 2 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

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Report Cover Page

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 10-Apr-00
Date Reported: 23-May-00
PO #: Clinton
PDC Cust. # : 280105

Login No. 00041639

This report includes information regarding the following described samples as received by the laboratory and is only valid for the parameters tested. This report contains 2 results page(s) not including the cover page(s).

Sample No.	Client ID	Site	Locator	Tests/Services
00041639-1	CLINTON EXPANSION EX-4 67'		GRAB	
				Cation Exchange Capacity
				Total Organic Carbon
00041639-2	CLINTON EXPANSION EX-4 82'		GRAB	
				Cation Exchange Capacity
				Total Organic Carbon

Certified by: Dorothy W. Rothert
Dorothy W. Rothert, Project Manager

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State of Illinois Bacteriological Analysis in Drinking Water Certified Lab Registry No. 17533
State of Arkansas Certified Wastewater and Hazardous Waste Lab
State of Indiana Certified Drinking Water Lab No. C-IL-04
State of Iowa Certified Wastewater Lab No. 240
American Industrial Hygiene Association Bulk/Air Asbestos Proficiency Program Lab ID No. 101206
State of North Dakota Wastewater and Hazardous Waste CertifiedLab No. R-094
State of Wisconsin Certified Wastewater and Hazardous Waste Lab ID No. 998294430
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Laboratory Results

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 10-Apr-00
Date Reported: 23-May-00
PO #: Clinton
PDC Cust. # : 280105

Login No. 00041639

Sample No: 00041639-1
Client ID: CLINTON EXPANSION
Site: EX-4 67'
Locator: GRAB
Collect Date: 06-APR-00 15:50

Parameter	Result	Units	Date	By
SW-846 METHOD 9081				
Cationic Exchange Capacity	0.800	meq / 100g	13-Apr-00 19:00	EKL
SUBCONTRACTED - Report Attached				
Carbon, Total Organic				

recycled paper

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Laboratory Results

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 10-Apr-00
Date Reported: 23-May-00
PO #: Clinton
PDC Cust. # : 280105

Login No. 00041639

Sample No: 00041639-2
Client ID: CLINTON EXPANSION
Site: EX-4 82'
Locator: GRAB
Collect Date: 06-APR-00 16:50

Parameter	Result	Units	Date	By
SW-846 METHOD 9081				
Cationic Exchange Capacity	1.65	meq / 100g	13-Apr-00 19:00	EKL
SUBCONTRACTED - Report Attached				
Carbon, Total Organic				

recycled paper

SUBURBAN LABORATORIES, Inc.
4140 Litt Drive • Hillside, Illinois 60162-1183
Tel. (708) 544-3260 • Toll Free (800) 783-LABS • Fax (708) 544-8587

April 20, 2000

Dorothy Rothert
PDC Laboratories
P.O. Box 9071
Peoria, IL 61612-9071
TEL: 309-692-9688
FAX 309-692-9689

RE: 00041639-1 & 2 Order No.: 0004287

Dear Dorothy Rothert,

Suburban Laboratories, Inc. received 2 samples on 4/12/00 9:30:00 AM for the analyses presented in the following report.

There were no problems with the analyses and all the data for the associated QC met EPA or laboratory specifications except where noted in the case narrative.

This report consists of this final report of laboratory analysis, and any accompanying documentation including, but not limited to, chain of custody records, raw data, and letters of explanation or reliance. This report may not be reproduced, except in full, without the prior written approval of Suburban Laboratories, Inc.

If you have any questions regarding these test results, please call your customer service representative at (708) 544-3260.

Sincerely,

Mike Chung
Laboratory Director

CC:

Suburban Laboratories, Inc. **Date:** *19-Apr-00*

CLIENT: PDC Laboratories
Project: 00041639-1 & 2
Lab Order: 0004287

CASE NARRATIVE

General Comments:
- All results reported in wet weight unless otherwise indicated. (dry = Dry Weight)
- Sample results relate only to the analytes of interest tested and to sample as received by the laboratory.
- Environmental compliance sample results meet the requirements of Part 186 unless otherwise indicated.
- Accreditation by the State of Illinois is not an endorsement or a guarantee of the validity of data generated. For more information about the laboratories' scope of accreditation, please contact Suburban or the Agency.
- Limit: The lowest concentration that can be reliably achieved within specified requirements of precision and accuracy during routine laboratory operating conditions. Limit may also represent a project or client specific reporting level.

Data Qualifiers:
U: The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ: The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limits approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
H: The holding time for the sample has been exceeded.
R: The sample results are rejected due to serious deficiencies in the ability to analyze the sample and/or meet quality control criteria. The presence or absence of the analyte cannot be verified.
I: Invalid; CS: Compound Screened; TNTC: Too Numerous to Count

Method References:
E: USEPA Methods for the Determination of Inorganic Substances in Environmental Samples; Methods for Chemical Analysis of Water and Wastes; Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, 40CFR136 App A; Methods for the Determination of Metals in Environmental Samples; Methods for the Determination of Organic Compounds in Drinking Water
SW: USEPA, Test Methods for Evaluating Solid Waste, SW-846, 3rd Ed, includes Updates I-III
M: APHA, Standard Methods for the Examination of Water and Wastewater, 18th & 19th Ed.
D: ASTM, Annual Book of Standards F: NAS, Food Chemicals Codex (FCC), 3rd Edition
B: US FDA Bacteriological Analytical Manual (BAM) 8th Edition, 1995
USP: US Pharmacopoeia, 22nd Revision, 1990

Project Specific Comments:
None

Suburban Laboratories, Inc.

Date: *19-Apr-00*

CLIENT:	PDC Laboratories	**Client Sample ID:**	00041639-1 grab
Lab Order:	0004287	**Tag Number:**	
Project:	00041639-1 & 2	**Collection Date:**	4/6/00 3:50:00 PM
Lab ID:	0004287-01A	**Matrix:**	SOIL

Analyses	Result	Qual	MDL	Limit	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON		**SW9060**					Analyst: **SH**
Total Organic Carbon	93.5		10	30.0	mg/Kg	1	4/18/00 11:00:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Suburban Laboratories, Inc.

Date: *19-Apr-00*

CLIENT:	PDC Laboratories	**Client Sample ID:**	00041639-2 grab
Lab Order:	0004287	**Tag Number:**	
Project:	00041639-1 & 2	**Collection Date:**	4/6/00 4:50:00 PM
Lab ID:	0004287-02A	**Matrix:**	SOIL

Analyses	Result	Qual	MDL	Limit	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON		**SW9060**					Analyst: **SH**
Total Organic Carbon	72.3		10	30.0	mg/Kg	1	4/18/00 11:00:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Lab Order: 0004287
Client: PDC Laboratories
Project: 00041639-1 & 2

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0004287-01A	00041639-1 grab	4/6/00 3:50:00 PM	Soil	TOTAL ORGANIC CARBON			4/18/00
0004287-02A	00041639-2 grab	4/6/00 4:50:00 PM		TOTAL ORGANIC CARBON			4/18/00

PDC LABORATORIES, INC.
2231 WEST ALTORFER DRIVE
PEORIA, IL 61615

PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY RECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT: CLINTON LANDFILL, INC. - EXPANSION
ADDRESS:
CITY, STATE, ZIP:
CONTACT PERSON: JOHN BERRY

PROJECT NUMBER:
P.O. NUMBER:
MEANS SHIPPED:
PHONE NUMBER:
FAX NUMBER:
DATE SHIPPED:

SAMPLER (PLEASE PRINT): JOHN BERRY
SAMPLER'S SIGNATURE: John R. Berry

MATRIX TYPES:
WW-WASTEWATER
DW-DRINKING WATER
GW-GROUND WATER
WWSL-SLUDGE
NAS-SOLID
OTHER: _____

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # 00041639
LOGGED BY: JAB
LAB PROJ. #:
TEMPLATE:
PROJ. MGR.:

2 SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT	CATION/EXCHANGE CAPACITY	TOTAL ORGANIC CARBON					REMARKS
EX-4 67'	4-6-2000	3:50	X				X	X					
EX-4 82'	4-6-2000	4:50	X				X	X					

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.* _____

7 RELINQUISHED BY: (SIGNATURE) John R. Berry — DATE / TIME
RECEIVED BY: (SIGNATURE) — DATE / TIME
RELINQUISHED BY: (SIGNATURE) — DATE / TIME
RECEIVED AT LAB BY: (SIGNATURE) Judy Stout — DATE 4/10/00 / TIME 1:10

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 11 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

PDC L[illegible]RATORIES, INC.
2231 WEST ALTORFER DRIVE
PEORIA, IL 61615

PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY [illegible]ORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1			
CLIENT: PDC	PROJECT NUMBER:	P.O. NUMBER: 9972	MEANS SHIPPED: UPS
ADDRESS:	PHONE NUMBER:	FAX NUMBER:	DATE SHIPPED: 4-11-00
CITY / STATE / ZIP:	SAMPLER (PLEASE PRINT):		MATRIX TYPES: WW-WASTEWATER, DW-DRINKING WATER, GW-GROUND WATER, WWSL-SLUDGE, NAS-SOLID, OTHER:
CONTACT PERSON: Dorothy Rothert	SAMPLER'S SIGNATURE:		

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN #
LOGGED BY:
LAB PROJ. #
TEMPLATE:
PROJ. MGR.:

2 SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT	TOC							REMARKS
00041639-1	4-6-00	3:50	✓		NAS	1	✓							
-2	4-6-00	4:50	✓		NAS	1	✓							

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) (RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE) NORMAL RUSH
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.*

7			
RELINQUISHED BY: (SIGNATURE): [signature]	DATE: 4-11-00 TIME: 4:00	RECEIVED BY: (SIGNATURE)	DATE / TIME
RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED AT LAB BY: (SIGNATURE)	DATE / TIME

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT _____ °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

PDC Laboratories, Inc.
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Report Cover Page

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 06-Apr-00
Date Reported: 19-Apr-00
PO #: Clinton

Login No. 00041417

This report includes information regarding the following described samples as received by the laboratory and is only valid for the parameters tested. This report contains 3 results page(s) not including the cover page(s).

Sample No.	Client ID	Site	Locator	Tests/Services
00041417-1	91-118.02	EX-5 72'-73'	GRAB	
				Cation Exchange Capacity
				Total Organic Carbon
00041417-2	91-118.02	EX-5 82'-83'	GRAB	
				Cation Exchange Capacity
				Total Organic Carbon
00041417-3	91-118.02	EX-5 91.5'	GRAB	
				Cation Exchange Capacity
				Total Organic Carbon

Certified by: Dorothy W. Rothert
Dorothy W. Rothert, Project Manager

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State of Illinois Bacteriological Analysis in Drinking Water Certified Lab Registry No. 17533
State of Arkansas Certified Wastewater and Hazardous Waste Lab
State of Indiana Certified Drinking Water Lab No. C-IL-04
State of Iowa Certified Wastewater Lab No. 240
American Industrial Hygiene Association Bulk/Air Asbestos Proficiency Program Lab ID No. 101206
State of North Dakota Wastewater and Hazardous Waste CertifiedLab No. R-094
State of Wisconsin Certified Wastewater and Hazardous Waste Lab ID No. 998294430
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Laboratory Results

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 06-Apr-00
Date Reported: 19-Apr-00
PO #: Clinton
PDC Cust. # : 280105

Login No. 00041417

Sample No: 00041417-1
Client ID: 91-118.02
Site: EX-5 72'-73'
Locator: GRAB
Collect Date: 04-APR-00 15:50

Parameter	Result	Units	Date	By
SW-846 METHOD 9081				
Cationic Exchange Capacity	0.950	meq / 100g	13-Apr-00 19:00	EKL
SUBCONTRACTED - Report Attached				
Carbon, Total Organic				

recycled paper

PDC Laboratories, Inc.
P.O. Box 9071 • Peoria, IL 61612-9071
(309) 692-9688 • (800) 752-6651 • FAX (309) 692-9689

Laboratory Results

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 06-Apr-00
Date Reported: 19-Apr-00
PO #: Clinton
PDC Cust. # : 280105

Login No. 00041417

Sample No: 00041417-2
Client ID: 91-118.02
Site: EX-5 82'-83'
Locator: GRAB
Collect Date: 05-APR-00 10:50

Parameter	Result	Units	Date	By
SW-846 METHOD 9081				
Cationic Exchange Capacity	1.38	meq / 100g	13-Apr-00 19:00	EKL
SUBCONTRACTED - Report Attached				
Carbon, Total Organic				

recycled paper

PDC Laboratories, Inc.
P.O. Box 9071 • Peoria, IL 61612-9071
(309) 692-9688 • (800) 752-6651 • FAX (309) 692-9689

Laboratory Results

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 06-Apr-00
Date Reported: 19-Apr-00
PO #: Clinton
PDC Cust. # : 280105

Login No. 00041417

Sample No: 00041417-3
Client ID: 91-118.02
Site: EX-5 91.5'
Locator: GRAB
Collect Date: 05-APR-00 11:15

Parameter	Result	Units	Date	By
SW-846 METHOD 9081				
Cationic Exchange Capacity	1.65	meq / 100g	13-Apr-00 19:00	EKL
SUBCONTRACTED - Report Attached				
Carbon, Total Organic				

recycled paper

SUBURBAN LABORATORIES, Inc.
4140 Litt Drive • Hillside, Illinois 60162-1183
Tel. (708) 544-3260 • Toll Free (800) 783-LABS • Fax (708) 544-8587

April 12, 2000

Dorothy W. Rothett
PDC Laboratories
P.O. Box 9071
Peoria, IL 61612-9071
TEL: 309-692-9688
FAX 309-692-9689

RE: 00041416-1-2/00041417-1-2-3 Order No.: 0004192

Dear Dorothy W. Rothett,

Suburban Laboratories, Inc. received 5 samples on 4/10/00 9:00:00 AM for the analyses presented in the following report.

There were no problems with the analyses and all the data for the associated QC met EPA or laboratory specifications except where noted in the case narrative.

This report consists of this final report of laboratory analysis, and any accompanying documentation including, but not limited to, chain of custody records, raw data, and letters of explanation or reliance. This report may not be reproduced, except in full, without the prior written approval of Suburban Laboratories, Inc.

If you have any questions regarding these test results, please call your customer service representative at (708) 544-3260.

Sincerely,

Mike Chung
Laboratory Director

CC:

Suburban Laboratories, Inc. **Date:** *12-Apr-00*

CLIENT: PDC Laboratories
Project: 00041416-1-2/00041417-1-2-3
Lab Order: 0004192

CASE NARRATIVE

General Comments:
- All results reported in wet weight unless otherwise indicated. (dry = Dry Weight)
- Sample results relate only to the analytes of interest tested and to sample as received by the laboratory.
- Environmental compliance sample results meet the requirements of Part 186 unless otherwise indicated.
- Accreditation by the State of Illinois is not an endorsement or a guarantee of the validity of data generated. For more information about the laboratories' scope of accreditation, please contact Suburban or the Agency.
- Limit: The lowest concentration that can be reliably achieved within specified requirements of precision and accuracy during routine laboratory operating conditions. Limit may also represent a project or client specific reporting level.

Data Qualifiers:
U: The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ: The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limits approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
H: The holding time for the sample has been exceeded.
R: The sample results are rejected due to serious deficiencies in the ability to analyze the sample and/or meet quality control criteria. The presence or absence of the analyte cannot be verified.
I: Invalid; CS: Compound Screened; TNTC: Too Numerous to Count

Method References:
E: USEPA Methods for the Determination of Inorganic Substances in Environmental Samples; Methods for Chemical Analysis of Water and Wastes; Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, 40CFR136 App A; Methods for the Determination of Metals in Environmental Samples; Methods for the Determination of Organic Compounds in Drinking Water
SW: USEPA, Test Methods for Evaluating Solid Waste, SW-846, 3rd Ed, includes Updates I-III
M: APHA, Standard Methods for the Examination of Water and Wastewater, 18th & 19th Ed.
D: ASTM, Annual Book of Standards F: NAS, Food Chemicals Codex (FCC), 3rd Edition
B: US FDA Bacteriological Analytical Manual (BAM) 8th Edition, 1995
USP: US Pharmacopoeia, 22nd Revision, 1990

Project Specific Comments:
None

Suburban Laboratories, Inc.

Date: *12-Apr-00*

CLIENT:	PDC Laboratories	**Client Sample ID:**	00041416-1 grab
Lab Order:	0004192	**Tag Number:**	
Project:	00041416-1-2/00041417-1-2-3	**Collection Date:**	4/3/00 10:25:00 AM
Lab ID:	0004192-01A	**Matrix:**	SOIL

Analyses	Result	Qual	MDL	Limit	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON		**SW9060**					Analyst: **SH**
Total Organic Carbon	216		10	30.0	mg/Kg	1	4/11/00 11:30:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Suburban Laboratories, Inc.

Date: *12-Apr-00*

CLIENT:	PDC Laboratories	**Client Sample ID:**	00041416-2 grab
Lab Order:	0004192	**Tag Number:**	
Project:	00041416-1-2/00041417-1-2-3	**Collection Date:**	4/3/00 11:45:00 AM
Lab ID:	0004192-02A	**Matrix:**	SOIL

Analyses	Result	Qual	MDL	Limit	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON		**SW9060**				Analyst: **SH**	
Total Organic Carbon	3,090		10	30.0	mg/Kg	1	4/11/00 11:30:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Suburban Laboratories, Inc.

Date: *12-Apr-00*

CLIENT:	PDC Laboratories	**Client Sample ID:**	00041417-1 grab
Lab Order:	0004192	**Tag Number:**	
Project:	00041416-1-2/00041417-1-2-3	**Collection Date:**	4/4/00 3:50:00 PM
Lab ID:	0004192-03A	**Matrix:**	SOIL

Analyses	Result	Qual	MDL	Limit	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON		**SW9060**				Analyst: **SH**	
Total Organic Carbon	3,320		10	30.0	mg/Kg	1	4/11/00 11:30:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Suburban Laboratories, Inc.

Date: *12-Apr-00*

CLIENT:	PDC Laboratories	**Client Sample ID:**	00041417-2 grab
Lab Order:	0004192	**Tag Number:**	
Project:	00041416-1-2/00041417-1-2-3	**Collection Date:**	4/5/00 10:50:00 AM
Lab ID:	0004192-04A	**Matrix:**	SOIL

Analyses	Result	Qual	MDL	Limit	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON		**SW9060**				Analyst: **SH**	
Total Organic Carbon	3,290		10	30.0	mg/Kg	1	4/11/00 11:30:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Suburban Laboratories, Inc.

Date: *12-Apr-00*

CLIENT:	PDC Laboratories	**Client Sample ID:**	00041417-3 grab
Lab Order:	0004192	**Tag Number:**	
Project:	00041416-1-2/00041417-1-2-3	**Collection Date:**	4/5/00 11:15:00 AM
Lab ID:	0004192-05A	**Matrix:**	SOIL

Analyses	Result	Qual	MDL	Limit	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON		**SW9060**					Analyst: **SH**
Total Organic Carbon	3,870		10	30.0	mg/Kg	1	4/11/00 11:30:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Suburban Laboratories, Inc.

12-Apr-00

Lab Order: 0004192
Client: PDC Laboratories
Project: 00041416-1-2/00041417-1-2-3

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0004192-01A	00041416-1 grab	4/3/00 10:25:00 AM	Soil	TOTAL ORGANIC CARBON			4/11/00
0004192-02A	00041416-2 grab	4/3/00 11:45:00 AM		TOTAL ORGANIC CARBON			4/11/00
0004192-03A	00041417-1 grab	4/4/00 3:50:00 PM		TOTAL ORGANIC CARBON			4/11/00
0004192-04A	00041417-2 grab	4/5/00 10:50:00 AM		TOTAL ORGANIC CARBON			4/11/00
0004192-05A	00041417-3 grab	4/5/00 11:15:00 AM		TOTAL ORGANIC CARBON			4/11/00

PDC LABORATORIES, INC.
2231 WEST ALTORFER DRIVE
PEORIA, IL 61615

PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY RECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1

CLIENT: CLINTON LANDFILL, - EXPANSION

ADDRESS:

CITY
STATE
ZIP:

CONTACT PERSON: JOHN BERRY

PROJECT NUMBER:

PHONE NUMBER:

P.O. NUMBER:

FAX NUMBER:

MEANS SHIPPED:

DATE SHIPPED:

SAMPLER (PLEASE PRINT): JOHN BERRY

SAMPLER'S SIGNATURE: John Berry

MATRIX TYPES:
WW-WASTEWATER
DW-DRINKING WATER
GW-GROUND WATER
WWSL-SLUDGE
NAS-SOLID
OTHER: _____

ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)

LOGIN # 0004 1417-3
LOGGED BY: RMP
LAB PROJ. #:
TEMPLATE:
PROJ. MGR.:

2

SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT.	TOTAL ORGANIC CARBON	CATION EXCHANGE CAPACITY					REMARKS
EX-5 72-73'	4-4-00	3:50p	X		SOIL	1	X	X					
EX-5 82'-83'	4-5-00	10:50am	X		SOIL	1	X	X					
EX-5 91.5	4-5	1615	X		SOIL	1	X	X					

5

TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)

RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE

FAX # IF DIFFERENT FROM ABOVE:

PHONE # IF DIFFERENT FROM ABOVE:

6

The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.

8

7

RELINQUISHED BY: (SIGNATURE) John Berry
DATE: 4-5-00
TIME: 2:05p

RECEIVED BY: (SIGNATURE) Todd Meaney
DATE: 4-5-00
TIME: 2:05

RELINQUISHED BY: (SIGNATURE)
DATE:
TIME:

RECEIVED AT LAB BY: (SIGNATURE) Kathy Baldie
DATE: 4-6-00
TIME: 8:45am

8

COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 8 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

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Report Cover Page

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 06-Apr-00
Date Reported: 19-Apr-00
PO #: Clinton

Login No. 00041416

This report includes information regarding the following described samples as received by the laboratory and is only valid for the parameters tested. This report contains 2 results page(s) not including the cover page(s).

Sample No.	Client ID	Site	Locator	Tests/Services
00041416-1	91-118.02	EX-6 31'	GRAB	
				Cation Exchange Capacity
				Total Organic Carbon
00041416-2	91-118.02	EX-6 52'-53'	GRAB	
				Cation Exchange Capacity
				Total Organic Carbon

Certified by: Dorothy W. Rothert
Dorothy W. Rothert, Project Manager

PDC Laboratories participates in the following laboratory accreditation/certification and proficiency programs. Endorsement by the Federal or State Government or their agencies is not implied.

State of Illinois Chemical Analysis in Drinking Water Accredited Lab. No. 100230
State of Illinois Bacteriological Analysis in Drinking Water Certified Lab Registry No. 17533
State of Arkansas Certified Wastewater and Hazardous Waste Lab
State of Indiana Certified Drinking Water Lab No. C-IL-04
State of Iowa Certified Wastewater Lab No. 240
American Industrial Hygiene Association Bulk/Air Asbestos Proficiency Program Lab ID No. 101206
State of North Dakota Wastewater and Hazardous Waste CertifiedLab No. R-094
State of Wisconsin Certified Wastewater and Hazardous Waste Lab ID No. 998294430
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Laboratory Results

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 06-Apr-00
Date Reported: 19-Apr-00
PO #: Clinton
PDC Cust. # : 280105

Login No. 00041416

Sample No: 00041416-1
Client ID: 91-118.02
Site: EX-6 31'
Locator: GRAB
Collect Date: 03-APR-00 10:25

Parameter	Result	Units	Date	By
SW-846 METHOD 9081				
Cationic Exchange Capacity	2.60	meq / 100g	13-Apr-00 19:00	EKL
SUBCONTRACTED - Report Attached				
Carbon, Total Organic				

recycled paper

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Laboratory Results

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 06-Apr-00
Date Reported: 19-Apr-00
PO #: Clinton
PDC Cust. # : 280105

Login No. 00041416

Sample No: 00041416-2
Client ID: 91-118.02
Site: EX-6 52'-53'
Locator: GRAB
Collect Date: 03-APR-00 11:45

Parameter	Result	Units	Date	By
SW-846 METHOD 9081				
Cationic Exchange Capacity	1.38	meq / 100g	13-Apr-00 19:00	EKL
SUBCONTRACTED - Report Attached				
Carbon, Total Organic				

recycled paper

PDC BORATORIES, INC.
223 EST ALTORFER DRIVE
PEORIA, IL 61615

PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY ECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1			
CLIENT: CLI - EXPANSION	PROJECT NUMBER	P.O. NUMBER	MEANS SHIPPED
ADDRESS	PHONE NUMBER	FAX NUMBER	DATE SHIPPED
CITY STATE ZIP	SAMPLER (PLEASE PRINT): JOHN BERRY		
CONTACT PERSON: JOHN BERRY	SAMPLER'S SIGNATURE		

MATRIX TYPES:
WW-WASTEWATER
DW-DRINKING WATER
GW-GROUND WATER
WWSL-SLUDGE
NAS-SOLID
OTHER: _____

3 ANALYSIS REQUESTED: TOTAL ORGANIC CARBON; CATION EXCHANGE CAPACITY

4 (FOR LAB USE ONLY)
LOGIN # 0004 1416-2
LOGGED BY: RMP
LAB PROJ. # _____
TEMPLATE: _____
PROJ. MGR.: _____

2 SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT	TOTAL ORGANIC CARBON	CATION EXCHANGE CAPACITY	REMARKS
BORING EX-6 31'	4-3-2000	10:25	X		SOIL	1			
BORING EX-6 52'-53'	4-3-2000	11:45	X		SOIL	1			

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.* _____

7			
RELINQUISHED BY: (SIGNATURE) John Berry	DATE 4-5-2000 TIME 2:05 pm	RECEIVED BY: (SIGNATURE) [signature]	DATE 4-5-00 TIME 2:05
RELINQUISHED BY: (SIGNATURE)	DATE TIME	RECEIVED AT LAB BY: (SIGNATURE) Kathy Boddie	DATE 4-6-00 TIME 8:45 AM

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 8 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

PAGE _____ OF _____

PDC Laboratories, Inc.
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Report Cover Page

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 31-Mar-00
Date Reported: 19-Apr-00
PO #: Clinton

Login No. 00033203

This report includes information regarding the following described samples as received by the laboratory and is only valid for the parameters tested. This report contains 2 results page(s) not including the cover page(s).

Sample No.	Client ID	Site	Locator	Tests/Services
00033203-1	91-118.02	EX-7B @ 31'	GRAB	
				Cation Exchange Capacity
				Total Organic Carbon
00033203-2	91-118.02	EX-7B @ 46'	GRAB	
				Cation Exchange Capacity
				Total Organic Carbon

Certified by: Dorothy W. Rothert
Dorothy W. Rothert, Project Manager

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State of Illinois Chemical Analysis in Drinking Water Accredited Lab. No. 100230
State of Illinois Bacteriological Analysis in Drinking Water Certified Lab Registry No. 17533
State of Arkansas Certified Wastewater and Hazardous Waste Lab
State of Indiana Certified Drinking Water Lab No. C-IL-04
State of Iowa Certified Wastewater Lab No. 240
American Industrial Hygiene Association Bulk/Air Asbestos Proficiency Program Lab ID No. 101206
State of North Dakota Wastewater and Hazardous Waste CertifiedLab No. R-094
State of Wisconsin Certified Wastewater and Hazardous Waste Lab ID No. 998294430
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(309) 692-9688 • (800) 752-6651 • FAX (309) 692-9689

Laboratory Results

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 31-Mar-00
Date Reported: 19-Apr-00
PO #: Clinton
PDC Cust. # : 280105

Login No. 00033203

Sample No: 00033203-1
Client ID: 91-118.02
Site: EX-7B @ 31'
Locator: GRAB
Collect Date: 30-MAR-00 11:30

Parameter	Result	Units	Date	By
SW-846 METHOD 9081				
Cationic Exchange Capacity	2.25	meq / 100g	13-Apr-00 19:00	EKL
SUBCONTRACTED - Report Attached				
Carbon, Total Organic				

recycled paper

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Laboratory Results

Clinton Landfill
c/o Clinton Landfill
PO Box 9071
Peoria, IL 61612

Attn: Mr. Dennis Porter

Date Received: 31-Mar-00
Date Reported: 19-Apr-00
PO #: Clinton
PDC Cust. # : 280105

Login No. 00033203

Sample No: 00033203-2
Client ID: 91-118.02
Site: EX-7B @ 46'
Locator: GRAB
Collect Date: 30-MAR-00 13:35

Parameter	Result	Units	Date	By
SW-846 METHOD 9081				
Cationic Exchange Capacity	0.950	meq / 100g	13-Apr-00 19:00	EKL
SUBCONTRACTED - Report Attached				
Carbon, Total Organic				

recycled paper

SUBURBAN LABORATORIES, Inc.
4140 Litt Drive • Hillside, Illinois 60162-1183
Tel. (708) 544-3260 • Toll Free (800) 783-LABS • Fax (708) 544-8587

April 12, 2000

Dorothy W. Rothert
PDC Laboratories
P.O. Box 9071
Peoria, IL 61612-9071
TEL: 309-692-9688
FAX 309-692-9689

RE: Clin-Waste

Order No.: 0004047

Dear Dorothy W. Rothert,

Suburban Laboratories, Inc. received 1 sample on 4/4/00 9:30:00 AM for the analyses presented in the following report.

There were no problems with the analyses and all the data for the associated QC met EPA or laboratory specifications except where noted in the case narrative.

This report consists of this final report of laboratory analysis, and any accompanying documentation including, but not limited to, chain of custody records, raw data, and letters of explanation or reliance. This report may not be reproduced, except in full, without the prior written approval of Suburban Laboratories, Inc.

If you have any questions regarding these test results, please call your customer service representative at (708) 544-3260.

Sincerely,

Mike Chung
Laboratory Director

CC:

Suburban Laboratories, Inc. **Date:** *12-Apr-00*

CLIENT: PDC Laboratories
Project: Clin-Waste
Lab Order: 0004047

CASE NARRATIVE

General Comments:
- All results reported in wet weight unless otherwise indicated. (dry = Dry Weight)
- Sample results relate only to the analytes of interest tested and to sample as received by the laboratory.
- Environmental compliance sample results meet the requirements of Part 186 unless otherwise indicated.
- Accreditation by the State of Illinois is not an endorsement or a guarantee of the validity of data generated. For more information about the laboratories' scope of accreditation, please contact Suburban or the Agency.
- Limit: The lowest concentration that can be reliably achieved within specified requirements of precision and accuracy during routine laboratory operating conditions. Limit may also represent a project or client specific reporting level.

Data Qualifiers:
U: The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ: The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limits approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
H: The holding time for the sample has been exceeded.
R: The sample results are rejected due to serious deficiencies in the ability to analyze the sample and/or meet quality control criteria. The presence or absence of the analyte cannot be verified.
I: Invalid; CS: Compound Screened; TNTC: Too Numerous to Count

Method References:
E: USEPA Methods for the Determination of Inorganic Substances in Environmental Samples; Methods for Chemical Analysis of Water and Wastes; Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, 40CFR136 App A; Methods for the Determination of Metals in Environmental Samples; Methods for the Determination of Organic Compounds in Drinking Water
SW: USEPA, Test Methods for Evaluating Solid Waste, SW-846, 3rd Ed, includes Updates I-III
M: APHA, Standard Methods for the Examination of Water and Wastewater, 18th & 19th Ed.
D: ASTM, Annual Book of Standards F: NAS, Food Chemicals Codex (FCC), 3rd Edition
B: US FDA Bacteriological Analytical Manual (BAM) 8th Edition, 1995
USP: US Pharmacopoeia, 22nd Revision, 1990

Project Specific Comments:
None

Suburban Laboratories, Inc.

Date: *12-Apr-00*

CLIENT:	PDC Laboratories	**Client Sample ID:**	00033203-1 grab
Lab Order:	0004047	**Tag Number:**	
Project:	Clin-Waste	**Collection Date:**	3/30/00 11:30:00 AM
Lab ID:	0004047-001A	**Matrix:**	SOIL

Analyses	Result	Qual	MDL	Limit	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON		**SW9060**					Analyst: **SH**
Total Organic Carbon	150		10	30.0	mg/Kg	1	4/11/00 11:30:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Suburban Laboratories, Inc.

Date: *12-Apr-00*

CLIENT:	PDC Laboratories	**Client Sample ID:**	00033203-2 grab
Lab Order:	0004047	**Tag Number:**	
Project:	Clin-Waste	**Collection Date:**	3/30/00 1:35:00 PM
Lab ID:	0004047-002A	**Matrix:**	SOIL

Analyses	Result	Qual	MDL	Limit	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON		**SW9060**					Analyst: **SH**
Total Organic Carbon	3,200		10	30.0	mg/Kg	1	4/11/00 11:30:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Lab Order: 0004047
Client: PDC Laboratories
Project: Clin-Waste

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0004047-001A	00033203-1 grab	3/30/00 11:30:00 AM	Soil	TOTAL ORGANIC CARBON			4/11/00
0004047-002A	00033203-2 grab	3/30/00 1:35:00 PM		TOTAL ORGANIC CARBON			4/11/00

PDC LABORATORIES, INC.
2231 WEST ALTORFER DRIVE
PEORIA, IL 61615

PHONE # 309-692-9688
FAX # 309-692-9689

CHAIN OF CUSTODY RECORD

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT	PROJECT NUMBER	P.O. NUMBER	MEANS SHIPPED
CLINTON LANDFILL, INC	91-118.02		
ADDRESS	PHONE NUMBER	FAX NUMBER	DATE SHIPPED
CITY STATE ZIP	SAMPLER (PLEASE PRINT)	MATRIX TYPES: WW-WASTEWATER, DW-DRINKING WATER, GW-GROUND WATER, WWSL-SLUDGE, NAS-SOLID, OTHER:	
CONTACT PERSON: JOHN BERRY	SAMPLER'S SIGNATURE		

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # 02033203
LOGGED BY: AM
LAB PROJ. #
TEMPLATE:
PROJ. MGR.:

2 SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	TOTAL # OF CONT	Total Organic Carbon		Cation Exchange Capacity (CEC)					REMARKS
EX-7B @ 31'	3-30	11:30	X		Soil	1	X		X					
EX-7B @ 46'	3-30	13:35	X		Soil	1	X		X					

5 TURNAROUND TIME REQUESTED (PLEASE CIRCLE) NORMAL RUSH
(RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE)
RUSH RESULTS VIA (PLEASE CIRCLE) FAX PHONE
FAX # IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

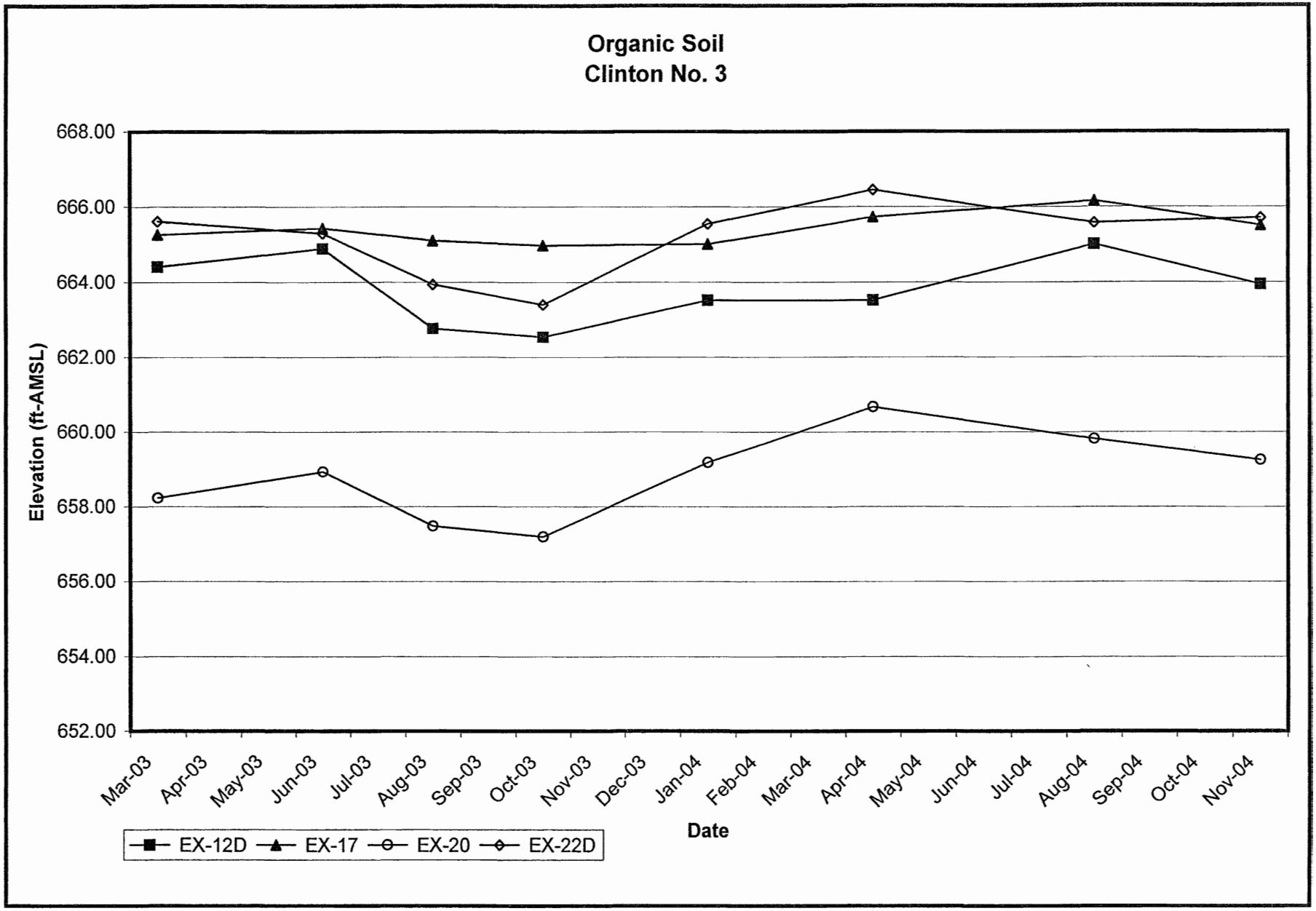
6 *The sample temperature will be measured upon receipt at the lab. By initialing this area you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area you allow the lab to proceed with analytical testing regardless of the sample temperature.*

7 RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	DATE / TIME
RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED AT LAB BY: (SIGNATURE)	DATE / TIME
Kathy Porter	3-31-00 / 0910	J. Stanton	3/31/00 / 9:10

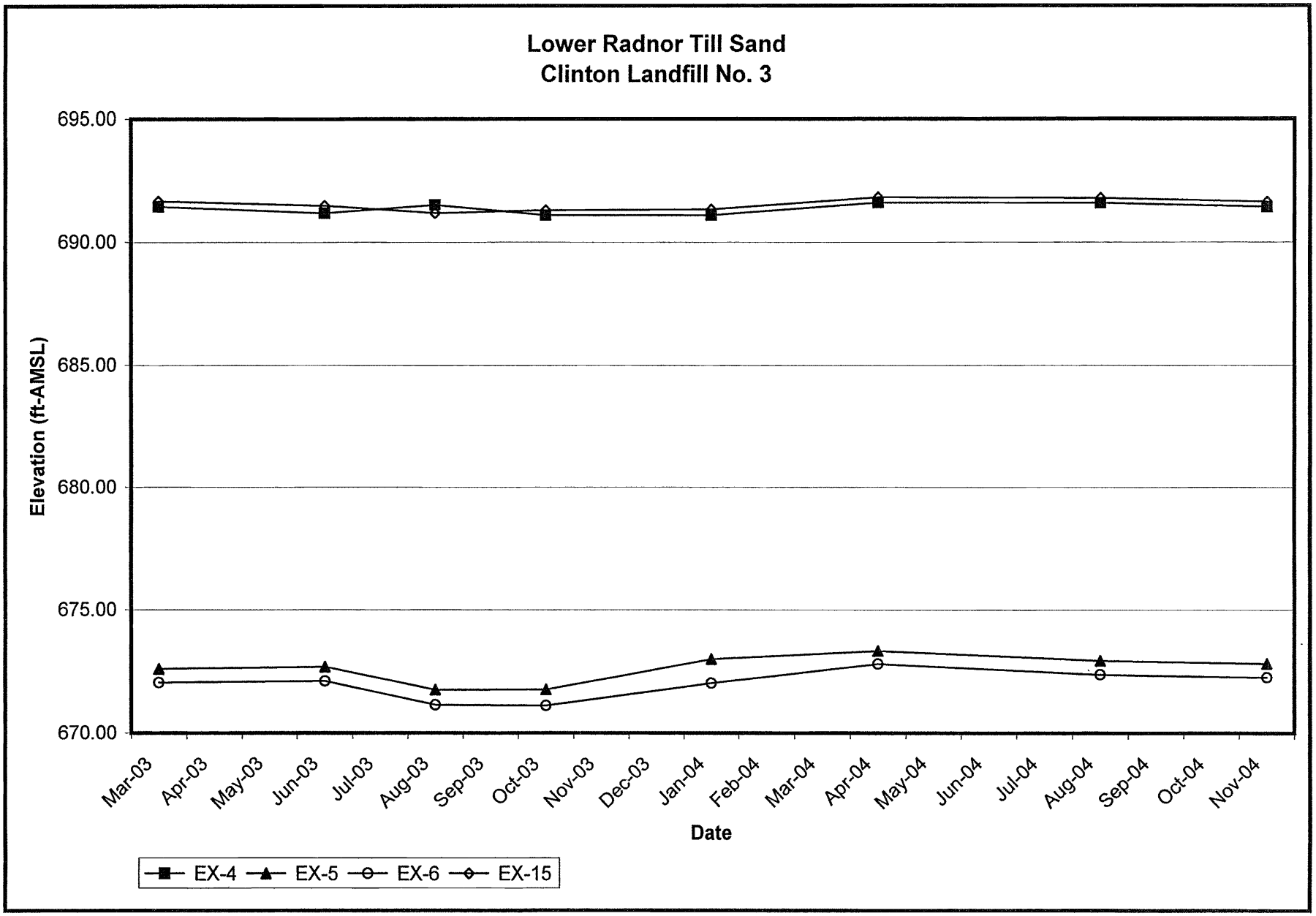
8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 18 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
BOTTLES RECEIVED IN GOOD CONDITION Y OR N
BOTTLES FILLED WITH ADEQUATE VOLUME Y OR N
SAMPLES RECEIVED WITHIN HOLD TIME(S) Y OR N

APPENDIX 812.314-F: GRAPHICAL DISPLAY OF HISTORICAL GROUNDWATER ELEVATIONS



J:\Projects\91-118 CLI\Technical\Groundwater\8Qtr Mean ExpWell Elev.xls



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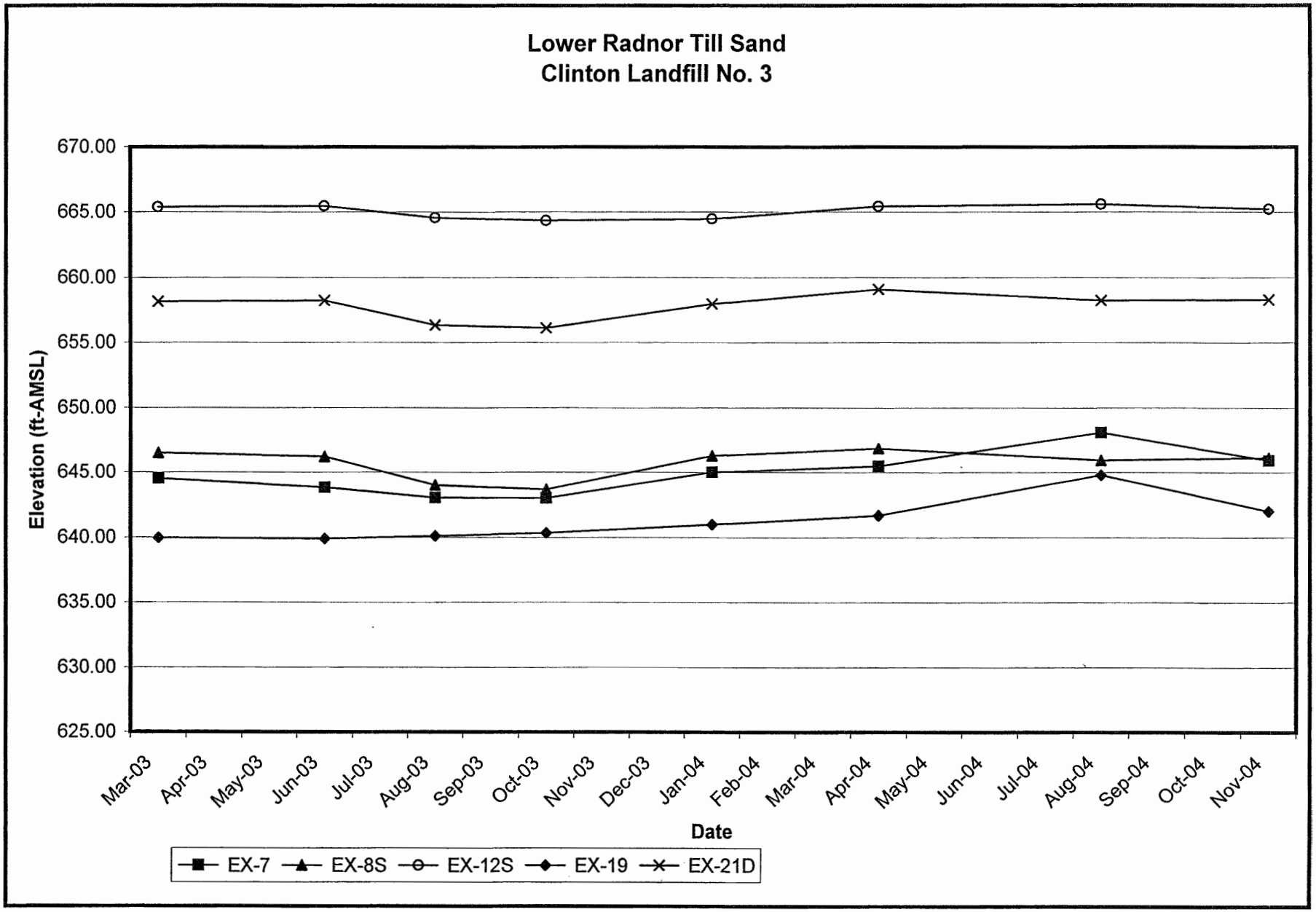

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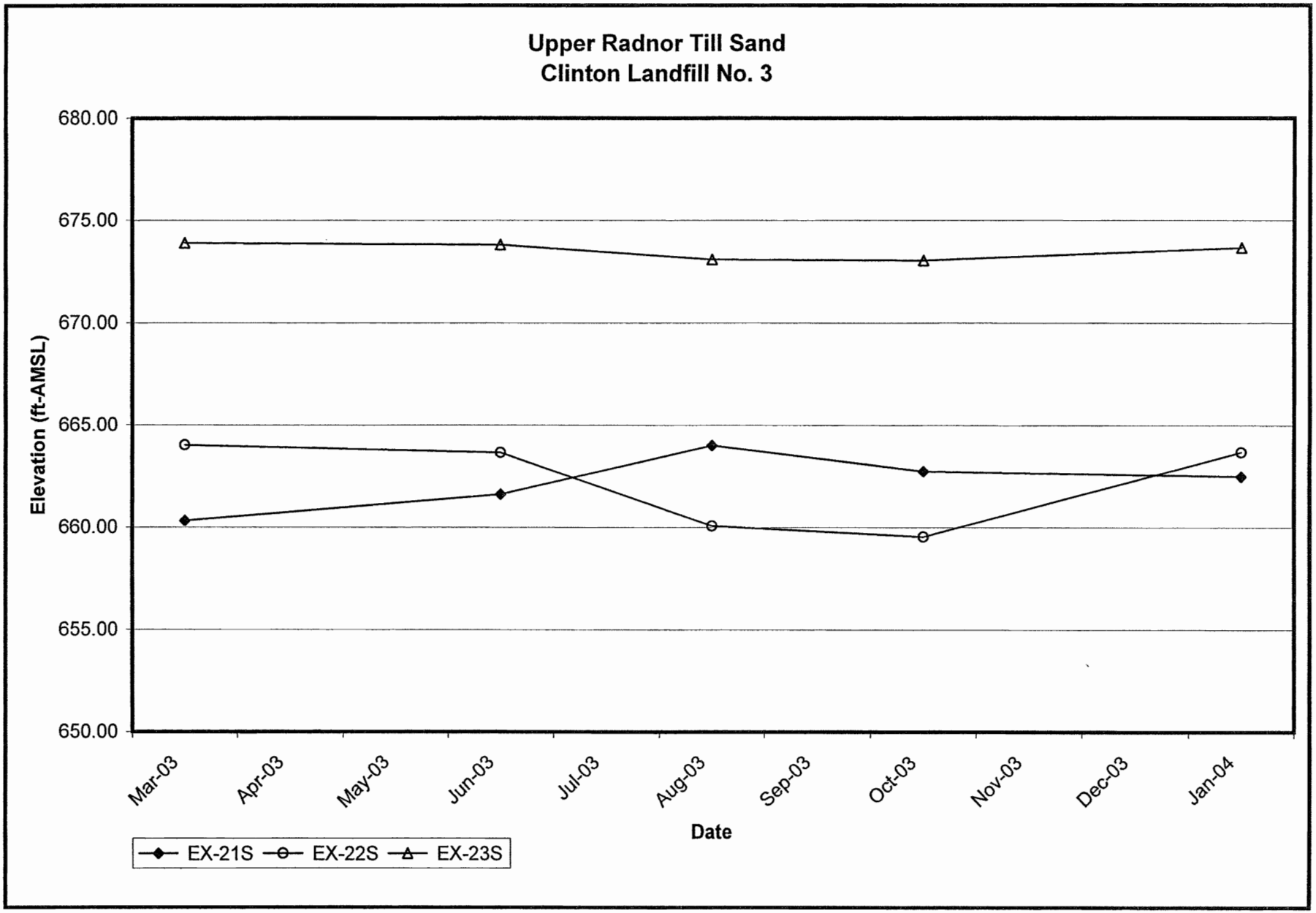
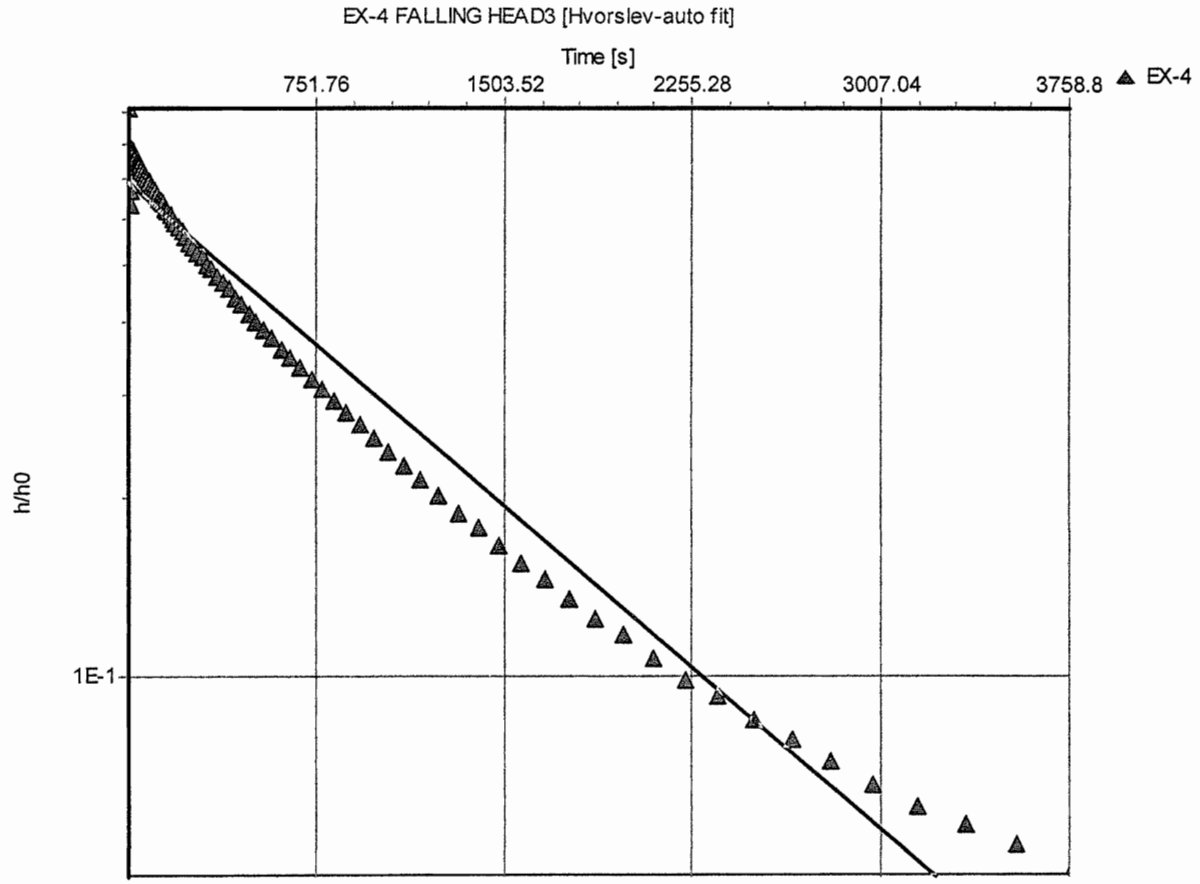

Upper Radnor Till Sand
Clinton Landfill No. 3
680.00
675.00
670.00
665.00
660.00
655.00
650.00
Elevation (ft-AMSL)
Mar-03
Apr-03
May-03
Jun-03
Jul-03
Aug-03
Sep-03
Oct-03
Nov-03
Dec-03
Jan-04
Date
EX-21S
EX-22S
EX-23S

APPENDIX 812.314-D: SLUG TEST DATA

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report** Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.



Slug Test: **EX-4 FALLING HEAD3**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 3.12E-5 [cm/s]

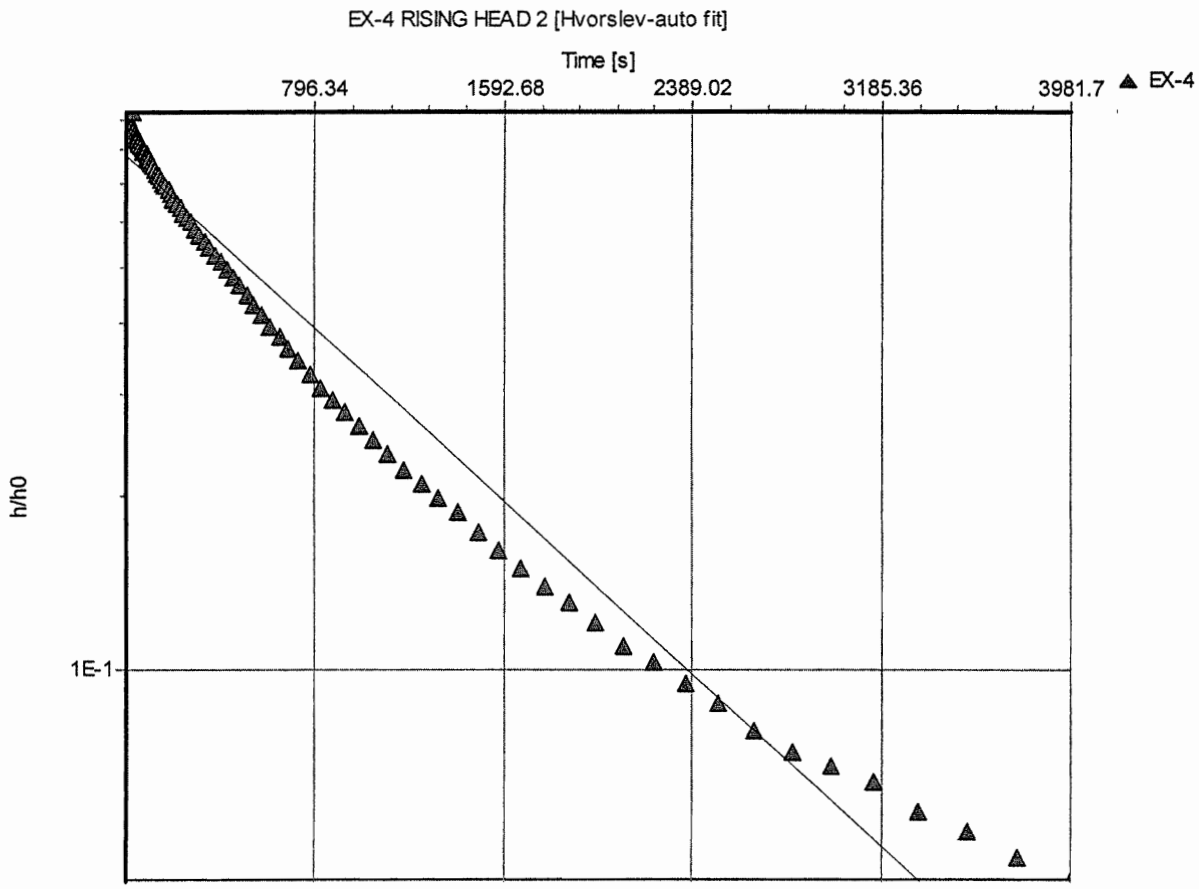
Test parameters:				
	Test Well:	EX-4	Aquifer Thickness:	2.75 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.65 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 1/14/2005

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**	
	Project:	CLI #3 Expansion well slug tests
	Number:	91-0118
	Client:	Clinton Landfill, Inc.



Slug Test: **EX-4 RISING HEAD 2**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 3.22E-5 [cm/s]

Test parameters:				
	Test Well:	EX-4	Aquifer Thickness:	2.75 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.65 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 1/19/2005

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-4**	**Slug Test:**	**EX-4 FALLING HEAD3**
		Test Well:	EX-4
Depth to Static WL:	35.13 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.65 [ft]
Date:	1/13/2005	Aquifer Thickness:	2.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	32.92	-2.21
2	1.4	33.10	-2.03
3	2.8	33.48	-1.65
4	4.3	33.73	-1.40
5	5.8	33.65	-1.48
6	7.4	33.39	-1.74
7	9.1	33.40	-1.73
8	10.9	33.40	-1.73
9	12.8	33.41	-1.72
10	14.9	33.42	-1.71
11	17.1	33.42	-1.71
12	19.4	33.43	-1.70
13	21.9	33.44	-1.69
14	24.5	33.45	-1.68
15	27.3	33.46	-1.67
16	30.2	33.47	-1.66
17	33.3	33.48	-1.65
18	36.6	33.49	-1.64
19	40.1	33.50	-1.63
20	43.8	33.51	-1.62
21	47.7	33.52	-1.61
22	51.9	33.53	-1.60
23	56.3	33.54	-1.59
24	61	33.56	-1.58
25	66	33.57	-1.57
26	71.3	33.58	-1.55
27	76.9	33.60	-1.53
28	82.8	33.61	-1.52
29	89.1	33.63	-1.51
30	95.7	33.64	-1.49
31	102.7	33.66	-1.47

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-4**	**Slug Test:**	**EX-4 FALLING HEAD3**
		Test Well:	EX-4
Depth to Static WL:	35.13 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.65 [ft]
Date:	1/13/2005	Aquifer Thickness:	2.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	110.2	33.68	-1.46
33	118.1	33.69	-1.44
34	126.5	33.71	-1.43
35	135.4	33.72	-1.41
36	144.8	33.75	-1.38
37	154.8	33.77	-1.37
38	165.4	33.78	-1.35
39	176.6	33.81	-1.32
40	188.5	33.83	-1.30
41	201.1	33.85	-1.28
42	214.4	33.87	-1.26
43	228.5	33.90	-1.23
44	243.4	33.92	-1.21
45	259.2	33.94	-1.19
46	276	33.97	-1.16
47	293.8	33.99	-1.14
48	312.6	34.02	-1.11
49	332.5	34.04	-1.09
50	353.6	34.07	-1.06
51	376	34.10	-1.03
52	399.7	34.12	-1.01
53	424.8	34.16	-0.98
54	451.4	34.18	-0.95
55	479.6	34.22	-0.91
56	509.5	34.24	-0.89
57	541.1	34.27	-0.86
58	574.6	34.30	-0.83
59	610.1	34.33	-0.80
60	647.7	34.36	-0.77
61	687.5	34.39	-0.74
62	729.7	34.42	-0.71

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-4**	**Slug Test:**	**EX-4 FALLING HEAD3**
		Test Well:	EX-4
Depth to Static WL:	35.13 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.65 [ft]
Date:	1/13/2005	Aquifer Thickness:	2.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	774.4	34.45	-0.68
64	821.8	34.48	-0.65
65	872	34.51	-0.62
66	925.1	34.54	-0.59
67	981.4	34.57	-0.56
68	1041	34.60	-0.53
69	1104.2	34.63	-0.50
70	1171.1	34.65	-0.48
71	1242	34.68	-0.45
72	1317.1	34.71	-0.42
73	1396.6	34.73	-0.40
74	1480.9	34.76	-0.37
75	1570.2	34.78	-0.35
76	1664.7	34.81	-0.32
77	1764.8	34.83	-0.30
78	1870.9	34.85	-0.28
79	1983.3	34.87	-0.26
80	2102.3	34.89	-0.24
81	2228.4	34.91	-0.22
82	2362	34.93	-0.20
83	2503.5	34.94	-0.19
84	2653.4	34.96	-0.17
85	2812.2	34.97	-0.16
86	2980.4	34.99	-0.14
87	3158.5	35.00	-0.13
88	3347.2	35.01	-0.12
89	3547.1	35.02	-0.11
90	3758.8	35.03	-0.10

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-4**	**Slug Test:**	**EX-4 RISING HEAD 2**
		Test Well:	EX-4
Depth to Static WL:	35.13 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.65 [ft]
Date:	1/13/2005	Aquifer Thickness:	2.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	37.14	2.01
2	1.4	36.99	1.86
3	2.9	36.97	1.84
4	4.4	36.97	1.84
5	6	36.96	1.83
6	7.7	36.95	1.82
7	9.5	36.94	1.81
8	11.4	36.93	1.80
9	13.5	36.92	1.79
10	15.7	36.91	1.78
11	18	36.91	1.77
12	20.5	36.90	1.77
13	23.1	37.01	1.88
14	25.9	36.88	1.74
15	28.8	36.87	1.74
16	31.9	36.85	1.72
17	35.2	36.84	1.71
18	38.7	36.83	1.70
19	42.4	36.82	1.69
20	46.3	36.81	1.68
21	50.5	36.79	1.66
22	54.9	36.78	1.65
23	59.6	36.76	1.63
24	64.6	36.75	1.62
25	69.9	36.74	1.61
26	75.5	36.73	1.59
27	81.4	36.71	1.58
28	87.7	36.69	1.56
29	94.3	36.67	1.54
30	101.3	36.66	1.53
31	108.8	36.64	1.51

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-4**	**Slug Test:**	**EX-4 RISING HEAD 2**
		Test Well:	EX-4
Depth to Static WL:	35.13 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.65 [ft]
Date:	1/13/2005	Aquifer Thickness:	2.75 [ft]

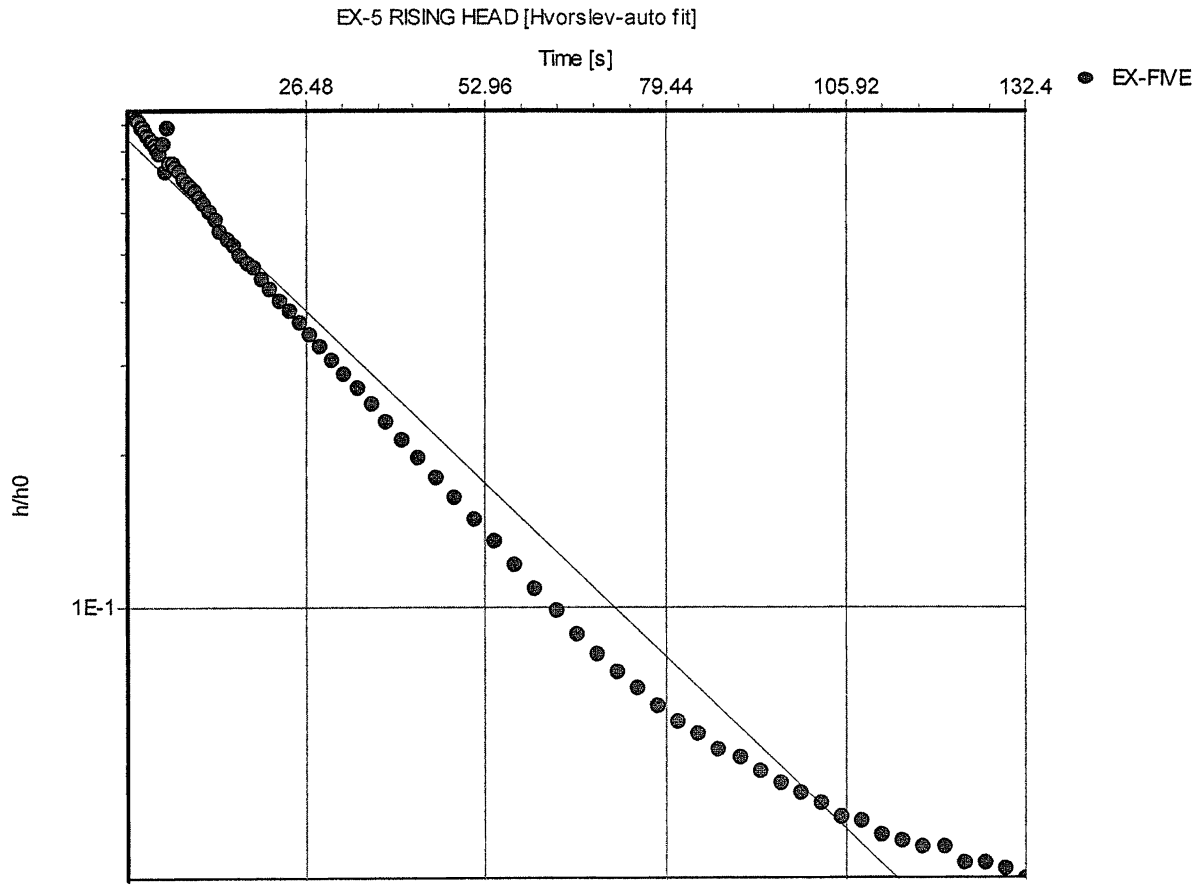
	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	116.7	36.62	1.49
33	125.1	36.60	1.47
34	134	36.58	1.45
35	143.4	36.57	1.44
36	153.4	36.54	1.41
37	164	36.52	1.39
38	175.2	36.50	1.37
39	187.1	36.48	1.35
40	199.7	36.46	1.32
41	213	36.43	1.30
42	227.1	36.41	1.28
43	242	36.38	1.25
44	257.8	36.36	1.23
45	274.6	36.34	1.21
46	292.4	36.30	1.17
47	311.2	36.28	1.14
48	331.1	36.25	1.12
49	352.2	36.22	1.09
50	374.6	36.19	1.06
51	398.3	36.16	1.03
52	423.4	36.13	1.00
53	450	36.10	0.97
54	478.2	36.07	0.94
55	508.1	36.03	0.90
56	539.7	36.00	0.87
57	573.2	35.96	0.83
58	608.7	35.92	0.79
59	646.3	35.89	0.76
60	686.1	35.86	0.72
61	728.3	35.82	0.69
62	773	35.79	0.66

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-4**	**Slug Test:**	**EX-4 RISING HEAD 2**
		Test Well:	EX-4
Depth to Static WL:	35.13 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.65 [ft]
Date:	1/13/2005	Aquifer Thickness:	2.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	820.4	35.75	0.62
64	870.6	35.72	0.59
65	923.7	35.69	0.56
66	980	35.66	0.53
67	1039.6	35.63	0.50
68	1102.8	35.61	0.48
69	1169.7	35.58	0.45
70	1240.6	35.55	0.42
71	1315.7	35.53	0.40
72	1395.2	35.51	0.38
73	1479.5	35.48	0.35
74	1568.8	35.46	0.33
75	1663.3	35.43	0.30
76	1763.4	35.41	0.28
77	1869.5	35.39	0.26
78	1981.9	35.38	0.24
79	2100.9	35.35	0.22
80	2227	35.34	0.21
81	2360.6	35.32	0.19
82	2502.1	35.31	0.18
83	2652	35.29	0.16
84	2810.8	35.27	0.14
85	2979	35.27	0.14
86	3157.1	35.26	0.13
87	3345.8	35.24	0.11
88	3545.7	35.24	0.10
89	3757.4	35.23	0.09
90	3981.7	35.22	0.09

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-5 RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 1.10E-3 [cm/s]

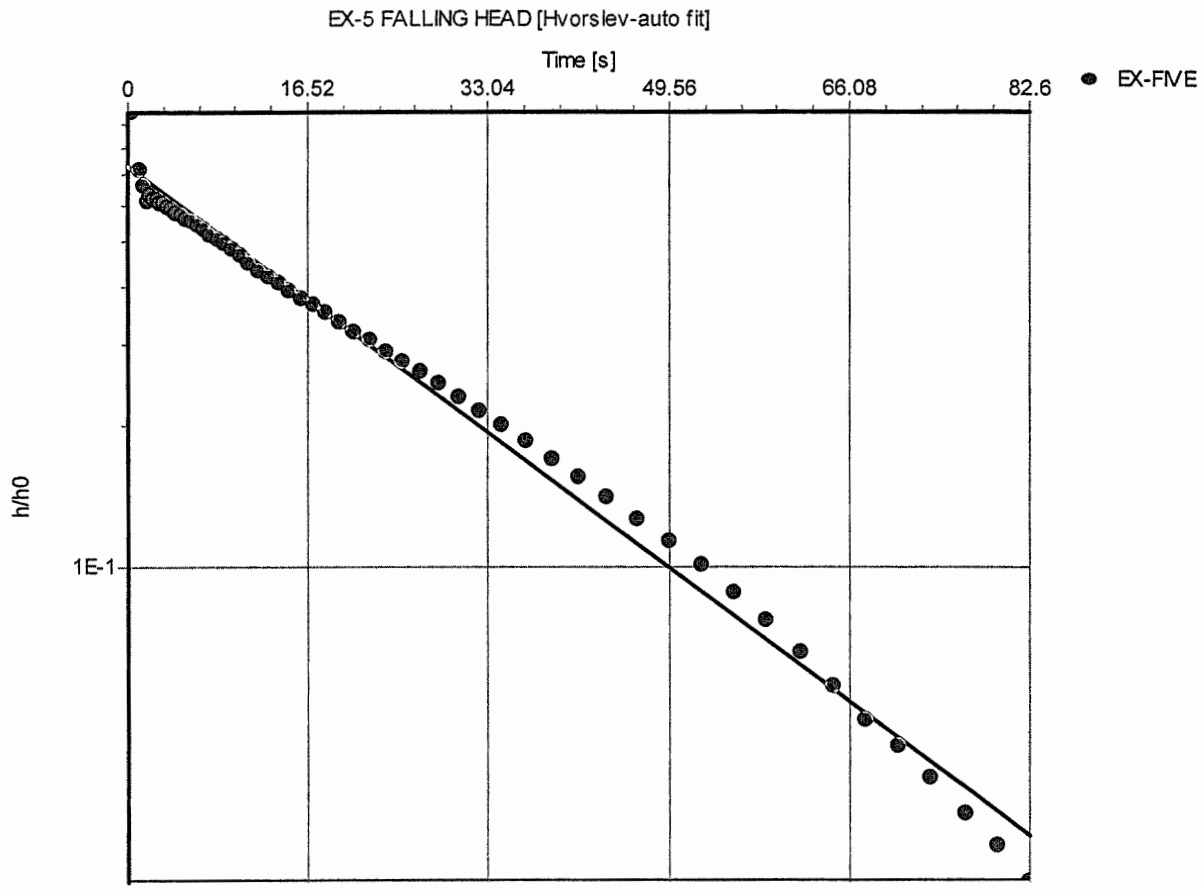
Test parameters:	Test Well:	EX-FIVE	Aquifer Thickness:	3.5 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.68 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 1/14/2005

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-5 FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 1.49E-3 [cm/s]

Test parameters:	Test Well:	EX-FIVE	Aquifer Thickness:	3.5 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.68 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 1/14/2005

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-FIVE**	**Slug Test:**	**EX-5 RISING HEAD**
		Test Well:	EX-FIVE
Depth to Static WL:	57.25 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Monte Kuhn	Screen length:	9.68 [ft]
Date:	3/2/2001	Aquifer Thickness:	3.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	59.46	2.21
2	0.3	59.37	2.12
3	0.6	59.34	2.09
4	0.9	59.32	2.07
5	1.2	59.30	2.05
6	1.5	59.26	2.01
7	1.8	59.25	2.00
8	2.1	59.20	1.95
9	2.4	59.20	1.95
10	2.7	59.16	1.91
11	3	59.13	1.88
12	3.3	59.11	1.86
13	3.6	59.09	1.84
14	3.9	59.09	1.84
15	4.2	59.05	1.80
16	4.5	59.01	1.76
17	4.8	58.99	1.74
18	5.2	59.07	1.81
19	5.5	58.85	1.60
20	5.9	59.21	1.96
21	6.3	58.91	1.66
22	6.8	58.90	1.65
23	7.2	58.88	1.63
24	7.7	58.84	1.59
25	8.3	58.80	1.55
26	8.8	58.77	1.52
27	9.4	58.74	1.48
28	10.1	58.71	1.46
29	10.7	58.67	1.42
30	11.4	58.63	1.38
31	12.2	58.59	1.34

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-FIVE**	**Slug Test:**	**EX-5 RISING HEAD**
		Test Well:	EX-FIVE
Depth to Static WL:	57.25 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Monte Kuhn	Screen length:	9.68 [ft]
Date:	3/2/2001	Aquifer Thickness:	3.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	13	58.54	1.28
33	13.8	58.47	1.22
34	14.7	58.43	1.18
35	15.6	58.39	1.14
36	16.6	58.35	1.10
37	17.7	58.30	1.05
38	18.8	58.29	1.04
39	20	58.23	0.98
40	21.2	58.19	0.94
41	22.6	58.14	0.89
42	24	58.10	0.85
43	25.5	58.06	0.80
44	27	58.01	0.76
45	28.6	57.97	0.72
46	30.3	57.93	0.68
47	32.1	57.88	0.63
48	34	57.85	0.60
49	36.1	57.80	0.55
50	38.3	57.76	0.51
51	40.6	57.72	0.47
52	43.1	57.69	0.44
53	45.7	57.65	0.40
54	48.5	57.61	0.36
55	51.4	57.58	0.33
56	54.4	57.55	0.30
57	57.4	57.52	0.27
58	60.4	57.49	0.24
59	63.4	57.47	0.22
60	66.4	57.44	0.19
61	69.4	57.43	0.18
62	72.4	57.41	0.16

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-FIVE**	**Slug Test:**	**EX-5 RISING HEAD**
		Test Well:	EX-FIVE
Depth to Static WL:	57.25 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Monte Kuhn	Screen length:	9.68 [ft]
Date:	3/2/2001	Aquifer Thickness:	3.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	75.4	57.40	0.15
64	78.4	57.39	0.14
65	81.4	57.38	0.13
66	84.4	57.37	0.12
67	87.4	57.37	0.12
68	90.4	57.36	0.11
69	93.4	57.35	0.10
70	96.4	57.35	0.10
71	99.4	57.34	0.09
72	102.4	57.34	0.09
73	105.4	57.34	0.09
74	108.4	57.33	0.08
75	111.4	57.33	0.08
76	114.4	57.33	0.08
77	117.4	57.32	0.07
78	120.4	57.32	0.07
79	123.4	57.32	0.07
80	126.4	57.32	0.07
81	129.4	57.32	0.07
82	132.4	57.31	0.06

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-FIVE**	**Slug Test:**	**EX-5 FALLING HEAD**
		Test Well:	EX-FIVE
Depth to Static WL:	57.25 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Monte Kuhn	Screen length:	9.68 [ft]
Date:	3/2/2001	Aquifer Thickness:	3.5 [ft]

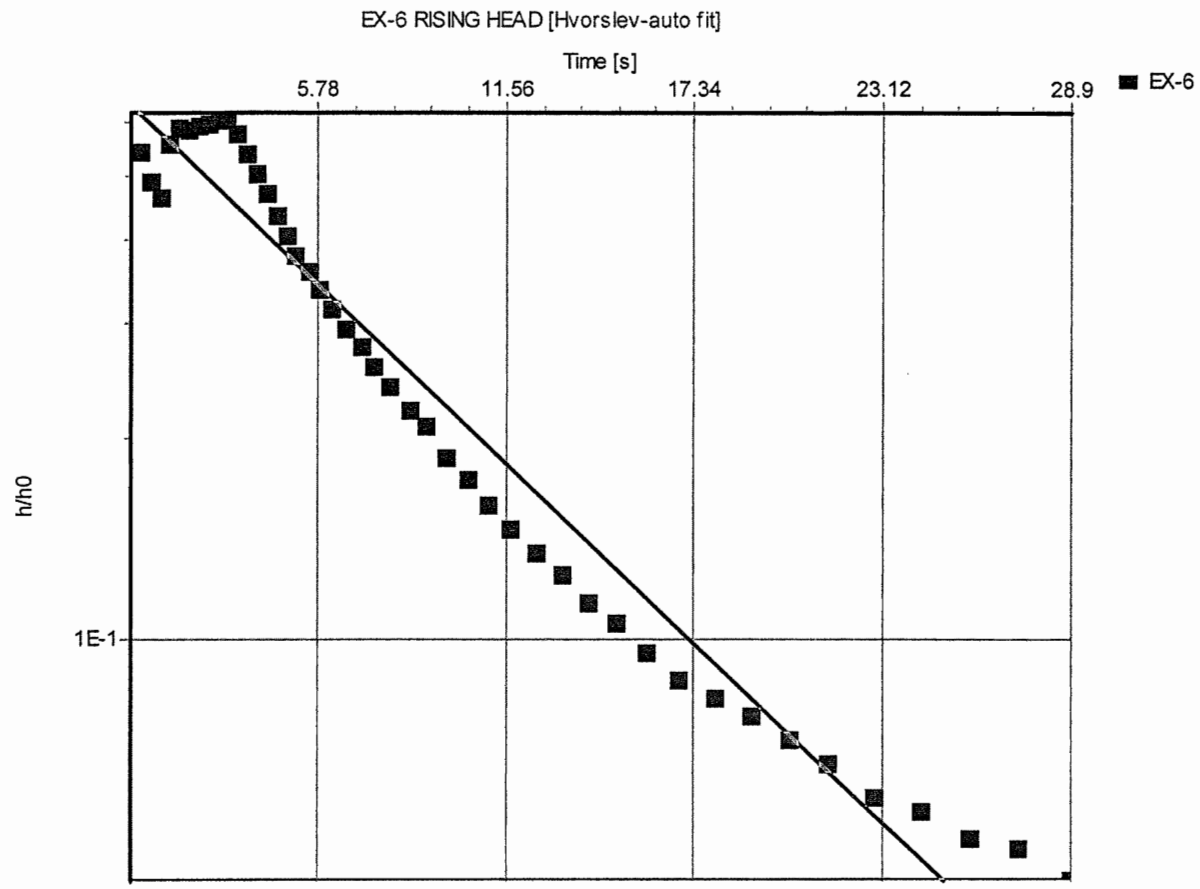
	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	54.49	-2.76
2	0.3	54.62	-2.63
3	1.2	55.28	-1.97
4	1.5	55.42	-1.83
5	1.8	55.56	-1.69
6	2.1	55.51	-1.74
7	2.4	55.55	-1.70
8	2.7	55.55	-1.70
9	3	55.58	-1.67
10	3.4	55.59	-1.66
11	3.7	55.61	-1.64
12	4.1	55.63	-1.62
13	4.5	55.65	-1.60
14	5	55.67	-1.58
15	5.4	55.70	-1.55
16	5.9	55.72	-1.53
17	6.5	55.76	-1.49
18	7	55.78	-1.47
19	7.6	55.82	-1.43
20	8.3	55.85	-1.41
21	8.9	55.88	-1.37
22	9.6	55.92	-1.33
23	10.4	55.96	-1.29
24	11.2	56.00	-1.25
25	12	56.06	-1.19
26	12.9	56.09	-1.16
27	13.8	56.13	-1.12
28	14.8	56.17	-1.08
29	15.9	56.21	-1.05
30	17	56.24	-1.01
31	18.2	56.28	-0.97

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-FIVE**	**Slug Test:**	**EX-5 FALLING HEAD**
		Test Well:	EX-FIVE
Depth to Static WL:	57.25 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Monte Kuhn	Screen length:	9.68 [ft]
Date:	3/2/2001	Aquifer Thickness:	3.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	19.4	56.32	-0.93
33	20.8	56.37	-0.88
34	22.2	56.41	-0.84
35	23.7	56.45	-0.80
36	25.2	56.49	-0.76
37	26.8	56.53	-0.72
38	28.5	56.57	-0.68
39	30.3	56.61	-0.64
40	32.2	56.66	-0.59
41	34.3	56.70	-0.55
42	36.5	56.74	-0.51
43	38.8	56.78	-0.47
44	41.3	56.82	-0.43
45	43.9	56.86	-0.39
46	46.7	56.90	-0.35
47	49.6	56.94	-0.31
48	52.6	56.97	-0.28
49	55.6	57.01	-0.24
50	58.6	57.04	-0.21
51	61.6	57.07	-0.18
52	64.6	57.10	-0.15
53	67.6	57.12	-0.13
54	70.6	57.14	-0.11
55	73.6	57.15	-0.10
56	76.6	57.17	-0.08
57	79.6	57.18	-0.07
58	82.6	57.19	-0.06

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**	
	Project:	CLI #3 Expansion well slug tests
	Number:	91-0118
	Client:	Clinton Landfill, Inc.



Slug Test: **EX-6 RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 4.00E-3 [cm/s]

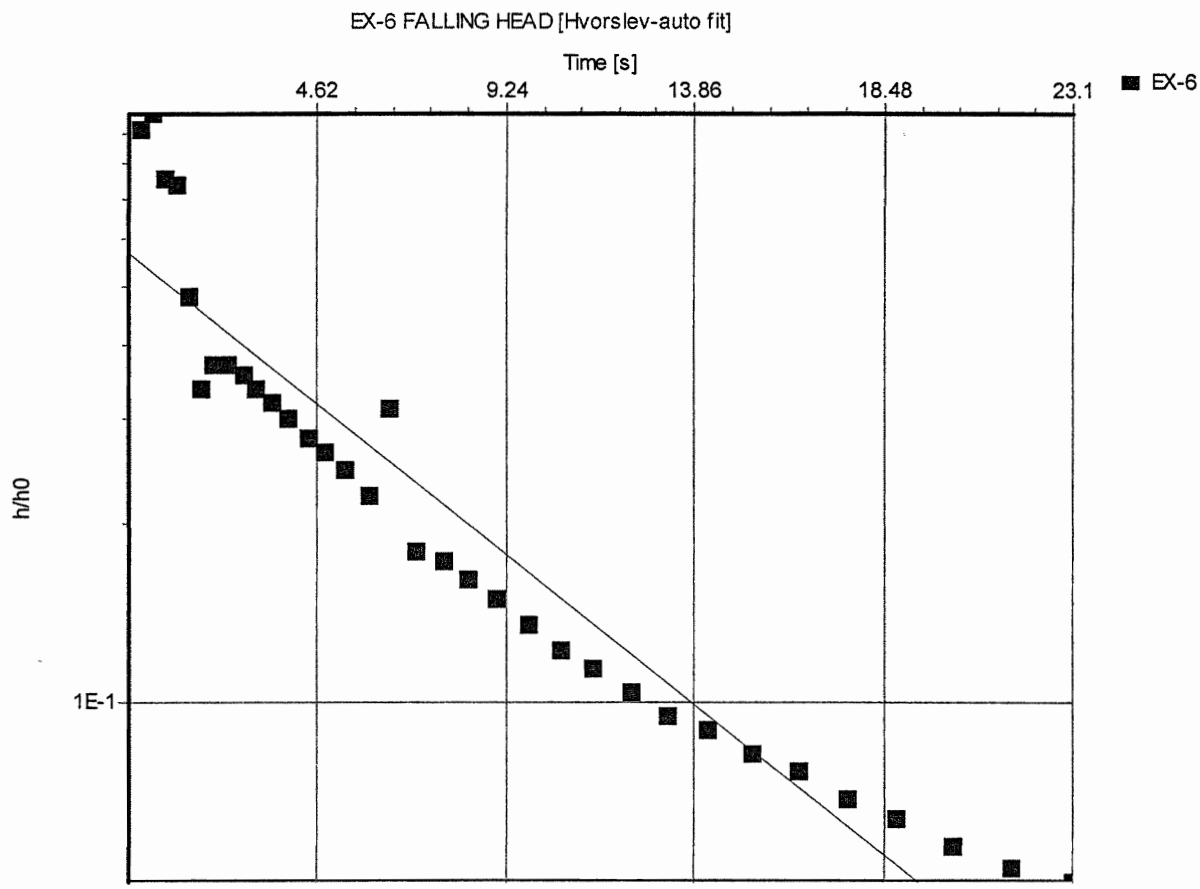
Test parameters:				
	Test Well:	EX-6	Aquifer Thickness:	3.95 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.68 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 1/14/2005

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-6 FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 4.66E-3 [cm/s]

Test parameters:				
	Test Well:	EX-6	Aquifer Thickness:	3.95 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.68 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 1/14/2005

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-6**	**Slug Test:**	**EX-6 RISING HEAD**
		Test Well:	EX-6
Depth to Static WL:	24.68 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Jennifer Erps	Screen length:	9.68 [ft]
Date:	6/29/2001	Aquifer Thickness:	3.95 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	26.49	1.81
2	0.3	25.66	0.98
3	0.6	25.57	0.89
4	0.9	25.52	0.84
5	1.2	25.69	1.01
6	1.5	25.75	1.07
7	1.8	25.74	1.06
8	2.1	25.76	1.08
9	2.4	25.76	1.08
10	2.7	25.81	1.13
11	3	25.78	1.10
12	3.3	25.73	1.05
13	3.6	25.66	0.98
14	3.9	25.59	0.91
15	4.2	25.53	0.85
16	4.5	25.47	0.79
17	4.8	25.42	0.74
18	5.1	25.37	0.69
19	5.5	25.33	0.65
20	5.8	25.29	0.61
21	6.2	25.25	0.57
22	6.6	25.21	0.53
23	7.1	25.18	0.50
24	7.5	25.15	0.47
25	8	25.12	0.44
26	8.6	25.08	0.40
27	9.1	25.06	0.38
28	9.7	25.02	0.34
29	10.4	24.99	0.31
30	11	24.97	0.29
31	11.7	24.95	0.27

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-6**	**Slug Test:**	**EX-6 RISING HEAD**
		Test Well:	EX-6
Depth to Static WL:	24.68 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Jennifer Erps	Screen length:	9.68 [ft]
Date:	6/29/2001	Aquifer Thickness:	3.95 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	12.5	24.92	0.24
33	13.3	24.91	0.23
34	14.1	24.89	0.21
35	15	24.87	0.19
36	15.9	24.85	0.17
37	16.9	24.84	0.16
38	18	24.83	0.15
39	19.1	24.82	0.14
40	20.3	24.81	0.13
41	21.5	24.80	0.12
42	22.9	24.78	0.10
43	24.3	24.78	0.10
44	25.8	24.77	0.09
45	27.3	24.77	0.09
46	28.9	24.76	0.08

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-6**	**Slug Test:**	**EX-6 FALLING HEAD**
		Test Well:	EX-6
Depth to Static WL:	24.68 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Jennifer Erps	Screen length:	9.68 [ft]
Date:	6/29/2001	Aquifer Thickness:	3.95 [ft]

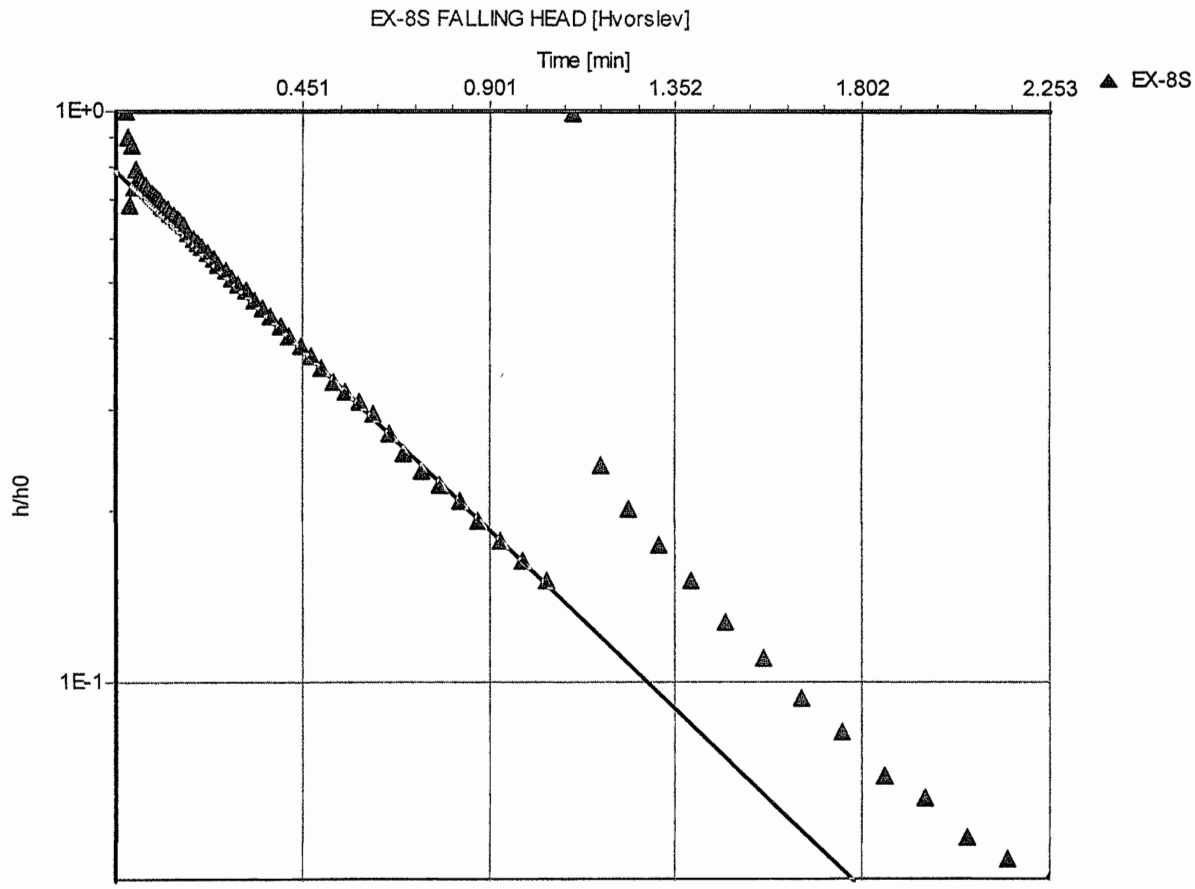
	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	22.84	-1.84
2	0.3	22.99	-1.69
3	0.6	22.89	-1.79
4	0.9	23.28	-1.40
5	1.2	23.32	-1.36
6	1.5	23.79	-0.89
7	1.8	24.06	-0.62
8	2.1	24.00	-0.68
9	2.4	24.00	-0.68
10	2.8	24.03	-0.66
11	3.1	24.06	-0.62
12	3.5	24.09	-0.59
13	3.9	24.13	-0.55
14	4.4	24.17	-0.52
15	4.8	24.20	-0.48
16	5.3	24.23	-0.45
17	5.9	24.27	-0.41
18	6.4	24.10	-0.58
19	7	24.35	-0.33
20	7.7	24.36	-0.32
21	8.3	24.38	-0.30
22	9	24.41	-0.27
23	9.8	24.43	-0.25
24	10.6	24.45	-0.23
25	11.4	24.47	-0.21
26	12.3	24.49	-0.19
27	13.2	24.51	-0.18
28	14.2	24.51	-0.17
29	15.3	24.53	-0.15
30	16.4	24.54	-0.14
31	17.6	24.55	-0.13

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-6**	**Slug Test:**	**EX-6 FALLING HEAD**
		Test Well:	EX-6
Depth to Static WL:	24.68 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Jennifer Erps	Screen length:	9.68 [ft]
Date:	6/29/2001	Aquifer Thickness:	3.95 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	18.8	24.56	-0.12
33	20.2	24.57	-0.11
34	21.6	24.58	-0.10
35	23.1	24.59	-0.09

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-8S FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 9.93E-4 [cm/s]

Test parameters:	Test Well:	EX-8S	Aquifer Thickness:	2.5 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.68 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

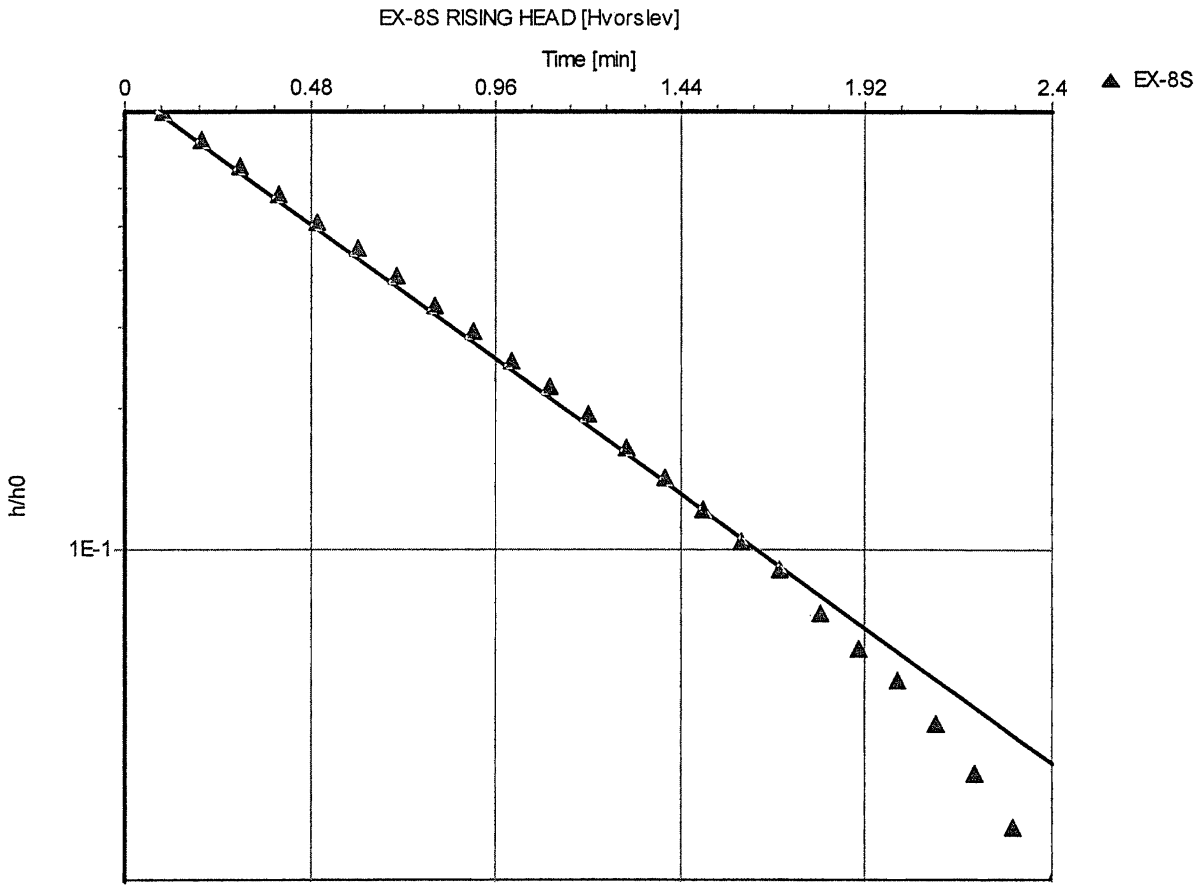
Evaluated by:

Evaluation Date: 1/26/2005

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 3.9-676-4893

Slug Test Analysis Report

Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.



Slug Test: **EX-8S RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 8.63E-4 [cm/s]

Test parameters:				
	Test Well:	EX-8S	Aquifer Thickness:	2.5 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.68 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 1/26/2005

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report

Project: CLI #3 Expansion well slug tests

Number: 91-0118

Client: Clinton Landfill, Inc.

Test Well:	**EX-8S**	**Slug Test:**	**EX-8S RISING HEAD**
		Test Well:	EX-8S
Depth to Static WL:	10.36 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Dan Dunn	Screen length:	9.68 [ft]
Date:	5/2/2001	Aquifer Thickness:	2.5 [ft]

	Time [min]	Depth to WL [ft]	Drawdown [ft]
1	0	11.56	1.20
2	0.1	11.41	1.05
3	0.2	11.28	0.92
4	0.3	11.16	0.80
5	0.4	11.06	0.70
6	0.5	10.97	0.61
7	0.6	10.90	0.54
8	0.7	10.83	0.47
9	0.8	10.76	0.40
10	0.9	10.71	0.35
11	1	10.67	0.31
12	1.1	10.63	0.27
13	1.2	10.59	0.23
14	1.3	10.56	0.20
15	1.4	10.53	0.17
16	1.5	10.51	0.15
17	1.6	10.48	0.12
18	1.7	10.47	0.11
19	1.8	10.45	0.09
20	1.9	10.43	0.07
21	2	10.42	0.06
22	2.1	10.41	0.05
23	2.2	10.40	0.04
24	2.3	10.39	0.03
25	2.4	10.38	0.02

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-8S**	**Slug Test:**	**EX-8S FALLING HEAD**
		Test Well:	EX-8S
Depth to Static WL:	10.36 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Dan Dunn	Screen length:	9.68 [ft]
Date:	5/2/2001	Aquifer Thickness:	2.5 [ft]

	Time [min]	Depth to WL [ft]	Drawdown [ft]
1	0.025	9.18	-1.18
2	0.03	9.30	-1.06
3	0.035	9.55	-0.81
4	0.04	9.33	-1.03
5	0.045	9.49	-0.87
6	0.05	9.43	-0.93
7	0.055	9.47	-0.89
8	0.06	9.47	-0.89
9	0.065	9.48	-0.88
10	0.07	9.49	-0.87
11	0.075	9.49	-0.88
12	0.08	9.49	-0.87
13	0.085	9.51	-0.85
14	0.09	9.52	-0.84
15	0.095	9.53	-0.83
16	0.1	9.53	-0.83
17	0.106	9.54	-0.82
18	0.112	9.55	-0.81
19	0.119	9.56	-0.80
20	0.126	9.57	-0.79
21	0.133	9.57	-0.79
22	0.141	9.59	-0.77
23	0.149	9.60	-0.76
24	0.158	9.60	-0.76
25	0.167	9.62	-0.74
26	0.177	9.64	-0.72
27	0.188	9.65	-0.71
28	0.199	9.66	-0.70
29	0.21	9.68	-0.68
30	0.223	9.69	-0.67
31	0.236	9.71	-0.65

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-8S**	**Slug Test:**	**EX-8S FALLING HEAD**
		Test Well:	EX-8S
Depth to Static WL:	10.36 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Dan Dunn	Screen length:	9.68 [ft]
Date:	5/2/2001	Aquifer Thickness:	2.5 [ft]

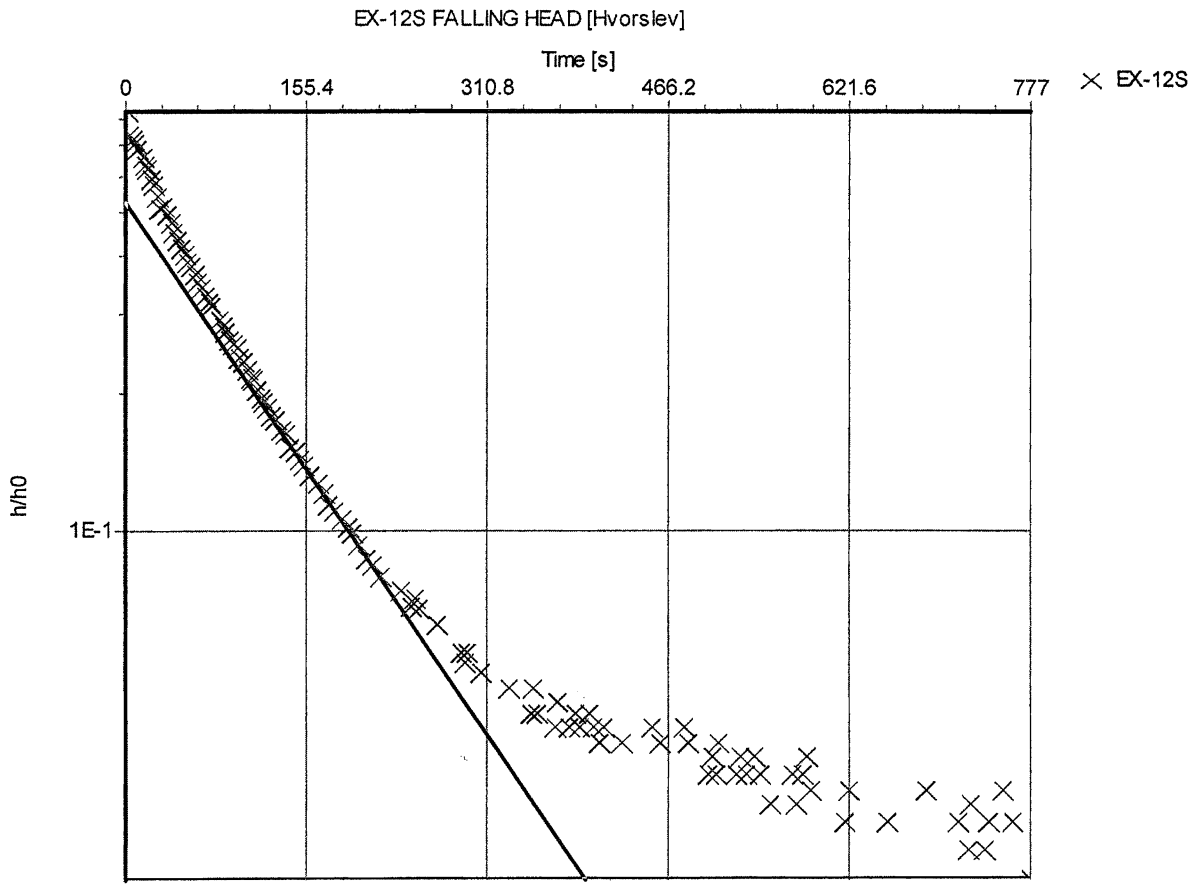
	Time [min]	Depth to WL [ft]	Drawdown [ft]
32	0.25	9.72	-0.64
33	0.265	9.74	-0.62
34	0.28	9.76	-0.60
35	0.297	9.77	-0.59
36	0.315	9.79	-0.57
37	0.333	9.81	-0.55
38	0.353	9.82	-0.54
39	0.374	9.85	-0.51
40	0.396	9.86	-0.50
41	0.42	9.88	-0.48
42	0.445	9.90	-0.46
43	0.47	9.92	-0.44
44	0.496	9.94	-0.42
45	0.525	9.97	-0.39
46	0.555	9.98	-0.38
47	0.586	9.99	-0.37
48	0.621	10.01	-0.35
49	0.658	10.04	-0.32
50	0.696	10.06	-0.30
51	0.738	10.08	-0.28
52	0.781	10.10	-0.26
53	0.828	10.12	-0.24
54	0.876	10.13	-0.23
55	0.928	10.15	-0.21
56	0.983	10.17	-0.19
57	1.041	10.18	-0.18
58	1.103	9.19	-1.17
59	1.168	10.08	-0.28
60	1.238	10.12	-0.24
61	1.311	10.15	-0.21
62	1.39	10.18	-0.18

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-8S**	**Slug Test:**	**EX-8S FALLING HEAD**
		Test Well:	EX-8S
Depth to Static WL:	10.36 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Dan Dunn	Screen length:	9.68 [ft]
Date:	5/2/2001	Aquifer Thickness:	2.5 [ft]

	Time [min]	Depth to WL [ft]	Drawdown [ft]
63	1.473	10.21	-0.15
64	1.561	10.23	-0.13
65	1.655	10.25	-0.11
66	1.753	10.26	-0.10
67	1.853	10.28	-0.08
68	1.953	10.29	-0.07
69	2.053	10.30	-0.06
70	2.153	10.30	-0.06
71	2.253	10.31	-0.05

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-12S FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 3.22E-4 [cm/s]

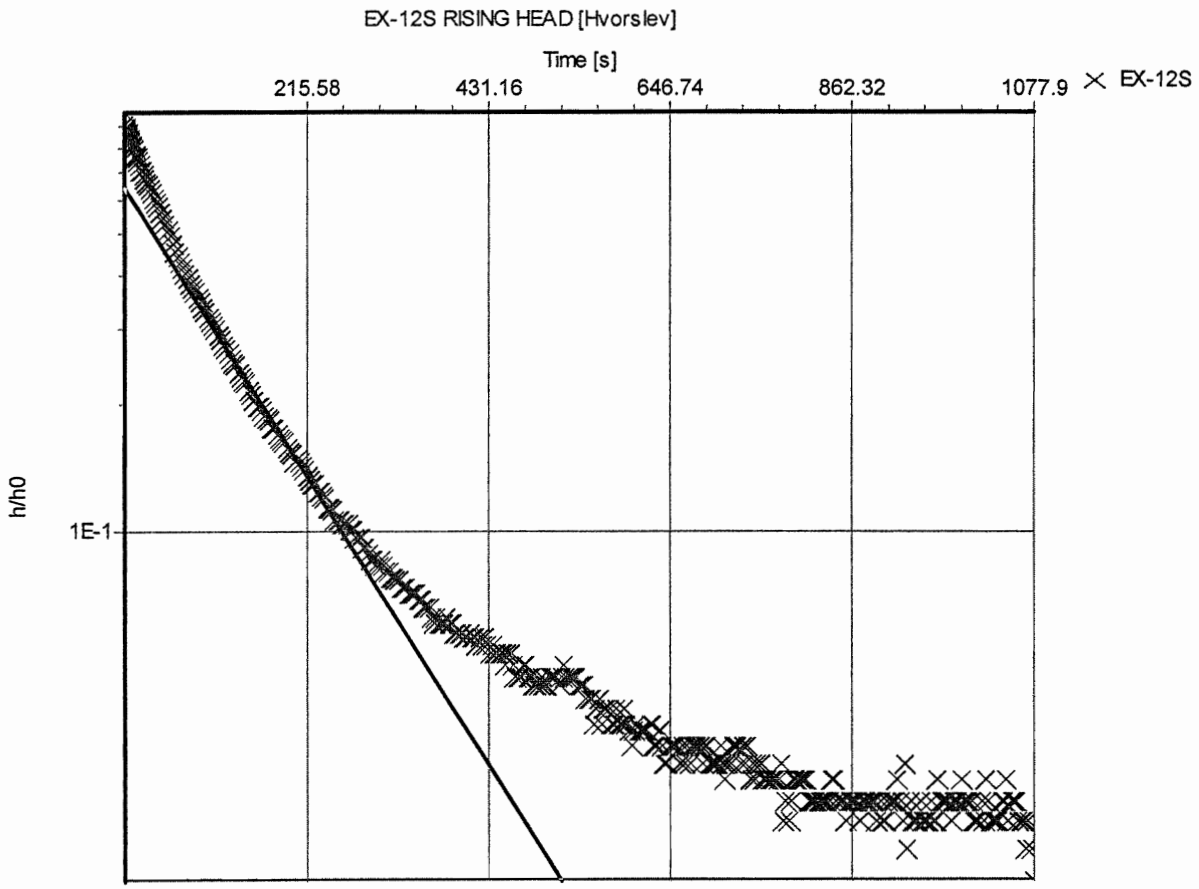
Test parameters:				
	Test Well:	EX-12S	Aquifer Thickness:	1.1 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.63 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 12/6/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-12S RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 2.70E-4 [cm/s]

Test parameters:	Test Well:	EX-12S	Aquifer Thickness:	1.1 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.63 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 12/6/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	46.03	1.72
2	0.4	45.98	1.66
3	0.8	45.88	1.57
4	1.3	45.84	1.52
5	1.7	45.85	1.54
6	2.2	45.83	1.52
7	2.8	45.82	1.51
8	3.3	45.81	1.50
9	3.9	45.80	1.49
10	4.6	45.78	1.46
11	5.2	45.79	1.47
12	5.9	45.77	1.45
13	6.7	45.76	1.44
14	7.5	45.74	1.43
15	8.3	45.73	1.41
16	9.2	45.72	1.40
17	10.1	45.70	1.39
18	11.1	45.69	1.37
19	12.2	45.69	1.37
20	13.3	45.65	1.33
21	14.5	45.63	1.32
22	15.7	45.62	1.31
23	17.1	45.59	1.28
24	18.5	45.58	1.27
25	20	45.53	1.22
26	21.5	45.53	1.22
27	23.1	45.51	1.19
28	24.8	45.49	1.17
29	26.6	45.46	1.15
30	28.5	45.44	1.13
31	30.6	45.42	1.10

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	32.8	45.39	1.08
33	35.1	45.36	1.05
34	37.6	45.34	1.03
35	40.2	45.31	1.00
36	43	45.28	0.97
37	45.9	45.25	0.94
38	48.9	45.23	0.91
39	51.9	45.20	0.89
40	54.9	45.17	0.85
41	57.9	45.14	0.82
42	60.9	45.10	0.79
43	63.9	45.08	0.77
44	66.9	45.06	0.74
45	69.9	45.03	0.72
46	72.9	45.01	0.70
47	75.9	45.00	0.68
48	78.9	44.97	0.66
49	81.9	44.96	0.65
50	84.9	44.94	0.63
51	87.9	44.93	0.61
52	90.9	44.91	0.60
53	93.9	44.90	0.58
54	96.9	44.88	0.57
55	99.9	44.86	0.55
56	102.9	44.85	0.54
57	105.9	44.84	0.53
58	108.9	44.83	0.51
59	111.9	44.81	0.50
60	114.9	44.80	0.49
61	117.9	44.79	0.47
62	120.9	44.78	0.46

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	123.9	44.77	0.45
64	126.9	44.75	0.44
65	129.9	44.74	0.43
66	132.9	44.74	0.42
67	135.9	44.72	0.41
68	138.9	44.71	0.40
69	141.9	44.70	0.39
70	144.9	44.70	0.38
71	147.9	44.68	0.37
72	150.9	44.67	0.36
73	153.9	44.67	0.35
74	156.9	44.65	0.34
75	159.9	44.65	0.34
76	162.9	44.64	0.33
77	165.9	44.64	0.32
78	168.9	44.63	0.32
79	171.9	44.63	0.31
80	174.9	44.61	0.30
81	177.9	44.61	0.30
82	180.9	44.61	0.29
83	183.9	44.60	0.29
84	186.9	44.60	0.28
85	189.9	44.59	0.28
86	192.9	44.58	0.27
87	195.9	44.58	0.27
88	198.9	44.58	0.26
89	201.9	44.57	0.25
90	204.9	44.57	0.26
91	207.9	44.57	0.25
92	210.9	44.56	0.25
93	213.9	44.55	0.24

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	216.9	44.55	0.23
95	219.9	44.54	0.23
96	222.9	44.53	0.22
97	225.9	44.53	0.22
98	228.9	44.53	0.21
99	231.9	44.53	0.21
100	234.9	44.52	0.21
101	237.9	44.52	0.21
102	240.9	44.51	0.20
103	243.9	44.51	0.20
104	246.9	44.51	0.19
105	249.9	44.50	0.18
106	252.9	44.50	0.18
107	255.9	44.50	0.18
108	258.9	44.49	0.18
109	261.9	44.49	0.18
110	264.9	44.49	0.18
111	267.9	44.49	0.17
112	270.9	44.49	0.17
113	273.9	44.48	0.17
114	276.9	44.48	0.17
115	279.9	44.48	0.17
116	282.9	44.47	0.16
117	285.9	44.47	0.16
118	288.9	44.47	0.15
119	291.9	44.46	0.15
120	294.9	44.46	0.15
121	297.9	44.46	0.14
122	300.9	44.46	0.14
123	303.9	44.46	0.15
124	306.9	44.46	0.14

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 5

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
125	309.9	44.45	0.14
126	312.9	44.45	0.14
127	315.9	44.45	0.13
128	318.9	44.45	0.13
129	321.9	44.45	0.13
130	324.9	44.45	0.13
131	327.9	44.44	0.13
132	330.9	44.44	0.13
133	333.9	44.44	0.13
134	336.9	44.44	0.12
135	339.9	44.44	0.12
136	342.9	44.44	0.12
137	345.9	44.44	0.12
138	348.9	44.43	0.12
139	351.9	44.43	0.12
140	354.9	44.43	0.11
141	357.9	44.43	0.11
142	360.9	44.43	0.11
143	363.9	44.42	0.11
144	366.9	44.42	0.10
145	369.9	44.42	0.11
146	372.9	44.42	0.10
147	375.9	44.42	0.10
148	378.9	44.42	0.10
149	381.9	44.42	0.11
150	384.9	44.42	0.10
151	387.9	44.42	0.10
152	390.9	44.41	0.10
153	393.9	44.41	0.10
154	396.9	44.41	0.10
155	399.9	44.41	0.10

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 6

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
156	402.9	44.41	0.10
157	405.9	44.41	0.10
158	408.9	44.41	0.10
159	411.9	44.41	0.10
160	414.9	44.41	0.10
161	417.9	44.41	0.09
162	420.9	44.41	0.10
163	423.9	44.41	0.09
164	426.9	44.41	0.10
165	429.9	44.41	0.09
166	432.9	44.40	0.09
167	435.9	44.41	0.09
168	438.9	44.40	0.09
169	441.9	44.40	0.09
170	444.9	44.40	0.09
171	447.9	44.40	0.09
172	450.9	44.40	0.08
173	453.9	44.40	0.09
174	456.9	44.40	0.09
175	459.9	44.40	0.08
176	462.9	44.39	0.08
177	465.9	44.39	0.08
178	468.9	44.39	0.08
179	471.9	44.40	0.08
180	474.9	44.40	0.08
181	477.9	44.39	0.08
182	480.9	44.39	0.08
183	483.9	44.39	0.07
184	486.9	44.39	0.07
185	489.9	44.39	0.07
186	492.9	44.39	0.08

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 7

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
187	495.9	44.39	0.07
188	498.9	44.39	0.07
189	501.9	44.39	0.08
190	504.9	44.39	0.08
191	507.9	44.39	0.08
192	510.9	44.39	0.08
193	513.9	44.39	0.07
194	516.9	44.39	0.08
195	519.9	44.40	0.08
196	522.9	44.39	0.08
197	525.9	44.39	0.08
198	528.9	44.39	0.08
199	531.9	44.39	0.08
200	534.9	44.39	0.08
201	537.9	44.39	0.07
202	540.9	44.39	0.07
203	543.9	44.39	0.07
204	546.9	44.38	0.07
205	549.9	44.38	0.07
206	552.9	44.38	0.07
207	555.9	44.37	0.06
208	558.9	44.38	0.07
209	561.9	44.38	0.07
210	564.9	44.37	0.06
211	567.9	44.38	0.07
212	570.9	44.38	0.07
213	573.9	44.38	0.07
214	576.9	44.37	0.06
215	579.9	44.37	0.06
216	582.9	44.38	0.07
217	585.9	44.37	0.06

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 8

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
218	588.9	44.37	0.06
219	591.9	44.38	0.07
220	594.9	44.37	0.06
221	597.9	44.37	0.06
222	600.9	44.37	0.05
223	603.9	44.37	0.06
224	606.9	44.37	0.06
225	609.9	44.37	0.06
226	612.9	44.37	0.06
227	615.9	44.37	0.06
228	618.9	44.37	0.06
229	621.9	44.37	0.06
230	624.9	44.37	0.06
231	627.9	44.37	0.05
232	630.9	44.37	0.05
233	633.9	44.37	0.06
234	636.9	44.37	0.05
235	639.9	44.36	0.05
236	642.9	44.36	0.05
237	645.9	44.37	0.05
238	648.9	44.37	0.05
239	651.9	44.37	0.05
240	654.9	44.37	0.05
241	657.9	44.36	0.05
242	660.9	44.37	0.05
243	663.9	44.36	0.05
244	666.9	44.37	0.05
245	669.9	44.36	0.05
246	672.9	44.37	0.05
247	675.9	44.37	0.05
248	678.9	44.37	0.05

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 9

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
249	681.9	44.37	0.05
250	684.9	44.36	0.05
251	687.9	44.37	0.05
252	690.9	44.37	0.05
253	693.9	44.36	0.05
254	696.9	44.36	0.05
255	699.9	44.36	0.05
256	702.9	44.36	0.05
257	705.9	44.37	0.05
258	708.9	44.36	0.05
259	711.9	44.36	0.04
260	714.9	44.36	0.05
261	717.9	44.36	0.05
262	720.9	44.37	0.05
263	723.9	44.37	0.05
264	726.9	44.37	0.05
265	729.9	44.36	0.05
266	732.9	44.37	0.05
267	735.9	44.36	0.05
268	738.9	44.37	0.05
269	741.9	44.36	0.04
270	744.9	44.36	0.05
271	747.9	44.36	0.04
272	750.9	44.36	0.05
273	753.9	44.36	0.05
274	756.9	44.36	0.04
275	759.9	44.36	0.04
276	762.9	44.36	0.04
277	765.9	44.36	0.04
278	768.9	44.36	0.04
279	771.9	44.36	0.04

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 10

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
280	774.9	44.36	0.04
281	777.9	44.36	0.05
282	780.9	44.35	0.04
283	783.9	44.35	0.04
284	786.9	44.35	0.04
285	789.9	44.35	0.04
286	792.9	44.36	0.04
287	795.9	44.36	0.04
288	798.9	44.36	0.04
289	801.9	44.36	0.04
290	804.9	44.36	0.04
291	807.9	44.36	0.04
292	810.9	44.35	0.04
293	813.9	44.35	0.04
294	816.9	44.35	0.04
295	819.9	44.35	0.04
296	822.9	44.35	0.04
297	825.9	44.35	0.04
298	828.9	44.35	0.04
299	831.9	44.35	0.04
300	834.9	44.35	0.04
301	837.9	44.36	0.04
302	840.9	44.36	0.04
303	843.9	44.35	0.04
304	846.9	44.35	0.04
305	849.9	44.35	0.04
306	852.9	44.35	0.04
307	855.9	44.35	0.04
308	858.9	44.35	0.04
309	861.9	44.35	0.04
310	864.9	44.35	0.04

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 11

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
311	867.9	44.35	0.04
312	870.9	44.35	0.04
313	873.9	44.35	0.04
314	876.9	44.35	0.04
315	879.9	44.35	0.04
316	882.9	44.35	0.04
317	885.9	44.35	0.04
318	888.9	44.35	0.04
319	891.9	44.35	0.04
320	894.9	44.35	0.04
321	897.9	44.35	0.04
322	900.9	44.35	0.04
323	903.9	44.35	0.04
324	906.9	44.35	0.04
325	909.9	44.35	0.04
326	912.9	44.35	0.04
327	915.9	44.36	0.04
328	918.9	44.35	0.04
329	921.9	44.35	0.04
330	924.9	44.36	0.05
331	927.9	44.34	0.03
332	930.9	44.35	0.04
333	933.9	44.35	0.04
334	936.9	44.35	0.04
335	939.9	44.35	0.04
336	942.9	44.35	0.04
337	945.9	44.35	0.04
338	948.9	44.35	0.04
339	951.9	44.35	0.04
340	954.9	44.35	0.04
341	957.9	44.35	0.04

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 12

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
342	960.9	44.35	0.04
343	963.9	44.36	0.04
344	966.9	44.35	0.04
345	969.9	44.35	0.04
346	972.9	44.35	0.04
347	975.9	44.35	0.04
348	978.9	44.35	0.04
349	981.9	44.35	0.04
350	984.9	44.35	0.04
351	987.9	44.35	0.04
352	990.9	44.36	0.04
353	993.9	44.35	0.04
354	996.9	44.35	0.04
355	999.9	44.35	0.04
356	1002.9	44.35	0.04
357	1005.9	44.35	0.04
358	1008.9	44.35	0.04
359	1011.9	44.35	0.04
360	1014.9	44.35	0.04
361	1017.9	44.35	0.04
362	1020.9	44.36	0.04
363	1023.9	44.35	0.04
364	1026.9	44.35	0.04
365	1029.9	44.35	0.04
366	1032.9	44.35	0.04
367	1035.9	44.35	0.04
368	1038.9	44.35	0.04
369	1041.9	44.35	0.04
370	1044.9	44.36	0.04
371	1047.9	44.35	0.04
372	1050.9	44.35	0.04

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report

Project: CLI #3 Expansion well slug tests

Number: 91-0118

Client: Clinton Landfill, Inc.

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S RISING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	44.313 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/25/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
373	1053.9	44.35	0.04
374	1056.9	44.35	0.04
375	1059.9	44.35	0.04
376	1062.9	44.35	0.04
377	1065.9	44.35	0.04
378	1068.9	44.34	0.03
379	1071.9	44.35	0.04
380	1074.9	44.34	0.03
381	1077.9	44.34	0.03

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S FALLING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	43.98 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/24/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	42.23	-1.75
2	1	42.53	-1.45
3	4	42.69	-1.29
4	6	42.73	-1.25
5	7	42.72	-1.26
6	9	42.74	-1.24
7	11	42.77	-1.21
8	15	42.82	-1.16
9	17	42.87	-1.11
10	19	42.89	-1.09
11	22	42.95	-1.03
12	24	42.97	-1.01
13	27	43.04	-0.94
14	30	43.09	-0.89
15	33	43.08	-0.90
16	36	43.12	-0.86
17	39	43.15	-0.83
18	42	43.19	-0.79
19	45	43.23	-0.75
20	48	43.25	-0.73
21	51	43.28	-0.70
22	54	43.30	-0.68
23	57	43.32	-0.66
24	60	43.34	-0.64
25	63	43.37	-0.61
26	66	43.38	-0.60
27	69	43.41	-0.57
28	72	43.42	-0.56
29	75	43.44	-0.54
30	81	43.47	-0.51
31	84	43.49	-0.49

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S FALLING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	43.98 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/24/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	87	43.50	-0.48
33	90	43.52	-0.46
34	93	43.53	-0.45
35	96	43.54	-0.44
36	99	43.56	-0.42
37	102	43.57	-0.41
38	105	43.59	-0.39
39	108	43.60	-0.38
40	111	43.61	-0.37
41	114	43.62	-0.36
42	117	43.64	-0.34
43	120	43.65	-0.33
44	123	43.65	-0.33
45	126	43.67	-0.31
46	129	43.67	-0.31
47	135	43.69	-0.29
48	138	43.69	-0.29
49	141	43.71	-0.27
50	147	43.72	-0.26
51	150	43.73	-0.25
52	153	43.74	-0.24
53	159	43.75	-0.23
54	165	43.76	-0.22
55	171	43.77	-0.21
56	174	43.78	-0.20
57	180	43.79	-0.19
58	186	43.79	-0.19
59	192	43.80	-0.18
60	195	43.81	-0.17
61	201	43.82	-0.16
62	207	43.83	-0.15

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S FALLING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	43.98 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/24/2003	Aquifer Thickness:	1.1 [ft]

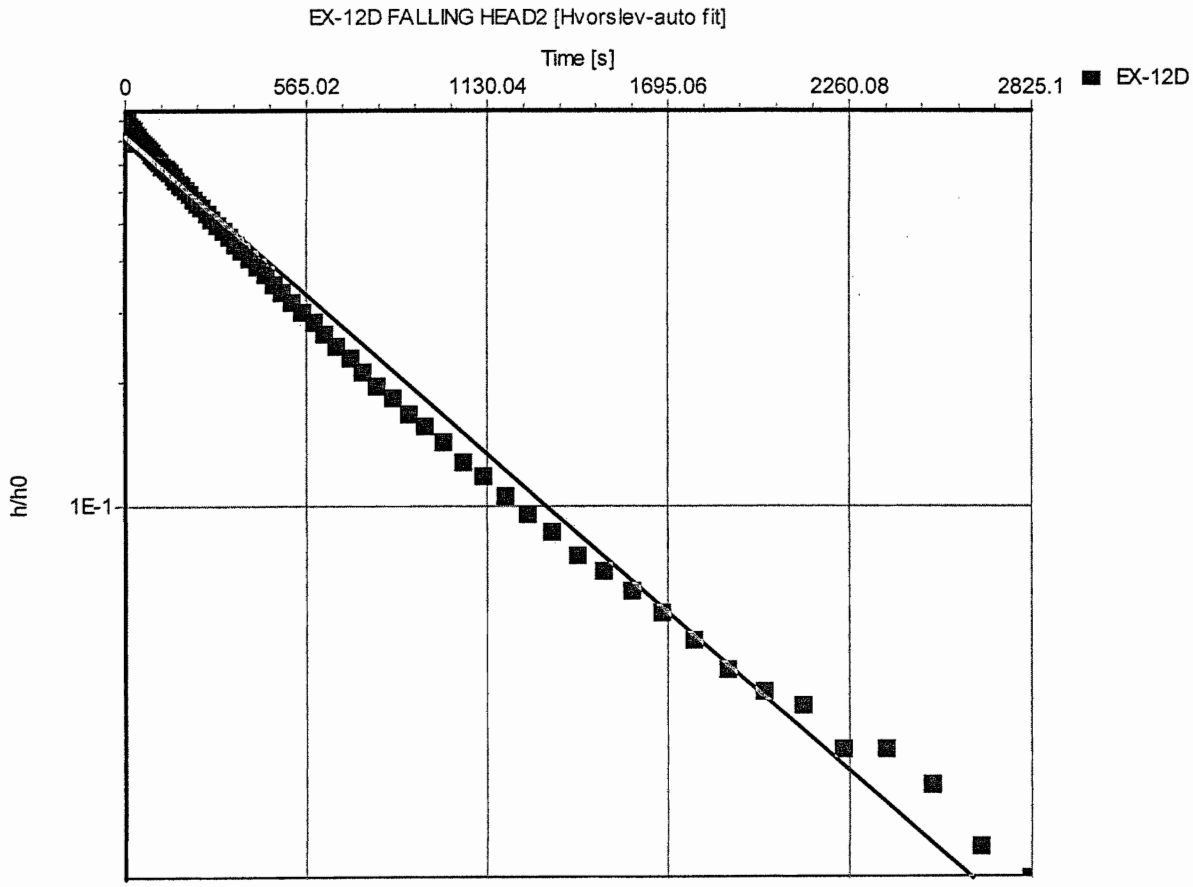
	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	213	43.83	-0.15
64	219	43.84	-0.14
65	237	43.85	-0.13
66	246	43.86	-0.12
67	249	43.86	-0.13
68	252	43.86	-0.12
69	267	43.87	-0.11
70	288	43.89	-0.09
71	291	43.89	-0.09
72	294	43.89	-0.09
73	306	43.89	-0.09
74	330	43.90	-0.08
75	348	43.91	-0.07
76	351	43.90	-0.08
77	354	43.91	-0.07
78	369	43.92	-0.06
79	372	43.91	-0.07
80	381	43.92	-0.06
81	387	43.91	-0.07
82	390	43.92	-0.06
83	399	43.91	-0.07
84	402	43.92	-0.06
85	408	43.92	-0.06
86	411	43.92	-0.06
87	426	43.92	-0.06
88	453	43.92	-0.06
89	459	43.92	-0.06
90	480	43.92	-0.06
91	483	43.92	-0.06
92	501	43.93	-0.05
93	504	43.92	-0.06

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-12S**	**Slug Test:**	**EX-12S FALLING HEAD**
		Test Well:	EX-12S
Depth to Static WL:	43.98 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.63 [ft]
Date:	9/24/2003	Aquifer Thickness:	1.1 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	507	43.93	-0.05
95	510	43.92	-0.06
96	525	43.93	-0.05
97	528	43.92	-0.06
98	534	43.93	-0.05
99	540	43.92	-0.06
100	546	43.93	-0.05
101	555	43.94	-0.04
102	573	43.93	-0.05
103	576	43.94	-0.04
104	582	43.93	-0.05
105	585	43.92	-0.06
106	588	43.93	-0.05
107	618	43.94	-0.04
108	621	43.93	-0.05
109	654	43.94	-0.04
110	687	43.93	-0.05
111	714	43.94	-0.04
112	723	43.95	-0.03
113	726	43.94	-0.04
114	738	43.95	-0.03
115	741	43.94	-0.04
116	753	43.93	-0.05
117	762	43.94	-0.04
118	777	43.95	-0.03

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**	
	Project:	CLI #3 Expansion well slug tests
	Number:	91-0118
	Client:	Clinton Landfill, Inc.



Slug Test: **EX-12D FALLING HEAD2**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 5.97E-5 [cm/s]

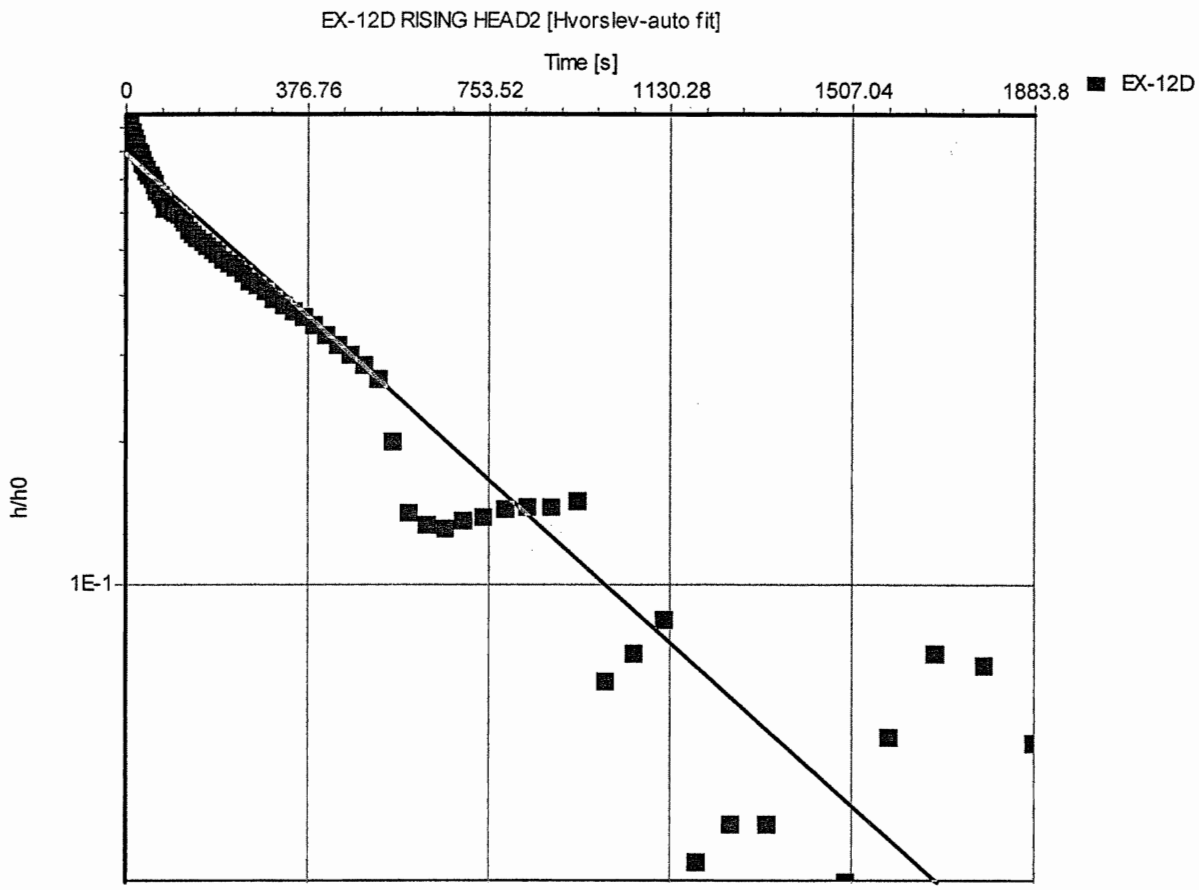
Test parameters:				
	Test Well:	EX-12D	Aquifer Thickness:	3.75 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.63 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 12/6/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-12D RISING HEAD2**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 7.75E-5 [cm/s]

Test parameters:	Test Well:	EX-12D	Aquifer Thickness:	3.75 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.63 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 12/11/2004

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-12D**	**Slug Test:**	**EX-12D FALLING HEAD2**
		Test Well:	EX-12D
Depth to Static WL:	43.4 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	12/2/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	42.55	-0.85
2	0.5	42.67	-0.73
3	1.1	42.61	-0.79
4	1.8	42.66	-0.74
5	2.4	42.73	-0.67
6	3.1	42.62	-0.78
7	3.9	42.59	-0.81
8	4.7	42.65	-0.75
9	5.5	42.63	-0.77
10	6.4	42.65	-0.75
11	7.3	42.65	-0.75
12	8.3	42.65	-0.75
13	9.4	42.65	-0.75
14	10.5	42.66	-0.74
15	11.7	42.66	-0.74
16	12.9	42.66	-0.74
17	14.3	42.66	-0.74
18	15.7	42.67	-0.73
19	17.2	42.67	-0.73
20	18.7	42.67	-0.73
21	20.3	42.68	-0.73
22	22	42.68	-0.72
23	23.8	42.68	-0.72
24	25.7	42.68	-0.72
25	27.8	42.69	-0.71
26	30	42.69	-0.71
27	32.3	42.69	-0.71
28	34.8	42.70	-0.70
29	37.4	42.70	-0.70
30	40.2	42.71	-0.69
31	43.1	42.71	-0.69

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-12D**	**Slug Test:**	**EX-12D FALLING HEAD2**
		Test Well:	EX-12D
Depth to Static WL:	43.4 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	12/2/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	46.2	42.72	-0.68
33	49.5	42.72	-0.68
34	53	42.73	-0.67
35	56.7	42.73	-0.67
36	60.6	42.74	-0.66
37	64.8	42.74	-0.66
38	69.2	42.75	-0.65
39	73.9	42.75	-0.65
40	78.9	42.76	-0.64
41	84.2	42.77	-0.63
42	89.8	42.78	-0.63
43	95.7	42.78	-0.62
44	102	42.79	-0.61
45	108.6	42.80	-0.60
46	115.6	42.81	-0.59
47	123.1	42.82	-0.58
48	131	42.82	-0.58
49	139.4	42.83	-0.57
50	148.3	42.84	-0.56
51	157.7	42.85	-0.55
52	167.7	42.87	-0.53
53	178.3	42.88	-0.52
54	189.5	42.89	-0.51
55	201.4	42.90	-0.50
56	214	42.91	-0.49
57	227.3	42.93	-0.47
58	241.4	42.94	-0.46
59	256.3	42.95	-0.45
60	272.1	42.97	-0.43
61	288.9	42.98	-0.42
62	306.7	43.00	-0.41

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-12D**	**Slug Test:**	**EX-12D FALLING HEAD2**
		Test Well:	EX-12D
Depth to Static WL:	43.4 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	12/2/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	325.5	43.01	-0.39
64	345.4	43.02	-0.38
65	366.5	43.04	-0.36
66	388.9	43.06	-0.34
67	412.6	43.07	-0.33
68	437.7	43.08	-0.32
69	464.3	43.10	-0.30
70	492.5	43.12	-0.28
71	522.4	43.13	-0.27
72	554	43.15	-0.25
73	587.5	43.16	-0.24
74	623	43.18	-0.23
75	660.6	43.19	-0.21
76	700.4	43.21	-0.20
77	742.6	43.22	-0.18
78	787.3	43.23	-0.17
79	834.7	43.24	-0.16
80	884.9	43.26	-0.14
81	938	43.27	-0.13
82	994.3	43.28	-0.12
83	1053.9	43.29	-0.11
84	1117.1	43.30	-0.10
85	1184	43.31	-0.09
86	1254.9	43.32	-0.08
87	1330	43.33	-0.07
88	1409.5	43.34	-0.06
89	1493.8	43.34	-0.06
90	1583.1	43.35	-0.05
91	1677.6	43.35	-0.05
92	1777.7	43.36	-0.04
93	1883.8	43.37	-0.03

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-12D**	**Slug Test:**	**EX-12D FALLING HEAD2**
		Test Well:	EX-12D
Depth to Static WL:	43.4 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	12/2/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	1996.2	43.37	-0.03
95	2115.2	43.37	-0.03
96	2241.3	43.38	-0.02

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-12D**	**Slug Test:**	**EX-12D RISING HEAD2**
		Test Well:	EX-12D
Depth to Static WL:	43.4 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	12/2/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	44.16	0.76
2	0.5	44.16	0.76
3	1.1	44.17	0.77
4	1.8	44.15	0.75
5	2.4	44.14	0.74
6	3.1	44.14	0.74
7	3.9	44.14	0.74
8	4.7	44.13	0.73
9	5.5	44.14	0.74
10	6.4	44.13	0.73
11	7.3	44.12	0.72
12	8.3	44.12	0.72
13	9.4	44.11	0.71
14	10.5	44.09	0.69
15	11.7	44.10	0.70
16	12.9	44.08	0.68
17	14.3	44.09	0.69
18	15.7	44.08	0.68
19	17.2	44.07	0.67
20	18.7	44.07	0.66
21	20.3	44.06	0.66
22	22	44.05	0.65
23	23.8	44.04	0.64
24	25.7	44.04	0.64
25	27.8	44.03	0.63
26	30	44.03	0.63
27	32.3	44.01	0.61
28	34.8	44.00	0.60
29	37.4	44.00	0.60
30	40.2	43.98	0.58
31	43.1	43.98	0.58

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-12D**	**Slug Test:**	**EX-12D RISING HEAD2**
		Test Well:	EX-12D
Depth to Static WL:	43.4 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	12/2/2004	Aquifer Thickness:	3.75 [ft]

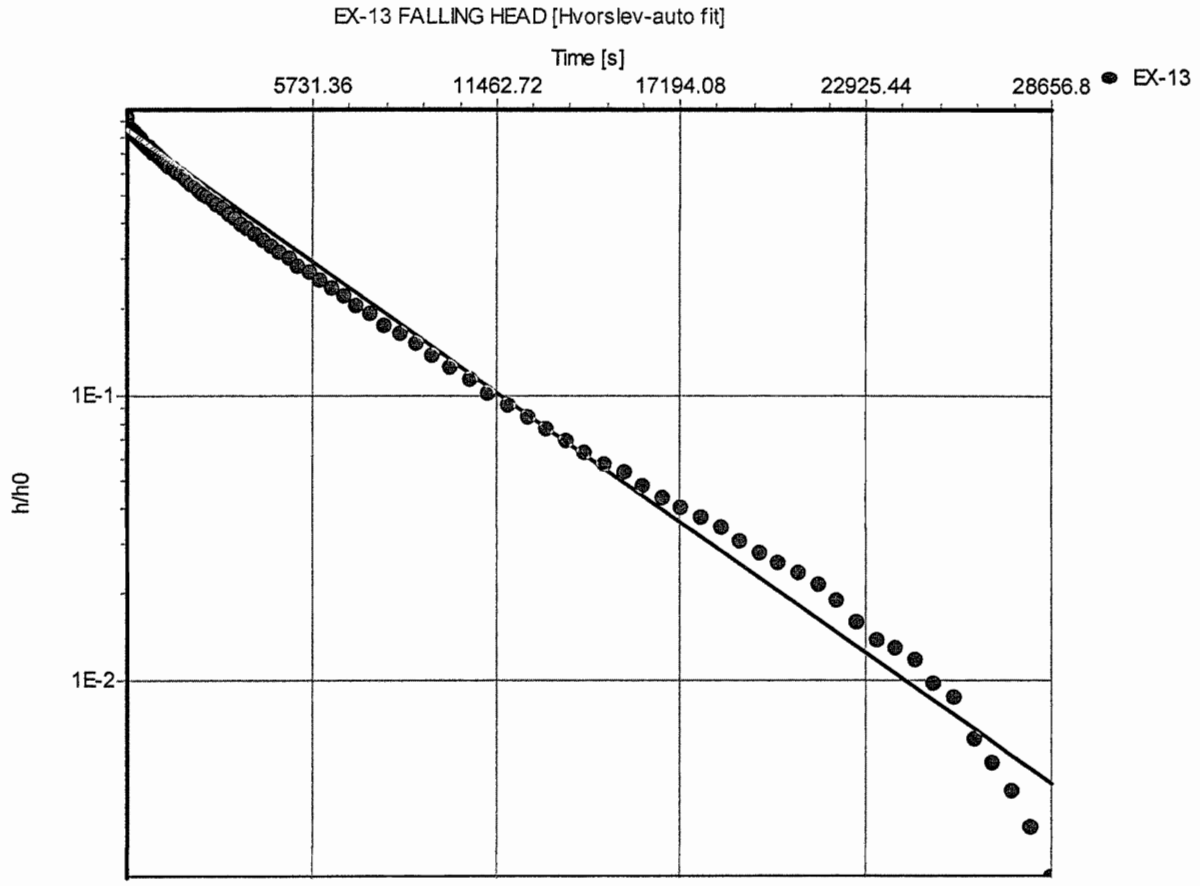
	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	46.2	43.97	0.57
33	49.5	43.97	0.57
34	53	43.96	0.56
35	56.7	43.95	0.55
36	60.6	43.94	0.54
37	64.8	43.93	0.52
38	69.2	43.92	0.52
39	73.9	43.91	0.51
40	78.9	43.89	0.48
41	84.2	43.89	0.49
42	89.8	43.89	0.48
43	95.7	43.88	0.48
44	102	43.87	0.47
45	108.6	43.87	0.47
46	115.6	43.86	0.46
47	123.1	43.85	0.45
48	131	43.84	0.44
49	139.4	43.83	0.43
50	148.3	43.82	0.42
51	157.7	43.81	0.41
52	167.7	43.80	0.40
53	178.3	43.80	0.40
54	189.5	43.79	0.39
55	201.4	43.78	0.38
56	214	43.77	0.37
57	227.3	43.76	0.36
58	241.4	43.75	0.35
59	256.3	43.74	0.34
60	272.1	43.73	0.33
61	288.9	43.72	0.32
62	306.7	43.71	0.31

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-12D**	**Slug Test:**	**EX-12D RISING HEAD2**
		Test Well:	EX-12D
Depth to Static WL:	43.4 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	12/2/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	325.5	43.70	0.30
64	345.4	43.69	0.29
65	366.5	43.69	0.29
66	388.9	43.68	0.27
67	412.6	43.66	0.26
68	437.7	43.65	0.25
69	464.3	43.64	0.24
70	492.5	43.63	0.23
71	522.4	43.61	0.21
72	554	43.56	0.16
73	587.5	43.51	0.11
74	623	43.51	0.11
75	660.6	43.50	0.10
76	700.4	43.51	0.11
77	742.6	43.51	0.11
78	787.3	43.51	0.11
79	834.7	43.52	0.12
80	884.9	43.52	0.12
81	938	43.52	0.12
82	994.3	43.45	0.05
83	1053.9	43.46	0.06
84	1117.1	43.47	0.07
85	1184	43.42	0.02
86	1254.9	43.43	0.02
87	1330	43.38	-0.02
88	1493.8	43.42	0.02
89	1583.1	43.44	0.04
90	1677.6	43.46	0.06
91	1777.7	43.35	-0.05
92	1883.8	43.36	-0.04
93	1996.2	43.40	0.00

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**	
	Project:	CLI #3 Expansion well slug tests
	Number:	91-0118
	Client:	Clinton Landfill, Inc.



Slug Test: **EX-13 FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 6.77E-6 [cm/s]

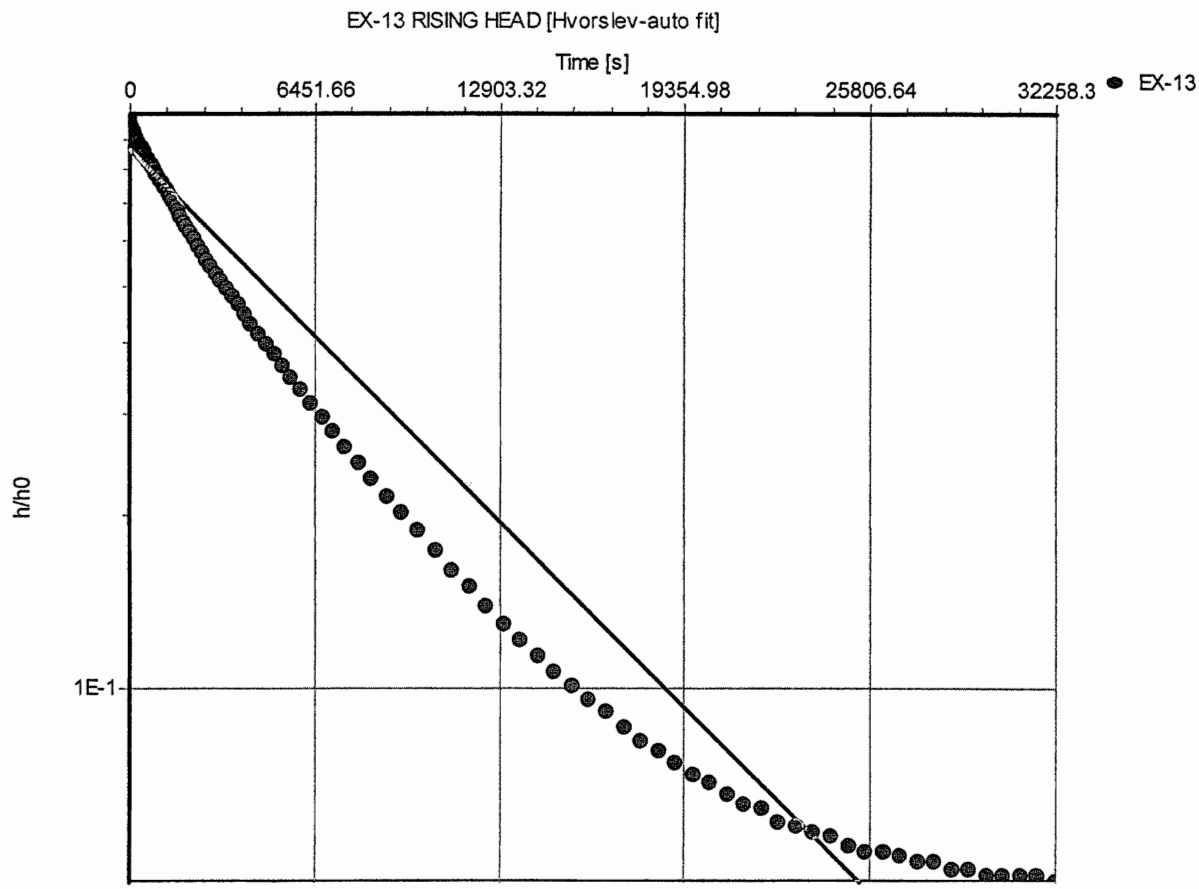
Test parameters:				
	Test Well:	EX-13	Aquifer Thickness:	3.75 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.78 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 11/29/2004

PDC Technical Services, Inc.	Slug Test Analysis Report
4349 Southport Road	Project: CLI #3 Expansion well slug tests
Peoria, IL 61615	Number: 91-0118
Phone: 3.9-676-4893	Client: Clinton Landfill, Inc.



Slug Test: **EX-13 RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 4.23E-6 [cm/s]

Test parameters:				
	Test Well:	EX-13	Aquifer Thickness:	3.75 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.78 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 11/29/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-13**	**Slug Test:**	**EX-13 FALLING HEAD**
		Test Well:	EX-13
Depth to Static WL:	55.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.78 [ft]
Date:	11/14/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	53.52	-1.96
2	0.5	53.69	-1.79
3	0.9	53.85	-1.63
4	1.4	53.52	-1.96
5	2	53.75	-1.73
6	2.5	53.78	-1.70
7	3.1	53.77	-1.71
8	3.8	53.76	-1.72
9	4.4	53.65	-1.83
10	5.1	53.74	-1.74
11	5.9	53.78	-1.70
12	6.7	53.68	-1.80
13	7.5	53.75	-1.73
14	8.4	53.78	-1.70
15	9.3	53.77	-1.71
16	10.3	53.77	-1.71
17	11.4	53.77	-1.71
18	12.5	53.77	-1.71
19	13.7	53.76	-1.72
20	14.9	53.77	-1.71
21	16.3	53.77	-1.71
22	17.7	53.77	-1.71
23	19.2	53.77	-1.71
24	20.7	53.77	-1.71
25	22.3	53.77	-1.71
26	24	53.77	-1.71
27	25.8	53.77	-1.71
28	27.7	53.78	-1.70
29	29.8	53.78	-1.70
30	32	53.78	-1.70
31	34.3	53.78	-1.70

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-13**	**Slug Test:**	**EX-13 FALLING HEAD**
		Test Well:	EX-13
Depth to Static WL:	55.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.78 [ft]
Date:	11/14/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	36.8	53.78	-1.70
33	39.4	53.78	-1.70
34	42.2	53.79	-1.69
35	45.1	53.79	-1.69
36	48.2	53.79	-1.69
37	51.5	53.79	-1.69
38	55	53.79	-1.69
39	58.7	53.79	-1.69
40	62.6	53.80	-1.68
41	66.8	53.80	-1.68
42	71.2	53.80	-1.68
43	75.9	53.80	-1.68
44	80.9	53.81	-1.67
45	86.2	53.81	-1.67
46	91.8	53.81	-1.67
47	97.7	53.82	-1.66
48	104	53.82	-1.66
49	110.6	53.82	-1.66
50	117.6	53.83	-1.65
51	125.1	53.83	-1.65
52	133	53.83	-1.65
53	141.4	53.84	-1.64
54	150.3	53.84	-1.64
55	159.7	53.84	-1.64
56	169.7	53.85	-1.63
57	180.3	53.85	-1.63
58	191.5	53.86	-1.62
59	203.4	53.86	-1.62
60	216	53.87	-1.61
61	229.3	53.87	-1.61
62	243.4	53.88	-1.60

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-13**	**Slug Test:**	**EX-13 FALLING HEAD**
		Test Well:	EX-13
Depth to Static WL:	55.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.78 [ft]
Date:	11/14/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	258.3	53.88	-1.60
64	274.1	53.89	-1.59
65	290.9	53.90	-1.58
66	308.7	53.90	-1.58
67	327.5	53.91	-1.57
68	347.4	53.92	-1.56
69	368.5	53.93	-1.55
70	390.9	53.94	-1.54
71	414.6	53.95	-1.53
72	439.7	53.96	-1.52
73	466.3	53.97	-1.51
74	494.5	53.98	-1.50
75	524.4	53.99	-1.49
76	556	54.00	-1.48
77	589.5	54.01	-1.47
78	625	54.03	-1.45
79	662.6	54.04	-1.44
80	702.4	54.05	-1.43
81	744.6	54.07	-1.41
82	789.3	54.08	-1.40
83	836.7	54.10	-1.38
84	886.9	54.11	-1.37
85	940	54.13	-1.35
86	996.3	54.15	-1.33
87	1055.9	54.16	-1.32
88	1119.1	54.18	-1.30
89	1186	54.20	-1.28
90	1256.9	54.22	-1.26
91	1332	54.24	-1.24
92	1411.5	54.26	-1.22
93	1495.8	54.29	-1.19

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-13**	**Slug Test:**	**EX-13 FALLING HEAD**
		Test Well:	EX-13
Depth to Static WL:	55.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.78 [ft]
Date:	11/14/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	1585.1	54.31	-1.17
95	1679.6	54.33	-1.15
96	1779.7	54.36	-1.12
97	1885.8	54.38	-1.10
98	1998.2	54.41	-1.07
99	2117.2	54.43	-1.05
100	2243.3	54.46	-1.02
101	2376.9	54.49	-0.99
102	2518.4	54.52	-0.96
103	2668.3	54.55	-0.93
104	2827.1	54.58	-0.90
105	2995.3	54.61	-0.87
106	3173.4	54.64	-0.84
107	3362.1	54.67	-0.81
108	3562	54.70	-0.78
109	3773.7	54.73	-0.75
110	3998	54.76	-0.72
111	4235.6	54.80	-0.68
112	4487.2	54.83	-0.65
113	4753.8	54.86	-0.62
114	5036.2	54.89	-0.59
115	5335.3	54.93	-0.55
116	5652.1	54.96	-0.52
117	5987.7	54.99	-0.49
118	6343.2	55.02	-0.46
119	6719.7	55.05	-0.43
120	7118.6	55.08	-0.40
121	7541.1	55.11	-0.37
122	7988.6	55.14	-0.34
123	8462.6	55.16	-0.32
124	8964.7	55.19	-0.29

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 5

Test Well:	**EX-13**	**Slug Test:**	**EX-13 FALLING HEAD**
		Test Well:	EX-13
Depth to Static WL:	55.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.78 [ft]
Date:	11/14/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
125	9496.6	55.21	-0.27
126	10060	55.24	-0.24
127	10656.8	55.26	-0.22
128	11256.8	55.28	-0.20
129	11856.8	55.30	-0.18
130	12456.8	55.32	-0.16
131	13056.8	55.33	-0.15
132	13656.8	55.35	-0.13
133	14256.8	55.36	-0.12
134	14856.8	55.37	-0.11
135	15456.8	55.38	-0.10
136	16056.8	55.39	-0.09
137	16656.8	55.40	-0.08
138	17256.8	55.40	-0.08
139	17856.8	55.41	-0.07
140	18456.8	55.41	-0.07
141	19056.8	55.42	-0.06
142	19656.8	55.43	-0.05
143	20256.8	55.43	-0.05
144	20856.8	55.43	-0.05
145	21456.8	55.44	-0.04
146	22056.8	55.44	-0.04
147	22656.8	55.45	-0.03
148	23256.8	55.45	-0.03
149	23856.8	55.46	-0.02
150	24456.8	55.46	-0.02
151	25056.8	55.46	-0.02
152	25656.8	55.46	-0.02
153	26256.8	55.47	-0.01
154	26856.8	55.47	-0.01
155	27456.8	55.47	-0.01

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 6

Test Well:	**EX-13**	**Slug Test:**	**EX-13 FALLING HEAD**
		Test Well:	EX-13
Depth to Static WL:	55.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.78 [ft]
Date:	11/14/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
156	28056.8	55.47	-0.01
157	28656.8	55.48	0.00
158	29256.8	55.48	0.00

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-13**	**Slug Test:**	**EX-13 RISING HEAD**
		Test Well:	EX-13
Depth to Static WL:	55.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.78 [ft]
Date:	11/15/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	57.33	1.85
2	0.4	57.33	1.85
3	0.7	57.27	1.79
4	1.1	57.32	1.84
5	1.5	57.27	1.79
6	2	57.29	1.81
7	2.4	57.27	1.79
8	2.9	57.28	1.80
9	3.5	57.27	1.79
10	4	57.28	1.80
11	4.6	57.27	1.79
12	5.3	57.27	1.79
13	5.9	57.27	1.79
14	6.6	57.26	1.78
15	7.4	57.26	1.78
16	8.2	57.26	1.78
17	9	57.26	1.78
18	9.9	57.26	1.78
19	10.8	57.26	1.78
20	11.8	57.26	1.78
21	12.9	57.25	1.77
22	14	57.25	1.77
23	15.2	57.25	1.77
24	16.4	57.25	1.77
25	17.8	57.25	1.77
26	19.2	57.25	1.77
27	20.7	57.25	1.77
28	22.2	57.24	1.76
29	23.8	57.24	1.76
30	25.5	57.24	1.76
31	27.3	57.24	1.76

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-13**	**Slug Test:**	**EX-13 RISING HEAD**
		Test Well:	EX-13
Depth to Static WL:	55.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.78 [ft]
Date:	11/15/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	29.2	57.24	1.76
33	31.3	57.24	1.76
34	33.5	57.23	1.75
35	35.8	57.23	1.75
36	38.3	57.23	1.75
37	40.9	57.23	1.75
38	43.7	57.23	1.75
39	46.6	57.23	1.75
40	49.7	57.23	1.75
41	53	57.22	1.74
42	56.5	57.22	1.74
43	60.2	57.22	1.74
44	64.1	57.22	1.74
45	68.3	57.22	1.74
46	72.7	57.21	1.73
47	77.4	57.21	1.73
48	82.4	57.21	1.73
49	87.7	57.21	1.73
50	93.3	57.20	1.72
51	99.2	57.20	1.72
52	105.5	57.20	1.72
53	112.1	57.19	1.71
54	119.1	57.19	1.71
55	126.6	57.19	1.71
56	134.5	57.18	1.70
57	142.9	57.18	1.70
58	151.8	57.18	1.70
59	161.2	57.17	1.69
60	171.2	57.17	1.69
61	181.8	57.16	1.68
62	193	57.16	1.68

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-13**	**Slug Test:**	**EX-13 RISING HEAD**
		Test Well:	EX-13
Depth to Static WL:	55.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.78 [ft]
Date:	11/15/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	204.9	57.16	1.68
64	217.5	57.15	1.67
65	230.8	57.14	1.66
66	244.9	57.14	1.66
67	259.8	57.13	1.65
68	275.6	57.13	1.65
69	292.4	57.12	1.64
70	310.2	57.12	1.64
71	329	57.11	1.63
72	348.9	57.10	1.62
73	370	57.09	1.61
74	392.4	57.09	1.61
75	416.1	57.08	1.60
76	441.2	57.07	1.59
77	467.8	57.06	1.58
78	496	57.05	1.57
79	525.9	57.04	1.56
80	557.5	57.03	1.55
81	591	57.03	1.55
82	626.5	57.01	1.53
83	664.1	57.00	1.52
84	703.9	56.99	1.51
85	746.1	56.98	1.50
86	790.8	56.97	1.49
87	838.2	56.95	1.47
88	888.4	56.94	1.46
89	941.5	56.92	1.44
90	997.8	56.91	1.43
91	1057.4	56.89	1.41
92	1120.6	56.88	1.40
93	1187.5	56.86	1.38

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-13**	**Slug Test:**	**EX-13 RISING HEAD**
		Test Well:	EX-13
Depth to Static WL:	55.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.78 [ft]
Date:	11/15/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	1258.4	56.84	1.36
95	1333.5	56.82	1.34
96	1413	56.80	1.32
97	1497.3	56.78	1.30
98	1586.6	56.75	1.27
99	1681.1	56.73	1.25
100	1781.2	56.70	1.22
101	1887.3	56.68	1.20
102	1999.7	56.65	1.17
103	2118.7	56.62	1.14
104	2244.8	56.60	1.12
105	2378.4	56.57	1.09
106	2519.9	56.54	1.06
107	2669.8	56.51	1.03
108	2828.6	56.48	1.00
109	2996.8	56.45	0.97
110	3174.9	56.42	0.94
111	3363.6	56.40	0.92
112	3563.5	56.37	0.89
113	3775.2	56.34	0.86
114	3999.5	56.31	0.83
115	4237.1	56.28	0.80
116	4488.7	56.25	0.77
117	4755.3	56.21	0.73
118	5037.7	56.18	0.70
119	5336.8	56.15	0.67
120	5653.6	56.12	0.64
121	5989.2	56.09	0.61
122	6344.7	56.06	0.58
123	6721.2	56.03	0.55
124	7120.1	56.00	0.52

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 5

Test Well:	**EX-13**	**Slug Test:**	**EX-13 RISING HEAD**
		Test Well:	EX-13
Depth to Static WL:	55.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.78 [ft]
Date:	11/15/2004	Aquifer Thickness:	3.75 [ft]

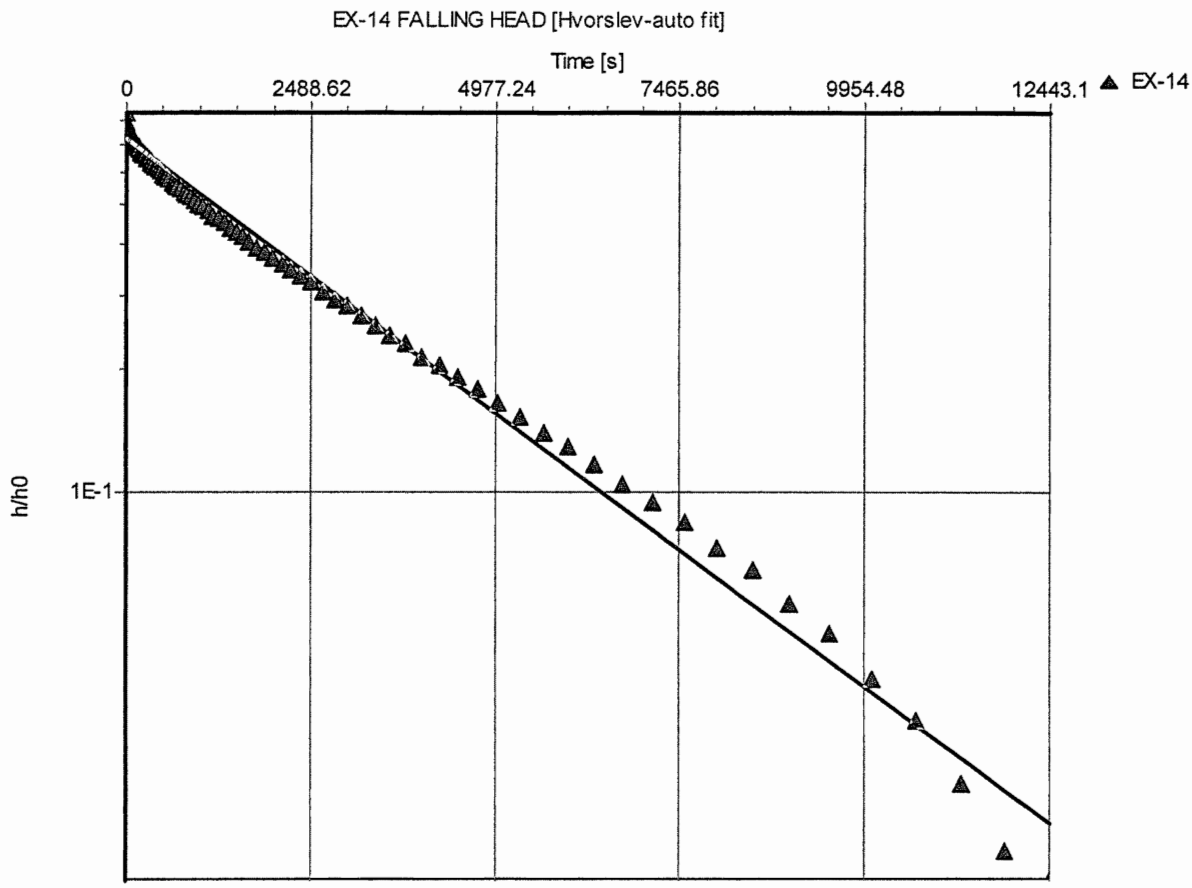
	Time [s]	Depth to WL [ft]	Drawdown [ft]
125	7542.6	55.97	0.49
126	7990.1	55.94	0.46
127	8464.1	55.91	0.43
128	8966.2	55.88	0.40
129	9498.1	55.85	0.37
130	10061.5	55.83	0.35
131	10658.3	55.80	0.32
132	11258.3	55.78	0.30
133	11858.3	55.76	0.28
134	12458.3	55.74	0.26
135	13058.3	55.72	0.24
136	13658.3	55.71	0.23
137	14258.3	55.69	0.21
138	14858.3	55.68	0.20
139	15458.3	55.67	0.19
140	16058.3	55.66	0.18
141	16658.3	55.65	0.17
142	17258.3	55.64	0.16
143	17858.3	55.63	0.15
144	18458.3	55.62	0.14
145	19058.3	55.62	0.14
146	19658.3	55.61	0.13
147	20258.3	55.61	0.13
148	20858.3	55.60	0.12
149	21458.3	55.60	0.12
150	22058.3	55.59	0.11
151	22658.3	55.59	0.11
152	23258.3	55.59	0.11
153	23858.3	55.58	0.10
154	24458.3	55.58	0.10
155	25058.3	55.58	0.10

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 6

Test Well:	**EX-13**	**Slug Test:**	**EX-13 RISING HEAD**
		Test Well:	EX-13
Depth to Static WL:	55.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.78 [ft]
Date:	11/15/2004	Aquifer Thickness:	3.75 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
156	25658.3	55.58	0.10
157	26258.3	55.58	0.10
158	26858.3	55.57	0.09
159	27458.3	55.57	0.09
160	28058.3	55.57	0.09
161	28658.3	55.57	0.09
162	29258.3	55.57	0.09
163	29858.3	55.57	0.09
164	30458.3	55.57	0.09
165	31058.3	55.57	0.09
166	31658.3	55.57	0.09
167	32258.3	55.57	0.09

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**	
	Project:	CLI #3 Expansion well slug tests
	Number:	91-0118
	Client:	Clinton Landfill, Inc.



Slug Test: **EX-14 FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 1.14E-5 [cm/s]

Test parameters:				
	Test Well:	EX-14	Aquifer Thickness:	2.5 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.7 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 11/29/2004

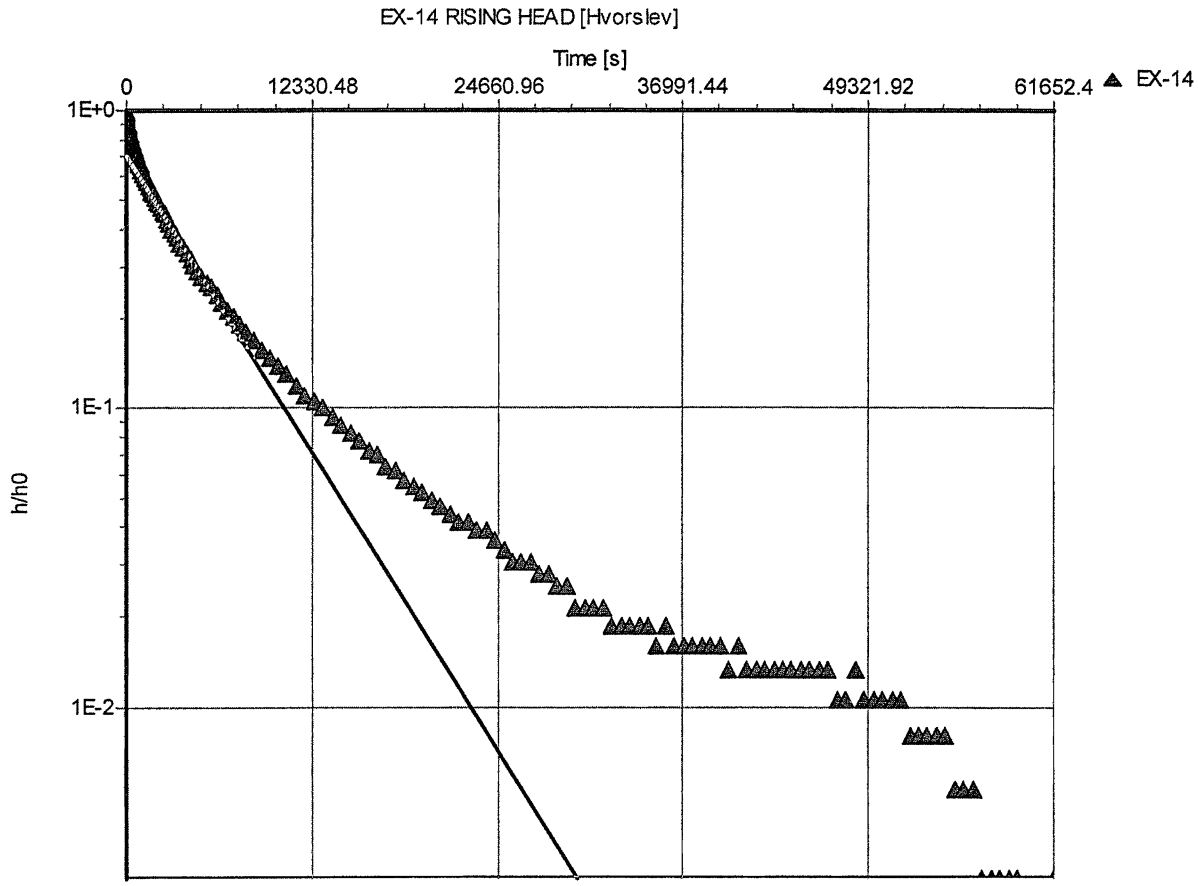
PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 3.9-676-4893

Slug Test Analysis Report

Project: CLI #3 Expansion well slug tests

Number: 91-0118

Client: Clinton Landfill, Inc.



Slug Test: **EX-14 RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 6.88E-6 [cm/s]

Test parameters:				
	Test Well:	EX-14	Aquifer Thickness:	2.5 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.7 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 11/29/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	**Slug Test Data Report** Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-14**	**Slug Test:**	**EX-14 FALLING HEAD**
		Test Well:	EX-14
Depth to Static WL:	50.3 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	11/17/2004	Aquifer Thickness:	2.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	49.33	-0.97
2	1.2	49.49	-0.81
3	2.6	49.55	-0.75
4	4	49.54	-0.76
5	5.5	49.55	-0.75
6	7	49.55	-0.75
7	8.6	49.55	-0.75
8	10.3	49.56	-0.74
9	12.1	49.56	-0.74
10	14	49.56	-0.74
11	16.1	49.56	-0.74
12	18.3	49.57	-0.73
13	20.6	49.57	-0.73
14	23.1	49.57	-0.73
15	25.7	49.57	-0.73
16	28.5	49.57	-0.73
17	31.4	49.57	-0.73
18	34.5	49.58	-0.72
19	37.8	49.58	-0.72
20	41.3	49.58	-0.72
21	45	49.58	-0.72
22	48.9	49.59	-0.71
23	53.1	49.59	-0.71
24	57.5	49.59	-0.71
25	62.2	49.59	-0.71
26	67.2	49.60	-0.70
27	72.5	49.60	-0.70
28	78.1	49.60	-0.70
29	84	49.60	-0.70
30	90.3	49.61	-0.69
31	96.9	49.61	-0.69

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-14**	**Slug Test:**	**EX-14 FALLING HEAD**
		Test Well:	EX-14
Depth to Static WL:	50.3 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	11/17/2004	Aquifer Thickness:	2.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	103.9	49.61	-0.69
33	111.4	49.62	-0.68
34	119.3	49.62	-0.68
35	127.7	49.62	-0.68
36	136.6	49.62	-0.68
37	146	49.63	-0.67
38	156	49.63	-0.67
39	166.6	49.64	-0.66
40	177.8	49.64	-0.66
41	189.7	49.64	-0.66
42	202.3	49.65	-0.65
43	215.6	49.65	-0.65
44	229.7	49.66	-0.64
45	244.6	49.66	-0.64
46	260.4	49.67	-0.63
47	277.2	49.67	-0.63
48	295	49.67	-0.63
49	313.8	49.68	-0.62
50	333.7	49.69	-0.61
51	354.8	49.69	-0.61
52	377.2	49.70	-0.60
53	400.9	49.70	-0.60
54	426	49.71	-0.59
55	452.6	49.71	-0.59
56	480.8	49.72	-0.58
57	510.7	49.73	-0.57
58	542.3	49.73	-0.57
59	575.8	49.74	-0.56
60	611.3	49.75	-0.55
61	648.9	49.76	-0.54
62	688.7	49.76	-0.54

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-14**	**Slug Test:**	**EX-14 FALLING HEAD**
		Test Well:	EX-14
Depth to Static WL:	50.3 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	11/17/2004	Aquifer Thickness:	2.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	730.9	49.77	-0.53
64	775.6	49.78	-0.52
65	823	49.79	-0.51
66	873.2	49.79	-0.51
67	926.3	49.80	-0.50
68	982.6	49.81	-0.49
69	1042.2	49.82	-0.48
70	1105.4	49.83	-0.47
71	1172.3	49.84	-0.46
72	1243.2	49.85	-0.45
73	1318.3	49.86	-0.44
74	1397.8	49.87	-0.43
75	1482.1	49.88	-0.42
76	1571.4	49.89	-0.41
77	1665.9	49.91	-0.39
78	1766	49.92	-0.38
79	1872.1	49.93	-0.37
80	1984.5	49.94	-0.36
81	2103.5	49.95	-0.35
82	2229.6	49.96	-0.34
83	2363.2	49.98	-0.32
84	2504.7	49.99	-0.31
85	2654.6	50.00	-0.30
86	2813.4	50.01	-0.29
87	2981.6	50.03	-0.27
88	3159.7	50.04	-0.26
89	3348.4	50.05	-0.25
90	3548.3	50.07	-0.23
91	3760	50.08	-0.22
92	3984.3	50.09	-0.21
93	4221.9	50.10	-0.20

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-14**	**Slug Test:**	**EX-14 FALLING HEAD**
		Test Well:	EX-14
Depth to Static WL:	50.3 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	11/17/2004	Aquifer Thickness:	2.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	4473.5	50.12	-0.18
95	4740.1	50.13	-0.17
96	5022.5	50.14	-0.16
97	5321.6	50.15	-0.15
98	5638.4	50.16	-0.14
99	5974	50.18	-0.13
100	6329.5	50.19	-0.11
101	6706	50.20	-0.10
102	7104.9	50.21	-0.09
103	7527.4	50.22	-0.08
104	7974.9	50.23	-0.07
105	8448.9	50.24	-0.06
106	8951	50.25	-0.05
107	9482.9	50.26	-0.04
108	10046.3	50.27	-0.03
109	10643.1	50.27	-0.03
110	11243.1	50.28	-0.02
111	11843.1	50.29	-0.01
112	12443.1	50.29	-0.01

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-14**	**Slug Test:**	**EX-14 RISING HEAD**
		Test Well:	EX-14
Depth to Static WL:	50.348 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	11/17/2004	Aquifer Thickness:	2.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	51.09	0.74
2	0.7	51.09	0.74
3	1.5	51.08	0.73
4	2.3	51.08	0.73
5	3.1	51.07	0.73
6	4	51.07	0.72
7	4.9	51.07	0.72
8	5.9	51.07	0.72
9	7	51.06	0.71
10	8.1	51.06	0.71
11	9.3	51.06	0.71
12	10.5	51.06	0.71
13	11.9	51.06	0.71
14	13.3	51.05	0.70
15	14.8	51.05	0.70
16	16.3	51.05	0.70
17	17.9	51.05	0.70
18	19.6	51.05	0.70
19	21.4	51.04	0.70
20	23.3	51.04	0.69
21	25.4	51.05	0.70
22	27.6	51.04	0.69
23	29.9	51.04	0.69
24	32.4	51.03	0.69
25	35	51.04	0.69
26	37.8	51.03	0.68
27	40.7	51.03	0.68
28	43.8	51.03	0.68
29	47.1	51.02	0.68
30	50.6	51.02	0.67
31	54.3	51.02	0.67

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-14**	**Slug Test:**	**EX-14 RISING HEAD**
		Test Well:	EX-14
Depth to Static WL:	50.348 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	11/17/2004	Aquifer Thickness:	2.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	58.2	51.02	0.67
33	62.4	51.02	0.67
34	66.8	51.01	0.66
35	71.5	51.01	0.66
36	76.5	51.01	0.66
37	81.8	51.01	0.66
38	87.4	51.00	0.66
39	93.3	51.00	0.65
40	99.6	51.00	0.65
41	106.2	51.00	0.65
42	113.2	51.00	0.65
43	120.7	50.99	0.64
44	128.6	50.99	0.64
45	137	50.99	0.64
46	145.9	50.98	0.63
47	155.3	50.98	0.63
48	165.3	50.97	0.63
49	175.9	50.97	0.62
50	187.1	50.97	0.62
51	199	50.97	0.62
52	211.6	50.96	0.61
53	224.9	50.96	0.61
54	239	50.96	0.61
55	253.9	50.95	0.60
56	269.7	50.95	0.60
57	286.5	50.94	0.59
58	304.3	50.94	0.59
59	323.1	50.93	0.59
60	343	50.93	0.58
61	364.1	50.92	0.58
62	386.5	50.92	0.57

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-14**	**Slug Test:**	**EX-14 RISING HEAD**
		Test Well:	EX-14
Depth to Static WL:	50.348 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	11/17/2004	Aquifer Thickness:	2.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	410.2	50.91	0.56
64	435.3	50.91	0.56
65	461.9	50.90	0.55
66	490.1	50.90	0.55
67	520	50.89	0.54
68	551.6	50.88	0.54
69	585.1	50.88	0.53
70	620.6	50.87	0.52
71	658.2	50.87	0.52
72	698	50.86	0.51
73	740.2	50.85	0.51
74	784.9	50.84	0.50
75	832.3	50.84	0.49
76	882.5	50.83	0.48
77	935.6	50.82	0.48
78	991.9	50.82	0.47
79	1051.5	50.81	0.46
80	1114.7	50.80	0.45
81	1181.6	50.79	0.44
82	1252.5	50.78	0.44
83	1327.6	50.78	0.43
84	1407.1	50.77	0.42
85	1491.4	50.76	0.41
86	1580.7	50.75	0.40
87	1675.2	50.74	0.39
88	1775.3	50.73	0.38
89	1881.4	50.72	0.37
90	1993.8	50.71	0.36
91	2112.8	50.70	0.35
92	2238.9	50.69	0.34
93	2372.5	50.68	0.33

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-14**	**Slug Test:**	**EX-14 RISING HEAD**
		Test Well:	EX-14
Depth to Static WL:	50.348 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	11/17/2004	Aquifer Thickness:	2.5 [ft]

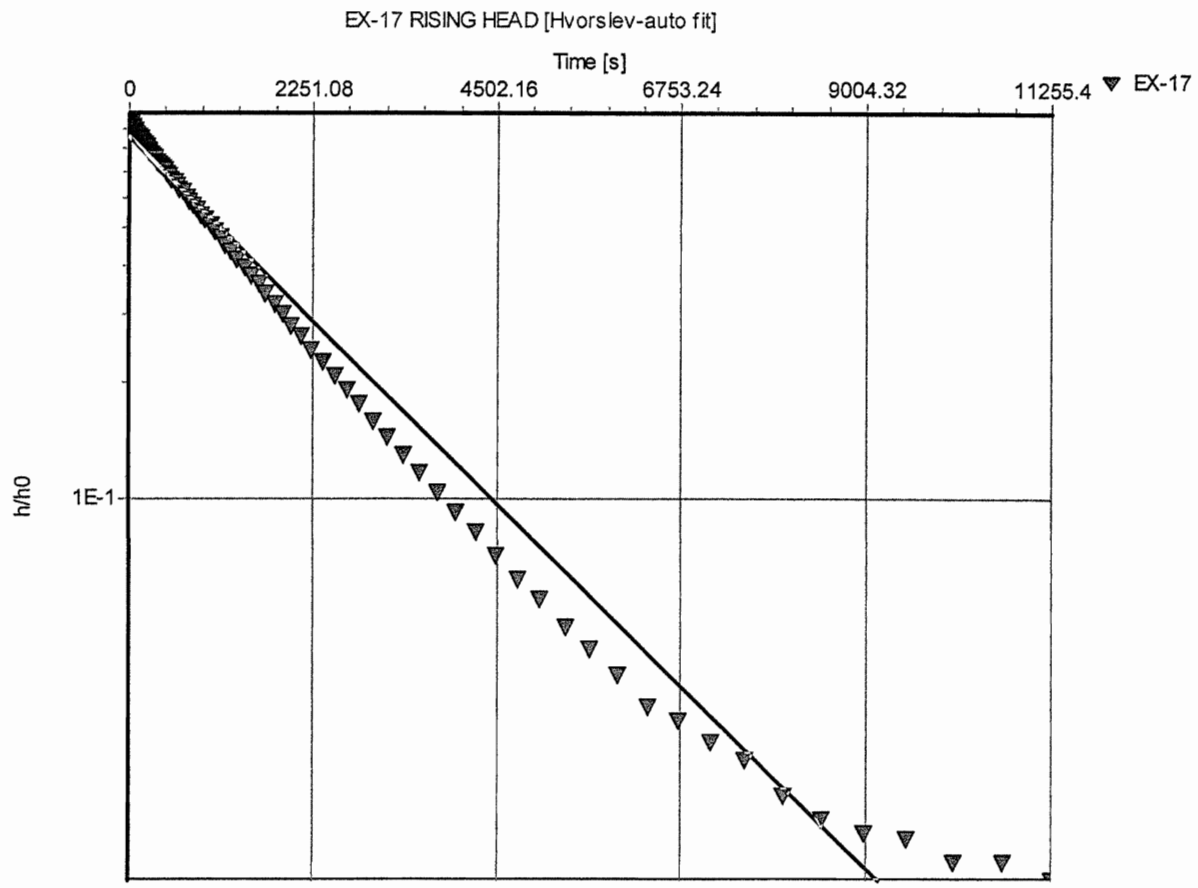
	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	2514	50.67	0.33
95	2663.9	50.66	0.31
96	2822.7	50.65	0.30
97	2990.9	50.64	0.29
98	3169	50.63	0.28
99	3357.7	50.62	0.27
100	3557.6	50.61	0.26
101	3769.3	50.60	0.25
102	3993.6	50.59	0.24
103	4231.2	50.58	0.23
104	4482.8	50.57	0.22
105	4749.4	50.56	0.21
106	5031.8	50.55	0.20
107	5330.9	50.54	0.19
108	5647.7	50.53	0.18
109	5983.3	50.52	0.17
110	6338.8	50.51	0.16
111	6715.3	50.50	0.15
112	7114.2	50.49	0.14
113	7536.7	50.48	0.13
114	7984.2	50.47	0.12
115	8458.2	50.46	0.12
116	8960.3	50.46	0.11
117	9492.2	50.45	0.10
118	10055.6	50.44	0.09
119	10652.4	50.44	0.09
120	11252.4	50.43	0.08
121	11852.4	50.42	0.07
122	12452.4	50.42	0.07
123	13052.4	50.41	0.06
124	13652.4	50.41	0.06

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 5

Test Well:	**EX-14**	**Slug Test:**	**EX-14 RISING HEAD**
		Test Well:	EX-14
Depth to Static WL:	50.348 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	11/17/2004	Aquifer Thickness:	2.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
125	14252.4	50.40	0.06
126	14852.4	50.40	0.05

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-17 RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 1.81E-5 [cm/s]

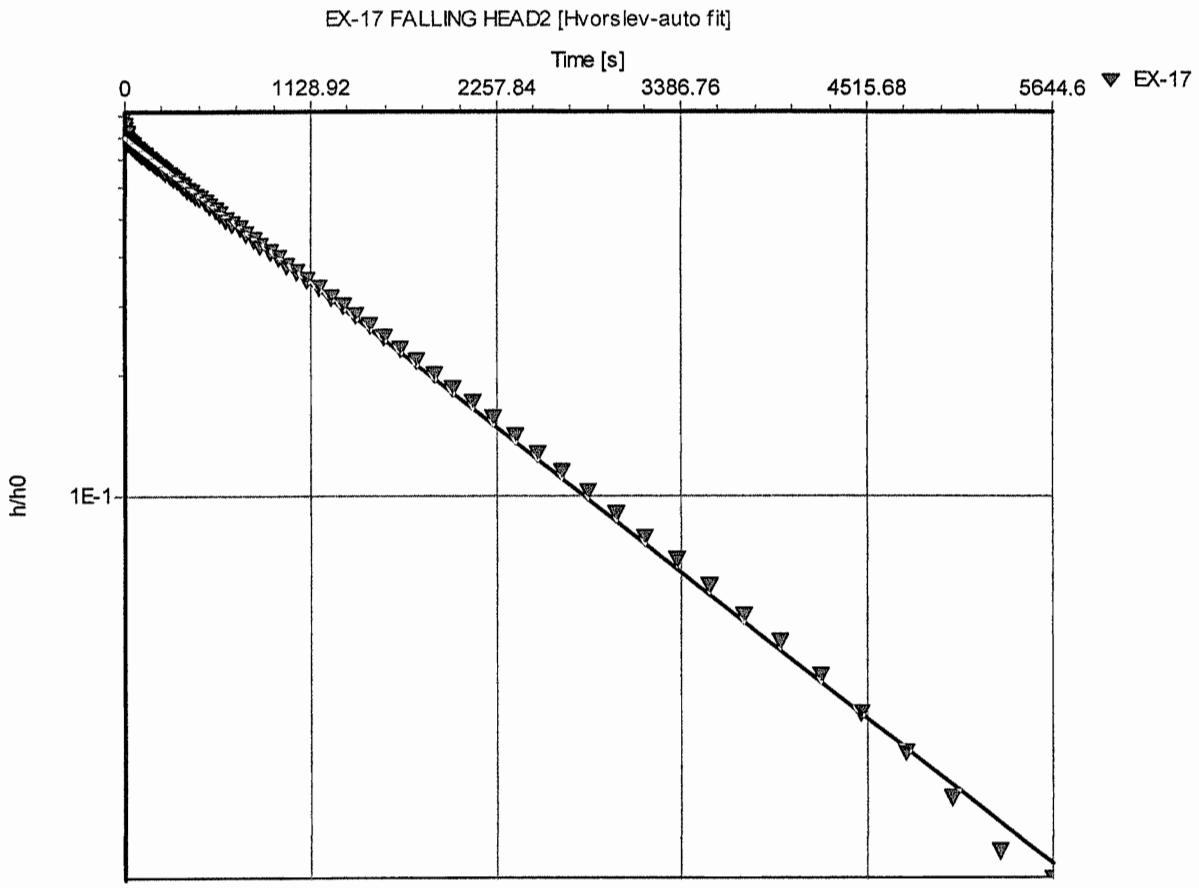
Test parameters:	Test Well:	EX-17	Aquifer Thickness:	3.35 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.63 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 11/30/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-17 FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 2.76E-5 [cm/s]

Test parameters:				
	Test Well:	EX-17	Aquifer Thickness:	3.35 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.63 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 11/30/2004

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-17**	**Slug Test:**	**EX-17 RISING HEAD**
		Test Well:	EX-17
Depth to Static WL:	51.94 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	11/16/2004	Aquifer Thickness:	3.35 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	53.71	1.77
2	0.6	53.70	1.76
3	1.1	53.68	1.73
4	1.7	53.67	1.73
5	2.4	53.67	1.73
6	3	53.66	1.72
7	3.7	53.65	1.71
8	4.5	53.64	1.70
9	5.3	53.64	1.70
10	6.1	53.64	1.70
11	7	53.63	1.69
12	7.9	53.62	1.68
13	8.9	53.62	1.68
14	10	53.61	1.67
15	11.1	53.61	1.67
16	12.3	53.61	1.67
17	13.5	53.60	1.66
18	14.9	53.60	1.66
19	16.3	53.59	1.65
20	17.8	53.59	1.65
21	19.3	53.59	1.65
22	20.9	53.59	1.65
23	22.6	53.58	1.64
24	24.4	53.58	1.64
25	26.3	53.58	1.64
26	28.4	53.57	1.63
27	30.6	53.57	1.63
28	32.9	53.56	1.62
29	35.4	53.56	1.62
30	38	53.56	1.62
31	40.8	53.55	1.61

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-17**	**Slug Test:**	**EX-17 RISING HEAD**
		Test Well:	EX-17
Depth to Static WL:	51.94 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	11/16/2004	Aquifer Thickness:	3.35 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	43.7	53.55	1.61
33	46.8	53.55	1.61
34	50.1	53.54	1.60
35	53.6	53.53	1.59
36	57.3	53.53	1.59
37	61.2	53.53	1.59
38	65.4	53.52	1.58
39	69.8	53.52	1.58
40	74.5	53.51	1.57
41	79.5	53.51	1.57
42	84.8	53.50	1.56
43	90.4	53.49	1.55
44	96.3	53.49	1.55
45	102.6	53.48	1.54
46	109.2	53.47	1.53
47	116.2	53.47	1.53
48	123.7	53.46	1.52
49	131.6	53.45	1.51
50	140	53.44	1.50
51	148.9	53.44	1.50
52	158.3	53.43	1.49
53	168.3	53.42	1.48
54	178.9	53.41	1.47
55	190.1	53.40	1.46
56	202	53.38	1.44
57	214.6	53.37	1.43
58	227.9	53.36	1.42
59	242	53.35	1.41
60	256.9	53.33	1.39
61	272.7	53.32	1.38
62	289.5	53.31	1.37

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-17**	**Slug Test:**	**EX-17 RISING HEAD**
		Test Well:	EX-17
Depth to Static WL:	51.94 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	11/16/2004	Aquifer Thickness:	3.35 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	307.3	53.29	1.35
64	326.1	53.27	1.33
65	346	53.26	1.32
66	367.1	53.24	1.30
67	389.5	53.22	1.28
68	413.2	53.20	1.26
69	438.3	53.19	1.25
70	464.9	53.16	1.22
71	493.1	53.14	1.20
72	523	53.12	1.18
73	554.6	53.10	1.16
74	588.1	53.07	1.13
75	623.6	53.06	1.12
76	661.2	53.03	1.09
77	701	53.00	1.06
78	743.2	52.98	1.04
79	787.9	52.95	1.01
80	835.3	52.92	0.98
81	885.5	52.89	0.95
82	938.6	52.86	0.92
83	994.9	52.83	0.89
84	1054.5	52.80	0.86
85	1117.7	52.77	0.83
86	1184.6	52.74	0.80
87	1255.5	52.71	0.77
88	1330.6	52.67	0.73
89	1410.1	52.64	0.70
90	1494.4	52.61	0.66
91	1583.7	52.57	0.63
92	1678.2	52.54	0.60
93	1778.3	52.51	0.57

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-17**	**Slug Test:**	**EX-17 RISING HEAD**
		Test Well:	EX-17
Depth to Static WL:	51.94 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	11/16/2004	Aquifer Thickness:	3.35 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	1884.4	52.47	0.53
95	1996.8	52.44	0.50
96	2115.8	52.41	0.47
97	2241.9	52.37	0.43
98	2375.5	52.34	0.40
99	2517	52.31	0.37
100	2666.9	52.28	0.34
101	2825.7	52.25	0.31
102	2993.9	52.22	0.28
103	3172	52.20	0.26
104	3360.7	52.17	0.23
105	3560.6	52.15	0.21
106	3772.3	52.12	0.18
107	3996.6	52.10	0.16
108	4234.2	52.09	0.15
109	4485.8	52.07	0.13
110	4752.4	52.05	0.11
111	5034.8	52.04	0.10
112	5333.9	52.02	0.08
113	5650.7	52.01	0.07
114	5986.3	52.00	0.06
115	6341.8	51.99	0.05
116	6718.3	51.99	0.05
117	7117.2	51.98	0.04
118	7539.7	51.98	0.04
119	7987.2	51.97	0.03
120	8461.2	51.97	0.03
121	8963.3	51.96	0.02
122	9495.2	51.96	0.02
123	10058.6	51.96	0.02
124	10655.4	51.96	0.02

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 5

Test Well:	**EX-17**	**Slug Test:**	**EX-17 RISING HEAD**
		Test Well:	EX-17
Depth to Static WL:	51.94 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	11/16/2004	Aquifer Thickness:	3.35 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
125	11255.4	51.96	0.02

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-17**	**Slug Test:**	**EX-17 FALLING HEAD**
		Test Well:	EX-17
Depth to Static WL:	51.94 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	11/16/2004	Aquifer Thickness:	3.35 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	49.84	-2.10
2	0.9	50.00	-1.94
3	1.8	50.05	-1.89
4	2.8	50.19	-1.75
5	3.9	50.27	-1.67
6	5	50.16	-1.78
7	6.2	50.25	-1.69
8	7.4	50.30	-1.64
9	8.8	50.23	-1.71
10	10.2	50.33	-1.61
11	11.7	50.29	-1.65
12	13.2	50.29	-1.65
13	14.8	50.30	-1.64
14	16.5	50.31	-1.63
15	18.3	50.31	-1.63
16	20.2	50.31	-1.63
17	22.3	50.32	-1.63
18	24.5	50.32	-1.62
19	26.8	50.32	-1.62
20	29.3	50.33	-1.61
21	31.9	50.33	-1.61
22	34.7	50.34	-1.60
23	37.6	50.34	-1.60
24	40.7	50.35	-1.59
25	44	50.35	-1.59
26	47.5	50.36	-1.59
27	51.2	50.36	-1.58
28	55.1	50.37	-1.57
29	59.3	50.37	-1.57
30	63.7	50.38	-1.56
31	68.4	50.38	-1.56

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-17**	**Slug Test:**	**EX-17 FALLING HEAD**
		Test Well:	EX-17
Depth to Static WL:	51.94 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	11/16/2004	Aquifer Thickness:	3.35 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	73.4	50.39	-1.55
33	78.7	50.39	-1.55
34	84.3	50.40	-1.54
35	90.2	50.41	-1.53
36	96.5	50.42	-1.52
37	103.1	50.43	-1.52
38	110.1	50.43	-1.51
39	117.6	50.44	-1.50
40	125.5	50.45	-1.49
41	133.9	50.46	-1.48
42	142.8	50.47	-1.47
43	152.2	50.48	-1.46
44	162.2	50.49	-1.45
45	172.8	50.50	-1.44
46	184	50.51	-1.43
47	195.9	50.52	-1.42
48	208.5	50.54	-1.40
49	221.8	50.55	-1.39
50	235.9	50.57	-1.37
51	250.8	50.58	-1.36
52	266.6	50.60	-1.34
53	283.4	50.61	-1.33
54	301.2	50.63	-1.31
55	320	50.65	-1.29
56	339.9	50.67	-1.27
57	361	50.68	-1.26
58	383.4	50.71	-1.23
59	407.1	50.73	-1.21
60	432.2	50.75	-1.19
61	458.8	50.77	-1.17
62	487	50.80	-1.14

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-17**	**Slug Test:**	**EX-17 FALLING HEAD**
		Test Well:	EX-17
Depth to Static WL:	51.94 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	11/16/2004	Aquifer Thickness:	3.35 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	516.9	50.82	-1.12
64	548.5	50.85	-1.09
65	582	50.87	-1.07
66	617.5	50.90	-1.04
67	655.1	50.93	-1.01
68	694.9	50.96	-0.98
69	737.1	50.99	-0.95
70	781.8	51.02	-0.92
71	829.2	51.05	-0.89
72	879.4	51.08	-0.86
73	932.5	51.11	-0.83
74	988.8	51.14	-0.80
75	1048.4	51.18	-0.76
76	1111.6	51.21	-0.73
77	1178.5	51.24	-0.70
78	1249.4	51.28	-0.66
79	1324.5	51.31	-0.63
80	1404	51.35	-0.59
81	1488.3	51.38	-0.56
82	1577.6	51.41	-0.53
83	1672.1	51.45	-0.49
84	1772.2	51.48	-0.46
85	1878.3	51.52	-0.42
86	1990.7	51.55	-0.39
87	2109.7	51.58	-0.36
88	2235.8	51.61	-0.33
89	2369.4	51.64	-0.30
90	2510.9	51.67	-0.27
91	2660.8	51.70	-0.24
92	2819.6	51.72	-0.22
93	2987.8	51.75	-0.19

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4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-17**	**Slug Test:**	**EX-17 FALLING HEAD**
		Test Well:	EX-17
Depth to Static WL:	51.94 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.63 [ft]
Date:	11/16/2004	Aquifer Thickness:	3.35 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	3165.9	51.77	-0.17
95	3354.6	51.79	-0.15
96	3554.5	51.82	-0.13
97	3766.2	51.83	-0.11
98	3990.5	51.85	-0.09
99	4228.1	51.87	-0.07
100	4479.7	51.88	-0.06
101	4746.3	51.89	-0.05
102	5028.7	51.90	-0.04
103	5327.8	51.91	-0.03
104	5644.6	51.92	-0.02

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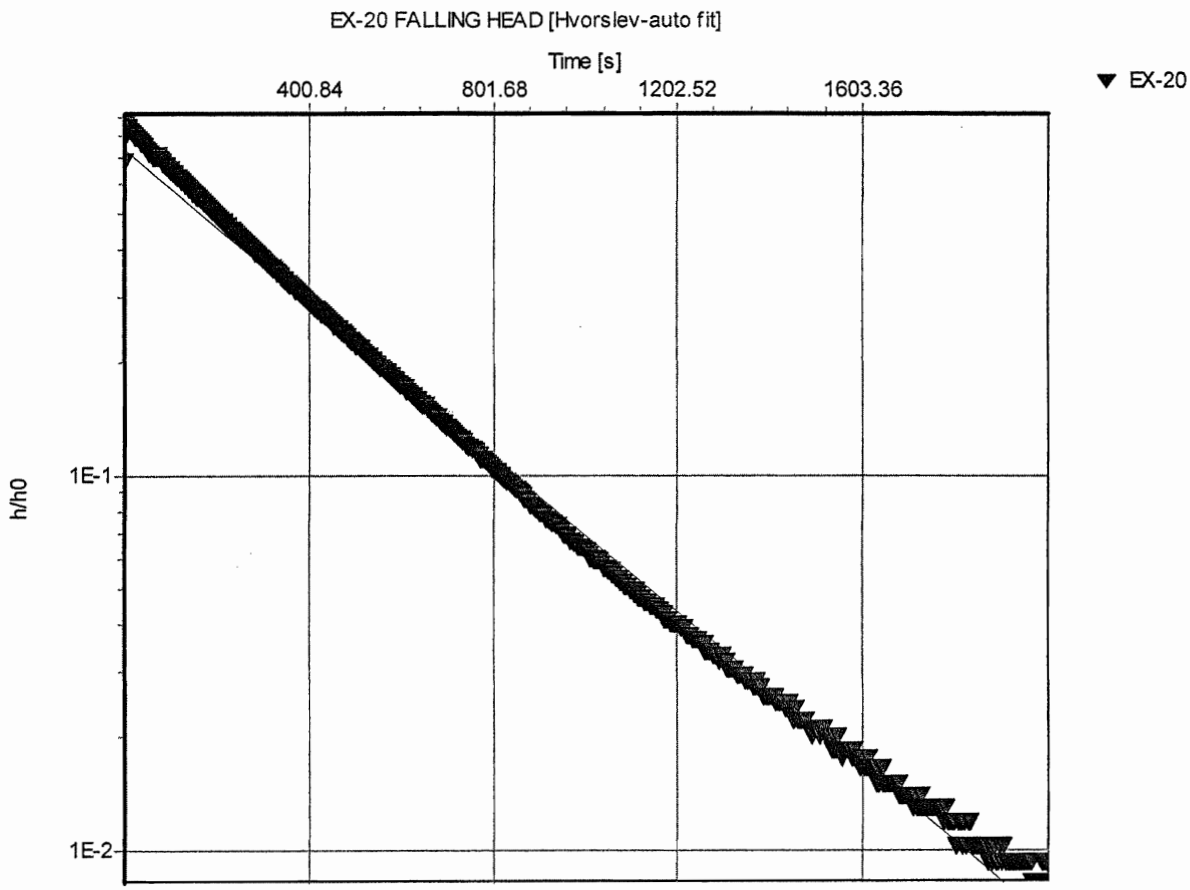
PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 3.9-676-4893

Slug Test Analysis Report

Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.



Slug Test: **EX-20 FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 8.68E-5 [cm/s]

Test parameters:				
	Test Well:	EX-20	Aquifer Thickness:	2 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.77 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 12/6/2004

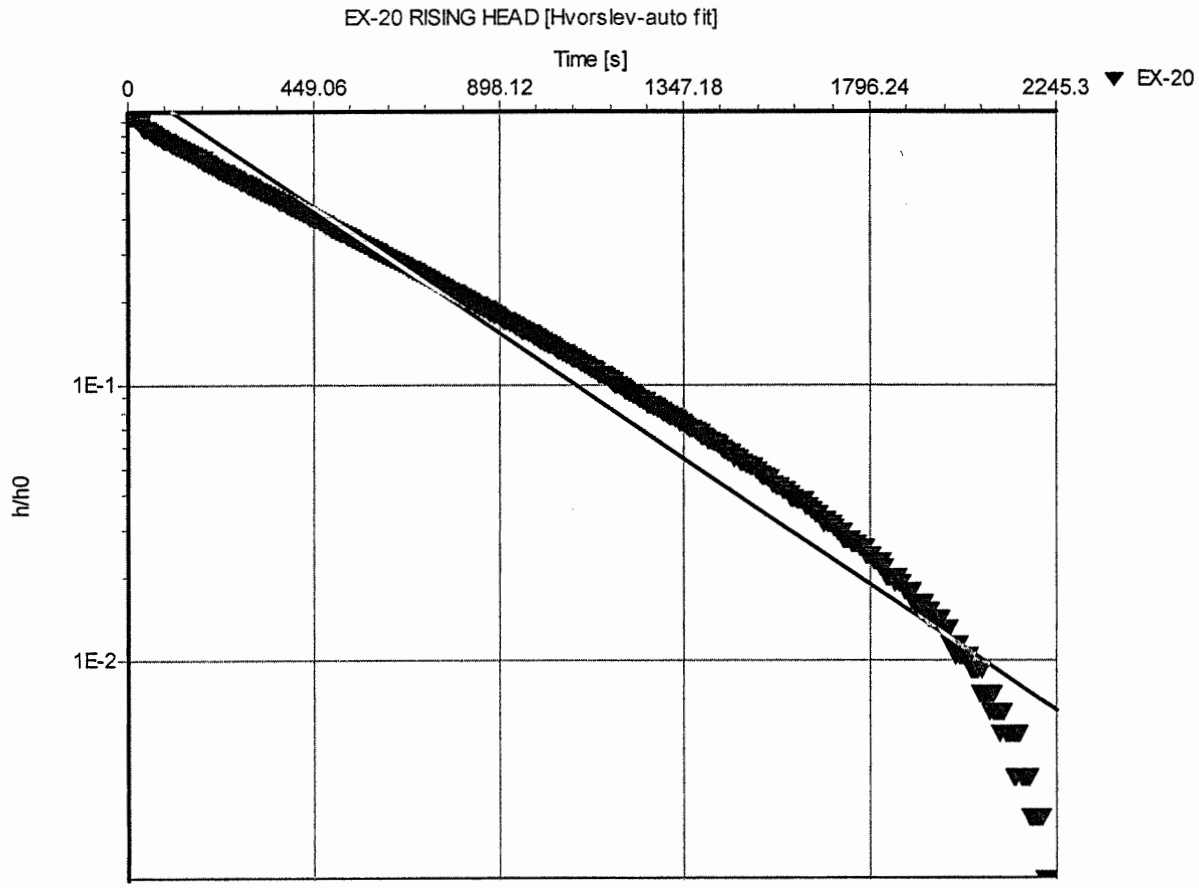
PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 3.9-676-4893

Slug Test Analysis Report

Project: CLI #3 Expansion well slug tests

Number: 91-0118

Client: Clinton Landfill, Inc.



Slug Test: **EX-20 RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 8.59E-5 [cm/s]

Test parameters:				
	Test Well:	EX-20	Aquifer Thickness:	2 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.77 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 12/6/2004

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report

Project: CLI #3 Expansion well slug tests

Number: 91-0118

Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	16.75	-1.95
2	0.8	16.91	-1.79
3	1.6	17.37	-1.34
4	2.5	17.07	-1.63
5	3.4	17.10	-1.60
6	4.4	16.92	-1.78
7	5.5	17.00	-1.70
8	6.6	17.06	-1.64
9	7.8	17.06	-1.64
10	9	17.07	-1.63
11	10.4	17.08	-1.62
12	11.8	17.08	-1.62
13	13.3	17.09	-1.61
14	14.8	17.10	-1.60
15	16.4	17.11	-1.59
16	18.1	17.12	-1.58
17	19.9	17.13	-1.57
18	21.8	17.13	-1.57
19	23.9	17.14	-1.56
20	26.1	17.15	-1.55
21	28.4	17.16	-1.54
22	30.9	17.18	-1.52
23	33.5	17.19	-1.51
24	36.3	17.20	-1.50
25	39.2	17.21	-1.49
26	42.2	17.22	-1.48
27	45.2	17.24	-1.46
28	48.2	17.25	-1.45
29	51.2	17.27	-1.43
30	54.2	17.29	-1.41
31	57.2	17.30	-1.40

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Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	60.2	17.31	-1.39
33	63.2	17.32	-1.38
34	66.2	17.33	-1.37
35	69.2	17.33	-1.37
36	72.2	17.33	-1.37
37	75.2	17.30	-1.40
38	78.2	17.35	-1.35
39	81.2	17.37	-1.34
40	84.2	17.38	-1.32
41	87.2	17.39	-1.31
42	90.2	17.40	-1.30
43	93.2	17.41	-1.29
44	96.2	17.42	-1.28
45	99.2	17.43	-1.27
46	102.2	17.44	-1.26
47	105.2	17.45	-1.25
48	108.2	17.46	-1.24
49	111.2	17.47	-1.23
50	114.2	17.48	-1.22
51	117.2	17.49	-1.21
52	120.2	17.50	-1.20
53	123.2	17.51	-1.19
54	126.2	17.52	-1.18
55	129.2	17.53	-1.17
56	132.2	17.54	-1.16
57	135.2	17.55	-1.15
58	138.2	17.56	-1.14
59	141.2	17.57	-1.13
60	144.2	17.58	-1.12
61	147.2	17.59	-1.11
62	150.2	17.60	-1.10

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4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	153.2	17.61	-1.09
64	156.2	17.61	-1.09
65	159.2	17.62	-1.08
66	162.2	17.63	-1.07
67	165.2	17.64	-1.06
68	168.2	17.65	-1.05
69	171.2	17.66	-1.04
70	174.2	17.67	-1.04
71	177.2	17.67	-1.03
72	180.2	17.68	-1.02
73	183.2	17.69	-1.01
74	186.2	17.70	-1.00
75	189.2	17.71	-0.99
76	192.2	17.71	-0.99
77	195.2	17.72	-0.98
78	198.2	17.73	-0.97
79	201.2	17.74	-0.96
80	204.2	17.74	-0.96
81	207.2	17.75	-0.95
82	210.2	17.76	-0.94
83	213.2	17.77	-0.93
84	216.2	17.78	-0.92
85	219.2	17.78	-0.92
86	222.2	17.79	-0.91
87	225.2	17.80	-0.90
88	228.2	17.80	-0.90
89	231.2	17.81	-0.89
90	234.2	17.82	-0.88
91	237.2	17.82	-0.88
92	240.2	17.83	-0.87
93	243.2	17.84	-0.86

100% recycled paper

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	246.2	17.85	-0.85
95	249.2	17.85	-0.85
96	252.2	17.86	-0.84
97	255.2	17.87	-0.83
98	258.2	17.87	-0.83
99	261.2	17.88	-0.82
100	264.2	17.89	-0.81
101	267.2	17.89	-0.81
102	270.2	17.90	-0.80
103	273.2	17.91	-0.79
104	276.2	17.91	-0.79
105	279.2	17.92	-0.78
106	282.2	17.93	-0.77
107	285.2	17.93	-0.77
108	288.2	17.94	-0.76
109	291.2	17.94	-0.76
110	294.2	17.95	-0.75
111	297.2	17.95	-0.75
112	300.2	17.96	-0.74
113	303.2	17.97	-0.73
114	306.2	17.97	-0.73
115	309.2	17.98	-0.72
116	312.2	17.99	-0.71
117	315.2	17.99	-0.71
118	318.2	18.00	-0.70
119	321.2	18.00	-0.70
120	324.2	18.01	-0.69
121	327.2	18.01	-0.69
122	330.2	18.02	-0.68
123	333.2	18.02	-0.68
124	336.2	18.03	-0.67

100% recycled paper

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
125	339.2	18.03	-0.67
126	342.2	18.04	-0.66
127	345.2	18.05	-0.65
128	348.2	18.05	-0.65
129	351.2	18.06	-0.64
130	354.2	18.06	-0.64
131	357.2	18.07	-0.63
132	360.2	18.07	-0.63
133	363.2	18.08	-0.63
134	366.2	18.08	-0.62
135	369.2	18.09	-0.61
136	372.2	18.09	-0.61
137	375.2	18.10	-0.60
138	378.2	18.10	-0.60
139	381.2	18.11	-0.59
140	384.2	18.11	-0.59
141	387.2	18.12	-0.59
142	390.2	18.12	-0.58
143	393.2	18.12	-0.58
144	396.2	18.13	-0.57
145	399.2	18.13	-0.57
146	402.2	18.14	-0.56
147	405.2	18.14	-0.56
148	408.2	18.15	-0.55
149	411.2	18.15	-0.55
150	414.2	18.15	-0.55
151	417.2	18.16	-0.54
152	420.2	18.16	-0.54
153	423.2	18.17	-0.54
154	426.2	18.17	-0.53
155	429.2	18.18	-0.52

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PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
156	432.2	18.18	-0.52
157	435.2	18.18	-0.52
158	438.2	18.19	-0.51
159	441.2	18.19	-0.51
160	444.2	18.20	-0.50
161	447.2	18.20	-0.50
162	450.2	18.20	-0.50
163	453.2	18.21	-0.49
164	456.2	18.21	-0.49
165	459.2	18.21	-0.49
166	462.2	18.22	-0.48
167	465.2	18.22	-0.48
168	468.2	18.23	-0.47
169	471.2	18.23	-0.47
170	474.2	18.23	-0.47
171	477.2	18.24	-0.46
172	480.2	18.24	-0.46
173	483.2	18.24	-0.46
174	486.2	18.25	-0.45
175	489.2	18.25	-0.45
176	492.2	18.26	-0.45
177	495.2	18.26	-0.44
178	498.2	18.26	-0.44
179	501.2	18.27	-0.43
180	504.2	18.27	-0.43
181	507.2	18.27	-0.43
182	510.2	18.27	-0.43
183	513.2	18.28	-0.42
184	516.2	18.28	-0.42
185	519.2	18.29	-0.41
186	522.2	18.29	-0.41

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PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
187	525.2	18.29	-0.41
188	528.2	18.30	-0.40
189	531.2	18.30	-0.40
190	534.2	18.30	-0.40
191	537.2	18.30	-0.40
192	540.2	18.31	-0.39
193	543.2	18.31	-0.39
194	546.2	18.31	-0.39
195	549.2	18.32	-0.38
196	552.2	18.32	-0.38
197	555.2	18.32	-0.38
198	558.2	18.33	-0.38
199	561.2	18.33	-0.37
200	564.2	18.33	-0.37
201	567.2	18.33	-0.37
202	570.2	18.33	-0.37
203	573.2	18.34	-0.36
204	576.2	18.34	-0.36
205	579.2	18.34	-0.36
206	582.2	18.35	-0.36
207	585.2	18.35	-0.35
208	588.2	18.35	-0.35
209	591.2	18.35	-0.35
210	594.2	18.36	-0.34
211	597.2	18.36	-0.34
212	600.2	18.36	-0.34
213	603.2	18.36	-0.34
214	606.2	18.37	-0.33
215	609.2	18.37	-0.33
216	612.2	18.37	-0.33
217	615.2	18.38	-0.32

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4349 Southport Road
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Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
218	618.2	18.38	-0.32
219	621.2	18.38	-0.32
220	624.2	18.38	-0.32
221	627.2	18.38	-0.32
222	630.2	18.39	-0.31
223	633.2	18.39	-0.31
224	636.2	18.39	-0.31
225	639.2	18.39	-0.31
226	642.2	18.40	-0.30
227	645.2	18.40	-0.30
228	648.2	18.40	-0.30
229	651.2	18.40	-0.30
230	654.2	18.40	-0.30
231	657.2	18.41	-0.29
232	660.2	18.41	-0.29
233	663.2	18.41	-0.29
234	666.2	18.41	-0.29
235	669.2	18.42	-0.28
236	672.2	18.42	-0.28
237	675.2	18.42	-0.28
238	678.2	18.42	-0.28
239	681.2	18.42	-0.28
240	684.2	18.43	-0.27
241	687.2	18.43	-0.27
242	690.2	18.43	-0.27
243	693.2	18.43	-0.27
244	696.2	18.44	-0.27
245	699.2	18.44	-0.26
246	702.2	18.44	-0.26
247	705.2	18.44	-0.26
248	708.2	18.44	-0.26

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4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
249	711.2	18.44	-0.26
250	714.2	18.45	-0.25
251	717.2	18.45	-0.25
252	720.2	18.45	-0.25
253	723.2	18.45	-0.25
254	726.2	18.45	-0.25
255	729.2	18.46	-0.24
256	732.2	18.46	-0.24
257	735.2	18.46	-0.24
258	738.2	18.46	-0.24
259	741.2	18.47	-0.23
260	744.2	18.47	-0.23
261	747.2	18.47	-0.23
262	750.2	18.47	-0.23
263	753.2	18.47	-0.23
264	756.2	18.47	-0.23
265	759.2	18.47	-0.23
266	762.2	18.47	-0.23
267	765.2	18.48	-0.22
268	768.2	18.48	-0.22
269	771.2	18.48	-0.22
270	774.2	18.48	-0.22
271	777.2	18.48	-0.22
272	780.2	18.49	-0.21
273	783.2	18.49	-0.21
274	786.2	18.49	-0.21
275	789.2	18.49	-0.21
276	792.2	18.49	-0.21
277	795.2	18.49	-0.21
278	798.2	18.50	-0.20
279	801.2	18.50	-0.20

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PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
280	804.2	18.50	-0.20
281	807.2	18.50	-0.20
282	810.2	18.50	-0.20
283	813.2	18.50	-0.20
284	816.2	18.50	-0.20
285	819.2	18.50	-0.20
286	822.2	18.51	-0.19
287	825.2	18.51	-0.19
288	828.2	18.51	-0.19
289	831.2	18.51	-0.19
290	834.2	18.51	-0.19
291	837.2	18.51	-0.19
292	840.2	18.51	-0.19
293	843.2	18.52	-0.18
294	846.2	18.52	-0.18
295	849.2	18.52	-0.18
296	852.2	18.52	-0.18
297	855.2	18.52	-0.18
298	858.2	18.53	-0.18
299	861.2	18.52	-0.18
300	864.2	18.53	-0.18
301	867.2	18.53	-0.17
302	870.2	18.53	-0.17
303	873.2	18.53	-0.17
304	876.2	18.53	-0.17
305	879.2	18.53	-0.17
306	882.2	18.54	-0.16
307	885.2	18.54	-0.16
308	888.2	18.54	-0.16
309	891.2	18.54	-0.16
310	894.2	18.54	-0.16

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PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
311	897.2	18.54	-0.16
312	900.2	18.54	-0.16
313	903.2	18.55	-0.15
314	906.2	18.55	-0.15
315	909.2	18.55	-0.15
316	912.2	18.55	-0.15
317	915.2	18.55	-0.15
318	918.2	18.55	-0.15
319	921.2	18.55	-0.15
320	924.2	18.55	-0.15
321	927.2	18.55	-0.15
322	930.2	18.56	-0.14
323	933.2	18.56	-0.14
324	936.2	18.56	-0.14
325	939.2	18.56	-0.14
326	942.2	18.56	-0.14
327	945.2	18.56	-0.14
328	948.2	18.56	-0.14
329	951.2	18.56	-0.14
330	954.2	18.56	-0.14
331	957.2	18.56	-0.14
332	960.2	18.56	-0.14
333	963.2	18.56	-0.14
334	966.2	18.57	-0.13
335	969.2	18.57	-0.13
336	972.2	18.57	-0.13
337	975.2	18.57	-0.13
338	978.2	18.57	-0.13
339	981.2	18.57	-0.13
340	984.2	18.57	-0.13
341	987.2	18.57	-0.13

100% recycled paper

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
342	990.2	18.57	-0.13
343	993.2	18.57	-0.13
344	996.2	18.57	-0.13
345	999.2	18.58	-0.12
346	1002.2	18.58	-0.12
347	1005.2	18.58	-0.12
348	1008.2	18.58	-0.12
349	1011.2	18.58	-0.12
350	1014.2	18.58	-0.12
351	1017.2	18.58	-0.12
352	1020.2	18.59	-0.11
353	1023.2	18.58	-0.12
354	1026.2	18.59	-0.11
355	1029.2	18.58	-0.12
356	1032.2	18.59	-0.11
357	1035.2	18.59	-0.11
358	1038.2	18.59	-0.11
359	1041.2	18.59	-0.11
360	1044.2	18.59	-0.11
361	1047.2	18.59	-0.11
362	1050.2	18.59	-0.11
363	1053.2	18.59	-0.11
364	1056.2	18.59	-0.11
365	1059.2	18.59	-0.11
366	1062.2	18.59	-0.11
367	1065.2	18.59	-0.11
368	1068.2	18.60	-0.10
369	1071.2	18.60	-0.10
370	1074.2	18.60	-0.10
371	1077.2	18.60	-0.10
372	1080.2	18.60	-0.10

100% recycled paper

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Peoria, IL 61615
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Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
373	1083.2	18.60	-0.10
374	1086.2	18.60	-0.10
375	1089.2	18.60	-0.10
376	1092.2	18.60	-0.10
377	1095.2	18.60	-0.10
378	1098.2	18.60	-0.10
379	1101.2	18.60	-0.10
380	1104.2	18.60	-0.10
381	1107.2	18.60	-0.10
382	1110.2	18.61	-0.09
383	1113.2	18.60	-0.10
384	1116.2	18.61	-0.09
385	1119.2	18.61	-0.09
386	1122.2	18.61	-0.09
387	1125.2	18.61	-0.09
388	1128.2	18.61	-0.09
389	1131.2	18.61	-0.09
390	1134.2	18.61	-0.09
391	1137.2	18.61	-0.09
392	1140.2	18.61	-0.09
393	1143.2	18.61	-0.09
394	1146.2	18.61	-0.09
395	1149.2	18.61	-0.09
396	1152.2	18.61	-0.09
397	1155.2	18.61	-0.09
398	1158.2	18.62	-0.09
399	1161.2	18.62	-0.09
400	1164.2	18.62	-0.09
401	1167.2	18.62	-0.09
402	1170.2	18.62	-0.08
403	1173.2	18.62	-0.08

100% recycled paper

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Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
404	1176.2	18.62	-0.08
405	1179.2	18.62	-0.08
406	1182.2	18.62	-0.08
407	1185.2	18.62	-0.08
408	1188.2	18.62	-0.08
409	1191.2	18.62	-0.08
410	1194.2	18.62	-0.08
411	1197.2	18.62	-0.08
412	1200.2	18.62	-0.08
413	1203.2	18.62	-0.08
414	1206.2	18.62	-0.08
415	1209.2	18.62	-0.08
416	1212.2	18.62	-0.08
417	1215.2	18.62	-0.08
418	1218.2	18.62	-0.08
419	1221.2	18.63	-0.07
420	1224.2	18.63	-0.07
421	1227.2	18.63	-0.07
422	1230.2	18.63	-0.07
423	1233.2	18.63	-0.07
424	1236.2	18.63	-0.07
425	1239.2	18.63	-0.07
426	1242.2	18.63	-0.07
427	1245.2	18.63	-0.07
428	1248.2	18.63	-0.07
429	1251.2	18.63	-0.07
430	1254.2	18.63	-0.07
431	1257.2	18.63	-0.07
432	1260.2	18.63	-0.07
433	1263.2	18.63	-0.07
434	1266.2	18.63	-0.07

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PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
435	1269.2	18.63	-0.07
436	1272.2	18.63	-0.07
437	1275.2	18.63	-0.07
438	1278.2	18.64	-0.06
439	1281.2	18.64	-0.06
440	1284.2	18.64	-0.06
441	1287.2	18.64	-0.06
442	1290.2	18.64	-0.06
443	1293.2	18.64	-0.06
444	1296.2	18.64	-0.06
445	1299.2	18.64	-0.06
446	1302.2	18.64	-0.06
447	1305.2	18.64	-0.06
448	1308.2	18.64	-0.06
449	1311.2	18.64	-0.06
450	1314.2	18.64	-0.06
451	1317.2	18.64	-0.06
452	1320.2	18.64	-0.06
453	1323.2	18.64	-0.06
454	1326.2	18.64	-0.06
455	1329.2	18.64	-0.06
456	1332.2	18.64	-0.06
457	1335.2	18.64	-0.06
458	1338.2	18.64	-0.06
459	1341.2	18.64	-0.06
460	1344.2	18.64	-0.06
461	1347.2	18.65	-0.05
462	1350.2	18.64	-0.06
463	1353.2	18.65	-0.05
464	1356.2	18.65	-0.05
465	1359.2	18.65	-0.05

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Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
466	1362.2	18.65	-0.05
467	1365.2	18.65	-0.05
468	1368.2	18.65	-0.05
469	1371.2	18.65	-0.05
470	1374.2	18.65	-0.05
471	1377.2	18.65	-0.05
472	1380.2	18.65	-0.05
473	1383.2	18.65	-0.05
474	1386.2	18.65	-0.05
475	1389.2	18.65	-0.05
476	1392.2	18.65	-0.05
477	1395.2	18.65	-0.05
478	1398.2	18.65	-0.05
479	1401.2	18.65	-0.05
480	1404.2	18.65	-0.05
481	1407.2	18.65	-0.05
482	1410.2	18.65	-0.05
483	1413.2	18.65	-0.05
484	1416.2	18.65	-0.05
485	1419.2	18.65	-0.05
486	1422.2	18.65	-0.05
487	1425.2	18.65	-0.05
488	1428.2	18.65	-0.05
489	1431.2	18.65	-0.05
490	1434.2	18.65	-0.05
491	1437.2	18.65	-0.05
492	1440.2	18.65	-0.05
493	1443.2	18.65	-0.05
494	1446.2	18.65	-0.05
495	1449.2	18.65	-0.05
496	1452.2	18.65	-0.05

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PDC Technical Services, Inc.
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Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
497	1455.2	18.66	-0.04
498	1458.2	18.65	-0.05
499	1461.2	18.66	-0.04
500	1464.2	18.66	-0.04
501	1467.2	18.66	-0.04
502	1470.2	18.66	-0.04
503	1473.2	18.66	-0.04
504	1476.2	18.66	-0.04
505	1479.2	18.66	-0.04
506	1482.2	18.66	-0.04
507	1485.2	18.66	-0.04
508	1488.2	18.66	-0.04
509	1491.2	18.66	-0.04
510	1494.2	18.66	-0.04
511	1497.2	18.66	-0.04
512	1500.2	18.66	-0.04
513	1503.2	18.66	-0.04
514	1506.2	18.66	-0.04
515	1509.2	18.66	-0.04
516	1512.2	18.66	-0.04
517	1515.2	18.66	-0.04
518	1518.2	18.66	-0.04
519	1521.2	18.66	-0.04
520	1524.2	18.66	-0.04
521	1527.2	18.66	-0.04
522	1530.2	18.66	-0.04
523	1533.2	18.66	-0.04
524	1536.2	18.66	-0.04
525	1539.2	18.66	-0.04
526	1542.2	18.66	-0.04
527	1545.2	18.66	-0.04

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Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
528	1548.2	18.66	-0.04
529	1551.2	18.66	-0.04
530	1554.2	18.66	-0.04
531	1557.2	18.67	-0.03
532	1560.2	18.66	-0.04
533	1563.2	18.66	-0.04
534	1566.2	18.66	-0.04
535	1569.2	18.66	-0.04
536	1572.2	18.66	-0.04
537	1575.2	18.66	-0.04
538	1578.2	18.66	-0.04
539	1581.2	18.67	-0.03
540	1584.2	18.66	-0.04
541	1587.2	18.67	-0.03
542	1590.2	18.67	-0.03
543	1593.2	18.67	-0.03
544	1596.2	18.67	-0.03
545	1599.2	18.67	-0.03
546	1602.2	18.67	-0.03
547	1605.2	18.67	-0.03
548	1608.2	18.67	-0.03
549	1611.2	18.67	-0.03
550	1614.2	18.67	-0.03
551	1617.2	18.67	-0.03
552	1620.2	18.67	-0.03
553	1623.2	18.67	-0.03
554	1626.2	18.67	-0.03
555	1629.2	18.67	-0.03
556	1632.2	18.67	-0.03
557	1635.2	18.67	-0.03
558	1638.2	18.67	-0.03

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Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
559	1641.2	18.67	-0.03
560	1644.2	18.67	-0.03
561	1647.2	18.67	-0.03
562	1650.2	18.67	-0.03
563	1653.2	18.67	-0.03
564	1656.2	18.67	-0.03
565	1659.2	18.67	-0.03
566	1662.2	18.67	-0.03
567	1665.2	18.67	-0.03
568	1668.2	18.67	-0.03
569	1671.2	18.67	-0.03
570	1674.2	18.67	-0.03
571	1677.2	18.67	-0.03
572	1680.2	18.67	-0.03
573	1683.2	18.67	-0.03
574	1686.2	18.67	-0.03
575	1689.2	18.67	-0.03
576	1692.2	18.67	-0.03
577	1695.2	18.67	-0.03
578	1698.2	18.67	-0.03
579	1701.2	18.67	-0.03
580	1704.2	18.67	-0.03
581	1707.2	18.67	-0.03
582	1710.2	18.68	-0.02
583	1713.2	18.67	-0.03
584	1716.2	18.67	-0.03
585	1719.2	18.68	-0.02
586	1722.2	18.68	-0.02
587	1725.2	18.68	-0.02
588	1728.2	18.67	-0.03
589	1731.2	18.68	-0.02

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Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
590	1734.2	18.68	-0.02
591	1737.2	18.68	-0.02
592	1740.2	18.68	-0.02
593	1743.2	18.68	-0.02
594	1746.2	18.68	-0.02
595	1749.2	18.68	-0.02
596	1752.2	18.68	-0.02
597	1755.2	18.68	-0.02
598	1758.2	18.68	-0.02
599	1761.2	18.68	-0.02
600	1764.2	18.68	-0.02
601	1767.2	18.68	-0.02
602	1770.2	18.68	-0.02
603	1773.2	18.68	-0.02
604	1776.2	18.68	-0.02
605	1779.2	18.68	-0.02
606	1782.2	18.68	-0.02
607	1785.2	18.68	-0.02
608	1788.2	18.68	-0.02
609	1791.2	18.68	-0.02
610	1794.2	18.68	-0.02
611	1797.2	18.68	-0.02
612	1800.2	18.68	-0.02
613	1803.2	18.68	-0.02
614	1806.2	18.68	-0.02
615	1809.2	18.68	-0.02
616	1812.2	18.68	-0.02
617	1815.2	18.68	-0.02
618	1818.2	18.68	-0.02
619	1821.2	18.68	-0.02
620	1824.2	18.68	-0.02

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PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
621	1827.2	18.68	-0.02
622	1830.2	18.68	-0.02
623	1833.2	18.68	-0.02
624	1836.2	18.68	-0.02
625	1839.2	18.68	-0.02
626	1842.2	18.68	-0.02
627	1845.2	18.68	-0.02
628	1848.2	18.68	-0.02
629	1851.2	18.68	-0.02
630	1854.2	18.68	-0.02
631	1857.2	18.68	-0.02
632	1860.2	18.68	-0.02
633	1863.2	18.68	-0.02
634	1866.2	18.68	-0.02
635	1869.2	18.68	-0.02
636	1872.2	18.68	-0.02
637	1875.2	18.68	-0.02
638	1878.2	18.68	-0.02
639	1881.2	18.68	-0.02
640	1884.2	18.68	-0.02
641	1887.2	18.68	-0.02
642	1890.2	18.68	-0.02
643	1893.2	18.68	-0.02
644	1896.2	18.68	-0.02
645	1899.2	18.68	-0.02
646	1902.2	18.68	-0.02
647	1905.2	18.68	-0.02
648	1908.2	18.68	-0.02
649	1911.2	18.68	-0.02
650	1914.2	18.68	-0.02
651	1917.2	18.68	-0.02

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PDC Technical Services, Inc.
4349 Southport Road
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Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 FALLING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
652	1920.2	18.68	-0.02
653	1923.2	18.68	-0.02
654	1926.2	18.68	-0.02
655	1929.2	18.68	-0.02
656	1932.2	18.68	-0.02
657	1935.2	18.68	-0.02
658	1938.2	18.68	-0.02
659	1941.2	18.68	-0.02
660	1944.2	18.68	-0.02
661	1947.2	18.68	-0.02
662	1950.2	18.68	-0.02
663	1953.2	18.68	-0.02
664	1956.2	18.68	-0.02
665	1959.2	18.68	-0.02
666	1962.2	18.68	-0.02
667	1965.2	18.68	-0.02
668	1968.2	18.68	-0.02
669	1971.2	18.68	-0.02
670	1974.2	18.68	-0.02
671	1977.2	18.68	-0.02
672	1980.2	18.68	-0.02
673	1983.2	18.68	-0.02
674	1986.2	18.68	-0.02
675	1989.2	18.68	-0.02
676	1992.2	18.68	-0.02
677	1995.2	18.68	-0.02
678	1998.2	18.68	-0.02
679	2001.2	18.68	-0.02
680	2004.2	18.68	-0.02

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PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	**Slug Test Data Report** Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	20.54	1.84
2	0.3	20.49	1.79
3	0.6	20.47	1.77
4	0.9	20.50	1.80
5	1.2	20.46	1.76
6	1.5	20.45	1.75
7	1.8	20.46	1.76
8	2.1	20.45	1.75
9	2.4	20.46	1.76
10	2.7	20.44	1.73
11	3.1	20.45	1.75
12	3.4	20.42	1.72
13	3.8	20.45	1.75
14	4.2	20.45	1.75
15	4.7	20.44	1.74
16	5.1	20.43	1.73
17	5.6	20.43	1.73
18	6.2	20.44	1.73
19	6.7	20.45	1.75
20	7.3	20.45	1.75
21	8	20.45	1.75
22	8.6	20.44	1.74
23	9.3	20.44	1.74
24	10.1	20.41	1.71
25	10.9	20.43	1.73
26	11.7	20.40	1.70
27	12.6	20.44	1.73
28	13.5	20.40	1.70
29	14.5	20.40	1.70
30	15.6	20.44	1.74
31	16.7	20.44	1.74

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	17.9	20.44	1.74
33	19.1	20.42	1.72
34	20.5	20.39	1.69
35	21.9	20.37	1.67
36	23.4	20.35	1.65
37	24.9	20.43	1.73
38	26.5	20.39	1.69
39	28.2	20.39	1.69
40	30	20.36	1.66
41	31.9	20.35	1.65
42	34	20.33	1.63
43	36.2	20.28	1.58
44	38.5	20.26	1.55
45	41	20.26	1.56
46	43.6	20.25	1.55
47	46.4	20.24	1.54
48	49.3	20.24	1.54
49	52.3	20.23	1.53
50	55.3	20.22	1.52
51	58.3	20.21	1.51
52	61.3	20.20	1.50
53	64.3	20.18	1.48
54	67.3	20.18	1.48
55	70.3	20.17	1.47
56	73.3	20.16	1.46
57	76.3	20.15	1.45
58	79.3	20.14	1.44
59	82.3	20.13	1.43
60	85.3	20.12	1.42
61	88.3	20.11	1.41
62	91.3	20.11	1.41

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Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	94.3	20.10	1.40
64	97.3	20.09	1.39
65	100.3	20.08	1.38
66	103.3	20.08	1.38
67	106.3	20.07	1.37
68	109.3	20.06	1.36
69	112.3	20.05	1.35
70	115.3	20.05	1.35
71	118.3	20.04	1.34
72	121.3	20.03	1.33
73	124.3	20.03	1.33
74	127.3	20.02	1.32
75	130.3	20.01	1.31
76	133.3	20.00	1.30
77	136.3	20.00	1.30
78	139.3	19.99	1.29
79	142.3	19.99	1.29
80	145.3	19.97	1.27
81	148.3	19.97	1.27
82	151.3	19.96	1.26
83	154.3	19.96	1.26
84	157.3	19.95	1.25
85	160.3	19.95	1.25
86	163.3	19.94	1.24
87	166.3	19.93	1.23
88	169.3	19.93	1.23
89	172.3	19.92	1.22
90	175.3	19.91	1.21
91	178.3	19.90	1.20
92	181.3	19.89	1.19
93	184.3	19.91	1.21

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	187.3	19.88	1.18
95	190.3	19.87	1.17
96	193.3	19.86	1.16
97	196.3	19.86	1.16
98	199.3	19.85	1.15
99	202.3	19.84	1.14
100	205.3	19.84	1.14
101	208.3	19.83	1.13
102	211.3	19.82	1.12
103	214.3	19.82	1.12
104	217.3	19.81	1.11
105	220.3	19.80	1.10
106	223.3	19.80	1.10
107	226.3	19.79	1.09
108	229.3	19.79	1.09
109	232.3	19.78	1.08
110	235.3	19.77	1.07
111	238.3	19.77	1.07
112	241.3	19.76	1.06
113	244.3	19.76	1.06
114	247.3	19.75	1.05
115	250.3	19.75	1.05
116	253.3	19.74	1.04
117	256.3	19.73	1.03
118	259.3	19.73	1.03
119	262.3	19.72	1.02
120	265.3	19.72	1.02
121	268.3	19.71	1.01
122	271.3	19.71	1.01
123	274.3	19.70	1.00
124	277.3	19.70	1.00

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 5

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
125	280.3	19.69	0.99
126	283.3	19.69	0.98
127	286.3	19.68	0.98
128	289.3	19.68	0.98
129	292.3	19.67	0.97
130	295.3	19.67	0.96
131	298.3	19.66	0.96
132	301.3	19.65	0.95
133	304.3	19.65	0.95
134	307.3	19.64	0.94
135	310.3	19.64	0.94
136	313.3	19.63	0.93
137	316.3	19.63	0.93
138	319.3	19.62	0.92
139	322.3	19.62	0.92
140	325.3	19.61	0.91
141	328.3	19.61	0.91
142	331.3	19.61	0.91
143	334.3	19.60	0.90
144	337.3	19.59	0.89
145	340.3	19.59	0.89
146	343.3	19.59	0.89
147	346.3	19.58	0.88
148	349.3	19.58	0.88
149	352.3	19.57	0.87
150	355.3	19.57	0.87
151	358.3	19.56	0.86
152	361.3	19.56	0.86
153	364.3	19.55	0.85
154	367.3	19.55	0.85
155	370.3	19.55	0.85

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 6

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
156	373.3	19.54	0.84
157	376.3	19.54	0.84
158	379.3	19.53	0.83
159	382.3	19.53	0.83
160	385.3	19.52	0.82
161	388.3	19.52	0.82
162	391.3	19.51	0.81
163	394.3	19.51	0.81
164	397.3	19.51	0.81
165	400.3	19.50	0.80
166	403.3	19.50	0.80
167	406.3	19.49	0.79
168	409.3	19.49	0.79
169	412.3	19.48	0.78
170	415.3	19.48	0.78
171	418.3	19.48	0.78
172	421.3	19.47	0.77
173	424.3	19.47	0.77
174	427.3	19.46	0.76
175	430.3	19.46	0.76
176	433.3	19.45	0.75
177	436.3	19.45	0.75
178	439.3	19.45	0.75
179	442.3	19.44	0.74
180	445.3	19.44	0.74
181	448.3	19.43	0.73
182	451.3	19.43	0.73
183	454.3	19.43	0.73
184	457.3	19.42	0.72
185	460.3	19.42	0.72
186	463.3	19.42	0.72

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 7

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
187	466.3	19.41	0.71
188	469.3	19.41	0.71
189	472.3	19.40	0.70
190	475.3	19.40	0.70
191	478.3	19.40	0.70
192	481.3	19.39	0.69
193	484.3	19.39	0.69
194	487.3	19.38	0.68
195	490.3	19.38	0.68
196	493.3	19.38	0.68
197	496.3	19.37	0.67
198	499.3	19.37	0.67
199	502.3	19.37	0.66
200	505.3	19.36	0.66
201	508.3	19.36	0.66
202	511.3	19.35	0.65
203	514.3	19.35	0.65
204	517.3	19.35	0.65
205	520.3	19.34	0.64
206	523.3	19.34	0.64
207	526.3	19.34	0.64
208	529.3	19.34	0.64
209	532.3	19.33	0.63
210	535.3	19.33	0.63
211	538.3	19.32	0.62
212	541.3	19.32	0.62
213	544.3	19.32	0.62
214	547.3	19.31	0.61
215	550.3	19.31	0.61
216	553.3	19.31	0.61
217	556.3	19.30	0.60

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 8

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
218	559.3	19.30	0.60
219	562.3	19.30	0.60
220	565.3	19.29	0.59
221	568.3	19.29	0.59
222	571.3	19.29	0.59
223	574.3	19.28	0.58
224	577.3	19.28	0.58
225	580.3	19.28	0.58
226	583.3	19.28	0.57
227	586.3	19.27	0.57
228	589.3	19.27	0.57
229	592.3	19.27	0.57
230	595.3	19.26	0.56
231	598.3	19.26	0.56
232	601.3	19.26	0.56
233	604.3	19.25	0.55
234	607.3	19.25	0.55
235	610.3	19.25	0.55
236	613.3	19.25	0.55
237	616.3	19.24	0.54
238	619.3	19.24	0.54
239	622.3	19.24	0.54
240	625.3	19.23	0.53
241	628.3	19.23	0.53
242	631.3	19.23	0.53
243	634.3	19.22	0.52
244	637.3	19.22	0.52
245	640.3	19.22	0.52
246	643.3	19.22	0.52
247	646.3	19.21	0.51
248	649.3	19.21	0.51

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 9

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
249	652.3	19.21	0.51
250	655.3	19.21	0.51
251	658.3	19.20	0.50
252	661.3	19.20	0.50
253	664.3	19.20	0.50
254	667.3	19.19	0.49
255	670.3	19.19	0.49
256	673.3	19.19	0.49
257	676.3	19.19	0.48
258	679.3	19.18	0.48
259	682.3	19.18	0.48
260	685.3	19.18	0.48
261	688.3	19.18	0.48
262	691.3	19.17	0.47
263	694.3	19.17	0.47
264	697.3	19.17	0.47
265	700.3	19.16	0.46
266	703.3	19.16	0.46
267	706.3	19.16	0.46
268	709.3	19.16	0.46
269	712.3	19.16	0.46
270	715.3	19.15	0.45
271	718.3	19.15	0.45
272	721.3	19.15	0.45
273	724.3	19.15	0.45
274	727.3	19.14	0.44
275	730.3	19.14	0.44
276	733.3	19.14	0.44
277	736.3	19.14	0.44
278	739.3	19.13	0.43
279	742.3	19.13	0.43

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 10

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
280	745.3	19.13	0.43
281	748.3	19.13	0.43
282	751.3	19.12	0.42
283	754.3	19.12	0.42
284	757.3	19.12	0.42
285	760.3	19.12	0.42
286	763.3	19.11	0.41
287	766.3	19.11	0.41
288	769.3	19.11	0.41
289	772.3	19.11	0.41
290	775.3	19.11	0.41
291	778.3	19.10	0.40
292	781.3	19.10	0.40
293	784.3	19.10	0.40
294	787.3	19.10	0.39
295	790.3	19.10	0.39
296	793.3	19.09	0.39
297	796.3	19.09	0.39
298	799.3	19.09	0.39
299	802.3	19.09	0.39
300	805.3	19.08	0.38
301	808.3	19.08	0.38
302	811.3	19.08	0.38
303	814.3	19.08	0.38
304	817.3	19.07	0.37
305	820.3	19.07	0.37
306	823.3	19.07	0.37
307	826.3	19.07	0.37
308	829.3	19.07	0.37
309	832.3	19.07	0.37
310	835.3	19.06	0.36

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 11

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
311	838.3	19.06	0.36
312	841.3	19.06	0.36
313	844.3	19.06	0.36
314	847.3	19.06	0.36
315	850.3	19.05	0.35
316	853.3	19.05	0.35
317	856.3	19.05	0.35
318	859.3	19.05	0.35
319	862.3	19.05	0.35
320	865.3	19.04	0.34
321	868.3	19.04	0.34
322	871.3	19.04	0.34
323	874.3	19.04	0.34
324	877.3	19.04	0.34
325	880.3	19.04	0.34
326	883.3	19.03	0.33
327	886.3	19.03	0.33
328	889.3	19.03	0.33
329	892.3	19.03	0.33
330	895.3	19.03	0.33
331	898.3	19.02	0.32
332	901.3	19.02	0.32
333	904.3	19.02	0.32
334	907.3	19.02	0.32
335	910.3	19.01	0.31
336	913.3	19.01	0.31
337	916.3	19.01	0.31
338	919.3	19.01	0.31
339	922.3	19.01	0.31
340	925.3	19.01	0.31
341	928.3	19.01	0.30

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 12

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
342	931.3	19.01	0.30
343	934.3	19.00	0.30
344	937.3	19.00	0.30
345	940.3	19.00	0.30
346	943.3	19.00	0.30
347	946.3	19.00	0.30
348	949.3	18.99	0.29
349	952.3	18.99	0.29
350	955.3	18.99	0.29
351	958.3	18.99	0.29
352	961.3	18.99	0.29
353	964.3	18.99	0.29
354	967.3	18.98	0.28
355	970.3	18.98	0.28
356	973.3	18.98	0.28
357	976.3	18.98	0.28
358	979.3	18.98	0.28
359	982.3	18.98	0.28
360	985.3	18.98	0.28
361	988.3	18.97	0.27
362	991.3	18.97	0.27
363	994.3	18.97	0.27
364	997.3	18.97	0.27
365	1000.3	18.97	0.27
366	1003.3	18.97	0.27
367	1006.3	18.96	0.26
368	1009.3	18.96	0.26
369	1012.3	18.96	0.26
370	1015.3	18.96	0.26
371	1018.3	18.96	0.26
372	1021.3	18.96	0.26

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
373	1024.3	18.95	0.25
374	1027.3	18.95	0.25
375	1030.3	18.95	0.25
376	1033.3	18.95	0.25
377	1036.3	18.95	0.25
378	1039.3	18.95	0.25
379	1042.3	18.95	0.25
380	1045.3	18.95	0.25
381	1048.3	18.94	0.24
382	1051.3	18.94	0.24
383	1054.3	18.94	0.24
384	1057.3	18.94	0.24
385	1060.3	18.94	0.24
386	1063.3	18.94	0.24
387	1066.3	18.94	0.24
388	1069.3	18.93	0.23
389	1072.3	18.93	0.23
390	1075.3	18.93	0.23
391	1078.3	18.93	0.23
392	1081.3	18.93	0.23
393	1084.3	18.93	0.23
394	1087.3	18.93	0.23
395	1090.3	18.92	0.22
396	1093.3	18.92	0.22
397	1096.3	18.92	0.22
398	1099.3	18.92	0.22
399	1102.3	18.92	0.22
400	1105.3	18.92	0.22
401	1108.3	18.92	0.21
402	1111.3	18.92	0.21
403	1114.3	18.91	0.21

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
404	1117.3	18.91	0.21
405	1120.3	18.91	0.21
406	1123.3	18.91	0.21
407	1126.3	18.91	0.21
408	1129.3	18.91	0.21
409	1132.3	18.91	0.21
410	1135.3	18.91	0.21
411	1138.3	18.90	0.20
412	1141.3	18.90	0.20
413	1144.3	18.90	0.20
414	1147.3	18.90	0.20
415	1150.3	18.90	0.20
416	1153.3	18.90	0.20
417	1156.3	18.90	0.20
418	1159.3	18.90	0.20
419	1162.3	18.89	0.19
420	1165.3	18.89	0.19
421	1168.3	18.89	0.19
422	1171.3	18.89	0.19
423	1174.3	18.89	0.19
424	1177.3	18.89	0.19
425	1180.3	18.89	0.19
426	1183.3	18.88	0.18
427	1186.3	18.89	0.19
428	1189.3	18.88	0.18
429	1192.3	18.88	0.18
430	1195.3	18.88	0.18
431	1198.3	18.88	0.18
432	1201.3	18.88	0.18
433	1204.3	18.88	0.18
434	1207.3	18.88	0.18

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 15

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
435	1210.3	18.88	0.18
436	1213.3	18.87	0.17
437	1216.3	18.87	0.17
438	1219.3	18.87	0.17
439	1222.3	18.87	0.17
440	1225.3	18.87	0.17
441	1228.3	18.87	0.17
442	1231.3	18.87	0.17
443	1234.3	18.87	0.17
444	1237.3	18.86	0.16
445	1240.3	18.86	0.16
446	1243.3	18.86	0.16
447	1246.3	18.86	0.16
448	1249.3	18.86	0.16
449	1252.3	18.86	0.16
450	1255.3	18.86	0.16
451	1258.3	18.86	0.16
452	1261.3	18.86	0.16
453	1264.3	18.86	0.16
454	1267.3	18.86	0.16
455	1270.3	18.86	0.16
456	1273.3	18.85	0.15
457	1276.3	18.85	0.15
458	1279.3	18.85	0.15
459	1282.3	18.85	0.15
460	1285.3	18.85	0.15
461	1288.3	18.85	0.15
462	1291.3	18.85	0.15
463	1294.3	18.85	0.15
464	1297.3	18.85	0.15
465	1300.3	18.85	0.15

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 16

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
466	1303.3	18.85	0.15
467	1306.3	18.84	0.14
468	1309.3	18.84	0.14
469	1312.3	18.84	0.14
470	1315.3	18.84	0.14
471	1318.3	18.84	0.14
472	1321.3	18.84	0.14
473	1324.3	18.84	0.14
474	1327.3	18.84	0.14
475	1330.3	18.84	0.14
476	1333.3	18.84	0.14
477	1336.3	18.83	0.13
478	1339.3	18.83	0.13
479	1342.3	18.83	0.13
480	1345.3	18.83	0.13
481	1348.3	18.83	0.13
482	1351.3	18.83	0.13
483	1354.3	18.83	0.13
484	1357.3	18.83	0.13
485	1360.3	18.83	0.13
486	1363.3	18.83	0.13
487	1366.3	18.83	0.13
488	1369.3	18.83	0.13
489	1372.3	18.83	0.13
490	1375.3	18.83	0.13
491	1378.3	18.83	0.13
492	1381.3	18.82	0.12
493	1384.3	18.82	0.12
494	1387.3	18.82	0.12
495	1390.3	18.82	0.12
496	1393.3	18.82	0.12

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
497	1396.3	18.82	0.12
498	1399.3	18.82	0.12
499	1402.3	18.82	0.12
500	1405.3	18.82	0.12
501	1408.3	18.82	0.12
502	1411.3	18.82	0.12
503	1414.3	18.82	0.12
504	1417.3	18.81	0.11
505	1420.3	18.81	0.11
506	1423.3	18.81	0.11
507	1426.3	18.81	0.11
508	1429.3	18.81	0.11
509	1432.3	18.81	0.11
510	1435.3	18.81	0.11
511	1438.3	18.81	0.11
512	1441.3	18.81	0.11
513	1444.3	18.81	0.11
514	1447.3	18.81	0.11
515	1450.3	18.81	0.11
516	1453.3	18.80	0.10
517	1456.3	18.80	0.10
518	1459.3	18.80	0.10
519	1462.3	18.80	0.10
520	1465.3	18.80	0.10
521	1468.3	18.80	0.10
522	1471.3	18.80	0.10
523	1474.3	18.80	0.10
524	1477.3	18.80	0.10
525	1480.3	18.80	0.10
526	1483.3	18.80	0.10
527	1486.3	18.80	0.10

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 18

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
528	1489.3	18.80	0.10
529	1492.3	18.80	0.10
530	1495.3	18.80	0.10
531	1498.3	18.80	0.10
532	1501.3	18.80	0.10
533	1504.3	18.79	0.09
534	1507.3	18.79	0.09
535	1510.3	18.79	0.09
536	1513.3	18.79	0.09
537	1516.3	18.79	0.09
538	1519.3	18.79	0.09
539	1522.3	18.79	0.09
540	1525.3	18.79	0.09
541	1528.3	18.79	0.09
542	1531.3	18.79	0.09
543	1534.3	18.79	0.09
544	1537.3	18.79	0.09
545	1540.3	18.79	0.09
546	1543.3	18.79	0.09
547	1546.3	18.79	0.09
548	1549.3	18.78	0.08
549	1552.3	18.78	0.08
550	1555.3	18.78	0.08
551	1558.3	18.78	0.08
552	1561.3	18.78	0.08
553	1564.3	18.78	0.08
554	1567.3	18.78	0.08
555	1570.3	18.78	0.08
556	1573.3	18.78	0.08
557	1576.3	18.78	0.08
558	1579.3	18.78	0.08

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
559	1582.3	18.78	0.08
560	1585.3	18.78	0.08
561	1588.3	18.78	0.08
562	1591.3	18.78	0.08
563	1594.3	18.78	0.08
564	1597.3	18.77	0.07
565	1600.3	18.77	0.07
566	1603.3	18.77	0.07
567	1606.3	18.77	0.07
568	1609.3	18.77	0.07
569	1612.3	18.77	0.07
570	1615.3	18.77	0.07
571	1618.3	18.77	0.07
572	1621.3	18.77	0.07
573	1624.3	18.77	0.07
574	1627.3	18.77	0.07
575	1630.3	18.77	0.07
576	1633.3	18.77	0.07
577	1636.3	18.77	0.07
578	1639.3	18.77	0.07
579	1642.3	18.77	0.07
580	1645.3	18.77	0.07
581	1648.3	18.77	0.07
582	1651.3	18.77	0.07
583	1654.3	18.77	0.07
584	1657.3	18.77	0.07
585	1660.3	18.77	0.07
586	1663.3	18.76	0.06
587	1666.3	18.76	0.06
588	1669.3	18.76	0.06
589	1672.3	18.76	0.06

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 20

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
590	1675.3	18.76	0.06
591	1678.3	18.76	0.06
592	1681.3	18.76	0.06
593	1684.3	18.76	0.06
594	1687.3	18.76	0.06
595	1690.3	18.76	0.06
596	1693.3	18.76	0.06
597	1696.3	18.76	0.06
598	1699.3	18.76	0.06
599	1702.3	18.76	0.06
600	1705.3	18.76	0.06
601	1708.3	18.76	0.06
602	1711.3	18.76	0.06
603	1714.3	18.76	0.06
604	1717.3	18.75	0.05
605	1720.3	18.75	0.05
606	1723.3	18.75	0.05
607	1726.3	18.75	0.05
608	1729.3	18.75	0.05
609	1732.3	18.75	0.05
610	1735.3	18.75	0.05
611	1738.3	18.75	0.05
612	1741.3	18.75	0.05
613	1744.3	18.75	0.05
614	1747.3	18.75	0.05
615	1750.3	18.75	0.05
616	1753.3	18.75	0.05
617	1756.3	18.75	0.05
618	1759.3	18.75	0.05
619	1762.3	18.75	0.05
620	1765.3	18.75	0.05

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 21

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
621	1768.3	18.75	0.05
622	1771.3	18.75	0.05
623	1774.3	18.75	0.05
624	1777.3	18.75	0.05
625	1780.3	18.75	0.05
626	1783.3	18.75	0.05
627	1786.3	18.74	0.04
628	1789.3	18.74	0.04
629	1792.3	18.74	0.04
630	1795.3	18.74	0.04
631	1798.3	18.74	0.04
632	1801.3	18.74	0.04
633	1804.3	18.74	0.04
634	1807.3	18.74	0.04
635	1810.3	18.74	0.04
636	1813.3	18.74	0.04
637	1816.3	18.74	0.04
638	1819.3	18.74	0.04
639	1822.3	18.74	0.04
640	1825.3	18.74	0.04
641	1828.3	18.74	0.04
642	1831.3	18.74	0.04
643	1834.3	18.74	0.04
644	1837.3	18.74	0.04
645	1840.3	18.74	0.04
646	1843.3	18.74	0.04
647	1846.3	18.74	0.04
648	1849.3	18.74	0.04
649	1852.3	18.74	0.04
650	1855.3	18.74	0.04
651	1858.3	18.74	0.04

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
652	1861.3	18.74	0.04
653	1864.3	18.74	0.04
654	1867.3	18.74	0.04
655	1870.3	18.74	0.04
656	1873.3	18.74	0.04
657	1876.3	18.73	0.03
658	1879.3	18.73	0.03
659	1882.3	18.73	0.03
660	1885.3	18.73	0.03
661	1888.3	18.73	0.03
662	1891.3	18.73	0.03
663	1894.3	18.73	0.03
664	1897.3	18.73	0.03
665	1900.3	18.73	0.03
666	1903.3	18.73	0.03
667	1906.3	18.73	0.03
668	1909.3	18.73	0.03
669	1912.3	18.73	0.03
670	1915.3	18.73	0.03
671	1918.3	18.73	0.03
672	1921.3	18.73	0.03
673	1924.3	18.73	0.03
674	1927.3	18.73	0.03
675	1930.3	18.73	0.03
676	1933.3	18.73	0.03
677	1936.3	18.73	0.03
678	1939.3	18.73	0.03
679	1942.3	18.73	0.03
680	1945.3	18.73	0.03
681	1948.3	18.73	0.03
682	1951.3	18.73	0.03

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 23

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
683	1954.3	18.73	0.03
684	1957.3	18.73	0.03
685	1960.3	18.73	0.03
686	1963.3	18.73	0.03
687	1966.3	18.73	0.03
688	1969.3	18.72	0.02
689	1972.3	18.72	0.02
690	1975.3	18.72	0.02
691	1978.3	18.72	0.02
692	1981.3	18.72	0.02
693	1984.3	18.72	0.02
694	1987.3	18.72	0.02
695	1990.3	18.72	0.02
696	1993.3	18.72	0.02
697	1996.3	18.72	0.02
698	1999.3	18.72	0.02
699	2002.3	18.72	0.02
700	2005.3	18.72	0.02
701	2008.3	18.72	0.02
702	2011.3	18.72	0.02
703	2014.3	18.72	0.02
704	2017.3	18.72	0.02
705	2020.3	18.72	0.02
706	2023.3	18.72	0.02
707	2026.3	18.72	0.02
708	2029.3	18.72	0.02
709	2032.3	18.72	0.02
710	2035.3	18.72	0.02
711	2038.3	18.72	0.02
712	2041.3	18.72	0.02
713	2044.3	18.72	0.02

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 24

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
714	2047.3	18.72	0.02
715	2050.3	18.72	0.02
716	2053.3	18.72	0.02
717	2056.3	18.72	0.02
718	2059.3	18.71	0.01
719	2062.3	18.72	0.02
720	2065.3	18.71	0.01
721	2068.3	18.71	0.01
722	2071.3	18.71	0.01
723	2074.3	18.71	0.01
724	2077.3	18.71	0.01
725	2080.3	18.71	0.01
726	2083.3	18.71	0.01
727	2086.3	18.71	0.01
728	2089.3	18.71	0.01
729	2092.3	18.71	0.01
730	2095.3	18.71	0.01
731	2098.3	18.71	0.01
732	2101.3	18.71	0.01
733	2104.3	18.71	0.01
734	2107.3	18.71	0.01
735	2110.3	18.71	0.01
736	2113.3	18.71	0.01
737	2116.3	18.71	0.01
738	2119.3	18.71	0.01
739	2122.3	18.71	0.01
740	2125.3	18.71	0.01
741	2128.3	18.71	0.01
742	2131.3	18.71	0.01
743	2134.3	18.71	0.01
744	2137.3	18.71	0.01

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
745	2140.3	18.71	0.01
746	2143.3	18.71	0.01
747	2146.3	18.71	0.01
748	2149.3	18.71	0.01
749	2152.3	18.71	0.01
750	2155.3	18.71	0.01
751	2158.3	18.71	0.01
752	2161.3	18.71	0.01
753	2164.3	18.71	0.01
754	2167.3	18.71	0.01
755	2170.3	18.71	0.01
756	2173.3	18.71	0.01
757	2176.3	18.71	0.01
758	2179.3	18.71	0.01
759	2182.3	18.70	0.00
760	2185.3	18.70	0.00
761	2188.3	18.70	0.00
762	2191.3	18.70	0.00
763	2194.3	18.70	0.00
764	2197.3	18.70	0.00
765	2200.3	18.70	0.00
766	2203.3	18.70	0.00
767	2206.3	18.70	0.00
768	2209.3	18.70	0.00
769	2212.3	18.70	0.00
770	2215.3	18.70	0.00
771	2218.3	18.70	0.00
772	2221.3	18.70	0.00
773	2224.3	18.70	0.00
774	2227.3	18.70	0.00
775	2230.3	18.70	0.00

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 26

Test Well:	**EX-20**	**Slug Test:**	**EX-20 RISING HEAD**
		Test Well:	EX-20
Depth to Static WL:	18.7 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.77 [ft]
Date:	9/25/2003	Aquifer Thickness:	2 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
776	2233.3	18.70	0.00
777	2236.3	18.70	0.00
778	2239.3	18.70	0.00
779	2242.3	18.70	0.00
780	2245.3	18.70	0.00
781	2248.3	18.70	0.00

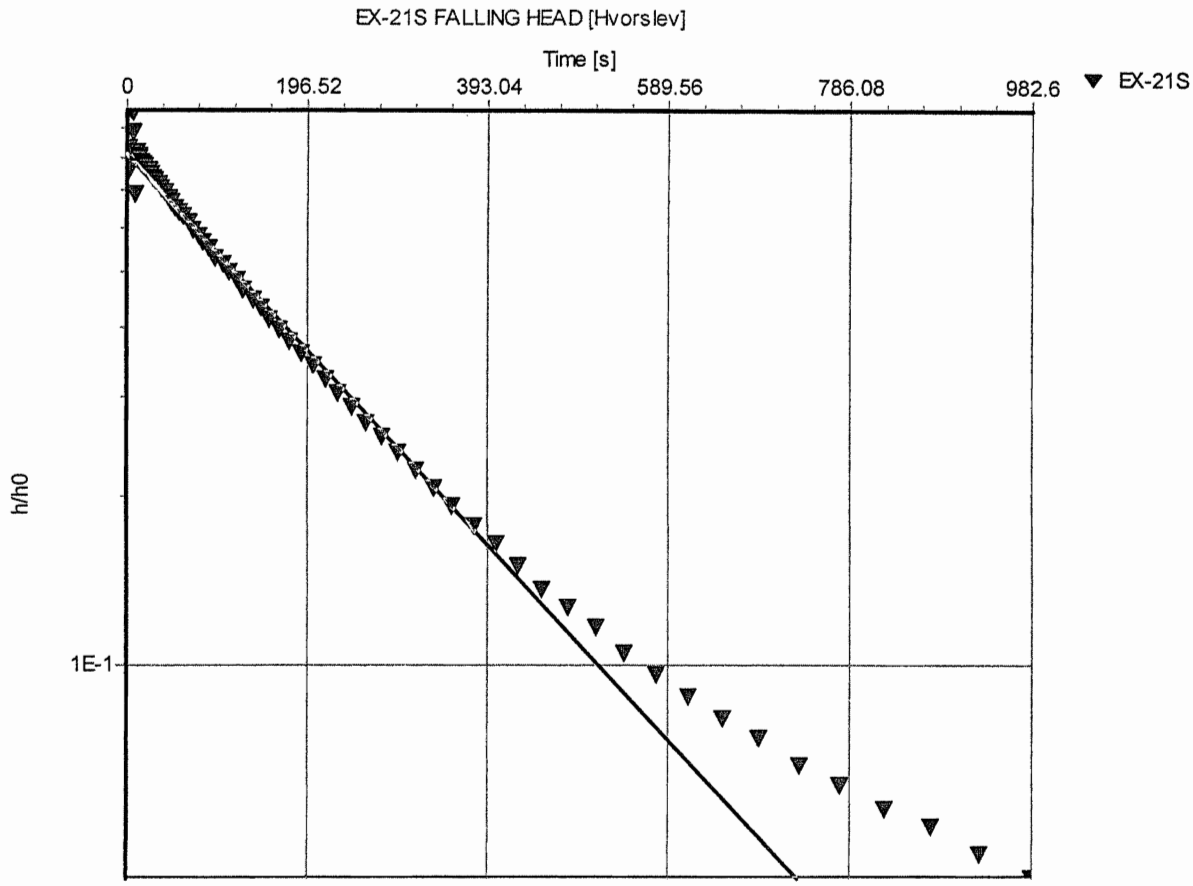
PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 3.9-676-4893

Slug Test Analysis Report

Project: CLI #3 Expansion well slug tests

Number: 91-0118

Client: Clinton Landfill, Inc.



Slug Test: **EX-21S FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 1.50E-4 [cm/s]

Test parameters:

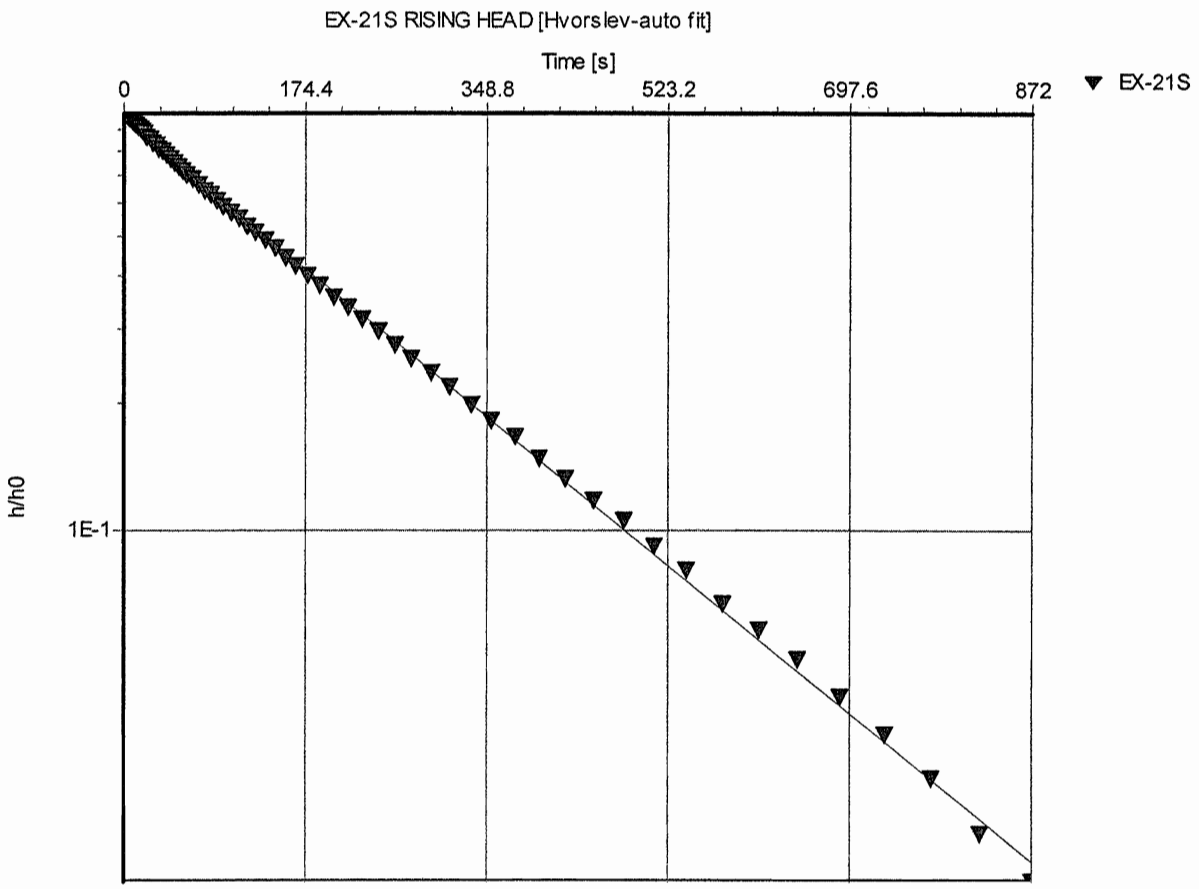
Test Well:	EX-21S	Aquifer Thickness:	2.6 [ft]
Casing radius:	0.083333333 [ft]		
Screen length:	9.7 [ft]		
Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 1/14/2005

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-21S RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 1.73E-4 [cm/s]

Test parameters:				
	Test Well:	EX-21S	Aquifer Thickness:	2.6 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.7 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 1/14/2005

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-21S**	**Slug Test:**	**EX-21S FALLING HEAD**
		Test Well:	EX-21S
Depth to Static WL:	37.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	1/12/2005	Aquifer Thickness:	2.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	35.05	-2.43
2	1.2	35.64	-1.84
3	2.6	35.46	-2.02
4	4	35.13	-2.35
5	5.5	35.33	-2.15
6	7	35.15	-2.33
7	8.6	35.81	-1.67
8	10.3	35.49	-1.99
9	12.1	35.53	-1.95
10	14	35.55	-1.93
11	16.1	35.57	-1.91
12	18.3	35.59	-1.89
13	20.6	35.61	-1.87
14	23.1	35.64	-1.84
15	25.7	35.66	-1.82
16	28.5	35.69	-1.79
17	31.4	35.71	-1.77
18	34.5	35.74	-1.74
19	37.8	35.76	-1.72
20	41.3	35.80	-1.68
21	45	35.83	-1.65
22	48.9	35.86	-1.62
23	53.1	35.89	-1.59
24	57.5	35.92	-1.56
25	62.2	35.96	-1.52
26	67.2	35.99	-1.49
27	72.5	36.03	-1.45
28	78.1	36.06	-1.42
29	84	36.11	-1.38
30	90.3	36.14	-1.34
31	96.9	36.19	-1.29

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-21S**	**Slug Test:**	**EX-21S FALLING HEAD**
		Test Well:	EX-21S
Depth to Static WL:	37.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	1/12/2005	Aquifer Thickness:	2.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	103.9	36.22	-1.26
33	111.4	36.26	-1.22
34	119.3	36.30	-1.18
35	127.7	36.35	-1.13
36	136.6	36.39	-1.09
37	146	36.43	-1.05
38	156	36.48	-1.00
39	166.6	36.52	-0.96
40	177.8	36.56	-0.92
41	189.7	36.61	-0.87
42	202.3	36.65	-0.83
43	215.6	36.70	-0.78
44	229.7	36.74	-0.74
45	244.6	36.78	-0.70
46	260.4	36.82	-0.66
47	277.2	36.86	-0.62
48	295	36.90	-0.58
49	313.8	36.94	-0.54
50	333.7	36.98	-0.50
51	354.8	37.01	-0.47
52	377.2	37.05	-0.43
53	400.9	37.08	-0.40
54	426	37.12	-0.36
55	452.6	37.15	-0.33
56	480.8	37.17	-0.31
57	510.7	37.20	-0.28
58	542.3	37.22	-0.26
59	575.8	37.25	-0.23
60	611.3	37.27	-0.21
61	648.9	37.28	-0.20
62	688.7	37.30	-0.18

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-21S**	**Slug Test:**	**EX-21S FALLING HEAD**
		Test Well:	EX-21S
Depth to Static WL:	37.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	1/12/2005	Aquifer Thickness:	2.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	730.9	37.32	-0.16
64	775.6	37.33	-0.15
65	823	37.35	-0.13
66	873.2	37.36	-0.13
67	926.3	37.37	-0.11
68	982.6	37.38	-0.10

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	**Slug Test Data Report** Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-21S**	**Slug Test:**	**EX-21S RISING HEAD**
		Test Well:	EX-21S
Depth to Static WL:	37.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	1/12/2005	Aquifer Thickness:	2.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	39.55	2.07
2	1.4	39.52	2.04
3	2.8	39.50	2.02
4	4.3	39.48	2.00
5	5.8	39.46	1.98
6	7.4	39.44	1.96
7	9.1	39.41	1.93
8	10.9	39.39	1.91
9	12.8	39.37	1.89
10	14.9	39.35	1.87
11	17.1	39.32	1.84
12	19.4	39.30	1.82
13	21.9	39.28	1.80
14	24.5	39.25	1.77
15	27.3	39.22	1.74
16	30.2	39.19	1.71
17	33.3	39.16	1.68
18	36.6	39.13	1.65
19	40.1	39.10	1.62
20	43.8	39.07	1.59
21	47.7	39.04	1.56
22	51.9	39.01	1.53
23	56.3	38.97	1.49
24	61	38.94	1.46
25	66	38.90	1.42
26	71.3	38.86	1.38
27	76.9	38.82	1.34
28	82.8	38.78	1.30
29	89.1	38.74	1.26
30	95.7	38.70	1.22
31	102.7	38.66	1.18

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-21S**	**Slug Test:**	**EX-21S RISING HEAD**
		Test Well:	EX-21S
Depth to Static WL:	37.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	1/12/2005	Aquifer Thickness:	2.6 [ft]

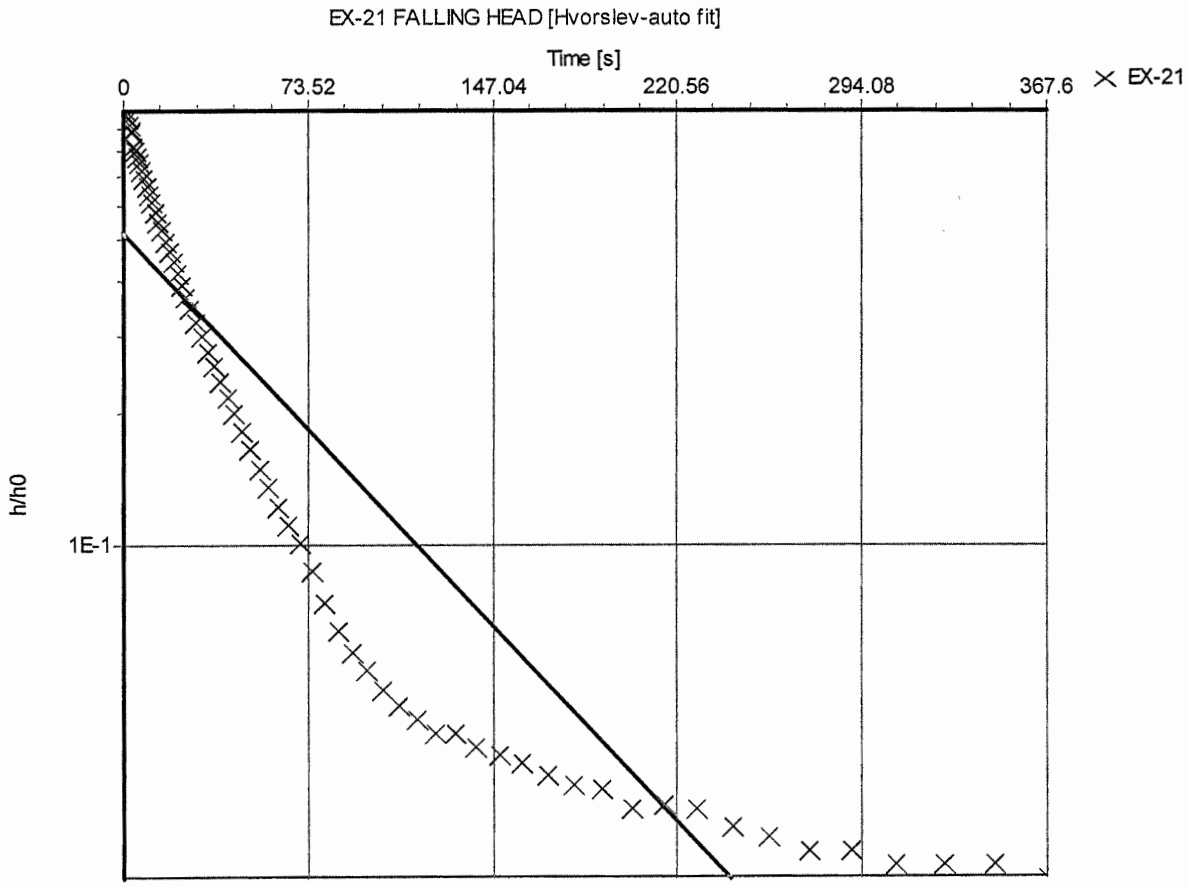
	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	110.2	38.63	1.15
33	118.1	38.58	1.10
34	126.5	38.54	1.06
35	135.4	38.50	1.02
36	144.8	38.45	0.97
37	154.8	38.41	0.93
38	165.4	38.36	0.88
39	176.6	38.31	0.83
40	188.5	38.27	0.79
41	201.1	38.22	0.74
42	214.4	38.18	0.70
43	228.5	38.14	0.66
44	243.4	38.10	0.62
45	259.2	38.05	0.57
46	276	38.01	0.53
47	293.8	37.97	0.49
48	312.6	37.93	0.45
49	332.5	37.89	0.41
50	353.6	37.86	0.38
51	376	37.82	0.34
52	399.7	37.79	0.31
53	424.8	37.76	0.28
54	451.4	37.72	0.24
55	479.6	37.70	0.22
56	509.5	37.67	0.19
57	541.1	37.65	0.17
58	574.6	37.62	0.14
59	610.1	37.60	0.12
60	647.7	37.58	0.10
61	687.5	37.56	0.08
62	729.7	37.55	0.07

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-21S**	**Slug Test:**	**EX-21S RISING HEAD**
		Test Well:	EX-21S
Depth to Static WL:	37.48 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.7 [ft]
Date:	1/12/2005	Aquifer Thickness:	2.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	774.4	37.53	0.05
64	821.8	37.52	0.04
65	872	37.51	0.03

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-21 FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 5.23E-4 [cm/s]

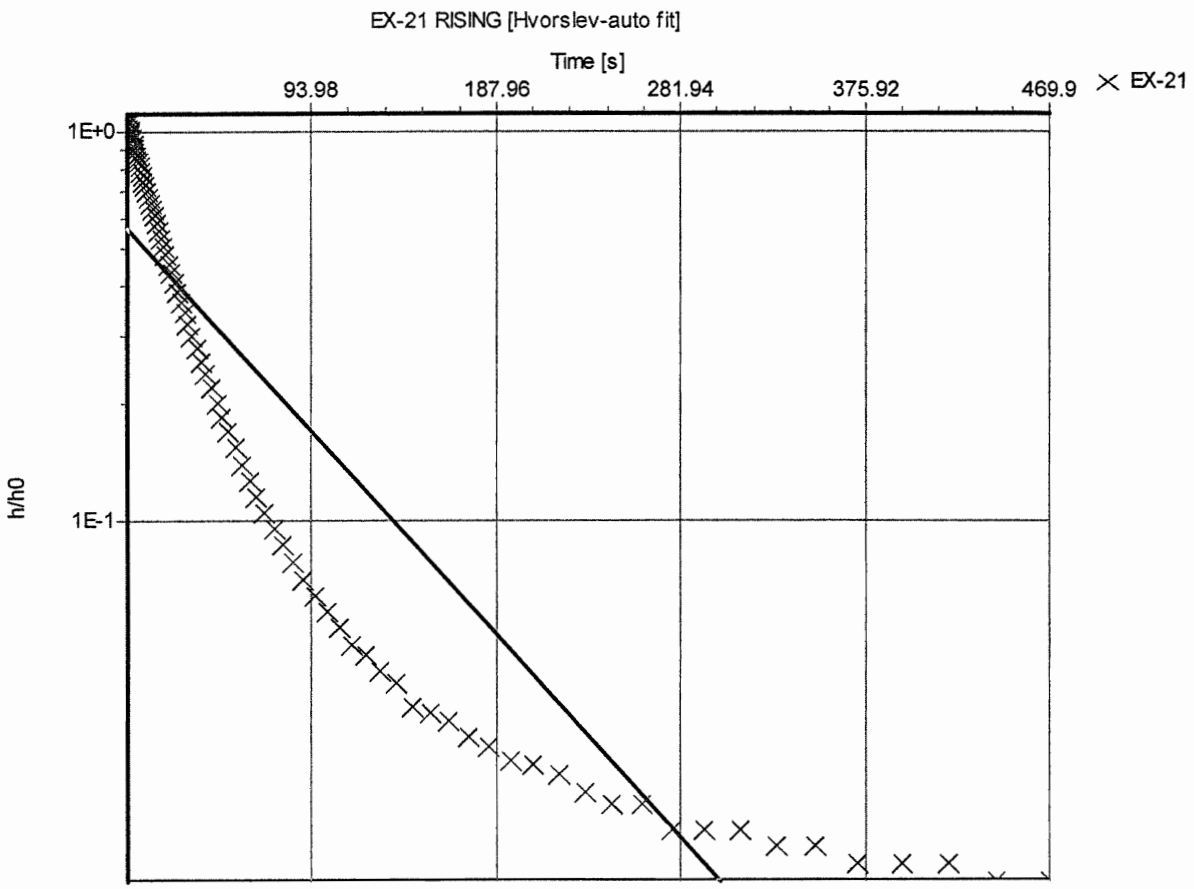
Test parameters:				
	Test Well:	EX-21	Aquifer Thickness:	3.4 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.64 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 11/30/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**	
	Project:	CLI #3 Expansion well slug tests
	Number:	91-0118
	Client:	Clinton Landfill, Inc.



Slug Test: **EX-21 RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 4.76E-4 [cm/s]

Test parameters:				
	Test Well:	EX-21	Aquifer Thickness:	3.4 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.64 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 11/29/2004

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report

Project: CLI #3 Expansion well slug tests

Number: 91-0118

Client: Clinton Landfill, Inc.

Test Well:	**EX-21**	**Slug Test:**	**EX-21 FALLING HEAD**
		Test Well:	EX-21
Depth to Static WL:	45.82 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.64 [ft]
Date:	11/13/2004	Aquifer Thickness:	3.4 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	44.36	-1.46
2	0.5	44.37	-1.45
3	1.1	44.40	-1.42
4	1.6	44.44	-1.38
5	2.2	44.48	-1.34
6	2.9	44.53	-1.29
7	3.5	44.52	-1.30
8	4.2	44.62	-1.20
9	5	44.65	-1.17
10	5.8	44.69	-1.13
11	6.6	44.72	-1.10
12	7.5	44.76	-1.06
13	8.4	44.80	-1.02
14	9.4	44.85	-0.97
15	10.5	44.89	-0.93
16	11.6	44.93	-0.89
17	12.8	44.97	-0.85
18	14	45.01	-0.81
19	15.4	45.05	-0.77
20	16.8	45.09	-0.73
21	18.3	45.13	-0.69
22	19.8	45.17	-0.65
23	21.4	45.21	-0.61
24	23.1	45.24	-0.58
25	24.9	45.28	-0.54
26	26.8	45.31	-0.51
27	28.9	45.35	-0.47
28	31.1	45.38	-0.44
29	33.4	45.42	-0.41
30	35.9	45.44	-0.38
31	38.5	45.48	-0.34

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-21**	**Slug Test:**	**EX-21 FALLING HEAD**
		Test Well:	EX-21
Depth to Static WL:	45.82 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.64 [ft]
Date:	11/13/2004	Aquifer Thickness:	3.4 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	41.3	45.50	-0.32
33	44.2	45.53	-0.29
34	47.3	45.55	-0.27
35	50.6	45.58	-0.24
36	54.1	45.60	-0.22
37	57.8	45.62	-0.20
38	61.7	45.64	-0.18
39	65.9	45.66	-0.16
40	70.3	45.67	-0.15
41	75	45.69	-0.13
42	80	45.71	-0.11
43	85.3	45.73	-0.09
44	90.9	45.74	-0.08
45	96.8	45.75	-0.08
46	103.1	45.75	-0.07
47	109.7	45.76	-0.06
48	116.7	45.76	-0.06
49	124.2	45.77	-0.05
50	132.1	45.77	-0.05
51	140.5	45.77	-0.05
52	149.4	45.77	-0.05
53	158.8	45.77	-0.05
54	168.8	45.78	-0.04
55	179.4	45.78	-0.04
56	190.6	45.78	-0.04
57	202.5	45.78	-0.04
58	215.1	45.78	-0.04
59	228.4	45.78	-0.04
60	242.5	45.79	-0.03
61	257.4	45.79	-0.03
62	273.2	45.79	-0.03

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-21**	**Slug Test:**	**EX-21 FALLING HEAD**
		Test Well:	EX-21
Depth to Static WL:	45.82 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.64 [ft]
Date:	11/13/2004	Aquifer Thickness:	3.4 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	290	45.79	-0.03
64	307.8	45.79	-0.03
65	326.6	45.79	-0.03
66	346.5	45.79	-0.03
67	367.6	45.80	-0.02

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-21**	**Slug Test:**	**EX-21 RISING HEAD**
		Test Well:	EX-21
Depth to Static WL:	45.82 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.64 [ft]
Date:	11/13/2004	Aquifer Thickness:	3.4 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	47.27	1.45
2	0.3	47.43	1.61
3	0.6	47.38	1.56
4	0.9	47.36	1.53
5	1.2	47.33	1.51
6	1.5	47.31	1.49
7	1.8	47.29	1.47
8	2.1	47.27	1.45
9	2.5	47.24	1.42
10	2.8	47.22	1.40
11	3.2	47.20	1.38
12	3.6	47.17	1.35
13	4.1	47.14	1.32
14	4.5	47.11	1.29
15	5	47.08	1.26
16	5.6	47.05	1.23
17	6.1	47.03	1.21
18	6.7	47.00	1.18
19	7.4	46.97	1.15
20	8	46.94	1.12
21	8.7	46.91	1.09
22	9.5	46.87	1.05
23	10.3	46.84	1.02
24	11.1	46.80	0.98
25	12	46.77	0.95
26	12.9	46.73	0.91
27	13.9	46.70	0.88
28	15	46.66	0.84
29	16.1	46.63	0.81
30	17.3	46.59	0.77
31	18.5	46.55	0.73

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-21**	**Slug Test:**	**EX-21 RISING HEAD**
		Test Well:	EX-21
Depth to Static WL:	45.82 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.64 [ft]
Date:	11/13/2004	Aquifer Thickness:	3.4 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	19.9	46.52	0.70
33	21.3	46.48	0.66
34	22.8	46.45	0.63
35	24.3	46.41	0.59
36	25.9	46.38	0.56
37	27.6	46.35	0.52
38	29.4	46.31	0.49
39	31.3	46.28	0.46
40	33.4	46.25	0.43
41	35.6	46.22	0.40
42	37.9	46.19	0.37
43	40.4	46.16	0.34
44	43	46.14	0.32
45	45.8	46.11	0.29
46	48.7	46.09	0.27
47	51.8	46.06	0.24
48	55.1	46.04	0.22
49	58.6	46.02	0.20
50	62.3	46.00	0.18
51	66.2	45.99	0.17
52	70.4	45.97	0.15
53	74.8	45.96	0.14
54	79.5	45.95	0.13
55	84.5	45.93	0.11
56	89.8	45.92	0.10
57	95.4	45.91	0.09
58	101.3	45.90	0.08
59	107.6	45.90	0.08
60	114.2	45.89	0.07
61	121.2	45.89	0.06
62	128.7	45.88	0.06

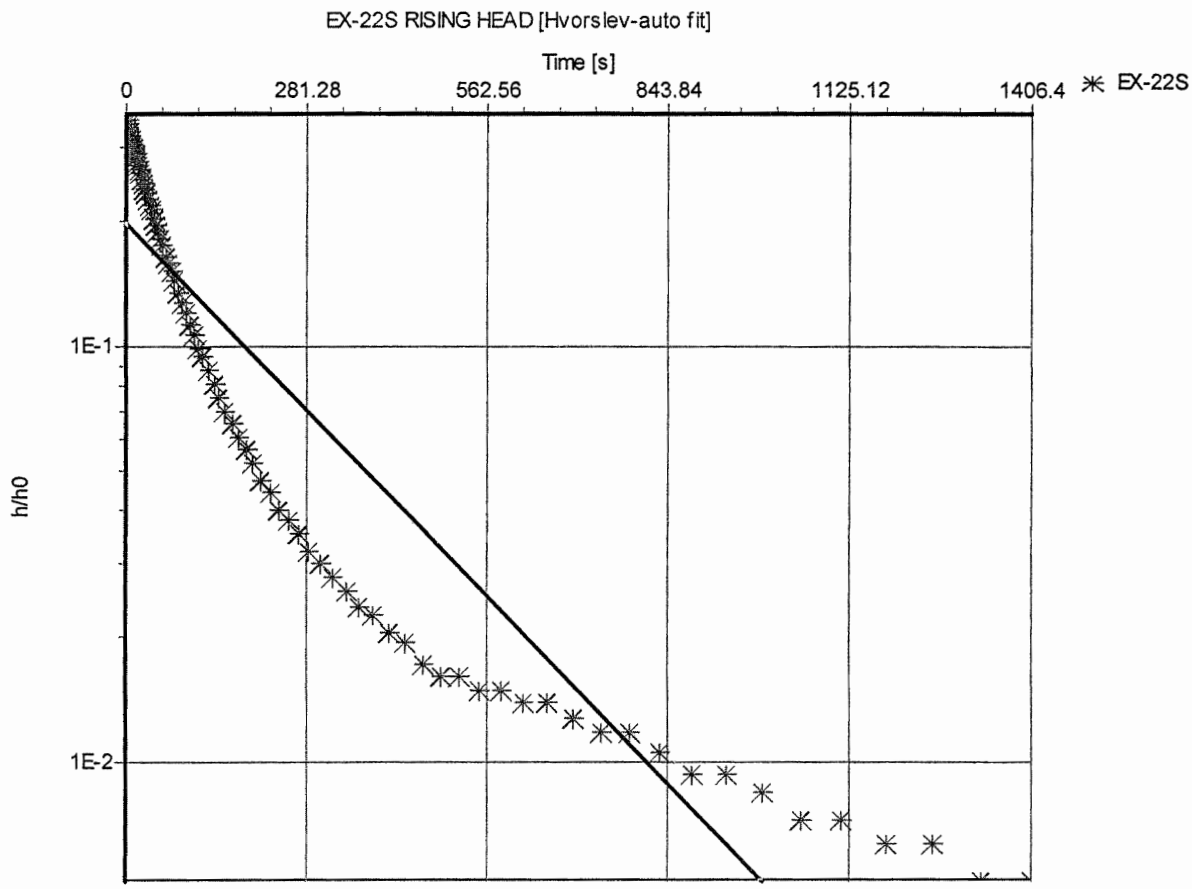
PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report
Project: CLI #3 Expansion well slug tests
Number: 91-0118
Client: Clinton Landfill, Inc.

Test Well:	**EX-21**	**Slug Test:**	**EX-21 RISING HEAD**
		Test Well:	EX-21
Depth to Static WL:	45.82 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.64 [ft]
Date:	11/13/2004	Aquifer Thickness:	3.4 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	136.6	45.88	0.05
64	145	45.87	0.05
65	153.9	45.87	0.05
66	163.3	45.86	0.04
67	173.3	45.86	0.04
68	183.9	45.86	0.04
69	195.1	45.86	0.03
70	207	45.85	0.03
71	219.6	45.85	0.03
72	232.9	45.85	0.03
73	247	45.85	0.03
74	261.9	45.85	0.03
75	277.7	45.84	0.02
76	294.5	45.84	0.02
77	312.3	45.84	0.02
78	331.1	45.84	0.02
79	351	45.84	0.02
80	372.1	45.84	0.02

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**	
	Project:	CLI #3 Expansion well slug tests
	Number:	91-0118
	Client:	Clinton Landfill, Inc.



Slug Test: **EX-22S RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 1.36E-4 [cm/s]

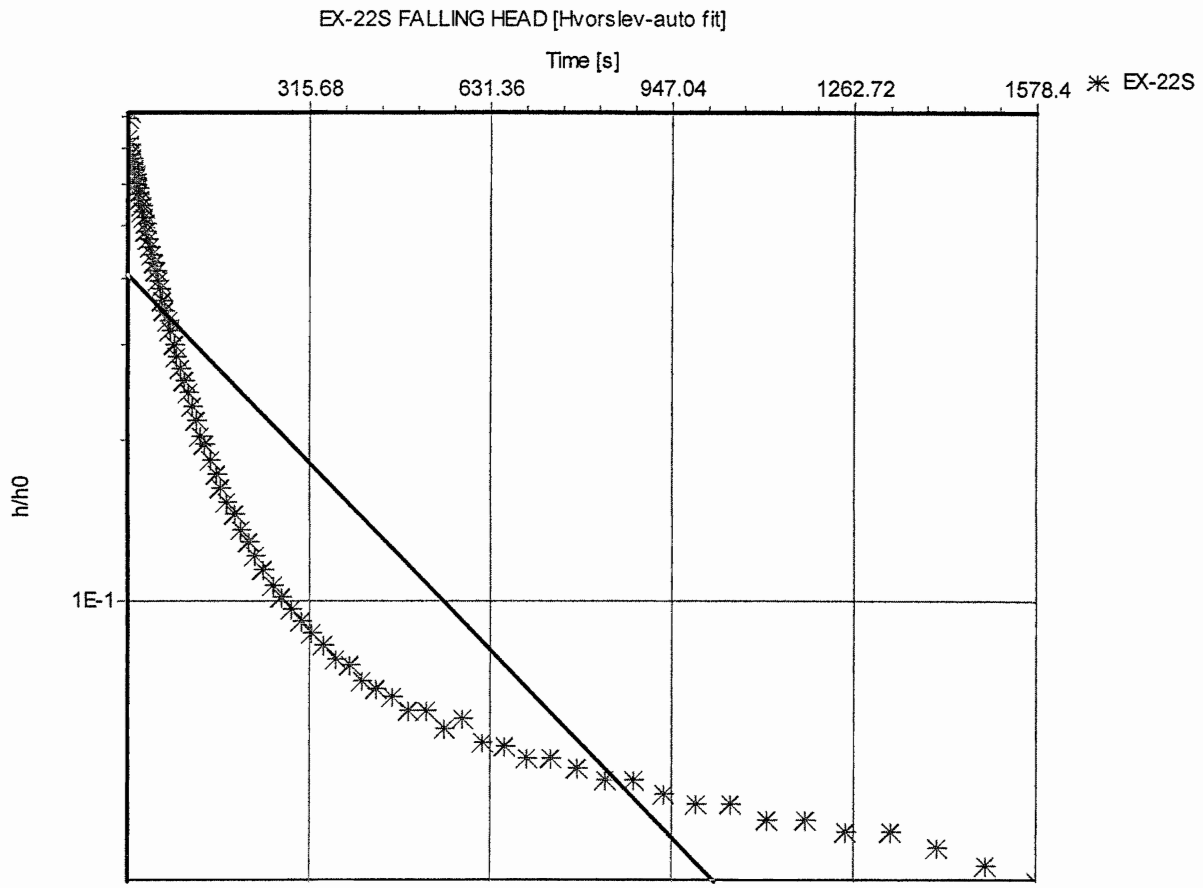
Test parameters:				
	Test Well:	EX-22S	Aquifer Thickness:	2.8 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.77 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 12/11/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**	
	Project:	CLI #3 Expansion well slug tests
	Number:	91-0118
	Client:	Clinton Landfill, Inc.



Slug Test: **EX-22S FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 9.39E-5 [cm/s]

Test parameters:				
	Test Well:	EX-22S	Aquifer Thickness:	2.8 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.77 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 12/11/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-22S**	**Slug Test:**	**EX-22S FALLING HEAD**
		Test Well:	EX-22S
Depth to Static WL:	4.28 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.77 [ft]
Date:	12/8/2004	Aquifer Thickness:	2.8 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	2.32	-1.96
2	0.8	2.85	-1.43
3	1.7	2.72	-1.56
4	2.6	2.68	-1.60
5	3.6	2.89	-1.39
6	4.7	2.94	-1.34
7	5.8	2.99	-1.29
8	7	2.99	-1.29
9	8.2	2.97	-1.31
10	9.6	3.02	-1.26
11	11	3.03	-1.25
12	12.5	3.05	-1.23
13	14	3.08	-1.21
14	15.6	3.10	-1.18
15	17.3	3.12	-1.16
16	19.1	3.15	-1.13
17	21	3.18	-1.10
18	23.1	3.21	-1.07
19	25.3	3.23	-1.05
20	27.6	3.26	-1.02
21	30.1	3.29	-0.99
22	32.7	3.32	-0.96
23	35.5	3.35	-0.93
24	38.4	3.38	-0.90
25	41.5	3.42	-0.86
26	44.8	3.44	-0.84
27	48.3	3.47	-0.81
28	52	3.51	-0.77
29	55.9	3.53	-0.75
30	60.1	3.57	-0.71
31	64.5	3.60	-0.68

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-22S**	**Slug Test:**	**EX-22S FALLING HEAD**
		Test Well:	EX-22S
Depth to Static WL:	4.28 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.77 [ft]
Date:	12/8/2004	Aquifer Thickness:	2.8 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	69.2	3.62	-0.66
33	74.2	3.66	-0.62
34	79.5	3.69	-0.59
35	85.1	3.72	-0.56
36	91	3.75	-0.53
37	97.3	3.77	-0.51
38	103.9	3.80	-0.48
39	110.9	3.83	-0.45
40	118.4	3.85	-0.43
41	126.3	3.88	-0.40
42	134.7	3.90	-0.38
43	143.6	3.92	-0.36
44	153	3.94	-0.34
45	163	3.96	-0.32
46	173.6	3.98	-0.30
47	184.8	4.00	-0.29
48	196.7	4.01	-0.27
49	209.3	4.03	-0.25
50	222.6	4.04	-0.24
51	236.7	4.06	-0.23
52	251.6	4.07	-0.21
53	267.4	4.08	-0.20
54	284.2	4.09	-0.19
55	302	4.10	-0.18
56	320.8	4.11	-0.17
57	340.7	4.12	-0.16
58	361.8	4.13	-0.15
59	384.2	4.13	-0.15
60	407.9	4.14	-0.14
61	433	4.14	-0.14
62	459.6	4.15	-0.13

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-22S**	**Slug Test:**	**EX-22S FALLING HEAD**
		Test Well:	EX-22S
Depth to Static WL:	4.28 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.77 [ft]
Date:	12/8/2004	Aquifer Thickness:	2.8 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	487.8	4.16	-0.12
64	517.7	4.16	-0.12
65	549.3	4.17	-0.11
66	582.8	4.16	-0.12
67	618.3	4.17	-0.11
68	655.9	4.18	-0.11
69	695.7	4.18	-0.10
70	737.9	4.18	-0.10
71	782.6	4.18	-0.10
72	830	4.19	-0.09
73	880.2	4.19	-0.09
74	933.3	4.19	-0.09
75	989.6	4.20	-0.08
76	1049.2	4.20	-0.08
77	1112.4	4.20	-0.08
78	1179.3	4.20	-0.08
79	1250.2	4.21	-0.07
80	1325.3	4.21	-0.07
81	1404.8	4.21	-0.07
82	1489.1	4.22	-0.06
83	1578.4	4.22	-0.06

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-22S**	**Slug Test:**	**EX-22S RISING HEAD**
		Test Well:	EX-22S
Depth to Static WL:	4.28 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.77 [ft]
Date:	12/8/2004	Aquifer Thickness:	2.8 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	5.88	1.59
2	0.8	5.83	1.55
3	1.6	5.78	1.50
4	2.4	5.75	1.47
5	3.3	5.72	1.44
6	4.2	5.69	1.41
7	5.2	5.69	1.41
8	6.3	5.66	1.38
9	7.4	5.64	1.36
10	8.6	5.62	1.34
11	9.8	5.59	1.31
12	11.2	5.57	1.29
13	12.6	5.55	1.26
14	14.1	5.52	1.24
15	15.6	5.50	1.22
16	17.2	5.47	1.19
17	18.9	5.45	1.17
18	20.7	5.43	1.15
19	22.6	5.39	1.11
20	24.7	5.36	1.08
21	26.9	5.34	1.05
22	29.2	5.31	1.02
23	31.7	5.28	1.00
24	34.3	5.25	0.96
25	37.1	5.21	0.93
26	40	5.19	0.91
27	43.1	5.15	0.87
28	46.4	5.12	0.84
29	49.9	5.09	0.81
30	53.6	5.06	0.78
31	57.5	5.03	0.75

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-22S**	**Slug Test:**	**EX-22S RISING HEAD**
		Test Well:	EX-22S
Depth to Static WL:	4.28 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.77 [ft]
Date:	12/8/2004	Aquifer Thickness:	2.8 [ft]

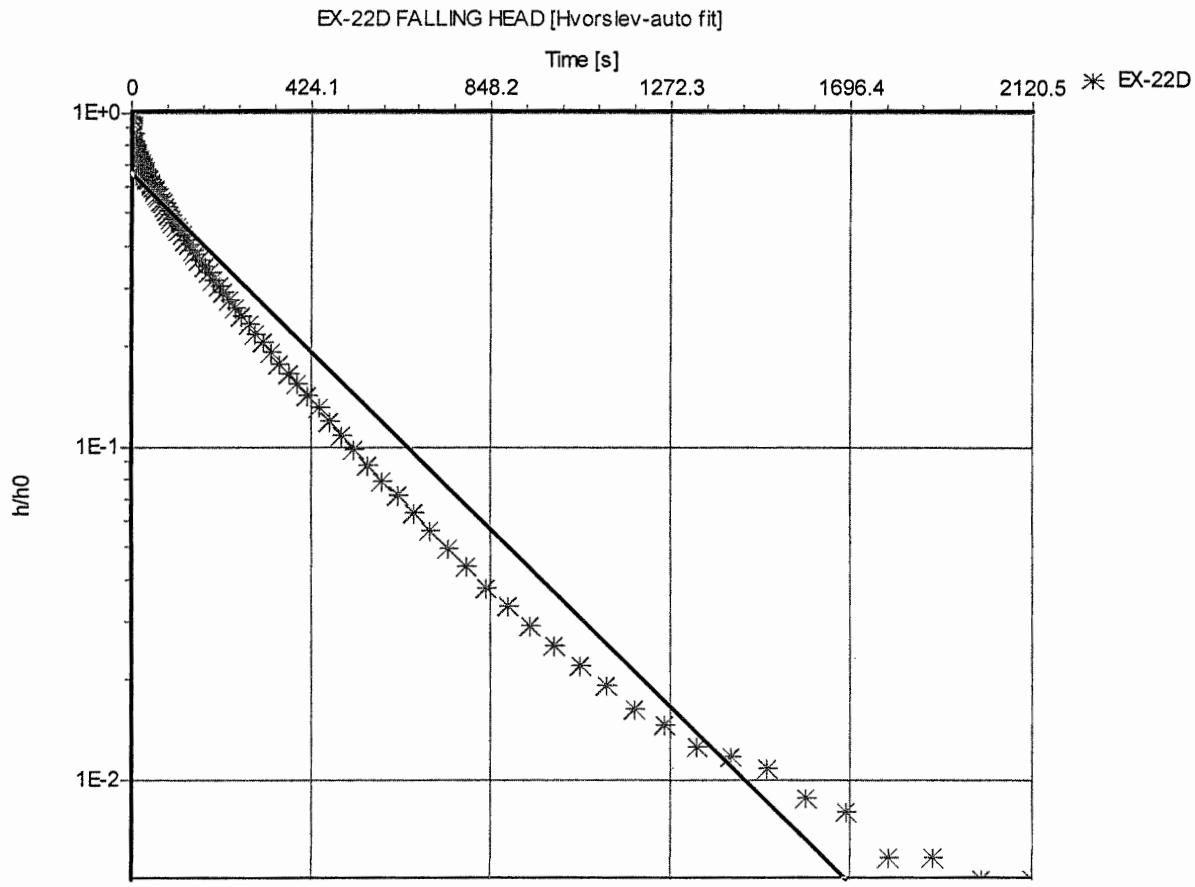
	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	61.7	4.99	0.71
33	66.1	4.96	0.68
34	70.8	4.93	0.65
35	75.8	4.90	0.62
36	81.1	4.86	0.58
37	86.7	4.83	0.55
38	92.6	4.80	0.52
39	98.9	4.77	0.49
40	105.5	4.74	0.46
41	112.5	4.71	0.43
42	120	4.68	0.40
43	127.9	4.66	0.38
44	136.3	4.63	0.35
45	145.2	4.60	0.32
46	154.6	4.58	0.30
47	164.6	4.56	0.28
48	175.2	4.54	0.26
49	186.4	4.52	0.24
50	198.3	4.50	0.22
51	210.9	4.48	0.20
52	224.2	4.47	0.19
53	238.3	4.45	0.17
54	253.2	4.44	0.16
55	269	4.43	0.15
56	285.8	4.42	0.14
57	303.6	4.41	0.13
58	322.4	4.40	0.12
59	342.3	4.39	0.11
60	363.4	4.38	0.10
61	385.8	4.38	0.10
62	409.5	4.37	0.09

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-22S**	**Slug Test:**	**EX-22S RISING HEAD**
		Test Well:	EX-22S
Depth to Static WL:	4.28 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.77 [ft]
Date:	12/8/2004	Aquifer Thickness:	2.8 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	434.6	4.36	0.08
64	461.2	4.35	0.07
65	489.4	4.35	0.07
66	519.3	4.35	0.07
67	550.9	4.34	0.06
68	584.4	4.34	0.06
69	619.9	4.34	0.06
70	657.5	4.34	0.06
71	697.3	4.33	0.05
72	739.5	4.33	0.05
73	784.2	4.33	0.05
74	831.6	4.33	0.04
75	881.8	4.32	0.04
76	934.9	4.32	0.04
77	991.2	4.32	0.04
78	1050.8	4.31	0.03
79	1114	4.31	0.03
80	1180.9	4.31	0.03
81	1251.8	4.31	0.03
82	1326.9	4.30	0.02
83	1406.4	4.30	0.02

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-22D FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 1.07E-4 [cm/s]

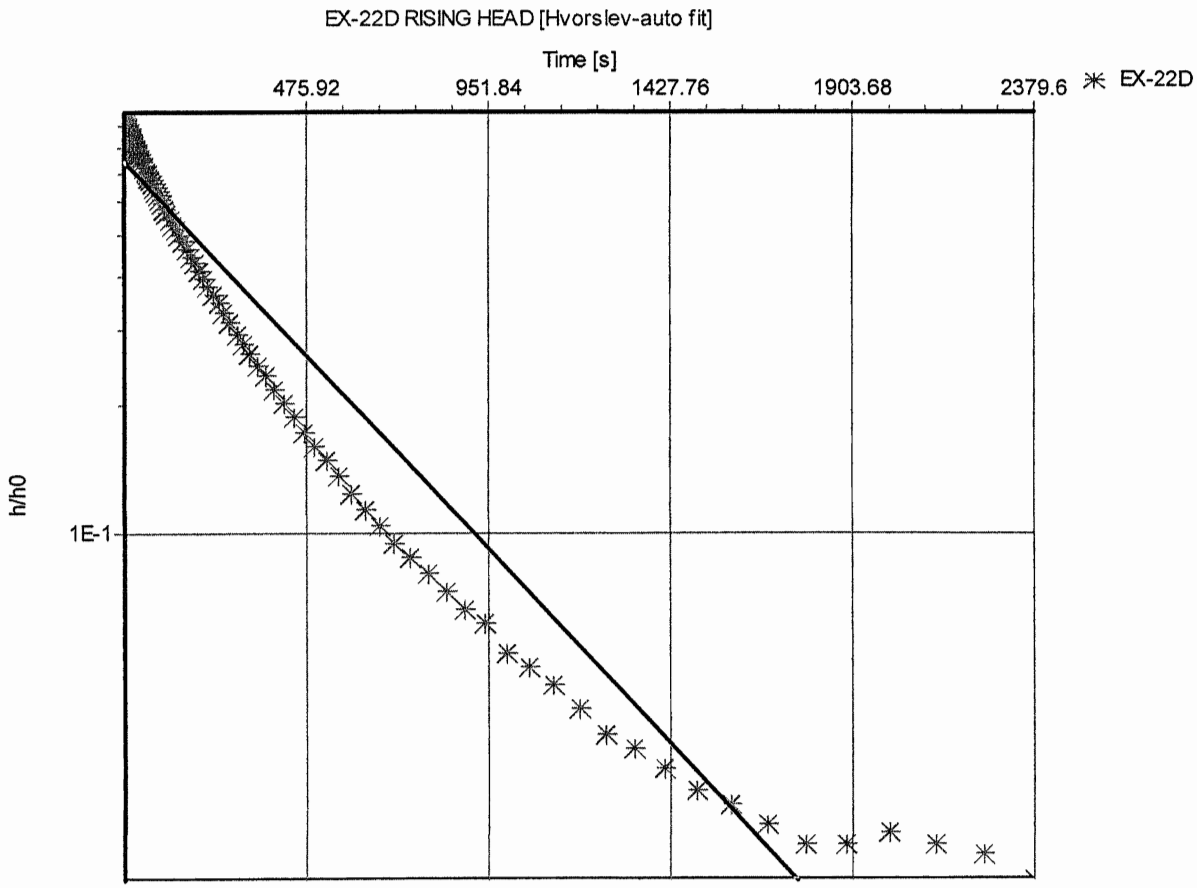
Test parameters:	Test Well:	EX-22D	Aquifer Thickness:	4.5 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.73 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 11/30/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-22D RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 8.09E-5 [cm/s]

Test parameters:				
	Test Well:	EX-22D	Aquifer Thickness:	4.5 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.73 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 11/30/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-22D**	**Slug Test:**	**EX-22D FALLING HEAD**
		Test Well:	EX-22D
Depth to Static WL:	3.64 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.73 [ft]
Date:	11/13/2004	Aquifer Thickness:	4.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	1.26	-2.38
2	0.3	1.38	-2.27
3	0.6	1.42	-2.22
4	0.9	1.27	-2.37
5	1.2	1.23	-2.41
6	1.5	1.33	-2.31
7	1.8	1.63	-2.01
8	2.2	2.06	-1.58
9	2.5	1.69	-1.95
10	2.9	1.58	-2.06
11	3.3	1.80	-1.84
12	3.8	1.70	-1.94
13	4.2	1.73	-1.91
14	4.7	1.74	-1.90
15	5.3	1.75	-1.89
16	5.8	1.76	-1.89
17	6.4	1.77	-1.87
18	7.1	1.77	-1.87
19	7.7	1.78	-1.86
20	8.4	1.79	-1.85
21	9.2	1.80	-1.84
22	10	1.82	-1.83
23	10.8	1.82	-1.82
24	11.7	1.84	-1.80
25	12.6	1.85	-1.79
26	13.6	1.86	-1.78
27	14.7	1.87	-1.77
28	15.8	1.88	-1.76
29	17	1.90	-1.74
30	18.2	1.91	-1.73
31	19.6	1.93	-1.71

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-22D**	**Slug Test:**	**EX-22D FALLING HEAD**
		Test Well:	EX-22D
Depth to Static WL:	3.64 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.73 [ft]
Date:	11/13/2004	Aquifer Thickness:	4.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	21	1.94	-1.70
33	22.5	1.96	-1.68
34	24	1.97	-1.67
35	25.6	1.99	-1.65
36	27.3	2.00	-1.64
37	29.1	2.02	-1.62
38	31	2.04	-1.60
39	33.1	2.06	-1.58
40	35.3	2.08	-1.56
41	37.6	2.10	-1.54
42	40.1	2.12	-1.52
43	42.7	2.14	-1.50
44	45.5	2.16	-1.48
45	48.4	2.19	-1.45
46	51.5	2.21	-1.43
47	54.8	2.24	-1.41
48	58.3	2.26	-1.38
49	62	2.29	-1.35
50	65.9	2.31	-1.33
51	70.1	2.34	-1.30
52	74.5	2.37	-1.27
53	79.2	2.40	-1.24
54	84.2	2.42	-1.22
55	89.5	2.45	-1.19
56	95.1	2.49	-1.15
57	101	2.52	-1.12
58	107.3	2.55	-1.09
59	113.9	2.58	-1.06
60	120.9	2.61	-1.03
61	128.4	2.65	-0.99
62	136.3	2.69	-0.96

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-22D**	**Slug Test:**	**EX-22D FALLING HEAD**
		Test Well:	EX-22D
Depth to Static WL:	3.64 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.73 [ft]
Date:	11/13/2004	Aquifer Thickness:	4.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	144.7	2.72	-0.92
64	153.6	2.75	-0.89
65	163	2.78	-0.86
66	173	2.82	-0.82
67	183.6	2.85	-0.79
68	194.8	2.89	-0.76
69	206.7	2.92	-0.72
70	219.3	2.95	-0.69
71	232.6	2.99	-0.65
72	246.7	3.02	-0.62
73	261.6	3.05	-0.59
74	277.4	3.09	-0.55
75	294.2	3.12	-0.52
76	312	3.15	-0.49
77	330.8	3.18	-0.46
78	350.7	3.22	-0.43
79	371.8	3.25	-0.40
80	394.2	3.27	-0.37
81	417.9	3.30	-0.34
82	443	3.33	-0.31
83	469.6	3.36	-0.28
84	497.8	3.38	-0.26
85	527.7	3.41	-0.23
86	559.3	3.43	-0.21
87	592.8	3.45	-0.19
88	628.3	3.47	-0.17
89	665.9	3.49	-0.15
90	705.7	3.51	-0.13
91	747.9	3.52	-0.12
92	792.6	3.54	-0.10
93	840	3.55	-0.09

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-22D**	**Slug Test:**	**EX-22D FALLING HEAD**
		Test Well:	EX-22D
Depth to Static WL:	3.64 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.73 [ft]
Date:	11/13/2004	Aquifer Thickness:	4.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	890.2	3.56	-0.08
95	943.3	3.57	-0.07
96	999.6	3.58	-0.06
97	1059.2	3.59	-0.05
98	1122.4	3.59	-0.05
99	1189.3	3.60	-0.04
100	1260.2	3.61	-0.04
101	1335.3	3.61	-0.03
102	1414.8	3.61	-0.03
103	1499.1	3.61	-0.03
104	1588.4	3.62	-0.02
105	1682.9	3.62	-0.02
106	1783	3.63	-0.01
107	1889.1	3.63	-0.01
108	2001.5	3.63	-0.01
109	2120.5	3.63	-0.01

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report

Project: CLI #3 Expansion well slug tests

Number: 91-0118

Client: Clinton Landfill, Inc.

Test Well:	**EX-22D**	**Slug Test:**	**EX-22D RISING HEAD**
		Test Well:	EX-22D
Depth to Static WL:	3.64 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.73 [ft]
Date:	11/13/2004	Aquifer Thickness:	4.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	5.80	2.16
2	0.3	5.71	2.07
3	0.6	5.74	2.10
4	0.9	5.69	2.05
5	1.2	5.72	2.08
6	1.6	5.71	2.07
7	1.9	5.70	2.06
8	2.3	5.70	2.06
9	2.7	5.69	2.05
10	3.2	5.67	2.03
11	3.6	5.67	2.03
12	4.1	5.66	2.02
13	4.7	5.66	2.02
14	5.2	5.61	1.97
15	5.8	5.64	2.00
16	6.5	5.62	1.98
17	7.1	5.63	1.99
18	7.8	5.60	1.96
19	8.6	5.60	1.96
20	9.4	5.58	1.94
21	10.2	5.58	1.94
22	11.1	5.56	1.92
23	12	5.55	1.91
24	13	5.54	1.90
25	14.1	5.53	1.89
26	15.2	5.52	1.88
27	16.4	5.51	1.87
28	17.6	5.49	1.85
29	19	5.48	1.84
30	20.4	5.47	1.83
31	21.9	5.45	1.81

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-22D**	**Slug Test:**	**EX-22D RISING HEAD**
		Test Well:	EX-22D
Depth to Static WL:	3.64 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.73 [ft]
Date:	11/13/2004	Aquifer Thickness:	4.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	23.4	5.44	1.80
33	25	5.43	1.78
34	26.7	5.41	1.77
35	28.5	5.39	1.75
36	30.4	5.38	1.74
37	32.5	5.36	1.72
38	34.7	5.34	1.70
39	37	5.33	1.69
40	39.5	5.31	1.67
41	42.1	5.29	1.65
42	44.9	5.27	1.63
43	47.8	5.25	1.61
44	50.9	5.22	1.58
45	54.2	5.20	1.56
46	57.7	5.17	1.53
47	61.4	5.15	1.51
48	65.3	5.13	1.49
49	69.5	5.10	1.46
50	73.9	5.07	1.43
51	78.6	5.05	1.40
52	83.6	5.02	1.37
53	88.9	4.99	1.35
54	94.5	4.96	1.32
55	100.4	4.93	1.28
56	106.7	4.89	1.25
57	113.3	4.86	1.22
58	120.3	4.83	1.19
59	127.8	4.79	1.15
60	135.7	4.76	1.12
61	144.1	4.72	1.08
62	153	4.69	1.05

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-22D**	**Slug Test:**	**EX-22D RISING HEAD**
		Test Well:	EX-22D
Depth to Static WL:	3.64 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.73 [ft]
Date:	11/13/2004	Aquifer Thickness:	4.5 [ft]

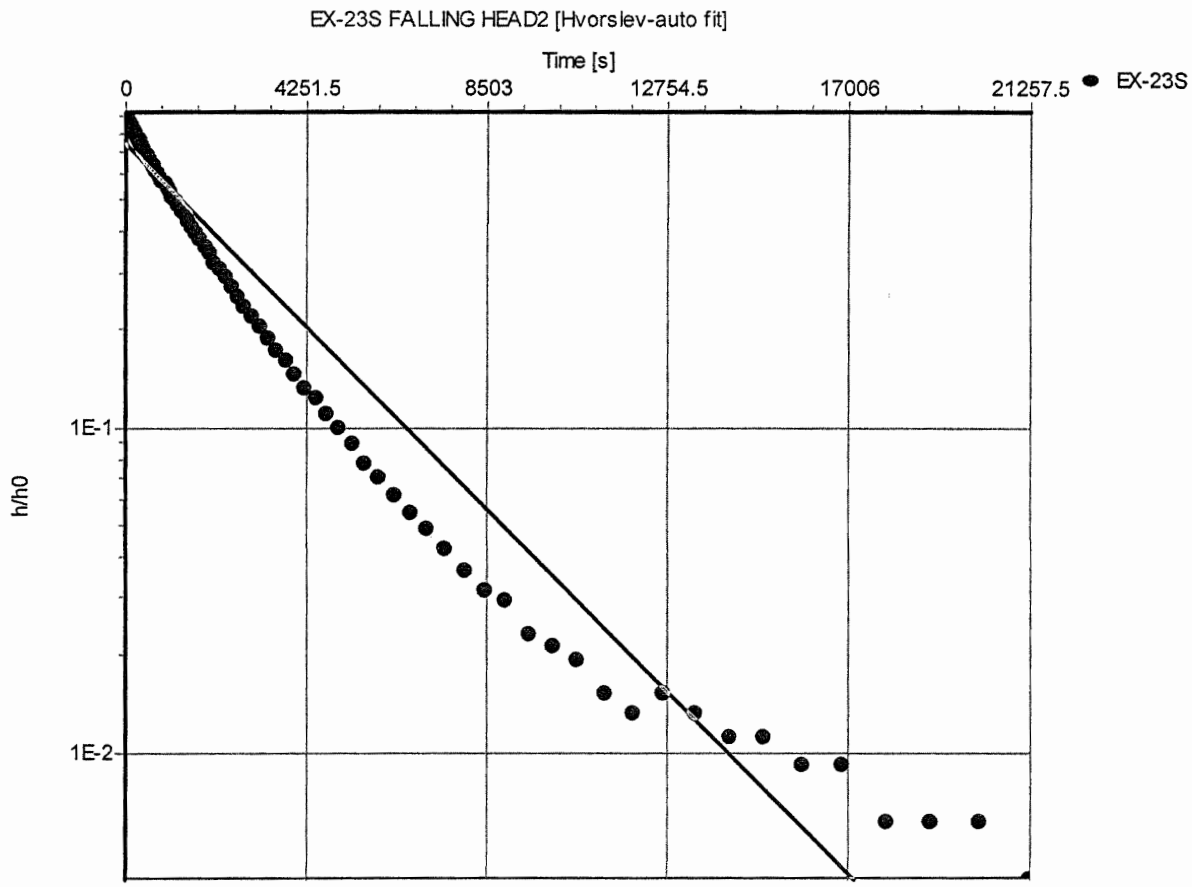
	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	162.4	4.65	1.01
64	172.4	4.61	0.97
65	183	4.57	0.93
66	194.2	4.54	0.90
67	206.1	4.50	0.86
68	218.7	4.47	0.83
69	232	4.43	0.79
70	246.1	4.39	0.75
71	261	4.35	0.71
72	276.8	4.32	0.68
73	293.6	4.28	0.64
74	311.4	4.25	0.61
75	330.2	4.21	0.57
76	350.1	4.18	0.54
77	371.2	4.15	0.51
78	393.6	4.11	0.47
79	417.3	4.08	0.44
80	442.4	4.05	0.41
81	469	4.02	0.38
82	497.2	3.99	0.35
83	527.1	3.96	0.32
84	558.7	3.94	0.29
85	592.2	3.91	0.27
86	627.7	3.89	0.25
87	665.3	3.87	0.23
88	705.1	3.85	0.21
89	747.3	3.83	0.19
90	792	3.82	0.17
91	839.4	3.80	0.16
92	889.6	3.79	0.15
93	942.7	3.77	0.13

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-22D**	**Slug Test:**	**EX-22D RISING HEAD**
		Test Well:	EX-22D
Depth to Static WL:	3.64 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.73 [ft]
Date:	11/13/2004	Aquifer Thickness:	4.5 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	999	3.76	0.11
95	1058.6	3.75	0.11
96	1121.8	3.74	0.10
97	1188.7	3.73	0.08
98	1259.6	3.71	0.07
99	1334.7	3.71	0.07
100	1414.2	3.70	0.06
101	1498.5	3.70	0.05
102	1587.8	3.69	0.05
103	1682.3	3.69	0.05
104	1782.4	3.68	0.04
105	1888.5	3.68	0.04
106	2000.9	3.68	0.04
107	2119.9	3.68	0.04
108	2246	3.68	0.04
109	2379.6	3.67	0.03

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-23S FALLING HEAD2**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 1.13E-5 [cm/s]

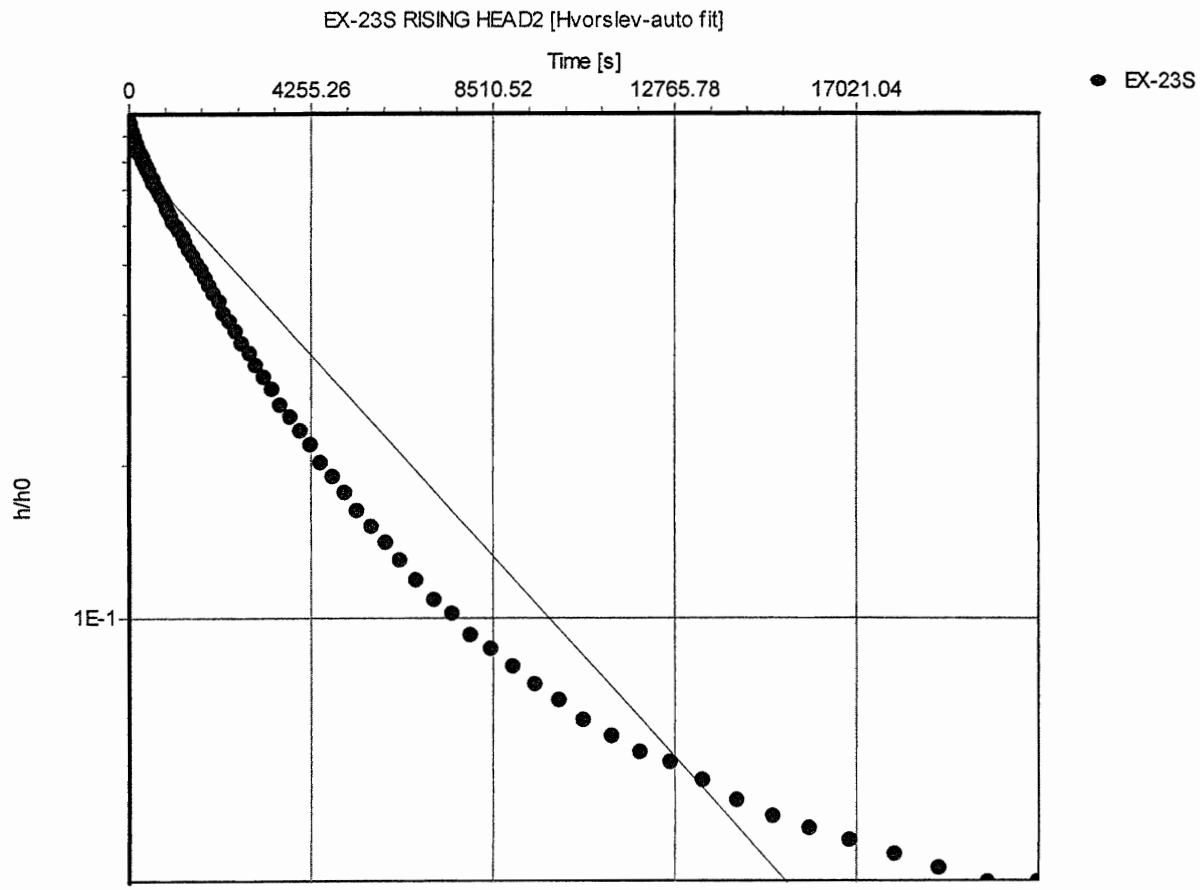
Test parameters:				
	Test Well:	EX-23S	Aquifer Thickness:	9.6 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.67 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 12/11/2004

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-23S RISING HEAD2**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 7.94E-6 [cm/s]

Test parameters:	Test Well:	EX-23S	Aquifer Thickness:	9.6 [ft]
	Casing radius:	0.083333333 [ft]		
	Screen length:	9.67 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 12/11/2004

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-23S**	**Slug Test:**	**EX-23S FALLING HEAD2**
		Test Well:	EX-23S
Depth to Static WL:	38.24 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.67 [ft]
Date:	12/8/2004	Aquifer Thickness:	9.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	37.25	-0.99
2	1.5	37.40	-0.84
3	3	37.36	-0.88
4	4.6	37.32	-0.92
5	6.3	37.33	-0.91
6	8.1	37.35	-0.89
7	10	37.33	-0.91
8	12.1	37.34	-0.90
9	14.3	37.34	-0.90
10	16.6	37.34	-0.90
11	19.1	37.34	-0.90
12	21.7	37.35	-0.90
13	24.5	37.35	-0.89
14	27.4	37.35	-0.89
15	30.5	37.35	-0.89
16	33.8	37.35	-0.89
17	37.3	37.36	-0.88
18	41	37.36	-0.88
19	44.9	37.36	-0.88
20	49.1	37.37	-0.88
21	53.5	37.37	-0.87
22	58.2	37.37	-0.87
23	63.2	37.37	-0.87
24	68.5	37.38	-0.86
25	74.1	37.38	-0.86
26	80	37.38	-0.86
27	86.3	37.39	-0.85
28	92.9	37.39	-0.85
29	99.9	37.40	-0.84
30	107.4	37.40	-0.84
31	115.3	37.40	-0.84

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-23S**	**Slug Test:**	**EX-23S FALLING HEAD2**
		Test Well:	EX-23S
Depth to Static WL:	38.24 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.67 [ft]
Date:	12/8/2004	Aquifer Thickness:	9.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	123.7	37.40	-0.84
33	132.6	37.41	-0.83
34	142	37.42	-0.83
35	152	37.42	-0.82
36	162.6	37.43	-0.82
37	173.8	37.43	-0.81
38	185.7	37.43	-0.81
39	198.3	37.44	-0.80
40	211.6	37.45	-0.79
41	225.7	37.45	-0.79
42	240.6	37.46	-0.78
43	256.4	37.47	-0.77
44	273.2	37.47	-0.77
45	291	37.48	-0.76
46	309.8	37.49	-0.75
47	329.7	37.50	-0.74
48	350.8	37.50	-0.74
49	373.2	37.51	-0.73
50	396.9	37.52	-0.72
51	422	37.53	-0.71
52	448.6	37.54	-0.70
53	476.8	37.55	-0.69
54	506.7	37.56	-0.68
55	538.3	37.57	-0.67
56	571.8	37.59	-0.66
57	607.3	37.60	-0.64
58	644.9	37.61	-0.63
59	684.7	37.62	-0.62
60	726.9	37.63	-0.61
61	771.6	37.65	-0.59
62	819	37.66	-0.58

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-23S**	**Slug Test:**	**EX-23S FALLING HEAD2**
		Test Well:	EX-23S
Depth to Static WL:	38.24 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.67 [ft]
Date:	12/8/2004	Aquifer Thickness:	9.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	869.2	37.68	-0.57
64	922.3	37.69	-0.55
65	978.6	37.70	-0.54
66	1038.2	37.72	-0.52
67	1101.4	37.74	-0.51
68	1168.3	37.75	-0.49
69	1239.2	37.77	-0.47
70	1314.3	37.78	-0.46
71	1393.8	37.80	-0.44
72	1478.1	37.82	-0.42
73	1567.4	37.83	-0.41
74	1661.9	37.85	-0.39
75	1762	37.87	-0.37
76	1868.1	37.89	-0.35
77	1980.5	37.90	-0.34
78	2099.5	37.92	-0.32
79	2225.6	37.94	-0.30
80	2359.2	37.96	-0.29
81	2500.7	37.97	-0.27
82	2650.6	37.99	-0.25
83	2809.4	38.01	-0.23
84	2977.6	38.02	-0.22
85	3155.7	38.04	-0.20
86	3344.4	38.06	-0.19
87	3544.3	38.07	-0.17
88	3756	38.08	-0.16
89	3980.3	38.10	-0.14
90	4217.9	38.11	-0.13
91	4469.5	38.12	-0.12
92	4736.1	38.13	-0.11
93	5018.5	38.14	-0.10

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-23S**	**Slug Test:**	**EX-23S FALLING HEAD2**
		Test Well:	EX-23S
Depth to Static WL:	38.24 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.67 [ft]
Date:	12/8/2004	Aquifer Thickness:	9.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	5317.6	38.15	-0.09
95	5634.4	38.16	-0.08
96	5970	38.17	-0.07
97	6325.5	38.18	-0.06
98	6702	38.19	-0.05
99	7100.9	38.19	-0.05
100	7523.4	38.20	-0.04
101	7970.9	38.20	-0.04
102	8444.9	38.21	-0.03
103	8947	38.21	-0.03
104	9478.9	38.22	-0.02
105	10042.3	38.22	-0.02
106	10639.1	38.22	-0.02
107	11271.3	38.23	-0.02
108	11940.9	38.23	-0.01
109	12650.2	38.23	-0.02
110	13401.5	38.23	-0.01
111	14197.4	38.23	-0.01
112	15040.4	38.23	-0.01
113	15933.4	38.23	-0.01
114	16879.3	38.23	-0.01
115	17881.2	38.23	-0.01
116	18942.5	38.23	-0.01
117	20066.7	38.23	-0.01
118	21257.5	38.24	0.00

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	**Slug Test Data Report** Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-23S**	**Slug Test:**	**EX-23S RISING HEAD2**
		Test Well:	EX-23S
Depth to Static WL:	38.15 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.67 [ft]
Date:	12/9/2004	Aquifer Thickness:	9.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	39.11	0.96
2	0.3	39.10	0.95
3	0.7	39.09	0.94
4	1.1	39.08	0.93
5	1.6	39.08	0.93
6	2	39.08	0.93
7	2.5	39.07	0.92
8	3.1	39.07	0.92
9	3.6	39.07	0.92
10	4.2	39.07	0.92
11	4.9	39.07	0.92
12	5.5	39.07	0.92
13	6.2	39.08	0.93
14	7	39.07	0.92
15	7.8	39.07	0.92
16	8.6	39.07	0.92
17	9.5	39.07	0.92
18	10.4	39.07	0.92
19	11.4	39.07	0.92
20	12.5	39.07	0.92
21	13.6	39.07	0.91
22	14.8	39.07	0.91
23	16	39.06	0.91
24	17.4	39.06	0.91
25	18.8	39.06	0.91
26	20.3	39.06	0.91
27	21.8	39.06	0.91
28	23.4	39.06	0.91
29	25.1	39.06	0.91
30	26.9	39.05	0.90
31	28.8	39.05	0.90

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-23S**	**Slug Test:**	**EX-23S RISING HEAD2**
		Test Well:	EX-23S
Depth to Static WL:	38.15 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.67 [ft]
Date:	12/9/2004	Aquifer Thickness:	9.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	30.9	39.05	0.90
33	33.1	39.05	0.90
34	35.4	39.05	0.90
35	37.9	39.04	0.89
36	40.5	39.04	0.89
37	43.3	39.04	0.89
38	46.2	39.04	0.89
39	49.3	39.04	0.89
40	52.6	39.04	0.89
41	56.1	39.03	0.88
42	59.8	39.03	0.88
43	63.7	39.03	0.88
44	67.9	39.03	0.88
45	72.3	39.03	0.88
46	77	39.02	0.87
47	82	39.02	0.87
48	87.3	39.02	0.87
49	92.9	39.02	0.87
50	98.8	39.01	0.86
51	105.1	39.01	0.86
52	111.7	39.00	0.85
53	118.7	39.00	0.85
54	126.2	39.00	0.85
55	134.1	38.99	0.84
56	142.5	38.99	0.84
57	151.4	38.99	0.84
58	160.8	38.98	0.83
59	170.8	38.98	0.83
60	181.4	38.97	0.82
61	192.6	38.97	0.82
62	204.5	38.96	0.81

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 3

Test Well:	**EX-23S**	**Slug Test:**	**EX-23S RISING HEAD2**
		Test Well:	EX-23S
Depth to Static WL:	38.15 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.67 [ft]
Date:	12/9/2004	Aquifer Thickness:	9.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
63	217.1	38.96	0.81
64	230.4	38.95	0.80
65	244.5	38.95	0.80
66	259.4	38.94	0.79
67	275.2	38.94	0.79
68	292	38.93	0.78
69	309.8	38.93	0.78
70	328.6	38.92	0.77
71	348.5	38.92	0.77
72	369.6	38.91	0.76
73	392	38.90	0.75
74	415.7	38.89	0.74
75	440.8	38.89	0.74
76	467.4	38.88	0.73
77	495.6	38.87	0.72
78	525.5	38.86	0.71
79	557.1	38.85	0.70
80	590.6	38.84	0.69
81	626.1	38.83	0.68
82	663.7	38.82	0.67
83	703.5	38.81	0.66
84	745.7	38.80	0.65
85	790.4	38.79	0.64
86	837.8	38.78	0.63
87	888	38.77	0.62
88	941.1	38.76	0.61
89	997.4	38.74	0.59
90	1057	38.73	0.58
91	1120.2	38.72	0.57
92	1187.1	38.71	0.55
93	1258	38.69	0.54

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 4

Test Well:	**EX-23S**	**Slug Test:**	**EX-23S RISING HEAD2**
		Test Well:	EX-23S
Depth to Static WL:	38.15 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.67 [ft]
Date:	12/9/2004	Aquifer Thickness:	9.6 [ft]

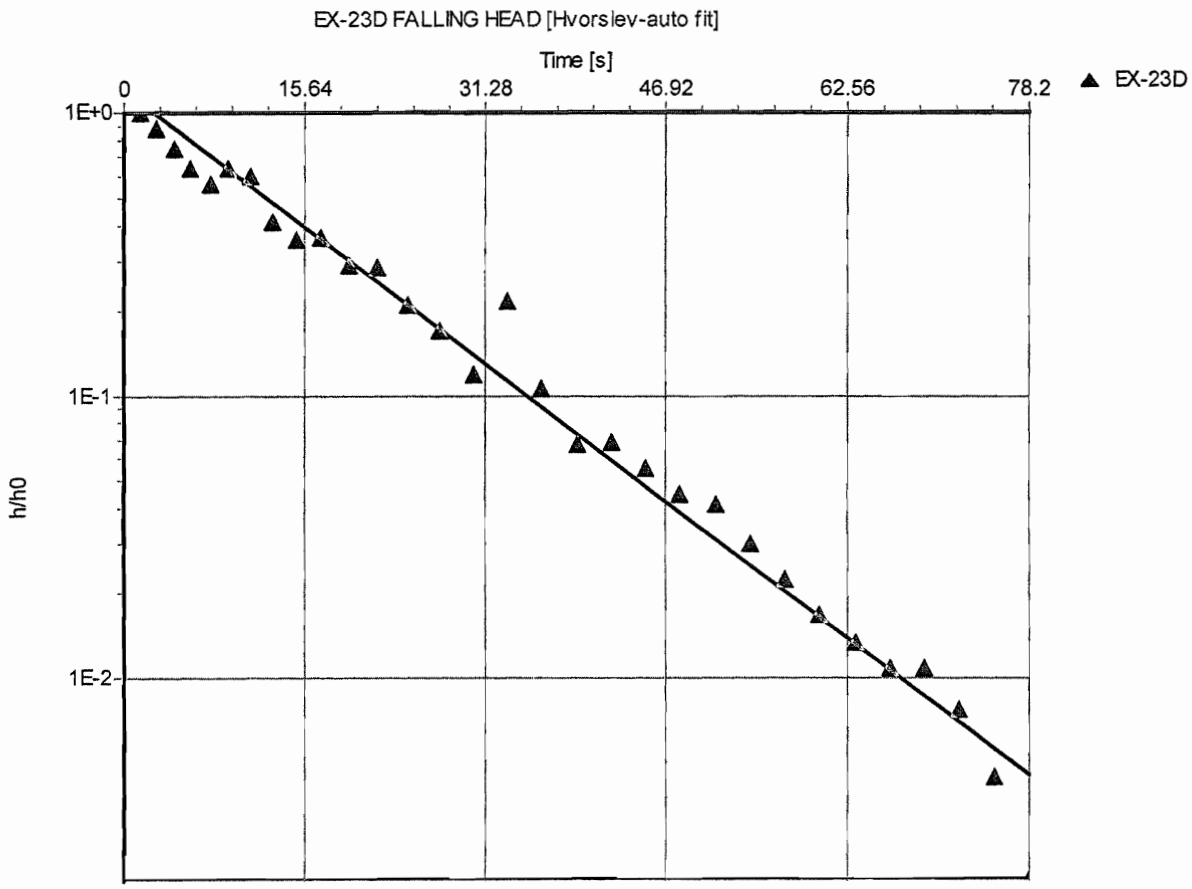
	Time [s]	Depth to WL [ft]	Drawdown [ft]
94	1333.1	38.68	0.53
95	1412.6	38.66	0.51
96	1496.9	38.64	0.49
97	1586.2	38.63	0.48
98	1680.7	38.62	0.47
99	1780.8	38.60	0.45
100	1886.9	38.58	0.43
101	1999.3	38.57	0.42
102	2118.3	38.55	0.40
103	2244.4	38.53	0.38
104	2378	38.52	0.37
105	2519.5	38.50	0.35
106	2669.4	38.48	0.33
107	2828.2	38.47	0.32
108	2996.4	38.45	0.30
109	3174.5	38.44	0.29
110	3363.2	38.42	0.27
111	3563.1	38.40	0.25
112	3774.8	38.39	0.24
113	3999.1	38.37	0.22
114	4236.7	38.36	0.21
115	4488.3	38.35	0.20
116	4754.9	38.33	0.18
117	5037.3	38.32	0.17
118	5336.4	38.31	0.16
119	5653.2	38.30	0.15
120	5988.8	38.28	0.13
121	6344.3	38.28	0.13
122	6720.8	38.26	0.11
123	7119.7	38.25	0.10
124	7542.2	38.25	0.10

PDC Technical Services, Inc.	Slug Test Data Report	
4349 Southport Road	Project: CLI #3 Expansion well slug tests	
Peoria, IL 61615	Number: 91-0118	
Phone: 309-676-4893	Client: Clinton Landfill, Inc.	Page 5

Test Well:	**EX-23S**	**Slug Test:**	**EX-23S RISING HEAD2**
		Test Well:	EX-23S
Depth to Static WL:	38.15 [ft]	Casing radius:	0.083333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Andrew Whelpley	Screen length:	9.67 [ft]
Date:	12/9/2004	Aquifer Thickness:	9.6 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
125	7989.7	38.24	0.09
126	8463.7	38.23	0.08
127	8965.8	38.23	0.08
128	9497.7	38.22	0.07
129	10061.1	38.22	0.07
130	10657.9	38.21	0.06
131	11290.1	38.21	0.06
132	11959.7	38.20	0.05
133	12669	38.20	0.05
134	13420.3	38.20	0.05
135	14216.2	38.19	0.04
136	15059.2	38.19	0.04
137	15952.2	38.19	0.04
138	16898.1	38.19	0.04
139	17900	38.18	0.03
140	18961.3	38.18	0.03
141	20085.5	38.18	0.03
142	21276.3	38.18	0.03

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 3.9-676-4893	**Slug Test Analysis Report**
	Project: CLI #3 Expansion well slug tests
	Number: 91-0118
	Client: Clinton Landfill, Inc.



Slug Test: **EX-23D FALLING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 2.64E-3 [cm/s]

Test parameters:				
	Test Well:	EX-23D	Aquifer Thickness:	8.8 [ft]
	Casing radius:	0.08333333 [ft]		
	Screen length:	9.69 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 12/6/2004

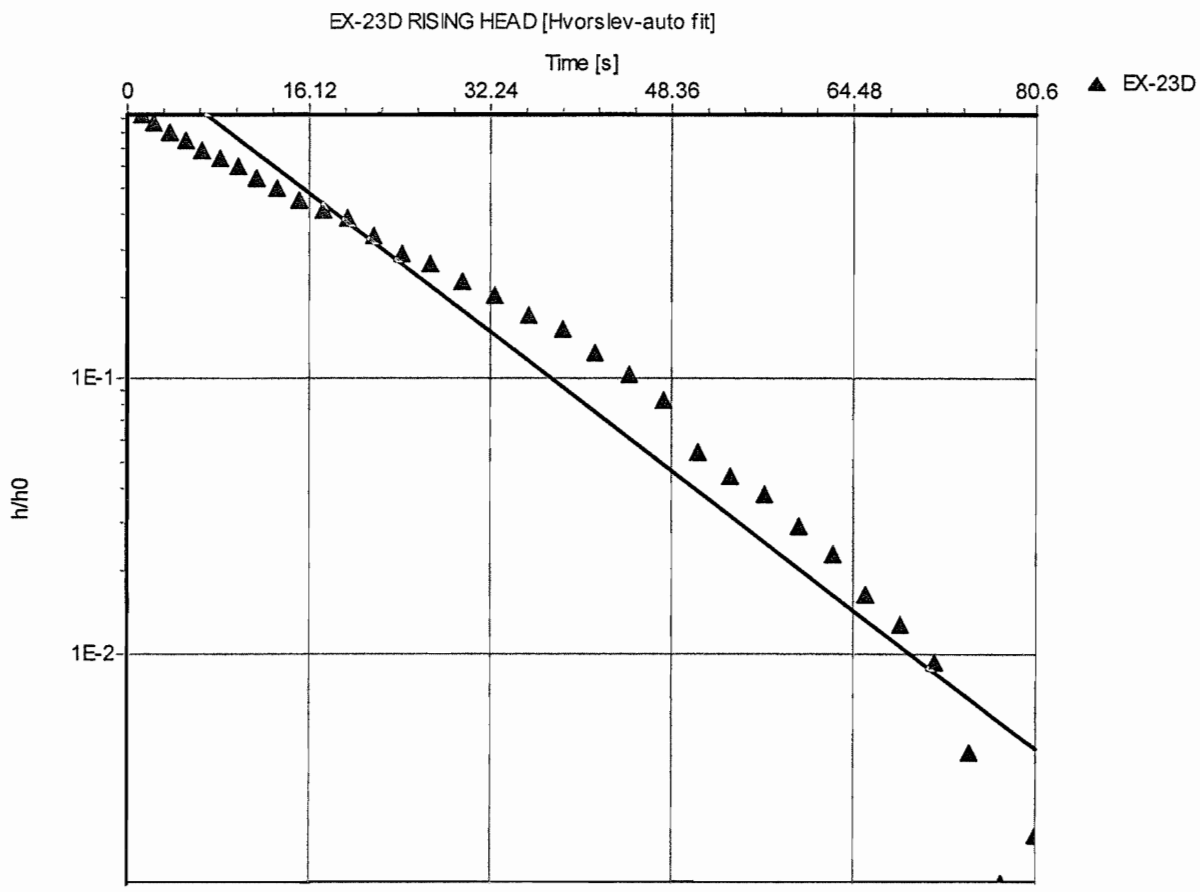
PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 3.9-676-4893

Slug Test Analysis Report

Project: CLI #3 Expansion well slug tests

Number: 91-0118

Client: Clinton Landfill, Inc.



Slug Test: **EX-23D RISING HEAD**

Analysis Method: **Hvorslev**

Analysis Results: Conductivity: 2.69E-3 [cm/s]

Test parameters:				
	Test Well:	EX-23D	Aquifer Thickness:	8.8 [ft]
	Casing radius:	0.08333333 [ft]		
	Screen length:	9.69 [ft]		
	Boring radius:	0.33333333 [ft]		

Comments:

Evaluated by:

Evaluation Date: 12/6/2004

PDC Technical Services, Inc.
4349 Southport Road
Peoria, IL 61615
Phone: 309-676-4893

Slug Test Data Report

Project: CLI #3 Expansion well slug tests

Number: 91-0118

Client: Clinton Landfill, Inc.

Test Well:	**EX-23D**	**Slug Test:**	**EX-23D FALLING HEAD**
		Test Well:	EX-23D
Depth to Static WL:	40.8 [ft]	Casing radius:	0.08333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.69 [ft]
Date:	10/2/2003	Aquifer Thickness:	8.8 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	39.25	-1.55
2	1.4	39.25	-1.55
3	2.8	39.43	-1.37
4	4.3	39.65	-1.15
5	5.8	39.80	-1.00
6	7.4	39.94	-0.86
7	9.1	39.81	-0.99
8	10.9	39.87	-0.93
9	12.8	40.16	-0.64
10	14.9	40.25	-0.55
11	17.1	40.24	-0.56
12	19.4	40.35	-0.45
13	21.9	40.36	-0.44
14	24.5	40.48	-0.32
15	27.3	40.54	-0.26
16	30.2	40.62	-0.18
17	33.2	40.47	-0.33
18	36.2	40.64	-0.16
19	39.2	40.70	-0.10
20	42.2	40.69	-0.11
21	45.2	40.71	-0.09
22	48.2	40.73	-0.07
23	51.2	40.74	-0.06
24	54.2	40.75	-0.05
25	57.2	40.77	-0.03
26	60.2	40.77	-0.03
27	63.2	40.78	-0.02
28	66.2	40.78	-0.02
29	69.2	40.78	-0.02
30	72.2	40.79	-0.01
31	75.2	40.79	-0.01

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-23D**	**Slug Test:**	**EX-23D FALLING HEAD**
		Test Well:	EX-23D
Depth to Static WL:	40.8 [ft]	Casing radius:	0.08333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.69 [ft]
Date:	10/2/2003	Aquifer Thickness:	8.8 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	78.2	40.80	0.00

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	**Slug Test Data Report** Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 1

Test Well:	**EX-23D**	**Slug Test:**	**EX-23D RISING HEAD**
		Test Well:	EX-23D
Depth to Static WL:	40.8 [ft]	Casing radius:	0.08333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.69 [ft]
Date:	10/2/2004	Aquifer Thickness:	8.8 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
1	0	42.20	1.40
2	1.2	42.10	1.30
3	2.4	42.01	1.21
4	3.8	41.93	1.13
5	5.2	41.85	1.05
6	6.7	41.77	0.97
7	8.2	41.70	0.90
8	9.8	41.64	0.84
9	11.5	41.56	0.76
10	13.3	41.50	0.70
11	15.2	41.44	0.64
12	17.3	41.38	0.58
13	19.5	41.34	0.54
14	21.8	41.27	0.47
15	24.3	41.21	0.41
16	26.9	41.17	0.37
17	29.7	41.12	0.32
18	32.6	41.08	0.28
19	35.6	41.04	0.24
20	38.6	41.01	0.21
21	41.6	40.98	0.18
22	44.6	40.95	0.15
23	47.6	40.92	0.12
24	50.6	40.88	0.08
25	53.6	40.86	0.06
26	56.6	40.85	0.05
27	59.6	40.84	0.04
28	62.6	40.83	0.03
29	65.6	40.82	0.02
30	68.6	40.82	0.02
31	71.6	40.81	0.01

PDC Technical Services, Inc. 4349 Southport Road Peoria, IL 61615 Phone: 309-676-4893	Slug Test Data Report Project: CLI #3 Expansion well slug tests Number: 91-0118 Client: Clinton Landfill, Inc.	Page 2

Test Well:	**EX-23D**	**Slug Test:**	**EX-23D RISING HEAD**
		Test Well:	EX-23D
Depth to Static WL:	40.8 [ft]	Casing radius:	0.08333333 [ft]
Location:	Clinton, Illinois	Boring radius:	0.33333333 [ft]
Recorded by:	Joe Herron	Screen length:	9.69 [ft]
Date:	10/2/2004	Aquifer Thickness:	8.8 [ft]

	Time [s]	Depth to WL [ft]	Drawdown [ft]
32	74.6	40.81	0.01
33	77.6	40.80	0.00
34	80.6	40.80	0.00

22-19N-2E

COMPANY Woollen Bros. NO.
FARM Radio Station W.H.O.W. NO.
DATE DRILLED 6/47 (Tenant-Oliver Rhea)
AUTHORITY Woollen Bros.
COLLECTOR 20' N. line, 30' W. line of NE ELEVATION 705 ETM

No.	Co. no. 128 Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil and yellow clay	7		7	
	Yellow sand	5		12	
	Blue clay	38		50	
	Green clay	12		62	
	Gray clay	14		76	
	Gray gravel	1		77	
	Finished in gray gravel at 76'-77'				
	4" hole				
	75½' of 4" pipe				
	Drawn down 6' at 6 g.p.m. for 1 hr.				
	Water sandy				
	Pipe loose				
	Cook Screen, Size 4", Length 3', Slot 40				
	Pump loaned. Small hand pump head 2-18-1¼ pipe. 1 short joint 16'. 1-2½ brass cylinder.				

[redacted] NO ENVELOPE

COUNTY Dewitt 22-19N-2E

SAMPLE SET NO.
(24159—20M—9-46) 2 ILLINOIS GEOLOGICAL SURVEY, URBANA

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Hammer, Terry Well No. #1
Address R.R. 1 Box 156A Maroa IL
Well address same as above
Lot _____ Subd _____ ISWS P# 320018
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-038-99 Date 11/23/1999
Water from sand County DeWitt
at depth 65 to 86 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 20

Sec. 22
Twp. 19 N
Rge. 2 E
Elev. _____

NE SE SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	82
5	STAINLESS STL SCREEN	82	86

Size hole below casing: _____ in.
Static level 49 ft. below casing top which is 1 ft. above ground level. Pumping level 50 ft. when pumping at 12 gpm for 2 hours.

Formations passed through	Thickness	Bottom
topsoil	2	2
yellow clay	16	18
gray clay	47	65
coarse sand & gravel	21	86

Household - Private

DeWitt 12-039-21415-00 22-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner E. W. Andrews Trust Well No. _____
Address R.R. #2 Box #108 Clinton IL
Driller Mashburn, Robert License No. 102-3084
11. Permit No. 03901894 Date 07/26/94
12. Water from sand 13. County DeWitt
at depth 244 to 292 ft.
14. Screen: Diam. 5 in.
Length: 4 ft. Slot 15

Sec. 24
Twp. 19 N
Rge. 2 E
Elev. 733 FT+ BM

SE NE NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	288

16. Size hole below casing: _____ in.
17. Static level 123 ft. below casing top which is 1 ft. above ground level. Pumping level 126 ft. when pumping at 12 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	18	18
gray clay	47	65
green clay	25	90
gray clay	20	110
drown drift	3	113
gray clay	50	163
sand	7	170
hard gray clay	74	244
fine sand	28	272

Household - Private

DeWitt 12-039-21141-00 24-19N-02E

18. Formations passed through (continued)	Thickness	Bottom
medium sand	20	292

TOWN

TOWNSHIP

R. 2E

COMPANY Woollen Bros. NO.

T. 20N

SEC. 33

FARM Walker, Carl NO.

DATE DRILLED 1946

AUTHORITY Woollen Bros.

COLLECTOR

ELEVATION SW cor. SE

Co. No. 220

Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
Soil and yellow clay	16		16	
Blue clay	13		29	
Blue sand bed	4		33	
Blue clay	30		63	
Fine dirty sand and gas	3		66	
Drift wood, brown	2		68	
Dark clay	3		71	
Green clay	8		79	
Dirty sand and gravel	3		82	
Gray hardpan	32		114	
Gravel	1		115	
Clay				

Finished in gravel at 114 to 115'

4" hole
112' of 4" pipe
Drawn down 35' at 5 g.p.m. for 2 hrs.
Water clear; level 50'
Medium Pipe
Cook Brass Screen, Size 4",
Length 3', Slot 25.

~~No envelope~~ NO ENVELOPE [redacted]

COUNTY Dewitt 33-20N-2E

SAMPLE SET NO.

(84107—20M—6-45) 2

ILLINOIS GEOLOGICAL SURVEY, URBANA

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Murphy, Gene Well No. _____
Address R. R. #1 Box 241 Clinton IL
Driller Luttrell, Gerald Dean License No. 092-3318
11. Permit No. 135497 Date 09/28/87
12. Water from sand & gravel 13. County DeWitt
at depth 15 to 44 ft. Sec. 33
14. Screen: Diam._____in. Twp. 20 N
Length:_____ft. Slot _____ Rge. 2 E
Elev. _____

SE SW NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
6	SCH 21	0	10
36	TILE	10	44

16. Size hole below casing: _____in.
17. Static level _____ft. below casing top which is _____ft. above ground level. Pumping level_____ft. when pumping at _____ gpm for_____hours.

18. Formations passed through	Thickness	Bottom
top soil	3	3
grey dirt	12	15
ylw sand & gvl mix	29	44

DeWitt 12-039-20827-00 33-20N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Cleary Buildings Well No. #1
    Address % CT 1 Investments R.R. #2 Clinton IL
    Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 03900892 Date 05/26/92
12. Water from sand 13. County DeWitt
    at depth 99 to 105 ft. Sec. 34
14. Screen: Diam. 5 in. Twp. 20 N
    Length: 4 ft. Slot 15 Rge. 2 E
    Elev.

NW SE SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	101

16. Size hole below casing: _____ in.
17. Static level 46 ft. below casing top which is 1 ft. above ground level. Pumping level 50 ft. when pumping at 10 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	18	18
blue clay	43	61
brown drift	3	64
green clay	4	68
gray clay	31	99
sand	6	105
gray clay at	0	105

Household - Private

DeWitt 12-039-21026-00 34-20N-02E

LOG OF WATER WELL

Property owner Mrs. Nellie Pond, Clinton Well No. 1

Drilled by Woollen Bros., Wapella Year 1943

Formations passed through Co. no. 129	Thickness	Depth of Bottom
soil	1	1
yellow clay	16	17
blue clay	10	27
sandy clay	10	37
blue clay	18	55
dirty sand	5	60
green clay	10	70
hard pan	36	106
gravel	3	109

[Continue on back if necessary]

Finished in gravel at 106 to 109 ft.

Cased with 4 inch blk pipe from 0 to 106 ft.

and inch from to ft.

Size hole below casing inch. Static level from surf. 25 ft.

Tested capacity 5 gal. per min. Temperature °F

Water lowered to 40 ft. in. in hrs. min.

Length of test hrs. min. Screen Cook Brass

Slot 25 Diam. 3 3/4 Length 3 ft Bottom set at 109 ft.

[Show location in Section Plat]

Township name Texas Elev. 720 EH BH Sec. 25

Description of location SE NW NW Twp. 19

1070' N. line, 1120' W. line of NW Rge. 2E

Signed Leonard Newberry County Dewitt

Copy for Illinois State Geological Survey Index: 25-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Marlow, Glenn Well No. #1
Address R.R. #1 Box #331 Maroa IL
Driller Mashburn, Robert License No. 102-3084
11. Permit No. 03903193 Date 11/17/93
12. Water from sand 13. County DeWitt
at depth 233 to 280 ft.
14. Screen: Diam. 4 in.
Length: 4 ft. Slot 15

Sec. 27
Twp. 19 N
Rge. 2 E
Elev. 725 ETM BH

NW NW SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
4	PVC SDR 21	-1	276

16. Size hole below casing: _____ in.
17. Static level 116 ft. below casing top which is 1 ft. above ground level. Pumping level 120 ft. when pumping at 20 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
top soil	3	3
yellow clay	11	14
gray clay	76	90
brown drift	5	95
green clay	10	105
grey clay	128	233
fine sand	17	250
medium - coarse sand	30	280

Household - Private

DeWitt 12-039-21039-00 27-19N-02E

LOG OF WATER WELL

Property owner Herbert Marlow Well No. 2

Drilled by Woollen Bros. Year

Formations passed through	Thickness	Depth of Bottom
soil Co. no. 109	2	2
yellow clay	12	14
blue clay	69	83

Permit says Gas Well

Permit issued April 1, 1940.

[Continue on back if necessary]

Finished in Blue clay at 83 to ft.

Cased with 4 inch Diam from 0 to ft.

and inch from to ft.

Size hole below casing inch. Static level from surf. ft.

Tested capacity very weak pressure gal. per min. Temperature °F.

Water lowered to ft. in. in hrs. min.

Length of test hrs. min. Screen None

Slot Diam. Length Bottom set at ft.

[Show location in Section Plat]

Township name Tunbridge Elev. Sec. 27

Description of location 50 W. of WELL #1 Twp. 19N

741' N., 119' E. of SW cor. NE Rge. 2 E

Signed Leonard Newberry County DeWitt

Copy for Illinois State Geological Survey Index: 27-19N-2E

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed September 8, 1970

10. Dept. Mines and Minerals permit No. NF 09004 Year 1970
11. Property owner JAMES BRAY Well No. 1
Address 722 N. ALEXANDER CLINTON
Driller MASHBURN BROS License No. 92-203
12. Water from SAND (Formation) 13. County DEWITT
at depth 95 to 110 ft.
14. Screen: Diam. 4 in.
Length: 4 ft. Slot 20

Sec. 33
Twp. 20N
Rng. 2E
Elev.

SHOW LOCATION IN SECTION PLAT
NE/c NW SE NE
(permit)

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	BLK STEEL 11#	-3-6"	106

16. Size Hole below casing: NONE in.
17. Static level 36 ft. below casing top which is 1 ft. above ground level. Pumping level 38 ft. when pumping at 17 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	17	17
BLUE CLAY	8	25
BROWN SAND	8	33
GRAY CLAY	62	95
SAND + GRAVEL	15	110
NOT THRU SAND AT 110'		
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED Mashburn Bros DATE Sept 26-70

COUNTY No. 5552

DEWITT

33-20N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Bray, Mike Well No. _____
Address P.O. Box #222 Clinton IL
Well address Rt. #1 Clinton, IL
Lot _____ Subd _____ ISWS P# 298238
Driller Mashburn, Robert License No. 102-3084
Permit No. 03903397 Date 09/25/1997
Water from sand County DeWitt
at depth 90 to 103 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 15

Sec. 33
Twp. 20 N
Rge. 2 E
Elev. _____

SW NE NE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	99

Size hole below casing: _____ in.
Static level 39 ft. below casing top which is 1 ft. above ground level. Pumping level 43 ft. when pumping at 15 gpm for 2 hours.

Formations passed through	Thickness	Bottom
yellow clay	15	15
gray clay	43	58
drift	3	61
green clay	3	64
gray clay	26	90
fine to medium sand	13	103
gray clay at	0	103

Household - Private

DeWitt 12-039-21304-00 33-20N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Evans, Norman Well No. #2
Address R.R. #1 Box #235 Clinton IL
Driller Layten, James License No. 102-2243
11. Permit No. 03900395 Date 03/10/95
12. Water from gravel 13. County DeWitt
at depth 105 to 120 ft. Sec. 33
14. Screen: Diam. 5 in. Twp. 20 N
Length: 4 ft. Slot 20 Rge. 2 E
Elev.

NE NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21 PLASTIC	-1	115

16. Size hole below casing: _____ in.
17. Static level 51 ft. below casing top which is 1 ft. above ground level. Pumping level 64 ft. when pumping at 25 gpm for _____ hours.

18. Formations passed through	Thickness	Bottom
yellow clay	13	13
gray clay	72	85
peat	5	90
green clay	12	102
dirty gravel	3	105
good gravel	15	120
gravelly clay	3	123
gravel	2	125
gray clay	15	140

Household - Private

DeWitt 12-039-21063-00 33-20N-02E

JESTED AND MAIL ORIGINAL TO STATE
, STATE OFFICE BUILDING, SPRINGFIELD,
AL / WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 7-8-72

10. Property owner Gale Finfrock Well No. _____
Address R #2 Clinton
Driller Earl Woolley License No. 92-556
11. Permit No. 15453 Date 7-6-72
12. Water from Sand + Gravel (Formation) 13. County DeWitt
at depth 91 to 94 ft.
14. Screen: Diam. 4 in.
Length: 3 ft. Slot .015

Sec. 33
Twp. 20N
Rge. 2E
Elev. _____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	US -12#	0	91

SHOW LOCATION IN SECTION PLAT
NW NW NW
(permit)

16. Size Hole below casing: _____ in.
17. Static level 40 ft. below casing top which is 1 ft. above ground level. Pumping level 40 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Soil + yellow clay	18	18
Blue clay	51	69
Drift	1	70
Green clay	11	81
Gray Hardpan	7	88
Sand + gravel	6	94

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Earl Woolley DATE Jul. 9 '72

COUNTY No. 581

DEWITT

33-20N-2E

QUESTED AND MAIL ORIGINAL TO STATE DE-
16, STATE OFFICE BUILDING, SPRINGFIELD,
CAL / WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 6-12-73

10. Property owner G. G. Finfrock Well No. _____
Address RR# Clinton, Ill
Driller Earl Woollen License No. 102-118
11. Permit No. #19407 Date 6-7-73
12. Water from Sand (Formation) 13. County DeWitt
at depth ____ to ____ ft. Sec. 33
14. Screen: Diam. 4 in. Twp. 20N
Length: 4 ft. Slot .015 Rge. 2E
Elev. _____

SHOW LOCATION IN SECTION PLAT
NW NW NE
(permit)

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	US 12#	0	104

16. Size Hole below casing: _____ in.
17. Static level 38 ft. below casing top which is 2 ft. above ground level. Pumping level 82 ft. when pumping at 7 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Soil + yellow	13	13
blue clay	51	64
Drift	2	66
Green clay	7	73
Gray Hardpan	31	104
Fine Sand	4	108

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Earl Woollen DATE Aug 5 73

COUNTY No. 600

DEWITT 33-20N-2E

ILLINOIS GEOLOGICAL SURVEY, URBANA

'ermit # 27813 CABLE TOOLS	Thickness	Top	Bottom
'ellow clay		0	14
;leu clay		14	63
'ine sand, some gravel (water bearing)		63	65
;reen clay		65	75
;ray hardpan		75	109
'ine sand, some gravel,a little coal water bearing		109	112 TD

Iole record: 6" 0 - 112'
:asing record: 6" +1.5 - 109'
;creen record: 4' of 6" nominal Howard Smith stainless steel screen slot # 20, set 108 - 112'; exposed 3' from 109 - 112'; no gravel pack

:hief aquifer: sand and gravel 109 - 112' and 63 -65'
Nonpumping level 32.70' below measuring point
'umping level 107.35' below measuring point after pumping at approximately 9 gpm for 3 hours

Measuring point for above measurements: top of casing; 1.5' above ground level

*Trailer Park (Westside Park Estates)

NO ENVELOPE

MPANY	Earl D. Woollen
RM	*Finfrock, Gale D. NO. 2
TE DRILLED	September 21, 1974 COUNTY NO. 20622
THORITY	State Water Survey
EVATION	720' T.M.
CATION	100' N line, 1583' W line, NW
UNTY	DEWITT

33-20N-2E

ILLINOIS GEOLOGICAL SURVEY, URBANA

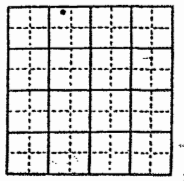
ABLE TOOLS	Thickness	Top	Bottom
lack soil and blue clay mix (some methane gas at 27')		0	27
lue clay		27	39
ack sand (fine)		39	41
reen clay		41	50
ray hard pan clay		50	84
and and gravel (fine sand and some coarse gravel - water bearing)		84	86
ray clay at		86	
otal Depth			86

ole record: 4" 0 - 86'
asing: 4" + .5' - 84'
creen record: 3' of 4" nominal Johnson stainless steel screen slot # 20; set from 83 - 86', screen exposed from 84 - 86', no gravel pack
hief aquifer: sand and gravel 84 - 86'
onpumping level: 7.53' below measuring point
umping level: 52.69' below measuring point after pumping at Approximately 7.5 gpm for 3 hours
easuring point for above measurements: top of casing, .5' above ground level

* G.G. Finfrock
** 1 mile west of Clinton on north side of route # 10

O ENVELOPE

MPANY Woollen Drilling Company
RM *Westside Park Estates NO. 3
TE DRILLED September 9, 1975 COUNTY NO. 20636
THORITY State Water Survey
EVATION 700' T.M.
CATION **125' N line, 1800' W line, NW
UNTY DEWITT



33-20N-2E

TOWN — TOWNSHIP Clintonia R2E

COMPANY Woollen Bros. NO. T. SEC.

FARM Lillard, Russel NO. 20N 33

DATE DRILLED July 1944

AUTHORITY Woollen Bros. 720 ETM

COLLECTOR ELEVATION 700 Rolfe

SE NE NW

Co. no. 219

D.	Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil, yellow clay	16		16	
	Blue clay	29		45	
	Gravel	1		46	
	Gravel, clay	9		55	
	Blue clay	17		73	
	Drift, brown	2		75	
	Green clay	5		80	
	Gray hardpan	27		107	
	Hardpan, hard	8		115	
	Gravel 2 or 3 in.				
	Hardpan, soft	11		128	
	Hardpan, hard	4		132	
	Gravel; 4 g.p.m. for 30 min.	2		134	
	Hardpan	9		143	
	Gravel	1		144	
	Hardpan, hard	20		164	
	Gravel; no water	1		165	
	Hardpan, gray, hard	43		208	
	Drift	2		210	
	Green clay	2		212	
	Yellow clay	16		228	
	Gray clay	4		232	
	Yellowish blue	36		268	
	Blue clay	7		275	
	Sand, water	3		278	
	Blue clay				
	4" hole				
	275' of pipe				
	8 g.p.m. for 2 hrs.				

COUNTY Dewitt 33-20N-2E

SAMPLE SET NO.

(84107—20M—6-45) 2

ILLINOIS GEOLOGICAL SURVEY, URBANA

SHEET 2 T. 20N R. 2E S. 33

COMPANY Woollen Bros. NO.

FARM Lillard, Russel NO.

o.	Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Water clear Water level 120' Finished in sand & gravel at 275' to 278' (All numbers taken from original log)				

COUNTY Dewitt 33-20N-2E

SAMPLE SET NO.

(84107—20M—6-45) ILLINOIS GEOLOGICAL SURVEY, URBANA

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner North, Raymond Well No. #3
Address R. R. #1 Clinton IL
Driller Layten, James G. License No. 102-2243
11. Permit No. 114667 Date 09/12/84
12. Water from gravel 13. County DeWitt
at depth 101 to 122 ft. Sec. 33
14. Screen: Diam. 6 in. Twp. 20 N
Length: 8 ft. Slot 50 Rge. 2 E
Elev.

NE NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
6	PLASTIC	0	107

16. Size hole below casing: _____ in.
17. Static level 50 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 100 gpm for 1 hours.

18. Formations passed through	Thickness	Bottom
clay	45	45
sand & gravel	2	47
clay	3	50
sand & gravel	17	67
clay	34	101
sand & gravel	21	122

DeWitt 12-039-20945-00 33-20N-02E

STATE OFFICE BUILDING, SPRINGFIELD,
/WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD
Completed 1-73

10. Property owner MARCO CHEMICALS Well No. 1
Address SOUTH CLINTON ST CLINTON
Driller MASHBURN BROS License No. 92-203
11. Permit No. NE 17584 Date FEB 1973
12. Water from SAND + GRAVEL (Formation) 13. County DEWITT
at depth 341 to 356 ft.
14. Screen: Diam. 6 in.
Length: 15 ft. Slot 20

Sec. 34
Twp. 20N
Rge. 2E
Elev. 710

SHOW LOCATION IN SECTION PLAT
40' SL, 80' EL of SE NE SE (permit)

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6	BLK STEEL 19.45	+2	341

16. Size Hole below casing: _____ in.
17. Static level 118 ft. below casing top which is 2 ft. above ground level. Pumping level 126 ft. when pumping at 200 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow CLAY	17	17
GREY CLAY	55	72
BLue SAND + GRAVEL	6	78
HARD GREY CLAY	194	272
FINE SAND	46	318
SOFT GREY CLAY	10	328
COURSE SAND + GRAVEL	28	356
NOT THRU SAND AT 356		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Mashburn Bros DATE Feb 8-73

COUNTY No. 593

DEWITT 34-20N-2E

(3)

LOG OF WATER WELL

Co. 221

~~reperty~~ owner City of Clinton Test Well No. 54-1

rilled by Layne-Western Co., Aurora Year 1954

Formations passed through	Thickness	Depth of Bottom
Brown Soil	½	½
Red-brown clay (soft)	4½	5
Yellow clay (soft) boulders	6	11
Brown-gray clay (soft)	2	13
Blue-gray clay	3	16
Loose fine sand to med. gravel (brown turning to gray-will jet)	5	21
Soft blue-gray clay (pebbles & stones embedded)	12	33

[Continue on back if necessary]

Finished in shale 355 to 360 ft.

S.S. #24530

Cased with ___ inch ___ from 0 to ___ ft.

Permit issued February 22, 1954.

and ___ inch ___ from ___ to ___ ft.

Size hole ~~below casing~~ 3 inch. Static level from surf. ___ ft.

Tested capacity ___ gal. per min. Temperature ___ °F.

Water lowered to ___ ft. ___ in. in ___ hrs. ___ min.

Length of test ___ hrs. ___ min. Screen ___

Slot ___ Diam. ___ Length ___ Bottom set at ___ ft.

[Show location in Section Plat]

Township name Clintonia Elev. 721.5 Sec. 34

Description of location Approx. 460 S. & 1220' E. of center of Sec. Twp. 20 N. Rge. 2 E

Signed [signature] County DeWitt

DEWITT

Copy for Illinois State Geological Survey Index: 34-20N-2E

Loose coarse gray sand (will jet)	3	36
Sandy blue-gray clay, streaked with brown soil & peat	5	41
Peat	6	47
Sandy blue-gray clay (soft)	4	51
Sandy gray clay (limestone shells) fairly hard	19	70
Cemented sand, clay and gravel (hard)	5	75
Loose fine sand to coarse gravel ;(will jet)	3	78
Sandy clay	2	80
Loose sand & gravel streaks clay	2	82
Cemented sand, clay & gravel "Hardpan" (Very hard from 100' to 123')	41	123
Tight coarse sand to med. gravel	2	125
Cemented sand, clay & gravel (Occassional streak, loose sand)	38	163
Tight clean coarse sand (streaks of substance similar to soapstone)	8	171
Sand, clay & gravel (Hard)	16	187
Gray clay (soft)	12	199
Sand, clay and gravel (fairly soft)	21	220
Loose clean sand & med. gravel (loose will jet)	3	223
Tight sand, clay & gravel (mostly sand)	19	242
Tight coarse sand & gravel (wood & peat)	10	252
Tight coarse sand & fine gravel	30	282
Tight coarse sand more & coarser gravel	10	292
Tight coarse sand & fine gravel (6 - 12" streaks clay)	10	302
Tight fine sand to med. gravel	30	332
Tight fine sand (little more & larger than above)	20	352
Tight coarse gravel and boulders	3	355
Hard blue shale	5	360

Town	Clinton	Township	Clintonia	Map No.	
Company	Woollen Brothers	No.		R. 2E	
Farm	Pollock, Fred	No.	T.		Sec.
Authority	Woollen Brothers, Wapella				34
Elevation			20		
Collector			N		
Confidential		Date Drilled	1941		

69' N. line, 1188' E. line of SW

No.	Co. no. 221 Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil	1		1	
	Clay, yellow	17		18	
	Clay, blue	21		39	
	Sand, blue and gas	2		41	
	Clay, blue	14		45	
	Sand and gravel	2		47	
	Clay, blue	10		57	
	Sand, brown and gas	3		60	
	Clay, blue	10		70	
	Driftwood	2		72	
	Clay, green	10		82	
	Hardpan	1		83	
	Sand and gravel, no water	10		93	
	Hardpan, very hard	5		98	
	Sand, clean and gravel	2		100	

Water level 46' from ground surface
Water lowered 3' at 5 g.p.m.

3' of #25 slot Johnson armco screen
5 g.p.m. jet pump set at 55'

NO ENVELOPE [redacted]

COUNTY Dewitt

DRILL RECORD

INDEX NO. 34-20N-2E

(12880—20M) ILLINOIS GEOLOGICAL SURVEY, URBANA (12-41)

(36941—50M—2-67)27-0 2

ILLINOIS GEOLOGICAL SURVEY, URBANA

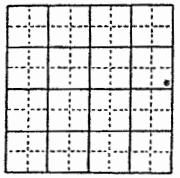
Permit # NF 18534	Thickness	Top	Bottom
Brown clay and fill		0	5
Brown clay		5	11
Gray clay		11	15
Fine sand		15	17
Gray clay		17	32
Peat		32	34
Hard gray gravelly clay		34	123
Hard gray gravelly clay, caving		123	129
Very hard gravelly clay (gray)		129	179
Softer gray gravelly clay, caving		179	243
Fine sand, trace of clay		243	285
Medium coarse sand, trace of fine sand		285	315
Medium coarse sand, some gravel, trace of fine sand		315	343
Medium coarse sand, some gravel, trace fine sand, some peat and coal		343	348
Shale and coal		348	352
Total Depth			352

Casing: 255' of 30" outside diameter, .375" wall, steel with welded joints from +2 - 253'
274' of 18" outside diameter, .375" wall, Armco iron with welded joints from +2 - 276'

Hole record: 38" 0 - 285'
30" 285 - 352'

Screen record: 62' of 18 3/4" outside diameter stainless with welded joints from 276 - 338'

OMPANY Layne-Western Company
ARM City of Clinton NO. 8
ATE DRILLED July 19, 1973 COUNTY NO. 309
UTHORITY Company
LEVATION 710' T.M.
OCATION 2500' N line, 85' E line, NE
OUNTY DEWITT



34-20N-2E

	Thickness	Top	Bottom
Screen: 60' of .060" slot openings			
Cemented from 0 - 25'; gravel pack from 210 - 340' with # 2 Muscatine well pack			
Static level 103'; pumping level 111' after 5 hours pumping at 620 g.p.m.			
Length of test: 8 hours			
S.S. # 59001			

Layne-Western Company — City of CLinton #8

COUNTY DEWITT — 34-20N-2E

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Gravelly yellow clay	8	0	8
Loose coarse sand & med. gravel (boulders)	3	8	11
Soft sandy blue clay	12	11	33
Peat & black soil	4	33	37
Soft gray-green clay	7	37	44
Gravelly green clay (boulders 48 to 51')	12	44	56
Gray-blue clay, gravel embedded	8	56	64
Loose coarse clean sand & gravel	23	64	87
Hard gray clay	½	87	87*
Loose coarse gravel	2½	87	89*
Gravelly gray-blue clay (boulders 95')	6	89	95
Soft sandy gray clay (pebbles and stones embedded)	19	95	114
Hard sandy gray clay (used rock bit) boulders 114 & 130'	22	114	136
Sand in gravelly clay	19	136	155
Sand, gravel and clay, tight Occassional streak gravel or large stones	27	155	182
Tight sand and gravel & gray clay	5	182	187
Fairly loose fine sand to med. gravel	12	187	199
Soft sandy gray clay	4	199	203
Fairly loose fine sand - clay streaks	6	203	209
Soft sandy gray clay	29	209	238
Tight dirty fine sand	14	238	252
Fairly loose dirty fine sand gradually getting cleaner, also			

OMPANY Layne-Western
ARM Clinton NO. 4
ATE DRILLED 1954 COUNTY NO. 224
UTHORITY V.H. Moore
EVATION 715' ±
OCATION Ap. ~~460~~ 1450'S & ~~1500~~ 1450'E of center
OUNTY DEWITT

34-20N-2E

Strata	Thickness	Top	Bottom
a little bit of med. gravel last 20', pretty clean	44	252	296
Loose fine sand to med. gravel	15	296	311
Very coarse sand & gravel	11	311	322
Coarse sand & gravel (more sand than above)	10	322	332
Very coarse sand & gravel	10	332	342
Very coarse sand & gravel	7	342	349
Thin streak black shale, then greenish-white, then blue-green	23	349	372 TD

Finished in shale at 349 to 372'
Size hole 3"

* as copied from driller's log

Location changed as of company letter 12/31/54
ap. 450' S, 1450' E of center
ap. NW NE SE

.S. # 25046

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Clinton, City Well No. # 3
Address
Well address is west of plant
Lot Subd ISWS P#
Driller Ebert & Sons License No. 104853
Permit No. Date
Water from County DeWitt
at depth to ft.
Screen: Diam. in.
Length: ft. Slot

Sec. 34
Twp. 20 N
Rge. 2 E
Elev. 730

2329' N 1610' W SEc

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
12	CASING	0	340
8	IRON SCREEN .25" HOL	340	360

Size hole below casing: in.
Static level 118 ft. below casing top which is 0 ft. above ground level. Pumping level 148 ft. when pumping at 250 gpm for 5 hours.

Formations passed through	Thickness	Bottom
no record	360	360

Municipal Water Supply

DeWitt 12-039-21474-00 34-20N-2E

34-20N-2E

COMPANY Layne-Western Co. NO.
FARM Clinton City Well NO. 4
DATE DRILLED July 1948
AUTHORITY Layne-Western Co.
COLLECTOR ELEVATION
Ap. 2200' S. line, 1150' E. line of section

No.	Co. no. 226 Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Surface			0-5	
	Yellowish sand			10	
	Sand, white, soft, well flows at 68'			75	
	Brown sand, hard			80	
	Gravel, very cemented, hard			115	
	Fine gravel, med.			120	
	~~Fine soft sand 122-126~~			125	
	Gravel and hard pan, hard			135	
	Clean coarse gravel 136-139			140	
	Coarse muddy sand			145	
	Sand at 145 soft			150	
	Sand very fine soft			155	
	Sand cemented, hard			185	
	Gravel clean, takes mud, soft			220	
	Gravel, very coarse, takes mud, clean, soft			225	
	Coarse clean gravel, soft			285	
	Coarse gravel, little sand, soft			300	
	Sand, coarse, clean, takes mud, soft			330	
	Coarse gravel			335	
	Gravel, coarse, clean, soft			340	
	Hard pan at 344			345	
	Finished in sand & gravel 6" id. casing to 308'. Below casing is 20' exposed screen, below which the well is backfilled with gravel.				

SS# 18252 NO ENVELOPE

COUNTY DeWitt 34-20N-2E
SAMPLE SET NO. 18252
(41512—20M—8-47) 2

ILLINOIS GEOLOGICAL SURVEY, URBANA

767
JWFVg

LOG OF WATER WELL

Co# 223 (3)

~~Property~~ owner City of Clinton Test Well No. 54-3

Drilled by Layne Western Co., Aurora Year 1954

Formations passed through	Thickness	Depth of Bottom
Black Soil	4	4
Gravelly yellow clay	3	7
Hard sandy blue-gray clay (large stones & Boulders)	7	14
Soft sandy blue-gray clay	7	21
Peat or brown soil - wood	6	27
Soft sandy green clay, gravel & boulders at 36'	13	40
Grn. - blue clay turning to blue-gray gravel & stone embedded	14	54
Loose clean coarse sand & gravel	9	63
Loose clean coarse sand & gravel, streaks of peat	3	73

[Continue on back if necessary]

Finished in shale at 341 to 343 ft.

S.S. #24532

Cased with ____ inch ____ from 0 to ____ ft.

and ____ inch ____ from ____ to ____ ft.

Size hole ~~below casing~~ 3 inch. Static level from surf. ____ ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

Township name Clintonia Elev. 700± Sec. 34

Description of location Approx. 250'S. & 1550'E. of center of Sec.

Twp. 20 N.

Rge. 2 E

Signed ____ County DeWitt

DEWITT

Copy for Illinois State Geological Survey Index: 34-20N-2E

34-20N-2E

COMPANY Layne-Western Company NO. 5
FARM Clinton City NO.
DATE DRILLED 1945 Co. no. 225
AUTHORITY S. W. S.
COLLECTOR ELEVATION 725 Rolfe
450' N. line, 760' W. line of SE

No.	Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	250' W. of Quincy St. and 50' N. of I.C.R.R. switchline				
	No log				
	Casing record:				
	26" O.D. casing - surface - 312'				
	17" O.D. casing - surface - 211½'				
	Approx. 14" swedge nipple between 14" and 12" casing				
	12" I.D. casing - 211½'-321½'				
	39½' of 12" I.D. Layne shutter screen from 321½'-361'				
	12" concrete plug at bottom of screen				
	30 yds of gravel pack				

ORIGINAL FILED

COUNTY Dewitt 34-20N-2E
SAMPLE SET NO. 13379
(24159—20M—9-46) 2

ILLINOIS GEOLOGICAL SURVEY, URBANA

LOG OF WATER WELL

Co. #222

Property owner: City of Clinton — Test Well No. 54-2

Drilled by: Layne-Western Co. — Year: 1934

Formations passed through	Thickness	Depth of Bottom
Fill-cinders, soil & bricks	2	2
Black Soil	3	5
Yellow Clay	2	7
Loose fine sand to coarse gravel (will jet)	6	13
Tight fine to coarse sand (dirty) blue clay	14	27
Peat, wood, silty fine to coarse gray sand	6	33
Tight dirty silty fine to coarse gray sand	8	41
Loose coarse sand	3	44
Tight dirty silty fine to coarse sand	15	59

[Continue on back if necessary]

Finished in Shale at 346 to 349 ft.

S.S. #24531

Cased with ____ inch from 0 to ____ ft.

and ____ inch from ____ to ____ ft.

Drilled hole ~~below casing~~ 3 inch. Static level from surf. ____ ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

Township name Clintonia Elev. 709.1

Description of location Approx. 150' S. & 1310' E. of center of Sec.

Sec. 34 Twp. 20 N. Rge. 2 E.

Signed W. Moore County DeWitt

DEWITT

Copy for Illinois State Geological Survey Index: 34-20N-2E

Loose coarse sand & fine gravel	10	69
Tight coarse gravel in clay	11	80
Sand, clay & gravel, (Hard), bouldder at 92')	30	110
Sand, clay & gravel, (more gravel than above) (very hard used pulldowns) Loose gravel 135 to 138')	41	151
Fairly loose med. gravel	7	158
Gravelly clay, very hard, used pull-downs, 171 to 173 loose	22	180
Gravelly clay (more clay than above, not as hard)	35	215
Sandy gray clay (soft)	21	236
Tight silty fine sand	19	255
Tight silty fine sand (small amount med. gravel)	25	280
Fairly loose fine sand (more gravel than above)	44	324
Tight coarse clean gravel	22	346
Black shale turning to grn. blue	3	349

ACKNOWLEDGED

JUN 1 1954

Copy for Illinois State Geological Survey

Tight coarse sand and fine gravel	3	76
Cemented sand, clay & gravel Hard, boulders 84'	54	130
Fairly loose fine sand	1	131
Tight gravelly clay	2	133
Loose fine sand	2	135
Soft sandy blue clay	8	143
Fairly loose finesand to med gravel	8	151
Gravelly hard gray clay	34	185
Tight fine sand - gray clay	5	190
Sandy gray clay (very soft) occasional streak gravel & green-clay	40	230
Fairly loose fine sand (small amount med. gravel)	50	280
Tight coarse sand & gravel (believe its from up hole)	10	290
Tight clean coarse gravel	29	319
Tight fine sand	11	330
Hard sandy gray clay - gravelly	9	341
Black Shale	2	343

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1906. 386790

MOORE'S MODERN METHODS

TOWN Clinton TOWNSHIP

COMPANY Woollen Bros. No.

FARM Clinton Theater No.

AUTHORITY Woollen Bros.

ELEVATION

COLLECTOR J.P.G. DATE DRILLED

CONFIDENTIAL 1936

Map No. 7

R. 2E

T. 20 N

Sec. 34?

No.	Co #513 STRATA	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil	8		8	
	Yellow clay	10		18	
	Blue clay	37		55	
	Driftwood	2		57	
	Green clay	15		7 2	
	Sand		8	72	8
	Hardpan with seams of gravel	51	10	124	6
	Sand and gravel	5	6	130	
	Clay to			130	6
	#20 Johnson Screen 123' 10" to 130' 6"				
	Static 36"				
	Pumped 50 g.p.m. with drawdown to 100'				
	NO ENVELOPE				
	[redacted]				

County DeWitt Index No. 07

T.—DRILL RECORD

47327—10M—4-35 [redacted] 4 Illinois Geological Survey, Urbana.

347-20N-2E

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1906. 306742

MOORE'S MODERN METHODS

TOWN Clinton TOWNSHIP DeWitt MAP NO. 7

COMPANY Clinton Ice Company T 20 N R 2E SEC. 34?

FARM 2-1

AUTHORITY

ELEVATION HOLE NO.

COLLECTOR H. O. Emmey DATE DRILLED 1921

No.	Co. #514 STRATA	THICKNESS FEET	THICKNESS IN.	DEPTH FEET	DEPTH IN.
	Clay, yellow	2		8	
	Clay, blue or grey	8		16	
	Clay, sandy	8		24	
	Clay, some sand	31		55	
	Drift, (a few inches)				
	Clay, brown or grey	5		60	
	Clay, grey	13		73	
	Sand and gravel	1		74	
	Clay & gravel, grey	21		95	
	Sand	2		97	
	Clay, grey	14		111	
	Sand and gravel	5		116	
	Hardpan, clay, grey, some gravel	51		167	
	Drift		6	167	6
	Clay, grey	5	6	173	
	Clay, green or blue	4		177	
	Clay, green	5		182	
	Hardpan, brown, grey	79		261	
	Sand, fine (filled casing 45 feet)	12		273	
	Sand, called liver, very fine (6 or 8 inches)				
	Sand and gravel, good	44		317	
	Sand and gravel, coarse	13		330	
	Sand, very fine	23		353	
	Sand, coarse	11		364	
	Layers of finer and coarser sand but about the same	10		374	

NO ENVELOPE

County DeWitt Index No. 0700

T—DRILL RECORD 34?-20N-2E

STATE OFFICE BUILDING, SPRINGFIELD,
AL / WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 8-15-71

10. Property owner John Armstrong Well No. _____
Address Wapella, Ill
Driller Earl Woollen License No. 92-556
11. Permit No. UF 11802 Date 7-29-71
12. Water from Sand + gravel Formation 13. County DeWitt
at depth 78 to 81 ft.
14. Screen: Diam. 4 in.
Length: 3 ft. Slot .025

Sec. 35
Twp. 20N
Rge. 2E
Elev. _____

SHOW LOCATION IN SECTION PLAT
SW SW SE
(permit)

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	V-S	0	78

16. Size Hole below casing: _____ in.
17. Static level 18 ft. below casing top which is 1 ft. above ground level. Pumping level 50 ft. when pumping at _____ gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
soil + yellow	17	17
Blue clay	33	50
drift	2	52
green clay	9	61
gray hardpan	17	78
sand + gravel	3	81
blue clay		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Earl Woollen DATE Aug 30-71

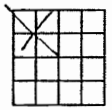
COUNTY No. 564

DEWITT 35-20N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner West Side Park Well No. #4
    Address Route 10 West Clinton IL
    Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 135539 Date 09/29/87
12. Water from sand 13. County DeWitt
    at depth 111 to 118 ft.
14. Screen: Diam. 5 in.
    Length: 8 ft. Slot 20

Sec. 34
Twp. 20 N
Rge. 2 E
Elev. _____



15. Casing and Liner Pipe NW

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21 PVC	-2	111

16. Size hole below casing: _____ in.
17. Static level 42 ft. below casing top which is 2 ft. above ground level. Pumping level 55 ft. when pumping at 50 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	22	22
blue clay	38	60
brown drift	5	65
green clay	7	72
grey clay	37	109
grey sand	1	110
grey clay	1	111
clean sand & gravel	7	118
grey clay	0	118

DeWitt 12-039-20828-00 34-20N-02E

TOWN TOWNSHIP

COMPANY Woollen Bros. NO.

FARM Ammon, Irvin NO.

DATE DRILLED February 1946

AUTHORITY Woollen Bros.

COLLECTOR ELEVATION

R. 2E

T. 20N

SEC. 35

N W cor. of SW

Co. no. 229

No.	Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil, yellow clay	18		18	
	Blue clay	23		41	
	Sand, dirty	1		42	
	Gray clay	6		48	
	Brown drift	5		53	
	Green clay	5		58	
	Gray hardpan, hard	16		72	
	Gravel, sand	6		78	
	Gravel				

4" hole
75' 9" of pipe
No drawdown at 6 g.p.m. for 1 hr.
Water fairly clear
Water level 15'
Finished in sand, gravel at 72' to 78'

Pipe loose

Cook Brass Screen, Size 4", Length 3', Slot 25.

Electric Pump.

NO ENVELOPE [redacted]

COUNTY Dewitt 35-20N-2E

SAMPLE SET NO.

(84107—20M—6-45) 2

ILLINOIS GEOLOGICAL SURVEY, URBANA

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Clinton, City of Well No. #10
    Address Clinton IL
    Driller Layne-Western Co. License No. 092-1400
11. Permit No. E892296A Date 06/12/89
12. Water from sand & gravel 13. County DeWitt
    at depth 300 to 370 ft. Sec. 35
14. Screen: Diam. 16 in. Twp. 20 N
    Length: 60 ft. Slot .05 Rge. 2 E
    Elev. 725

1950'S 800'E NWc

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
16	STEEL .375"	-2	300

16. Size hole below casing: _____ in.
17. Static level 127 ft. below casing top which is 0 ft. above ground level. Pumping level 140 ft. when pumping at 1032 gpm for 6 hours.

18. Formations passed through	Thickness	Bottom
SS #66784 (0'-365')	0	0
brown very silty sandy clay	13	13
gray silty sandy clay	9	22
gray sand & gravel with clay seams	6	28
hard gray very sandy silty clay	13	41
organic brown silt (peat)	4	45
soft dark gray clay	3	48
blue gray sandy silty clay	8	56
hard gry sandy silty clay, some gravel	13	69

Municipal Water Supply

DeWitt 12-039-21112-00 35-20N-2E

18. Formations passed through (continued)	Thickness	Bottom
sand	4	73
hard gray sandy silty clay, some gravel	84	157
sand @ 97-99,107-109, 137-140, 146-150	0	157
dark brown organic clay, trace wood	11	168
hard blue gray sandy silty clay	7	175
hard gray & brown sandy silty clay	4	179
brn gry silty sandy clay, sd & silt seam	69	248
gray very fine to medium sand	9	257
gray clayey silt	3	260
gray fine-coarse sand with silty seams	33	293
gray fine sand-small gravel, fine seams	37	330
fine to coarse sand	1	331
gry fine snd-small gravel, coarse layers	20	351
gray fine sand-coarse gravel, some coal	10	361
soft coal	4	365
gray shale with lime lenses	5	370

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Clinton, City of Well No. #11
    Address Clinton IL
    Driller Layne-Western Co. License No. 092-1400
11. Permit No. E892296B Date 06/12/89
12. Water from sand & gravel 13. County DeWitt
    at depth 300 to 370 ft.
14. Screen: Diam. 16 in.
    Length: 60 ft. Slot .05

Sec. 35
Twp. 20 N
Rge. 2 E
Elev. 720

15. Casing and Liner Pipe 1900'S 50'E NWc

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
16	STEEL .375"	-3	300

16. Size hole below casing: _____ in.
17. Static level 122 ft. below casing top which is 0 ft. above ground level. Pumping level 137 ft. when pumping at 1180 gpm for 3 hours.

18. Formations passed through	Thickness	Bottom
ss #66785 (0'-365')	0	0
brown silty clay	10	10
gray silty clay	4	14
gray sand & gravel with clay seams	9	23
gray sandy silty clay	15	38
brown peat	5	43
soft dark gray clay	4	47
blue gray sandy silty clay	4	51
gry sandy silty clay, gravel-sand layers	54	105

Municipal Water Supply

DeWitt 12-039-21113-00 35-20N-2E

18. Formations passed through (continued)	Thickness	Bottom
sand & gravel	2	107
gry sandy silty clay, gravel-sand layers	56	163
blue gray silt & sand w/clay seams	7	170
hard blue sandy silty clay w/silt seams	7	177
hard brown & gray sandy silty clay	8	185
brn gry sandy silty clay, grvl-boulders	65	250
sand with clay & silt seams	9	259
clayey silt	2	261
tight very fine coarse sand	29	290
fine to coarse sand	10	300
fine sand-small gravel, slighty dirty	15	315
as above w/ layers of gravel & boulders	45	360
fine sand to coarse gravel with coal	5	365
soft shale with lime lenses	5	370

TOWN

TOWNSHIP Clintonia R. 2E

COMPANY Woollen Bros. NO. T. SEC.

FARM Jasper, W. J. NO. 20N 35

DATE DRILLED December 1944

AUTHORITY Woollen Bros.

COLLECTOR ELEVATION 720± Rolfe

300' N. line, 60' E. line of NE

No.	Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	No. 230				
	Soil	2		2	
	Yellow clay	12		14	
	Blue clay	24		38	
	Driftwood	4		42	
	Green clay	7		49	
	Hardpan	10		59	
	Gravel; 4 g.p.m.	1		60	
	Clay	11		71	
	Sand, little water	1		72	
	Hardpan	3		75	
	Dirty gravel	1		76	
	Hardpan	71		147	
	Sand, gravel	3		150	
	total depth			150	

147' of 4" pipe
Drawn down 53' to water at 3½ g.p.m.
Water level 35'
Finished in sand, gravel at 147' to 150'
Pipe loose and bent

Johnson Armco Screen, Size 3 3/4,
Length 3', Slot 25.

NO ENVELOPE [redacted]

COUNTY Dewitt 35-20N-2E

SAMPLE SET NO.

(84107—20M—6-45) 2

ILLINOIS GEOLOGICAL SURVEY, URBANA

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed 12-72

10. Dept. Mines and Minerals permit No. NF 17173 Year 72

11. ☆ Property owner WAYNE RICKGAUER Well No. 1

Address 304 S. JACKSON ST

Driller MASHBURN BROS License No. 92-203

12. Water from SAND (Formation) at depth 321 to 331 ft.

13. County DEWITT

Sec. 35

Twp. 20N

Rng. 2E

Elev. 725

14. Screen: Diam. 6 in.

Length: 10 ft. Slot 20

☆ Catfish Farm

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6	BLK STEEL 19#	+1	321

SHOW LOCATION IN SECTION PLAT

2200' NL, 1400' WL of NW(permit)

16. Size Hole below casing: NONE in.

17. Static level 107 ft. below casing top which is 2 ft. above ground level. Pumping level 121 ft. when pumping at 120 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
TOP SOIL	3	3
YELLOW CLAY	13	16
BLUE CLAY	19	35
BROWN DRIFT	5	40
GREEN CLAY	8	48
GREY CLAY	24	72
SAND & GRAVEL	6	78
GREY CLAY	67	145
BROWN DRIFT	5	150
GREY CLAY	104	254
FINE SAND	56	310
FINE TO MEDIUM SAND	8	318
FINE TO COURSE SAND-SOME GRAVEL	13	331
NOT THRU SAND AT 331'		
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED Mashburn Bros DATE Dec 18-72

S.S. # 58931

COUNTY No. 591

DEWITT

35-20N-2E

35-20N-2E

COMPANY Woollen Bros. NO.
FARM Thompson, F. NO.
DATE DRILLED 8/47
AUTHORITY Woollen Bros.
COLLECTOR ELEVATION
SE SE NW

No.	Co. no. 228 Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil & yellow clay	14		14	
	Blue clay	27		41	
	Seam of gas			41	
	Brown drift	9		50	
	Green clay	6		56	
	Hardpan	24		80	
	Gray s and and gravel	4		84	
	Finished in gray sand and gravel at 80'-84'				
	4" hole				
	80' of 4" pipe				
	Drawn down 2' at 9 g.p.m.for 1 hr.				
	Water dirty				
	Water level 10'				
	Black, tight pipe				
	Cook Screen, Size 4", Length 4', Slot 30.				

NO ENVELOPE

[redacted]

COUNTY Dewitt 35-20N-2E

SAMPLE SET NO.

TOWN

COMPANY Woollen Bros

FARM Warner, Lloyd

DATE DRILLED April 1945

AUTHORITY Woollen Bros.

COLLECTOR

TOWNSHIP Clintonia R. 2E

NO. T. 20N SEC. 35

ELEVATION 720± Rolfe

NE cor. of NW

Co. No. 231

Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
Soil, yellow clay	16		16	
Blue clay	20		36	
Sand, gas, water	6		42	
Green clay	11		53	
Hardpan, hard	8		61	
Hardpan, soft	2½		63½	
Hardpan, hard		6	64	
Gravel	2½		66½	
Clay				
Total depth			66½	

4" hole
65' of pipe
Drawn down 40' at 5 g.p.m. for 1 hr.
Water clear
Finished in gravel at 64' to 66½'

Pipe loose
Cook Brass Screen, Size 4", Length 3',
Slot 25.

NO ENVELOPE [redacted]

COUNTY Dewitt

SAMPLE SET NO.

35-20N-2E

(84107—20M—6-45) 2

ILLINOIS GEOLOGICAL SURVEY, URBANA

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Mears, Chet Well No. _____
Address R.R. #3 Box #196 Clinton IL
Driller Mashburn, Robert License No. 102-3084
11. Permit No. 03901696 Date 07/23/96
12. Water from sand 13. County DeWitt
at depth 73 to 81 ft. Sec. 36
14. Screen: Diam. 5 in. Twp. 20 N
Length: 4 ft. Slot 15 Rge. 2 E
Elev. _____

NW NE NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	77

16. Size hole below casing: _____in.
17. Static level 11 ft. below casing top which is 1 ft. above ground level. Pumping level 18 ft.when pumping at 15 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	14	14
gray clay	3	17
sand	3	20
gray clay	22	42
drift	4	46
green clay	5	51
gray clay	22	73
medium sand	8	81
gray clay at	0	81

Household - Private

DeWitt 12-039-21245-00 36-20N-02E

TOWN

TOWNSHIP Clintonia R. 2E

COMPANY Woollen Bros. NO. T. SEC.

FARM Stiver Estate NO. 20N 36

DATE DRILLED 1944

AUTHORITY Woollen Bros.

COLLECTOR ELEVATION 720± Rolfe

70' N. line, 1000' E. line of NW

No.	Co. No. 232 Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil	2		2	
	Yellow clay	13		15	
	Blue clay	26		41	
	Driftwood	4		45	
	Green clay	7		52	
	Hardpan	11		63	
	Sand, gravel	4		67	
	Drift	½		67½	
	Total depth			67½	
	4" hole				
	64½' of 4" pipe				
	7' drawdown at 7 g.p.m.				
	Water slighty dirty				
	Water level 11'				
	Finished in sand, gravel at 63' to 67'				
	Pipe Loose				
	Johnson Armco Screen, Size 3 3/4,				
	Length 3', Slot 25.				

NO ENVELOPE [redacted]

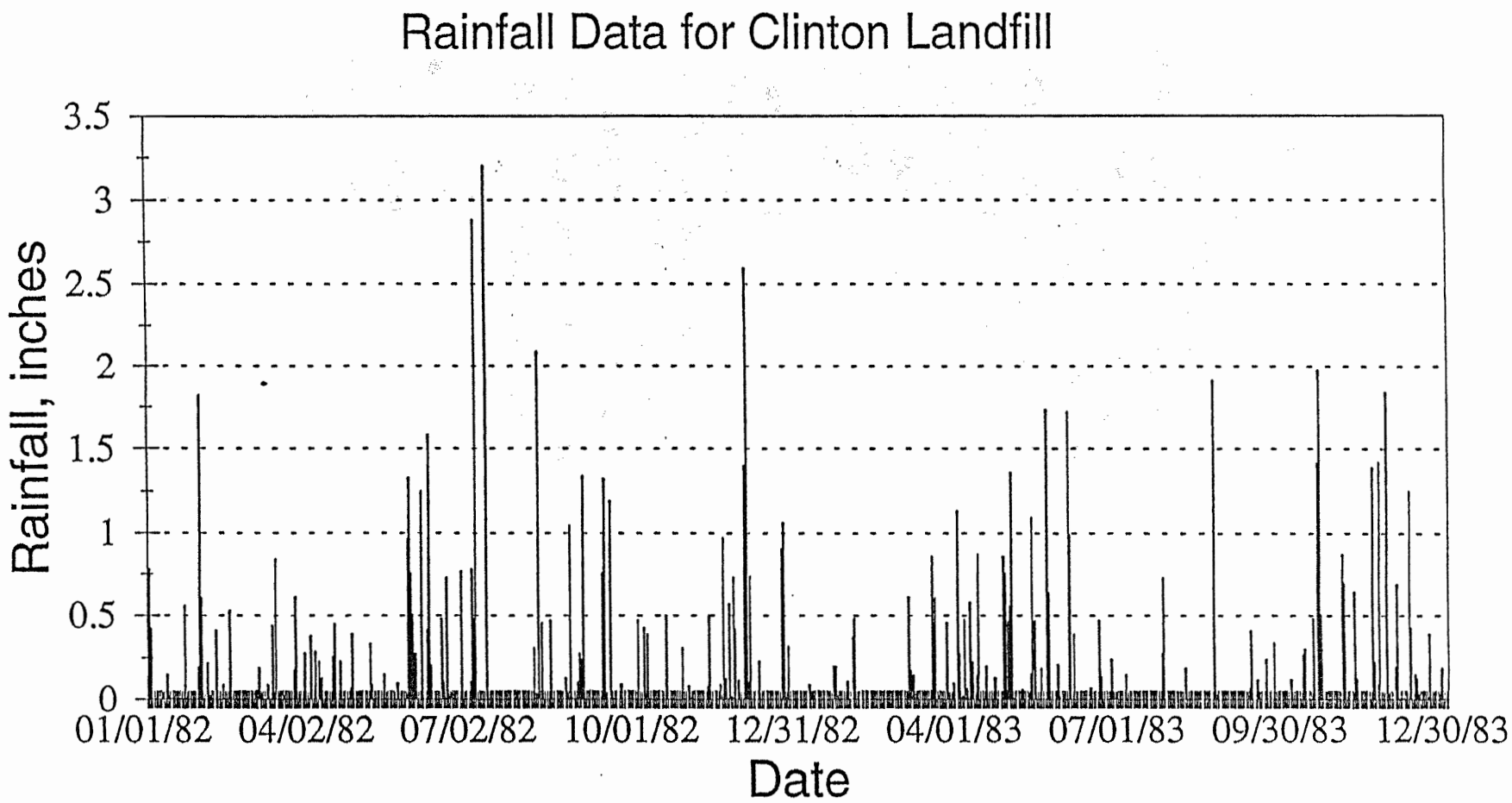
COUNTY Dewitt 36-20N-2E

SAMPLE SET NO.

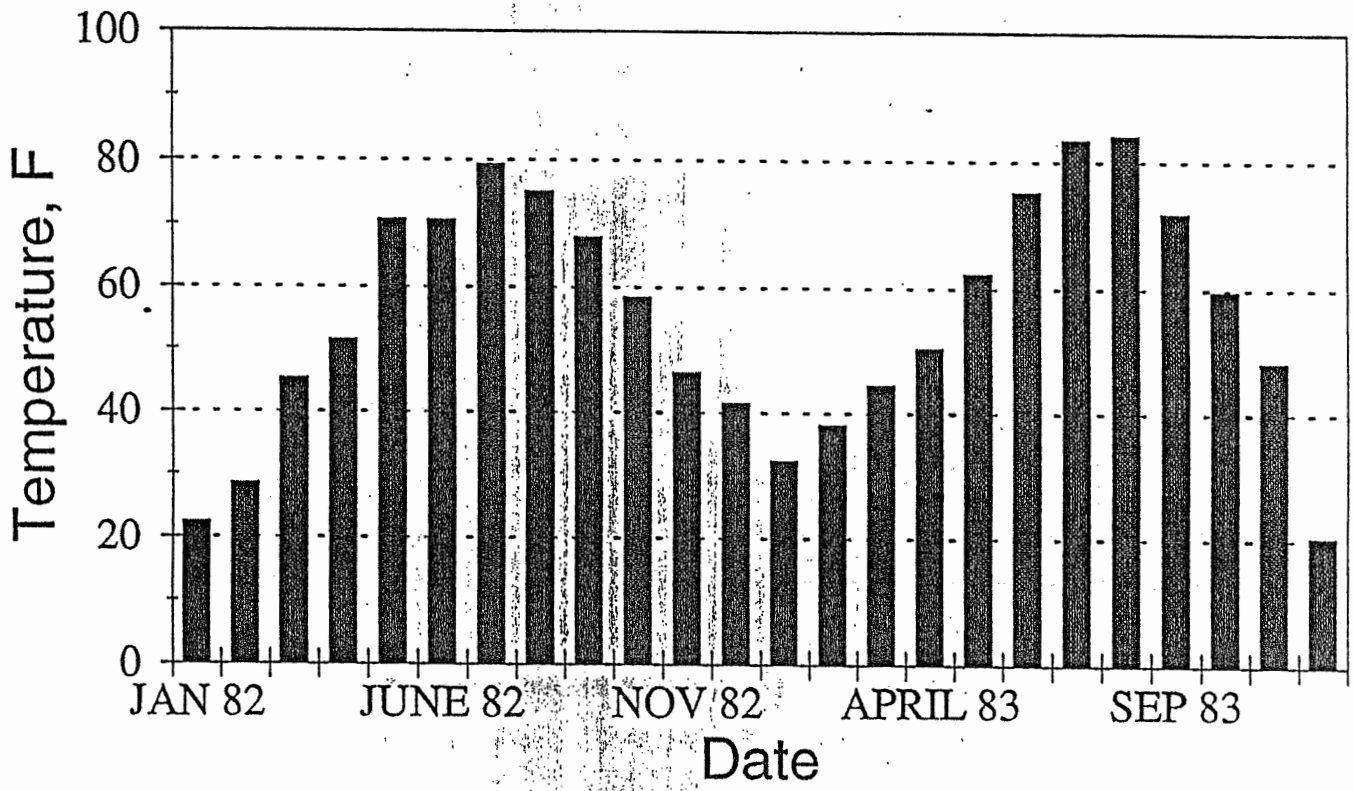
(84107—20M—6-45) 2

ILLINOIS GEOLOGICAL SURVEY, URBANA

APPENDIX 812.314-B: AVERAGE MONTHLY TEMPERATURE AND RAINFALL DATA


Rainfall Data for Clinton Landfill
Rainfall, inches
3.5
3
2.5
2
1.5
1
0.5
0
01/01/82
04/02/82
07/02/82
10/01/82
12/31/82
04/01/83
07/01/83
09/30/83
12/30/83
Date

SOURCE: NOAA


Average Monthly Temperature
Clinton Landfill, Inc.
Temperature, F
100
80
60
40
20
0
JAN 82
JUNE 82
NOV 82
APRIL 83
SEP 83
Date

SOURCE: NOAA

APPENDIX 812.314-C: SOIL BORING LOGS AND MONITOR WELL COMPLETION REPORTS

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. – PROPOSED EXPANSION AREA Sheet 1 of 4
Project Location CLINTON, ILLINOIS Project No. 91–118
Boring No. EX–1 Surface Elev. 722.77 Boring Type HSA Completion Depth 109.5
Coordinates: (X) N 5276.45 (Y) E 8837.99 Drilling Contractor SKS & ASSOCIATES
Date Started 12–2–96 Date Completed 12–3–96 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL SLURRY
Surface Conditions CORNFIELD (HARVESTED) If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	60										CLAYEY SILT (ML); Dark brown, soft, moist, with organics	
				1.0						721.52		SILTY CLAY (CL); Yellow brown, firm, moist, with organics	
									2				
				1.0									
									4				
2	CS	60											
				1.0									
									6				
				1.25					8			grades brown, stiff, trace gravel, organics out	
3	CS	60											
				0.25					10			grades wet from 10.5' to 12.2'	
									12			grades moist	
				1.25									Collected geotech. sample from 13'–14'
4	CS	60							14				
				1.25					16			grades gray	
				1.25					18			Hit water @ 19.0	
5	CS	55											
				1.5					20				
									22				
										700.27		SAND (SP); Gray, loose, saturated, trace clay, medium to fine grained sand	
										698.77		SILTY CLAY (CL); Gray, stiff, moist	
6	CS	30		1.5					24	698.27		GRAVEL & SAND (GP–SP); Gray, loose, saturated, small grained gravel & coarse grained sand	
										697.52			
									26			SILTY CLAY (CL); Gray, stiff, moist, with gravel and cobbles	
				1.5									
									28				
7	CS	49											

CAD DWG NO:91118237 EMPLOYEE NO: 9834 DATE/TIME: 12/23/96 09:56:04 ACD–12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. – PROPOSED EXPANSION AREA Sheet 2 of 4
Project Location CLINTON, ILLINOIS Project No. 91–118
Boring No. EX–1 Surface Elev. 722.77 Boring Type HSA Completion Depth 109.5
Coordinates: (X) N 5276.45 (Y) E 8837.99 Drilling Contractor SKS & ASSOCIATES
Date Started 12–2–96 Date Completed 12–3–96 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL SLURRY
Surface Conditions CORNFIELD (HARVESTED) If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	49										SILTY CLAY (CL); Gray, stiff, moist, with gravel & cobbles	
				1.5									
									32				
												grades trace gravel, cobbles out	
				1.25									
									34				
8	CS	60											
				1.75									
									36				
				2.0									
				2.75					38			grades very stiff	
9	CS	60											
									40				
				2.25									
									42				
				2.25									
									44				
10	CS	60											
				2.75									
									46				
				2.25									
									48				
11	CS	60											
									50				
				2.75									
									52				
				0.25						670.27			
												SILT (OL); Gray and brown, soft, moist, with peat	
				0.25						669.27			
									54			PEAT (Pt); Brown, soft, moist, with wood fibers	
12	CS	60											
				0.25									Collected geotech. sample from 55'–56'
									56				
									58			grades with gray silty clay @58.2	
				0.5									
13	CS	60											

CAD DWG NO:91118238 EMPLOYEE NO: 9834 DATE/TIME: 12/23/96 09:56:51 ACD–12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. – PROPOSED EXPANSION AREA Sheet 3 of 4
Project Location CLINTON, ILLINOIS Project No. 91–118
Boring No. EX–1 Surface Elev. 722.77 Boring Type HSA Completion Depth 109.5
Coordinates: (X) N 5276.45 (Y) E 8837.99 Drilling Contractor SKS & ASSOCIATES
Date Started 12–2–96 Date Completed 12–3–96 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL SLURRY
Surface Conditions CORNFIELD (HARVESTED) If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	60		0.5								PEAT (Pt); Brown, soft, moist, with wood fibers	
									62	660.77			
				1.25								SILTY CLAY (CL); Green gray, stiff, moist, trace gravel	
				1.25					64				Collected geotech. sample from 63'–64'
14	CS	60											
				4.0+					66			grades hard	
									68				
				4.0+									
15	CS	40							70				
												grades gray	
				4.0+					72				
				4.0+					74				
													Auger refusal at 75.5' Rock in hole; blind drill to get past.
									76				
16	CS	30		4.0+									
				4.0+					78				Collected geotech. sample from 78'–79'
17	CS	60											
									80	642.77			
										642.27		SILT (ML); Gray, moist, trace clay	
				4.0+								SILTY CLAY (CL); Gray, hard, moist, trace gravel & organics	
									82				
				4.0+					84				
18	CS	60											
				4.0+					86				
										635.77			
				1.0					88			PEAT (Pt); Brown and dark brown, firm, moist	
				1.0									
19	CS	30											

CAD DWG NO:91118239 EMPLOYEE NO: 9834 DATE/TIME: 12/23/96 09:57:41 ACD–12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. – PROPOSED EXPANSION AREA Sheet 4 of 4
Project Location CLINTON, ILLINOIS Project No. 91–118
Boring No. EX–1 Surface Elev. 722.77 Boring Type HSA Completion Depth 109.5
Coordinates: (X) N 5276.45 (Y) E 8837.99 Drilling Contractor SKS & ASSOCIATES
Date Started 12–2–96 Date Completed 12–3–96 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL SLURRY
Surface Conditions CORNFIELD (HARVESTED) If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
19	CS	30										PEAT (Pt); Brown and dark brown, firm, moist	
										631.27			
									92			SILTY SAND (SM); Gray, loose, saturated, fine grained sand	
				1.5						629.27			
									94			SILTY CLAY (CL); Gray, stiff, moist, trace gravel	
20	CS	57										grades hard	
				4.0+					96				Collected geotech. sample from 95'–96'
				4.0+					98				
21	CS	48								623.27			
									100			SILTY SAND (SM); Gray, loose, saturated, fine grained sand	
									102	620.77		SILT (ML); Gray, loose, saturated, trace clay	
				4.0+						619.27			
									104			SILTY CLAY (CL); Dark gray, hard, moist, trace gravel	
22	CS	60											
				4.0+					106				
				4.0+					108				
										613.27			
									110			End of boring @109.5'	
									112				
									114				
									116				
									118				

CAD DWG NO:91118240 EMPLOYEE NO: 9834 DATE/TIME: 12/23/96 09:58:34 ACD–12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. – PROPOSED EXPANSION AREA Sheet 1 of 4
Project Location CLINTON, ILLINOIS Project No. 91–118
Boring No. EX–2 Surface Elev. 721.34 Boring Type HSA Completion Depth 109.5
Coordinates: (X) N 4092.30 (Y) E 8556.31 Drilling Contractor SKS & ASSOCIATES
Date Started 12–5–96 Date Completed 12–6–96 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL SLURRY
Surface Conditions CORNFIELD (HARVESTED) If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	60								720.34		CLAYEY SILT (ML); Dark brown, soft, with organics	
									2			SILTY CLAY (CL); Brown mottled with yellow, firm, moist, trace organics	
				0.5									
									4				
2	CS	60		1.0									
									6				
				0.75								grades organics out	
									8				
3	CS	60		0.75									
									10			grades brown mottled with gray, trace gravel	
				1.0									
									12				
									14			grades gray, stiff	
4	CS	60		1.25									
									16				
				1.5									
									18				
5	CS	60											
									20				
									22	699.34		SAND (SP); Gray, loose, moist, fine grained sand, trace silt & clay	
									24				
6	CS	60											
									26				
									28				
7	CS	55											

CAD DWG NO:91118241 EMPLOYEE NO: 9834 DATE/TIME: 12/23/96 10:03:34 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. – PROPOSED EXPANSION AREA Sheet 2 of 4
Project Location CLINTON, ILLINOIS Project No. 91–118
Boring No. EX–2 Surface Elev. 721.34 Boring Type HSA Completion Depth 109.5
Coordinates: (X) N 4092.30 (Y) E 8556.31 Drilling Contractor SKS & ASSOCIATES
Date Started 12–5–96 Date Completed 12–6–96 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL SLURRY
Surface Conditions CORNFIELD (HARVESTED) If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	55										SAND (SP); Gray, loose, moist, fine grained sand, trace silt & clay	
									32				
									34	687.34		SILT (ML); Gray, loose, moist, trace fine grained sand, trace clay	
8	CS	60								686.34		SAND (SP); Gray, loose, saturated, fine grained sand, trace silt & clay	
									36	685.34		SILT (ML); Gray, moist, trace fine sand & clay	
										684.59		SILTY CLAY (CL); Gray, stiff, moist, trace gravel	
				1.5					38				
9	CS	60							40				
				2.5								grades very stiff	
									42				
				2.75					44				
10	CS	60											
				2.75					46				
									48				
				2.5									
11	CS	60							50				
				2.5					52				
										667.84			
									54	667.34		SILT (ML); Gray, loose, moist, trace clay	
12	CS	60										PEAT (Pt); Gray–brown, moist, with silt, trace clay	
									56			grades near black with wood fibers @56.0'	
									58	663.34		CLAYEY SILT (ML); Dark brown, moist, firm	Old organic topsoil
				1.0						662.34		SILTY CLAY (CL); Gray, stiff, moist, trace gravel, high plasticity clay	
13	CS	60		1.25									

CAD DWG NO:91118242 EMPLOYEE NO: 9834 DATE/TIME: 12/23/96 10:07:29 ACD–12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. – PROPOSED EXPANSION AREA — Sheet 3 of 4
Project Location CLINTON, ILLINOIS — Project No. 91–118
Boring No. EX–2 — Surface Elev. 721.34 — Boring Type HSA — Completion Depth 109.5
Coordinates: (X) N 4092.30 (Y) E 8556.31 — Drilling Contractor SKS & ASSOCIATES
Date Started 12–5–96 Date Completed 12–6–96 — Driller TODD SKINNER — Rig No. MOBILE B–57
Logged By J. BERRY — Backfilled (Y/N) Y — Backfill Material BENSEAL SLURRY
Surface Conditions CORNFIELD (HARVESTED) — If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	60										SILTY CLAY (CL); Gray, stiff, moist, trace gravel, high plasticity clay	
				1.5									
									62				Collected geotech. sample from 62'–63'
				2.5								grades gray & green, very stiff	
14	CS	60							64				
												grades gray	
				3.0					66				
				2.75					68				
15	CS	60											
				2.5					70				
									72				
				3.75									
16	CS	60							74				
				4.0+								grades hard	
									76				
				4.0+					78				
17	CS	49											
									80				
				4.0+								3" saturated sand seam at 81.3' (medium to coarse grained)	
									82				
18	CS	58							84				
				4.0+									
									86				
										634.34			
				0.25								PEAT (Pt); Brown, moist, soft	
									88			grades mottled with black @88.2'	
										632.34		SANDY CLAY (CL); Reddish–gray, wet, soft, trace gravel	
19	CS	60		0.5									

CAD DWG NO:91118243 EMPLOYEE NO: 9834 DATE/TIME: 12/23/96 10:12:30 ACD–12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. – PROPOSED EXPANSION AREA Sheet 4 of 4
Project Location CLINTON, ILLINOIS Project No. 91–118
Boring No. EX–2 Surface Elev. 721.34 Boring Type HSA Completion Depth 109.5
Coordinates: (X) N 4092.30 (Y) E 8556.31 Drilling Contractor SKS & ASSOCIATES
Date Started 12–5–96 Date Completed 12–6–96 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL SLURRY
Surface Conditions CORNFIELD (HARVESTED) If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
19	CS	60								630.34		SANDY CLAY (CL); Reddish–gray, wet, soft, trace gravel	
				4.0+								SILTY CLAY (CL); Gray, hard, moist, trace gravel	
									92				Collected geotech. sample from 91'–92'
									94				
20	CS	60											
				4.0+									
									96				Collected geotech. sample from 96'–97'
				4.0+					98				
21	CS	50											
				4.0+					100				
									102				Collected geotech. sample from 102'–103'
				4.0+									
22	CS	60							104				
									106				
									108				Collected geotech. sample from 107'–108'
				4.0+									
									110			End of boring @109.5'	
									112				
									114				
									116				
									118				

CAD DWG NO:91118244 EMPLOYEE NO: 9834 DATE/TIME: 12/23/96 10:15:40 ACD–12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. – PROPOSED EXPANSION AREA — Sheet 1 of 4
Project Location CLINTON, ILLINOIS — Project No. 91–118
Boring No. EX–3 — Surface Elev. 712.00 — Boring Type HSA — Completion Depth 100.0
Coordinates: (X) N 3138.14 (Y) E 8847.01 — Drilling Contractor SKS & ASSOCIATES
Date Started 12–3–96 Date Completed 12–4–96 — Driller TODD SKINNER — Rig No. MOBILE B–57
Logged By J. BERRY — Backfilled (Y/N) Y Backfill Material BENSEAL SLURRY
Surface Conditions GRASS — If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	48								711.50		CLAYEY SILT (OL); Dark brown, soft, moist, with organics	
				0.75					2			SILTY CLAY (CL); Brown, firm, moist, with organics	
				1.0					4			grades trace organics	
2	CS	60							6	706.00			
				0.75								SANDY CLAY (CL); Brown, firm, moist	
									8			grades more sand	
										703.10			
3	CS	60							10			SAND (SP); Brown, loose, moist, fine grained, trace silt	
												grades saturated @11.2'	
										700.30			
									12			SILT (ML); Gray, moist, trace clay	
									14				
4	CS	60										grades with sand	
									16				
									18			2" saturated sand seam @17.9'	
										693.00			
				1.25					20			SILTY CLAY (CL); Dark gray, stiff, moist, trace gravel	
5	CS	60											
				1.5					22				
				1.5					24				
												2" sand seam @24.6'	
6	CS	55		1.75								grades trace sand	
									26				
										685.00			
									28			SAND (SW); Dark gray, medium dense, saturated, medium to fine grained sand	

CAD DWG NO:91118245 EMPLOYEE NO: 9834 DATE/TIME: 12/23/96 13:36:37 ACD–12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. – PROPOSED EXPANSION AREA Sheet 2 of 4
Project Location CLINTON, ILLINOIS Project No. 91–118
Boring No. EX–3 Surface Elev. 712.00 Boring Type HSA Completion Depth 100.0
Coordinates: (X) N 3138.14 (Y) E 8847.01 Drilling Contractor SKS & ASSOCIATES
Date Started 12–3–96 Date Completed 12–4–96 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL SLURRY
Surface Conditions GRASS If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60										SAND (SW); Gray, loose, saturated, fine to coarse grained, trace gravel and clay	
									32				
									34				
				3.0						677.50		SILTY CLAY (CL); Gray, very stiff, moist, trace gravel	
8	CS	48		4.0+					36			grades hard @36.0'	
				2.5					38				
				2.25								grades very stiff @39.0'	
9	CS	58							40				
				2.0					42				Collected geotech. sample from 42.5'–43.5'
				2.0					44				
										667.20		SILT (ML); Gray, saturated, trace fine sand & clay	
10	CS	60								666.50		PEAT (Pt); Brown, firm, moist, trace clay & silt	
				0.75					46				
									48			grades dark brown	
				0.75					50			grades near black	
11	CS	60								661.50		CLAYEY SILT (ML); Dark brown to black, stiff, moist, trace organics	Old organic topsoil
									52				
										659.50		SILTY CLAY (CL); Dark gray, stiff, moist, trace gravel, high plasticity clay	
				1.5					54				Collected geotech. sample from 53.5'–54.5'
12	CS	56							56			1" saturated sand seam @55.8' (medium grained)	
				1.5								1" saturated sand seam @56.4' (medium grained)	
				1.5					58			1" saturated sand seam @58.1' (medium grained)	
										652.20		SILTY SAND (SM); Gray, loose, saturated	

CAD DWG NO:91118246 EMPLOYEE NO: 9834 DATE/TIME: 12/23/96 13:43:09 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. – PROPOSED LANDFILL EXPANSION Sheet 3 of 4
Project Location CLINTON, ILLINOIS Project No. 91–118
Boring No. EX–3 Surface Elev. 712.00 Boring Type HSA Completion Depth 100.0
Coordinates: (X) N 3138.14 (Y) E 8847.01 Drilling Contractor SKS & ASSOCIATES
Date Started 12–3–96 Date Completed 12–4–96 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL SLURRY
Surface Conditions GRASS If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	58								651.30		SILTY SAND (SM); Gray, loose, saturated	
												SILTY CLAY (CL); Gray, hard, moist, trace gravel	
				4.0+					62				
				4.0+					64			1" saturated sand seam @64.3'	
14	CS	60											
				4.0+					66				
				4.0+					68				
				4.0+						643.00		SAND (SW); Gray, loose, saturated, medium grained, with clay	
										642.50			
15	CS	60							70			SILTY CLAY (CL); Gray, hard, moist, trace gravel	
									72				
									74			3" saturated sand seam @74.0' (medium grained)	
16	CS	60		4.0+									
				4.0+					76				
												SANDY SILT (ML); Gray, wet, trace clay, fine grained sand	
										634.30			
									78	634.00		SILT (OL); Dark brown, firm, wet, with organics, trace clay	
										633.00			
				4.0+								SILTY CLAY (CL); Gray, hard, moist, trace gravel	
17	CS	60		4.0+					80				
									82				Collected geotech. sample from 82'–83'
				4.0+									
									84				
18	CS	60											
				4.0+					86				
				4.0+					88				

CAD DWG NO:91118247 EMPLOYEE NO: 9834 DATE/TIME: 12/23/96 13:50:12 ACD–12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. – PROPOSED EXPANSION AREA Sheet 4 of 4
Project Location CLINTON, ILLINOIS Project No. 91–118
Boring No. EX–3 Surface Elev. 712.00 Boring Type HSA Completion Depth 100.0
Coordinates: (X) N 3138.14 (Y) E 8847.01 Drilling Contractor SKS & ASSOCIATES
Date Started 12–3–96 Date Completed 12–4–96 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL SLURRY
Surface Conditions GRASS If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
19	CS	60		4.0+								SILTY CLAY (CL); Gray, hard, moist, trace gravel	
									92				
				4.0+					94				
20	CS	60		4.0+					96				
									98			3" saturated medium to fine grained sand seam @97.8'	
				4.0+									
				2.0						613.00		SANDY CLAY (CL); Gray, firm, moist, trace gravel	
									100	612.50		SILTY CLAY (CL); Gray, firm, moist, trace gravel	
										612.00		End of boring @100.0'	
									102				
									104				
									106				
									108				
									110				
									112				
									114				
									116				
									118				

CAD DWG NO:91118248 EMPLOYEE NO: 9834 DATE/TIME: 12/23/96 13:53:06 ACD–12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-4 Surface Elev. 724.53 Boring Type HSA Completion Depth 94.0'
Coordinates: (X) 5413.35 (Y) 9871.23 Drilling Contractor SKS ENGINEERS, INC.
Date Started 4-6-00 Date Completed 4-6-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL EX-4

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	36								723.53		CLAYEY SILT (ML); Dark brown, stiff, moist, with roots, trace fine sand	
				2.0					2			SILTY CLAY (CL); Light brown mottled orange, very stiff, trace iron oxide staining	
				2.0					4				
2	CS	60		0.5								grades firm	
									6			3" wet SAND & GRAVEL seam @6'	
				0.5					8				
				1.0						716.03		SILTY CLAY (CL); Brown, stiff, moist, trace gravel	
3	CS	60							10				
				1.5									
									12			grades mottled gray	
				1.5						711.53			
				1.5					14			SILTY CLAY (CL); Gray, stiff, moist, trace gravel	
4	CS	60											
				1.5					16				
				1.75					18	706.33			
												SAND (SW); Gray, dense, wet to saturated, fine to medium grained, trace silt	
5	CS	60							20				
										703.03			
				4.0+					22			SILTY CLAY (CL); Gray, hard, moist, trace gravel & fine sand	
				4.0+					24				
6	CS	60								700.03			
				4.0+						699.43		SAND (SP); Gray, dense, saturated, medium grained, trace silt	
									26			SILTY CLAY (CL); Gray, hard, moist, trace gravel 2" sand seam @26.5'	
				4.0+					28				
7	CS	60											

CAD DWG NO:91118473 EMPLOYEE NO: 9834 DATE/TIME: 05/09/00 08:04 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-4 Surface Elev. 724.53 Boring Type HSA Completion Depth 94.0'
Coordinates: (X) 5413.35 (Y) 9871.23 Drilling Contractor SKS ENGINEERS, INC.
Date Started 4-6-00 Date Completed 4-6-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL EX-4

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60										SILTY CLAY (CL); Gray, hard, moist, trace gravel	
				4.0+									
									32				
							X			691.53		SAND (SW); Gray, dense, saturated, fine to coarse grained, trace silt & gravel	Collected sample for grain size.
8	CS	60							34				
									36			grades trace cobbles @36'	
									38				
										685.33			Difficult drilling
9	CS	3							40			SILTY CLAY (CL); Gray, hard, moist, trace gravel	
									42				
									44			grades stiff	
10	CS	60		1.5									
				1.5					46				
				1.75					48				
												grades hard	
11	CS	60		4.0+					50				
				4.0+					52				
										671.03			
12	CS	60		1.25					54	670.03		SILTY CLAY/CLAYEY SILT (CL-ML); Dark brown, stiff, moist, trace fine sand & peat (old organic topsoil)	
									56			PEAT (Pt); Brown, dense, moist, wood fragments, trace fine grained sand & clay	
				1.5					58	666.03			
13	CS	60										SILTY CLAY (CH); Gray, stiff, moist, trace gravel	

CAD DWG NO:91118474 EMPLOYEE NO: 9834 DATE/TIME: 11/07/00 10:15 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-4 Surface Elev. 724.53 Boring Type HSA Completion Depth 94.0'
Coordinates: (X) 5413.35 (Y) 9871.23 Drilling Contractor SKS ENGINEERS, INC.
Date Started 4-6-00 Date Completed 4-6-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL EX-4

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	60		1.5								SILTY CLAY (CH); Gray, stiff, moist, trace gravel	
									62				
				1.5								grades blue-gray @62.8'	
												grades with sand @63.3'	
									64	660.78		SILTY CLAY (CL); Gray, hard, moist, trace gravel	Pushed Shelby tube from 64'-66'.
14	CS	60											
									66				Collected geotech. sample from 66'-67'.
				4.0+									Collected TOC and CEC sample from 67'.
									68				
				4.0+									
15	CS	60							70				
				4.0+									
									72				
				4.0+									
									74				
16	CS	60											
				4.0+					76				
									78				
				4.0+									
17	CS	60											Pushed Shelby tube from 79'-81'.
				4.0+					80				Collected geotech. sample from 81'-82'.
									82				Collected TOC and CEC sample from 82'.
										641.93		SANDY CLAY (CL); Gray, hard, moist, trace gravel	
										641.53		SILTY CLAY (CL); Gray, hard, moist, trace gravel	
				4.0+					84				
18	CS	58											
				4.0+					86	638.28			
												SAND (SP); Gray, dense, saturated, fine grained, with silt, trace medium to coarse grained sand	Collected geotech. sample from 86.5'-87.5' for grain size.
									88				
										635.53			
19	CS	56										SILTY CLAY (CL); Gray, hard, moist, trace gravel	

CAD DWG NO:91118475 EMPLOYEE NO: 9834 DATE/TIME: 05/09/00 08:56 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 4 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-4 Surface Elev. 724.53 Boring Type HSA Completion Depth 94.0'
Coordinates: (X) 5413.35 (Y) 9871.23 Drilling Contractor SKS ENGINEERS, INC.
Date Started 4-6-00 Date Completed 4-6-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL EX-4

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
19	CS	56										SILTY CLAY (CL); Gray, hard, moist, trace gravel	
				4.0+									
									92				
				4.0+									
									94	630.53		End of boring @94.0'	
									96				
									98				
									100				
									102				
									104				
									106				
									108				
									110				
									112				
									114				
									116				
									118				

CAD DWG NO:91118476 EMPLOYEE NO: 9834 DATE/TIME: 05/09/00 08:39 ACAD-14.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, ILLINOIS Well #: EX-4

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-4

State Plane Coordinate: (X) N 5413.35 (Y) E 9871.23 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SHIVE-HATTERY ILL. Registration #: 035-002809

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: 4 1/4" I.D. HSA Drilling Fluids (type): ___

Logged By: J. BERRY Date Started: 4-6-00 Date Finished: 4-6-00

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: CEMENT-BENTONITE GROUT

Installation Method: TREMIE PIPE

Type of Bentonite Seal: BENSEAL SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE PIPE

Setting Time: 30 MINUTES

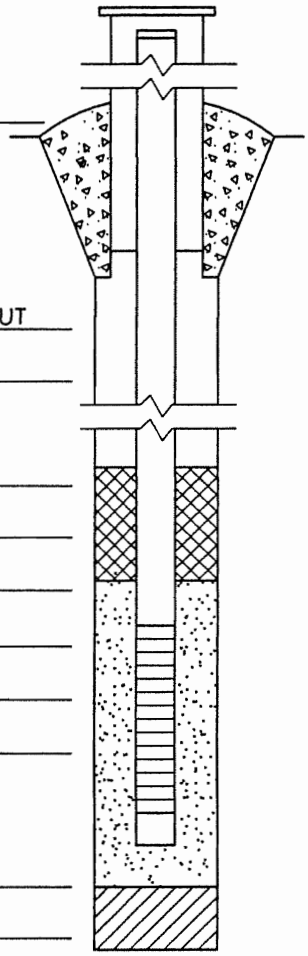
Type of Sand Pack: SILICA SAND

Grain Size: 20-40 MESH

Installation Method: POURED, SURGED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
727.67	3.14	Top of Protective Casing
727.33	2.80	Top of Riser Pipe
724.53	0.00	Ground Surface
721.53	3.00	Top of annular sealant
646.33	78.20	Top of Seal
643.33	81.20	Top of Sand Pack
641.03	83.50	Top of Screen
631.38	93.15	Bottom of Screen
631.03	93.50	Bottom of Well
631.03	93.50	Top of Backfill (If Applicable)
630.53	93.50	Bottom of Borehole

Casing Measurements

Diameter of borehole (in)	8.0
ID of riser pipe (in)	2.0
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	86.30
Screen length (1st slot to last slot, ft)	9.65
Bottom of screen to end cap (ft)	0.35
Total length of casing (riser+screen+end cap) (ft)	96.30
Screen slot size	0.010

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 23.11 (feet below ground surface)				X	
Riser pipe from 23.11 to 83.50 (feet below ground surface)	X				
Screen	X				

CAD DWG NO:91118477 EMPLOYEE NO: 9834 DATE/TIME: 05/09/00 09:17 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-5 Surface Elev. 727.97 Boring Type HSA Completion Depth 92.23'
Coordinates: (X) N 3975.99 (Y) E 9852.94 Drilling Contractor SKS ENGINEERS, INC.
Date Started 4-4-00 Date Completed 4-4-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL EX-5

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	48								727.22		CLAYEY SILT (ML); Dark brown, stiff, moist, with root fragments	
				1.25								SILTY CLAY (CL); Light brown mottled gray, stiff, moist, trace fine sand	
									2				
				1.25									
2	CS	60		0.5					4				
										722.22			
				0.5					6			SILTY CLAY (CL); Brown, firm, moist, trace gravel	
				0.5					8				
3	CS	60											
				1.0					10			grades stiff	
									12				
				1.0									
4	CS	60							14			grades mottled gray	
				1.0									
									16				
				1.0								grades gray	
									18				
5	CS	60		1.0						708.67		3" CLAYEY SILT seam @19.3'	
									20				
				1.0									
									22				
				1.0									
6	CS	50							24				
				1.0									
									26				
				1.25									
									28				
7	CS	60											

CAD DWG NO:91118478 EMPLOYEE NO: 9834 DATE/TIME: 05/09/00 09:42 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-5 Surface Elev. 727.97 Boring Type HSA Completion Depth 92.23'
Coordinates: (X) N 3975.99 (Y) E 9852.94 Drilling Contractor SKS ENGINEERS, INC.
Date Started 4-4-00 Date Completed 4-4-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL EX-5

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60										SILTY CLAY (CL); Gray, stiff, moist, trace gravel	
				3.0								grades very stiff	
									32				
				4.0+									
8	CS	55							34			grades hard	
				4.0+									
									36				
				4.0+									
				4.0+					38				
9	CS	42											
				1.5					40			grades stiff	
									42				
				1.5									
10	CS	58							44				
				1.5									
									46				
				1.25									
									48				
11	CS	60											
				2.25					50			grades very stiff	
									52				
				2.5									
									54				
12	CS	60		0.5						673.57		CLAYEY SILT (ML); Gray, firm, moist, with organics (wood fragments)	
									56				
				0.5									
												grades wood fragments out	
									58				
13	CS	60											

CAD DWG NO:91118479 EMPLOYEE NO: 9834 DATE/TIME: 05/09/00 09:14 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-5 Surface Elev. 727.97 Boring Type HSA Completion Depth 92.23
Coordinates: (X) N 3975.99 (Y) E 9852.94 Drilling Contractor SKS ENGINEERS, INC.
Date Started 4-4-00 Date Completed 4-4-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL EX-5

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	60									CLAYEY SILT (ML); Gray, firm, moist, trace fine sand & gravel	
									666.47			
				1.25				62			SILTY CLAY (CL); Blue gray, stiff, moist, trace sand & gravel	
								64				
14	CS	60		1.5								
				3.5				66			grades light gray, very stiff	
								68	659.72			
									659.17		SAND (SW); Gray, dense, wet, trace clay & silt, fine to medium grained sand	
15	CS	60						70			SILTY CLAY (CL); Light gray, very stiff, moist, trace gravel	Pushed Shelby tube from 69'-71'
				2.5								Collected geotech. sample from 71'-72'
								72				Collected TOC and CEC sample from 72'-73'
				2.5				74				
16	CS	60									3" wet SILTY SAND (SM) @75.3'	
								76				
								78			4" wet SILT (ML) @77.6'	
				4.0+							grades hard	
17	CS	60						80				Pushed Shelby tube from 79'-81'
				4.0+								Collected geotech. sample from 81'-82'
								82				
								84				
18	CS	60		4.0+								
				4.0+				86				
									640.97		SAND (SW); Gray, very dense, saturated, fine to coarse grained, trace gravel, silt, & clay	Collected geotech. sample from 87'-89'
								88				
19	CS	36										

CAD DWG NO:91118480 EMPLOYEE NO: 9834 DATE/TIME: 11/07/00 10:50 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 4 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-5 Surface Elev. 727.97 Boring Type HSA Completion Depth 92.23'
Coordinates: (X) N 3975.99 (Y) E 9852.94 Drilling Contractor SKS ENGINEERS, INC.
Date Started 4-4-00 Date Completed 4-4-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL EX-5

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
19	CS	36								637.47		SAND (SW); Gray, very dense, saturated, fine to coarse grained, trace silt & clay	Collected geotech. samples from 90.5'-91.5'
									92	635.74		SILTY CLAY (CL); Gray, hard, moist, trace gravel	Collected samples for TOC & CEC @91.5'
												End of boring @92.23'	
									94				
									96				
									98				
									100				
									102				
									104				
									106				
									108				
									110				
									112				
									114				
									116				
									118				

CAD DWG NO:91118481 EMPLOYEE NO: 9834 DATE/TIME: 11/07/00 10:11 ACAD-14.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, ILLINOIS Well #: EX-5

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-5

State Plane Coordinate: (X) N 3975.99 (Y) E 9852.94 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SHIVE-HATTERY ILL. Registration #: 035-002809

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: 4 1/4" I.D. HSA Drilling Fluids (type): ___

Logged By: J. BERRY Date Started: 4-4-00 Date Finished: 4-5-00

Notes: ___

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
730.73	2.76	Top of Protective Casing
730.36	2.39	Top of Riser Pipe
727.97	0.00	Ground Surface
724.97	3.00	Top of annular sealant
651.47	76.50	Top of Seal
648.47	79.50	Top of Sand Pack
646.00	81.97	Top of Screen
636.32	91.65	Bottom of Screen
635.97	92.00	Bottom of Well
635.97	92.00	Top of Backfill (If Applicable)
635.74	92.23	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: CEMENT-BENTONITE GROUT

Installation Method: TREMIE PIPE

Type of Bentonite Seal: BENSEAL SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE PIPE

Setting Time: 30 MINUTES

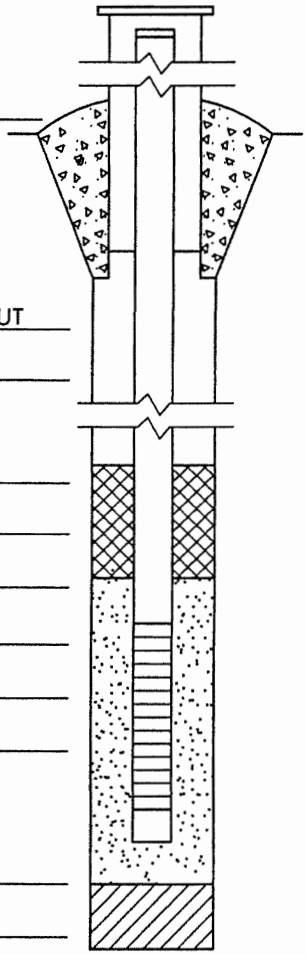
Type of Sand Pack: SILICA SAND

Grain Size: 20-40 MESH

Installation Method: POURED, SURGED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 71.68 (feet below ground surface)				X	
Riser pipe from 71.68 to 81.97 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.0
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	84.36
Screen length (1st slot to last slot, ft)	9.68
Bottom of screen to end cap (ft)	0.35
Total length of casing (riser+screen+end cap) (ft)	94.39
Screen slot size	0.010

CAD DWG NO:91118482 EMPLOYEE NO: 9834 DATE/TIME: 05/09/00 10:04 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 2
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-6 Surface Elev. 694.24 Boring Type HSA Completion Depth 58.8'
Coordinates: (X) N 2479.10 (Y) E 9798.27 Drilling Contractor SKS ENGINEERS, INC.
Date Started 4-3-00 Date Completed 4-3-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL EX-6

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	48		0.5						693.49		CLAYEY SILT (ML); Black, soft, moist, with root fragments	
				1.5					2			SILTY CLAY (CL); Light brown, stiff, moist, trace gravel & root fragments	
				2.5					4			grades very stiff	
2	CS	60											
				3.0					6				
				3.0					8				
3	CS	60											
				3.5					10				
				4.0+					12			grades hard	
4	CS	60		4.0+					14			grades dark brown	
				3.0					16			grades mottled gray, very stiff	
				3.0					18			grades gray, stiff	
5	CS	14		1.0					20				
				1.0					22				
				1.0					24	669.84		CLAYEY SILT (ML); Gray-black, stiff, moist, trace peat	
6	CS	60							26	668.24		PEAT (Pt); Brown, moist, trace clay & fine sand	
				0.5					28	666.24		SILTY CLAY (CL); Gray, soft, moist, trace sand	
7	CS	60											

CAD DWG NO:91118483 EMPLOYEE NO: 9834 DATE/TIME: 11/07/00 10:26 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 2
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-6 Surface Elev. 694.24 Boring Type HSA Completion Depth 58.8'
Coordinates: (X) N 2479.10 (Y) E 9798.27 Drilling Contractor SKS ENGINEERS, INC.
Date Started 4-3-00 Date Completed 4-3-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL EX-6

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60		1.0								SILTY CLAY (CL); Gray, stiff, moist, trace gravel	Collected TOC and CEC sample at 31'
				1.0					32			grades blue-gray	Pushed Shelby tube from 32'-34'
8	CS	60		1.0					34				Collected geotech. sample from 34'-35'
				1.0					36			grades light gray	
				2.25					38			grades very stiff	
9	CS	60							40				
				2.5						653.24		SILTY SAND (SM); Gray, dense, wet, trace clay	
									42			grades more silty	
				2.5						651.24		SILTY CLAY (CL); Gray, very stiff, moist, trace gravel	
10	CS	60		4.0+					44			grades hard, with sand & gravel	
				4.0+					46	648.74 648.24		SAND (SW); Gray, dense, wet, medium to fine grained, trace clay & silt	
				4.0+					48			SILTY CLAY (CL); Gray, hard, wet, trace gravel	
11	CS	55							50				Pushed Shelby tube from 49'-51'
				1.5								grades stiff	Collected geotech. sample from 51'-52'
				1.0					52				Collected TOC and CEC sample from 52'-53'
12	CS	48							54	640.59		SAND (SW); Gray, very dense, wet, fine to medium grained, trace clay & silt	
									56			grades with coarse grained sand	Collected geotech. sample from 55'-56'
				4.0+					58	636.64 635.44		SILTY CLAY (CL); Gray, hard, moist, trace gravel	
												End of boring @58.8'	

CAD DWG NO:91118484 EMPLOYEE NO: 9834 DATE/TIME: 11/07/00 10:11 ACAD-14.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, ILLINOIS Well #: EX-6

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-6

State Plane Coordinate: (X) N 2479.10 (Y) E 9798.27 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SHIVE-HATTERY ILL. Registration #: 035-002809

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: 4 1/4" I.D. HSA Drilling Fluids (type): ___

Logged By: J. BERRY Date Started: 4-3-00 Date Finished: 4-3-00

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: CEMENT-BENTONITE GROUT

Installation Method: TREMIE PIPE

Type of Bentonite Seal: BENSEAL SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE PIPE

Setting Time: 45 MINUTES

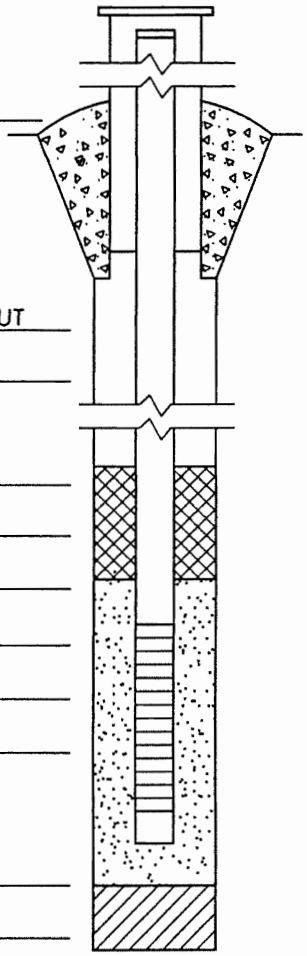
Type of Sand Pack: SILICA SAND

Grain Size: 20-40 MESH

Installation Method: POURED, SURGED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
697.15	2.91	Top of Protective Casing
696.67	2.43	Top of Riser Pipe
694.24	0.00	Ground Surface
691.24	3.00	Top of annular sealant
651.74	42.50	Top of Seal
648.74	45.50	Top of Sand Pack
646.37	47.87	Top of Screen
636.69	57.55	Bottom of Screen
636.34	57.90	Bottom of Well
636.34	57.90	Top of Backfill (If Applicable)
635.44	58.80	Bottom of Borehole

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.0
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	50.30
Screen length (1st slot to last slot, ft)	9.68
Bottom of screen to end cap (ft)	0.35
Total length of casing (riser+screen+end cap) (ft)	60.33
Screen slot size	0.010

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 37.60 (feet below ground surface)				X	
Riser pipe from 37.60 to 47.87 (feet below ground surface)	X				
Screen	X				

CAD DWG NO:91118485 EMPLOYEE NO: 9834 DATE/TIME: 05/09/00 10:00 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-7 Surface Elev. 691.80 Boring Type HSA Completion Depth 69.2'
Coordinates: (X) N 2485.65 (Y) E 7850.33 Drilling Contractor SKS ENGINEERS, INC.
Date Started 3-30-00 Date Completed 3-30-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions CINDERS (RAILROAD R.O.W.) If "No" explain INSTALLED MONITORING WELL EX-7

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	0										CLAYEY SILT (ML); Dark brown to black, soft, moist, with cinders & fine sand, trace cobbles	
									2	689.30		SILTY CLAY (CL); Light brown, soft, moist to wet, trace gravel	
2	CS	60		0.5					4				
				1.0					6			grades stiff, moist	
				1.0					8				
3	CS	60							10				
				1.25									
				2.5					12			grades very stiff	
4	CS	60		2.75					14				
				2.75					16			grades dark brown mottled gray	
5	CS	14							18				
				2.25					20			grades gray	
									22				
												wet SILTY SAND from 23.8' to 24.2'	
6	CS	60		0.5					24	667.55		CLAYEY SILT (ML); Gray, soft, moist to wet, trace fine sand & wood fragments	
										666.40		PEAT (Pt); Gray-brown, moist, with clay, trace silt & fine sand	
									26				
									28	663.05		SILTY CLAY (CL); Black, soft, moist, with organics, trace fine sand & gravel (old topsoil)	
7	CS	60		0.25									

CAD DWG NO:91118486 EMPLOYEE NO: 9834 DATE/TIME: 05/09/00 10:02 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 3
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-7 Surface Elev. 691.80 Boring Type HSA Completion Depth 69.2'
Coordinates: (X) N 2485.66 (Y) E 7850.33 Drilling Contractor SKS ENGINEERS, INC.
Date Started 3-30-00 Date Completed 3-30-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions CINDERS (RAILROAD R.O.W.) If "No" explain INSTALLED MONITORING WELL EX-7

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	36										SILTY CLAY (CL); Gray, very stiff, moist, trace gravel (very silty)	
				2.0									Collected TOC and CEC sample from 31'.
									32				
8	ST	24											Pushed Shelby tube from 32'-34'.
									34				
9	CS	60		2.0								SILTY CLAY (CL); Blue-gray, very stiff, moist, trace fine sand & gravel	
									36				Collected geotech. sample from 36'-37'.
				2.5									
				3.5					38			grades hard	
				4.0+									
10	CS	60							40			grades gray	
				4.0+					42				
										648.30			
									44	647.90		SAND (SP); Gray, medium dense, saturated, trace silt, fine grained	
11	CS	36		4.0+									
												SILTY CLAY (CL); Gray, hard, moist, trace gravel & fine sand	Collected TOC and CEC sample from 45'.
				4.0+					46				Collected geotech. sample from 46'-47'.
12	ST	12											Pushed Shelby tube from 47'-49'.
				4.0+					48				
13	CS	52							50				
										641.10		SAND (SW); Gray, dense, saturated, trace silt & clay, fine to coarse grained	
									52			grades fine to medium grained	Collected geotech. sample from 52'-54'.
14	CS	36							54				
									56	635.80		SILTY CLAY (CL); Gray, very stiff, moist, trace gravel & sand	
				2.5									
15	CS	24							58			grades hard	
				4.0+									
16	CS	60		4.0+									

CAD DWG NO:91118487 EMPLOYEE NO: 9834 DATE/TIME: 05/09/00 10:35 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-7 Surface Elev. 691.80 Boring Type HSA Completion Depth 69.2'
Coordinates: (X) N 2485.65 (Y) E 7850.33 Drilling Contractor SKS ENGINEERS, INC.
Date Started 3-30-00 Date Completed 3-30-00 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions CINDERS (RAILROAD R.O.W.) If "No" explain INSTALLED MONITORING WELL EX-7

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
16	CS	60										SILTY CLAY (CL); Gray, hard, moist, trace gravel	
				4.0+									
									62				
				4.0+									
17	CS	60							64				
									66				
									68				
										622.60		End of boring @69.2'	
									70				
									72				
									74				
									76				
									78				
									80				
									82				
									84				
									86				
									88				

CAD DWG NO:91118488 EMPLOYEE NO: 9834 DATE/TIME: 05/09/00 11:14 ACAD-14.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, ILLINOIS Well #: EX-7

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-7

State Plane Coordinate: (X) N 2485.65 (Y) E 7850.33 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SHIVE-HATTERY ILL. Registration #: 035-002809

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: 4 1/4" I.D. HSA Drilling Fluids (type): ___

Logged By: J. BERRY Date Started: 3-30-00 Date Finished: 3-31-00

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: CEMENT-BENTONITE GROUT

Installation Method: TREMIE PIPE

Type of Bentonite Seal: BENSEAL SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE PIPE

Setting Time: 30 MINUTES

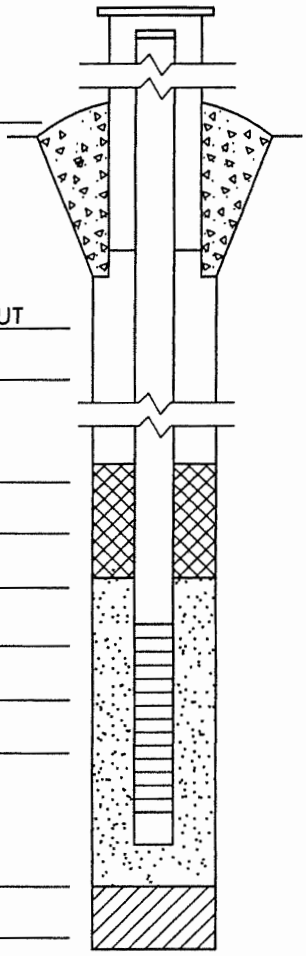
Type of Sand Pack: SILICA SAND

Grain Size: 20-40 MESH

Installation Method: POURED, SURGED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
694.93	3.13	Top of Protective Casing
694.60	2.80	Top of Riser Pipe
691.80	0.00	Ground Surface
688.80	3.00	Top of annular sealant
649.30	42.50	Top of Seal
646.30	45.50	Top of Sand Pack
643.91	47.89	Top of Screen
634.15	57.65	Bottom of Screen
633.80	58.00	Bottom of Well
633.80	58.00	Top of Backfill (If Applicable)
622.60	69.20	Bottom of Borehole

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 37.62 (feet below ground surface)				X	
Riser pipe from 37.62 to 47.89 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.0
ID of riser pipe (in)	2.0
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	50.69
Screen length (1st slot to last slot, ft)	9.76
Bottom of screen to end cap (ft)	0.35
Total length of casing (riser+screen+end cap) (ft)	60.80
Screen slot size	0.010

CAD DWG NO:91118489 EMPLOYEE NO: 9834 DATE/TIME: 05/09/00 11:52 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC.–PROPOSED EXPANSION Sheet 1 of 2
Project Location CLINTON, IL. Project No. 91118.02
Boring No. EX–8 Surface Elev. 654.00 Boring Type HSA Completion Depth 44.50'
Coordinates: (X) N 1723.89 (Y) E 10205.48 Drilling Contractor SKS ENGINEERS, INC.
Date Started 03/29/01 Date Completed 03/29/01 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL EX–8D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	40										CLAYEY SILT (ML); [Topsoil] Black, moist, with root fragments, trace sand	
									2				
									4				
2	CS	60											
										649.00		SILTY CLAY (CL); Brown, wet, with gravel & sand	
									6	648.00			
				1.75								SILTY CLAY (CL); Light brown, stiff, moist, trace gravel	
				+4.0								grades hard	
				+4.0					8				
3	CS	60											
				+4.0					10			grades gray	
									12				
				+4.0									
				1.0						641.00		SANDY CLAY (CL); Gray, stiff, moist to wet, trace gravel	
									14	640.00			
4	CS	20										GRAVELLY SAND, Gray; fine to coarse sand; with small grained gravel, with clay	
									16			SAND (SW); Gray, medium to coarse, trace gravel and silt	
5	CS	30											
									18				
6	CS	60								634.80		SILTY CLAY (CL); Gray,hard, moist, trace gravel	
				+4.0					20				
									22				
				+4.0						631.00		CLAYEY SILT (ML); Gray, hard, moist to wet; trace organics, sand seam 1" @ 23.75	
									24	629.60			
7	CS	60		+4.0								SILTY CLAY (CL); Gray; hard; moist; trace gravel	
									26				
				+4.0									
									28				
				+4.0									
8	CS	60											

CAD DWG NO:91118568 EMPLOYEE NO: 89525 DATE/TIME: 05/03/01 11:02 ACAD–14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC.–PROPOSED EXPANSION — Sheet 2 of 2

Project Location CLINTON, IL. — Project No. 91118.02

Boring No. EX–8 — Surface Elev. 654.00 — Boring Type HSA — Completion Depth 44.50'

Coordinates: (X) N 1723.89 (Y) E 10205.48 — Drilling Contractor SKS ENGINEERS, INC.

Date Started 03/29/01 Date Completed 03/29/01 — Driller TODD SKINNER — Rig No. MOBILE B–57

Logged By JOHN BERRY — Backfilled (Y/N) N Backfill Material

Surface Conditions BARE GROUND — If "No" explain INSTALLED MONITORING WELL EX–8D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
9	CS	60		+4.0								SILTY CLAY (CL); Gray, hard, moist; trace gravel	
									32				
				+4.0									
									34				
10	CS	60		+4.0									
										618.50		SAND (SW); Gray, saturated, fine to coarse grain trace gravel & silt	
									36				
									38	616.00		SILTY CLAY (CL); Gray; hard; moist; trace gravel	
				+4.0									
11	CS	60							40				
				+4.0					42				
				+4.0					44				
										609.50		End of boring @44.50	
									46				
									48				
									50				
									52				
									54				
									56				
									58				

CAD DWG NO:91118569 EMPLOYEE NO: DATE/TIME: 05/03/01 11:52 ACAD–14.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118.02 Project Location: CLINTON, ILLINOIS Well #: EX-8D

Project Name: CLINTON LANDFILL, INC. PROPOSED EXPANSION Borehole #: EX-8

State Plane Coordinate: (X) N 1723.89 (Y) E 10205.48 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HSA Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 03/29/01 Date Finished: 03/29/01

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: PELLETS
(Granular, Pellet, Slurry)

Installation Method: POURED

Setting Time: 30 MINUTES

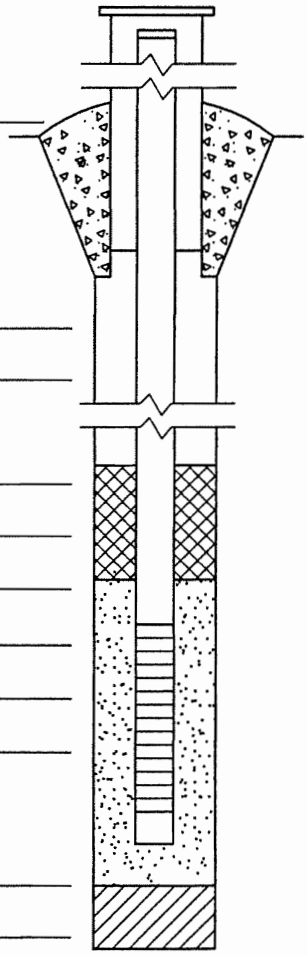
Type of Sand Pack: SILICA

Grain Size: 20 - 40 MESH

Installation Method: POURED, SURGED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
656.93	2.93	Top of Protective Casing
656.59	2.59	Top of Riser Pipe
654.00	0.00	Ground Surface
651.00	3.00	Top of annular sealant
625.80	28.20	Top of Seal
622.80	31.20	Top of Sand Pack
620.65	33.35	Top of Screen
610.88	43.12	Bottom of Screen
610.84	43.16	Bottom of Well
610.84	43.16	Top of Backfill (If Applicable)
609.50	44.50	Bottom of Borehole

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 12.26 (feet below ground surface)				X	
Riser pipe from 12.26 to 33.35 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	35.94
Screen length (1st slot to last slot, ft)	9.77
Bottom of screen to end cap (ft)	0.04
Total length of casing (riser+screen+end cap) (ft)	45.75
Screen slot size	0.010

CAD DWG NO:91118572 EMPLOYEE NO: 89525 DATE/TIME: 05/03/01 09:41 ACAD-14.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118.02 Project Location: CLINTON, ILLINOIS Well #: EX-8S

Project Name: CLINTON LANDFILL, INC. PROPOSED EXPANSION Borehole #: EX-8

State Plane Coordinate: (X) N 1728.82 (Y) E 10203.08 (or) Latitude: ___ ° ___ ' ___ " Longitude: ___ ° ___ ' ___ "

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HSA Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 03/29/01 Date Finished: 03/29/01

Notes: ___

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
657.15	3.05	Top of Protective Casing
656.81	2.71	Top of Riser Pipe
654.10	0.00	Ground Surface
651.10	3.00	Top of annular sealant
646.10	8.00	Top of Seal
644.10	10.00	Top of Sand Pack
641.52	12.58	Top of Screen
631.64	22.46	Bottom of Screen
631.60	22.50	Bottom of Well
		Top of Backfill (If Applicable)
631.60	22.5	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: PELLETS
(Granular, Pellet, Slurry)

Installation Method: POURED

Setting Time: 35 MINUTES

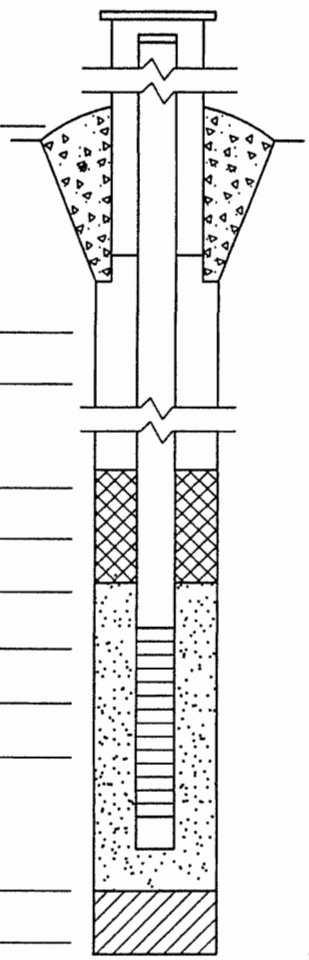
Type of Sand Pack: SILICA

Grain Size: 20 - 40 MESH

Installation Method: POURED, SURGED

Type of Backfill Material: N/A
(If Applicable)

Installation Method: ___



Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 2.34 (feet below ground surface)				X	
Riser pipe from 2.34 to 12.58 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	15.29
Screen length (1st slot to last slot, ft)	9.88
Bottom of screen to end cap (ft)	0.04
Total length of casing (riser+screen+end cap) (ft)	25.21
Screen slot size	0.010

CAD DWG NO:91118573 EMPLOYEE NO: 89525 DATE/TIME: 05/03/01 10:54 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC.–PROPOSED EXPANSION Sheet 1 of 2
Project Location CLINTON, IL. Project No. 91118.02
Boring No. EX–9 Surface Elev. 648.30 Boring Type HSA Completion Depth 44.50'
Coordinates: (X) N 1771.449 (Y) E 7915.36 Drilling Contractor SKS ENGINEERS, INC.
Date Started 03/28/01 Date Completed 03/28/01 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By JOHN BERRY Backfilled (Y/N) Y Backfill Material
Surface Conditions BARE GROUND If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	45										CLAYEY SILT (ML); Dark brown, moist, trace gravel	
										646.80			
				1.0					2			SANDY CLAY (CL); Light brown, stiff; moist	
									4	644.30			
2	CS	43										CLAYEY SAND (SC); Brown, moist, fine to med. grained sand, trace gravel	
									6			grades with more sand	
									8	640.3			
												CLAYEY SILT (ML); Black; moist; trace organics (old organic topsoil)	
3	CS	53								638.80			
				0.75					10			SILTY CLAY (CL); Light brown mottled gray; stiff to firm; trace find sand & gravel	
				1.0					12				
4	CS	60		1.0					14				
										632.80			
									16			CLAYEY SILT (ML); Gray, wet; trace sand	
										631.80			
												SANDY SILT (ML); Gray; wet	
									18			grades with more sand	
										629.80			
5	CS	30										SAND (SW); Gray, saturated, fine to med. grained, trace silt	
									20				
									22				
6	CS	30										grades fine to coarse; trace gravel & silt	
									24	624.30			
7	CS	20										GRAVELLY SAND (GW); Gray, wet, with clay, trace silt	
									26				
8	CS	30								621.80			
												SILTY SAND (SM); Gray; fine grained sand, saturated	
									28			grades with more silt	
										619.30		CLAYEY SILT (ML); Gray; hard; moist to damp;	
9	CS	60		+4.0						618.80		trace gravel; laminated	

CAD DWG NO:91118570 EMPLOYEE NO: 89525 DATE/TIME: 05/03/01 11:33 ACAD–14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC.–PROPOSED EXPANSION Sheet 2 of 2
Project Location CLINTON, IL. Project No. 91118.02
Boring No. EX–9 Surface Elev. 648.30 Boring Type HSA Completion Depth 44.50'
Coordinates: (X) N 1779.49 (Y) E 7915.36 Drilling Contractor SKS ENGINEERS, INC.
Date Started 03/28/01 Date Completed 03/28/01 Driller TODD SKINNER Rig No. MOBILE B–57
Logged By JOHN BERRY Backfilled (Y/N) Y Backfill Material STET
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL EX–9 6' SOUTH

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
9	CS	60		+4.0								SILTY CLAY (CL); Gray, hard, moist; trace gravel	
									32				
				+4.0					34				
10	CS	60											
				+4.0					36				
									38				
11	CS	60		+4.0					40				
				+4.0					42				
									44	603.80		End of boring @44.50	
									46				
									48				
									50				
									52				
									54				
									56				
									58				

CAD DWG NO:91118571 EMPLOYEE NO: 89525 DATE/TIME: 05/03/01 11:28 ACAD–14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL NO.3 — Sheet 1 of 2
Project Location CLINTON, IL. — Project No. 91118.02
Boring No. EX-10 — Surface Elev. 711.2 — Boring Type HSA — Completion Depth 49.10'
Coordinates: (X) N 5207.17 (Y) E 8049.41 — Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/11/01 — Date Completed 12/11/01 — Driller TODD SKINNER — Rig No. MOBILE B-57
Logged By JOHN BERRY — Backfilled (Y/N) N — Backfill Material
Surface Conditions SILTY CLAY — If "No" explain INSTALLED PIEZOMETER EX-10

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	47										SILTY CLAY (CL); Dark brown, stiff, moist, with root fragments	
				1.5									
									2				
				+4.0								grades yellow-brown and hard with less clay	
									4	707.20		SILT (ML); Yellow-brown, hard, dry (little moisture)	
2	CS	58								706.20			
												CLAYEY SILT (ML); Yellow-brown, hard, dry, trace gravel	
				+4.0					6				
												grades mottled gray with more clay	
				+4.0					8				
3	CS	50											
									10	700.95		SILT (ML); Yellow-brown, hard, dry, trace fine sand	pushed shelby tube from 10.5' to 11.5'
				+4.0						699.70			
									12	698.95		CLAYEY SILT (ML); Yellow-brown, hard, dry, trace gravel	collected sample from 12.5' to 13.5' for geotechnical tests
				+4.0								SILTY CLAY (CL); Gray, hard, moist, trace gravel	
									14				
4	CS	60											
				+4.0					16				
									18				
				3.25									
5	CS	60		2.75					20				
												grades stiff	
				1.5					22				
				1.5					24				
6	CS	30											
				1.5					26				
				1.5								grades with sand	
									28				
7	CS	60											

CAD DWG NO:91118676 EMPLOYEE NO: 89525 DATE/TIME: 01/28/02 11:47 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL NO.3 — Sheet 2 of 2
Project Location CLINTON, IL. — Project No. 91118.02
Boring No. EX-10 — Surface Elev. 711.20 — Boring Type HSA — Completion Depth 49.10'
Coordinates: (X) N 5207.17 (Y) E 8049.41 — Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/11/01 Date Completed 12/11/01 — Driller TODD SKINNER — Rig No. MOBILE B-57
Logged By JOHN BERRY — Backfilled (Y/N) N Backfill Material
Surface Conditions SILTY CLAY — If "No" explain INSTALLED PIEZOMETER EX-10

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7cont.	CS	60		2.0								SILTY CLAY (CL); Gray, stiff, moist; trace gravel	
	ST												pushed shelby tube from 31' to 33'
									32				
				1.25									
									34				
8	CS	60											
				1.75									
									36				
				1.75									
									38				
9	ST												pushed shelby tube from 39' to 41'
									40				split spoon from 41' to 43'
										670.20			
10	SS	24	38							699.70		CLAYEY SILT (ML); Brown-black, very stiff, moist with organics, trace fine sand	
									42				
												PEAT (OL); Brown-black, moist, some clay, trace fine sand	
11	CS	12											
									44				
12	CS	60								666.70			
										666.20		ORGANIC SILT (OL); Black, moist, trace clay	
				1.5								SILTY CLAY (CL); Blue-gray, moist, stiff to very stiff, trace fine sand and gravel	
				2.25					46				
									48				
				1.25									
										662.10		End of boring @49.10'	
									50				
									52				
									54				
									56				
									58				

CAD DWG NO:91118677 EMPLOYEE NO: 89525 DATE/TIME: 01/28/02 11:31 ACAD-14.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118.02 Project Location: CLINTON, ILLINOIS Well #: EX-10

Project Name: CLINTON LANDFILL, INC. PROPOSED EXPANSION Borehole #: EX-10

State Plane Coordinate: (X) N 5207.17 (Y) E 8049.41 (or) Latitude: ___ ° ___ ' ___ " Longitude: ___ ° ___ ' ___ "

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

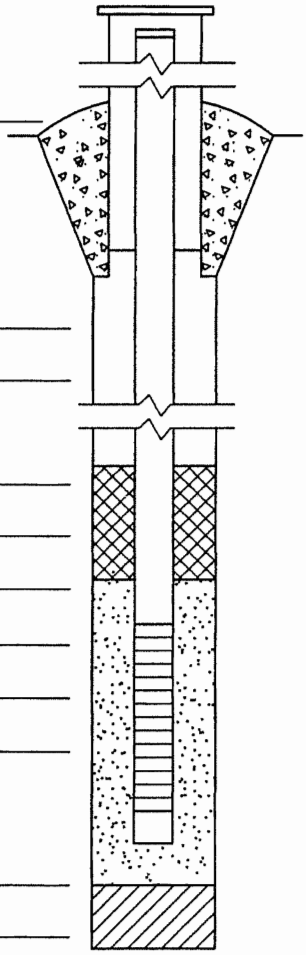
Drilling Method: HSA Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 12/11/01 Date Finished: 12/11/01

Notes: ___

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
n/a	n/a	Top of Protective Casing
n/a	n/a	Top of Riser Pipe
711.20	0.00	Ground Surface
708.20	3.00	Top of annular sealant
676.80	34.4	Top of Seal
674.80	36.4	Top of Sand Pack
672.84	38.36	Top of Screen
663.32	47.88	Bottom of Screen
662.77	48.43	Bottom of Well
662.77	48.43	Top of Backfill (If Applicable)
662.10	49.10	Bottom of Borehole

Annular Space Details



Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: PELLETS
(Granular, Pellet, Slurry)

Installation Method: POURED

Setting Time: 30 MINUTES

Type of Sand Pack: SILICA

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	40.52
Screen length (1st slot to last slot, ft)	9.52
Bottom of screen to end cap (ft)	0.55
Total length of casing (riser+screen+end cap) (ft)	50.59
Screen slot size	10 SLOT

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 38.36 (feet below ground surface)				X	
Riser pipe from ___ to ___ (feet below ground surface)					
Screen	X				

CAD DWG NO:91118682 EMPLOYEE NO: 89525 DATE/TIME: 01/28/02 15:22 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. PROPOSED EXPANSION — Sheet 1 of 3
Project Location CLINTON, IL. — Project No. 91118.02
Boring No. EX-11 — Surface Elev. 705.7 — Boring Type HSA — Completion Depth 76.0'
Coordinates: (X) N 4839.3 (Y) E 7941.4 — Drilling Contractor SKS ENGINEERS, INC.
Date Started 2/13/02 Date Completed 2/13/02 — Driller TODD SKINNER — Rig No. MOBILE B-57
Logged By JOHN BERRY — Backfilled (Y/N) Y Backfill Material BENSEAL GROUT
Surface Conditions FARM FIELD — If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	49										CLAYEY SILT (ML); Dark brown, soft, moist, with organics (root fragments)	
									2	703.70		SILTY CLAY (CL); Brown mottled gray, stiff, moist, trace root fragments	
				1.0					4				
2	CS	60								700.70		grades soft, wet	
				0.5					6				
									8				
				2.0						696.95		SILTY CLAY (CL); Brown, very stiff, moist, trace gravel and fine sand	
3	CS	60		3.0					10				
										695.20		SILTY CLAY (CL); Gray, hard, moist, trace gravel and fine sand	
				+4.0					12				
				+4.0					14				
4	ST	24											pushed shelby tube from 14.5' to 16.5'
									16				
5	CS	36											
				+4.0					18				
				+4.0									
6	CS	60							20				
				+4.0									
									22				
				+4.0									
				+4.0					24				
7	CS	60								680.70		grades very stiff	
				3.0					26				
				2.75					28				
				3.0									
8	CS	60		3.0									

CAD DWG NO:91118696 EMPLOYEE NO: 89540 DATE/TIME: 01/28/02 11:47 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC, PROPOSED EXPANSION — Sheet 2 of 3
Project Location CLINTON, IL. — Project No. 91118.02
Boring No. EX-11 — Surface Elev. 705.7 — Boring Type HSA — Completion Depth 76.0'
Coordinates: (X) N 4839.3 (Y) E 7941.4 — Drilling Contractor SKS ENGINEERS, INC.
Date Started 2/13/02 — Date Completed 2/13/02 — Driller TODD SKINNER — Rig No. MOBILE B-57
Logged By JOHN BERRY — Backfilled (Y/N) Y — Backfill Material BENSEAL GROUT
Surface Conditions FARM FIELD — If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
8cont.	CS	60										SILTY CLAY (CL); Gray, very stiff, moist, trace gravel and fine sand	
				2.0					32				
				1.5					34	671.70		grades stiff	
9	CS	60											
									36				
										668.88		1" Silty Sand layer, moist	
										668.80		CLAYEY SILT (CL); Brown, stiff, moist, with organics	
				1.0					38	667.70			
				1.0								PEAT (OL); Brown-black, stiff, moist, with organics (root fragments) and silt	
10	CS	60		1.0					40	665.20		grades with clay	
				1.5						664.10			
									42			SILTY CLAY (CL); Blue-gray, stiff, moist	Berry Clay
				1.5					44				
11	CS	60											
				1.5					46	659.70			
				1.25								SILTY CLAY (CL); Gray, stiff, moist, trace gravel and fine sand	
				1.5					48				
12	CS	60											
				2.5					50	655.20		Grades very stiff	
									52				
				+4.0						652.70		Grades hard	
13	CS	57							54				
				+4.0					56				
				+4.0					58				
14	CS	58											

CAD DWG NO:91118697 EMPLOYEE NO: 89540 DATE/TIME: 01/28/02 11:31 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC, PROPOSED EXPANSION — Sheet 3 of 3
Project Location CLINTON, IL. — Project No. 91118.02
Boring No. EX-11 — Surface Elev. 705.7 — Boring Type HSA — Completion Depth 76.0'
Coordinates: (X) N 4839.3 (Y) E 7941.4 — Drilling Contractor SKS ENGINEERS, INC.
Date Started 2/13/02 — Date Completed 2/13/02 — Driller TODD SKINNER — Rig No. MOBILE B-57
Logged By JOHN BERRY — Backfilled (Y/N) Y — Backfill Material BENSEAL GROUT
Surface Conditions FARM FIELD — If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
14cont.	CS	58										SILTY CLAY (CL); Gray, hard, moist, trace gravel and fine sand	
				+4.0					62				
				+4.0					64				
15	CS	60											
				+4.0					66				
				+4.0					68				
										636.70			
16	CS	60		1.0					70	635.80		SANDY CLAY (CL); Gray, stiff, moist, with gravel	
				1.25								SILTY CLAY (CL); Gray, stiff, moist, trace gravel	
				1.25					72				
										633.40		SAND (SW); Gray, fine to medium grain, with clay and trace gravel	Sangamon Soil
									74	631.70			
17	CS	18		1.5								SILTY CLAY (CL); Gray, stiff, moist, trace gravel	
				1.75					76	629.70			
												End of Boring @ 76.0'	
									78				
									80				
									82				
									84				
									86				
									88				

CAD DWG NO:91118698 EMPLOYEE NO: 89540 DATE/TIME: 01/28/02 11:31 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-12 Surface Elev. 705.4' Boring Type HSA Completion Depth 77.0'
Coordinates: (X) N 5212.26 (Y) E 7864.57 Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/26/02 Date Completed 12/31/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions If "No" explain INSTALLED MONITORING WELL EX-12

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	50										CLAYEY SILT (ML); Yellowish brown (10YR 4/4), moist, w/root fragments	
										704.40		SILTY CLAY (CL); Yellowish brown (10YR 4/6), moist, stiff, trace gravel	
				1.0					2				
				1.0						701.65			
2	CS	60		1.25					4	701.15		SILT (ML); Yellowish brown (10YR 6/8), moist	
												SILTY CLAY (CL); Yellowish brown (10YR 4/6), moist, stiff, trace gravel	
				3.0					6			grades very stiff	
				3.5					8				
3	CS	60											
				3.0					10				
										693.90		SILTY CLAY (CL); Dark gray (10YR 4/1), moist hard, trace gravel	
				+4.0					12				
				+4.0									
4	CS	60							14				
				2.5								grades very stiff	
									16				
				2.5					18				
5	CS	60											
				2.25					20				
				2.5					22				
6	CS	60		2.5					24				
				2.0					26			grades stiff	
				1.75					28				
7	CS	60											

CAD DWG NO:91118798 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:26 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-12 Surface Elev. 705.4' Boring Type HSA Completion Depth 77.0'
Coordinates: (X) N 5212.26 (Y) E 7864.57 Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/26/02 Date Completed 12/31/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions If "No" explain INSTALLED MONITORING WELL EX-12

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60								675.40		SILTY CLAY (CL); Dark gray (10YR 4/1), moist, stiff, trace gravel	
				2.25									
									32	673.20		SAND & GRAVEL (SP); Dark gray (10YR 4/1), damp to moist, w/clay, fine to coarse sand	
									34				
8	CS	50											
									36				
									38				
9	CS	50											
									40			grades wet to saturated	
									42			grades gravel out	
									44				
10										660.80		SILTY CLAY (CL); Blue green (Gley 2 5/10BG), moist, stiff, trace gravel	TOC Sample @ 660.0
				1.25					46				
										658.50		SILTY CLAY (CL); Gray (10YR 5/1), moist, hard, trace gravel	
				+4.0					48				
				+4.0									
11	CS	60											
				+4.0					50				
				+4.0					52				
									54			grades dark gray (10YR 4/1)	
12	CS	60											
									56				
									58				
12	CS	60											

CAD DWG NO:91118799 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:33 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-12 Surface Elev. 705.4' Boring Type HSA Completion Depth 77.0'
Coordinates: (X) N 5212.26 (Y) E 7864.57 Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/26/02 Date Completed 12/31/01 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions If "No" explain INSTALLED MONITORING WELL EX-12

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
12	CS	60		+4.0						645.40		SILTY CLAY (CL); Dark gray (10YR 4/1), moist, hard, trace gravel	
										644.30			
				+4.0					62	643.20		SAND (SP); Dark gray (10YR 4/1), saturated, fine to coarse grained	
												SILTY CLAY (CL); Gray (10YR 6/1), moist, hard, trace gravel	
13	CS	50							64				
				+4.0					66				
				+4.0					68	637.40		SAND + GRAVEL (SP); Gray (10YR 6/1), saturated, fine to coarse grained	
14	CS	42							70				
									72	633.65		SILTY CLAY (CL); Gray (10YR 6/1), moist, hard, trace gravel	
				+4.0									
15	CS	48							74				
				+4.0					76				
				+4.0						628.40		End of boring @77.0'	
									78				
									80				
									82				
									84				
									86				
									88				

CAD DWG NO:91118800 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:16 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-12D

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-12D

State Plane Coordinate: (X) N 5212.26 (Y) E 7864.57 (or) Latitude: ___ ° ___ ' ___ " Longitude: ___ ° ___ ' ___ "

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 12/26/02 Date Finished: 12/31/02

Notes: ___

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
708.02	2.62	Top of Protective Casing
707.68	2.28	Top of Riser Pipe
705.40	0.00	Ground Surface
702.40	3.00	Top of annular sealant
645.15	60.25	Top of Seal
642.15	63.25	Top of Sand Pack
639.37	66.03	Top of Screen
629.75	75.65	Bottom of Screen
629.40	76.00	Bottom of Well
629.40	76.00	Top of Backfill (If Applicable)
628.40	77.00	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: BENTONITE SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 30 MINUTES

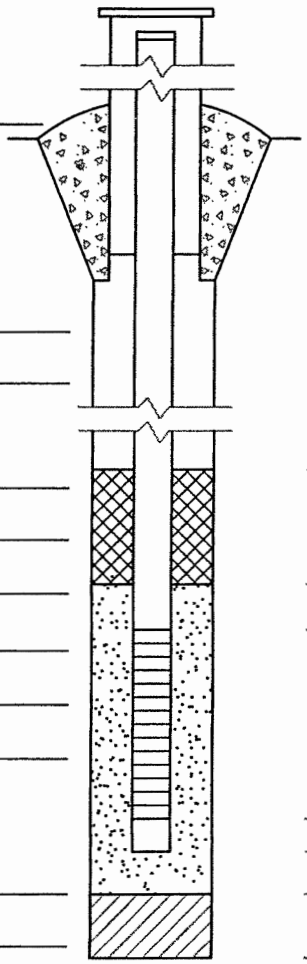
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 35.69 (feet below ground surface)				X	
Riser pipe from 35.69 to 66.03 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	68.31
Screen length (1st slot to last slot, ft)	9.62
Bottom of screen to end cap (ft)	0.35
Total length of casing (riser+screen+end cap) (ft)	78.28
Screen slot size	10 SLOT

CAD DWG NO:91118841 EMPLOYEE NO: 89525 DATE/TIME: 03/14/03 16:42 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-12S

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-12S

State Plane Coordinate: (X) N 5211.82 (Y) E 7822.99 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ____

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 12/31/02 Date Finished: 01/02/03

Notes: ____

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
707.99	2.59	Top of Protective Casing
707.67	2.27	Top of Riser Pipe
705.40	0.00	Ground Surface
702.40	3.00	Top of annular sealant
653.88	51.52	Top of Seal
651.88	53.52	Top of Sand Pack
649.88	55.52	Top of Screen
640.25	65.15	Bottom of Screen
639.90	65.50	Bottom of Well
639.90	65.50	Top of Backfill (If Applicable)
639.40	66.00	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: BENTONITE SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 30 MINUTES

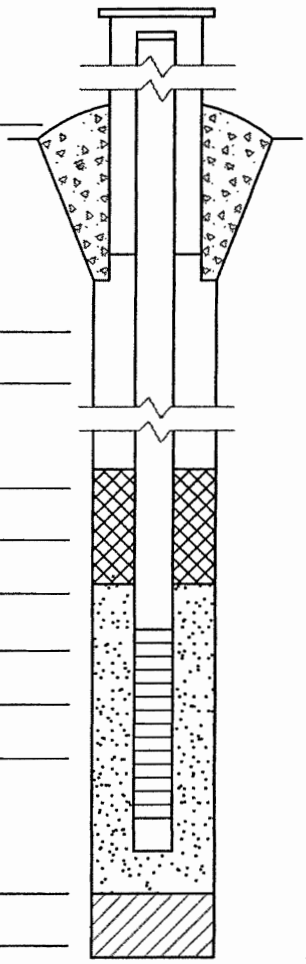
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	57.79
Screen length (1st slot to last slot, ft)	9.63
Bottom of screen to end cap (ft)	0.35
Total length of casing (riser+screen+end cap) (ft)	67.77
Screen slot size	10 SLOT

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 25.11 (feet below ground surface)				X	
Riser pipe from 25.11 to 55.52 (feet below ground surface)	X				
Screen					

CAD DWG NO:91118822 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 10:28 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-13 Surface Elev. 722.60' Boring Type HSA Completion Depth 94.5'
Coordinates: (X) N 5264.54 (Y) E 8574.98 Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/19/02 Date Completed 9/26/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions WET PLOWED FIELD If "No" explain INSTALLED MONITORING WELL EX-13

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	52								721.60		CLAYEY SILT (ML); Dark brown, wet, w/root fragments	
				1.0								SILTY CLAY (CL); Brown mottled w/orange, moist, stiff, trace root fragments	
									2				
				1.0									
									4				
2	CS	60										grades root fragments out	
				1.0									
									6				
				1.0									
									8				
										713.60			
3	CS	36		1.5								SILTY CLAY (CL); Brown, moist, stiff, some sand, trace gravel	
									10				
				1.5						711.10			
									12			SILTY CLAY (CL); Brown, moist, stiff, trace gravel	
	ST	24											
				2.0									
									14	708.60			
4	CS	60		2.5								SILTY CLAY (CL); Gray, moist, very stiff, trace gravel	
									16				
				2.0									
									18				
				2.0									
5	CS	60											
				2.0					20				
				2.25									
									22				
				2.25									
									24				
6	CS	60											
				2.5									
									26				
				2.5									
									28				
				2.75									
7	CS	60											

CAD DWG NO:91118777 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:23 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-13 Surface Elev. 722.6' Boring Type HSA Completion Depth 94.5'
Coordinates: (X) N 5264.54 (Y) E 8574.98 Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/19/02 Date Completed 12/26/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions WET PLOWED FIELD If "No" explain INSTALLED MONITORING WELL EX-13

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60		2.5								SILTY CLAY (CL); Gray, moist, very stiff, trace gravel	
									32				
				2.5									
									34				
8	CS	60											
				3.0					36				
				2.5					38				
				2.75									
9	CS	60		2.75					40				
												1" sand layer @ 681.2	
				2.5					42				
	ST	24"											
	ST	20"							44				
10	CS	60											
									46				
				2.75					48				
11	CS	60		2.5					50				
				2.0					52	670.60			TOC Sample @ 671.0
	ST	24"										PEAT (OL); Dark brown, moist, w/clay	
	ST	24"							54	668.60			
12	CS	60								667.20		SILTY SAND (SW); Fine grained, moist, w/clay	
									56			PEAT (OL); Dark brown/black, moist, w/clay	
										665.60			
				1.0					58			SILTY CLAY (CL); Black, moist, stiff, w/root fragments (old organic topsoil)	
				1.0									
13	CS	50											

CAD DWG NO:91118778 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:54 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-13 Surface Elev. 722.6' Boring Type HSA Completion Depth 94.5'
Coordinates: (X) N 5264.54 (Y) E 8574.98 Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/19/02 Date Completed 12/26/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions WET PLOWED FIELD If "No" explain INSTALLED MONITORING WELL EX-13

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL / GEOTECHNICAL / SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
14	CS	30		1.0						SILTY CLAY (CL): Black, moist, stiff	
										~~grades gray w/trace sand @ 661.3~~	
				1.25							TOC Sample @ 660.5
							62	660.60		SILTY CLAY (CL): Blue-green, moist, trace gravel	
							64				
15	CS	42									
							66	656.60			
				1.75						SILTY CLAY (CL): Gray, moist, stiff, trace gravel	TOC Sample @ 655.5
								655.60			
				2.0						CLAYEY SILT (ML): Gray, moist, stiff	
				3.25			68	654.35		SILTY CLAY (CL): Gray, moist, very stiff, trace gravel	
16	CS	60		4.0						grades hard @ 652.8	
							70				
				+4.0							
							72				
				+4.0							
17	CS	60					74				
				+4.0							
							76				
				+4.0							
				+4.0			78				
18	CS	60									
				+4.0			80			grades damp	
				+4.0			82				
				+4.0							
19	CS	60					84				
				+4.0							
							86				
				4.0							
				0.5			88	634.80		CLAYEY SILT (ML): Brown, wet to saturated, stiff, w/organics	
20	CS	60		0.5						grades gray @ 633.2	

CAD DWG NO:91118779 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:10 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 4 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-13 Surface Elev. 722.6' Boring Type HSA Completion Depth 94.5'
Coordinates: (X) N 5264.54 (Y) E 8574.98 Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/19/02 Date Completed 12/26/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions WET PLOWED FIELD If "No" explain INSTALLED MONITORING WELL EX-13

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
20	CS	60		0.5								CLAYEY SILT (ML); Gray, wet to saturated, w/organics	
										631.05		grades w/sand @ 631.3	
									92			SILTY CLAY (CL); Gray, hard, moist, trace gravel	
									94	628.10			
												End of boring @94.5'	
									96				
									98				
									100				
									102				
									104				
									106				
									108				
									110				
									112				
									114				
									116				
									118				

CAD DWG NO:91118780 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:10 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-13

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-13

State Plane Coordinate: (X) N 5264.54 (Y) E 8574.98 (or) Latitude: ___ ° ___ ' ___ " Longitude: ___ ° ___ ' ___ "

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 12/19/02 Date Finished: 12/23/02

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: BENTONITE SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 30 MINUTES

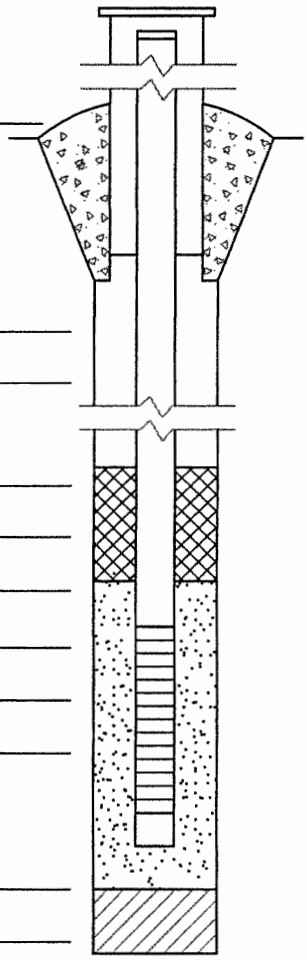
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
725.54	2.85	Top of Protective Casing
725.19	2.59	Top of Riser Pipe
722.60	0.00	Ground Surface
719.60	3.00	Top of annular sealant
643.60	79.00	Top of Seal
640.60	82.00	Top of Sand Pack
638.42	84.18	Top of Screen
628.64	93.96	Bottom of Screen
628.60	94.00	Bottom of Well
628.60	94.00	Top of Backfill (If Applicable)
628.10	94.50	Bottom of Borehole

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	86.77
Screen length (1st slot to last slot, ft)	9.78
Bottom of screen to end cap (ft)	.04
Total length of casing (riser+screen+end cap) (ft)	96.59
Screen slot size	10 SLOT

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 43.82 (feet below ground surface)				X	
Riser pipe from 43.82 to 84.18 (feet below ground surface)	X				
Screen					

CAD DWG NO:91118823 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 10:14 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-14 Surface Elev. 726.8' Boring Type HSA Completion Depth 93.5'
Coordinates: (X) N 5302.88 (Y) E 9396.78 Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/13/02 Date Completed 12/18/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions PICKED CORN FIELD If "No" explain INSTALLED MONITORING WELL EX-14

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	48								725.80		CLAYEY SILT (ML); Dark brown, moist , w/root fragments	
									2			SILTY CLAY (CL); Brown, mottled yellow, very stiff, moist, trace gravel	
				2.0									
				2.0					4				
2	CS	60											
				2.0					6			grades stiff	
				1.0									
				1.0					8				
3	CS	60											
				1.0					10				
				1.25					12			grades mottled gray & stiff	
4	CS	60							14				
				1.5					16			grades gray	
				1.5					18				
5	CS	60											
				1.5					20				
				1.5					22				
				2.0					24				
6	CS	60										grades hard	
				+4.0					26				
				+4.0					28	697.80		SANDY CLAY (CL); Gray, hard, moist; w/small grained gravel	
7	CS	60		2.5						697.30		SILTY CLAY (CL); Gray, very stiff, moist; trace gravel	

CAD DWG NO:91118773 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:44 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-14 Surface Elev. 726.8' Boring Type HSA Completion Depth 93.5'
Coordinates: (X) N 5302.88 (Y) E 9396.78 Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/13/02 Date Completed 12/18/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions PICKED CORN FIELD If "No" explain INSTALLED MONITORING WELL EX-14

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60		2.5								SILTY CLAY (CL); Gray, very stiff, moist, trace gravel	
									32				
				2.5									
				+4.0					34			grades hard	
8	CS	60											
				+4.0					36				
									38				
				+4.0									
9	CS	60							40				
				1.5								grades stiff	
									42				
				1.5									
									44				
10	CS	60										grades very stiff	
				2.35					46				
				2.25					48				
				2.25									
11	CS	60							50				
				2.5									
				2.25					52				
									54	672.55			
12	CS	53										CLAYEY SILT (ML); Gray, wet to saturated, with fine grained sand	
									56				
									58	668.80			
				2.5								CLAYEY SILT (ML); Dark brown, very stiff, moist, w/organics	
13	CS	50		2.5									

CAD DWG NO:91118774 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:52 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-14 Surface Elev. 726.8' Boring Type HSA Completion Depth 93.5'
Coordinates: (X) N 5302.88 (Y) E 9396.78 Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/13/02 Date Completed 12/18/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions PICKED CORN FIELD If "No" explain INSTALLED MONITORING WELL EX-14

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	50								666.05		CLAYEY SILT (ML); Dark brown, very stiff, moist, with organics	
										665.05		SAND (SW); Gray, fine grained, saturated, trace silt & clay	
				2.25					62			SILTY CLAY (CL); Blue-green/gray, very stiff, moist, trace gravel	
				2.25									
				2.0					64	662.80		SILTY CLAY (CL); Light gray, very stiff, moist, trace gravel	
14	CS	60											
				3.0					66				
				3.5									TOC Sample @ 659.0
									68				
												grades hard	
				+4.0					70				
15	CS	60											
				+4.0					72				
				+4.0					74				
16	CS	30											
				+4.0					76				
				+4.0									
									78			grades with gravel from 648.8 to 648.0	
				+4.0									
17	CS	60							80				
				+4.0									
				+4.0					82				
				3.0						643.70		CLAYEY SILT (ML); Dark brown/black, very stiff, moist, w/organics, trace sand	
18	CS	60							84	642.10		SILT (ML); Gray, wet to saturated, trace organics	
										641.20		SILTY CLAY (CL); Gray, moist, hard, w/ fine sand	
				+4.0					86				
				+4.0					88				
19	CS	48											

CAD DWG NO:91118775 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:05 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 4 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-14 Surface Elev. 726.8' Boring Type HSA Completion Depth 93.5'
Coordinates: (X) N 5302.88 (Y) E 9396.78 Drilling Contractor SKS ENGINEERS, INC.
Date Started 12/13/02 Date Completed 12/18/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions PICKED CORN FIELD If "No" explain INSTALLED MONITORING WELL EX-14

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
19	CS	48										SILTY CLAY (CL); Gray, hard, moist, trace gravel	
									92				
										633.30		End of boring @93.5'	
									94				
									96				
									98				
									100				
									102				
									104				
									106				
									108				
									110				
									112				
									114				
									116				
									118				

CAD DWG NO:91118776 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:60 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-14

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-14

State Plane Coordinate: (X) N 5302.88 (Y) E 9396.78 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 12/13/02 Date Finished: 12/18/02

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL GROUT

Installation Method: TREMIE PIPE

Type of Bentonite Seal: BENTONITE SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 30 MINUTES

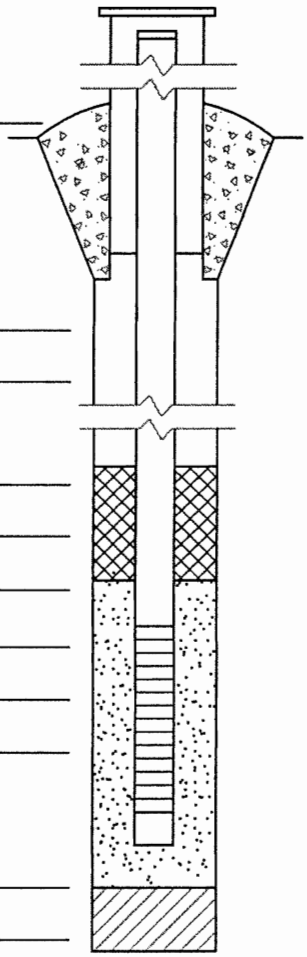
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
729.41	2.61	Top of Protective Casing
728.97	2.17	Top of Riser Pipe
726.80	0.00	Ground Surface
723.80	3.00	Top of annular sealant
648.80	78.00	Top of Seal
645.80	81.00	Top of Sand Pack
643.84	82.96	Top of Screen
634.14	92.66	Bottom of Screen
633.80	93.30	Bottom of Well
633.80	93.00	Top of Backfill (If Applicable)
633.30	93.50	Bottom of Borehole

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 42.64 (feet below ground surface)					
Riser pipe from 42.64 to 82.96 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	85.13
Screen length (1st slot to last slot, ft)	9.70
Bottom of screen to end cap (ft)	0.34
Total length of casing (riser+screen+end cap) (ft)	95.17
Screen slot size	10 SLOT

CAD DWG NO:91118824 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 10:02 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-15 Surface Elev. 731.1' Boring Type HSA Completion Depth 94.5'
Coordinates: (X) N 5328.65 (Y) E 10301.36 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/06/03 Date Completed 01/08/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions PLOWED FIELD If "No" explain INSTALLED MONITORING WELL EX-15

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	52								730.10		CLAYEY SILT (ML); Black (10YR 2/1), moist to wet	
				1.75					2			SILTY CLAY (CL); Dark yellowish brown (10YR 4/4), stiff, moist, trace gravel	
				1.75					4				
2	CS	60										grades hard	
				1.0					6				
				1.25					8				
3	CS	60							10				
				1.0									
				1.0					12	719.10		SILTY CLAY (CL); Gray (10YR 5/1), stiff, moist, trace gravel	
				1.0					14				
4	CS	60											
				1.0					16				
				1.5					18				
5	CS	60		+4.0								2" sandy silt @ 711.8	
									20			grades dark gray (10YR 4/1)	
				+4.0					22				
				+4.0					24				
6	CS	60		3.0								grades very stiff	
				3.0					26				
				1.75								grades stiff	
				1.75					28				
7	CS	60											

CAD DWG NO:91118804 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:30 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-15 Surface Elev. 731.1' Boring Type HSA Completion Depth 94.5'
Coordinates: (X) N 5328.65 (Y) E 10301.36 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/6/03 Date Completed 01/08/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions PLOWED FIELD If "No" explain INSTALLED MONITORING WELL EX-15

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60		1.0						701.10		SILTY CLAY (CL); Dark gray (10YR 4/1), stiff, moist, trace gravel	
				1.0									
				1.0					32				
				3.0								grades very stiff	
8	CS	60							34				
				1.5								grades stiff	
									36				
				1.5									
				1.75					38				
9	CS	60										grades very stiff	
				2.25					40				
				2.25					42				
10	CS								44				
				2.0									
									46				
				2.25									
				2.25					48				
11	CS	60											
				2.0					50				
				+4.0					52			grades hard	
				+4.0									
12	CS								54			grades stiff	
				1.75									
									56				
				1.75									
									58				TOC Sample @ 673.0
13	CS	48								671.80		SAND (SP); Gray, (10YR 4/1), saturated, very dense, fine to coarse grained	

CAD DWG NO:91118805 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 13:43 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-15 Surface Elev. 731.1' Boring Type HSA Completion Depth 94.5'
Coordinates: (X) N 5328.65 (Y) E 10301.36 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/06/03 Date Completed 01/08/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions PLOWED FIELD If "No" explain INSTALLED MONITORING WELL EX-15

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	48								671.10		SAND (SP); Gray (10YR 4/1), dense, saturated, fine to medium grained, trace gravel & clay	
									62				
									64			grades w/ large grained gravel	
14	CS	29											
									66				
										664.30		SILTY CLAY (CL); Blue green (Gley 2 4/10G), stiff, moist, trace gravel	
15	CS	30		1.25					68				
16	CS	60		+4.0						661.70		SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel	
									70				
				+4.0					72				
				+4.0					74				
17	CS	60											TOC Sample @ 657.0
				3.5								grades dark gray (10YR 4/1), very stiff	
									76				
				3.75					78				
18	CS	60		3.75									
									80			grades hard	
				+4.0					82				
				+4.0					84				
19	CS	60											
				+4.0					86				TOC Sample @ 646.0
										643.85		CLAYEY SILT (ML); Dark gray (10YR 4/1), stiff, moist, trace gravel & sand	
				1.5					88				
										642.30		SILT & SAND (SM); Gray (10YR 4/1), saturated	
										641.90		SAND (SP); Dark gray (10YR 4/1), saturated, very dense, fine to coarse grained, trace silt	
20	CS	60											

CAD DWG NO:91118806 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 14:08 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 4 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-15 Surface Elev. 731.1' Boring Type HSA Completion Depth 94.5'
Coordinates: (X) N 5328.65 (Y) E 10301.36 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/06/03 Date Completed 01/08/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions PLOWED FIELD If "No" explain INSTALLED MONITORING WELL EX-15

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
20	CS	60								641.10		SAND (SP); Dark gray (10YR 4/1), very dense, saturated, fine to coarse grained	
									92	638.80		SILTY CLAY (CL); Dark gray (10YR 4/1), hard, moist, trace gravel	
				+4.0									
				+4.0					94	636.75		CLAYEY SILT (ML); Brown (10YR 4/3), moist to wet, trace organics	
										636.60		End of boring @94.5'	
									96				
									98				
									100				
									102				
									104				
									106				
									108				
									110				
									112				
									114				
									116				
									118				

CAD DWG NO:91118807 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 14:56 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-15

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-15

State Plane Coordinate: (X) N 5328.65 (Y) E 10301.36 (or) Latitude: ___ ° ___ ' ___ " Longitude: ___ ° ___ ' ___ "

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ____

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 01/06/03 Date Finished: 01/08/03

Notes: ____

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
734.10	3.00	Top of Protective Casing
733.73	2.63	Top of Riser Pipe
731.10	0.00	Ground Surface
728.10	3.00	Top of annular sealant
654.10	77.00	Top of Seal
651.10	80.00	Top of Sand Pack
648.63	82.47	Top of Screen
638.94	92.16	Bottom of Screen
638.60	92.50	Bottom of Well
638.60	92.50	Top of Backfill (If Applicable)
636.60	94.50	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 30 MINUTES

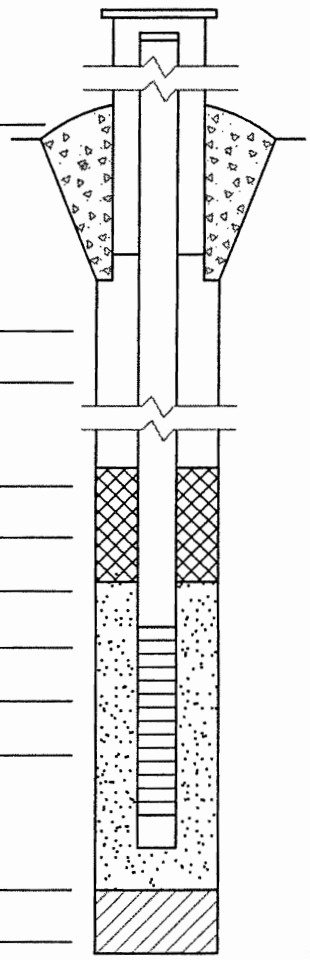
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	85.10
Screen length (1st slot to last slot, ft)	9.69
Bottom of screen to end cap (ft)	0.34
Total length of casing (riser+screen+end cap) (ft)	95.13
Screen slot size	10 SLOT

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 42.26 (feet below ground surface)				X	
Riser pipe from 42.26 to 82.47 (feet below ground surface)	X				
Screen	X				

CAD DWG NO:91118825 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 10:42 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-16 Surface Elev. 717.0' Boring Type HSA Completion Depth 99.5'
Coordinates: (X) N 4676.37 (Y) E 8713.38 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/14/03 Date Completed 01/16/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) Y Backfill Material BENTONITE GROUT
Surface Conditions PICKED CORN FIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	50										CLAYEY SILT (ML); Black (10YR 2/1), moist, trace root fragments	
				1.25						715.80			
									2			SILTY CLAY (CL); Yellowish brown (10YR 5/6), stiff, moist	
				1.5									
2	CS	60							4				
				0.75								grades soft	
									6				
				0.75									
				1.25					8			grades stiff	
3	CS	60											
				1.5					10				
				1.25					12				
4	CS	60		2.5					14	702.80		SILTY CLAY (CL); Dark gray (10YR 5/1), very stiff, moist, trace gravel	
				2.75					16				
				+4.0								grades hard	
				+4.0					18				
5	CS	60											
				+4.0					20				
				2.5					22			grades very stiff	
				1.75									
6	CS	60							24			grades stiff	
				1.5								CLAYEY SILT seam (wet) from 691.7 to 691.5	
									26				
				1.5									
				1.5					28				
7	CS	60											

CAD DWG NO:91118787 EMPLOYEE NO: 89525 DATE/TIME: 03/11/03 11:30 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-16 Surface Elev. 717.0' Boring Type HSA Completion Depth 99.5'
Coordinates: (X) N 4676.37 (Y) E 8713.38 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/14/03 Date Completed 01/16/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) Y Backfill Material BENTONITE GROUT
Surface Conditions PICKED CORNFIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60		1.75						687.00		SILTY CLAY (CL); Dark gray (10YR 5/1), stiff, moist, trace gravel	
				+4.0					32			grades hard	
				+4.0									
				2.5					34			grades very stiff	
8	CS	60											
				2.0					36				
				1.5								grades stiff	
				1.5					38				
9	CS	60											
									40				
									42				
				2.25								grades very stiff	
10	CS			2.25					44				TOC Sample @ 672.5
				2.5					46				
												SILTY SAND (SW); Gray, wet, trace clay	
										669.50 669.25 669.00		SILT (OL); Gray, w/organics, wet, trace clay	TOC Sample @ 669.25
									48			CLAYEY SILT (CL); Brown (10YR 4/2) w/organics moist, grades w/more organics	
										668.00			
11	CS	60							50			PEAT (Pt); Brown (10YR 4/3), moist, w/clay, w/wood fragments	
									52				
										664.00			
				1.5					54			SILTY CLAY (CL); Dark brown (10YR 4/3), stiff, moist, trace gravel, very clayey	
12	CS	F		2.0						662.60		SILTY CLAY (CL); Blue green (Gley2 5/5B), very stiff, moist, trace gravel & sand	
				2.25					56				
									58				
										658.00			
13	CS	50		1.0								SILTY CLAY (CL); Gray (10YR 5/1), very stiff, moist, trace gravel	

CAD DWG NO:91118788 EMPLOYEE NO: 89525 DATE/TIME: 03/11/03 11:07 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 4
oject Location CLINTON, IL. Project No. 91-118
oring No. EX-16 Surface Elev. 717.0' Boring Type HSA Completion Depth 99.5'
Coordinates: (X) N 4676.37 (Y) E 8713.38 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/14/03 Date Completed 01/16/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) Y Backfill Material BENTONITE GROUT
Surface Conditions PICKED CORN FIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	50		2.5						657.00		SILTY CLAY (CL); Gray (10 YR 5/1), very stiff, moist, trace gravel & fine sand	
												Sand seam from 656.2 to 656.1	
				2.25					62				
									64				
14	CS	60		+4.0								grades hard	
									66				
				+4.0									
									68				
				+4.0								grades damp	
15	CS	60							70				
				+4.0									
									72				
				+4.0									
									74				
16	CS	30										~~grades dark gray (10YR 4/1)~~	
				+4.0					76				
				+4.0								~~Sand seam from 639.9 to 639.7 (wet), fine to coarse grained~~	
									78				
17	CS	60											
				+4.0					80				
				+4.0									
				1.5					82	634.75 / 634.50		SILT (ML); Gray, wet, trace organics	
				1.5		■						CLAYEY SILT (ML); Brown (10YR 4/3), stiff, moist to wet, w/organics	TOC Sample @ 634.0
18	CS	60		+4.0					84	632.70		grades dark gray (10YR 4/1) @ 633.1	
												~~SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel~~	
				+4.0					86				
									88				
				+4.0									
19	CS	60											

CAD DWG NO:91118789 EMPLOYEE NO: 89525 DATE/TIME: 03/11/03 11:07 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 4 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-16 Surface Elev. 717.0' Boring Type HSA Completion Depth 99.5'
Coordinates: (X) N 4676.37 (Y) E 8713.38 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/14/03 Date Completed 01/16/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) Y Backfill Material BENTONITE GROUT
Surface Conditions PICKED CORN FIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
19	CS	60		+4.0						627.00		SILTY CLAY (CL); Gray, (10YR 5/1), hard, moist, trace gravel	
									92				
				+4.0									
				+4.0					94				
20	CS	60											
				+4.0					96				
				+4.0					98				
										617.50		End of boring @99.5'	
									100				
									102				
									104				
									106				
									108				
									110				
									112				
									114				
									116				
									118				

CAD DWG NO:91118790 EMPLOYEE NO: 89525 DATE/TIME: 03/11/03 11:48 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-17 Surface Elev. 715.0' Boring Type HSA Completion Depth 87.0'
Coordinates: (X) N 3801.67 (Y) E 7752.77 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/02/03 Date Completed 01/06/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions If "No" explain INSTALLED MONITORING WELL EX-17

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	54										SILTY CLAY (CL); Dark gray (10YR 4/1), very stiff, moist, trace gravel	FILL
				3.0									
									2				
				3.5									
									4				
2	CS	60											
				+4.0								grades hard	
									6				
				+4.0					8				
3	CS	60											
				+4.0					10				
				+4.0					12			grades dark brown/black w/ cinders (10YR 2/1)	
4	CS	60							14			grades dark brown (10YR 4/2)	
				2.5									
									16				
				1.75					18	697.00		SILTY CLAY (CL); Dark brown/black (10YR 2/1), stiff, moist, trace gravel & roots	ORIGINAL GROUND SURFACE
										696.00			
5	CS	60		2.25					20			SILTY CLAY (CL); Brown (10YR 2/4), very stiff, moist, trace gravel	
									22				
				2.0									
6	CS	60		2.25					24				
				1.25									
				3.5					26				
				+4.0									
				+4.0					28			grades hard	
7	CS	60		3.0									

CAD DWG NO:91118801 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 14:41 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-17 Surface Elev. 715.0' Boring Type HSA Completion Depth 87.0'
Coordinates: (X) N 3801.67 (Y) E 7752.77 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/02/03 Date Completed 01/06/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions If "No" explain INSTALLED MONITORING WELL EX-17

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	ST								685.00		SILTY CLAY (CL); Dark gray (10YR 4/1), very stiff, moist, trace gravel & sand	
				2.5									
									32				
				3.0									
									34				
8	CS	60											
				2.5									
									36				
										677.50		CLAYEY SAND (SC); Dark gray (10YR 4/1), moist to wet, fine to coarse grained sand	
									38				
9	CS	59		2.5						675.40		SILTY CLAY (CL); Dark gray (10YR 4/1), very stiff, moist, trace gravel	
									40				
												1" sand seam @ 673.5	
				2.5					42				
				2.5									
									44				
10	CS	60											
				2.0									
				2.0					46				
										667.75 667.50		SILTY SAND (SM); Dark gray (10YR 4/1), moist	
				1.0					48			PEAT (Pt); Brown (10YR 4/3), very stiff, moist, w/silt & clay and wood fragments	
11	CS	60											
				1.0					50				
									52				
				1.0						662.50		SILTY CLAY (CL); Black (10YR 2/1), stiff, moist, trace organics and sand	
									54				
12	CS	60		1.0						660.40		SILTY CLAY (CL); Dark gray (10YR 4/1), stiff, moist, trace sand & gravel	
				1.5					56			grades bluish gray (Gley2 5/1) @ 659.5	
				1.5					58				
				3.0								grades very stiff	TOC Sample @ 657.0
13	CS	60											

CAD DWG NO:91118802 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 14:18 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-17 Surface Elev. 715.0' Boring Type HSA Completion Depth 87.0'
Coordinates: (X) N 3801.67 (Y) E 7752.77 Drilling Contractor SKS ENGINEERS, INC.
Date Started 1/02/03 Date Completed 1/06/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions If "No" explain INSTALLED MONITORING WELL EX-17

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	60		1.5						655.00		SILTY CLAY (CL); Bluish gray (Gley2 5/1), stiff, moist, trace gravel	
										654.25			
				1.5					62			SILTY CLAY (CL); Gray (10YR 5/1), stiff, moist, trace gravel	
												1" sand seam @ 653.4	
				3.0								grades very stiff	
14	CS	60		+4.0					64			grades hard	
				+4.0					66				
				+4.0					68				
15	CS	60										3" sand seam @ 645.7	
				+4.0					70				
				+4.0					72				
16	CS	60		+4.0					74				
									76				
				+4.0									
									78				
												SILTY SAND (SM); Gray (10YR 5/1), saturated, trace clay	
17	CS	36								635.85			
										635.50		SAND (SP); Gray (10YR 5/1), saturated, dense, fine to medium grained	
									80				
										634.00		SILT (ML); Gray (10YR 5/1), wet, with peat	
										633.60		CLAYEY SILT (ML); Dark gray (10YR 4/1), wet, trace organics	
18	CS	50							82	632.50		SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel	
									84				
									86			1" silt layer (moist) @ 629.2	
										628.00		End of boring @87.0'	
									88				

CAD DWG NO:91118803 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 14:14 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-17

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-17

State Plane Coordinate: (X) N 3801.67 (Y) E 7752.77 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 01/02/03 Date Finished: 01/06/03

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 35 MINUTES

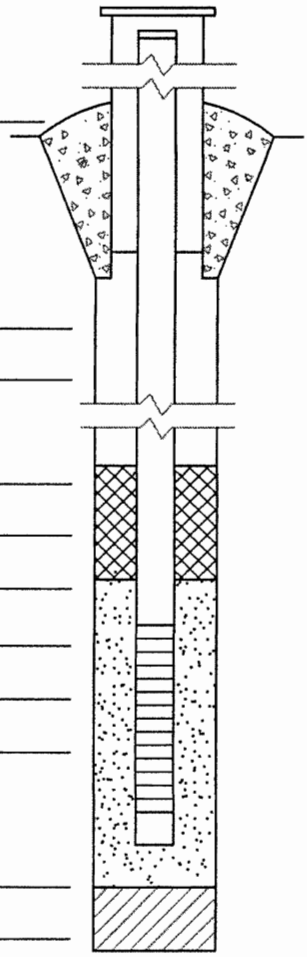
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
717.74	3.00	Top of Protective Casing
717.38	2.38	Top of Riser Pipe
715.00	0.00	Ground Surface
712.00	3.00	Top of annular sealant
643.50	71.50	Top of Seal
641.00	74.00	Top of Sand Pack
638.47	76.53	Top of Screen
628.84	86.16	Bottom of Screen
628.50	86.50	Bottom of Well
628.50	86.50	Top of Backfill (If Applicable)
628.00	87.00	Bottom of Borehole

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 46.19 (feet below ground surface)				X	
Riser pipe from 46.19 to 76.53 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	78.91
Screen length (1st slot to last slot, ft)	9.63
Bottom of screen to end cap (ft)	0.34
Total length of casing (riser+screen+end cap) (ft)	88.88
Screen slot size	10 SLOT

CAD DWG NO:91118826 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 11:12 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-18 Surface Elev. 725.0 Boring Type HSA Completion Depth 99.5
Coordinates: (X) N 3693.60 (Y) E 8249.50 Drilling Contractor SKS ENGINEERS, INC.
Date Started 1/16/03 Date Completed 1/21/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) Y Backfill Material BENTONITE GROUT
Surface Conditions SILTY CLAY If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	F										SILTY CLAY (CL); Brown, (10YR 4/3), stiff, moist, trace gravel	
				1.5									
				2.0					2			grades yellowish brown (10YR 5/4)	
2	CS	60							4			grades soft	
				0.75									
									6				
				0.75									
									8			grades brown (10YR 4/3)	
3	CS	F											
				0.75					10				
				2.75					12				
4	CS	60		1.5					14			grades stiff	
										710.00		SILTY CLAY (CL); Dark gray, (10YR 4/1), stiff, moist, trace gravel	
				1.5					16				
				1.75					18				
5	CS	60											
									20				
									22	703.00		SANDY SILT (SM); Dark gray, (10YR 4/1), wet, trace clay	
												CLAYEY SILT (ML); Dark gray (10YR 4/1), stiff, moist, trace fine sand	
									24	700.70			
6	CS	60		1.25						700.25		SILTY CLAY (CL); Dark gray (10YR 4/1), moist, trace gravel	
				+4.0					26			grades hard	
				+4.0					28			2" gravel & sand seam @ 696.9	
7	CS	60											

CAD DWG NO:91118783 EMPLOYEE NO: 89525 DATE/TIME: 03/11/03 13:07 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-18 Surface Elev. 725.0 Boring Type HSA Completion Depth 99.5'
Coordinates: (X) N 3693.60 (Y) E 8249.50 Drilling Contractor SKS ENGINEERS, INC.
Date Started 1/16/03 Date Completed 1/21/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) Y Backfill Material BENTONITE GROUT
Surface Conditions SILTY CLAY If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60		2.25						695.00		SILTY CLAY (CL); Dark gray (10YR 4/1), very stiff, moist, trace gravel	
									32				
				2.25									
				2.0					34				
8	CS	60											
				2.75					36				
				3.0					38				
				3.0									
9	CS	60							40				
				2.5									
									42				
				2.5									
									44				
10	CS	60		2.75									
									46				
				2.5									
									48				
				2.5									
11	CS	55								676.00		SAND & GRAVEL; Dark gray (10YR 4/1), moist, fine to coarse sand w/gravel	
									50				
												grades saturated	
									52				
												grades trace clay	
									54				
12	CS	40											
									56				
									58				
												~~grades w/clay~~	
13	CS	49											

CAD DWG NO:91118784 EMPLOYEE NO: 89525 DATE/TIME: 03/11/03 13:20 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-18 Surface Elev. 725.0' Boring Type HSA Completion Depth 99.5'
Coordinates: (X) N 3693.60 (Y) E 8249.50 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/16/03 Date Completed 01/21/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) Y Backfill Material BENTONITE GROUT
Surface Conditions SILTY CLAY If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	49								665.00		SAND & GRAVEL (SP); Dark gray (10YR 4/1), saturated, fine to coarse sand, w/clay	
									62				
									64				
14	CS	43											
									66				
									68				
										656.00		SILTY CLAY (CL); Dark gray (10YR 4/1), hard, moist, trace gravel	
15	CS	57		+4.0					70				
				+4.0					72				
				+4.0					74				
16	CS	58											
				+4.0					76				
													TOC Sample @ 649.1
				+4.0					78				
17	CS	60							80			grades damp	
				+4.0									
				+4.0					82				
									84				
18	CS	52		+4.0						640.30		SANDY CLAY (CL); Dark gray (10YR 4/1), stiff, moist	TOC Sample @ 641.1
				1.5						639.50			
				1.0					86			CLAYEY SILT (ML); Dark gray (10YR 4/1), stiff, moist to wet, trace fine sand	
				1.25									TOC Sample @ 638.1
				1.25					88				
										636.00		SILTY CLAY (CL); Dark gray (10YR 4/1), very stiff, moist, trace gravel	
19	CS	55		2.25									

CAD DWG NO:91118785 EMPLOYEE NO: 89525 DATE/TIME: 03/11/03 13:27 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 4 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-18 Surface Elev. 725.0' Boring Type HSA Completion Depth 99.5'
Coordinates: (X) N 3693.60 (Y) E 8249.50 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/16/03 Date Completed 01/21/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) Y Backfill Material BENTONITE GROUT
Surface Conditions SILTY CLAY If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
19	CS	55								635.00		SILTY CLAY (CL); Dark gray (10YR 4/1), firm, moist, trace gravel	
				0.75						633.50			
									92			CLAYEY SILT (ML); Dark gray (10YR 4/1), moist to wet, trace fine sand	
												grades mottled brown, w/organics	
				1.0									TOC Sample @ 632.10
									94	631.00			
20	CS	48										CLAYEY SAND (SC); Dark gray (10YR 4/1), moist to wet, trace gravel	
										630.00			
				+4.0									
									96			SILTY CLAY (CL); Dark gray (10YR 4/1), hard, moist, trace gravel	
				+4.0									
									98				
				+4.0									
										625.50			
									100			End of boring @99.5'	
									102				
									104				
									106				
									108				
									110				
									112				
									114				
									116				
									118				

CAD DWG NO:91118786 EMPLOYEE NO: 89525 DATE/TIME: 03/11/03 13:18 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-19 Surface Elev. 718.4 Boring Type HSA Completion Depth 84.0'
Coordinates: (X) N 2925.20 (Y) E 7753.10 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/21/03 Date Completed 01/27/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions SILTY CLAY (BARE GROUND) If "No" explain INSTALLED MONITORING WELL EX-19

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	48								717.40		CLAYEY SILT (ML); Dark brown (10YR 2/2), moist, w/root fragments	
				1.75									
									2			SILTY CLAY (CL); Yellowish brown (10YR 5/6), stiff, moist, w/root fragments	
				2.0									
2	CS	60							4	713.40			
				2.5								SILTY CLAY (CL); Dark yellowish brown (10YR 4/4), very stiff, moist, trace gravel	
				2.25					6				
				2.25					8				
3	CS	60											
				2.5					10				
												grades mottled gray	
				2.25					12				
				1.25						705.40		SILTY CLAY (CL); Dark gray (10YR 4/1), stiff, moist, trace gravel	
4	CS	60							14				
				1.75									
									16				
				1.75									
									18				
5	CS	60		1.75									
									20				
				1.75									
									22				
				3.25								grades very stiff	
6	CS	60		1.25					24	693.90		CLAYEY SILT (ML); Dark gray (10YR 4/1), stiff, moist, trace fine sand	
				1.0					26				
				1.0									
				+4.0					28	689.80			
7	CS	60										SILTY CLAY (CL); Dark gray (10YR 4/1), hard, moist, trace gravel	

CAD DWG NO:91118813 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 14:53 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-19 Surface Elev. 718.4 Boring Type HSA Completion Depth 84.0'
Coordinates: (X) N 2925.20 (Y) E 7753.10 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/21/03 Date Completed 01/27/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions SILTY CLAY (BARE GROUND) If "No" explain INSTALLED MONITORING WELL EX-19

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60		+4.0						688.40		SILTY CLAY (CL); Dark gray (10YR 4/1), hard, moist, trace gravel	
									32	686.40			
				+4.0						685.65		CLAYEY SILT (ML); Dark gray (10YR 4/1), hard, moist	
				+4.0					34			SILTY CLAY (CL); Dark gray (10YR 4/1), hard, moist, trace gravel grades very stiff	
8	CS	60		3.25									
									36				
				2.5									
									38				
				2.25								grades stiff	
9	CS	60		1.25					40				
				1.25					42				
				1.25					44				
10	CS	60											
	ST	12							46				
				+4.0					48			grades hard	
11	CS	60		3.0					50				
				1.25								1" silty sand seam, loose @ 666.4	
									52	666.40		CLAYEY SILT (ML); Brown (10YR 5/1), stiff, moist, w/organics	
				3.0						664.90			
12	CS	F							54			PEAT (Pt); Brown (10YR 4/3), stiff, moist, w/wood fragments	TOC Sample @ 663.0
				2.75					56				
										661.40		SILTY CLAY (CL); Gray (10YR 4/2), stiff, moist, trace organics	
				1.5					58	659.90		SILTY CLAY (CL); Blue gray (Gley 2 5/5B), stiff, moist, trace gravel	
13	CS	F		1.0									

CAD DWG NO:91118814 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 14:36 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-19 Surface Elev. 718.4 Boring Type HSA Completion Depth 84.0'
Coordinates: (X) N 2925.20 (Y) E 7753.10 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/21/03 Date Completed 01/27/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions SILTY CLAY (BARE GROUND) If "No" explain INSTALLED MONITORING WELL EX-19

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	F								658.40		SILTY CLAY (CL); Blue gray (Gley 2 5/5B), stiff, moist, trace gravel	
				1.5								grades blue green	
									62				
				0.5								grades soft	
									64				
14	CS	60		+4.0						653.90		CLAYEY SILT (ML); Blue gray (Gley 2 5/5B), hard, moist, trace organics	
				+4.0					66				
										651.40		SILTY CLAY (CL); Gray (10YR 4/1), hard, moist, trace gravel	
				+4.0					68				
15	CS	60		+4.0									
									70				
				+4.0					72			grades trace organics	
										645.80			TOC Sample @ 646.0
										645.10		CLAYEY SILT (ML); Gray (10YR 5/1), hard, moist, trace gravel	
				+4.0					74				
16	CS	30		+4.0								SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel	
									76				
										640.90			
									78	640.40		SAND (SP); Gray (10YR 4/1), loose, moist, fine grained, trace gravel	
17	CS	30										CLAYEY SILT (ML); Gray (10YR 5/1), soft, wet, trace fine sand	
									80	638.40		SAND (SP); Mottled brown (10YR 4/1 + 5/1), loose, saturated, trace gravel, trace clay	
										637.40		SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel	
									82				
									84	634.40			
												End of boring @ 84.0'	
									86				
									88				

CAD DWG NO:91118815 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 14:36 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-19

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-19

State Plane Coordinate: (X) N 2925.20 (Y) E 7753.10 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 01/21/03 Date Finished: 01/27/03

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 30 MINUTES

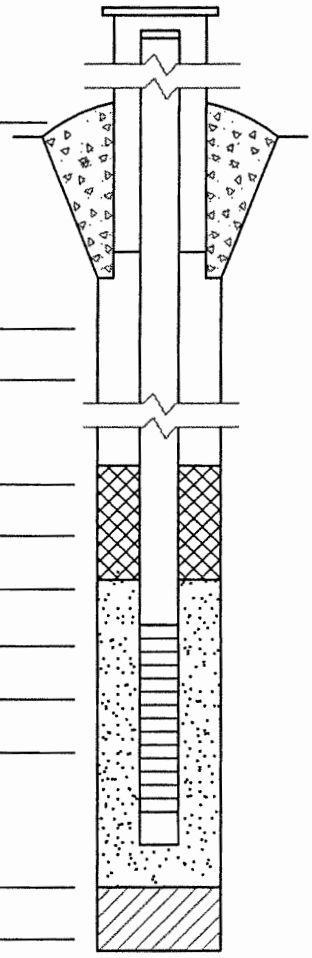
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
721.30	2.90	Top of Protective Casing
720.98	2.58	Top of Riser Pipe
718.40	0.00	Ground Surface
715.40	3.00	Top of annular sealant
649.90	68.50	Top of Seal
647.00	71.40	Top of Sand Pack
644.22	74.18	Top of Screen
634.44	83.96	Bottom of Screen
634.40	84.00	Bottom of Well
		Top of Backfill (If Applicable)
634.40	84.00	Bottom of Borehole

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 63.87 (feet below ground surface)				X	
Riser pipe from 63.87 to 74.18 (feet below ground surface)	X				
Screen					

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	76.76
Screen length (1st slot to last slot, ft)	9.78
Bottom of screen to end cap (ft)	0.04
Total length of casing (riser+screen+end cap) (ft)	86.58
Screen slot size	10 SLOT

CAD DWG NO:91118827 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 13:26 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 2
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-20 Surface Elev. 673.5' Boring Type HSA Completion Depth 43.0'
Coordinates: (X) N 2401.08 (Y) E 8527.68 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/31/03 Date Completed 02/03/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By M. KUHN Backfilled (Y/N) N Backfill Material
Surface Conditions TOPSOIL If "No" explain INSTALLED MONITORING WELL EX-20

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	48		2.5								SILTY CLAY (CL); Brown (10YR 4/2), very stiff, damp, trace gravel	
									2				
				+4.0								grades hard	
				+4.0					4				
2	CS	60		+4.0									
										668.00			
				2.0					6			CLAYEY SILT (ML); Gray (10YR 4/1), mottled brown (10 YR 4/2), stiff, damp, trace organics	
										666.00			
				1.5					8			SILTY CLAY (CL); Brown (10YR 4/2), stiff, damp, trace gravel, trace organics	
3	CS	60		1.25						664.00			TOC Sample @ 664.0
									10			SILTY CLAY (CL); Greenish gray (Gley 2 4/1), stiff, damp, trace gravel	
				1.25									
									12				
				2.0									
4	CS	60		1.0					14				
				1.25					16				
										656.70		SAND (SP); Gray (10YR 5/1), loose, moist	
										655.80			
				2.0					18			SILTY CLAY (CL); Gray (10YR 5/1), stiff, damp, trace gravel	
5	CS	60		1.5									
									20	653.50		CLAYEY SILT (ML); Gray (10YR 5/1), hard, damp, trace gravel	
				+4.0									
									22				
				+4.0									
6	CS	34		+4.0					24				
				+4.0					26				
									28				
7	CS	42		+4.0									TOC Sample @ 645.0

CAD DWG NO:91118808 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 15:22 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 2
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-20 Surface Elev. 673.5' Boring Type HSA Completion Depth 43.0'
Coordinates: (X) N 2401.08 (Y) E 8527.68 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/31/03 Date Completed 02/03/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By M. KUHN Backfilled (Y/N) N Backfill Material
Surface Conditions TOPSOIL If "No" explain INSTALLED MONITORING WELL EX-20

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7				+4.0						643.50		CLAYEY SILT (ML); Gray (10YR 5/1), hard, damp, trace gravel, trace sand	
									32				
				3.0								grades very stiff	
									34				
8	CS	60		2.5								grades moist	
									36				
				2.25									
									38				
				3.0									
9	CS	38								634.00		SAND (SW); Gray (10YR 4/1), loose, wet	
									40				
										632.00			
				+4.0					42			CLAYEY SILT (ML); Gray (10YR 4/1), hard, damp, trace gravel	
										630.50		End of boring @43.0'	
									44				
									46				
									48				
									50				
									52				
									54				
									56				
									58				

CAD DWG NO:91118809 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 15:40 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-20

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-20

State Plane Coordinate: (X) N 2401.08 (Y) E 8527.68 (or) Latitude: ___ ° ___ ' ___ " Longitude: ___ ° ___ ' ___ "

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: M. KUHN Date Started: 01/31/03 Date Finished: 02/03/03

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 30 MINUTES

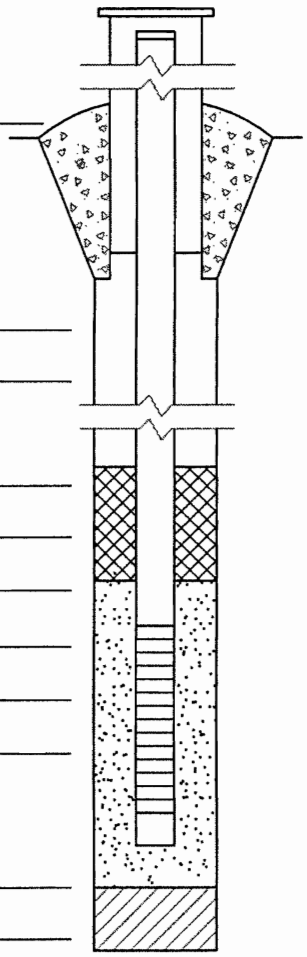
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
676.47	2.97	Top of Protective Casing
676.18	2.68	Top of Riser Pipe
673.50	0.00	Ground Surface
670.50	3.00	Top of annular sealant
647.00	26.50	Top of Seal
644.00	29.50	Top of Sand Pack
641.11	32.39	Top of Screen
631.34	42.16	Bottom of Screen
631.00	42.50	Bottom of Well
631.00	42.50	Top of Backfill (If Applicable)
630.50	43.00	Bottom of Borehole

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 12.10 (feet below ground surface)				X	
Riser pipe from 12.10 to 32.39 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	35.07
Screen length (1st slot to last slot, ft)	9.77
Bottom of screen to end cap (ft)	0.34
Total length of casing (riser+screen+end cap) (ft)	45.18
Screen slot size	10 SLOT

CAD DWG NO:91118828 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 13:35 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-21 Surface Elev. 701.0' Boring Type HSA Completion Depth 67.4'
Coordinates: (X) N 2202.60 (Y) E 9192.47 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/29/03 Date Completed 01/30/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By M. KUHN Backfilled (Y/N) N Backfill Material
Surface Conditions TOPSOIL If "No" explain INSTALLED MONITORING WELL EX-21

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	54										CLAYEY SILT (ML); Brownish orange (7.5YR 4/4), stiff, damp, trace organics, trace sand	
				2.0					2				
				+4.0									
2	CS	60		4.0					4			grades hard	
				2.5					6				
												2" sand lense; Brown (7.5 YR 4/2), loose, damp @ 693.9	
				2.0					8	693.25		SILTY CLAY (CL); Brown-orange (7.5YR 4/4), very stiff, damp, trace gravel, trace sand	
3	CS	30		2.5					10				
				2.5									
									12				TOC Sample @ 690.0
4	CS	30							14				
				2.5					16				
				3.0					18				
5	CS	60		3.0						681.50		SILTY CLAY (CL); Gray (10YR 5/2), very stiff, damp, trace gravel	
				2.0					20				
				2.5					22				
6	CS	60		+4.0					24	677.00 676.50		SAND (SP); Orange (7.5YR 4/2), loose, moist, trace gravel (fine grained)	
				4.0					26			SILTY CLAY (CL); Gray (10YR 4/1), hard, moist, trace gravel, trace sand	TOC Sample @ 675.0
				+4.0					28				
7	CS	28											

CAD DWG NO:91118810 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 15:55 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-21 Surface Elev. 701.0' Boring Type HSA Completion Depth 67.4'
Coordinates: (X) N 2202.60 (Y) E 9192.47 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/29/03 Date Completed 01/30/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By M. KUHN Backfilled (Y/N) N Backfill Material
Surface Conditions TOPSOIL If "No" explain INSTALLED MONITORING WELL EX-21

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7										670.50		SILTY CLAY (CL); Gray (10YR 4/1), hard, moist, trace gravel, trace sand	
				1.75								CLAYEY SILT (ML); Dark gray (10YR 3/1), stiff, damp, trace organics and sand	TOC Sample @ 670.0
									32				
				1.0									
8	CS	60		1.0					34				
									36				
				1.5									
				1.5									
				4.0					38	663.00		SILTY CLAY (CL); Blue green (Gley 2 5/10BG), hard, damp, trace gravel	
9	CS	60		+4.0					40				
				+4.0					42				
				3.75						657.50		SILTY CLAY (CL); Gray (10YR 5/1), very stiff, damp, trace gravel	
10	CS	60		2.5					44				
										655.50		CLAYEY SILT (ML); Gray (10YR 5/1), very stiff, damp, trace gravel, trace sand	
				3.5					46				
				2.5					48				TOC Sample @ 652.0
11	CS	60		2.5					50				
										650.00		SILTY SAND (SM); Gray (10YR 5/1), loose, moist	
				+4.0					52				
12	CS	60		+4.0					54	647.40		CLAYEY SILT (ML); Gray (10YR 5/1), hard, damp, trace gravel, trace sand	
				+4.0					56				
				4.0					58				TOC Sample @ 643.0
13	CS	48											

CAD DWG NO:91118811 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 15:34 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-21 Surface Elev. 701.4 Boring Type HSA Completion Depth 67.4'
Coordinates: (X) N (Y) E Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/29/03 Date Completed 01/30/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By M. KUHN Backfilled (Y/N) N Backfill Material
Surface Conditions TOPSOIL If "No" explain INSTALLED MONITORING WELL EX-21

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13										641.40		CLAYEY SILT (ML); Gray (10YR 5/1), hard, damp, trace gravel, trace sand	
										640.40		SAND (SP); Gray (10YR 5/1), loose, wet, trace gravel	
									62				
									64				
14	CS	36		+4.0						637.00		CLAYEY SILT (ML); Gray (10YR 5/1), hard, damp, trace gravel, trace sand	
									66				
				+4.0						634.00		End of boring @67.4'	
									68				
									70				
									72				
									74				
									76				
									78				
									80				
									82				
									84				
									86				
									88				

CAD DWG NO:91118812 EMPLOYEE NO: 9834 DATE/TIME: 02/27/03 10:11 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-21

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-21

State Plane Coordinate: (X) N 2202.60 (Y) E 9192.47 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: M. KUHN Date Started: 01/30/03 Date Finished: 01/30/03

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 30 MINUTES

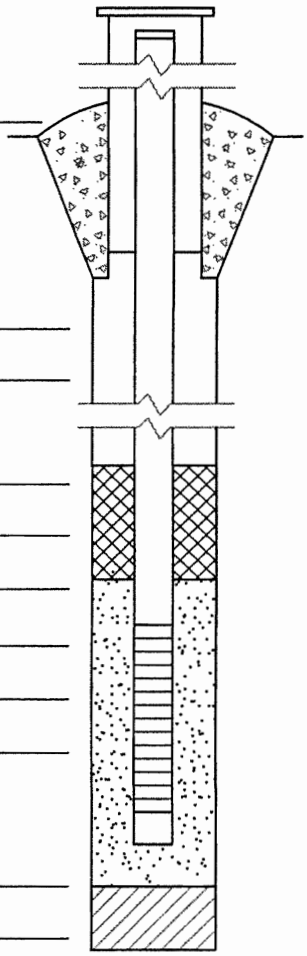
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
704.17	3.17	Top of Protective Casing
703.84	2.84	Top of Riser Pipe
701.00	0.00	Ground Surface
698.00	3.00	Top of annular sealant
649.50	51.50	Top of Seal
646.50	54.50	Top of Sand Pack
643.88	57.12	Top of Screen
634.24	66.76	Bottom of Screen
634.20	66.80	Bottom of Well
634.20	66.80	Top of Backfill (If Applicable)
633.60	67.40	Bottom of Borehole

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 36.85 (feet below ground surface)				X	
Riser pipe from 36.85 to 57.12 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	59.96
Screen length (1st slot to last slot, ft)	9.64
Bottom of screen to end cap (ft)	0.04
Total length of casing (riser+screen+end cap) (ft)	69.64
Screen slot size	10 SLOT

CAD DWG NO:91118829 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 13:17 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, ILLINOIS Well #: EX-21S

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-21S

State Plane Coordinate: (X) N 2196.90 (Y) E 9198.08 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: DAVE BALDWIN

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): N/A

Logged By: J. BERRY Date Started: 10/6/2003 Date Finished: 10/7/2003

Notes: ___

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
703.47	3.07	Top of Protective Cas
703.14	2.74	Top of Riser Pipe
700.4	0.00	Ground Surface
697.4	3.0	Top of annular sealan
656.9	43.50	Top of Seal
654.90	45.50	Top of Sand Pack
652.83	47.57	Top of Screen
643.13	57.27	Bottom of Screen
642.79	57.61	Bottom of Well
642.79	57.61	Top of Backfill (If Applicable)
642.40	58.00	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL SLURRY

Installation Method: TREMIE

Type of Bentonite Seal: SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 30 MINUTES

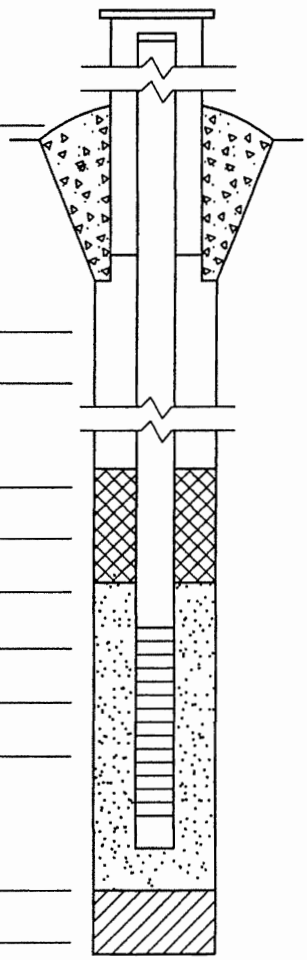
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 37.32 (feet below ground surface)				X	
Riser pipe from 37.32 to 47.57 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.0
Protective casing length (ft)	5.0
Riser pipe length (ft) (include stickup)	50.08
Screen length (1st slot to last slot, ft)	9.70
Bottom of screen to end cap (ft)	0.34
Total length of casing (riser+screen+end cap) (ft)	60.35
Screen slot size	.010

CAD DWG NO:91118891 EMPLOYEE NO: 89736 DATE/TIME: 10/24/03 14:32 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 2
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-22D Surface Elev. 667.10' Boring Type HSA Completion Depth 41.0'
Coordinates: (X) N 2257.44 (Y) E 10128.22 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/28/03 Date Completed 01/29/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By M. KUHN Backfilled (Y/N) N Backfill Material
Surface Conditions TOPSOIL If "No" explain INSTALLED MONITORING WELL EX-22D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	48		2.0								CLAYEY SILT (ML); Dark brown (10YR 3/3), very stiff, trace organics & root fragments	
										665.40			
				2.25					2			SILTY CLAY (CL); Brown (10YR 5/1), very stiff, damp, trace root fragments	
									4				
2	CS	38		0.5								grades soft	
									6			grades firm	TOC Sample @ 660.0
				0.75									
									8				
3	CS	46		0.75									
									10				
										656.30			
				2.0					12			SILTY CLAY (CL); Gray (Gley 2 5/5BG), mottled brown (10YR 5/1), stiff, damp, trace fine sand	TOC Sample @ 655.0
										653.90			
4	CS	58							14			SAND (SP); Gray (Gley 2 5/5BG), loose, wet, w/coarse gravel	
									16	651.10		CLAYEY SAND (SC); Gray (Gley 2 5/5BG), dense, damp, trace gravel	
				3.5					18	648.60			TOC Sample @ 648.0
5	CS	60										SILTY CLAY (CL); Gray (Gley 2 5/5BG), very stiff, moist, trace gravel	
				3.0					20				
				3.5					22				TOC Sample @ 644.0
6	CS	60		+4.0					24			grades hard	
				+4.0					26				
				+4.0					28				
7	CS	38		+4.0									

CAD DWG NO:91118816 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 15:06 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 2
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-22D Surface Elev. 667.10' Boring Type HSA Completion Depth 41.0'
Coordinates: (X) N 2257.44 (Y) E 10128.22 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/28/03 Date Completed 01/29/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By M. KUHN Backfilled (Y/N) N Backfill Material
Surface Conditions TOPSOIL If "No" explain INSTALLED MONITORING WELL EX-22D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7				+4.0						637.10		SILTY CLAY (CL); Gray (Gley 2 5/5BG), hard, moist, trace gravel	
									32				
				+4.0									
									34				
8	CS	60		+4.0									
										631.80		SAND (SP); Gray (Gley 2 5/5BG), loose, wet, trace gravel	
				+4.0					36				
												CLAYEY SILT (ML); Gray (Gley 2 5/5BG), mottled brown (10YR 5/1), stiff, damp, trace sand, trace organics	
				1.0					38	629.10			
										628.30		PEAT (Pt); Brown (10YR 5/1), mottled gray (Gley 2 5/5BG), firm, damp, trace wood fragments	
9	CS	24		2.5					40	627.30			
				2.0						626.10		SILTY CLAY (CL); Gray (Gley 2 5/5BG), mottled brown (10YR 5/1), very stiff, damp, trace gravel	
									42			End of boring @41.0'	
									44				
									46				
									48				
									50				
									52				
									54				
									56				
									58				

CAD DWG NO:91118817 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 16:11 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-22D

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-22D

State Plane Coordinate: (X) N 2257.44 (Y) E 10128.22 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 01/28/03 Date Finished: 01/29/03

Notes: ___

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
669.44	2.34	Top of Protective Casing
669.14	2.04	Top of Riser Pipe
667.10	0.00	Ground Surface
664.10	3.00	Top of annular sealant
642.10	25.00	Top of Seal
639.10	28.00	Top of Sand Pack
636.97	30.13	Top of Screen
627.24	39.86	Bottom of Screen
626.90	40.20	Bottom of Well
629.90	40.20	Top of Backfill (If Applicable)
626.35	40.75	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: BENSEAL
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 30 MINUTES

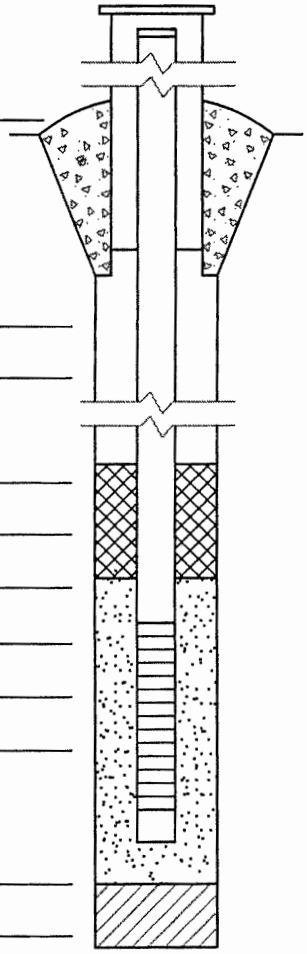
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	32.17
Screen length (1st slot to last slot, ft)	9.73
Bottom of screen to end cap (ft)	0.34
Total length of casing (riser+screen+end cap) (ft)	42.24
Screen slot size	10 SLOT

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 9.86 (feet below ground surface)					
Riser pipe from 9.86 to 30.13 (feet below ground surface)	X				
Screen	X				

CAD DWG NO:91118831 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 14:43 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-22S

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-22S

State Plane Coordinate: (X) N 2264.01 (Y) E 10127.55 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ____

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 01/28/03 Date Finished: 01/29/03

Notes: ____

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
669.70	2.70	Top of Protective Casing
669.33	2.33	Top of Riser Pipe
667.00	0.00	Ground Surface
664.50	3.00	Top of annular sealant
663.00	4.00	Top of Seal
661.00	6.00	Top of Sand Pack
658.95	8.05	Top of Screen
649.18	17.82	Bottom of Screen
648.84	18.16	Bottom of Well
648.84	18.16	Top of Backfill (If Applicable)
648.80	18.20	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENTONITE PELLET

Installation Method: POURED

Type of Bentonite Seal: PELLET
(Granular, Pellet, Slurry)

Installation Method: POURED

Setting Time: 30 MINUTES

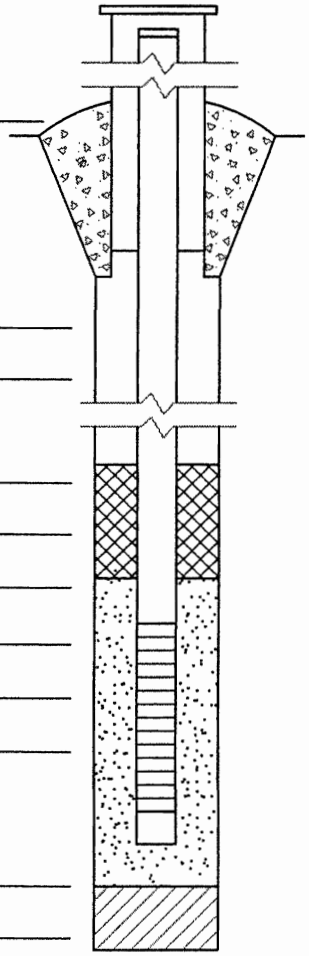
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	10.38
Screen length (1st slot to last slot, ft)	9.77
Bottom of screen to end cap (ft)	0.34
Total length of casing (riser+screen+end cap) (ft)	20.49
Screen slot size	10 SLOT

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 8.05 (feet below ground surface)	X				
Riser pipe from ____ to ____ (feet below ground surface)					
Screen	X				

CAD DWG NO:91118830 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 14:59 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-23S

ct Name: CLINTON LANDFILL, INC. Borehole #: EX-23

State Plane Coordinate: (X) N 3252.74 (Y) E 10306.07 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 01/10/03 Date Finished: 01/14/03

Notes: ___

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
713.70	2.70	Top of Protective Casing
713.28	2.28	Top of Riser Pipe
711.00	0.00	Ground Surface
708.00	3.00	Top of annular sealant
657.01	53.99	Top of Seal
654.01	56.99	Top of Sand Pack
652.01	58.99	Top of Screen
642.34	68.66	Bottom of Screen
642.00	69.00	Bottom of Well
642.00	69.00	Top of Backfill (If Applicable)
640.50	70.5	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 35 MINUTES

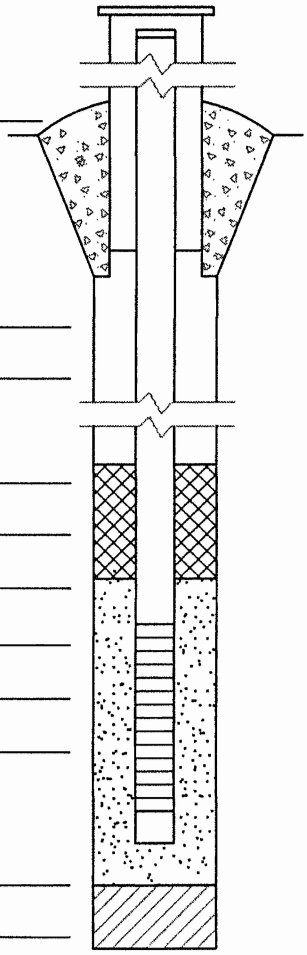
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
F ive casing					4" SQ. STEEL
Riser pipe from 0.00 to 38.83 (feet below ground surface)					
Riser pipe from 38.83 to 58.99 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	61.27
Screen length (1st slot to last slot, ft)	9.67
Bottom of screen to end cap (ft)	0.34
Total length of casing (riser+screen+end cap) (ft)	71.28
Screen slot size	10 SLOT

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-23D

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-23D

State Plane Coordinate: (X) N 3259.29 (Y) E 10307.13 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ___

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 01/10/03 Date Finished: 01/14/03

Notes: ___

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
713.80	3.00	Top of Protective Casing
713.41	2.61	Top of Riser Pipe
710.80	0.00	Ground Surface
707.80	3.00	Top of annular sealant
638.30	72.50	Top of Seal
635.30	75.50	Top of Sand Pack
633.41	77.39	Top of Screen
623.72	87.08	Bottom of Screen
623.30	87.50	Bottom of Well
623.30	87.50	Top of Backfill (If Applicable)
622.80	88.00	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 30 MINUTES

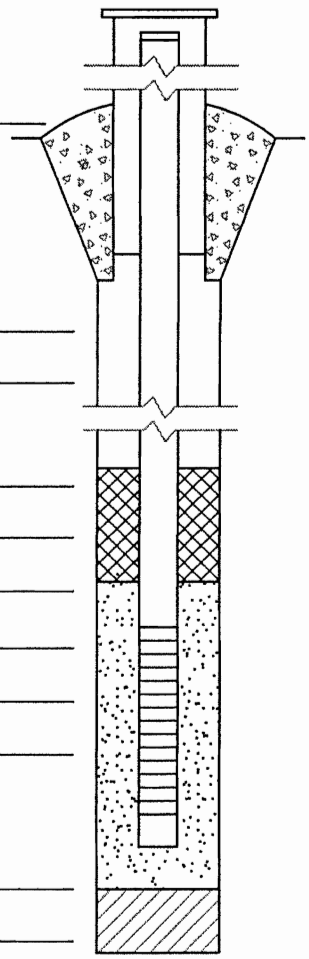
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
tective casing					4" SQ. STEEL
er pipe from 0.00 to 37.17 (feet below ground surface)				X	
Riser pipe from 37.17 to 77.39 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	80.00
Screen length (1st slot to last slot, ft)	9.69
Bottom of screen to end cap (ft)	0.42
Total length of casing (riser+screen+end cap) (ft)	90.11
Screen slot size	10 SLOT

CAD DWG NO:91118833 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 14:41 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-23 Surface Elev. 710.8' Boring Type HSA Completion Depth 88.0'
Coordinates: (X) N 3259.29 (Y) E 10307.13 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/10/03 Date Completed 01/14/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions PICKED CORN FIELD If "No" explain INSTALLED MONITORING WELL EX-23S

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	48										CLAYEY SILT (ML); Black (10YR 2/1), moist, trace root fragments	
									2				
				1.0						708.40		SILTY CLAY (CL); Brown (10YR 4/3), stiff, moist, trace root fragments	
									4				
2	CS	60		1.5									
									6				
				1.75									
									8				
				1.5									
3	CS	60							10				
				2.0								grades very stiff	
				2.5					12				
				3.0									
4	CS	60							14	696.80		SILTY CLAY (CL); Dark gray (10YR 4/1), very stiff, moist, trace gravel	
				3.5					16				
				4.0					18			grades hard	
				+4.0									
5	CS	60		3.75					20			grades very stiff	
				3.5					22				
				3.75					24				
6	CS	60											
				3.75					26				
				3.5					28				
7	CS	60		2.5									

CAD DWG NO:91118791 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 16:28 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 3

Project Location CLINTON, IL. Project No. 91-118

Boring No. EX-23 Surface Elev. 710.8' Boring Type HSA Completion Depth 88.0'

Coordinates: (X) N 3259.29 (Y) E 10307.13 Drilling Contractor SKS ENGINEERS, INC.

Date Started 01/10/03 Date Completed 01/14/03 Driller TODD SKINNER Rig No. MOBILE B-57

Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material

Surface Conditions PICKED CORNFIELD If "No" explain INSTALLED MONITORING WELL EX-23S

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7				2.5					680.80		SILTY CLAY (CL); Dark gray (10YR 4/1), very stiff, moist	
								32				
				2.5								
				2.5								
								34				
8	CS	ST										
								36				
								38	672.80		CLAYEY SILT (ML); Dark gray (10YR 4/1), stiff, moist, w/fine sand	
				2.0								
9	CS	60		2.0					671.30		SILTY CLAY (CL); Dark gray (10YR 4/1), stiff, moist, trace gravel 1" sand @ 41.2'	
				2.0				40				
				1.75				42	668.80 668.30		SILT (ML); Gray (10YR 5/1), moist	
											PEAT (Pt); Very dark brown (10YR 2/2), stiff, moist, w/clay, layered	
10	CS	60		2.25				44	666.40		SILTY CLAY (CL); Dark gray (10YR 4/1), mottled blue-green, very stiff, moist, very clayey	
				2.25				46				
				2.25				48				
11	CS	60							661.20		SILTY CLAY (CL); Greenish gray (Gley 1 5/5G), very stiff, trace gravel	
				2.5				50				
				2.25				52	658.80		SILTY CLAY (CL); Gray (10YR 5/1), very stiff, moist, trace gravel	
12	CS	F		2.5				54				
				2.5				56				
				2.5				58				
13	CS	ST							651.40		SAND (SW); Gray (10YR 5/1), wet, fine to medium grained	

CAD DWG NO:91118792 EMPLOYEE NO: 89525 DATE/TIME: 03/06/03 16:46 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-23 Surface Elev. 710.8' Boring Type HSA Completion Depth 88.0'
Coordinates: (X) N 3259.29 (Y) E 10307.13 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/10/03 Date Completed 01/14/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions PICKED CORN FIELD If "No" explain INSTALLED MONITORING WELL EX-23S

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	ST								650.80		SAND (SW), Gray (10YR 5/1), wet, fine to medium grained	
										649.80			
				2.5						649.30		SILTY CLAY (CL); Dark gray (10YR 4/1), very stiff, moist, trace gravel	
									62				
										647.80		SANDY SILT (ML); Dark gray (10YR 4/1), wet to saturated, trace gravel	
												GRAVELLY CLAY (CL), Dark gray (10YR 4/1), wet, trace sand	
14	CS	48		2.5					64	646.80		SILTY CLAY (CL); Dark gray (10YR 4/1), very stiff, moist	
										645.50			
									66			CLAYEY SAND (SC), Dark gray (10YR 4/1), wet to saturated	
												grades to sandy clay, wet + soft @ 643.3'	
				0.5									
				0.5					68				
										641.80		SILTY CLAY (CL); Dark gray (10YR 4/1), moist, hard, trace gravel	
	CS	12		+4.0						641.30			
	CS	60		+4.0					70			CLAYEY SILT (ML); Gray (10YR 5/1), hard, damp, trace sand, trace gravel	
				+4.0									
									72				
										637.30			
17	CS	42		+4.0					74	636.70		SAND (SP); Gray (10YR 5/1), loose, damp, trace gravel	
												CLAYEY SILT (ML); Gray (10YR 4/1), hard, damp, trace gravel	
				+4.0					76				
									78	632.80			
												CLAYEY SILT (ML); Very dark gray (10YR 3/1), mottled black (10YR 2/1), hard, damp, trace gravel, trace organics	
18	CS	54								631.60			
									80			SAND (SP); Gray (10YR 4/1), loose, wet, fine grained	
									82				
										627.30			
19	CS	36							84			PEAT (OL); Very dark gray (10YR 3/1), mottled black (10YR 2/1), hard, damp, trace organics	
									86				
									88	622.80		End of boring @ 88.0'	

CAD DWG NO:91118793 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 09:52 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-24 Surface Elev. 727.4' Boring Type HSA Completion Depth 98.0'
Coordinates: (X) N 4509.36 (Y) E 10317.42 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/08/03 Date Completed 01/10/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions GRASS COVER If "No" explain INSTALLED MONITORING WELL EX-24

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	54								726.70		CLAYEY SILT (ML); Dark brown (10YR 2/2), moist w/root fragments	
				0.75					2			SILTY CLAY (CL); Yellowish brown (10YR 5/6), soft, moist, trace gravel	
				1.0					4			grades dark yellowish brown (10YR 4/4)	
2	CS	60										grades stiff	
				1.25					6				
				1.25					8				
				1.25									
3	CS	60							10				
				1.25									
				1.25					12				
									14				
4	CS	60								713.10		SILTY CLAY (CL); Dark gray (10YR 4/1), stiff, moist, trace gravel	
				1.0					16				
				1.0					18				
5	CS	60		1.5					20				
				1.25					22				
				1.25					24				
6	CS	60											
				1.25					26				
				1.5					28				
				2.25								grades very stiff	
7	CS	ST											

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-24 Surface Elev. 727.4' Boring Type HSA Completion Depth 98.0'
Coordinates: (X) N 4509.36 (Y) E 10317.42 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/08/03 Date Completed 01/10/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions GRASS COVER If "No" explain INSTALLED MONITORING WELL EX-24

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS								697.40		SILTY CLAY (CL); Dark gray (10YR 4/1), stiff, moist, trace gravel	
								32				
				2.0							grades very stiff	
								34				
8	CS	60										
				2.75				36				
				3.0				38				
9	CS	60		3.25				40				
				3.5				42				
								44				
10	CS	60		3.75								
				3.5				46				
				3.75				48				
11	CS	60										
				2.5				50				
				2.75				52				
				2.5								
12	CS	60						54				
				2.5				56				
				2.5				58				
13	CS	60		0.5					667.90		CLAYEY SILT (ML); Dark brown (10YR 2/2), soft, moist, w/organics	

CAD DWG NO:91118795 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 09:38 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-24 Surface Elev. 727.4' Boring Type HSA Completion Depth 98.0'
Coordinates: (X) N 4509.36 (Y) E 10317.42 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/08/03 Date Completed 01/10/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions GRASS COVER If "No" explain INSTALLED MONITORING WELL EX-24

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	55		0.5						667.40		CLAYEY SILT (ML); Dark brown (10YR 2/2), soft, moist, w/organics	
										665.90		PEAT (Pt); Dark brown (10YR 2/2), moist, very fibrous wood fragments, w/clay	
									62				
									64	663.40		SILTY CLAY (CL); Black (10YR 2/1), soft, moist, very clayey	
14	CS	60		0.5									
				2.25					66			grades very stiff + dark gray (10YR 4/1) trace gravel	
				2.25					68			grades blue-gray (Gley 2 5/10G)	
				2.25									
15	CS	60							70				
				2.25						656.80		SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel	
				+4.0					72				
				+4.0					74				
16	CS	60							76				
									78				
				+4.0						648.40		SANDY CLAY (CL); Dark gray (10YR 4/1), soft, moist to wet, trace to some gravel (20%)	
17	CS	60		0.75					80	647.40		SILTY CLAY (CL); Dark gray (10YR 4/1), hard, moist, trace gravel	
				+4.0									
				+4.0					82				
				+4.0					84				
18	CS	60										grades damp	TOC Sample @ 643.1
				+4.0					86				
				+4.0					88				
				+4.0									
19	CS	60											

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 4 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-24 Surface Elev. 727.4' Boring Type HSA Completion Depth 98.0'
Coordinates: (X) N 4509.36 (Y) E 10317.42 Drilling Contractor SKS ENGINEERS, INC.
Date Started 01/08/03 Date Completed 01/10/03 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions GRASS COVER If "No" explain INSTALLED MONITORING WELL EX-24

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
19	CS	60								637.40 637.00		SILT (ML); Gray, (10YR 4/1), saturated, trace clay	
												PEAT (Pt); Brown (10YR 4/3), wet, w/silt, trace clay	TOC Sample @ 636.0
				1.0					92	635.40		CLAYEY SILT (ML); Gray, (10YR 4/1), soft, wet, trace organics	
				0.75						633.80		SANDY SILT (ML); Gray, (10YR 4/1), saturated, trace organics	
20	CS	42		+4.0					94	632.30		SILTY CLAY (CL); Gray, (10YR 4/4), hard, moist, trace gravel	
				3.0					96			2" medium grained sand @ 631.5 grades very stiff	
				+4.0								grades hard	
									98	629.40		End of boring @98.0'	
									100				
									102				
									104				
									106				
									108				
									110				
									112				
									114				
									116				
									118				

CAD DWG NO:91118797 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 09:54 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: EX-24

Project Name: CLINTON LANDFILL, INC. Borehole #: EX-24

State Plane Coordinate: (X) N 4509.36 (Y) E 10317.42 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #: ____

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 01/07/03 Date Finished: 01/10/03

Notes: ____

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE

Setting Time: 35 MINUTES

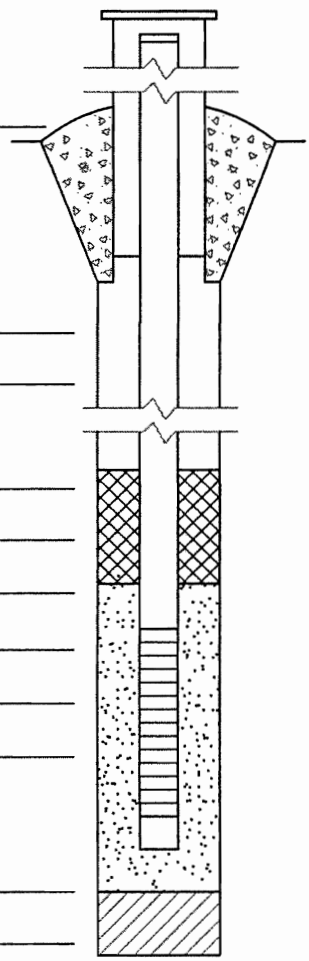
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: TREMIE

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
730.09	2.69	Top of Protective Casing
729.73	2.33	Top of Riser Pipe
727.40	0.00	Ground Surface
724.40	3.00	Top of annular sealant
643.90	83.50	Top of Seal
641.94	85.46	Top of Sand Pack
639.94	87.46	Top of Screen
630.25	97.15	Bottom of Screen
629.90	97.50	Bottom of Well
629.90	97.50	Top of Backfill (If Applicable)
629.40	98.00	Bottom of Borehole

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 47.28 (feet below ground surface)				X	
Riser pipe from 47.28 to 87.46 (feet below ground surface)	X				
Screen					

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (include stickup)	89.79
Screen length (1st slot to lost slot, ft)	9.69
Bottom of screen to end cap (ft)	0.35
Total length of casing (riser+screen+end cap) (ft)	99.83
Screen slot size	10 SLOT

CAD DWG NO:91118834 EMPLOYEE NO: 89525 DATE/TIME: 03/07/03 14:45 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3
P t Location CLINTON, IL. Project No. 91-118
Bo. g No. EX-25 Surface Elev. 717.0 Boring Type HSA Completion Depth 79.0'
Coordinates: (X) N 3449.8 (Y) E 9903.1 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10/13/03 Date Completed 10/17/03 Driller DAVE BALDWIN Rig No. MOBIL B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT
Surface Conditions BARE SOIL If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	28										CLAYEY SILT (ML); Brown (10YR 4/3), moist, trace root fragments	
				1.5						716.0		SILTY CLAY (CL); Brown (10YR 4/3), stiff, moist, trace root fragments	
									2				
				1.5									
2	CS	60		+4.0					4			grades hard	
				+4.0					6				
				+4.0					8				
3	CS	60											
				+4.0					10			grades Mottled Gray (10YR 6/1)	
				1.5					12	705.0		SILTY CLAY (CL); Gray (10YR 6/1) mottled brown, stiff, moist, trace gravel	
				1.5									
4	CS	60							14				
				2.25								grades very stiff	
									16				
				3.0					18			1" sand seam, brown, wet @18.5'	
5	CS	20											
									20	697.0		SAND (SW); Brown (10YR 5/3), loose, saturated, medium to fine grained, trace silt & clay	
									22			grades fine to coarse grained	
									24	692.9		SILTY CLAY (CL); Gray (10YR 5/1), stiff, moist, trace gravel	
6	CS	28											
				1.5					26				
				1.5					28				
7	CS	25											

CAD DWG NO:91118879 EMPLOYEE NO: 9834 DATE/TIME: 10/23/03 14:07 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-25 Surface Elev. 717.0 Boring Type HSA Completion Depth 79.0'
Coordinates: (X) N 3449.8 (Y) E 9903.1 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10/13/03 Date Completed 10/17/03 Driller DAVE BALDWIN Rig No. MOBIL B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT
Surface Conditions BARE SOIL If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	25		1.75								SILTY CLAY (CL); Gray (10YR 5/1), stiff, moist, trace gravel	
									32				
				1.75									
									34				
8	CS	60		1.5									
									36				
				1.5					38				
9	CS	60		1.75					40				
				1.75					42				
				2.25								grades very stiff	
10	CS	60							44				
				2.5					46				
				2.75					48				
				1.0						668.4		CLAYEY SILT (ML); Gray (10YR 5/1) mottled brown, very stiff, moist, with organics	
11	CS	60								667.5		ORGANIC SILT (OL); Gray-brown (10YR 5/1), stiff, moist, trace clay	
				1.0					50				
				1.0						665.8		SILTY CLAY (CL); Blue-green (Gley2 5/5B), stiff, moist, trace gravel	
				1.25					52				
12	CS	60		1.75					54				
				2.0					56				
				2.0					58				
13	CS	60		2.0									

CAD DWG NO:91118880 EMPLOYEE NO: 9834 DATE/TIME: 10/24/03 10:07 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3

Project Location CLINTON, IL. Project No. 91-118

Boring No. EX-25 Surface Elev. 717.0 Boring Type HSA Completion Depth 79.0'

Coordinates: (X) N 3449.8 (Y) E 9903.1 Drilling Contractor SKS ENGINEERS, INC.

Date Started 10/13/03 Date Completed 10/17/03 Driller DAVE BALDWIN Rig No. MOBIL B-57

Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT

Surface Conditions BARE SOIL If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	60								656.5			
										656.0		CLAYEY SILT (ML); Gray (10YR 6/1), stiff, moist, trace fine sand	
									62			SILTY SAND (SM); Gray (10YR 6/1), dense, wet, trace clay	
										654.0		CLAYEY SILT (ML); Gray (10YR 6/1), stiff, moist, trace fine sand	
									64	653.25		SAND (SW); Gray (10YR 6/1), dense, wet, fine to medium grained, trace silt & clay	
14	CS	49								652.2		grades with silt @64.4'	
				+4.0									
				+4.0					66			SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel	
				+4.0					68				
15	CS	60											
				+4.0					70				
				+4.0					72				
				+4.0									
16	CS	60							74				
									76				
										639.8		SAND (SP); Gray (10YR 5/1), very dense, saturated, medium grained, trace gravel (5% fine, 80% medium, 10% coarse, 5% gravel)	
									78				
										638.0		End of boring @79.0'	
									80				
									82				
									84				
									86				
									88				

CAD DWG NO:91118881 EMPLOYEE NO: 9834 DATE/TIME: 10/24/03 10:31 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-26 Surface Elev. 707.3 Boring Type HSA Completion Depth 69.0'
Coordinates: (X) N 3353.81 (Y) E 9248.47 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10-9-03 Date Completed 10-13-03 Driller DAVE BALDWIN Rig No. MOBIL B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT
Surface Conditions BARE SOIL If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	48								706.55		CLAYEY SILT (ML); Brown (10YR 4/3), moist, trace root fragments	
				2.0					2			SILTY CLAY (CL); Brown (10YR 4/3), stiff, moist, trace root fragments grades mottled tan @2.5'	
				2.0					4	703.55			
2	CS	60										CLAYEY SILT (ML); Gray (10YR 6/1) mottled yellowish brown (10YR 5/6), stiff, moist	
				2.75								grades more silt, trace sand	
				2.0					6	701.0		SILTY CLAY (CL); Brown (10YR 4/3), stiff, moist, trace gravel	
				2.0					8				
3	CS	60											
				2.0					10			grades mottled gray (10YR 5/1) grades hard	
				+4.0					12	695.3		SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel	
				+4.0					14				
4	CS	60											
				2.5					16			grades very stiff	
				2.5					18				
5	CS	60		2.0					20				
				2.25					22				
				2.25					24			grades hard	
6	CS	55		+4.0									
				+4.0					26				
				+4.0					28				
7	CS	25		2.0								grades stiff	

CAD DWG NO:91118882 EMPLOYEE NO: 9834 DATE/TIME: 10/24/03 12:38 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 3
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-26 Surface Elev. 707.3 Boring Type HSA Completion Depth 69.0'
Coordinates: (X) N 3353.81 (Y) E 9248.47 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10-9-03 Date Completed 10-13-03 Driller DAVE BALDWIN Rig No. MOBIL B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT
Surface Conditions BARE SOIL If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	25		1.75								SILTY CLAY (CL); Gray (10YR 5/1), stiff, moist, trace gravel	
									32				
				1.5									
												grades very stiff	
									34				
8	CS	50		2.5									
									36				
				2.5									
										669.9		CLAYEY SILT (ML); Gray (10YR 5/1), stiff, moist, with fine sand	
				1.0					38				
										668.3		SAND (SP); Gray (10YR 5/1), loose, wet, fine grained, with clay, trace silt	
9	CS	50							40				
									42				
				1.25						664.7		CLAYEY SILT (ML); Gray (10YR 6/1) mottled brown, stiff, moist, with organics	
				1.25						663.7			
									44			PEAT (Pt); Dark brown (10YR 3/3), stiff, moist, with clay and wood fragments	
10	CS	50											
				1.5					46				
				1.75						659.8		SILTY CLAY (CL); Very dark greenish brown (10YR 3/2), stiff, moist, trace gravel and organics	
				1.75					48	658.8			
11	CS	60										SILTY CLAY (CL); Dark bluish gray (Gley2 5/5BG), stiff, moist, trace gravel	
				1.5					50				
				1.25					52	655.1		SILTY CLAY (CL); Light gray (10YR 7/1), stiff, moist, trace gravel	
				1.0								3" moist clayey silt seam with fine sand @53.3'	
12	CS	55		+4.0					54			grades gray (10YR 5/1), hard	
									56	651.05		SAND (SW); Gray (10YR 5/1), loose, saturated, fine to medium grained, trace silt & clay	
				+4.0						650.3			
									58			SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel	
13	CS	60		+4.0									

CAD DWG NO:91118883 EMPLOYEE NO: 9834 DATE/TIME: 10/28/03 14:42 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3

Project Location CLINTON, ILLINOIS Project No. 91-118

Boring No. EX-26 Surface Elev. 707.3 Boring Type HSA Completion Depth 69.0'

Coordinates: (X) N 3353.81 (Y) E 9248.47 Drilling Contractor SKS ENGINEERS, INC.

Date Started 10-9-03 Date Completed 10-13-03 Driller DAVE BALDWIN Rig No. MOBIL B-57

Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT

Surface Conditions BARE SOIL If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	60										SILTY CLAY (CL); Gray (10YR 6/1), hard, moist, ~~trace gravel~~	
				+4.0									
									62				
				1.25								grades stiff	
									64				
14	CS	60		+4.0								grades hard ~~1" sandy clay seam @64.9'~~	
									66				
				+4.0									
									68				
				+4.0									
										638.3		End of boring @69.0'	
									70				
									72				
									74				
									76				
									78				
									80				
									82				
									84				
									86				
									88				

CAD DWG NO:91118884 EMPLOYEE NO: 9834 DATE/TIME: 10/28/03 15:55 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3

Project Location CLINTON, ILLINOIS Project No. 91-118

Boring No. EX-27 Surface Elev. 723.9 Boring Type HSA Completion Depth 84.0'

Coordinates: (X) N 3353.81 (Y) E 8678.60 Drilling Contractor SKS ENGINEERS, INC.

Date Started 10-7-03 Date Completed 10-9-03 Driller DAVE BALDWIN Rig No. MOBIL B-57

Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT

Surface Conditions HARVESTED BEAN FIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	12										CLAYEY SILT (ML); Brown (10YR 5/3), stiff, damp, with organics	
				1.0					2	721.9			
												SILTY CLAY (CL); Dark yellowish brown (10YR 6/4), stiff, moist, trace organics & gravel	
				1.25					4				
2	CS	60											
									6				
				1.25									
									8				
				1.25									
3	CS	60							10				
				1.25								grades mottled gray (10YR 5/1)	
									12				
										710.5			
4	CS	40		1.5					14			SILTY CLAY (CL); Gray (10YR 5/1), stiff, moist, trace gravel	
									16				
				1.5									
										706.4			
									18	705.4		SILTY SAND (SM); Gray (10YR 5/1), loose, wet to saturated, trace clay	
5	CS	60		2.0					20			SILTY CLAY (CL); Gray (10YR 5/1), very stiff, moist, trace gravel & fine sand	
				2.25					22				
												grades hard	
				+4.0					24				
6	CS	45											
				+4.0					26				
										697.4			
										696.9		SAND (SW); Gray (10YR 5/1), loose, wet, fine to coarse grained, trace silt & clay	
				+4.0					28			SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel	
7	CS	60											

CAD DWG NO:91118885 EMPLOYEE NO: 9834 DATE/TIME: 10/24/03 16:32 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 3

Project Location CLINTON, ILLINOIS Project No. 91-118

Boring No. EX-27 Surface Elev. 723.9 Boring Type HSA Completion Depth 84.0'

Coordinates: (X) N 3353.81 (Y) E 8678.60 Drilling Contractor SKS ENGINEERS, INC.

Date Started 10-7-03 Date Completed 10-9-03 Driller DAVE BALDWIN Rig No. MOBIL B-57

Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT

Surface Conditions HARVESTED BEAN FIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60										SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, ~~trace gravel & organics~~	
				+4.0					32				
				+4.0					34				
8	CS	60											
				+4.0					36				
				+4.0					38			~~grades very stiff~~	
				3.25									
9	CS	60							40				
				3.25									
				3.5					42				
10	CS	60		3.25					44			~~grades hard~~	
				+4.0					46				
									48				
11	CS	60		+4.0					50				
				+4.0					52				
				2.25					54			grades very stiff	
12	CS	60											
				2.25					56			SILTY SAND (SM); Gray (10YR 5/1), loose, wet, trace clay	
				2.0					58	666.9 666.4		ORGANIC SILT (OL); Dark grayish brown (10YR 4/2), very stiff, moist, with clay, trace root fragments & fine sand	
13	CS	60		2.0						664.9		~~PEAT (Pt); Very dark brown (10YR 2/2), very stiff,~~ moist, trace clay & silt, with root fragments	

CAD DWG NO:91118886 EMPLOYEE NO: 9834 DATE/TIME: 10/24/03 16:27 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3

P ct Location CLINTON, ILLINOIS Project No. 91-118

B g No. EX-27 Surface Elev. 723.9 Boring Type HSA Completion Depth 84.0'

Coordinates: (X) N 3353.81 (Y) E 8678.60 Drilling Contractor SKS ENGINEERS, INC.

Date Started 10-7-03 Date Completed 10-9-03 Driller DAVE BALDWIN Rig No. MOBIL B-57

Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT

Surface Conditions HARVESTED BEAN FIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	60										PEAT (Pt); Dark brown (10YR 2/2), very stiff, moist, trace clay & silt, with root and wood fragments	
				2.0					62				
				2.5						660.4		SILTY CLAY (CL); Gray (10YR 5/1), very stiff, moist, trace gravel	
14	CS	60							64				
				2.0						658.65		SILTY CLAY (CL); Bluish gray (Gley2 5/5B), very stiff, moist, trace gravel	
									66				
				2.0					68				
15	CS	60		2.0					70	653.9		CLAYEY SILT (ML); Gray (10YR 5/1), very stiff, moist, trace gravel & organics	
				2.25					72				
				2.0						650.5		SILTY CLAY (CL); Gray (10YR 5/1), very stiff, moist, trace gravel	
16	CS	60							74				
				3.0					76				
				+4.0								grades hard	
				+4.0					78				
17	CS	60											
				+4.0					80				
				+4.0					82				
									84	639.9		End of boring @84.0'	
									86				
									88				

CAD DWG NO:91118887 EMPLOYEE NO: 9834 DATE/TIME: 10/24/03 16:59 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-28 Surface Elev. 723.7 Boring Type HSA Completion Depth 79.5'
Coordinates: (X) N 3814.4 (Y) E 9903.4 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10-15-03 Date Completed 10-16-03 Driller DAVE BALDWIN Rig No. MOBIL B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT
Surface Conditions HARVESTED BEAN FIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	48		1.0						722.7		CLAYEY SILT (ML); Brown (10YR 5/3), stiff, moist, trace root fragments	
				2.25					2			SILTY CLAY (CL); Brown (10YR 5/3), very stiff, moist	
												grades mottled white (10YR 8/1)	
2	CS	60							4	718.95			
				1.0					6			SILTY CLAY (CL); Brown (10YR 5/3), stiff, moist, trace gravel	
				0.75					8				
				1.0									
3	CS	48							10				
				1.0									
									12	711.7		SAND (SW); Brown (10YR 5/3), loose, wet, fine to coarse grained, trace gravel & clay	
									14	709.7		SILTY CLAY (CL); Gray (10YR 5/1), stiff, moist, trace gravel	
4	CS	40		1.5									
				1.5					16				
				1.5					18			grades mottled brown	
5	CS	20								704.7		SAND (SW); Brown (10YR 5/3), loose, saturated, medium to coarse grained, trace silt & clay	
									20	702.7		SILTY CLAY (CL); Gray (10YR 5/1), stiff, moist, trace gravel	
				1.5					22				
6	CS	59							24				
				1.5					26				
				1.75					28				
7	CS	60											

CAD DWG NO:91118888 EMPLOYEE NO: 9834 DATE/TIME: 10/23/03 09:06 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 3
ect Location CLINTON, ILLINOIS Project No. 91-118
ng No. EX-28 Surface Elev. 723.7 Boring Type HSA Completion Depth 79.5'
Coordinates: (X) N 3814.4 (Y) E 9903.4 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10-15-03 Date Completed 10-16-03 Driller DAVE BALDWIN Rig No. MOBIL B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT
Surface Conditions HARVESTED BEAN FIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60		+4.0								SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel	
									32				
				+4.0									
									34				
8	CS	60		3.0								grades very stiff	
									36				
				1.75								grades stiff	
									38				
				1.25									
9	CS	60							40				
				2.0									
									42				
				1.75									
				1.5					44				
10	CS	60											
				2.0					46				
				2.0									
				1.75					48				
										674.6			
11	CS	60		1.25					50			CLAYEY SILT (ML); Gray (10YR 5/1), stiff, moist, trace fine sand grades dark brown (10YR 3/3), trace organics [old organic topsoil from 50' to 50.4']	
				1.25					52				
										670.8			
				3.0					54			SILTY CLAY (CL); Bluish gray (Gley2 5/10BG), very stiff, moist, trace gravel	
12	CS	60		3.0									
				2.75					56				
										666.8			
				1.75					58			SILTY CLAY (CL); Gray (10YR 6/1), stiff, moist, trace gravel & fine sand	
				1.75									
13	CS	60		3.5								grades very stiff	

CAD DWG NO:91118889 EMPLOYEE NO: 9834 DATE/TIME: 10/23/03 10:17 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. EX-28 Surface Elev. 723.7 Boring Type HSA Completion Depth 79.5'
Coordinates: (X) N 3814.4 (Y) E 9903.4 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10-15-03 Date Completed 10-16-03 Driller DAVE BALDWIN Rig No. MOBIL B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT
Surface Conditions HARVESTED BEAN FIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	60		+4.0								SILTY CLAY (CL); Gray (10YR 6/1), hard, moist, trace gravel	
									62			grades slightly mottled dark greenish gray	
				+4.0									
				+4.0					64				
14	CS	60											
				2.0								grades stiff	
									66	657.45		CLAYEY SILT (ML); Gray mottled greenish gray (10YR 6/1), stiff, moist, with fine sand	
										657.20		SILTY CLAY (CL); Gray mottled greenish gray (10YR 6/1), stiff, moist, trace gravel	
									68	655.70		CLAYEY SILT (ML); Gray mottled greenish gray (10YR 6/1), stiff, moist, with fine sand	
				2.0						655.20			
15	CS	60							70			SILTY CLAY (CL); Gray mottled greenish gray (10YR 6/1), stiff, moist, trace gravel	
				+4.0								grades gray (10YR 5/1), hard @70'	
									72				
				+4.0								SAND (SW); Gray (10YR 5/1), dense, saturated, trace clay, medium to coarse grained	
										650.70			
									74	650.20		SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel	
16	CS	60		+4.0									
									76				
				+4.0									
									78				
				+4.0									
										644.20			
									80			End of boring @79.5'	
									82				
									84				
									86				
									88				

CAD DWG NO:91118890 EMPLOYEE NO: 89736 DATE/TIME: 01/07/05 15:12 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-29 Surface Elev. 718.0 Boring Type HSA Completion Depth 79.0'
Coordinates: (X) N 3833.6 (Y) E 9088.5 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10/17/03 Date Completed 10/20/03 Driller DAVE BALDWIN Rig No. MOBIL B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT
Surface Conditions HARVESTED BEAN FIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	35		1.0						717.0		CLAYEY SILT (ML); Brownish yellow (10YR 6/6), stiff, moist, trace root fragments	
				3.5								SILTY CLAY (CL); Brownish yellow (10YR 6/6), very stiff, moist, trace organics	
									2				
				3.5									
2	CS	60							4				
				3.5						712.8		SILTY CLAY (CL); Yellowish brown (10YR 5/4), very stiff, moist, trace gravel	
									6				
				3.5									
									8				
3	CS	60		2.0								grades stiff	
									10				
				1.5						706.8		SILTY CLAY (CL); Gray (10YR 5/1) mottled brown (10YR 4/3), stiff, moist, trace gravel	
									12				
				1.5								grades gray (10YR 5/1)	
4	CS	60		+4.0					14			grades hard	
				+4.0					16				
				+4.0					18				
5	CS	60											
				+4.0					20				
				+4.0					22				
				+4.0									
6	CS	60		3.0					24			grades very stiff	
				2.25									
				+4.0					26			grades hard	
				+4.0					28				
7	CS	60											

CAD DWG NO:91118876 EMPLOYEE NO: 9834 DATE/TIME: 10/24/03 15:39 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-29 Surface Elev. 718.0 Boring Type HSA Completion Depth 79.0'
Coordinates: (X) N 3833.6 (Y) E 9088.5 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10/17/03 Date Completed 10/20/03 Driller DAVE BALDWIN Rig No. MOBIL B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT
Surface Conditions HARVESTED BEAN FIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60		3.0								SILTY CLAY (CL); Gray (10YR 5/1), very stiff, moist, trace gravel	
									32				
				2.25									
									34				
8	CS	50											
				2.25					36				
									38				
				2.75									
9	CS	50							40				
				2.5									
									42				
				2.25					44				
10	CS	60											
				2.5					46				
				2.25					48				
				1.75								grades very stiff	
11	CS	60		3.25					50	668.5		CLAYEY SILT (ML); Gray (10YR 5/1), very stiff, moist, trace fine sand	
				3.5						667.0		ORGANIC SILT (OL); Brown (10YR 4/3), very stiff, moist, mottled black with organics	
				3.75					52	665.5		PEAT (Pt); Very dark brown (10YR 2/2), very stiff, moist, with wood and root fragments	
				3.75					54				
12	CS	60								662.5		ORGANIC CLAYEY SILT (ML); Very dark brown (10YR 2/2), stiff, moist, with trace organics	
				1.25					56				
				1.25								grades more clay	
				1.75					58	660.0		SILTY CLAY (CL); Blue-gray (Gley2 5/5B), stiff, moist, trace gravel	
13	CS	60											

CAD DWG NO:91118877 EMPLOYEE NO: 9834 DATE/TIME: 10/24/03 15:09 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3
Project Location CLINTON, IL. Project No. 91-118
Boring No. EX-29 Surface Elev. 718.0 Boring Type HSA Completion Depth 79.0'
Coordinates: (X) N 3833.6 (Y) E 9088.5 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10/17/03 Date Completed 10/20/03 Driller DAVE BALDWIN Rig No. MOBIL B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material BENSEAL GROUT
Surface Conditions HARVESTED BEAN FIELD If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	60		2.0								SILTY CLAY (CL); Blue-gray (Gley2 5/5B); very stiff, moist, trace gravel	
									62				
				2.0									
									64				
14	CS	60		2.0									
				1.0						652.8 652.5		CLAYEY SILT (ML); Gray (10YR 5/1), stiff, moist, trace fine sand	
				+4.0					66			SILTY CLAY (CL); Gray (10YR 5/1), hard, moist, trace gravel	
				+4.0					68				
15	CS	60											
				+4.0					70				
				+4.0					72				
				2.75								grades very stiff	
16	CS	50							74				
				2.5									
									76				
				2.75					78				
										639.0		End of boring @79.0'	
									80				
									82				
									84				
									86				
									88				

CAD DWG NO:91118878 EMPLOYEE NO: 9834 DATE/TIME: 10/24/03 15:14 ACAD-15.

WELL CONSTRUCTION REPORT Date 6-01-02

TYPE OR PRINT FIRMLY WITH BLACK INK PEN, THIS FORM MUST BE COMPLETED WITHIN 30 DAYS OF COMPLETION AND SENT TO THE APPROPRIATE HEALTH DEPARTMENT

1. Date boring Well Completed 2-13-02
2. Use: [ ] Domestic [ ] Irrigation [ ] Commercial [ ] Livestock
   [X] Monitoring [X] Other Intended to install well unit to be monitored
3. Type of Well: was dry so no well was installed. Boring backfilled.
   a. Bored Well: Hole Diameter 8.00 in. Depth 76.0 ft.
   Casing Diameter N/A in. Buried Slab: [ ]Yes [ ]No
   b. Driven Well: Drive Pipe Diameter _____ in. Depth _____ ft.
   c. Drilled Well: Well Diameter _____ in. Depth _____ ft.
   Casing Diameter _____ in. Type _____ Joint _____

Casing Grout:

Kind	Oversized Drill Hole(In)	From(ft)	To(ft)
Benseal Grout	8.00	0.0	76.0

Finished In: Unconsolidated [ ] Gravel Pack: [ ]Yes [ ]No
Rock [ ] Grain Size _____

4. Well Disinfected? [ ]Yes [ ]No
5. Date Permanent Pump Installed _____
6. Licensed Pump Contractor _____
   License Number _____
7. Pitless Adapter Installed? [ ]Yes [ ]No
   Manufacturer _____ Model _____
   Attached to Casing - How? [ ] Screwed On [ ] Welded [ ] Compression
8. Type of Well Cap _____
9. Tank Working Cycle _____ gallons Captive Air: [ ]Yes [ ]No
10. Pump and Equipment Disinfected? [ ]Yes [ ]No

General Comments: (If dry hole, fill out log & indicate how hole was sealed.)

Illinois Department of Public Health
Division of Environmental Health - 525 W. Jefferson
Springfield, IL 62761

IMPORTANT NOTICE. This State Agency is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under Public Act 85-0863. Disclosure of this information is mandatory. This form has been approved by the Forms Management Center.

IL 482-0126 Printed by Authority of the State of Illinois P.O. PRT3030244 6.5M 6/98

GEOLOGICAL AND WATER SURVEY WELL RECORD

11. Permit Number N/A Date Issued _____
12. Property Owner Clinton Landfill, Inc. Well# EX-11 Boring
13. Drilling Company Name SKS Engineers, Inc.
14. Name of Person who drilled the well Todd Skinner
15. Well Site Address Rt. 51 South, Clinton, IL
16. Twnshp Name Texas Land ID# _____
17. Subdivision Name _____ Lot _____ Elevation 705.7 ft.
18. Location: Cnty DeWitt Sect 10 Twnshp 19N Range 2E
    SW Quarter of the SW Quarter of the NE Quarter
19. Casing and Liner Pipe: N/A

Dia (In)	Type	From(ft)	To (ft)

20. Screen:
    Diameter — in.
    Length — ft.
    Slot Size —
    Material —
21. Water from None at depth — ft. to — ft.
22. Static Level _____ ft. below casing top which is _____ in. above ground level.
    Pumping Level _____ ft. Pumping _____ gpm for _____ hours.
23. Earth Materials Passed Through

Earth Materials Passed Through	Depth Top(ft)	Depth Bottom(ft)
Clayey Silt (ML) Dk Brn, organics	0.0	2.0
Silty Clay (CL) Brown-gray, roots	2.0	8.8
Silty Clay (CL) Brown, tr. gravel + sand	8.8	10.5
Silty Clay (CL) Gray, tr. gravel + sand	10.5	36.8
Clayey Silt (ML) Brown, organics	36.8	38.0
Peat (OL) Brown-blk, organics + silt	38.0	41.6
Silty Clay (CL) Blue-gray [Berry Clay]	41.6	46.0
Silty Clay (CL) Gray, tr. gravel + sand	46.0	69.0
Sandy Clay (CL) Gray, with gravel	69.0	69.9
Silty Clay (CL) Gray, tr. gravel	69.9	72.3
Sand (SW) Gray, w/ clay and tr. gravel	72.3	74.0
Silty Clay (CL) Gray, tr. gravel	74.0	—
Boring terminated at		76.0
Backfilled w/ Benseal Grout to surface		

Continue on back of sheet if necessary

Licensed Contractor Signature _____ License Number _____

11/95

(SEE REVERSE SIDE FOR ADDITIONAL INFORMATION)

1. BORING NO. B-11
DATE 1-30-89
W. & A. FILE NO. 2703
SHEET 1 OF 11

WHITNEY & ASSOCIATES
INCORPORATED
2406 West Nebraska Avenue
PEORIA, ILLINOIS 61604

BORING LOG

PROJECT CLINTON MUNICIPAL LANDFILL
LOCATION Clinton, Illinois
BORING LOCATION N. 5738.18; E. 7681.24
DRILLED BY Winslow
BORING TYPE Hollow-Stem Auger
WEATHER CONDITIONS Partly Cloudy and Mild
SOIL CLASSIFICATION SYSTEM U.S.B.S.C.
SEEPAGE WATER ENCOUNTERED AT ELEVATION 688.4
GROUND SURFACE ELEVATION 715.5
GROUND WATER ELEVATION AT 24+ HRS. 677.4
BORING DISCONTINUED AT ELEVATION 597.2
GROUND WATER ELEVATION AT COMPLETION 668.4

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
BROWN AND GRAY-BROWN SILTY CLAY		SS	3 7				
BROWN MOTTLED ORANGE-BROWN SILTY CLAY							
BROWN MOTTLED GRAY AND ORANGE-BROWN SILTY CLAY	4	SS	7 13				
BROWN AND ORANGE-BROWN, WEATHERED GLACIAL SILTY CLAY TILL WITH SAND LENSES		SS	6 10				
GRAY-BROWN MOTTLED BROWN, WEATHERED GLACIAL SILTY CLAY TILL	8	SS	8 14				
706.10		SS	12 17				
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL	12	SS	8 15				
		SS	6 15				
	16	SS	9 16				
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL WITH OCCASIONAL SAND LENSES		SS	11 27				
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL	20	SS	22 42				
		SS	19 26				
	24	SS	14 28				
		SS	15 27				

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

BORING LOG
(CONTINUATION)

BORING NO. B-11 DATE 1-30-89

PROJECT Clinton Municipal Landfill SHEET 2 OF 11
LOCATION Clinton, Illinois W. & A. FILE NO. 2703

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
SEE SHEET 1 OF 11		SS	9 18				
	30	SS	8 21				
		SS	9 23				
GRAY (DRY) SAND SEAM							
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL	34	SS	13 24				
		SS	15 29				
	38	SS	13 22				
		SS	11 26				
	42	ST	24" Recovery				
		SS	14 21				
GRAY, FINE-GRAINED SAND SEAM	46	SS	10 19				
GRAY-BROWN SANDY SILT (SLIGHTLY ORGANIC)							
BROWN PEAT		SS	16 68				
	50	SS	27 48				
		SS	9 21				
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL	54	SS	17 40				
BLUE-GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL		SS	19 26				

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

BORING LOG
(CONTINUATION)

BORING NO. B-11

DATE 1-31-89

PROJECT Clinton Municipal Landfill

LOCATION Clinton, Illinois

SHEET 3 OF 11

W. & A. FILE NO. 2703

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL WITH OCCASIONAL SAND LENSES		SS	11 25				
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL	60	SS	11 27				
		SS	25 44				
	64	SS	29 63				
		SS	22 54				
	68	SS	29 43				
GRAY SILTY SAND		SS	23 70				
	72	SS	45 61				
GRAY, UNWEATHERED GLACIAL SANDY CLAY TILL		SS	21 52				
	76	SS	31 43				
GRAY, MEDIUM-GRAINED SAND WITH SOME FINE-GRAINED GRAVEL		SS	104/4"				
GRAY, UNWEATHERED GLACIAL SANDY CLAY TILL	80	SS	134/12"				
GRAY, FINE- TO MEDIUM-GRAINED SAND WITH TRACE OF FINE-GRAINED GRAVEL		SS	81 98				
	84	SS	21 30	16" Recovery			
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL		SS	19 29	16" Recovery			

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

BORING LOG
(CONTINUATION)

BORING NO. B-11

DATE 2-03-89

PROJECT Clinton Municipal Landfill

LOCATION Clinton, Illinois

SHEET 4 OF 11

W. & A. FILE NO. 2703

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
SEE SHEET 3 OF 11		SS	29 51	14" Recovery			
	90	ST	(2")				
		SS	45 66	18" Recovery			
	94	SS	49 69	23" Recovery			
		SS	37 74	20" Recovery			
	98	SS	50 70	24" Recovery			
		SS	49 75	23" Recovery			
	102	SS	60 101	24" Recovery			
		SS	25 65	24" Recovery			
GRAY, UNWEATHERED GLACIAL SANDY CLAY TILL WITH OCASSIONAL SAND LENSES	106	SS	108/9"	9" Recovery			
		SS	110/7"	7" Recovery			
	110	SS	103/5"	5" Recovery			
		SS	107/6"	6" Recovery			
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL	114	SS	103/5"	5" Recovery			
		SS	114/9"	9" Recovery			

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

BORING LOG
(CONTINUATION)

BORING NO. B-11 DATE 2-03-89

PROJECT Clinton Municipal Landfill SHEET 5 OF 11

LOCATION Clinton, Illinois W. & A. FILE NO. 2703

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
SEE SHEET 4 OF 11		SS	115/5"	5" Recovery			
		SS	111/4"	4" Recovery			
EXPLORATORY BORING DISCONTINUED	120						
	124						
	128						
	132						
	136						
	140						
	144						

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

TELEPHONE
309 673-2131

TESTS
DESIGN
REPORTS
ANALYSIS
INSPECTION
CONSULTATION
INVESTIGATIONS

WHITNEY & ASSOCIATES
INCORPORATED
2406 West Nebraska Avenue
PEORIA, ILLINOIS 61604

SPECIALISTS IN
SOILS - PORTLAND CEMENT CONCRETE
STEEL - BITUMINOUS CONCRETE
CONSTRUCTION MATERIALS
AGGREGATES - ASPHALT - POZ-O-PAC

SOILS AND GRAVEL SURVEYS
MATERIALS QUALITY CONTROL
SOIL MECHANICS AND
FOUNDATION ENGINEERING
DRILLING - CORING - TESTING

Winslow
INSTALLED BY

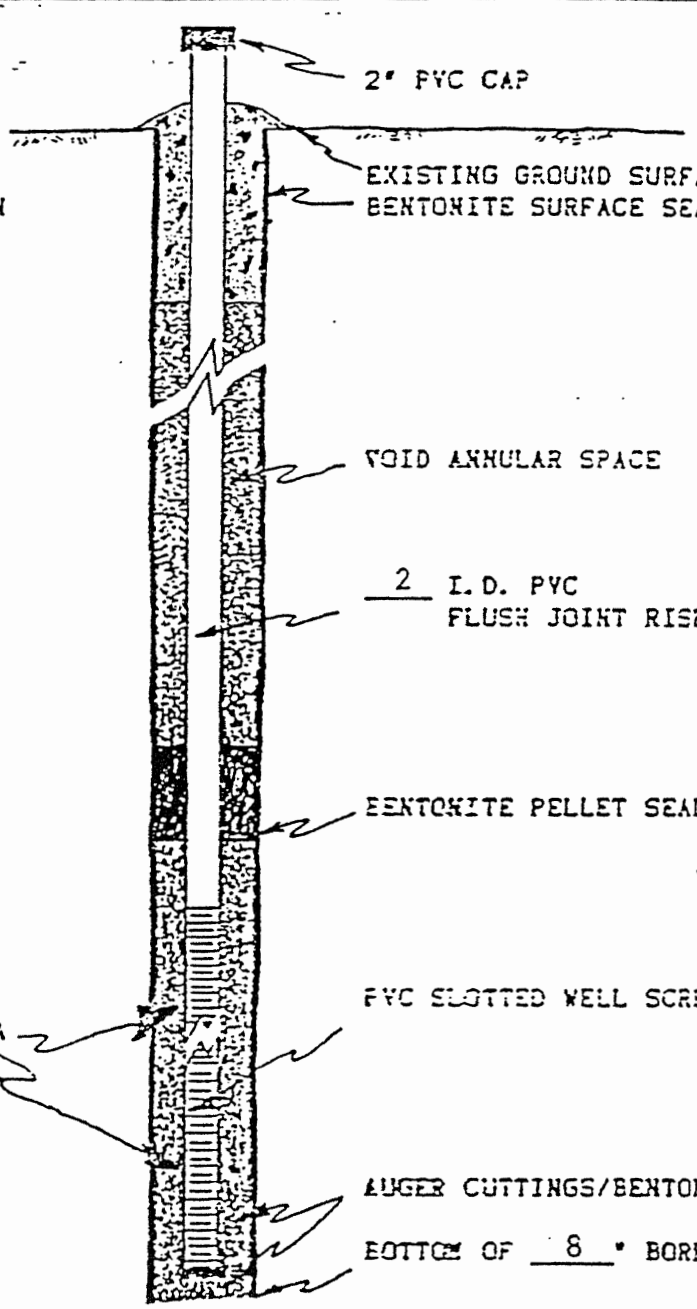
2-03-89
DATE

TYPICAL PIEZOMETER DIAGRAM

PROJECT Clinton Municipal Landfill
LOCATION Clinton, Illinois
MONITORING WELL LOCATION Boring B-11

MONITORING WELL NO. _____
INSTALLATION DATE 2-03-89

DEPTH	ELEVATION
(+) 4.5	720.0
0.0	715.5
(-) 1.5	714.0
(-)63.1	652.4
(-)64.8	650.7
(-)70.4	645.1
(-) 80.5	635.0
(-)118.3	597.2



BENCH MARK _____

WATER WELL SEALING FORM

Illinois Department of Public Health
525 West Jefferson Street
Springfield, Illinois 62761

This form shall be submitted to this Department not more than 30 days after a potable water well, boring or monitoring well is sealed. Such wells are to be sealed not more than 30 days after they are abandoned in accordance with the sealing requirements in the Water Well Construction Code.

1. Ownership (Name of Controlling Party) CLINTON LANDFILL, INC.

2. Well Location: P-11 Clinton Landfill, Inc.
   Address - Lot #
   Clinton (City) Dewitt (County)

   General Description: Section 10 Township 19N

   Range 2E

3. Year Drilled 1989

4. Drilling Permit No. (and date, if known) _____

5. Type of Well: Bored _____ Drilled x Other _____

6. Total Depth 118.5' Diameter (inches) 2"

7. Formation clear of obstruction x yes _____ no

   If no, depth - location of obstruction _____

8. DETAILS OF PLUGGING*

   Filled with Volclay Grout (Cement or other Materials) From 2' To 118.5' feet

   Kind of plug Bentonite Chips From 0' To 2' feet

   Filled with _____ From _____ To _____ feet

   Kind of plug _____ From _____ To _____ feet

   Filled with _____ From _____ To _____ feet

   Kind of plug _____ From _____ To _____ feet

9. CASING RECORD

   Upper 3 feet of casing removed x Yes _____ No _____

   If well casing consists of brick, stone, concrete blocks, porous tile, or other porous material, casing was removed to a depth of 10 feet below the surface. Yes x No _____

10. Date Well was Sealed October (month) 31 (day) 1989 (year)

11. Licensed water well driller or other person approved by the Department performing well sealing

    Geral Eberhardt (Name)

    26 N 035 Hazel Lane (Address) Wheaton (City) Illinois (State)

    092007129 (License Number)

Important Notice
This State Agency is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under Public Act 83-0861. Disclosure of this information is mandatory. This form has been approved by the Forms Management Center.

IL 482-0631

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 1
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. CSM-1 Surface Elev. 636.4 Boring Type HSA & ROTARY WASH Completion Depth 156.0'
Coordinates: (X) N 4025 (Y) E 7028 Drilling Contractor SKS
Date Started 6-28-95 Date Completed 7-14-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT/BENTONITE GROUT
Surface Conditions BARE GROUND If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	60										SILTY CLAY (CL); Gray, stiff, damp	
									1				
										634.65			
									2			SILT (MH); Gray, stiff, wet, some sand	
									3				
										632.90			
												SILTY CLAY (CL); Gray, hard, damp, trace gravel	
				>4.5					4				
2	CS	60							5				
				3.5					6				
									7				Collected sample #1 for CFC & TOC
				4.0					8				
				>4.5					9				
3	ST	20							10				
									11				
4	CS	36		>4.5					12				
				>4.5					13				
									14				
5	CS	60		>4.5									

CAD DWG NO:91118128 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 15:40:59 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 11
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. CSM-1 Surface Elev. 636.4 Boring Type HSA & ROTARY WASH Completion Depth 156.0'
Coordinates: (X) N 4025 (Y) E 7028 Drilling Contractor SKS
Date Started 6-28-95 Date Completed 7-14-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT/BENTONITE GROUT
Surface Conditions BARE GROUND If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
												SILTY CLAY (CL); Gray, hard, damp, with gravel (continued)	
									16				
				>4.5									Collected sample #2 for CEC & TOC
									17				
									18				
				>4.5									
									19				
6	ST	21							20				
									21				
7	CS	36							22				
				4.0					23			grades very stiff	
				>4.5					24			grades hard	
8	CS	48							25				
									26				
									27				
									28				
										607.90		CLAYEY SAND (SC); Gray, loose, wet	
									29	607.40			
9	ST	6										SILTY CLAY (CL); Gray, hard, damp, trace gravel	
10	CS	54		>4.5									

CAD DWG NO:91118129 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 15:42:27 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of _
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. CSM-1 Surface Elev. 636.4 Boring Type HSA & ROTARY WASH Completion Depth 156.0'
Coordinates: (X) N 4025 (Y) E 7028 Drilling Contractor SKS
Date Started 6-28-95 Date Completed 7-14-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT/BENTONITE GROUT
Surface Conditions BARE GROUND If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
										606.40		SAND (SP); Gray, loose, wet, medium to coarse grained, trace gravel	
									31	605.40		SILTY CLAY (CL); Gray, hard, damp, trace gravel	
				>4.5						604.65		SAND (SP); Gray-brown, loose, saturated, fine to medium grained	
									32	603.90		SILTY CLAY (CL); Gray, hard, damp, trace gravel	
				>4.5					33				
									34				
11	CS	60											
				4.0					35			grades very stiff	
				>4.5					36			grades hard	
									37				
				>4.5					38				
									39	597.40		SAND (SP); Gray, loose, wet, fine to medium grained, trace silt	
12	CS	60								597.15		SILTY CLAY (CL); Gray, hard, damp, trace gravel	
				>4.5					40				
									41			grades some gravel, some silt	
				>4.5					42				
									43				
				>4.5					44				
13	CS	60											

CAD DWG NO:91118130 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 15:43:23 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 4 of 11
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. CSM-1 Surface Elev. 636.4 Boring Type HSA & ROTARY WASH Completion Depth 156.0'
Coordinates: (X) N 4025 (Y) E 7028 Drilling Contractor SKS
Date Started 6-28-95 Date Completed 7-14-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT/BENTONITE GROUT
Surface Conditions BARE GROUND If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
												SILTY CLAY (CL); Gray, hard, damp, some gravel, some silt (continued)	
				>4.5					46				
									47				
									48	588.40		SAND (SP); Gray, loose, saturated, fine grained, trace silt	
									49			grades trace gravel, fine to medium grained, trace silt out	blow-in in augers
14	CS	0							50				
									51			grades medium to coarse grained	
									52				
									53				could not wash out
									54				
15	CS	0							55			grades with gravel	beat split spoon to verify
									56				
									57	579		SILTY CLAY (CL); Gray, very stiff, damp, some gravel	overdrilled to find silty clay
									58				
16	SS	12							59				
17	CS	60		4.0									

CAD DWG NO:91118131 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 15:46:06 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 5 of _
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. CSM-1 Surface Elev. 636.4 Boring Type HSA & ROTARY WASH Completion Depth 156.0'
Coordinates: (X) N 4025 (Y) E 7028 Drilling Contractor SKS
Date Started 6-28-95 Date Completed 7-14-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT/BENTONITE GROUT
Surface Conditions BARE GROUND If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
												SILTY CLAY (CL); Gray, very stiff, damp, trace gravel (continued)	
									61			grades hard	
				>4.5									
									62				
				4.0								grades very stiff	
									63				
									64	572.40			
				>4.5						572.15		SAND (SP); Gray, loose, wet, fine-medium grained, trace silt	
18	CS	60											
				4.0					65			SILTY CLAY (CL); Gray, hard, damp, trace gravel	
									66	570.40		SAND (SP); Gray, loose, wet, fine-medium grained	
				4.0					67	569.40		SILTY CLAY (CL); Gray, very stiff, damp, trace gravel	
									68				
										568.15		SAND (SP); Gray, loose, wet, fine-medium grained	
										567.65			
				>4.5					69			SILTY CLAY (CL); Gray, very stiff, damp, some gravel	
19	ST											grades very stiff to hard, trace gravel	
									70				
20	CS	48											
									71				
				>4.5					72				
									73				
										563.15			
									74			SAND (SP); Gray, loose, saturated, fine to medium grained, with silt	
21	CS	29											

CAD DWG NO:91118132 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 15:47:19 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 6 of 11
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. CSM-1 Surface Elev. 636.4 Boring Type HSA & ROTARY WASH Completion Depth 156.0'
Coordinates: (X) N 4025 (Y) E 7028 Drilling Contractor SKS
Date Started 6-28-95 Date Completed 7-14-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT/BENTONITE GROUT
Surface Conditions BARE GROUND If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
										560.90		SAND (SP); Gray, loose, saturated, medium to fine grained, with silt (continued)	
												SILTY CLAY (CL); Gray, hard, damp, with gravel	
				>4.5					76				
22	SS	12	>100						77				
23	CS	20	>100	>4.5					78				
									79				
				>4.5					80				
24	SS	12	>100	>4.5					81				Switched to rotary wash drilling at 80.5' (EL. 555.90)
25	SS	12	>100	>4.5					82				
									83				
									84				
26	SS	4	>100	>4.5					85				
									86				
27	SS	14	>100	>4.5					87				
									88				
28	SS	11	>100	>4.5					89				

CAD DWG NO:91118133 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 15:49:52 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 7 of 1
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. CSM-1 Surface Elev. 636.4 Boring Type HSA & ROTARY WASH Completion Depth 156.0'
Coordinates: (X) N 4025 (Y) E 7028 Drilling Contractor SKS
Date Started 6-28-95 Date Completed 7-14-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT/BENTONITE GROUT
Surface Conditions BARE GROUND If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
												SILTY CLAY (CL); Gray, hard, damp, with gravel (continued)	
29	SS	6	>100	>4.5									Switched to 300 lb./ 24" stroke hammer at 91.0'
30	SS	8	>100	>4.5					91				
									92				
31	SS	14	>100	>4.5					93				
									94				
				>4.5									
32	SS	18	>100	>4.5					95				
				>4.5					96				
										539.9		SANDY SILT (ML); Gray, hard, damp, some clay	
33	SS	10	>100	>4.5					97				
									98	538.4		SILTY CLAY (CL); Gray, hard, damp, trace gravel	
34	SS	17	>100	>4.5					99				
				>4.5					100				
35	SS	10	>100	>4.5					101				
				>4.5					102				
36	SS	10	>100	>4.5					103				
37	SS	21	56	>4.5					104				

CAD DWG NO:91118134 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 15:52:14 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 8 of 11
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. CSM-1 Surface Elev. 636.4 Boring Type HSA & ROTARY WASH Completion Depth 156.0'
Coordinates: (X) N 4025 (Y) E 7028 Drilling Contractor SKS
Date Started 6-28-95 Date Completed 7-14-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT/BENTONITE GROUT
Surface Conditions BARE GROUND If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
												SILTY CLAY (CL); Gray, hard, damp, trace gravel (continued)	
									106				
38	SS	24	31	>4.5									
									107				
				>4.5									
									108				
39	SS	24	23	>4.5									
									109				
				>4.5									
									110				
40	ST	12	>100										
				>4.5					111				
									112				
41	SS	24	24	>4.5									
									113				
									114				
42	SS	24	20	>4.5									
				>4.5					115				
										520.90			
				3.25								SILTY CLAY (CL); Dark brown, very stiff, damp, trace gravel, some peat	
43	SS	24	31	3.25					116				
				>4.5					117			grades hard	
				>4.5									
44	SS	24	27	>4.5					118				
									119				
				>4.5									

CAD DWG NO:91118135 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 15:52:45 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 9 of
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. CSM-1 Surface Elev. 636.4 Boring Type HSA & ROTARY WASH Completion Depth 156.0'
Coordinates: (X) N 4025 (Y) E 7028 Drilling Contractor SKS
Date Started 6-28-95 Date Completed 7-14-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT/BENTONITE GROUT
Surface Conditions BARE GROUND If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
45	SS	24	20	>4.5								SILTY CLAY (CL); Dark brown, hard, damp, trace gravel, some peat (continued)	
									121				
				3.75						514.90			
				>4.5								SILTY CLAY (CL); Gray, hard, damp, trace gravel (continued)	
									122				
46	SS	24	16	3.25									
				4.0									
									123			grades very stiff	
				4.0								grades green-gray	
									124				
47	SS	24	25	>4.5									
									125				
				>4.5								grades trace organics (wood)	
									126				
48	SS	20	18	4.0									
									127				
				4.0									
									128				
49	SS	22	18	>4.5									
									129			grades organics out, mottled gray-brown	
				>4.5									
									130				
50	SS	24	18	>4.5									
									131				
				>4.5									
									132				
51	SS	24	19	4.25									
									133				
				4.0									
									134				
52	SS	24	26	>4.5									
										501.90		SILTY CLAY (CL); Brown, hard, damp, trace gravel	

CAD DWG NO:91118136 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 15:53:17 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 10 of 11
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. CSM-1 Surface Elev. 636.4 Boring Type HSA & ROTARY WASH Completion Depth 156.0'
Coordinates: (X) N 4025 (Y) E 7028 Drilling Contractor SKS
Date Started 6-28-95 Date Completed 7-14-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT/BENTONITE GROUT
Surface Conditions BARE GROUND If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
												SILTY CLAY (CL); Brown, hard, damp, trace gravel (continued)	
									136				
53	SS	24	17	>4.5									
				>4.5					137				
									138				
54	SS	24	20	>4.5									
				>4.5					139				
									140				
55	SS	24	16	>4.5									
									141				
				2.75								grades very stiff	
									142				
56	SS	24	10	2.75									
				2.75					143				
												~~grades trace organics (wood)~~	
									144				
57	SS	24	25	2.5									
				2.5					145				
									146				
58	SS	24	18	2.5								~~grades organics out~~	
									147				
				2.5					148				
59	SS	20	10	2.75									
									149				
										486.90		SANDY SILT (ML); Gray, firm, saturated, fine grained sand, laminated	

CAD DWG NO:91118137 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 15:56:05 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 11 of 11
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. CSM-1 Surface Elev. 636.4 Boring Type HSA & ROTARY WASH Completion Depth 156.0'
Coordinates: (X) N 4025 (Y) E 7028 Drilling Contractor SKS
Date Started 6-28-95 Date Completed 7-14-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT/BENTONITE GROUT
Surface Conditions BARE GROUND If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
60	SS	22	19									SANDY SILT (ML); Gray, firm, saturated, fine grained sand, laminated (continued)	
										485.90		SAND (SP); Gray, medium dense, saturated, fine grained with silt	
									151				
									152				
61	SS	24	31										
									153	483.40		SANDY SILT (ML); Gray, firm, saturated	
									154	482.40		SAND (SP); Gray, medium dense, saturated, fine grained, with silt	
62	SS	24	19										
									155				
									156	480.40		End of boring @ 156.0'	
									157				
									158				
									159				
									160				
									161				
									162				
									163				
									164				

CAD DWG NO:91118138 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 15:56:42 ACD-12_

B-123

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Sheet 1 of 3

Project CLINTON LANDFILL, INC. Job No. 91C-118
Project Location CLINTON, ILLINOIS Boring Type HSA
Boring Designation B-CLG Elev. 704.15 Total Depth 85.0'
Date Started 8-31-93 Date Completed 8-31-93 Logged By JOHN BERRY
Drilling Contractor WHITNEY & ASSOCIATES
Driller STEVE WINSLOW Rig No. CME 75 Backfilled (Y/N) Y
Surface Conditions GRASS

SAMPLE NUMBER	SAMPLE TYPE	RECOVERED (INCHES)	SET 6"	2ND 6"	3RD 6"	"N" VALUE	QP (TSF)	DEPTH (FEET)	SAMPLE TYPE / LOG	DESCRIPTION OF MATERIAL	REMARKS, PHOTOIONIZATION DETECTOR READINGS (ppm)
										TOPSOIL; with organics	
										SILTY CLAY (CL); Brown, moist, trace gravel	
								2			
								4			
								6			
								8			
								10			
								12			
1	ST										Pushed tube. Collected CLG-1 for geotech. analysis
								14			
2	ST									grades gray	Pushed tube. Collected CLG-2 for geotech. analysis
								16			
								18			
								20			
								22			
								24			
								26			
								28			

CAD DWG NO:91C11827 EMPLOYEE NO: 982 DATE/TIME: 10/08/93 12:49:54 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Sheet 2 of

Project CLINTON LANDFILL, INC. Job No. 91C-116
Project Location CLINTON, ILLINOIS Boring Type HSA
Boring Designation B-CLG Elev. Total Depth 85.0'
Date Started 8-31-93 Date Completed 8-31-93 Logged By JOHN BERRY
Drilling Contractor WHITNEY & ASSOCIATES
Driller STEVE WINSLOW Rig No. CME 75 Backfilled (Y/N) Y
Surface Conditions GRASS

SAMPLE NUMBER	SAMPLE TYPE	RECOVERED (INCHES)	SET 6"	2ND 6"	3RD 6"	"N" VALUE	QP (TSF)	DEPTH (FEET)	SAMPLE TYPE	LOG	DESCRIPTION OF MATERIAL	REMARKS, PHOTOIONIZATION DETECTOR READINGS (ppm)
											SILTY CLAY (CL); Gray, moist, trace gravel	
								32				
								34				
								36				
								38				
3	AS							40			FORMER TOPSOIL; with organics	Grab samp' from cutt' Collected CL. for geotech. analysis
								42			SAND	
4	ST										SILTY CLAY (CL); Gray, moist, trace gravel	Pushed tube. Collected CLG-4 for geotech. analysis
								44				
								46				
								48				
								50				
								52				
								54				
								56				
								58				

CAD DWG NO:91C11828 EMPLOYEE NO: 982 DATE/TIME: 10/08/93 12:46:32 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project CLINTON LANDFILL, INC. Job No. 91C-118
Project Location CLINTON, ILLINOIS Boring Type HSA
Boring Designation B-CLG Elev. Total Depth 85.0'
Date Started 8-31-93 Date Completed 8-31-93 Logged By JOHN BERRY
Drilling Contractor WHITNEY & ASSOCIATES
Driller STEVE WINSLOW Rig No. CME 75 Backfilled (Y/N) Y
Surface Conditions GRASS

SAMPLE NUMBER	SAMPLE TYPE	RECOVERED (INCHES)	SET 6"	2ND 6"	3RD 6"	"N" VALUE	QP (TSF)	DEPTH (FEET)	DESCRIPTION OF MATERIAL	REMARKS, PHOTOIONIZATION DETECTOR READINGS (ppm)
CLG-5	SS	10	81	37	–	118			SILTY SAND (SW); Gray, damp, trace clay and gravel	
								62	CLAY (CL); Gray, damp, trace gravel	
								64		
CLG-7	SS	8	>50/6"			–	–		SILTY SAND (SW); Gray, damp, trace gravel and clay	
								66		
								68		
CLG-8	SS	24	23	25	57/50	82	–			
								70	SAND (SP); Gray, wet, trace silt	
								72		
								74		
CLG-9	SS	24	–	–	36/30	36	–			Had 1 foot blowin
								76	SILTY CLAY	
								78		
								80		
CLG-10	SS	24	–	–	17/28	17	–		SILTY SAND; Trace clay	Had 1 foot blowin
								82		
								84		
								86	End of boring @ 85.0'	
								88		

WHITNEY & ASSOCIATES
INCORPORATED
2406 West Nebraska Avenue
PEORIA, ILLINOIS 61604

BORING LOG

BORING NO. B-20
DATE 3-07-89
W. & A. FILE NO. 2703
SHEET 1 OF 5

PROJECT CLINTON MUNICIPAL LANDFILL
LOCATION Clinton, Illinois
BORING LOCATION N. 4280.713; E. 7696.857
DRILLED BY Winslow
BORING TYPE Hollow-Stem Auger
WEATHER CONDITIONS Partly Cloudy & Mild
SOIL CLASSIFICATION SYSTEM U.S.B.S.C.
SEEPAGE WATER ENCOUNTERED AT ELEVATION 687.3
GROUND SURFACE ELEVATION 712.3
GROUND WATER ELEVATION AT 24+ HRS. -
BORING DISCONTINUED AT ELEVATION 594.3
GROUND WATER ELEVATION AT COMPLETION 661.8

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
BROWN SILTY CLAY		SS	8 12	15" Recovery			
	4	SS	13 16	15" Recovery			
		SS	12 14	19" Recovery			
	8	SS	9 21	17" Recovery			
BROWN, WEATHERED GLACIAL SILTY CLAY TILL		3" ST		16" Recovery			
	12	SS	15 20	23" Recovery			
		SS	16 27	22" Recovery			
	16	SS	14 24	24" Recovery			
GRAY, SILTY CLAY LOAM		SS	13 23	24" Recovery			
	20	SS	12 29	24" Recovery			
GRAY AND BROWN, WEATHERED GLACIAL SILTY CLAY TILL WITH SAND LENSES		SS	14 24	22" Recovery			
	24	SS	21 28	24" Recovery			
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL		SS	11 25	19" Recovery			

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

BORING LOG
(CONTINUATION)

BORING NO. B-20

DATE 3-07-89

PROJECT Clinton Municipal Landfill

LOCATION Clinton, Illinois

SHEET 2 OF 5

W & A. FILE NO. 2703

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
SEE SHEET 1 OF 5		SS	10 19	21" Recovery			
	30	3" ST		24" Recovery			
		SS	21 39	24" Recovery			
	34	SS	19 37	24" Recovery			
		SS	14 30	23" Recovery			
	38	SS	32 58	23" Recovery			
		SS	30 42	17" Recovery			
	42	SS	29 45	17" Recovery			
		SS	19 35	24" Recovery			
	46	3" ST		No Recovery			
DARK BROWN, OLD ORGANIC TOPSOIL		SS	35 48	15" Recovery			
DARK BROWN SILTY CLAY (ORGANIC)	50	SS	40 60	17" Recovery			
DARK BROWN, OLD ORGANIC TOPSOIL							
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL		SS	21 30	23" Recovery			
	54	3" ST		24" Recovery			
		SS	13 22	23" Recovery			

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

BORING LOG
(CONTINUATION)

BORING NO. B-20

DATE 3-07-89

PROJECT Clinton Municipal Landfill

LOCATION Clinton, Illinois

SHEET 3 OF 5

W. & A. FILE NO. 2703

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
SEE SHEET 2 OF 5		SS	18 39	24" Recovery			
	60	SS	18 52	20" Recovery			
		SS	25 45	22" Recovery			
	64	SS	54 97/10"	19" Recovery			
		SS	102 -	12" Recovery			
	68	SS	28 50	21" Recovery			
GRAY, SILT		SS	20 80	15" Recovery			
	72	SS	113/10"	9" Recovery			
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL		SS	111/10"	10" Recovery			
	76	SS	98 -	12" Recovery			
GRAY-BROWN MOTTLED DARK BROWN SILT LOAM (OLD ORGANIC TOPSOIL)		SS	25 68	20" Recovery			
GRAY, UNWEATHERED GLACIAL SANDY CLAY TILL WITH OCCASIONAL SAND SEAMS	80	SS	24 40	24" Recovery			
GRAY, UNWEATHERED GLACIAL SANDY CLAY TILL		SS	20 48	24" Recovery			
	84	3" ST		9" Recovery			
		SS	30 61	21" Recovery			

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

BORING LOG
(CONTINUATION)

BORING NO. B-20 DATE 3-07-89

PROJECT Clinton Municipal Landfill SHEET 4 OF 5

LOCATION Clinton, Illinois W. & A. FILE NO. 2703

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
SEE SHEET 3 OF 5		SS	65 106/8"	19" Recovery			
GRAY, UNWEATHERED GLACIAL SANDY CLAY TILL WITH OCCASIONAL SAND LENSES	90	SS	75 103/11"	22" Recovery			
		SS	95 -	12" Recovery			
	94	SS	66 104/10"	21" Recovery			
		SS	104 -	12" Recovery			
	98	SS	55 99/10"	20" Recovery			
		SS	88 -	12" Recovery			
	102	SS	90 -	12" Recovery			
		SS	121/10"	No Recovery			
	106	SS	115/9"	9" Recovery			
		SS	125/6"	5" Recovery			
	110	SS	107/7"	7" Recovery			
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL		SS	103/3"	3" Recovery			
	114	SS	99/3"	3" Recovery			
		SS	102/3"	3" Recovery			

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

BORING LOG
(CONTINUATION)

BORING NO. B-20 DATE 3-07-89

PROJECT Clinton Municipal Landfill SHEET 5 OF 5

LOCATION Clinton, Illinois W. & A. FILE NO. 2703

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
SEE SHEET 4 OF 5		SS	111/2"	2" Recovery			
EXPLORATORY BORING DISCONTINUED							
	120						
	124						
	128						
	132						
	136						
	140						
	144						

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

WHITNEY & ASSOCIATES
INCORPORATED
2406 West Nebraska Avenue
PEORIA, ILLINOIS 61604

BORING LOG

BORING NO. B-22
DATE 3-20-89
W. & A. FILE NO. 2703
SHEET 1 OF 5

PROJECT CLINTON MUNICIPAL LANDFILL
LOCATION Clinton, Illinois
BORING LOCATION N. 2949.011; E. 7579.987
DRILLED BY Winslow
BORING TYPE Hollow-Stem Auger
WEATHER CONDITIONS Partly Cloudy & Cool
SOIL CLASSIFICATION SYSTEM U.S.B.S.C.
SEEPAGE WATER ENCOUNTERED AT ELEVATION 699.7
GROUND SURFACE ELEVATION 723.6
GROUND WATER ELEVATION AT 24+ HRS. 689.6
BORING DISCONTINUED AT ELEVATION 597.3
GROUND WATER ELEVATION AT COMPLETION 684.6

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
BROWN SILTY CLAY		SS	6 12	13" Recovery			
	4	SS	12 26	16" Recovery			
		SS	8 22	22" Recovery			
*Lost Tube; Sample was poor after tube was recovered	8	2" ST		No Recovery *			
BROWN AND GRAY-BROWN MOTTLED ORANGE-BROWN, WEATHERED GLACIAL SILTY CLAY TILL		SS	21 37	22" Recovery			
	12	2" ST		24" Recovery			
		SS	18 28	19" Recovery			
	16	SS	11 24	22" Recovery			
		SS	15 24	23" Recovery			
	20	2" ST		22" Recovery			
BROWN, FINE- TO MEDIUM-GRAINED SAND (DAMP)		SS	25 35	16" Recovery			
BROWN, FINE- TO MEDIUM-GRAINED SAND (WET)	24	SS	28 37	15" Recovery			
		2" ST		21" Recovery			

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

BORING LOG
(CONTINUATION)

BORING NO. B-22

DATE 3-20-89

PROJECT Clinton Municipal Landfill

LOCATION Clinton, Illinois

SHEET 2 OF 5

W. & A. FILE NO. 2703

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
SEE SHEET 1 OF 5		SS	12 17	24" Recovery			
GRAY, UNWEATHERED GLACIAL SANDY CLAY TILL WITH OCCASIONAL SAND SEAMS	30	SS	5 13	13" Recovery			
		2" ST		24" Recovery			
	34	SS	9 12	20" Recovery			
		SS	8 12	22" Recovery			
	38	SS	8 35				
GRAY SILT							
GRAY, UNWEATHERED GLACIAL SANDY CLAY TILL WITH CONSIDERABLE SAND SEAMS		SS	52 96/10"	20" Recovery			
GRAY, FINE- TO MEDIUM-GRAINED SAND	42	SS	58 93/6"	16" Recovery			
GRAY, MEDIUM- TO COARSE-GRAINED SAND WITH CONSIDERABLE FINE-GRAINED GRAVEL		SS	59 104/6"	18" Recovery			
GRAY, MEDIUM-GRAINED SAND	46	SS	49 97/6"	20" Recovery			
		SS	72	13" Recovery			
GRAY, FINE- TO MEDIUM-GRAINED SAND	50	SS	81	10" Recovery			
		SS	74	9" Recovery			
GRAY, UNWEATHERED GLACIAL SANDY CLAY TILL	54	SS	38 80	10" Recovery			
		SS	40 82	9" Recovery			

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
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WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

BORING LOG
(CONTINUATION)

BORING NO. B-22 DATE 3-20-89

PROJECT Clinton Municipal Landfill SHEET 3 OF 5
LOCATION Clinton, Illinois W. & A. FILE NO. 2703

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL WITH OCCASIONAL SAND LENSES		SS	32 69	10" Recovery			
	60	SS	14 48	16" Recovery			
DARK GRAY AND DARK BROWN OLD ORGANIC TOPSOIL *Attempted 2" ST broke off in hole. Attempted recovery with SS.		SS	29			*	
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL	64	SS		No Recovery			
		SS	18 48	24" Recovery			
	68	SS	19 48	24" Recovery			
GRAY, UNWEATHERED GLACIAL SANDY CLAY TILL		SS	22 42	22" Recovery			
	72	2" ST		16" Recovery			
		SS	51 72	23" Recovery			
	76	SS	58 79/6"	18" Recovery			
		SS	26 96/9"	20" Recovery			
	80	SS	91/12"	12" Recovery			
		SS	89/12"	10" Recovery			
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL WITH SAND SEAM	84	SS	42 57	18" Recovery			
		SS	39 50	20" Recovery			

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

BORING LOG
(CONTINUATION)

BORING NO. B-22

DATE 3-20-89

PROJECT Clinton Municipal Landfill

LOCATION Clinton, Illinois

SHEET 4 OF 5

W. & A. FILE NO. 2703

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
SEE SHEET 3 OF 4		SS	21 47	24" Recovery			
	90	SS	36 97/6"	18" Recovery			
		SS	102/7"	7" Recovery			
DARK GRAY SILT (ORGANIC)	94	SS	30 104/7"	19" Recovery			
GRAY, UNWEATHERED GLACIAL SILTY CLAY TILL		SS	102/6"	No Recovery			
	96	SS	57 69	24" Recovery			
		SS	53 95	24" Recovery			
	102	SS	93/6"	7" Recovery			
		SS	91/5"	5" Recovery			
	106	SS	114 -	7" Recovery			
		SS	108 -	10" Recovery			
	110	SS	93 -	10" Recovery			
		SS	104 -	10" Recovery			
	114	SS	90/4"	No Recovery			
		SS	54 39	17" Recovery			

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

BORING LOG
(CONTINUATION)

BORING NO. B-22

DATE 3-20-89

PROJECT Clinton Municipal Landfill

LOCATION Clinton, Illinois

SHEET 5 OF 5

W. & A. FILE NO. 2703

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
SEE SHEET 4 OF 5		SS	112/7"	6" Recovery			
	120	SS	126/3"	No Recovery			
		SS	133/4"	No Recovery			
	124	SS	200/2"	2" Recovery			
		SS	-	No Recovery			
EXPLORATORY BORING DISCONTINUED	128						
	132						
	136						
	140						
	144						

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
SS - SPLIT SPOON SAMPLE
ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
Dd - NATURAL DRY DENSITY - P.C.F.
Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

PROJECT CLINTON LANDFILL, INC., DEWITT COUNTY, ILLINOIS

CLIENT ANDREWS ENVIRONMENTAL ENGINEERING, INC.,

BORING 122 DATE STARTED 10-17-89 DATE COMPLETED 10-19-89 JOB 27,702

ELEVATIONS

GROUND SURFACE 726.25

END OF BORING 630.25

WATER TABLE

AT END OF BORING

24 HOURS

WHILE DRILLING

DISTANCE BELOW SURFACE IN FT

	LENGTH RECOVERY	SAMPLE NO.	SAMPLE TYPE	N	WC	Q_u	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS
OL		1	SS	10		4.0		0.75	725.5	Brown clayey TOPSOIL, trace sand, moist (OL)
CL		2	SS	12		1.75				Tough to very tough light brown silty CLAY, trace sand, small gravel, moist (CL)
		3	SS	9		1.25				
		4	SS	8		2.25				
		5	SS	14		1.75				
		6	SS	12		2.25				
		7	SS	14		1.5				
		8	SS	18		0.75				
CL		9	SS	16		1.0		16.0	710.25	Tough dark grayish brown silty CLAY, trace sand, small gravel, moist (CL)
		10	SS	15		1.75				
CL		11	SS	18				20.0	706.26	Tough to very tough brown silty CLAY, mottled gray, trace sand, small to large gravel, moist (CL)
		12	SS	26		1.5				
		13	SS	25		2.5				
		14	SS	29		2.5		27.0	699.25	Very tough dark brownish gray very silty CLAY, little sand, trace small to large gravel, moist (CL)
CL		15	SS	28		2.75				
SW		16	SS	81				30.25	696.00	Very dense fine to coarse SAND and small to large gravel, wet (SW)
SM		17 A B	SS	46		2.75		31.50	694.75	Very dense gray very silty fine SAND, few thin clay layers (1"-3" thick) from 32'-34', wet (SM)
		18	SS	99/11"						
CL		19 A B	SS	57		4.0		37.0	689.25	Hard dark gray very silty CLAY, little sand, trace small to large gravel, moist (CL)
SM		20	SS	54				38.0	688.25	Very dense gray silty fine SAND, wet (SM)

0 5 10 15 20 25 30 35 40

PROJECT CLINTON LANDFILL, INC., DEWITT COUNTY, ILLINOIS

CLIENT ANDREWS ENVIRONMENTAL ENGINEERING, INC.

BORING 122 cont. DATE STARTED 10-17-89 DATE COMPLETED 10-19-89 JOB 27,702

ELEVATIONS

GROUND SURFACE 726.25

END OF BORING 630.25

WATER TABLE

AT END OF BORING

24 HOURS

WHILE DRILLING

DISTANCE BELOW SURFACE IN		LENGTH RECOVERY	SAMPLE NO.	SAMPLE TYPE	N	WC	Q_U	γ DRY	DEPTH	ELEV.	SOIL DESCRIPTIONS
40	SM		21	SS	43						Very dense gray silty fine SAND, wet (SM)
			22	SS	30						
									43.75	682.50	
45	CL		23	SS	49		4.5				Hard dark gray very silty CLAY, little sand, trace small to large gravel, few thin silt layers (1/2" - 2" thick), moist (CL)
			24	SS	41		4.5		47.0	679.25	
	SC		25	SS	45						Very dense gray clayey fine SAND, some silt, few thin clay layers (1/2" - 1" thick), wet (SC)
50			26	SS	30		4.5		51.0	675.25	
	CL		27	SS	70/11"		4.5				Hard dark gray very silty CLAY, little sand, trace small to large gravel, moist (CL)
									54.0	672.25	
55	SW		28	SS	50/5"						Very dense gray fine to coarse SAND, little small to large gravel, wet (SW)
			29	SS	53				57.0	668.75	
	SW		30	SS	50/5"						
60			31	SS	50/1"						
			32	SS	56						Very dense gray fine to coarse SAND, and small to large gravel, trace silt, wet (SW) cobbles and boulders from 59'-62'
65			33	SS	50/6"						
			34	SS	59						
			35	SS	63						
70			36	SS	45		4.5+		71.0	655.25	
			37	SS	48		4.25				
	CL		38	SS	46		4.0				Hard dark gray very silty CLAY, little sand, trace small to large gravel, few thin clayey silt layers (3"-6" thick), moist (CL)
			39	SS	62		4.5+				
80			40	SS	31		2.75				

PROJECT CLINTON LANDFILL, INC., DEWITT COUNTY, ILLINOIS

CLIENT ANDREWS ENVIRONMENTAL ENGINEERING, INC.

BORING 122 cont. DATE STARTED 10-17-89 DATE COMPLETED 10-19-89 JOB 27,702

ELEVATIONS

GROUND SURFACE 726.25

END OF BORING 630.25

WATER TABLE

AT END OF BORING

24 HOURS

WHILE DRILLING

DISTANCE BELOW SURFACE IN FEET		LENGTH	RECOVERY	SAMPLE NO.	SAMPLE TYPE	N	WC	Q_u	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS
80				41	SS	42		3.5				
				42	SS	50/5"		3.75				Hard dark gray very silty CLAY, little sand, trace small to large gravel, few thin clayey silt layers (3"-6" thick), moist (CL)
85	CL			43	SS	70/6"						
				44	SS	100/6"						
				45	SS	65/6"						
90										90.0	636.25	
				46	SS	74/6"						Very dense gray fine to medium SAND, trace coarse sand, wet (SM)
	SM			47	SS	50/5"						
95				48	SS	74				95.0	631.25	Very dense brownish gray clayey SILT, very moist (ML)
	ML									95.5	630.75	Hard greenish gray very silty CLAY, little sand, trace small gravel, moist (CL)
				End of Boring at 96.0 feet								
100												
105												
110												
115												
120												

Monitoring Well B-122
Installation Notes

SS 304 Screen 90'-100'
SS 304 Riser 50'- 90'
Silica Sand 88'-100'
Bentonite Chips 85'- 88'
Volclay Grout 2'- 85'

Square design zinc plated steel protector casing concreted into place over riser pipe.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. B222D Surface Elev. 704.1 Boring Type HSA Completion Depth 130'
Coordinates: (X) N 4829.38 (Y) E 7621.35 Drilling Contractor SKS & ASSOCIATES, INC.
Date Started 11-10-95 Date Completed 11-15-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT-BENTONITE GROUT
Surface Conditions SILTY CLAY (BARE GROUND) If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
												SEE BORING LOG G22D FOR CONTINUOUS SAMPLING OF TOP 72.5 FEET.	
									62				
									64				
									66				
									68				
									70				
									72				
1	CS	30		4.5+						631.6		SILTY CLAY (CL); Gray, very stiff, moist, trace gravel	
										630.6		SAND (SP); Gray, medium grain, saturated, with silt	
				4.5+					74	629.6		SILTY CLAY (CL); Gray, very stiff, moist, trace gravel	
2	CS	57								628.7		SAND (SP); Gray, medium to coarse grain, saturated, with clay	
									76				
									78				
				4.0+						625.1		SILTY CLAY (CL); Gray, very stiff, moist, trace gravel	
3	CS	54							80				
				4.5+					82				
									84			5" medium grain, wet sand @ 84.1'	
4	CS	48								619.1		SANDY CLAY (CL); Gray, wet, medium to coarse grain sand, trace gravel	
				4.5+					86	617.7		SILTY CLAY (CL); Gray, very stiff, moist, trace gravel	
				4.5+					88				

CAD DWG NO:91118176 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 16:09:36 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of

Project Location CLINTON, ILLINOIS Project No. 91-118

Boring No. B222D Surface Elev. 704.1 Boring Type HSA Completion Depth 130'

Coordinates: (X) N 4829.38 (Y) E7621.35 Drilling Contractor SKS & ASSOCIATES, INC.

Date Started 11-10-95 Date Completed 11-15-95 Driller TODD SKINNER Rig No. MOBILE B-57

Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT-BENTONITE GROUT

Surface Conditions SILTY CLAY (BARE GROUND) If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
5	CS	60		4.5+								SILTY CLAY (CL); Gray, very stiff, moist, trace gravel	
									92				
				4.5+									
									94				Collected sample 22D for TOC & CEC analyses.
				4.5+									
6	CS	60							96			3" saturated, medium to coarse grain sand @ 95.6'	
				4.5+					98				
				4.5+					100				
7	CS	60										2" wet silt seam @ 101.9'	
				4.5+					102				
				4.5+					104			2" wet, medium grain sand @ 104.9'	
8	CS	60		4.5+					106			2" wet, fine to medium grain sand @ 105.8'	
				4.5+					108				
				4.5+					110				
9	CS	48										2" wet, medium grain sand @ 111.2'	
				4.5+					112				
				4.5+					114				
10	CS	50		4.0					116				
				2.5					118			3" wet silt seam @ 118.9'	
				2.0									

CAD DWG NO:91118177 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 16:10:14 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. B222D Surface Elev. 704.1 Boring Type HSA Completion Depth 130'
Coordinates: (X) N 4829.38 (Y) E 7621.35 Drilling Contractor SKS & ASSOCIATES, INC.
Date Started 11-10-95 Date Completed 11-15-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) Y Backfill Material CEMENT-BENTONITE GROUT
Surface Conditions SILTY CLAY (BARE GROUND) If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
11	CS	0										SILTY CLAY (CL); Gray, very stiff, moist, trace gravel	Rock in end of sampler
									122				
									124				
12	SS	10	90+	4.5+									
13	CS	48		4.5+					126				
				4.5+					128				
				4.5+					130	574.1		End of boring @130.0'	
									132				
									134				
									136				
									138				
									140				
									142				
									144				
									146				
									148				

CAD DWG NO:91118178 EMPLOYEE NO: 9834 DATE/TIME: 02/02/96 16:07:58 ACD-12_

PROJECT CLINTON LANDFILL, INC., DEWITT COUNTY, ILLINOIS

CLIENT ANDREWS ENVIRONMENTAL ENGINEERING, INC.

BORING 123 DATE STARTED 10-23-89 DATE COMPLETED 10-23-89 JOB 27,702

ELEVATIONS

GROUND SURFACE 703.92

END OF BORING 627.92

WATER TABLE

AT END OF BORING

24 HOURS

WHILE DRILLING

DISTANCE BELOW SURFACE IN FEET		LENGTH RECOVERY	SAMPLE NO.	SAMPLE TYPE	N	WC	Q_u	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS
0	OL								0.75	703.17	Dark brown clayey TOPSOIL, moist (OL
	ML		1	SS	4				2.5	701.42	Firm brown clayey SILT, little fine sand, moist (ML)
	CL		2	SS	10		3.75				Very tough light brown silty CLAY, trace sand, small gravel, moist (CL)
5			3	SS	11		2.0				
	SP		4	SS	14		4.25		6.5 7.0	697.42 696.92	Firm brown fine SAND, trace silt, damp (SP)
	CL		5	SS	19		3.25				Very tough brown silty CLAY, mottled gray, trace sand, small gravel, moist (CL)
10			6	SS	13		3.0				
			7	SS	26		2.25		13.5	690.42	
15	CL		8	SS	10		3.75				Very tough gray silty CLAY, trace sand, small to large gravel, moist (CL)
			9	SS	33		3.25				
			10	SS	16		2.5				
20									20.0	683.92	
	CL		11	SS	24		1.5				Tough gray silty CLAY, little sand, trace small to large gravel, moist (CL)
			12	SS	10		1.0				
25			13	SS	16		4.5+		24.5	679.42	
	CL		14	SS	12		4.5+				Hard gray silty CLAY, little sand, trace small to large gravel, moist (CL)
	SP		15 A B	SS	16		3.25		29.5 30.0	674.42 673.92	Firm gray fine to medium SAND, damp (SP)
30	CL		16	SS	24		3.5				Very tough to hard gray silty CLAY, trace sand, small to large gravel, moist (CL)
			17	SS	27		4.5+		34.0	669.92	
35			18	SS	22		2.0				Tough gray silty CLAY, trace sand, small to large gravel, moist (CL)
			19	SS	31		1.75		38.25	665.67	
	OL/Pt		20	SS	17						Brown organic silty CLAY and PEAT (OL/PT)
40											

PROJECT CLINTON LANDFILL, INC., DEWITT COUNTY, ILLINOIS

CLIENT ANDREWS ENVIRONMENTAL ENGINEERING, INC.

BORING 123 cont. DATE STARTED 10-23-89 DATE COMPLETED 10-24-89 JOB 27,702

ELEVATIONS

GROUND SURFACE 703.92

END OF BORING 627.92

WATER TABLE

AT END OF BORING

24 HOURS

WHILE DRILLING

DISTANCE BELOW SURFACE IN FE		LENGTH RECOVERY	SAMPLE NO.	SAMPLE TYPE	N	WC	q_u	γ DRY	DEPTH	ELEV.	SOIL DESCRIPTIONS
40	OL/Pt		21	SS	46						Brown organic silty CLAY and PEAT (OL/Pt)
									42.0	661.92	
	OL		22	SS	7		1.0				Dark gray to black organic silty CLAY, trace sand, roots, very moist (OL)
									44.5	659.42	
45	CL		23	SS	17		2.5				Very tough gray silty CLAY, trace sand, small gravel, moist (CL)
									46.0	657.92	
	CL		24	SS	17		2.25				Tough to very tough greenish gray silty CLAY, trace sand, small gravel, roots, moist (CL)
			25	SS	25		2.5				
50			26	SS	15		1.5				
									52.0	653.92	
	CL		27	SS	18		3.5				Very tough to hard dark gray very silty CLAY, little sand, trace small to large gravel, moist (CL)
55			28	SS	27		4.5+				
			29	SS	26		2.0				
			30	SS	20		4.5+				
60			31	SS	36		4.5+				
									62.0	643.92	
	CL		32 A/B	SS	87		4.5+				Hard dark gray very silty CLAY, some sand, trace small to large gravel, moist (CL)
65			33	SS	59		4.5+				
			34	SS	84/6"		4.5+				
			35 A/B	SS	35		4.5+		68.5	635.42	
70	ML/Pt										Dark brown clayey SILT and PEAT, little fine sand, very moist (ML/Pt)
			36	SS	62				71.0	632.92	
	SM		37	SS	61						Very dense gray silty fine SAND, few thin silt seams, wet (SM)
75			38 A/B	SS	57		4.5+		75.5	628.42	
	CL										Hard dark gray very silty CLAY, little sand, trace small to large gravel, moist (CL)
			End of Boring at 76.0 feet								

PROJECT CLINTON LANDFILL, INC., DEWITT COUNTY, ILLINOIS

CLIENT ANDREWS ENVIRONMENTAL ENGINEERING, INC.

BORING 123 cont. DATE STARTED 10-23-89 DATE COMPLETED 10-24-89 JOB 27,702

ELEVATIONS

GROUND SURFACE 703.92

END OF BORING 627.92

WATER TABLE

AT END OF BORING

24 HOURS

WHILE DRILLING

DISTANCE BELOW SURFACE IN FEET	LENGTH	RECOVERY	SAMPLE NO.	SAMPLE TYPE	N	WC	Q_u	γDRY	DEPTH	ELEV.	SOIL DESCRIPTIONS
80											
85											
90											
95											
100											
105											
110											
115											
120											

Monitoring Well B-123

Installation Notes

SS 304 Screen	71'-81'
SS 304 Riser	41'-71'
Silica Sand	69'-81'
Bentonite Chips	66'-69'
Volclay Grout	2'-66'

Square design zinc plated steel locking protector casing concreted into place over riser pipe.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 3
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. P223D Surface Elev. 704.15 Boring Type HSA Completion Depth 127'
Coordinates: (X) N 3721.55 (Y) E 7641.36 Drilling Contractor SKS & ASSOCIATES, INC.
Date Started 9-14-95 Date Completed 9-18-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions SILTY CLAY (BARE GROUND) If "No" explain INSTALLED PIEZOMETER P223D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
												SEE BORING LOG G23D FOR CONTINUOUS SAMPLING OF TOP 70 FEET.	

CAD DWG NO:91118140 EMPLOYEE NO: 9834 DATE/TIME: 10/13/95 08:02:22 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 3
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. P223D Surface Elev. 704.15 Boring Type HSA Completion Depth 127'
Coordinates: (X) N 3721.55 (Y) E 7641.36 Drilling Contractor SKS & ASSOCIATES, INC.
Date Started 9-14-95 Date Completed 9-18-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions SILTY CLAY (BARE GROUND) If "No" explain INSTALLED PIEZOMETER P223D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	60	–	–	–					634.15		ORGANIC PEAT AND SILT (PT); Dark gray to black, saturated, with clay	Collected G-23D-1 for Arsenic analysis from 71.5'-73.5'
									72	631.90		SANDY SILT (ML); Gray, saturated, with clay	
									74	629.65		SILTY CLAY (CL); Gray, moist	
2	CS	24	–	–	–				76				
				4.5+					78	626.15		SANDY CLAY (CL); Red-brown, saturated, with silt	Collected G-23D-2 for Arsenic analysis from 78'-79.5'
										625.40		SILTY CLAY (CL); Gray, hard, moist, trace gravel	
3	ST	24	–	–	–				80	624.15		SAND (SP); Gray, loose, wet, trace clay, medium to coarse grained	Pushed Shelby tube from 80'-82', for sample # P223D-1A Upper 1' of tube is sand
										623.15		SILTY CLAY (CL); Gray, hard, moist, trace gravel	
4	CS	36	–	–	–				82	621.65		SAND (SP); Gray, wet, trace clay, medium to coarse grained	
				4.5+					84	621.15		SILTY CLAY (CL); Gray, moist, trace gravel	Collected P223D-2 for TOC and CEC analysis from 83'-84'
5	CS	23	–	–	–				86				
				4.5+					88				
6	ST	0	–	–	–				90				Pushed Shelby tube from 90'-92', for sample # P223D-1B Tube bent, no sample obtained
7	CS	29	–	–	–				92				
				4.5+								2" fine to medium grained sand seam @93.4'	Collected P223D-1 for TOC and CEC analysis from 93'-94'
				4.5+					94				
8	CS	60	–	–	–				96				
				4.5+									
				4.5+					98			silt seam (dry) from 99.2' to 99.4'	

CAD DWG NO:91118141 EMPLOYEE NO: 9834 DATE/TIME: 10/13/95 08:04:24 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 3
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. P223D Surface Elev. 704.15 Boring Type HSA Completion Depth 127'
Coordinates: (X) N 3721.55 (Y) E 7641.36 Drilling Contractor SKS & ASSOCIATES, INC.
Date Started 9-14-95 Date Completed 9-18-95 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions SILTY CLAY (BARE GROUND) If "No" explain INSTALLED PIEZOMETER P223D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	Q_P (TSF)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
9	CS	60	–	4.5+	–							SILTY CLAY (CL); Gray, hard, moist, trace gravel	
										603.15			
										602.65		SANDY SILT (ML); Gray, wet	
				4.5+					102			SILTY CLAY (CL); Gray, hard, moist, trace gravel	
													Collected P223D-1B ~~for permeability~~ from 103'-105' ~~(601.15-599.15 MSL)~~
									104				
10	CS	60	–	4.5+	–								
									106				
				4.5+					108				
									110				
11	CS	40	–	–	–								
									112				
				4.5+					114				
12	CS	48	–	4.5+	–								
									116				
										587.15		SAND (SP); Gray, saturated, fine to medium ~~grained, trace silt~~	
									118				
									120				
13	SS	24	40	–	–								
												grades medium to coarse grained @121.4	
									122			grades with clay @122.3	
14	SS	24	32	–	–								
									124				
15	SS	8	>50	–	–							grades with gravel @124.7	
16	SS	8	>50	–	–								
									126	577.95			
17	SS	8	>50	4.5+	–							CLAYEY SILT (ML); Gray, hard, damp	
										577.15		End of boring @127'	
									128				

CAD DWG NO:91118142 EMPLOYEE NO: 9834 DATE/TIME: 10/13/95 08:14:20 ACD-12_

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL — Sheet 1 of 1
Project Location CLINTON, ILLINOIS — Project No. 91-118
Boring No. G37S — Surface Elev. 701.71 — Boring Type HSA — Completion Depth 46.0'
Coordinates: (X) 5336.43 (Y) 7631.88 — Drilling Contractor TESTING SERVICES CORPORATION
Date Started 11-10-97 Date Completed 11-10-97 — Driller BRUNO WILLIAMSON — Rig No. CME 55 #117
Logged By MIKE CAMERON — Backfilled (Y/N) N — Backfill Material
Surface Conditions BARE SOIL — If "No" explain INSTALLED WELL G37S

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
												SILTY CLAY (CL); [FILL]; Brown, hard, damp trace sand and gravel	Straight auger to 2.0'
									2				
1	SS	15	–	4.5+									
									4				
2	SS	18	–	4.5+								gray–brown	
									6	695.80		SAND (SW); Red–brown, medium dense, moist medium to fine grained, trace clay	
3	SS	18	–	–								grades damp, loose @6.75'	
									8				
4	SS	22	–	–									
										692.21		SILTY SAND (SM); Brown/gray, medium dense moist, fine grained	
									10			grades wet/saturated @10.25'	
5	SS	18	–	–									
				4.5+						690.46		SILTY CLAY (CL); Brown/gray, hard, damp, trace sand, gravel	
									12	689.71		SAND (SP); Brown/gray, loose, wet, very fine grained	
6	SS	22	–	–									
				3.75						688.06		SILTY CLAY (CL); Gray, very stiff, moist, trace sand and gravel	
									14				
7	SS	16	–	–									
				3.25					16			grades hard @16.0'	
8	SS	22	–	4.5+									
				4.0					18				
9	SS	18	–	3.75									
				4.5+					20				
10	SS	24	–	3.0									
				3.75					22				
11	SS	20	–	3.75								grades very stiff	
				2.75					24				
12	SS	21	–	3.25									
				4.0					26				
13	SS	21	–	3.25									
				3.25					28				
14	SS	2	–	3.75									
				4.25								1" seam SAND (SP) @29.9'	

CAD DWG NO:91118306 EMPLOYEE NO: 9834 DATE/TIME: 03/25/98 08:00 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL — Sheet 2 of 2
Project Location CLINTON, ILLINOIS — Project No. 91-118
Boring No. G37S — Surface Elev. 701.71 — Boring Type HSA — Completion Depth 46.0'
Coordinates: (X) 5336.43 (Y) 7631.88 — Drilling Contractor TESTING SERVICE CORPORATION
Date Started 11-10-97 Date Completed 11-10-97 — Driller BRUNO WILLIAMSON — Rig No. CME 55 #117
Logged By MIKE CAMERON — Backfilled (Y/N) N — Backfill Material
Surface Conditions BARE SOIL — If "No" explain INSTALLED WELL G37S

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
15	SS	22	–	4.25								SILTY CLAY (CL); Gray, very stiff, moist, trace sand and gravel.	
										670.40		SAND (SW); Gray, medium dense, moist, trace gravel	
16	SS	6	–	–					32				Spoon cut pebble, blocked shoe
									34				
17	SS	0	–	–									Spoon blocked again, no recovery
									36	665.71			
18	SS	f	–	–								SILTY CLAY (CL); Dark gray, very stiff, moist, trace sand	
									38			2" SILTY SAND seam (wet) @37.0'	
19	SS	f	–	4.0								grades blue-gray	
				4.5					40				
20	SS	f	–	3.75									
				2.5					42			grades light gray	
21	SS	f	–	1.75									
				2.75					44				
22	SS	f	–	4.0									
				4.25					46	655.71			
												End of Boring @46.0'	
									48				
									50				
									52				
									54				
									56				
									58				

CAD DWG NO:91118305 EMPLOYEE NO: 9834 DATE/TIME: 03/25/98 09:56 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL — Sheet 1 of 1
Project Location CLINTON, ILLINOIS — Project No. 91-118
Boring No. G38S — Surface Elev. 698.92 — Boring Type HSA — Completion Depth 40.0'
Coordinates: (X) 5094.58 (Y) 7687.31 — Drilling Contractor TESTING SERVICES CORPORATION
Date Started 11-13-97 Date Completed 11-13-97 — Driller BRUNO WILLIAMSON — Rig No. CME 55 #117
Logged By MIKE CAMERON — Backfilled (Y/N) N — Backfill Material
Surface Conditions GRASS — If "No" explain INSTALLED WELL G38S

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
												SILTY CLAY (CL); Dark brown, very stiff, moist, organic rich, trace sand	
									2				
1	SS	23	–	2.25									
									4				
2	SS	16	–	1.75								grades hard, light gray mottled with orange brown, organics out	
				4.5+					6			grades gray-brown, trace gravel	
3	SS	21	–	–									
				4.5+					8				
4	SS	22	–	–									
									10				
5	SS	0	–	X									Rock blocked spoon
									12				
6	SS	16	–	4.0									
				4.5+					14				
7	SS	18	–	3.0									
				3.0					16				
8	SS	18	–	4.5+									
				4.5+					18				
9	SS	12	–	4.5+									Large gravel blocking spoon, partial recovery
									20				
10	SS	22	–	–									
				4.5+					22	676.92			
11	SS	3	–	–								SAND (SW); Gray, dense, wet/saturated, trace clay, gravel; coarse to fine grained sand	Rock in spoon blocked recovery
									24			grades moist	
12	SS	14	–	–									
									26				
13	SS	13	–	–									
									28				
14	SS	4	–	–								fine to very fine grained	

CAD DWG NO:91118303 EMPLOYEE NO: 9834 DATE/TIME: 03/25/98 09:56 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL — Sheet 2 of 2
Project Location CLINTON, ILLINOIS — Project No. 91-118
Boring No. G38S — Surface Elev. 698.92 — Boring Type HSA — Completion Depth 40.0'
Coordinates: (X) 5094.58 (Y) 7687.31 — Drilling Contractor TESTING SERVICE CORPORATION
Date Started 11-13-97 Date Completed 11-13-97 — Driller BRUNO WILLIAMSON — Rig No. CME 55 #117
Logged By MIKE CAMERON — Backfilled (Y/N) N — Backfill Material
Surface Conditions GRASS — If "No" explain INSTALLED WELL G38S

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
15	SS	12	–	–				X				SAND (SW); Gray, dense, wet/saturated, trace clay, gravel; coarse to fine grained	
								X		667.92		SANDY GRAVEL (GW); Gray (grains vary by individual color), dense, saturated	
16	SS	10	–	–				X	32				
								X		665.92		SAND (SW); Gray, dense, moist, with gravel, trace clay, coarse to fine grained	
17	SS	0/0	–	–				X	34				No recovery in two tries
								X					
18	SS	11	–	–				X	36				
								X		661.92		SILTY CLAY (CL); Gray, hard, moist, trace sand & gravel	
				4.5+				X					
19	SS	6	–	0.5				X	38			grades blue/gray, firm, trace sand	
				0.5				X					
									40	658.92		End of Boring @ 40.0'	
									42				
									44				
									46				
									48				
									50				
									52				
									54				
									56				
									58				

CAD DWG NO:91118301 EMPLOYEE NO: 9834 DATE/TIME: 03/25/98 10:45 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON, LANDFILL, INC. Sheet 1 of
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. G39D Surface Elev. 700.60 Boring Type HSA Completion Depth 104.67'
Coordinates: (X) 5503.02 (Y) 7639.74 Drilling Contractor TESTING SERVICES CORPORATION
Date Started 11-4-97 Date Completed 11-6-97 Driller BRUNO WILLIAMSON Rig No. MOBILE B-61
Logged By M. CAMERON Backfilled (Y/N) Y Backfill Material CEMENT-BENTONITE GROUT
Surface Conditions GRASS If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
												SILTY CLAY (CL); Brown, very stiff, moist, trace sand & gravel	Log 2' by cuttings
									2				
1	SS	22		3.5				X				grades gray	
				3.25				X					
									4				
2	SS	6						X					
								X		695.60		SAND (SP): Light brown, dense, damp, fine grained	
								X	6	694.60		SAND (SW): Gray, dense, damp, coarse-fine grained	
3	SS	18						X				2" silt seam @6.6'	
				4.0				X		692.90		2" silt seam @7.6'	
									8				
4	SS	19						X				SILTY CLAY (CL): Gray, hard, damp, trace sand & gravel	
				4.5+				X		690.90			
									10				
5	SS	20						X				CLAYEY SILT (ML): Gray, dense, damp, with very fine sand	
								X				1" SAND (SP) seam: gray, dense, moist, fine grained @11.9'	
									12	688.60			
6	SS	18		4.0				X				SILTY CLAY (CL); Gray brown, hard, moist, trace sand	
				4.5+				X					
									14				
7	SS	24		3.5				X				grades gray, very stiff, trace gravel	
				2.25				X					
									16				
8	SS	18		2.5				X				grades trace organics - wood fibers	
				3.5				X					
									18				
9	SS	19		3.75				X					
				3.5				X					
									20			grades fibers out	
10	SS	24		3.5				X					
				2.75				X					
									22				
11	SS	24		2.25				X				grades more plastic (CL-CH)	
				1.25				X				grades stiff, mottled with black organics for 2"	
									24				
12	SS	24		2.75				X					
				2.25				X					
									26				
13	SS	f		2.5				X					
				2.5				X					
									28	672.40			
14	SS	14		3.25				X				SAND (SW): Gray, dense, damp, coarse-fine grained, trace gravel & clay	
								X					

CAD DWG NO:91118286 EMPLOYEE NO: 9834 DATE/TIME: 03/31/98 09:25 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. G39D Surface Elev. 700.60 Boring Type HSA Completion Depth 104.67'
Coordinates: (X) 5503.02 (Y) 7639.74 Drilling Contractor TESTING SERVICES CORPORATION
Date Started 11-4-97 Date Completed 11-6-97 Driller BRUNO WILLIAMSON Rig No. MOBILE B-61
Logged By M. CAMERON Backfilled (Y/N) Y Backfill Material CEMENT-BENTONITE GROUT
Surface Conditions GRASS If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
15	SS	12						X				SAND (SW); Gray, dense, damp, coarse to very fine grained, trace gravel, trace clay	
								X				2" silty clay seam @30.7'	
								X	32			1" clay seam @31.4'	
16	SS	12						X					
								X				1" clay seam @33.8'	
								X	34				
17	SS	12						X					
								X	36				
18	SS	7						X				grades with gravel @36.0'	Hit water @ 37.0'
								X					
								X	38				
19	SS	17						X					
				2.5				X		661.85		SILTY CLAY (CL); Blue-gray, very stiff, moist, trace sand, mottled with yellow-brown oxidation stains	
								X	40				
20	SS	6						X					
				2.25				X				grades gray	
								X	42				
21	SS	6						X					Piece of gravel blocked spoon.
								X					
								X	44				
22	SS	20		4.5+				X				grades hard	
				4.5+				X					
									46				Wash out augers with rig water; lost seal. Drilled to 48', resume sampling.
									48			grades trace gravel	
23	SS	18		4.5+				X					
				4.5+				X					
									50				
24	SS	12		4.5				X				grades damp/moist	
				4.5+				X					
									52				
25	SS	20		4.5+				X					
				4.5+				X					
									54				Rock blocked spoon, blind drill to 56.0'
									56				Spoon refusal after 8" @56', auger to 58'.
26	SS	8		4.3				X					
27	SS	12		4.5+				X					
									58				
28	SS	f		4.5+				X					
				4.5+				X					

CAD DWG NO:91118287 EMPLOYEE NO: 9834 DATE/TIME: 03/25/98 12:29 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. G39D Surface Elev. 700.60 Boring Type HSA Completion Depth 104.67'
Coordinates: (X) 5503.02 (Y) 7639.74 Drilling Contractor TESTING SERVICES CORPORATION
Date Started 11-4-97 Date Completed 11-6-97 Driller BRUNO WILLIAMSON Rig No. MOBILE B-61
Logged By M. CAMERON Backfilled (Y/N) Y Backfill Material CEMENT-BENTONITE GROUT
Surface Conditions GRASS If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
29	SS	0	–	–									No recovery on two tries
									62				
30	SS	18	–	4.5+									
									64				
31	SS	18	–	4.5+									
												1" SAND (SW) seam @65.75'	
									66	634.35		SAND (SP); Gray, dense, saturated, very fine grained	
32	SS	22	–	–						633.60			
												SILT (ML); Dark gray with black (organic rich) very stiff, moist, with very fine sand	
									68				
33	SS	2	–	–						631.60			
												SILTY CLAY (CL); Gray, hard, moist, with sand, trace gravel	
									70				
34	SS	24	–	4.5+									
									72				
35	SS	24	–	4.5+									
									74				
36	SS	17	–	4.5+									
									76				
37	SS	22	–	–									
				4.5					78				
38	SS	18	–	–									
				4.5+					80				
39	SS	22	–	–									
				4.5					82				
40	SS	22	–	–									
				4.5+					84				
41	SS	22	–	–									
				4.5+					86				
42	SS	17	–	–									
				4.5+					88				
43	SS	14	–	–						612.10			
												SILTY SANDY CLAY (CL); Gray, hard, damp, trace gravel	

CAD DWG NO:91118288 EMPLOYEE NO: 9834 DATE/TIME: DATE/TIME

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 4 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. G39D Surface Elev. 700.60 Boring Type HSA Completion Depth 104.67'
Coordinates: (X) 5503.02 (Y) 7639.74 Drilling Contractor TESTING SERVICE CORPORATION
Date Started 11-4-97 Date Completed 11-6-97 Driller BRUNO WILLIAMSON Rig No. MOBILE B-61
Logged By M. CAMERON Backfilled (Y/N) Y Backfill Material CEMENT-BENTONITE GROUT
Surface Conditions GRASS If "No" explain

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
44	SS	12	–	–				X		609.60		2" seam SAND (SP); Gray, dense, saturated, fine grained, with silt and clay; @90.8'	Various spoon refusals as marked; augered ahead and resumed sampling.
45	SS	6	–	–				X				SILTY CLAY (CL); Gray, hard, moist, trace sand and gravel	
46	SS	17	–	–				X	92				
								X				grades dark gray, damp-dry	
47	SS	18	–	4.5+				X	94				
48	SS	21	–	4.5+				X	96				
49	SS	9	–	4.5+				X	98				
50	SS	16	–	4.5+				X	100				
51	SS	6	–	4.5+				X	102				
52	SS	5	–	–				X					
53	SS	8	–	4.5+				X	104	595.93		End of boring @104.67'	
									106				
									108				
									110				
									112				
									114				
									116				
									118				

CAD DWG NO:91118289 EMPLOYEE NO: 9834 DATE/TIME: 03/31/98 09:29 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL — Sheet 1 of 4
Project Location CLINTON, ILLINOIS — Project No. 91-118
Boring No. G40D — Surface Elev. 705.49 — Boring Type HSA — Completion Depth 108.5'
Coordinates: (X) 4044.05 (Y) 7624.37 — Drilling Contractor TESTING SERVICE CORPORATION
Date Started 10/20/97 Date Completed 10/23/97 — Driller BRUNO WILLIAMSON — Rig No. MOBILE B-61
Logged By JOHN BERRY — Backfilled (Y/N) N Backfill Material
Surface Conditions BROWN SILTY CLAY — If "No" explain INSTALLED WELL G40D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
												SILTY CLAY (CL); Brown, trace gravel (FILL)	
									2				
1	SS	24		3.5				X				SILTY CLAY (CL); Brown mottled with gray, very stiff, moist, trace gravel	
				3.5				X	4				
2	SS	24		4.0+				X				grades hard	
				4.0+				X	6				
3	SS	12		4.0+				X					
4	SS	22						X	8			3" seam moist large gravel, @8.9'	
				1.5				X		696.00		SILTY CLAY (CL): Brown, very stiff, moist-wet, trace gravel	
5	SS							X	10				10-12'; no recovery
								X					12-14'; no recovery
6	SS							X	12				
								X					
7	SS	24		1.5				X	14	691.50		SILTY CLAY (CL); Dark brown to black, stiff moist to wet, trace gravel & organics	
				2.0				X					
8	SS	24		2.5				X	16	689.50		SILTY CLAY (CL); Brown, very stiff, moist, trace gravel	
								X				grades gray mottled with brown	
9	SS	24		4.0+				X	18				
				4.0+				X					
10	SS	24		4.0+				X	20				
				4.0+				X					
11	SS	24		4.0+				X	22				
				4.0+				X				grades gray	
12	SS	24						X	24				
				2.5				X				grades very stiff	
13	SS	24		2.5				X	26				
				2.5				X					
14	SS	24						X	28			2" saturated, coarse grained sand @29.1'	
				2.5				X					

CAD DWG NO:91118329 EMPLOYEE NO: 9834 DATE/TIME: 03/25/98 14:01 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL — Sheet 2 of 4
Project Location CLINTON, ILLINOIS — Project No. 91-118
Boring No. G40D — Surface Elev. 705.49 — Boring Type HSA — Completion Depth 108.5'
Coordinates: (X) 4044.05 (Y) 7624.37 — Drilling Contractor TESTING SERVICE CORPORATION
Date Started 10/20/97 Date Completed 10/23/97 — Driller BRUNO WILLIAMSON — Rig No. MOBILE B-61
Logged By JOHN BERRY — Backfilled (Y/N) N Backfill Material
Surface Conditions BROWN SILTY CLAY — If "No" explain INSTALLED WELL G40D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
15	SS	24		2.5			X				SILTY CLAY (CL); Gray, very stiff, moist, trace gravel and organics	
				4.0+			X				2" seam clayey sand – wet to saturated; @30.9' grades hard @31.9'	
								32				
16	SS	24		2.5			X				grades very stiff	
				2.5			X					
								34				
17	SS	24		2.5			X					
				2.5			X					
								36				
18	SS	24					X					
							X		668.49		SANDY SILT (SM); Wet, dense, fine to medium sand	
							X		667.89			
								38			PEAT (PT) Brown-black, moist, dense, trace silt	
19	SS	24					X					
							X					
								40				
20	SS	24					X					
							X					
								42				
21	SS	24					X					
							X		662.49			
				1.0			X				SILTY CLAY (CL); Dark brown-black, firm, moist, old organic topsoil, trace organics and gravel	
								44	661.49			
22	SS	24		1.0			X				SILTY CLAY (CL); Blue-gray, stiff, moist, trace gravel and organics	
							X					
								46				
23	SS	24		1.5			X					
				1.5			X				grades gray	
								48				
24	SS	16		1.5			X				grades organics out	
				1.5			X					
								50				
25	SS	18		1.5			X					
				2.0			X					
								52				
26	SS	24		4.0+			X				grades hard	
				4.0+			X					
								54				
27	SS	24		4.0+			X					
							X					
								56				
28	SS	24		4.0+			X					
							X					
								58				
29	SS	24		4.0+			X					
							X					

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL — Sheet 3 of 4
Project Location CLINTON, ILLINOIS — Project No. 91-118
Boring No. G40D — Surface Elev. 705.49 — Boring Type HSA — Completion Depth 108.5'
Coordinates: (X) 4044.05 (Y) 7624.37 — Drilling Contractor TESTING SERVICE CORPORATION
Date Started 10/20/98 Date Completed 10/23/98 — Driller BRUNO WILLIAMSON — Rig No. MOBILE B-61
Logged By JOHN BERRY — Backfilled (Y/N) N — Backfill Material
Surface Conditions BROWN SILTY CLAY — If "No" explain INSTALLED WELL G40D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
30	SS	24		4.0+								SILTY CLAY (CL); Gray, moist, hard, trace gravel	
									62			3" seam of medium to fine grained sand @61.4'	
31	SS	24											
				4.0+					64				
32	SS	24											
				4.0+					66				
33	SS	24		4.0+									
				4.0+					68				
34	SS	24		4.0+						636.49			
										635.89		PEAT (Pt); Brown-black, dense, moist to wet, trace gravel	
35	SS	24		4.0+					70			SILTY CLAY (CL); Gray, moist, hard, trace gravel	
				4.0+					72				
36	SS	24		4.0+						632.49			
									74	631.49		SAND (SP); Gray, dense, wet, medium to fine grained, trace silt	
37	SS	24		4.0+								SILTY CLAY (CL); Gray, moist, hard, trace gravel	
									76				
38	SS	24		4.0+									
									78				
39	SS	24		4.0+									
									80				
40	SS	24		4.0+									
									82				
41	SS	24		4.0+									
									84				
42	SS	24		4.0+									
									86				
43	SS	20		4.0+									
									88				
44	SS			4.0+									

CAD DWG NO:91118331 EMPLOYEE NO: 9834 DATE/TIME: 03/25/98 15:15 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL — Sheet 4 of 4
Project Location CLINTON, ILLINOIS — Project No. 91-118
Boring No. G40D — Surface Elev. 705.49 — Boring Type HSA — Completion Depth 108.5'
Coordinates: (X) 4044.05 (Y) 7624.37 — Drilling Contractor TESTING SERVICE CORPORATION
Date Started 10/20/98 — Date Completed 10/23/98 — Driller BRUNO WILLIAMSON — Rig No. MOBILE B-61
Logged By JOHN BERRY — Backfilled (Y/N) N — Backfill Material
Surface Conditions BROWN SILTY CLAY — If "No" explain INSTALLED WELL G40D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
45	SS	20		4.0+								SILTY CLAY (CL); Gray, moist, hard, trace gravel	
									92				
46	SS	18		4.0+									
									94				~~No recovery from~~
47	SS	0											94 – 96'
									96				
48	SS	6		4.0+									
									98	607.24			
49	SS	23										SILTY SAND (SM); Gray, saturated, dense, fine to medium grained, trace clay (same)	
										605.99		~~SILTY CLAY (SM); Gray, moist, hard, trace gravel~~	
									100				
50	SS	6		4.0+									
									102				
51	SS	10		4.0+									~~No recovery from~~
													104 – 106'
									104				
52	SS	0											
									106				
53	SS	18		4.0+									
									108				
										596.99		~~End of boring @108.5'~~	
									110				
									112				
									114				
									116				
									118				

CAD DWG NO:91118332 EMPLOYEE NO: 9834 DATE/TIME: 03/25/98 15:19 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of _
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. G46D Surface Elev. 709.49 Boring Type HSA Completion Depth 116.5'
Coordinates: (X) 3629.606 (Y) 7644.785 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10/19/98 Date Completed 10/20/98 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE SOIL (ACCESS ROAD) If "No" explain INSTALLED MONITORING WELL G46D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	54		4.0+								SILTY CLAY (CL); Brown-mottled gray, hard, moist, trace gravel and fine sand	
									2				
												1" sand seam (medium grain) @ 3.4'	
2	CS	60		1.5					4			grades stiff	
				1.5					6				
				1.5					8				
3	CS	60							10				
				1.5					12			grades gray mottled with brown	
				1.5					14				
4	CS	60										grades gray	
				4.0+					16				
				4.0+					18				
												3" sandy silt seam at 18.7' - saturated	
5	CS	49							20	690.24 689.49		CLAYEY SILT (ML); Gray, hard, damp to moist, trace fine sand	
										688.24		SILTY SAND (SM); Gray; dense, saturated, fine grained	
									22			SILT (ML); Gray, dense, moist, with clay	
				4.0+					24	685.49		SILTY CLAY (CL); Gray, hard, moist, trace gravel and fine sand	
6	CS	60											
				1.5					26			grades stiff	
				1.5					28				
7	CS	60											

CAD DWG NO:91118416 EMPLOYEE NO: 9859 DATE/TIME: 12/18/98 16:36 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. G46D Surface Elev. 709.49 Boring Type HSA Completion Depth 116.5'
Coordinates: (X) 3629.606 (Y) 7644.785 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10/19/98 Date Completed 10/20/98 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE SOIL (ACCESS ROAD) If "No" explain INSTALLED MONITORING WELL G46D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60		1.5								SILTY CLAY (CL); Gray, stiff, moist, trace gravel and fine sand	
									32			grades very stiff	
				3.0									
				4.0+					34			grades hard	
8	CS	60											
				3.0					36			grades very stiff	
				2.5					38				
				2.5									
9	CS	60							40			grades stiff	
				1.5									
				1.5					42				
									44	665.24			
10	CS	60										PEAT (PT); Brown, dense, moist, trace clay and fine sand	
									46			grades clay out	
									48			grades black	
				0.5						660.99		SILTY CLAY (OH); Soft, black, with organics, high plasticity, old organic topsoil	
11	CS	58							50	659.49		SILTY CLAY (CL); Gray, stiff, moist, trace gravel and fine sand	
				1.5									
				1.5					52			grades blue-gray	
				1.5					54				
12	CS	60											
				1.75					56			grades gray	
				4.0+					58			grades hard	
13	CS	55											

CAD DWG NO:91118417 EMPLOYEE NO: 9859 DATE/TIME: 12/18/98 16:40 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. G46D Surface Elev. 709.49 Boring Type HSA Completion Depth 116.5'
Coordinates: (X) 3629.606 (Y) 7644.785 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10/19/98 Date Completed 10/20/98 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE SOIL (ACCESS ROAD) If "No" explain INSTALLED MONITORING WELL G46D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	55		1.5								SILTY CLAY (CL); Gray, stiff, moist, trace gravel and fine sand	
				1.5									
									62				
										646.49		CLAYEY SILT (ML); Gray, stiff, moist	
										645.99		SANDY CLAY (CL); Gray, stiff, wet	
									64	645.49			
14	CS	58		2.25								SILTY CLAY (CL); Gray, very stiff, moist, trace gravel and fine sand	
				4.0+								grades hard	
				4.0+					66				
				4.0+					68				
15	CS	57											
				4.0+					70				
				4.0+					72			2" medium grain sand at 71.9', wet	
16	CS	60		4.0+					74				
										633.99		PEAT (PT); Brown, hard, moist to wet, trace sand	
									76	633.74		SILT (ML); Gray, dense, wet to saturated, with clay	
										632.99		SANDY SILT (ML); Gray, dense, saturated	
				4.0+						632.49		SILTY CLAY (CL); Gray, hard, moist, trace gravel and fine sand	
									78				
17	CS	60								630.24		SILT (ML); Gray, dense, wet to sat., trace clay	
									80	629.49		SAND (SW); Gray, dense, saturated, fine to med. grain, trace clay	
										628.99			
				4.0+								SILTY CLAY (CL); Gray, hard, moist, trace gravel and fine sand	
									82				
										626.49		SAND (SP); Gray, dense, saturated, fine grain, trace silt and clay	
				4.0+						625.99			
18	CS	60							84			SILTY CLAY (CL); Gray, hard, moist, trace gravel and fine sand	
				4.0+									
									86				
				4.0+									
									88				
19	CS	60											

CAD DWG NO:91118418 EMPLOYEE NO: 9859 DATE/TIME: 01/21/99 11:28 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 4 of 4
Project Location CLINTON, ILLINOIS Project No. 91-118
Boring No. G46D Surface Elev. 709.49 Boring Type HSA Completion Depth 116.5'
Coordinates: (X) 3629.606 (Y) 7644.785 Drilling Contractor SKS ENGINEERS, INC.
Date Started 10/19/98 Date Completed 10/20/98 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By J. BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE SOIL (ACCESS ROAD) If "No" explain INSTALLED MONITORING WELL G46D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
19	CS	60										SILTY CLAY (CL); Gray, hard, moist, trace gravel and fine sand	
				4.0+									
									92				
									94				
20	CS	60		4.0+									
				4.0+					96				
				4.0+					98				
21	CS	60											
									100				
				4.0+									
									102			grades damp, trace gravel	
				4.0+									
									104				
22	CS	60											
				4.0+									
									106	603.24			
												SAND (SP); Gray, dense, fine to coarse grained, saturated, trace gravel and clay	
										602.24			
									108			SILTY CLAY (CL); Gray, hard, moist, trace gravel and fine sand	
				4.0+									
23	CS	60											
									110				
										598.99		SILTY SAND (SM); Gray, dense, saturated, trace clay	
										598.49			
				4.0+									
									112			SILTY CLAY (CL); Gray, hard, moist, trace gravel and fine sand	
				4.0+									
									114				
24	CS	24											
				4.0+									
									116				
										592.99		End of boring @116.5'	
									118				

CAD DWG NO:91118419 EMPLOYEE NO: 9859 DATE/TIME: 12/18/98 16:48 ACAD-14.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, ILLINOIS Well #: P223D

Project Name: CLINTON LANDFILL, INC. Borehole #: P223D

State Plane Coordinate: (X) N 3721.55 (Y) E 7641.36 (or) Latitude: ° ' " Longitude: ° ' "

Surveyed By: FARNSWORTH & WYLIE P.C. ILL. Registration #: 2285

Drilling Contractor: SKS & ASSOCIATES, INC. Driller: TODD SKINNER

Drilling Method: HSA Drilling Fluids (type):

Logged By: J. BERRY Date Started: 9-14-95 Date Finished: 9-18-95

Notes: P223D INSTALLED AS A PIEZOMETER

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
706.63	2.48	Top of Protective Casing
706.25	2.10	Top of Riser Pipe
704.15	0.00	Ground Surface
701.15	3.00	Top of annular sealant
591.01	113.14	Top of Seal
589.01	115.14	Top of Sand Pack
587.05	117.10	Top of Screen
577.33	126.82	Bottom of Screen
577.05	127.10	Bottom of Well
N/A	N/A	Top of Backfill (If Applicable)
576.87	127.28	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: CEMENT BENTONITE GROUT

Installation Method: TREMIE PIPE

Type of Bentonite Seal: BENSEAL SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE PIPE

Setting Time: 30 MINUTES

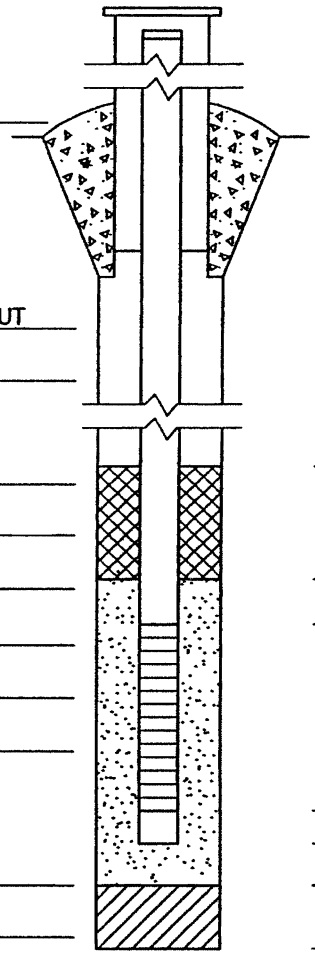
Type of Sand Pack: SILICA SAND

Grain Size: 10-20 MESH

Installation Method: HAND PLACEMENT OF SATURATED SILICA SAND

Type of Backfill Material: N/A
(If Applicable)

Installation Method:



Casing Measurements

Diameter of borehole (in)	8
ID of riser pipe (in)	2
Protective casing length (ft)	5.0
Riser pipe length (ft) (include stickup)	11
Screen length (1st slot to last slot, ft)	9.
Bottom of screen to end cap (ft)	0.28
Total length of casing (riser+screen+end cap) (ft)	130.33
Screen slot size	0.010

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					SQUARE STEEL
Riser pipe from 0.00 to 97.10 (feet below ground surface)				X	
Riser pipe from 97.10 to 117.10 (feet below ground surface)	X				
Screen	X				

CAD DWG NO:91118151 EMPLOYEE NO: 9834 DATE/TIME: 10/13/95 10:57:11 ACD-12

Illinois Environmental Protection Agency

Well Completion Report

County: Dewitt

Well #: B-122 G22D

Site Name: CLINTON LANDFILL, INC.

Grid Coordinate: Northing _____ Easting _____

Drilling Contractor: TESTING SERVICE CORPORATION

Date Drilled Start: 10-17-89

Driller: Greg Donovan

Geologist: Darin Delaney

Date Completed: 10-19-89

Drilling Method: Mud Rotary

Drilling Fluids (type): Bentonite

Annular Space Details

Type of Surface Seal: Concrete

Type of Annular Sealant: Volclay Grout

Amount of cement: # of bags _____ lbs. per bag _____

Amount of bentonite: # of bags _____ lbs. per bag _____

Type of Bentonite Seal (Granular, Pellet): Holeplug 3/8" chips

Amount of bentonite: # of Bags 1 lbs. per bag 50

Type of Sand Pack: 10-20 grade silica

Source of Sand: Colorado

Amount of Sand: # of bags 3 lbs. per bag 50

Well Construction Materials

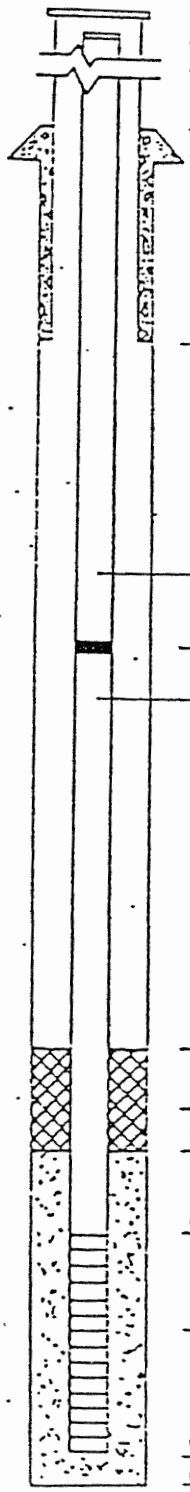
	Stainless Steel Specify Type	Teflon Specify Type	PVC Specify Type	Other Specify Type
Riser coupling joint				
Riser pipe above w.t.			sch 40	
Riser pipe below w.t.	304			
Screen	304			
Coupling joint screen to riser				
Protective casing	4"x4"x5'			

Measurements

to .01 ft. (where applicable)

Riser pipe length	92.0 feet
Protective casing length	5.0 feet
Screen length	10.0 feet
Bottom of screen to end cap	0.8 inch
[illegible] of screen to first joint	0.29 feet
[illegible]al length of casing	
Screen slot size	0.010 inches
% of openings in screen	31500
Diameter of borehole (in)	6 inches
ID of riser pipe (in)	2 inches

Elevations — .01 ft.



728.96 MSL Top of Protective Casing

728.17 MSL Top of Riser Pipe

ft. Casing Stickup

726.8 MSL Ground Surface

726.8 ft. Top of Surface seal

724.8 ft. Top of annular sealant

GRADE LOWERED AT THIS WELL, SEE REVISED IEPA WELL COMPLETION REPORT

Sch 40 PVC

676.8

SS 304

641.8 ft. Top of Seal

3. ft. Total Seal Interval

638.8 ft. Top of Sand

636.8 ft. Top of Screen

10' ft. Total Screen Interval

626.8 ft. Bottom of Screen

626.8 ft. Bottom of Borehole

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, ILLINOIS Well #: G38S

Project Name: CLINTON LANDFILL Borehole #: G38S

State Plane Coordinate: (X) 5094.58 (Y) 7687.31 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SHIVE-HATTERY ILL. Registration #: ___

Drilling Contractor: TESTING SERVICE CORPORATION Driller: BRUNO WILLIAMSON

Drilling Method: HSA Drilling Fluids (type): ___

Logged By: MIKE CAMERON Date Started: 11-13-97 Date Finished: 11-13-97

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: CEMENT-BENTONITE GROUT

Installation Method: TREMIE

Type of Bentonite Seal: PELLETS
(Granular, Pellet, Slurry)

Installation Method: POURED

Setting Time: 30 MINUTES

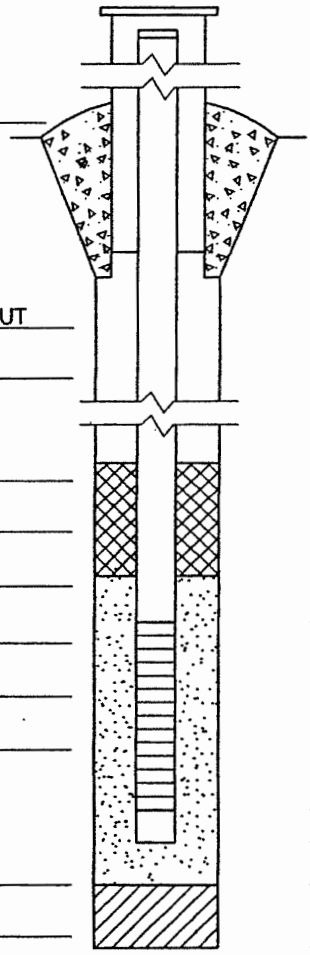
Type of Sand Pack: QUARTZ

Grain Size: # 5

Installation Method: POURED

Type of Backfill Material: QUARTZ SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
702.02	3.10	Top of Protective Casing
701.19	2.50	Top of Riser Pipe
698.92	0.00	Ground Surface
698.12	0.80	Top of annular sealant
674.12	24.80	Top of Seal
672.02	26.90	Top of Sand Pack
668.71	30.21	Top of Screen
658.97	39.95	Bottom of Screen
658.92	40.00	Bottom of Well
658.92	40.00	Top of Backfill (If Applicable)
657.92	41.00	Bottom of Borehole

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 24.98 (feet below ground surface)				X	
Riser pipe from 0.00 to 30.21 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	32.[illegible]
Screen length (1st slot to last slot, ft)	9.7[illegible]
Bottom of screen to end cap (ft)	0.05
Total length of casing (riser+screen+end cap) (ft)	42.50
Screen slot size	0.01

CAD DWG NO:91118323 EMPLOYEE NO: 9860 DATE/TIME: 02/03/98 13:59:29 ACD-12_

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, ILLINOIS Well #: G40D

Project Name: CLINTON LANDFILL Borehole #: G40D

State Plane Coordinate: (X) 4044.05 (Y) 7624.37 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SHIVE-HATTERY ILL. Registration #: 035-002809

Drilling Contractor: TESTING SERVICE CORPORATION Driller: BRUNO WILLIAMSON

Drilling Method: HSA Drilling Fluids (type): ___

Logged By: JOHN BERRY Date Started: 10/20/97 Date Finished: 10/23/97

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: CEMENT-BENTONITE GROUT

Installation Method: TREMIE PIPE

Type of Bentonite Seal: CHIPS
(Granular, Pellet, Slurry)

Installation Method: HAND POURED

Setting Time: 14 HOURS

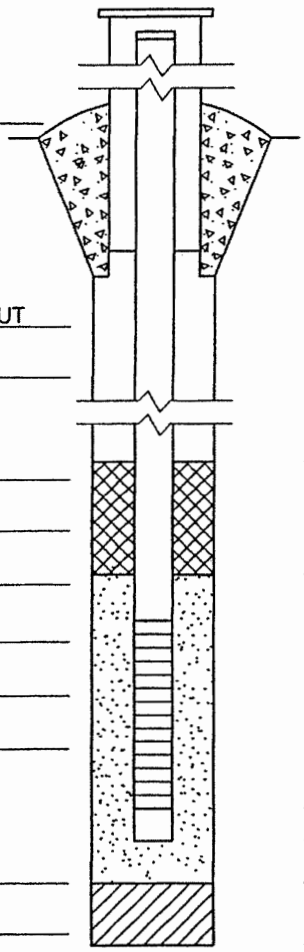
Type of Sand Pack: SILICA

Grain Size: #5

Installation Method: HAND POURED

Type of Backfill Material: SAND
(If Applicable)

Installation Method: HAND POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
708.41	2.92	Top of Protective Casing
707.75	2.26	Top of Riser Pipe
705.49	0.00	Ground Surface
702.49	3.00	Top of annular sealant
612.19	93.30	Top of Seal
609.99	95.50	Top of Sand Pack
607.39	98.10	Top of Screen
597.53	107.96	Bottom of Screen
597.49	108.00	Bottom of Well
597.49	108.00	Top of Backfill (If Applicable)
596.99	108.50	Bottom of Borehole

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 42.87 (feet below ground surface)				X	
Riser pipe from 42.87 to 98.10 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	100.36
Screen length (1st slot to last slot, ft)	9.86
Bottom of screen to end cap (ft)	0.04
Total length of casing (riser+screen+end cap) (ft)	110.26
Screen slot size	0.01

CAD DWG NO:91118333 EMPLOYEE NO: 9834 DATE/TIME: 08/14/98 08:09 ACAD-14.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, ILLINOIS Well #: G46D

Project Name: CLINTON LANDFILL, INC. Borehole #: G46D

State Plane Coordinate: (X) 3629.606 (Y) 7644.785 (or) Latitude: ___° ___' ___" Longitude: ___° ___' ___"

Surveyed By: SHIVE-HATTERY ILL. Registration #: 035-003068

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 10/19/98 Date Finished: 10/20/98

Notes:

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
712.04	2.55	Top of Protective Casing
711.69	2.20	Top of Riser Pipe
709.49	0.00	Ground Surface
706.49	3.00	Top of annular sealant
610.39	99.10	Top of Seal
606.39	103.10	Top of Sand Pack
603.84	105.65	Top of Screen
594.03	115.46	Bottom of Screen
593.99	115.50	Bottom of Well
593.99	115.50	Top of Backfill (If Applicable)
592.99	116.50	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: CEMENT-BENTONITE GROUT

Installation Method: TREMIE PIPE

Type of Bentonite Seal: BENTONITE SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE PIPE

Setting Time: 30 MINUTES

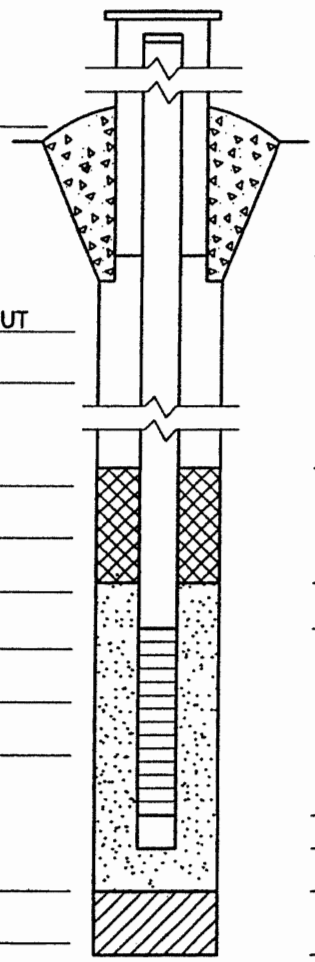
Type of Sand Pack: SILICA SAND

Grain Size: 20 - 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQUARE STEEL
Riser pipe from 0.00 to 55.32 (feet below ground surface)				X	
Riser pipe from 55.32 to 105.65 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (Include stickup)	107.8
Screen length (1st slot to last slot, ft)	9.8
Bottom of screen to end cap (ft)	0.04
Total length of casing (riser+screen+end cap) (ft)	117.70
Screen slot size	0.010

CAD DWG NO:91118425 EMPLOYEE NO: 9834 DATE/TIME: 03/02/99 11:21 ACAD-14.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, ILLINOIS Well #: G37S

Project Name: CLINTON LANDFILL Borehole #: G37S

State Plane Coordinate: (X) 5336.43 (Y) 7631.88 (or) Latitude: ___ ° ___ ' ___ " Longitude: ___ ° ___ ' ___ "

Surveyed By: SHIVE-HATTERY ILL. Registration #: 035-002809

Drilling Contractor: TESTING SERVICE CORPORATION Driller: BRUNO WILLIAMSON

Drilling Method: HSA Drilling Fluids (type): ___

Logged By: M. CAMERON Date Started: 11-10-97 Date Finished: 11-11-97

Notes: ___

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: CEMENT-BENTONITE GROUT

Installation Method: TREMIE PIPE

Type of Bentonite Seal: SLURRY
(Granular, Pellet, Slurry)

Installation Method: TREMIE PIPE

Setting Time: 1.5 HOURS

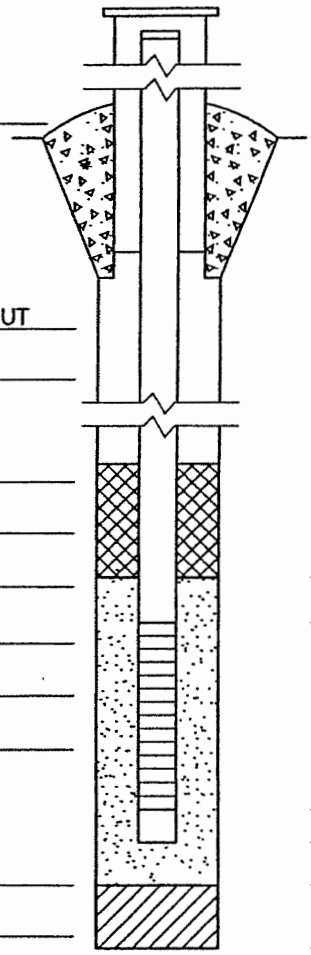
Type of Sand Pack: QUARTZ

Grain Size: #5

Installation Method: POURED, SURGED

Type of Backfill Material: QUARTZ SAND
(If Applicable)

Installation Method: POURED



Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
704.72	3.01	Top of Protective Casing
704.24	2.53	Top of Riser Pipe
701.71	0.00	Ground Surface
697.71	4.00	Top of annular sealant
678.71	23.00	Top of Seal
674.71	27.00	Top of Sand Pack
670.50	31.21	Top of Screen
660.76	40.95	Bottom of Screen
660.71	41.00	Bottom of Well
		Top of Backfill (If Applicable)
658.71	43.00	Bottom of Borehole

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (include stickup)	33.74
Screen length (1st slot to last slot, ft)	9.74
Bottom of screen to end cap (ft)	.05
Total length of casing (riser+screen+end cap) (ft)	43.53
Screen slot size	0.01

Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 30.98 (feet below ground surface)				X	
Riser pipe from 30.98 to 31.21 (feet below ground surface)	X				
Screen	X				

CAD DWG NO:91118311 EMPLOYEE NO: 9834 DATE/TIME: 04/02/98 11:02 ACAD-14.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 1 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. G51D Surface Elev. 726.9 Boring Type HSA Completion Depth 114.5'
Coordinates: (X) N 3048.92 (Y) E 7637.33 Drilling Contractor SKS ENGINEERS, INC.
Date Started 9/10/02 Date Completed 9/16/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL G51D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
1	CS	50										SILTY CLAY (CL) (FILL); Brown- mottled gray, trace gravel	
									2				
									4	722.40			
2	CS	60										SILTY CLAY (CL); Brown, moist, very stiff, trace gravel	
				2.5					6				
				2.25					8				
				2.5									
3	CS	60							10				
				2.0									
									12				
				2.5					14	712.65			
4	CS	60		2.25								SILTY CLAY (CL); Gray, moist, very stiff, trace gravel	
				1.5					16			grades stiff	
				2.5					18			grades very stiff	
5	CS	50							20				
				2.5									
									22	704.90		SAND (SW); Brown, damp, dense, fine grained, silt	
									24				
6	CS	60										grades trace gravel	
									26				
									28				
												SILTY CLAY(CL); Dark gray, moist, very stiff, trace clay	
7	CS	60		3.5						697.15			

CAD DWG NO:91118735 EMPLOYEE NO: 89525 DATE/TIME: 09/30/02 15:25 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 2 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. G51D Surface Elev. 726.9 Boring Type HSA Completion Depth 114.5'
Coordinates: (X) N 3048.92 (Y) E 7637.33 Drilling Contractor SKS ENGINEERS, INC.
Date Started 9/10/02 Date Completed 9/16/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL G51D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
7	CS	60									SILTY CLAY (CL); Dark gray, moist, very stiff, ~~trace gravel~~	
				3.5				32				
				3.5				34				
8	CS	60										
				3.5				36				
				3.0				38				
9	CS	60		3.5				40				
				+4.0							grades hard	
								42				
				+4.0				44				
10	CS	60									grade very stiff	
				3.0				46				
				2.5				48				
11	CS	60		2.5				50				
				2.5				52				
12	CS	60						54				
				2.5				56				
				2.5				58				
				2.5								
13	CS	60										

CAD DWG NO:91118736 EMPLOYEE NO: 89525 DATE/TIME: 09/30/02 15:36 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 3 of 4
Project Location CLINTON, IL Project No. 91-118
Boring No. G51D Surface Elev. 726.9 Boring Type HSA Completion Depth 114.5'
Coordinates: (X) N 3048.92 (Y) E 7637.33 Drilling Contractor SKS ENGINEERS, INC.
Date Started 9/10/02 Date Completed 9/16/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL G51D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 __ 11.7 __	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
13	CS	60		3.0						666.15		SILTY CLAY (CL); Gray, moist, very stiff, trace gravel and fine sand	
									62			CLAYEY SILT (ML); Dark brown-black, moist, very stiff, w/organics	
				2.0									
										663.40			
									64			PEAT (OL); Black, moist, trace clay and fine sand	
14	CS	60								662.15			
				2.5								CLAYEY SILT (ML); Black, moist, very stiff, trace wood fragments	
									66			wood fragments grades out	
				2.5								grades w/ more clay	
									68				
										657.90			
15	CS	60		3.0					70			SILTY CLAY (CL); Blue-green, moist, very stiff, trace gravel	
										655.15			
									72			SILTY CLAY (CL); Gray, moist, very stiff, trace gravel	
				3.0									
									74			grades hard	
16	CS	60		+4.0									
									76				
				+4.0									
									78				
				+4.0									
17	CS	60											
									80				
									82				
				+4.0									
										643.15		SAND (SW); Gray, dense, wet to saturated, fine grained, trace silt	
									84	642.90			
18	CS	60										SILTY CLAY (CL); Gray, moist, hard, trace gravel	
										641.90		SANDY CLAY (CL); Gray, wet, trace gravel	
										641.40		SILTY SAND (SM); Gray, wet, trace gravel and clay	
									86	642.90			
												SAND (SW); Gray, saturated, dense, fine to coarse grained, trace silt	
									88				
				1.0						638.65		SILTY CLAY (CL); Gray, moist to wet, stiff, trace gravel	
19	CS	60		2.0								grades very stiff	

CAD DWG NO:91118737 EMPLOYEE NO: 89525 DATE/TIME: 09/30/02 15:34 ACAD-15.

PDC TECHNICAL SERVICES, INC.
LOG OF BORING

Project Name CLINTON LANDFILL, INC. Sheet 4 of 4
Project Location CLINTON, IL. Project No. 91-118
Boring No. G51D Surface Elev. 726.90 Boring Type HSA Completion Depth 114.5'
Coordinates: (X) N 3048.92 (Y) E 7637.33 Drilling Contractor SKS ENGINEERS, INC.
Date Started 9/10/02 Date Completed 9/16/02 Driller TODD SKINNER Rig No. MOBILE B-57
Logged By JOHN BERRY Backfilled (Y/N) N Backfill Material
Surface Conditions BARE GROUND If "No" explain INSTALLED MONITORING WELL G51D

SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (INCHES)	"N" VALUE	q_u (tsf)	PID (PPM) eV LAMP 10.6 ___ 11.7 ___	CHEMICAL	GEOTECHNICAL	SAMPLE TYPE	DEPTH (FEET)	ELEVATION	GRAPHIC LOG	DESCRIPTION OF MATERIAL	REMARKS
19	CS	60		+4.0								SILTY CLAY (CL); Gray, moist, hard, trace gravel	
												1" fine SAND (black)@ 91.3'	
									92				
				+4.0									
									94				
20	CS	60								631.90			
				2.5						631.15		CLAYEY SILT (ML); Gray, moist to wet, very stiff, w/ organics	
									96	630.65		SILTY SAND (SM); Gray, moist to wet, trace clay	
				+4.0								SILTY CLAY (CL); Gray, moist, hard, trace gravel	
									98				
21	CS	60											
				+4.0					100				
									102				
				+4.0									
									104				
22	CS	60											
				+4.0					106				
				+4.0					108	619.15		SAND (SW); Gray, saturated, very dense, fine to coarse grained, trace clay and silt	
										618.65			
23	CS	60		+4.0								SILTY CLAY (CL); Gray, moist, hard, trace gravel	
									110				
				+4.0					112				
				+4.0					114	612.40		End of boring @114.5'	
									116				
									118				

CAD DWG NO:91118738 EMPLOYEE NO: 89525 DATE/TIME: 09/30/02 15:45 ACAD-15.

PDC TECHNICAL SERVICES, INC.
WELL COMPLETION REPORT

Project #: 91-118 Project Location: CLINTON, IL. Well #: G51D

Project Name: CLINTON LANDFILL, INC. Borehole #: G51D

State Plane Coordinate: (X) N 3048.92 (Y) E 7637.33 (or) Latitude: ° ' " Longitude: ° ' "

Surveyed By: SKS ENGINEERS, INC. ILL. Registration #:

Drilling Contractor: SKS ENGINEERS, INC. Driller: TODD SKINNER

Drilling Method: HOLLOW STEM AUGER Drilling Fluids (type): NONE

Logged By: J. BERRY Date Started: 9/10/02 Date Finished: 9/16/02

Notes:

Elevations (MSL-referenced to a National Geodetic Vertical Datum)	Depths (Feet above or below ground surface to .01 feet)	
729.51	2.61	Top of Protective Casing
729.14	2.24	Top of Riser Pipe
726.90	0.00	Ground Surface
723.90	3.00	Top of annular sealant
627.00	99.90	Top of Seal
625.00	101.90	Top of Sand Pack
622.41	104.49	Top of Screen
612.68	114.22	Bottom of Screen
612.64	114.26	Bottom of Well
612.64	114.26	Top of Backfill (If Applicable)
612.40	114.50	Bottom of Borehole

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: BENSEAL

Installation Method: TREMIE PIPE

Type of Bentonite Seal: BENTONITE PELLETS
(Granular, Pellet, Slurry)

Installation Method: POURED

Setting Time: 1 HOUR

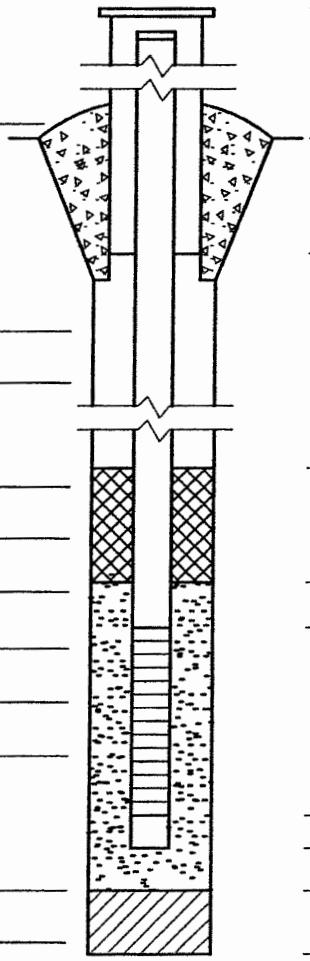
Type of Sand Pack: SILICA SAND

Grain Size: 40 MESH

Installation Method: POURED

Type of Backfill Material: SILICA SAND
(If Applicable)

Installation Method: POURED



Well Construction Materials

	SS304	SS316	PTFE	PVC	Other
Protective casing					4" SQ. STEEL
Riser pipe from 0.00 to 54.12 (feet below ground surface)				X	
Riser pipe from 54.12 to 104.49 (feet below ground surface)	X				
Screen	X				

Casing Measurements

Diameter of borehole (in)	8.00
ID of riser pipe (in)	2.00
Protective casing length (ft)	5.00
Riser pipe length (ft) (include stickup)	106.73
Screen length (1st slot to last slot, ft)	9.73
Bottom of screen to end cap (ft)	0.04
Total length of casing (riser+screen+end cap) (ft)	116.27
Screen slot size	10 SLOT

CAD DWG NO:91118747 EMPLOYEE NO: 89525 DATE/TIME: 10/01/02 09:05 ACAD-15.

APPENDIX 812.314-A: POTABLE WATER WELL LOGS AND AREA WELL LOCATION MAP

ILLINOIS
DEPARTMENT OF
NATURAL
RESOURCES

Illinois State Water Survey

Main Office • 2204 Griffith Drive • Champaign, IL 61820-7495 • *Tel (217) 333-2210* • *Fax (217) 333-6540*
Peoria Office • P.O. Box 697 • Peoria, IL 61652-0697 • *Tel (309) 671-3196* • *Fax (309) 671-3106*

SWS

12/17/2004

Mr. Mike Cameron
PDC Technical Services
4349 Southport Road
Peoria, IL 61615

Dear Mr. Cameron:

As you requested during our telephone conversation on December 16, 2004, we are enclosing printouts from our Private Well Database and Public, Industrial, Commercial Survey (PICS) Database for the following locations:

COUNTY	TOWNSHIP	RANGE	SECTIONS
DEWITT	19 NORTH	2 EAST	01-04, 09-16, 21-27
DEWITT	19 NORTH	3 EAST	06, 07, 18, 19
DEWITT	20 NORTH	2 EAST	33-36

No available information is indicated on the printout by the statement "0 records were found for the specified locations." Also enclosed are explanations of the Illinois State Water Survey Private Well and PICS Databases.

The data included in the Private Well Database are those non-municipal wells which are known to the Illinois State Water Survey, and the PICS Database is an inventory of municipal well information and large industrial groundwater users. We may not have a copy of well records for these groundwater users.

The enclosed statement reflects the charges for this request which includes a $35.00 query fee for PICS information, a $35.00 query fee for Private well information, and a $0.10 per page charge for 26 pages, plus a $5.00 shipping and handling fee, totaling $77.60.

If you have any questions or if I can be of further assistance, please call.

Sincerely,

Susie Casey

Susie Dodd-Casey
Associate Supportive Scientist
Groundwater Section
Phone: (217) 333-9043

Enclosures as stated

ILLINOIS STATE WATER SURVEY

2204 Griffith Drive
Champaign, IL 61820-7495
(217) 333-4300
Fax: (217) 244-0777

INVOICE/ STATEMENT

SOLD TO:
Mike Cameron
PDC Technical Services
4349 Southport Road
Peoria, IL 61615

SHIP TO:
Mr. Mike Cameron
PDC Technical Services
4349 Southport Road
Peoria, IL 61615

INVOICE NUMBER: GW05-649
INVOICE DATE: 12/17/2004
CUSTOMER REF. :
PROJECT :

SALES PERSON: sdodd

DESCRIPTION		AMOUNT
PICS Database Query		$35.00
Private Well Database Query	PAID	$35.00
	12/30/04	
Charge for 26 pages/lines @ $0.10	Ck#25718	$2.60
	SUBTOTAL	$72.60
	S & H	$5.00
	TOTAL DUE	$77.60

MAKE CHECK PAYABLE TO: UNIVERSITY OF ILLINOIS -- IL State Water Survey
Attention: Administration
NET 30 DAYS
Please return a COPY of the invoice with payment

For Accounting Use Only: Credit Fund 301750 740005 740018 A02

ILLINOIS STATE WATER SURVEY
PICS DATABASE EXPLANATION

SWS ID	ISWS Facility ID Number
NAME	Facility Name
WELL #	ISWS Point Source Well/Intake Number
STATUS	Point Source Status of Well/Intake A = Abandoned - no longer in existence, no affidavit on file, or do not know if it has been filled in C = Capped - cap attached to top D = Disconnected - disconnected from system E = Emergency - available for standby use I = In Use - produces major portion of water O = Observation - used for water level measurements S = Sealed - filled in U = Unused - exists but not used
FIPS	County Code Number
TWN	Civil Township
RNG	Range
SEC	Section
PLOT	10-acre Plot Location within the Section
DEPTH	Depth (well to nearest ft)
TYPE LOG	D = Driller's log O = Other X = Chemical C = Correlated log S = Sample study log - = Log not available
YEAR	Year Point Source Initially Constructed
DRILLER	Well Drilling Contractor of Well

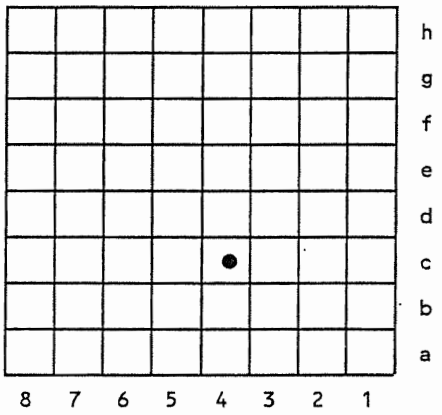
May 2002

ISWS 10-ACRE PLOT LOCATION SYSTEM

The following is an explanation of the ISWS Private Well Database location system.

The location system uses Township, Range, and Section. The location consists of five parts: County abbreviation, Township, Range, Section, and coordinate within the section (subsection or 10-acre plot). Sections are divided into rows of 1/8-mile squares. Each 1/8-mile square contains 10 acres and corresponds to a quarter of a quarter of a quarter section. A normal section of 1 square mile contains 8 rows of 1/8-mile squares; an odd-sized section contains more or fewer rows. Rows are numbered from east to west and lettered from south to north as shown in the diagram.

Example: St. Clair County, FIP No. 163
T2N, R10W
Section 23



The location of the well shown above is 163 2N10W-23.4c. The well point is located at the center of this 10-acre plot.

ILLINOIS STATE WATER SURVEY

PRIVATE WELL DATABASE EXPLANATION

WID	Illinois State Water Survey Identification Number
FIPS	County Code Number
TWN	Civil Township
RNG	Range
SEC	Section
PLOT	10-acre Plot Location within the Section
OWNER	Well Owner
DRILLER	Well Drilling Contractor of Well
DATE DRILLED	Date Initially Drilled
DEPTH	Depth (well to nearest ft)
RECORD TYPE	Record Type (types of information on file) R - Construction Report G - Geology S - Sealed A - Affidavit C - Chemical Analysis I - Inventory X - Indicates Comment in Owners Field Something Unusual O - Any Other Type of Record P - Pump Installation
USE	Well Use (two-letter code indicating the usage of the well) CO - Conservation CS - Community Supply DO - Domestic DW - De-Watering IC - Industrial/Commercial IN - Injection Well IR - Irrigation MO - Monitoring NC - Non-Community NW - Non-Well Source OB - Observation PK - Park RC - Recovery Well RW - Relief Well SC - School ST - State

USE	(Continued) TB - Test Boring TH - Test Hole TW - Test Well ~ - Unknown
WELL TYPE	Well Type (two-letter code indicating the type of well) BLANK - Assumed Drilled BD - Bored DL - Drilled DU - Dug (Being Phased Out) DR - Driven NW - Non-Well SP - Sand Point SG - Spring ~ - Assumed Drilled or Possibly Unknown
AQUIFER TYPE	Aquifer Type (two-letter code indicating aquifer type) BR - Bedrock DH - Dry Hole SW - Surface Water UN - Unconsolidated ~ - Unknown
STAT LVL	Static Level - Reported non-pumping water level
PUMP LVL	Pumping Level - Reported water level during initial pumping of the well
PUMP GPM	Pumping GPM - Gallons per minute at time of well construction

THE DATA IN THE PRIVATE WELL DATABASE IS A LISTING OF THE NON-COMMUNITY WELLS WHICH ARE KNOWN TO THE ILLINOIS STATE WATER SURVEY (ISWS). THIS INFORMATION HAS BEEN ENTERED VERBATIM FROM WELL LOGS SUBMITTED BY THE DRILLER, FROM CHEMICAL ANALYSIS REPORTS, FROM WELL SEALING FORMS, OR WELL INVENTORY FORMS FROM THE 1930-34 WELL SURVEY AND OTHER SPECIAL PROJECTS. THE ACCURACY OF THIS DATA IS CONTROLLED BY THOSE WHO SUBMITTED THE FORM. INFORMATION IN THE PRIVATE WELL DATABASE HAS NOT BEEN VERIFIED.

Illinois State Water Survey Private Well Database

Thursday, December 16, 2004

County: DEWITT

Township: 19N

Range: 02E

Sections: 01-04,09-16,21-27

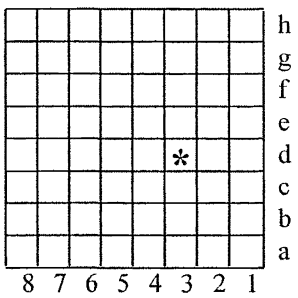
Records Found: 163

Questions: Contact the Illinois State Water Survey's Ground Water Division @(217)-333-9043

Publication: Please cite the Illinois State Water Survey's Private Well Database in all publications based wholly or partially on this information.

Note: The data in the Private Well Database is a listing of non-municipal wells which are known to the Illinois State Water Survey (ISWS). This information has been entered verbatim from well logs submitted by the driller, chemical analysis reports, well sealing forms, well inventory forms from the 1930-1934 well survey, and other special projects. The accuracy of this data is controlled by those submitting the forms. Information in the Private Well Database has not been verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any use of this material.



Location of a 10-acre-plot within a section:

The origin can be found at the lower right-hand-corner of an 8 x 8 grid. In this example, the well is in the 10-acre plot '3d'.

WID	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
214768	039	19N	02E	01		J F ZIEGLER		08/00/1944	35	C	DO	--	--			
214769	039	19N	02E	01	7F	J FRANK ZIEGLER - 1948	NEWBERRY	08/05/1941	90	RG	DO	--	UN	60	80	5
tenant-Sprague																
213968	039	19N	02E	01	8D	PAUL AFRAGUE	DE MENT	10/25/1975	129	RG	DO	--	UN	80	95	6
260832	039	19N	02E	02		REVERE WARE CORP. #201-S	MARLO	12/19/1992	20	R	MO	DL	--			
260834	039	19N	02E	02		REVERE WARE CORPORATION #VE-1	MARLO	12/18/1992	17	RG	MO	BD	UN			
260835	039	19N	02E	02		REVERE WARE CORPORATION #VE-2	MARLO	12/18/1992	17	RG	MO	DL	UN			
260836	039	19N	02E	02		REVERE WARE CORPORATION #VE-3	MARLO	12/16/1992	17	RG	MO	DL	UN			
260837	039	19N	02E	02		REVERE WARE CORPORATION #VE-4	MARLO	12/18/1992	17	RG	MO	BD	UN			
260838	039	19N	02E	02		REVERE WARE CORPORATION #VE-5	MARLO	12/17/1992	17	RG	MO	DL	UN			
291306	039	19N	02E	02	1E	DON COUVE #2	LAYTEN	09/11/1996	320	RG	DO	DL	UN	140	141	8
299641	039	19N	02E	02	3C	DEWITT CO. HIGHWAY DEPT.	MASHBURN DRLG/ROBERT	10/16/1997	314	RG	ST	DL	UN	136	145	30
214492	039	19N	02E	02	4C	J A CLARK (HARRY LITSINBEGER	WOOLLEN BROS	08/20/1940	96	RG	DO	--	UN	40	70	5
Paul A Sprague-1963																
237237	039	19N	02E	02	7F	DAN HAYNES #1	MASHBURN JR	07/01/1992	323	RG	DO	--	UN	121	125	10
220094	039	19N	02E	03		J A BOLIN MEAT SHOP	WOOLLEN	12/01/1945	173	RG	IC	--	UN	70		6
309384	039	19N	02E	03	2C	FRANK RUSSEL	JOHN GAZA	03/24/1999	295	RG	DO	DL	UN	134	159	

WID	FIP	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
220031	039	19N	02E	03	2G	CLINTON SANITARY DIST	WOOLEN	07/00/1935	86	RGC	IC	--	UN		72	15
296599	039	19N	02E	03	3C	DEWITT CO. HIGHWAY DEPT.	MASHBURN DRLG/ROBERT	05/20/1997 Sealed: 5/20/97	335	RGS	ST	--	BR			
NO WELL COMPLETED ACCORDING TO LOG HOLE SEALED.																
308098	039	19N	02E	03	3F	DOUG & LEILANI MAXWELL	KICKAPOO DRLG./DALE	11/10/1998	315	RG	DO	DL	UN	130	138	15
213970	039	19N	02E	03	4B	WELBY CYRULIK #1	MASHBURN JR	10/22/1987	290	RG	IC	--	UN	126	132	25
Dans Country Market																
213972	039	19N	02E	03	4B	CROSS BROS #1	MARSHBURN BROS	08/00/1988	291	RG	DO	--	UN	126	128	15
213985	039	19N	02E	03	4C	C WANNEBO		00/00/1926	34	O	DO	--	--			
213986	039	19N	02E	03	4D	EARL HOLT #2	DE MENT	04/15/1980	93	RG	DO	--	UN	40	60	5
356987	039	19N	02E	03	4D	TOOL EXC	SCOTT TOOL	00/00/0000 Sealed: 6/16/03	20	A	IN	DU	~~			
260206	039	19N	02E	03	4E	DAVE WATERS CONST. #1193	MASHBURN BROS.	11/00/1993	286	RG	DO	DL	UN	125	135	46
LOT 7 WOODHAVEN ESTES.																
246267	039	19N	02E	03	4E	DAVE WATERS CONST.	MASHBURN BROS.	11/00/1993	286	RG	DO	--	UN	126	135	35
Woodhaven Estes. Lot 4																
246268	039	19N	02E	03	4E	DAVE WATERS CONST.	MASHBURN BROS.	11/00/1993	289	RG	DO	--	UN	125	130	40
Wood Haven Eswtes. Lot 12																
246269	039	19N	02E	03	4E	DAVE WATERS CONST.	MASHBURN BROS.	11/00/1993	289	RG	DO	--	UN	126	132	40
Lot 13																
246270	039	19N	02E	03	4G	DAVE WATERS CONST.	MASHBURN BROS.	11/00/1993	286	RG	DO	--	UN	126	134	35
Wood Haven Lot 14																
220045	039	19N	02E	03	5D	NICKELS IMPLEMENT CO	WOOLLEN	11/08/1945	280	RG	IC	--	UN	125	143	7
232063	039	19N	02E	03	6C	JIM POLEN #3	MASHBURN BROS	05/28/1992	283	RG	DO	--	UN	123	130	40

WID	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
232064	039	19N	02E	03	6C	JIM POLEN #2 LOT 13	MASHBURN BROS	05/21/1992	288	RG	DO	--	UN	121	135	40
213988	039	19N	02E	03	6H	L A PHACES	KIRBY	00/00/1900	150	O	DO	--	--			
232065	039	19N	02E	03	7E	JACK DUPREE #1	MASHBURN JR	06/23/1992	302	RG	DO	--	UN	119	124	30
231230	039	19N	02E	03	7G	TEXAS TOWNSHIP #1	WASHBURN BROS	07/26/1991	303	RG	CS	--	UN	121	135	35
213990	039	19N	02E	04	1F	ROBT SHORT	DE MENT	11/20/1971	128	RG	DO	--	UN	49	55	10
213991	039	19N	02E	04	1H	G ADAMS		00/00/1900	35	O	DO	BD	--			
213992	039	19N	02E	04	2B	CARL HOLTZ	DE MENT	00/00/1964	136	R	DO	--	UN			
288866	039	19N	02E	04	2E	BELINDA RITTENHOUSE #1	MASHBURN	07/16/1995	79	RG	DO	DL	UN	42	47	12
220050	039	19N	02E	04	4A	S & K ENTERPRISES #1	EATON	06/29/1978	142	RG	IC	--	UN	54	62	60
220051	039	19N	02E	04	4A	S & K ENTERPRISES	EATON	09/12/1978	138	RG	IC	--	UN	49	62	60
213994 gravel bottom	039	19N	02E	04	6H	W I CACKLEY		00/00/1900	36	OG	DO	--	UN			
324875	039	19N	02E	04	7A	JAMES E. UNDERWOOD	MASHBURN DRILLING	08/02/2000	291	RG	DO	DL	UN	133	136	12
323145	039	19N	02E	04	7A	RICK WOOLRIDGE	MASHBURN DRILLING	06/19/2000	140	RG	DO	DL	UN	73	92	12
305531	039	19N	02E	04	8A	CRAIG & JULIE HINDS	MASHBURN DRLG/ROBERT	09/08/1998	294	RG	DO	DL	BR	141	166	10
324873	039	19N	02E	04	8A	FFRED CRUTCHFIELD #1	MASHBURN DRILLING	08/18/1999	276	RG	DO	DL	UN	125	127	12

WID	FIPS	N	RNG	SEC	PLOT	OWNER	DRIL	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP VL	PUMP GPM
331868	039	19N	02E	04	8A	MERLE CRUTCHER #1	MASHBURN DRILLING	06/24/2001	144	RG	DO	DL	UN	80	101	12
258711	039	19N	02E	04	8H	MIKE NORRIS #1	MASHBURN	04/22/1994	273	RG	DO	DL	UN	114	118	12
214100	039	19N	02E	09		LEONARD W INGHAM		00/00/1930		O	DO	SG	UN			
214101	039	19N	02E	09	1E	CLYDE WADE	KIRBY	00/00/1916	88	O	DO	--	--			
214494	039	19N	02E	09	1E	CLYDE WAD 1963	WOOLLEN BROS	00/00/1951	96	RG	DO	--	UN	60	72	5
deepened from 88' to 96'																
339565	039	19N	02E	09	2A	RODNEY PURDUE #1	KICKAPOO DRILLING	11/14/2001	277	RG	DO	DL	UN	114	116	13
214495	039	19N	02E	09	4D	E U HULLINGER-1948	NEWBERRY	09/16/1939	143	RG	DO	--	UN	90	95	5
214102	039	19N	02E	09	4D	CHAS STRAUGE	STRAUGE	00/00/1900	155	OG	DO	--	UN			
went through a vein of water bearing sand																
365645	039	19N	02E	09	7H	GARY STEPHENS #!	MASHBURN WELL DRILLING/ROBERT	09/24/2004	280	RG	DO	DL	BR	115	117	15
311387	039	19N	02E	09	8C	SID & KRISTA ROHRSCHEIB #1	MASHBURN DRLG/ROBERT	05/21/1999	275	RG	DO	DL	BR	127	129	15
348870	039	19N	02E	09	8D	SHELBY CYRVLICK #1	MASHBURN WELL DRILLING/ROBERT	07/02/2003	282	RG	DO	DL	BR	123	129	40
LOT 1 BANTA LAKES SUBD.																
222141	039	19N	02E	09	8E	EMILY BANTA	MASHBURN BROS	06/22/1990	284	RG	DO	--	UN	114	118	15
344047	039	19N	02E	10	1A	CLINTON LANDFILL, INC. #G-51D	SKS ENGINEERS/TODD SKINNER	09/16/2002	115	RG	MO	DL	UN			
344048	039	19N	02E	10	1A	CLINTON LANDFILL, INC. #G-52D	SKS ENGINEERS,INC/TODD	09/09/2002	118	RG	MO	DL	UN			
357710	039	19N	02E	10	1B	CLINTONLANDFILL, INC.	JOHN BERRY	00/00/2000 Sealed: 8/15/03	58	A	MO	DL				

WID	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
214103	039	19N	02E	10	2A	MAX WALDEN #2	MASHBURN	11/00/1976	279	RG	DO	--	UN	98	100	10
214104	039	19N	02E	10	2B	MAX WALDEN #1	MASHBURN	07/00/1977	265	RG	DO	--	UN	90	94	10
214105	039	19N	02E	10	3E	CLINTON LANDFILL #1	MASHBURN	05/11/1988	281	RG	IC	--	UN	108	112	60
340907	039	19N	02E	10	4E	CLINTON LANDFILL, INC. #EX-11	SKS ENGINEERS, INC./SKINNER	02/13/2002	76	RGO	MO	BD	UN			
INTENDED TO INSTALL UNIT TO BE MONITORIED DRY SO NO WELL INSTALLED BACKFILLED																
340904	039	19N	02E	10	4E	CLINTON LANDFILL, INC. #T-56D	SKS ENGINEER INC./SKINNER	12/10/2001	48	RGA	MO	BD	UN			
340905	039	19N	02E	10	4E	CLINTON LANDFILL, INC. #T-57D	SKS ENGINEERS, INC./SKINNER	12/27/2001	50	RGO	MO	BD	UN			
268702	039	19N	02E	10	4G	WARREN MARTIN	MASHBURN	05/31/1995	288	RG	DO	DL	UN	125	129	15
214106	039	19N	02E	10	5A	CHESTER IVES	IVES	00/00/1900	16	O	DO	BD	--			
water supplied from spring																
214109	039	19N	02E	10	5D	WM QUEERFELD	WOOLLEN BROS	11/00/1930	76	OC	DO	--	--			
214110	039	19N	02E	10	5E	LARRY CISCO	DE MENT	07/12/1973	88	RG	DO	--	UN	40	47	6
214111	039	19N	02E	10	5E	CARL LAWS #1	MASHBURN BROS	09/00/1988	280	RG	IR	--	UN	118	121	15
214112	039	19N	02E	10	6H	C H MOORE ESTATE	KIRBY	00/00/1912	130	O	DO	--	--			
277159	039	19N	02E	10	6H	C.H. MOORE ESTATE #2	SIMS, JR.	05/30/1995	293	RG	DO	--	DH			
280161	039	19N	02E	10	6H	C.H. MOORE TRUST ESTATE	LUTTRELL DRILLING	09/12/1995	85	RG	DO	BD	UN			

WID	FIP	WN	RNG	SEC	PLOT	OWNER	DRI R	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LV	PUMP LVL	PUMP GPM
214113	039	19N	02E	10	7C	STAN IRVIN #1	LAYTEN	05/14/1984	104	RG	DO	--	UN	56		
220000	039	19N	02E	10	8G	CITY OF CLINTON		07/00/1975	18	C	MO	--	--			
214556	039	19N	02E	11	2B	WM ADAMS 1948	WOOLLEN	09/16/1942	134	RG	DO	--	UN	53	125	5
332617	039	19N	02E	11	4B	CLINTON LANDFILL, INC. #EX-5	SKS ENGINEERS	04/04/2000	92	RG	MO	DL	UN	55		
214557	039	19N	02E	11	4H	MRS J P GILLEN/MARY GILLEN1948	NEWBERRY	11/05/1945	103	RG	DO	--	UN	60	66	5
287498	039	19N	02E	11	5C	GARY WARD	MASHBURN	04/09/1996	145	RG	DO	DL	UN	67	74	12
332606	039	19N	02E	11	5D	CLINTON LANDFILL, INC. #EX-4	SKS ENGINEERS	04/06/2000	94	RG	MO	BD	UN	33		
332605	039	19N	02E	11	6A	CLINTON LANDFILL, INC. #EX-3	SKS & ASSOCIATES	12/04/1996	100	RG	MO	DL	UN			
332604	039	19N	02E	11	7B	CLINTON LANDFILL, INC. #EX-2	SKS & ASSOCIATES	12/06/1996	109	RG	MO	BD	UN			
332603	039	19N	02E	11	7D	CLINTON LANDFILL,INC. #EX-1	SKS & ASSOCIATES	12/03/1996	109	RG	MO	BD	UN			
340906	039	19N	02E	11	8D	CLINTON LANDFIL, INC. #EX-10	SKS ENGINEERS, INC./SKINNER	12/11/2001	49	RGO	MO	BD	UN			
214115	039	19N	02E	12	3A	TERRY WILLIS LOT #1	DE MENT	06/07/1984	82	RG	DO	--	UN	14		10
214117	039	19N	02E	12	4A	JOHN WILLIS		00/00/1900	8	OC	DO	SG	--			
265931	039	19N	02E	12	4E	ST OF IL/WELDON SPRINGS PK #10	SHADOW MFG/HATFIELD	07/08/1994	141	RGC	ST	DL	UN			
SHOWER HOUSE-DAY USE AREA																
214116	039	19N	02E	12	5A	TERRY WILLIS #3 LOT 1	DE MENT	03/20/1977	142	RG	DO	--	UN	40	45	10

WID	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
214118	039	19N	02E	12	6A	WALTER BERRY	DE MENT	12/10/1980	70	RG	DO	DR	UN			
214119	039	19N	02E	12	6H	C M HARTSOCK		00/00/1893	75	O	DO	--	--			
214496	039	19N	02E	12	7D	WM ADAMS-1948	WOOLLEN	04/05/1946	25	RG	DO	--	UN	5	17	4
214120	039	19N	02E	12	8G	JOHN HOLT #2	DE MENT	07/03/1971	68	RG	DO	--	UN	40	45	5
214121	039	19N	02E	13		JAMES L MONNORW		00/00/1909	70	OG	DO	BD	UN			
214122	039	19N	02E	13		C H MOORE TRUST ESTATE	MOORES HARDWARE P&H	11/14/1989	38	A	DO	BD	--			
David & Roger Massey Farm Operators																
214123	039	19N	02E	13	1E	S LILLIARD		00/00/1920	60	O	DO	--	--			
214124	039	19N	02E	13	4D	LARRY AUSTIN #1	MASHBURN JR	04/27/1990	282	RG	DO	--	UN	125	150	17
323766	039	19N	02E	13	4D	LARRY BAKER	S & J DRILLING	06/24/2000	270	RG	DO	DL	UN	66	86	30
232067	039	19N	02E	13	5D	ARLEN LEBEGUE #1	MARSHBURN JR	07/02/1992	108	RG	DO	--	UN	5	10	15
214770	039	19N	02E	13	6A	SOLOMAN WEAVER	WOOLLEN BROS	10/02/1943	127	RG	DO	--	UN	60	64	6
G F Weaver-1963																
320017	039	19N	02E	13	7G	PAT DANISON	MASHBURN DRILLING	10/26/1999	276	RG	DO	DL	UN	96	99	15
349752	039	19N	02E	13	7H	DAVID RUSSELL #1	MASHBURN WELL DRILING/ROBERT	05/24/2003	286	RG	DO	DL	UN	115	117	15
312531	039	19N	02E	13	7H	LARRY MCGUIRE #1	MASHBURN DRILLING CO	09/01/1999	81	RG	DO	DL	UN	49	51	12
336335	039	19N	02E	14	1F	ERIC & HALLIE COOK #1	KICKAPOO DRILLING	08/21/2001	246	RG	DO	DL	UN	88	89	11

WID	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
344376	039	19N	02E	14	1G	BRIAN WILLIAMS #1	MASHBURN WELL DRILLING/ROBERT	03/29/2002	283	RG	DO	DL	UN	104	109	15
344375	039	19N	02E	14	2G	MIKE KROEGER #1	MASHBURN WELL DRILLING/ROBERT	06/05/2002	246	RG	DO	DL	UN	70	73	12
323143	039	19N	02E	14	2G	GARY & DOLORES WARD #1	MASHBURN DRILLING	05/17/2000	274	RG	DO	DL	BR	84	87	15
214125	039	19N	02E	14	4H	C D PERKINSON	MASHBURN BROS	05/14/1963	68	R	DO	--	UN			6
332621	039	19N	02E	14	5G	CLINTON LANDFILL, INC. #EX-8S	SKS ENGINEERS	03/29/2001	44	RG	MO	DL	UN	7		
332622	039	19N	02E	14	5G	CLINTON LANDFILL INC #EX-8D	SKS ENGINEERS	03/29/2001	44	RG	MO	DL	UN			
332619	039	19N	02E	14	5H	CLINTON LANDFILL INC. #EX-6	SKS ENGINEERS	04/03/2000	59	RG	MO	DL	UN	22		
332623	039	19N	02E	14	8G	CLINTON LANDFILL, INC.#EX-9	SKS ENGINEERS	03/28/2001	44	RG	MO	DL	UN	11		
332620	039	19N	02E	14	8H	CLINTON LANDFILL INC. #EX-7	SKS ENGINEERS	03/30/2000	69	RG	MO	DL	UN	64		
214126	039	19N	02E	15		CENTRAL ILL BUILDING & LOAN lot 51	MASHBURN JR	05/19/1978	264	RG	DO	--	UN	78	76	30
214127	039	19N	02E	15		CENTRAL ILL BLDG & LOAN LOT 32	MASHBURN UR	03/19/1978	248	RG	DO	--	UN	47	55	65
214128	039	19N	02E	15		CENTRAL ILL BLDG & LOAN LOT 39	MASHBURN JR	12/00/1978	245	RG	DO	--	UN	45	50	60
214129	039	19N	02E	15		CENTRAL ILL BLDG & LOAN LOT 48	MASHBURN JR	12/00/1978	260	RG	DO	--	UN	55	60	60
214130	039	19N	02E	15		CENTRAL ILL BLDG & LOAN LOT 44	MASHBURN	12/00/1978	253	RG	DO	--	UN	60	65	60
338945	039	19N	02E	15	5D	MARVIN MURPHY #1 COUNTRY CLUB ACRES SUBD.	KICKAPOO DRILLING	12/07/2001	242	RG	DO	DL	UN	46	46	15

WID	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
214771	039	19N	02E	15	5E	MRS WM HARTSOCK	HALL	04/22/1941	70	RG	DO	--	UN	8	18	6
W H Hartsock Est-1948																
214131	039	19N	02E	15	5E	MRS E HARTSOCK		00/00/1921	13	OG	DO	BD	UN			
sand and gravel bottom																
214132	039	19N	02E	15	5G	MARTIN AUCTION CO #1	MASHBURN JR	09/24/1985	230	RG	IC	--	UN	56	57	15
214133	039	19N	02E	15	6B	JIM BRAY & LANE #1	MASHBURN BROS	11/02/1970	290	RG	DO	--	UN	89	91	17
214134	039	19N	02E	15	6D	F SHEPHERD	KIRBY	00/00/1917	251	O	DO	--	--			
214135	039	19N	02E	15	8C	TOM CYRULIK	MASHBURN BROS	08/09/1961	236	R	DO	--	UN		90	12
214136	039	19N	02E	15	8C	CYRULIK	MASHBURN	00/00/1962	222	R	DO	--	UN			
349756	039	19N	02E	16		BOB & KAREN HILL	MASHBURN DRILLING/ROBERT	08/23/2003	263	RG	DO	DL	UN	78	84	20
214137	039	19N	02E	16	1A	GREG LICHTENWALTE2 #1	MASHBURN	05/05/1988	280	RG	DO	--	UN	112	120	60
335534	039	19N	02E	16	1D	HAROLD BRUSO	LUTTRELL DRILLING	10/09/2001	74	RG	DO	BD	UN			
365266	039	19N	02E	16	1H	PHIL & CONNNIE BROWN	CHUCK NELSON	00/00/0000 Sealed: 12/8/03	33	A	DO	DL				
214138	039	19N	02E	16	6F	GLEN REESE	DE MENT	00/00/1964	71	R	DO	--	UN			
214139	039	19N	02E	16	8H	M BARNDT	WOOLEN BROS	00/00/1928	110	O	DO	--	--			
214156	039	19N	02E	21	1G	ORVILLE E WILLOUGHBY #11	DE MENT	10/18/1978	232	RG	DO	--	UN	110	130	8
214773	039	19N	02E	21	2D	THOMAS O BRIAN	WOOLLEN BROS	10/18/1943	110	RG	DO	--	UN	76	78	5
B J-1963																

WID	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRI	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
214157	039	19N	02E	21	3A	LAVERNE EICH	WOOLLEN	04/00/1972	97	RG	DO	--	UN	60	60	10
296598	039	19N	02E	21	3C	WILLIAM CURRY	MASHBURN DRLG/ROBERT	06/11/1997	302	RG	DO	DL	UN	115	119	15
334584	039	19N	02E	21	6D	ZACK HOWELL #1	MASHBURN DRILLING	08/27/2001	296	RG	DO	DL	UN	126	129	15
231241	039	19N	02E	21	7G	DAN SNYDER #1	MASHBURN BROS	07/02/1991	69	RG	DO	--	UN	36	43	15
214158	039	19N	02E	22	1E	C H MOORE ESTATE	KIRBY	00/00/1916	150	OC	DO	--	--			
214159	039	19N	02E	22	4H	TOM MICHAELS #1	MASHBURN JR	12/00/1979	260	RG	DO	--	UN	102	103	15
220114	039	19N	02E	22	4H	W H O W RADIO STATION	WOOLLEN	06/11/1947	77	RG	IC	--	UN		6	6
337604	039	19N	02E	22	5B	TERRY HAMMER	MASHBURN DRILLING	10/19/2001	76	RG	DO	DL	UN	54	55	12
214160	039	19N	02E	22	5B	H WHITEHEAD	TATMAN & WARD	00/00/1900	93	OG	DO	--	UN			
went through 23' of gv & hit a hard surface well was stopped in the gv vein																
320018	039	19N	02E	22	5B	TERRY HAMMER #1	MASHBURN DRILLING	12/08/1999	86	RG	DO	DL	UN	48	49	12
343381	039	19N	02E	22	6B	MIKE BRAY #1	MASHBURN DRILLING/ROBERT	08/03/2002	88	RG	DO	DL	UN	56	57	12
305327	039	19N	02E	22	6G	MIKE CYRULICK	MASHBURN DRLG/ROBERT	08/31/1998	300	RG	DO	DL	UN	126	128	15
214161	039	19N	02E	23		C H MOORE TRUST ESTATE	MOORES HARDWARE P&H	11/15/1989	28	A	DO	BD	--			
Kelly Hiter Farm Operator																
214162	039	19N	02E	23	1G	C H MOORE ESTATE	KIRBY	00/00/1921	150	O	DO	--	--			
214774	039	19N	02E	23	4F	C H MOORE ESTATE	WOOLLEN BROS	06/12/1943	93	RG	DO	--	UN	65	75	60
C H Moore-1963																

WID	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
214163	039	19N	02E	23	4G	C H MOORE ESTATE	KIRBY	00/00/1918	145	OG	DO	--	UN			
in sand vein																
214164	039	19N	02E	24	1A	S LILLIARD		00/00/1900	50	O	DO	--	--			
260825	039	19N	02E	24	1G	E. W. ANDREWS TRUST #1	MASHBURN	08/15/1994	292	RG	DO	DL	UN	122	126	12
214165	039	19N	02E	24	1H	SARAH LILLIARD		00/00/1920	125	O	DO	--	--			
214166	039	19N	02E	24	3H	SARAH LILLIARD		00/00/1920	150	O	DO	--	--			
214775	039	19N	02E	25	7G	NELLIE POND-1948	NEWBERRY	04/31/1943	109	RG	DO	--	UN	25	40	5
214167	039	19N	02E	26	1A	IDA MAYALL	KIRBY	00/00/1914	110	O	DO	--	--			
214168	039	19N	02E	26	5H	H RAY	KIRBY	00/00/1916	130	O	DO	--	--			
214169	039	19N	02E	27	2F	F R MARLOW	WHITEHEAD	00/00/1900	19	O	DO	--	--			
246271	039	19N	02E	27	4D	GLENN MARLOW	MASHBURN	11/24/1993	280	RG	DO	--	UN	115	120	20
214827	039	19N	02E	27	4E	HERBERT O MARLOW	WOOLLEN	00/00/1939	116	OG	DO	--	UN	70	90	6
Gas Flow Measurement																
214170	039	19N	02E	27	5A	JOHN HOFFMAN	BRADEN	00/00/1910	158	O	DO	--	--			
214171	039	19N	02E	27	5A	HOFFMAN ESTATE	LENTZ	09/26/1950	120	R	DO	--	UN			
214172	039	19N	02E	27	5D	F W BROWNING	BRADEN	00/00/1910	120	O	DO	--	--			

Illinois State Water Surve PICS Database

Thursday, December 16, 2004

County: DEWITT

Township: 19N

Range: 02E

Sections: 01-04,09-16,21-27

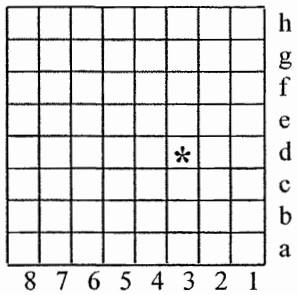
Records Found: 15

Questions: Contact the Illinois State Water Survey's Ground Water Division @ (217)-333-9043

Publication: Please cite the Illinois State Water Survey's PICS (Public-industrial-Commercial) Database in all publications based wholly or partially on this information.

Note: The data in the PICS Database is a listing of municipal and commercial wells which are known to the Illinois State Water Survey (ISWS). This information was initially entered from public water supply data and supplemented with the Illinois State Water Inventory Project data. This database is updated as additional information is received and verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any use of this material.



Location of a 10-acre-plot within a section:

The origin can be found at the lower right-hand-corner of an 8 x 8 grid. In this example, the well is in the 10-acre plot '3d'.

SWSID	FIPS	TWN	RNG	SEC	PLOT	NAME	DB ID	WELL #	DEPTH	STATUS	YEAR SEALED	TYPE	YEAR	DRILLER
03969500	039	19N	02E	01	4A	WELDON SPRINGS STATE PARK	10942	5	75	U	--	37	1971	MASHBURN BROS
03990500	039	19N	02E	09	2H	HICKORY MANOR SUBD	10949	1	143	U		33		
03995185	039	19N	02E	10	5A	RIDGEVIEW MHP	1132	2	260	U	--	33	1968	BRUCE MASHBURN
03995185	039	19N	02E	10	5A	RIDGEVIEW MHP	1131	1	241	U	--	33	1967	WOOLLEN BROS
03969500	039	19N	02E	12		WELDON SPRINGS STATE PARK	10947	100	6	I	--	37	--	--
03969500	039	19N	02E	12		WELDON SPRINGS STATE PARK	10948	101	9	I	--	37	--	--
03969500	039	19N	02E	12	2F	WELDON SPRINGS STATE PARK	10941	4	57	A	--	37	1955	WOOLLEN BROS
03969500	039	19N	02E	12	3E	WELDON SPRINGS STATE PARK	10940	3	135	S	--	37	1939	WOOLLEN BROS
03969500	039	19N	02E	12	4E	WELDON SPRINGS STATE PARK	10939	2	60	I	--	37	1959	G C MASHBURN & SONS
03969500	039	19N	02E	12	4E	WELDON SPRINGS STATE PARK	10938	1	47	S	1975	37	1949	WOOLLEN BROS
03969500	039	19N	02E	12	4E	WELDON SPRINGS STATE PARK	14409	10	141	U	--	37	1995	SHADOW MANUFACTURING
03969500	039	19N	02E	12	4H	WELDON SPRINGS STATE PARK	10944	7	73	I	--	37	1950	--

SWSID	FII	VN	RNG	SEC	PLOT	NAME	ID	WELL #	DEPTH	STATUS	YEAR SEALED	TYPE	YEAR	DRI
03969500	039	19N	02E	12	4H	WELDON SPRINGS STATE PARK	10945	8	38	I	--	37	1955	WOOLLEN BROS
03969500	039	19N	02E	12	4H	WELDON SPRINGS STATE PARK	10943	6	10	A	--	37	1940	--
03969500	039	19N	02E	12	7E	WELDON SPRINGS STATE PARK	10946	9	275	I	--	37	1975	SIMS DRILLING CO

Illinois State Water Survey Private Well Database

Thursday, December 16, 2004

County: DEWITT

Township: 19N

Range: 03E

Sections: 06,07,18,19

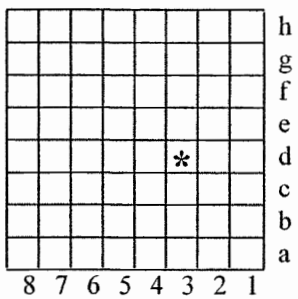
Records Found: 24

Questions: Contact the Illinois State Water Survey's Ground Water Division @(217)-333-9043

Publication: Please cite the Illinois State Water Survey's Private Well Database in all publications based wholly or partially on this information.

Note: The data in the Private Well Database is a listing of non-municipal wells which are known to the Illinois State Water Survey (ISWS). This information has been entered verbatim from well logs submitted by the driller, chemical analysis reports, well sealing forms, well inventory forms from the 1930-1934 well survey, and other special projects. The accuracy of this data is controlled by those submitting the forms. Information in the Private Well Database has not been verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any use of this material.



Location of a 10-acre-plot within a section:

The origin can be found at the lower right-hand-corner of an 8 x 8 grid. In this example, the well is in the 10-acre plot '3d'.

WID	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE	DEPTH	RECORD TYPE	WELL USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
212993	039	19N	03E	06	1C	JERRY JORDON #2	SIMS	08/11/1989	70	RG	DO	--	UN	40		15
342484	039	19N	03E	06	1D	ROGER CYRULICK #1	MASHBURN WELL DIRLLING/ROBERT	04/09/2002	302	RG	DO	DL	UN	126	129	30
LOT 3 COUNTRY MANOR ESTES.																
363663	039	19N	03E	06	5B	EUNICE HARBACH TRUST #1	MASHBURN WELL DRILLING/ROBERT	08/10/2004	302	RG	DO	DL	UN	117	120	15
232078	039	19N	03E	06	5D	MARY JORDAN #2	SIMS JR	12/10/1992	320	RG	DO	--	UN	119		15
212994	039	19N	03E	06	6F	MICHAEL R ARNOLD	COPPENBARGER	08/10/1981	61	RG	DO	--	UN	12	40	18
220101	039	19N	03E	06	7A	DEWITT COUNTY SPORTSMAN CLUB	LAYTON	10/04/1984	320	RG	NC	--	UN	120	122	10
#2																
212995	039	19N	03E	06	7G	N W LUTTRELL	KELLY	00/00/1875	43	O	DO	BD	--			
288493	039	19N	03E	07	1D	BOB BIEBER	MASHBURN	07/12/1996	282	RG	DO	DL	UN	121	127	15
290189	039	19N	03E	07	1D	DON REARDEN, JR.	MASHBURN	08/17/1996	282	RG	DO	DL	UN	116	121	15
222149	039	19N	03E	07	4A	DICK DOUGLAS #1	MASHBURN BROS	11/07/1990	258	RG	DO	--	UN	97	99	15
213011	039	19N	03E	18	1C	CARL REYNOLDS #4	DE MENT	06/15/1972	62	RG	DO	--	UN	40	43	6
213012	039	19N	03E	18	1G	BERNARD HARROLD	MASHBURN	00/00/1952	122	OGC	DO	--	UN			
gas flow measurement																
344377	039	19N	03E	18	4F	TODD GULLETT	MASHBURN DRILLING/ROBERT	07/17/2002	304	RG	DO	DL	UN	133	136	15
213013	039	19N	03E	18	6A	BOB FATHEREE		00/00/1967	90	OGC	DO	--	UN			
262349	039	19N	03E	18	6B	RODNEY & PAM ROGERS #1	LAYTEN	09/19/1994	157	RG	DO	DL	UN	49	68	

WID	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
242542	039	19N	03E	18	6E	SHELLY MATHERLY	SIMS	05/15/1993	164	RG	DO	--	UN	64		
271348	039	19N	03E	18	6E	JOHN SMITH #1	LAYTEN	06/15/1995	167	RG	DO	DL	UN	45	58	12
331750	039	19N	03E	18	7E	KEVIN HEIDEN #1	MASHBURN DRILLING	06/19/2001	151	RG	DO	DL	UN	47	51	12
213014	039	19N	03E	18	8A	J CROSNO		00/00/1900	22	O	DO	BD	--			
213015	039	19N	03E	18	8A	BOB FATHEREE	WOOLLEN	05/10/1971	166	RG	DO	--	UN	60	60	10
213016	039	19N	03E	19	1A	FRANK STOUTENBOUROUGH	MASHBURN	00/00/1963	156	O	DO	--	UN			
213017	039	19N	03E	19	1H	A DAY	MIRE	00/00/1904	88	OG	DO	--	UN		25	5
213018	039	19N	03E	19	8A	S LILLIARD	WOOLEN	00/00/1927	101	O	DO	--	--			
213019	039	19N	03E	19	8H	S LILLIARD		00/00/1900	80	O	DO	--	--			

Illinois State Water Surve· ᴰICS Database

Thursday, December 16, 2004

County: DEWITT

Township: 19N

Range: 03E

Sections: 06,07,18,19

Records Found: 0

Questions: Contact the Illinois State Water Survey's Ground Water Division @(217)-333-9043

Publication: Please cite the Illinois State Water Survey's PICS (Public-industrial-Commercial) Database in all publications based wholly or partially on this information.

Note: The data in the PICS Database is a listing of municipal and commercial wells which are known to the Illinois State Water Survey (ISWS). This information was initially entered from public water supply data and supplemented with the Illinois State Water Inventory Project data. This database is updated as additional information is received and verified.

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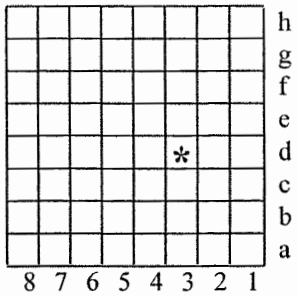

Location of a 10-acre-plot within a section:

The origin can be found at the lower right-hand-corner of an 8 x 8 grid. In this example, the well is in the 10-acre plot '3d'.

Illinois State Water Survey Private Well Database

Thursday, December 16, 2004

County: DEWITT

Township: 20N

Range: 02E

Sections: 33-36

Records Found: 39

Questions: Contact the Illinois State Water Survey's Ground Water Division @ (217)-333-9043

Publication: Please cite the Illinois State Water Survey's Private Well Database in all publications based wholly or partially on this information.

Note: The data in the Private Well Database is a listing of non-municipal wells which are known to the Illinois State Water Survey (ISWS). This information has been entered verbatim from well logs submitted by the driller, chemical analysis reports, well sealing forms, well inventory forms from the 1930-1934 well survey, and other special projects. The accuracy of this data is controlled by those submitting the forms. Information in the Private Well Database has not been verified.

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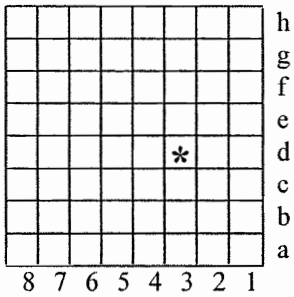

Location of a 10-acre-plot within a section:

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WID	FIP	VN	RNG	SEC	PLOT	OWNER	DRI	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVI	PUMP LVL	PUMP GPM
347792	039	20N	02E	33	2D	TAMARA SPENCER #1	KICKAPOO DRLG./MARK LAYTEN	03/27/2003	120	RG	DO	DL	UN	46	47	8
216169	039	20N	02E	33	2F	JAMES BRAY #1	MASHBURN	09/08/1970	110	RG	DO	--	UN	35	38	17
298238	039	20N	02E	33	2G	MIKE BRAY	MASHBURN DRLG/ROBERT	10/02/1997	103	RG	DO	DL	UN	38	42	15
216170	039	20N	02E	33	4A	CARL WALKER	NEWBERRY	07/26/1946	115	RG	DO	--	UN	50	85	5
269096	039	20N	02E	33	4F	NORMAN EVANS #2	LAYTEN	06/14/1995	140	RG	DO	DL	UN	50	63	
216171	039	20N	02E	33	5D	RAYMOND NORTH #3	LAYTEN	09/19/1984	122	RG	IC	--	UN	49	60	100
363865	039	20N	02E	33	5D	NORTH FERTILIZER SERVICE	KICKAPOO DRILLING/MARK	00/00/0000 Sealed: 5/11/04	103	A	IC	DL				
216173	039	20N	02E	33	5G	RUSSELL LILLARD	WOOLLEN	07/11/1944	278	RG	DO	--	UN	120	130	8
216172	039	20N	02E	33	6H	CECILE LILLARD	WOOLLEN	04/15/1944	280	RG	DO	--	BR	139	209	4
216413	039	20N	02E	33	7E	GENE MURPHY	LUTTRELL	09/30/1987	29	RG	DO	BD	UN			
220074 West Side Park Estates Mobile Home Park/mud bottom	039	20N	02E	33	7E	SHEEHY ESTATE		00/00/1900	60	OG	DO	BD	--			
216414	039	20N	02E	33	8H	GALE G FINFROCK	WOOLLEN	07/08/1972	94	RG	DO	--	UN	39	40	10
213764 location?	039	20N	02E	34		ALFRED STONE #1	WOOLLEN	00/00/1942	83	OG	DO	--	UN	12		4
219997	039	20N	02E	34		CLINTON #4	LAYNE WESTERN	00/00/1954	372	RG	TH	--	--			
220041	039	20N	02E	34	1C	MARCO CHEMICALS #1	MASHBURN	01/00/1973	356	RG	IC	--	UN	116	126	200

WID	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
220001	039	20N	02E	34	1E	CITY OF CLINTON #2-72	LAYNE WESTERN	10/16/1972	350	RGIC	TW	--	UN		117	300
232066	039	20N	02E	34	2B	CTI INVESTMENT #1	MASHBURN JR	06/24/1992	105	RG	DO	--	UN	45	50	10
Cleary Bldgs																
219998	039	20N	02E	34	2C	CITY OF CLINTON #1-71	VOPAT	11/16/1971	320	RG	TH	--	--			
219996	039	20N	02E	34	2D	CITY OF CLINTON #3-54	LAYNE WESTERN	00/00/1954	343	RG	TH	--	--			
220042	039	20N	02E	34	2G	MCCULLOM THEATER		00/00/1936	131	OGC	IC	--	--		100	50
Pleistocene																
219999	039	20N	02E	34	3C	CITY OF CLINTON #2-71	VOPAT	11/18/1971	339	RG	TH	--	--			
219994	039	20N	02E	34	3D	CITY OF CLINTON #54-1	LAYNE WESTERN	00/00/1954	360	RG	TW	--	--			
219995	039	20N	02E	34	3D	CITY OF CLINTON #54-2	LAYNE WESTERN	00/00/1954	349	RG	TW	--	--			
216415	039	20N	02E	34	6D	FRED POLLOCK	WOOLLEN	10/10/1941	100	RG	DO	--	UN	46	49	5
361636	039	20N	02E	34	6E	SCOTT BAUM	ROBERT MASHBURN	00/00/0000 Sealed: 6/12/04	56	A	DO	BD	~~			
216416	039	20N	02E	35		LOYD WARNER	WOOLLEN	04/07/1945	67	RG	DO	--	UN	16	56	5
216417	039	20N	02E	35		IRVEN AMMAN	WOOLLEN	02/01/1946	78	RG	DO	--	UN	15		6
216418	039	20N	02E	35		CANFIELD FARM	HAYES	00/00/1960		O	DO	--	--			
216419	039	20N	02E	35	1H	W J JASPER	NEWBERRY	01/10/1945	150	RG	DO	--	UN	35	53	4
216420	039	20N	02E	35	4A	JOHN ARMSTRONG	WOOLLEN	08/15/1971	81	RG	DO	--	UN	17	50	

WID	FIPS	TN	RNG	SEC	PLOT	OWNER	DRIL	DRILL DATE	DEPTH	RECORD TYPE	WELL USE	WELL TYPE	AQ TYPE	STAT LVL	PUMP LVL	PUMP GPM
220095	039	20N	02E	35	4C	CLINTON SWIM CLUB	MASHBURN	00/00/1962	324	O	NC	--	--			
216421	039	20N	02E	35	5E	FOREST THOMPSON	WOLLEN	08/26/1947	84	RG	DO	--	UN	10	12	9
216422	039	20N	02E	35	6E	WAYNE RICKGAVER	MASHBURN	12/00/1972	331	RG	DO	--	UN	105	121	120
216423	039	20N	02E	36	2H	ERNEST SHIELDS		00/00/1900	31	DO	DO	--	--		30	5
216424	039	20N	02E	36	5B	C M WARNER	KIRBY	00/00/1925	65	OG	DO	--	UN			
bottom of well in course gravel vein																
216425	039	20N	02E	36	6G	S A STIVERS	ARGO	00/00/1880	8	OC	DO	BD	--			
well is fed from spring windmill pumps water into tank																
216426	039	20N	02E	36	6H	S A STIVERS	NEWBERRY	07/06/1944	68	RG	DO	--	UN	11	18	7
289282	039	20N	02E	36	6H	CHET MEARS	MASHBURN	08/19/1996	81	RG	DO	DL	UN	10	17	15
216427	039	20N	02E	36	8C	DALTON	DEMENT	00/00/0000	57	O	DO	--	UN			

Illinois State Water Survey PICS Database

Thursday, December 16, 2004

County: DEWITT

Township: 20N

Range: 02E

Sections: 33-36

Records Found: 16

Questions: Contact the Illinois State Water Survey's Ground Water Division @ (217)-333-9043

Publication: Please cite the Illinois State Water Survey's PICS (Public-industrial-Commercial) Database in all publications based wholly or partially on this information.

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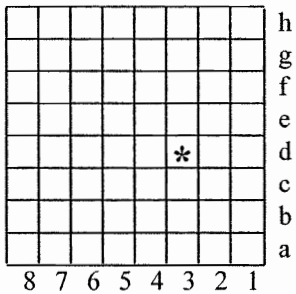

Location of a 10-acre-plot within a section:

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SWSID	FI	WN	RNG	SEC	PLOT	NAME	B ID	WELL #	DEPTH	STATUS	YEAR SEALED	TYPE	YEAR	DRI	R
03995225	039	20N	02E	33		WEST SIDE MHP		5		P		33			
03995225	039	20N	02E	33	2H	WEST SIDE MHP	1141	2	112	A	--	33	1974	WOOLLEN BROS	
03995225	039	20N	02E	33	2H	WEST SIDE MHP	1142	3	86	I	--	33	1975	WOOLLEN BROS	
03995225	039	20N	02E	33	2H	WEST SIDE MHP	1144	4	118	A	--	33	1987	G E MASHBURN, JR	
03995225	039	20N	02E	33	4H	WEST SIDE MHP	1143	1	108	A	--	33	1973	EARL D WOOLLEN	
03990050	039	20N	02E	34	1D	CLINTON	1153	8	352	I	--	33	1973	LAYNE-WESTERN CO	
03990050	039	20N	02E	34	1D	CLINTON	1152	9	348	I	--	33	1972	LAYNE-WESTERN CO	
03990050	039	20N	02E	34	2D	CLINTON	1147	6	345	I	--	33	1948	LAYNE-WESTERN CO	
03990050	039	20N	02E	34	2D	CLINTON	1146	4	345	S	1982	33	1948	LAYNE-WESTERN CO	
03990050	039	20N	02E	34	2D	CLINTON	1145	7	346	U	--	33	1954	LAYNE-WESTERN CO	
03990050	039	20N	02E	34	3D	CLINTON	1150	5	360	S	1982	33	1946	LAYNE-WESTERN CO	
03990050	039	20N	02E	34	3D	CLINTON	1149	1	341	S	<1986	33	1913	IRA DEMENT	

SWSID	FIPS	TWN	RNG	SEC	PLOT	NAME	DB ID	WELL #	DEPTH	STATUS	YEAR SEALED	TYPE	YEAR	DRILLER
03990050	039	20N	02E	34	3D	CLINTON	1148	2	358	S	1957	33	1914	OMER KERSEY
03990050	039	20N	02E	34	3D	CLINTON	1151	3	360	I	--	33	1923	EBERT & SON
03990050	039	20N	02E	35	7F	CLINTON	5448	10	370	I	--	33	1989	LAYNE-WESTERN CO
03990050	039	20N	02E	35	9F	CLINTON	5449	11	370	I	--	33	1989	LAYNE-WESTERN CO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Russell, David Well No. #1
Address 308 N. Irving Mason City IL
Well address R.R. Clinton, IL
Lot 2 & 3 Subd Riddle ISWS P# 349752
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-008-03 Date 05/19/2003
Water from sand County DeWitt
at depth 225 to 286 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot

Sec. 13
Twp. 19 N
Rge. 2 E
Elev.

NE NW NW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	278
5	SS SCREEN 15 & 20	278	286

Size hole below casing: in.
Static level 116 ft. below casing top which is 1 ft. above ground level. Pumping level 118 ft. when pumping at 15 gpm for 2 hours.

Formations passed through	Thickness	Bottom
topsoil	2	2
yellow clay	14	16
gray clay	41	57
drift	3	60
green clay	5	65
gray clay	160	225
sand	61	286

Private Water Well

DeWitt .12-039-21618-00 13-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

'operty owner Williams, Brian Well No. #1
ddress P.O. Box 208 McLean IL
ell address RR 2 Box 102 W Clinton, IL
ot _____ Subd _____ ISWS P# 344376
riller Mashburn, Robert License No. 102-3084
'ermit No. 039-010-02 Date 04/23/2002
Vater from sand County DeWitt
at depth 207 to 283 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot 12

Sec. 14
Twp. 19 N
Rge. 2 E
Elev. _____

SE NE NE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	275
5	SS SCREEN	275	283

Size hole below casing: _____ in.
Static level 105 ft. below casing top which is 1 ft. above ground level. Pumping level 110 ft. when pumping at 15 gpm for 2 hours.

Formations passed through	Thickness	Bottom
yellow clay	17	17
gray clay	47	64
drift	3	67
green clay	3	70
gray clay	137	207
sand	76	283

Household - Private

DeWitt 12-039-21552-00 14-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Kroeger, Mike Well No. #1
Address 645 W. Jefferson Clinton IL
Well address RR 1 Clinton, IL
Lot _____ Subd _____ ISWS P# 344375
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-006-02 Date 03/26/2002
Water from sand County DeWitt
at depth 173 to 246 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot 15

Sec. 14
Twp. 19 N
Rge. 2 E
Elev. _____

SW NE NE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	238
5	SS SCREEN	238	246

hole below casing: _____ in.
ic level 71 ft. below casing top which is 1 ft.
e ground level. Pumping level 74 ft. when pumping at 12 gpm for 2 hours.

Formations passed through	Thickness	Bottom
yellow clay	16	16
gray clay	35	51
drift	3	54
green clay	4	58
gray clay	44	102
sand	2	104
gray clay	69	173
sand	73	246

Household - Private

DeWitt 12-039-21553-00 14-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Murphy, Marvin Well No. #1
Address R.R. 2 Box 155 clinton IL
Well address same as above
Lot _____ Subd _____ ISWS P# 338945
Driller Layten, James License No. 102-2243
Permit No. 039-036-01 Date 10/24/2001
Water from medium gravel County DeWitt
at depth 230 to 242 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 20

Sec. 15
Twp. 19 N
Rge. 2 E
Elev. _____

NE NE SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	-1	200
5	SDR 17	200	231
5	STAINLESS STL SCREEN	231	235

Size hole below casing: _____ in.
Static level 46 ft. below casing top which is 1 ft. above ground level. Pumping level 47 ft. when pumping at 15 gpm for _____ hours.

Formations passed through	Thickness	Bottom
black dirt	3	3
rocky gravel	2	5
yellow sand & gravel	7	12
gray clay	8	20
sand	1	21
gray clay	16	37
sand & gravel	2	39
gray clay	27	66
sand & gravel	3	69

Household - Private

DeWitt 12-039-21520-00 15-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Harbach, Eunice Trust Well No. #1
Address 41 Jericho Rd. Clinton IL
Well address R.R. Clinton, IL
Lot _____ Subd _____ ISWS P# 363663
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-018-04 Date 07/22/2004
Water from sand County DeWitt
at depth 228 to 302 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot _____

Sec. 6
Twp. 19 N
Rge. 3 E
Elev. _____

NE SE SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	294
5	SS SCREEN SLOT 15/20	294	302

Size hole below casing: _____ in.
Static level 118 ft. below casing top which is 1 ft. above ground level. Pumping level 121 ft. when pumping at 15 gpm for 2 hours.

Formations passed through	Thickness	Bottom
topsoil	7	7
yellow clay	12	19
gray clay	49	68
drift	2	70
green clay	3	73
gray clay	155	228
sand	74	302

Private Water Well

DeWitt 12-039-21630-00 6-19N-3E

Formations passed through (continued)	Thickness	Bottom
gray clay	86	155
fine to medium sand	25	180
fine to medium sand & gravel	20	200
medium sand & gravel	30	230
medium gravel	12	242

Household - Private

DeWitt 12-039-21520-00 15-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Bruso, Harold & Sandra Well No. _____
Address 1131 Pineview Ct. Decatur IL
Well address R.R. 2 Box 258 AA Clinton, IL
Lot _____ Subd _____ ISWS P# 335534
Driller Luttrell, James License No. 092-7020
Permit No. 039-018-01 Date 07/24/2001
Water from _____ County DeWitt
at depth _____to_____ft.
Screen: Diam._____in.
Length:_____ft. Slot _____

Sec. 16
Twp. 19 N
Rge. 2 E
Elev. _____

NE NE SE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
12	HOLE PLUG	9	10
36	CONCRETE TILE	10	64

Size hole below casing: _____in.
Static level _____ft. below casing top which is _____ft.
above ground level. Pumping level 0 ft.when pumping at _____
gpm for_____hours.

Formations passed through	Thickness	Bottom
black dirt	2	2
yellow clay	16	18
blue clay	37	55
gray sand & gravel	3	58
blue clay	16	74

Household - Private

DeWitt 12-039-21511-00 16-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Gullett, Todd Well No. #1
Address RR 1 Box 235 Towanda IL
Well address RR 4 Clinton, IL
Lot _____ Subd _____ ISWS P# 344377
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-012-02 Date 05/10/2002
Water from sand County DeWitt
at depth 253 to 304 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot 15

Sec. 18
Twp. 19 N
Rge. 3 E
Elev. _____

NW SW NE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-2	296
5	SS SCREEN	296	304

Size hole below casing: _____ in.
Static level 134 ft. below casing top which is 2 ft. above ground level. Pumping level 137 ft. when pumping at 15 gpm for 2 hours.

Formations passed through	Thickness	Bottom
yellow clay	19	19
gray clay	48	67
drift	3	70
green clay	6	76
gray clay	177	253
sand & gravel	51	304

Household - Private

DeWitt 12-039-21551-00 18-19N-3E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Howell, Zack Well No. #1
Address Rt. 1 Box 323 Maroa IL
Well address same as above
Lot _____ Subd _____ ISWS P# 334584
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-017-01 Date 07/23/2001
Water from sand County DeWitt
at depth 232 to 296 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot 15

Sec. 21
Twp. 19 N
Rge. 2 E
Elev. _____

NW NE SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	288
5	SS SCREEN 15 & 20	288	296

Size hole below casing: _____ in.
Static level 127 ft. below casing top which is 1 ft. above ground level. Pumping level 130 ft. when pumping at 15 gpm for 2 hours.

Formations passed through	Thickness	Bottom
topsoil	2	2
yellow clay	17	19
gray clay	64	83
sand	3	86
gray clay	146	232
sand	64	296

Household - Private

DeWitt 12-039-21507-00 21-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Bray, Mike Well No. #1
Address P.O. Box 222 Clinton IL
Well address 225 N. Little Galilee Rd. Clinton, IL
Lot _____ Subd _____ ISWS P# 343381
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-021-02 Date 06/26/2002
Water from sand County DeWitt
at depth 67 to 88 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 20

Sec. 22
Twp. 19 N
Rge. 2 E
Elev. _____

NW SE SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	84
5	SS SCREEN	84	88

Size hole below casing: _____ in.
Static level 57 ft. below casing top which is 1 ft. above ground level. Pumping level 58 ft. when pumping at 12 gpm for 2 hours.

Formations passed through	Thickness	Bottom
topsoil	2	2
yellow clay	15	17
gray clay	50	67
sand & gravel	21	88
gray clay at	0	88

Household - Private

DeWitt 12-039-21558-00 22-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Hammer, Terry Well No. _____
Address Rt. 2 Box 118 Clinton IL
Well address 941 Little Galilee Rd. Clinton, IL
Lot _____ Subd _____ ISWS P# 337604
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-032-01 Date 10/10/2001
Water from sand County DeWitt
at depth 58 to 76 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 15

Sec. 22
Twp. 19 N
Rge. 2 E
Elev. _____

NE SE SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	72
5	STAINLESS STL SCREEN	72	76

Size hole below casing: _____ in.
Static level 55 ft. below casing top which is 1 ft. above ground level. Pumping level 56 ft. when pumping at 12 gpm for 2 hours.

Formations passed through	Thickness	Bottom
topsoil	2	2
yellow clay	17	19
gray clay	39	58
sand & gravel	18	76

Household - Private

DeWitt 12-039-21515-00 22-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Spencer, Tamara Well No. #1
Address R.R. 1 Box 238 Clinton IL
Well address same as above
Lot _____ Subd _____ ISWS P# 347792
Driller Layten, James License No. 102-2243
Permit No. 039-001-03 Date 01/13/2003
Water from sand & gravel County DeWitt
at depth 99 to 112 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 20

Sec. 33
Twp. 20 N
Rge. 2 E
Elev. _____

NW NE SE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	-1	108
5	STAINLESS STL SCREEN	108	112

Size hole below casing: _____ in.
Static level 47 ft. below casing top which is 1 ft. above ground level. Pumping level 48 ft. when pumping at 8 gpm for _____ hours.

Formations passed through	Thickness	Bottom
black fill	3	3
yellow clay	3	6
yellow sand & gravel	2	8
gray clay	20	28
sand & gravel with gray clay	4	32
gray clay	4	36
sand & gravel	3	39
gray clay	3	42
sand & gravel	2	44

Private Water Well

DeWitt 12-039-21626-00 33-20N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Weldon Springs State Park Well No. #7
Address
Well address
Lot Subd ISWS P#
Driller License No.
Permit No. Date 01/01/1971
Water from County DeWitt
at depth to ft.
Screen: Diam. 4 in.
Length: 3 ft. Slot 18

Sec. 1
Twp. 19 N
Rge. 2 E
Elev.

50' N 2600' W SEc

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
		0	
		0	
4	STEEL	-3	69

Size hole below casing: in.
Static level ft. below casing top which is ft.
above ground level. Pumping level 0 ft.when pumping at
gpm for hours.

Formations passed through	Thickness	Bottom

Noncommunity - Public

DeWitt 12-039-21530-00 1-19N-2E

Formations passed through (continued)	Thickness	Bottom
gray clay	2	46
sand & gravel	6	52
sand & gravel, firm with sandy clay	2	54
sand & gravel, fimer with clay	3	57
gray clay	2	59
sand & gravel with gray clay	7	66
gray clay	16	82
green clay	5	87
gray clay	12	99
sand & gravel	13	112
gray clay	8	120

Private Water Well

DeWitt 12-039-21626-00 33-20N-2E

Town Clinton Township Texas Map No.
Company Woollen Brothers No. R. 2E
Farm Ziegler, Frank No. T. Sec. 1
Authority Woollen Brothers, Wapella
Elevation 768 TM 19 N
Collector
Confidential Date Drilled 1941
1711' N. line, 1269' W. line

No.	Co. no. 110 Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Top soil	3		3	
	Clay, yellow	28		31	
	Gravel, dirty, yellow	12		43	
	Sand, dirty, gray	15		58	
	Clay, blue	28	6	86	6
	Sand and gravel	3		89	6
	Water level 60' from surface				
	20' drawdown at 5 g.p.m.				
	3' Johnson strainer, 14 slot				
	80' 1¼" drop pipe				
	2½" cylinder				
	4" well				
	Myers 94 pump head				

[redacted] NO ENVELOPE

COUNTY Dewitt INDEX NO.
DRILL RECORD 1-19N-2E

(12880—20M) ILLINOIS GEOLOGICAL SURVEY, URBANA (12-41)

REQUESTED AND MAIL ORIGINAL TO STATE
ONSUMER HEALTH PROTECTION, 535 WEST
2761. DO NOT DETACH GEOLOGICAL/WATER
DE PROPER WELL LOCAT

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 10-25-75

10. Property owner Paul Sprague Well No. _____
Address Clinton Ill
Driller Ray Le Mert License No. 92-68
11. Permit No. 142089 Date Oct. 16-75
12. Water from Sand Formation 13. County DeWitt
at depth 125 to 129 ft.
14. Screen: Diam. 4 in.
Length: 3 ft. Slot .026

Sec. 1
Twp. 19N.
Rge. 2E.
Elev. 730 TM

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4½	O.D. 11 lbs.		

SHOW LOCATION IN SECTION PLAT
300'NL 100'WL
SW (permit)

16. Size Hole below casing: _____ in.
17. Static level 80 ft. below casing top which is 1 ft. above ground level. Pumping level 95 ft. when pumping at 6 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top soil	3	3
Yellow Clay	27	30
Blue Clay	9.5	125
Sand	4	129

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Ray Le Mert DATE 5/17/76

DEWITT COUNTY No. 70656 1-19N-2E

LOG OF WATER WELL

Property owner: J. A. Clark Well No. 1

Drilled by: Woolen Bros. Year: 1940

Formations passed through	Thickness	Depth of Bottom
soil (Co. no. 111)	1	1
yellow clay	14	15
blue clay	50	65
gravel + gas	1	66
blue clay	4	70
drift + gas	4	74
grey clay	8	82
Hard Pan	5	87
sand + gas	2	89
Hard Pan	4	93
sand + gravel (some gas)	3	96

[Continue on back if necessary]

Finished in sand + gravel at 93 to 96 ft.

Cased with 4 inch Black Iron from 0 to ft.

and inch from to ft.

Size hole below casing inch. Static level from surf. 40 ft.

Tested capacity 5 gal. per min. Temperature °F.

Water lowered to 70 ft. in. in 1 hrs. min.

Length of test 1 hrs. min. Screen Johnson B.

Slot 25 Diam. 4 Length 3 Bottom set at 96 ft.

[Show location in Section Plat]

Township name Texas Elev. 740 T.A. Sec. 2

Description of location 100' E, 1420' S. NW. Cor. SE (SE of Clinton) Twp. 19N Rge. 2E.

Signed C. S. Woolen County Douglas

Copy for Illinois State Geological Survey Index: 2-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner DeWitt Co. Highway Depart. Well No. _____
Address _____
Well address Co. Hwy. #1 Clinton, IL
Lot _____ Subd _____ ISWS P# 299641
Driller Mashburn, Robert License No. 102-3084
Permit No. 03901297 Date 04/21/1997
Water from sand County DeWitt
at depth 250 to 314 ft.
Screen: Diam. 5 in.
Length: 12 ft. Slot 12

Sec. 2
Twp. 19 N
Rge. 2 E
Elev. _____

NW NE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	303

Size hole below casing: _____ in.
Static level 137 ft. below casing top which is 1 ft. above ground level. Pumping level 146 ft. when pumping at 30 gpm for 2 hours.

Formations passed through	Thickness	Bottom
yellow clay	17	17
gray clay	43	60
drift	6	66
green clay	4	70
gray clay	15	85
sand	4	89
gray clay	161	250
silty fine sand	25	275
medium sand	39	314

Semi-Private

DeWitt 12-039-21309-00 2-19N-2E

Formations passed through (continued)	Thickness	Bottom
limestone at	0	314

Semi-Private

DeWitt 12-039-21309-00 2-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Dewitt Co. Highway Dept. Well No. _____
Address 923 S. Sherman Clinton IL
Well address Co. Hwy. 1 Clinton, IL
Lot _____ Subd _____ ISWS P# _____
Driller Mashburn, Robert License No. 102-3084
Permit No. 03901297 Date 04/21/1997
Water from dry hole County DeWitt
at depth _____to_____ft.
Screen: Diam._____in.
Length:_____ft. Slot _____

Sec. 2
Twp. 19 N
Rge. 2 E
Elev. _____

NW NE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)

Size hole below casing: _____in.
Static level _____ft. below casing top which is _____ft. above ground level. Pumping level_____ft. when pumping at _____ gpm for_____hours.

Formations passed through	Thickness	Bottom
yellow clay	14	14
gray clay	53	67
sand	1	68
drift	4	72
green clay	7	79
gray clay	11	90
green clay	3	93
gray clay	53	146
sand	2	148

Commercial Operation - Business

DeWitt 12-039-21318-00 2-19N-2E

Formations passed through (continued)	Thickness	Bottom
gray clay	1	149
broken sand streaks & clay	5	154
gray clay	41	195
soft gray clay	90	285
soft sandy	2	287
soft grey clay brownish	36	323
shale	12	335

Commercial Operation - Business

DeWitt 12-039-21318-00 2-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Revere Ware Corp. Well No. #VE-1
    Address 1000 S. Sherman Clinton IL
    Driller Crank, Tim / Marlo John License No. 092-6857
11. Permit No. none Date
12. Water from 13. County DeWitt
    at depth to ft.
    Sec. 2
    Twp. 19 N
    Rge. 2 E
    Elev.
14. Screen: Diam. 3 in.
    Length: 1 ft. Slot .01

NW NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
3	PVC SCH 80	0	7

16. Size hole below casing: in.
17. Static level ft. below casing top which is ft. above ground level. Pumping level ft. when pumping at gpm for hours.

18. Formations passed through	Thickness	Bottom
clayey silt	17	17

Pollution Control

DeWitt 12-039-21145-00 02-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Revere Ware Corp Well No. #VE-2
    Address 1000 S. Sherman Clinton IL
    Driller Crank, Tim / Marlo John License No. 092-6857
11. Permit No. none Date
12. Water from 13. County DeWitt
    at depth to ft. Sec. 2
14. Screen: Diam. 3 in. Twp. 19 N
    Length: 1 ft. Slot .01 Rge. 2 E
    Elev.

NW NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
3	PVC SCH 80	0	7

16. Size hole below casing: in.
17. Static level ft. below casing top which is ft. above ground level. Pumping level ft. when pumping at gpm for hours.

18. Formations passed through	Thickness	Bottom
clayey silt	17	17

Pollution Control

DeWitt 12-039-21146-00 02-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Revere Ware Corp. Well No. #VE-3
Address 1000 S. Sherman Clinton IL
Driller Crank, Tim / Marlo John License No. 092-6857
11. Permit No. none Date
12. Water from 13. County DeWitt
at depth to ft.
14. Screen: Diam. 3 in.
Length: 10 ft. Slot .01

Sec. 2
Twp. 19 N
Rge. 2 E
Elev.

NW NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
3	PVC RISER	1	7

16. Size hole below casing: in.
17. Static level ft. below casing top which is ft. above ground level. Pumping level ft. when pumping at gpm for hours.

18. Formations passed through	Thickness	Bottom
clayey silt	17	17

Pollution Control

DeWitt 12-039-21147-00 02-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Revere Ware Corp. Well No. #VE-4
Address 1000 S. Sherman Clinton IL
Driller Crank, Tim / Marlo John License No. 092-6857
11. Permit No. none Date
12. Water from 13. County DeWitt
at depth to ft. Sec. 2
14. Screen: Diam. 3 in. Twp. 19 N
Length: 1 ft. Slot .01 Rge. 2 E
Elev.

NW NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
3	PVC SCH 80	0	7

16. Size hole below casing: in.
17. Static level ft. below casing top which is ft. above ground level. Pumping level ft. when pumping at gpm for hours.

18. Formations passed through	Thickness	Bottom
clayey silt	17	17

Pollution Control

DeWitt 12-039-21148-00 02-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Revere Ware Corp. Well No. #VE-5
Address 1000 S. Sherman Clinton IL
Driller Crank, Tim / Marlo John License No. 092-6857
11. Permit No. none Date
12. Water from 13. County DeWitt
at depth to ft. Sec. 2
14. Screen: Diam. 3 in. Twp. 19 N
Length: 1 ft. Slot .01 Rge. 2 E
Elev.

NW NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
3	PVC SCH 80	0	7

16. Size hole below casing: in.
17. Static level ft. below casing top which is ft. above ground level. Pumping level ft. when pumping at gpm for hours.

18. Formations passed through	Thickness	Bottom
clayey silt	17	17

Pollution Control

DeWitt 12-039-21149-00 02-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Haynes, Dan Well No. #1
Address R.R. #2 P.O. Box #84D Clinton IL
Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 03900692 Date 05/14/92
12. Water from sand 13. County DeWitt
at depth 230 to 323 ft. Sec. 2
14. Screen: Diam. 4 in. Twp. 19 N
Length: 4 ft. Slot 20 Rge. 2 E
Elev. 723 TM

NE SW NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
4	PVC SDR 21	-1	319

16. Size hole below casing: _____ in.
17. Static level 122 ft. below casing top which is 1 ft. above ground level. Pumping level 125 ft. when pumping at 10 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	22	22
blue clay	50	72
brown drift	4	76
green clay	3	79
hard gray clay	151	230
silty sand	60	290
fine sand	12	302
medium sand	13	315
medium to coarse sand	8	323

Household - Private

DeWitt 12-039-21014-00 02-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Couve, Don Well No. #2
    Address R.R. #4 Box #244 Clinton IL
    Driller Layten, James License No. 102-2243
11. Permit No. 03901896 Date 08/27/96
12. Water from sand & gravel 13. County DeWitt
    at depth 255 to 320 ft. Sec. 2
14. Screen: Diam. 5 in. Twp. 19 N
    Length: 4 ft. Slot 20 Rge. 2 E
    Elev.

SE SE NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	-1	240
5	SDR 17	240	301

16. Size hole below casing: _____ in.
17. Static level 141 ft. below casing top which is 1 ft. above ground level. Pumping level 142 ft. when pumping at 8 gpm for _____ hours.

18. Formations passed through	Thickness	Bottom
yellow clay	5	5
yellow gravel	9	14
gray clay	3	17
gray gravel	5	22
streaks of sand & gravel	3	25
gray clay	8	33
sand	1	34
gray clay	42	76
sand & gravel	1	77

Household - Private

DeWitt 12-039-21252-00 02-19N-02E

18. Formations passed through (continued)	Thickness	Bottom
gray clay	78	155
sand	2	157
gray clay	34	191
gravel	1	192
gray clay	23	215
streak of gravel	2	217
gray clay	19	236
sand	10	246
gravelly streak of gray clay	6	252
gray clay - soft	3	255
fine to medium sand	41	296
medium to coarse sand some gravel	11	307
medium to coarse sand	13	320

QUESTED AND MAIL ORIGINAL TO STATE
UMER HEALTH PROTECTION, 535 WEST
1. DO NOT DETACH GEOLOGICAL/WATER
PROPER LOCAT

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed April 15, 1980

10. Property owner Earl Holt Well No. 2
Address Clinton, Il
Driller Ray DeMent License No. 092-00686
11. Permit No. 193297 Date 4/4/80
12. Water from Sand (Formation) 13. County DeWitt
at depth 89 to 93 ft.
14. Screen: Diam. 4 in.
Length: 3 ft. Slot 20

Sec. 3
Twp. 19N
Rge. 2E
Elev.

SHOW LOCATION IN SECTION PLAT
300'NL 100'WL
SE (permit)

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Steel 11# per ft	0	93

16. Size Hole below casing: 0 in.
17. Static level 40 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 5 gpm for 12 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top soil	0	4
Yellow clay	22	26
Blue clay	63	89
Sand	4	93

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Ray DeMent DATE 4/15/80

COUNTY No. 20754

DEWITT 3-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Dupree, Jack Well No. #1
Address R.R. #2 Clinton IL
Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 03900912 Date 06/08/92
12. Water from sand 13. County DeWitt
at depth 278 to 302 ft.
14. Screen: Diam. 5 in.
Length: 4 ft. Slot 12

Sec. 3
Twp. 19 N
Rge. 2 E
Elev.

SE SW NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21 PVC	-1	298

16. Size hole below casing: _____ in.
17. Static level 120 ft. below casing top which is 1 ft. above ground level. Pumping level 124 ft. when pumping at 30 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	20	20
blue clay	54	74
brown drift	2	76
green clay	3	79
gray clay	199	278
fine sand	24	302
limestone at	0	302

Household - Private

DeWitt 12-039-21015-00 03-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Cyrulik, Welby Well No. #1
    Address Rt. #2 Clinton IL
    Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 136231 Date 10/15/87
12. Water from sand 13. County DeWitt
    at depth 270 to 290 ft. Sec. 3
14. Screen: Diam. 5 in. Twp. 19 N
    Length: 8 ft. Slot 12 Rge. 2 E
    Elev. 735TM

NW SW SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	282

16. Size hole below casing: _____ in.
17. Static level 126 ft. below casing top which is 1 ft. above ground level. Pumping level 132 ft. when pumping at 25 gpm for 3 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	16	16
blue clay	40	56
brown drift	3	59
grey clay	109	168
dirty sand	6	174
grey clay	96	270
sand	20	290
limestone	0	290

DeWitt 12-039-20831-00 03-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Cross Brothers Well No. #1
Address R.R. #2 P.O. Box #82 Clinton IL
Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 004056 Date 07/25/88
12. Water from sand 13. County DeWitt
at depth 272 to 291 ft.
14. Screen: Diam. 5 in.
Length: 4 ft. Slot 12

Sec. 3
Twp. 19 N
Rge. 2 E
Elev. 730 TM

15. Casing and Liner Pipe NW SW SE

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	287

16. Size hole below casing: _____ in.
17. Static level 126 ft. below casing top which is 1 ft. above ground level. Pumping level 128 ft. when pumping at 15 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	16	16
gray clay	46	62
brown dirt	12	74
green clay	4	78
gray clay	172	250
soft sandy clay	22	272
fine/medium sand	19	291
limestone at	0	291

Household - Private

DeWitt 12-039-20922-00 03-19N-02E

TOWN

COMPANY Woollen Bros.

FARM Beline

DATE DRILLED December 1945

AUTHORITY Woollen Bros.

COLLECTOR

TOWNSHIP Texas

NO.

NO.

ELEVATION ~~720 Rolfe~~ 725 TM

T. 19N

R. 2E

SEC. 3

NW cor. of SE

Co. no. 112

No.	Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil, yellow clay	13		13	
	Blue clay	18		31	
	Blue sand bed	2		33	
	Hard blue clay	31		64	
	Drift wood	4		68	
	Green clay	6		74	
	Gas			74	
	Hardpan	50		124	
	Gravel; 2 g.p.m.	2		126	
	Grey hardpan, very hard	24		150	
	6" seam of sand				
	Gray hardpan, hard	8		158	
	Fine dirty sand	1		159	
	Grey hardpan	11		170	
	Sand, gravel				
	Total depth			173	

NO ENVELOPE

4" hole
173' of 4" pipe, black
Drawn down very little at 6 g.p.m. for 2 hrs.
Water clear
Water level 70'
Finished on sand & gravel to 173'
Black Pipe, medium, maybe broken.
Myers Jet Electric Pump. Length 90'.
Size 1½ & I". ½ H.P.
Large pit size.
New model Myers, pumping about 3½ G.P.M.
well has gas [redacted] bothered a Mongomery
Ward Pump. Make it lose prime.

COUNTY Dewitt 3-19N-2E

SAMPLE SET NO.

(84107—20M—6-45)

ILLINOIS GEOLOGICAL SURVEY, URBANA

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Maxwell, Doug & Leilani Well No. _____
Address 509 E. Washington Pontiac IL
Well address R.R. Clinton, IL
Lot _____ Subd _____ ISWS P# 308098
Driller Layten, James License No. 102-2243
Permit No. 039-043-98 Date 10/13/1998
Water from sand & gravel County DeWitt
at depth 245 to 306 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 20

Sec. 3
Twp. 19 N
Rge. 2 E
Elev. _____

NE SW NE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	-1	298

Size hole below casing: _____ in.
Static level 131 ft. below casing top which is 1 ft. above ground level. Pumping level 139 ft. when pumping at 15 gpm for _____ hours.

Formations passed through	Thickness	Bottom
yellow clay	14	14
gray clay	19	33
gravel	2	35
gray clay	43	78
gray clay & gravel	3	81
gray clay	60	141
gray clay & gravel	1	142
gray clay	53	195
yellow clay	17	212

Household - Private

DeWitt 12-039-21378-00 3-19N-2E

Formations passed through (continued)	Thickness	Bottom
gray clay	8	220
sand & clay	10	230
fine sand & clay	5	235
fine sand	5	240
fine sand & clay	5	245
fine sand	15	260
sand & gravel	16	276
fine medium sand & gravel	14	290
medium sand & gravel	16	306
limestone	9	315

Household - Private

DeWitt 12-039-21378-00 3-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Polen, Jim Well No. #2
Address R.R. #2 Clinton IL
Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 03901392 Date 07/24/92
12. Water from sand 13. County DeWitt
at depth 279 to 288 ft. Sec. 3
14. Screen: Diam. 5 in. Twp. 19 N
Length: 8 ft. Slot 10 Rge. 2 E
Elev.

SW NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR21	-1	280

16. Size hole below casing: _____ in.
17. Static level 128 ft. below casing top which is 1 ft. above ground level. Pumping level 135 ft. when pumping at 40 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	24	24
blue clay	48	72
brown drift	3	75
green clay	7	82
gray clay	197	279
fine clean sand	9	288
limestone at	0	288

Household - Private

DeWitt 12-039-21016-00 03-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Polen, Jim Well No. #3
Address R.R. #2 P.O. Box #322A Clinton IL
Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 03901492 Date 07/24/92
12. Water from sand 13. County DeWitt
at depth 265 to 283 ft. Sec. 3
14. Screen: Diam. 5 in. Twp. 19 N
Length: 8 ft. Slot 10 Rge. 2 E
Elev.

SW NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	275

16. Size hole below casing: _____ in.
17. Static level 124 ft. below casing top which is 1 ft. above ground level. Pumping level 130 ft. when pumping at 40 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	25	25
blue clay	45	70
brown drift	6	76
green clay	6	82
gray clay	183	265
fine clean sand	18	283
limestone at	0	283

Household - Private

DeWitt 12-039-21017-00 03-19N-02E

TOWN TOWNSHIP Texas R. 2E

COMPANY Woollen Bros. NO. T. 19N SEC. 3

FARM Nickels, Archie NO.

DATE DRILLED November 1945

AUTHORITY Woollen Bros. 730 ETM

COLLECTOR ELEVATION 715 Rolfe

NE cor. of SW

Co. no. 114

Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
Soil, yellow clay	16		16	
Blue clay	41		57	
Drift wood	7		64	
Green clay	6		70	
Gray hardpan, hard	10		80	
Gray hardpan, soft	4		84	
Hardpan, hard	4		88	
Sand; 2 g.p.m. water	1		89	
Brown drift wood	2½		91½	
Sand, gravel	3		94½	
Gray hardpan, hard	27½		122	
Gravel, coarse; 1 g.p.m.	2		124	
Hardpan	19		143	
Seam gravel (no water)			143	
Hardpan	15		158	
Dirty sand	1		159	
Hardpan, hard	5		164	
Hardpan, med.	6		170	
Sand, gravel	2		172	
Hardpan	11		183	
Sand, gravel	1		184	
Hardpan, hard	8		192	
Gravel, dry	1		193	
Yellowish hardpan	22		215	
Sand dry	1		216	
Hardpan, med.	49		265	
Blueish clay	11		276	
Sand, gravel	4		280	
Clay, shale				
Total depth			280	

COUNTY Dewitt 3-19N-2E

SAMPLE SET NO.

(84107—20M—6-45) 2

ILLINOIS GEOLOGICAL SURVEY, URBANA

SHEET 2 T. 19N R. 2E S. 3

COMPANY Woollen Bros. NO.

FARM Nickels, Archie NO.

).	Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	4" hole				
	277' of pipe				
	Drawn down 18' at 7 g.p.m. for 1 hr.				
	Water dirty				
	Water level 125'				
	Finished in sand, gravel at 277' to 280'				

ORIGINAL FILED

COUNTY Dewitt 3-19N-2E

SAMPLE SET NO.

(84107—20M—6-45) ILLINOIS GEOLOGICAL SURVEY, URBANA

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Texas Township Building Well No. #1
    Address R.R. #2 Clinton IL
    Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 03900691 Date 06/25/91
12. Water from sand 13. County DeWitt
    at depth 283 to 303 ft. Sec. 3
14. Screen: Diam. 5 in. Twp. 19 N
    Length: 4 ft. Slot 15 Rge. 2 E
    Elev. 715±M

SE NW NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	0	299

16. Size hole below casing: _____ in.
17. Static level 128 ft. below casing top which is 1 ft. above ground level. Pumping level 135 ft. when pumping at 35 gpm for 3 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	24	24
blue clay	44	68
drift	3	71
green clay	3	74
gray clay	209	283
sand	20	303
limestone at	0	303

Noncommunity - Public

DeWitt 12-039-21000-00 03-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Russell, Frank Well No. _____
Address 618 E. Macon St. Clinton IL
Well address 602 E. Van Buren Clinton, IL
Lot _____ Subd _____ ISWS P# 309384
Driller Gaza, John Edward License No. 102-2631
Permit No. 03905598 Date 12/16/1998
Water from top of casing County DeWitt
at depth 135 to 195 ft.
Screen: Diam. 3 in.
Length: 4 ft. Slot 15

Sec. 3
Twp. 19 N
Rge. 2 E
Elev. _____

SW NE SE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	-1	191

Size hole below casing: 3 in.
Static level 135 ft. below casing top which is 1 ft. above ground level. Pumping level 160 ft. when pumping at _____ gpm for 2 hours.

Formations passed through	Thickness	Bottom
brown silt clay trace light sand & gvl	20	20
sand clay gry v hard neutralized polymer	250	270
fine sand gray	10	280
sand gray medium-coarse - water	15	295

Semi-Private

DeWitt 12-039-21386-00 3-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Waters, Dave Constr. Well No. _____
Address 600 E. Van Buren Clinton IL
Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 03901593 Date 06/17/93
12. Water from sand 13. County DeWitt
at depth 270 to 286 ft.
14. Screen: Diam. 5 in.
Length: 8 ft. Slot 10

Sec. 3
Twp. 19 N
Rge. 2 E
Elev. _____

SW SW NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	278

16. Size hole below casing: _____ in.
17. Static level 127 ft. below casing top which is 1 ft. above ground level. Pumping level 135 ft. when pumping at 35 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	21	21
blue clay	43	64
brown drift	2	66
green clay	4	70
gray clay	200	270
fine sand	16	286
limestone at	0	286

Household - Private

DeWitt 12-039-21037-00 03-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Waters, Dave Construction Well No. _____
Address 600 E. Van Buren Clinton IL
Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 03901493 Date 06/17/93
12. Water from sand 13. County DeWitt
at depth 271 to 286 ft. Sec. 3
14. Screen: Diam. 5 in. Twp. 19 N
Length: 8 ft. Slot 10 Rge. 2 E
Elev. _____

SW SW NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	278

16. Size hole below casing: _____ in.
17. Static level 126 ft. below casing top which is 1 ft. above ground level. Pumping level 135 ft. when pumping at 40 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	19	19
blue clay	41	60
brown drift	4	64
green clay	7	71
gray clay	200	271
fine sand	15	286
limestone at	0	286

Household - Private

DeWitt 12-039-21158-00 03-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Waters, Dave Constr. Well No. _____
Address 600 E. Van Buren Clinton IL
Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 03901693 Date 06/17/93
12. Water from sand 13. County DeWitt
at depth 274 to 289 ft. Sec. 3
14. Screen: Diam. 5 in. Twp. 19 N
Length: 8 ft. Slot 10 Rge. 2 E
Elev. _____

SW SW NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	281

16. Size hole below casing: _____ in.
17. Static level 127 ft. below casing top which is 1 ft. above ground level. Pumping level 132 ft. when pumping at 40 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	20	20
blue clay	46	66
brown drift	4	70
green clay	104	174
gray clay	97	271
fine sand	18	289
limestone at	0	289

Household - Private

DeWitt 12-039-21036-00 03-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Waters, Dave Constr. Well No. _____
Address 600 E. Van Buren Clinton IL
Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 03902593 Date 09/15/93
12. Water from sand 13. County DeWitt
at depth 271 to 286 ft. Sec. 3
14. Screen: Diam. 5 in. Twp. 19 N
Length: 8 ft. Slot 10 Rge. 2 E
Elev. _____

NE SW SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	278

16. Size hole below casing: _____ in.
17. Static level 127 ft. below casing top which is 1 ft. above ground level. Pumping level 134 ft. when pumping at 35 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	21	21
blue clay	47	68
brown drift	5	73
green clay	4	77
gray clay	194	271
fine sand	15	286
limestone at	0	286

Household - Private

DeWitt 12-039-21038-00 03-19N-02E

Town: Clinton Township: Texas R. 2E

Company: A. K. Qualls No.

Farm: Moore, Fred F. No.

Authority: Fred F. Moore, Manteno

Elevation

Collector

Confidential Date Drilled: Nov. 1939

T. 19 N Sec. 4 NW

No.	Co. no. 115 Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil, black	2		2	
	Clay, yellow	20		22	
	Clay, blue	10		32	
	Quicksand	20		52	
	Hardpan	20		72	
	Clay, blue	7		79	
	Sand and gravel, veins of water. Small vein of water found above quicksand but was not sufficient.	7		86	
	6" casing				

NO ENVELOPE

[redacted]

COUNTY: Dewitt 4-19N-2E

(40430—20M) ILLINOIS GEOLOGICAL SURVEY, URBANA (3-43)

QUESTED AND MAIL ORIGINAL TO STATE
SUMER HEALTH PROTECTION, 535 WEST
1. DO NOT DETACH GEOLOGICAL/WATER
PROPER LOCAT.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 6-29-78

10. Property owner S&K ENTERPRISES Well No. 1
Address RR.2 CLINTON ILL
Driller ZANE EATON License No. 103-122
11. Permit No. 76267 Date 6-29-1978
12. Water from SAND (Formation) 13. County DEWITT
at depth 134 to 142 ft.
14. Screen: Diam. 4 in.
Length: 8 ft. Slot 14
Sec. 4
Twp. 19N
Rge. 2E
Elev. 740ETM BM

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	200LB PVC	0	134

SHOW LOCATION IN SECTION PLAT
SW SW SE
(permit)

16. Size Hole below casing: 4 in.
17. Static level 54 ft. below casing top which is 0 ft. above ground level. Pumping level 42 ft. when pumping at 60 gpm for 1 hours. Sub. pump setat 105'

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	16	16
BLUE CLAY	30	46
SAND	1	47
GRAY CLAY	28	75
SAND	1	76
GREEN CLAY	58	134
SAND	8	142

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Zane Eaton DATE 8-15-78

COUNTY No. 20695

DEWITT 4-19N-2E

QUESTED AND MAIL ORIGINAL TO STATE
JMER HEALTH PROTECTION, 535 WEST
. DO NOT DETACH GEOLOGICAL/WATER
PROPER LOCAT

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 9-12-78

10. Property owner S and K Enterprise Well No. 1
Address R.R. 2 Clinton, Il.
Driller Zayne Eaton License No. 102-133
11. Permit No. 76268 Date 6-29-78
12. Water from SAND (Formation) 13. County DEWITT
at depth 131 to 138 ft.
14. Screen: Diam. 4 in.
Length: 8 ft. Slot 12-14

Sec. 4
Twp. 19N
Rge. 2E.
Elev. ____

SHOW LOCATION IN SECTION PLAT

SW SW SE
(permit)

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	200 LB PVC	0	130

16. Size Hole below casing: 4 in.
17. Static level 49 ft. below casing top which is 63 ft. above ground level. Pumping level 62 ft. when pumping at 60 gpm for 2 hours. Sub. pump set at 120'

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
TOP SOIL	17	17
BLUE CLAY	13	30
GRAY CLAY	15	45
GREEN CLAY	25	70
GRAY CLAY	61	131
SAND & CLEAN	7	138

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Zane Eaton DATE 1-7-79

COUNTY No. 206.96

DEWITT

4-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Woolridge, Rick Well No. _____
Address R.R. 3 Box 238 Clinton IL
Well address R.R. Clinton, IL
Lot _____ Subd _____ ISWS P# 323145
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-019-00 Date 05/23/2000
Water from sand County DeWitt
at depth 136 to 140 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 15

Sec. 4
Twp. 19 N
Rge. 2 E
Elev. _____

SE SW SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	136
5	STAINLESS STL SCREEN	136	140

Size hole below casing: _____ in.
Static level 74 ft. below casing top which is 1 ft. above ground level. Pumping level 93 ft. when pumping at 12 gpm for 2 hours.

Formations passed through	Thickness	Bottom
yellow clay	15	15
gray clay	13	28
sand	7	35
gray clay	27	62
drift	3	65
green clay	5	70
gray clay	66	136
sand	4	140
gray clay at	0	140

Household - Private

DeWitt 12-039-21443-00 4-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Underwood, James E. Well No. _____
Address Box 383 Wapella IL
Well address R.R. Clinton, IL
Lot _____ Subd _____ ISWS P# 324875
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-027-00 Date 06/27/2000
Water from sand County DeWitt
at depth 277 to 291 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot 10

Sec. 4
Twp. 19 N
Rge. 2 E
Elev. _____

SE SW SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	283
5	STAINLESS STL SCREEN	283	291

Size hole below casing: _____ in.
Static level 134 ft. below casing top which is 1 ft. above ground level. Pumping level 137 ft. when pumping at 12 gpm for 2 hours.

Formations passed through	Thickness	Bottom
yellow clay	17	17
gray clay	54	71
drift	4	75
green clay	6	81
gray clay	196	277
fine to medium sand	14	291
limestone at	0	291

Household - Private

DeWitt 12-039-21453-00 4-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Hinds, Craig, Julie Well No. _____
Address 285 1600th Ave. Mt. Pulaski IL
Well address R. #1 Clinton, IL
Lot _____ Subd _____ ISWS P# 305531
Driller Mashburn, Robert License No. 102-3084
Permit No. 03902998 Date 08/31/1998
Water from sand County DeWitt
at depth 286 to 290 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 10

Sec. 4
Twp. 19 N
Rge. 2 E
Elev. _____

SW SW SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	286

Size hole below casing: _____ in.
Static level 142 ft. below casing top which is 1 ft. above ground level. Pumping level 167 ft. when pumping at 10 gpm for 2 hours.

Formations passed through	Thickness	Bottom
topsoil	2	2
yellow clay	16	18
gray clay	54	72
drift	3	75
green clay	5	80
gray clay	60	140
sand	3	143
gray clay	124	267
fine silty sand no water loss	19	286

Household - Private

DeWitt 12-039-21355-00 4-19N-2E

Formations passed through (continued)	Thickness	Bottom
fine sand	4	290
silty sand no water loss	4	294
limestone at	0	294

Household - Private

DeWitt 12-039-21355-00 4-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Crutchfield, Fred Well No. #1
Address 74 Sommerset Dr. Clinton IL
Well address R.R. Clinton, IL
Lot _____ Subd _____ ISWS P# 324873
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-027-99 Date 07/26/1999
Water from sand County DeWitt
at depth 250 to 276 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot 12

Sec. 4
Twp. 19 N
Rge. 2 E
Elev. _____

SW SW SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC	-1	268
5	STAINLESS STL SCREEN	268	276

Size hole below casing: _____ in.
Static level 126 ft. below casing top which is 1 ft. above ground level. Pumping level 128 ft. when pumping at 12 gpm for 2 hours.

Formations passed through	Thickness	Bottom
topsoil	2	2
yellow sand	8	10
yellow clay	11	21
gray clay	12	33
sand	2	35
gray clay	25	60
sand	2	62
drift	4	66
green clay	8	74

Household - Private

DeWitt 12-039-21455-00 4-19N-2E

Formations passed through (continued)	Thickness	Bottom
gray clay	176	250
fine sand	10	260
medium sand	16	276

Household - Private

DeWitt 12-039-21455-00 4-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Rittenhouse, Belinda Well No. #1
Address 18 Bradley Ct. Clinton IL
Driller Mashburn, Robert License No. 102-3084
11. Permit No. 03900896 Date 06/27/96
12. Water from sand 13. County DeWitt
at depth 74 to 79 ft.
14. Screen: Diam. 5 in.
Length: 4 ft. Slot 12

Sec. 4
Twp. 19 N
Rge. 2 E
Elev. ____

SW SE NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	75

16. Size hole below casing: _____ in.
17. Static level 43 ft. below casing top which is 1 ft. above ground level. Pumping level 48 ft. when pumping at 12 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	16	16
gray clay	12	28
drift	4	32
green clay	5	37
gray clay	37	74
medium sand	5	79
gray clay at	0	79

Household - Private

DeWitt 12-039-21238-00 04-19N-02E

TED AND MAIL ORIGINAL TO STATE DE-
STATE OFFICE BUILDING, SPRINGFIELD,
/WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 11-20-71

). Property owner Rott. Short Well No. _____
Address Clinton Ill
Driller Ray DeNault License No. 92-68
1. Permit No. DF 12817 Date Nov. 11-71
2. Water from sand & gravel Formation 13. County Dewitt
at depth 116 to 128 ft.
4. Screen: Diam. 4 in.
Length: 4 ft. Slot .025
Sec. 4
Twp. 19N.
Rge. 2E.
Elev. 725 ETM
By

.5. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
	10.79 standard pipe		

SHOW LOCATION IN SECTION PLAT
NE SE NE
(permit)

16. Size Hole below casing: 6 in.
17. Static level 50 ft. below casing top which is 1 ft. above ground level. Pumping level 55 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top soil	4	4
yellow Clay	25	29
Blue Clay	51	80
Brown drift	7	87
Green drift	8	95
Hard pan	21	116
sand & gravel	12	128

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED _____ DATE _____

COUNTY No. 567

DEWITT

4-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Norris, Mike Well No. #1
Address 620 West White Clinton IL
Driller Mashburn, Robert License No. 102-3084
11. Permit No. 03903793 Date 12/09/93
12. Water from sand 13. County DeWitt
at depth 266 to 273 ft. Sec. 4
14. Screen: Diam. 5 in. Twp. 19 N
Length: 4 ft. Slot 12 Rge. 2 E
Elev. 735 TM

15. Casing and Liner Pipe NW NW NW

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21 PVC	-1	269

16. Size hole below casing: _____ in.
17. Static level 115 ft. below casing top which is 1 ft. above ground level. Pumping level 118 ft. when pumping at 12 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
clay	21	21
gray clay	11	32
sand	6	38
gray clay	58	96
green clay	7	103
gray clay	163	266
medium sand	7	273
limestone at	0	273

Household - Private

DeWitt 12-039-21124-00 04-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Crutcher, Merle & Margaret Well No. #1
Address 923 E. Johnson Clinton IL
Well address R.R. 1 Clinton, IL
Lot _____ Subd _____ ISWS P# 331868
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-009-01 Date 05/07/2001
Water from sand County DeWitt
at depth 140 to 144 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 15

Sec. 4
Twp. 19 N
Rge. 2 E
Elev. _____

SW SW SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	140
5	STAINLESS STL SCREEN	140	144

Size hole below casing: _____ in.
Static level 81 ft. below casing top which is 1 ft. above ground level. Pumping level 102 ft. when pumping at 12 gpm for 2 hours.

Formations passed through	Thickness	Bottom
topsoil	2	2
yellow clay	17	19
gray clay	48	67
drift	3	70
green clay	5	75
gray clay	65	140
sand	4	144
gray clay at	0	144

Household - Private

DeWitt 12-039-21484-00 4-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Dewitt Cty Sportsman Club Well No. #2
    Address R. R. #4 Clinton IL
    Driller Layten, James G. License No. 102-2243
11. Permit No. 115011 Date 09/26/84
12. Water from sand & gravel 13. County DeWitt
    at depth 225 to 320 ft. Sec. 6
14. Screen: Diam. 5 in. Twp. 19 N
    Length: 4 ft. Slot 20 Rge. 3 E
    Elev.

SE SW SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	0	306

16. Size hole below casing: _____ in.
17. Static level 121 ft. below casing top which is 1 ft. above ground level. Pumping level 122 ft. when pumping at 10 gpm for 1 hours.

18. Formations passed through	Thickness	Bottom
no record	30	30
sand & gravel	1	31
no record	5	36
sand & gravel	3	39
no record	12	51
sand & gravel	1	52
no record	69	121
sand & gravel	1	122
no record	3	125

DeWitt 12-039-20941-00 06-19N-03E

18. Formations passed through (continued)	Thickness	Bottom
sand & gravel	1	126
no record	13	139
sand & gravel	1	140
no record	15	155
sand & gravel	2	157
no record	4	161
sand & gravel	1	162
no record	63	225
fine-coarse sand	95	320

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Arnold, Michael R. Well No. _____
    Address Rt. #4 Box #253 Clinton IL
    Driller Coppenbarger, Floyd Lyle License No. 102-2391
11. Permit No. 100789 Date 08/04/81
12. Water from gravel 13. County DeWitt
    at depth 48 to 58 ft. Sec. 6
14. Screen: Diam. 5 in. Twp. 19 N
    Length: 4 ft. Slot 20 Rge. 3 E
    Elev. 735

NW SE NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	STEEL 15# A53 GB	0	58

16. Size hole below casing: _____ in.
17. Static level 12 ft. below casing top which is 1 ft. above ground level. Pumping level 40 ft. when pumping at 18 gpm for 5 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	30	30
blue clay	18	48
coarse gravel	10	58
blue clay	3	61

DeWitt 12-039-20779-00 06-19N-03E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Jordan, Jerry & Mary Well No. #2
Address R.R. #1 P.O. Box #108 Weldon IL
Driller Sims, Ronald M. Sr. License No. 102-1724
11. Permit No. 013393 Date 07/28/89
12. Water from sand 13. County DeWitt
at depth 60 to 70 ft. Sec. 6
14. Screen: Diam. 4 in. Twp. 19 N
Length: 4 ft. Slot 15 Rge. 3 E
Elev.

SE NE SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
4	SDR 21 PVC	0	66

16. Size hole below casing: _____ in.
17. Static level 40 ft. below casing top which is 1 ft. above ground level. Pumping level _____ ft. when pumping at 15 gpm for 1 hours.

18. Formations passed through	Thickness	Bottom
top soil	1	1
sandy brown soil	3	4
gravelly brown clay	11	15
firm gravelly clay	20	35
sand streaks	1	36
soft gray clay	1	37
coarse gravel, some clay streaks	23	60
coarse sand	10	70

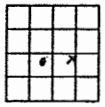
Household - Private

DeWitt 12-039-20963-00 06-19N-03E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Jordan, Mary C. Well No. #2
    Address R.R. #4 Box 3253G Clinton IL
    Driller Sims, Ronald M. Jr. License No. 102-3423
11. Permit No. 03902192 Date 11/30/92
12. Water from sand 13. County DeWitt
    at depth 290 to 320 ft.
14. Screen: Diam. 5 in.
    Length: 4 ft. Slot 14

Sec. 6
Twp. 19 N
Rge. 3 E
Elev. 730



correct

15. Casing and Liner Pipe NE NW SWE

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21 PVC	0	316

16. Size hole below casing: _____ in.
17. Static level 120 ft. below casing top which is 1 ft. above ground level. Pumping level _____ ft. when pumping at 15 gpm for 1 hours.

18. Formations passed through	Thickness	Bottom
brown dirt	1	1
brown clay	15	16
gray clay	22	38
sandy gray clay with sandstone at 38'	9	47
sandy gray clay with sandstone at 47'	10	57
sticky sandy gray clay	14	71
gray clay	57	128
sandy gray clay with sandstone at 168'	40	168
gray clay with sandstone at 184'	16	184

Household - Private

DeWitt 12-039-21040-00 06-19N-03E

18. Formations passed through (continued)	Thickness	Bottom
gray clay	56	240
fine-medium silty gray sand	50	290
fine-coarse sand	30	320

ILLINOIS GEOLOGICAL SURVEY, URBANA

	Thickness	Top	Bottom
Total Depth			1225

Casing: 8 5/8" - 216'
$3\frac{1}{2}$" - 650', drill pipe

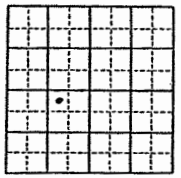
Dry and abandoned. Plugged August 1, 1965.

Drillers log filed.
Drilling time log filed.
Electric log not run - Company.

S.S. #52436

The William Nixon #1 well did not reach its objective depth, due to trouble experienced by the drilling contractor and no electric log was run on this well. (Co. letter dated October 29, 1965.)

COMPANY	A. G. Hill		
FARM	Nixon, William	NO.	1
DATE DRILLED	August 1, 1965	COUNTY NO.	442
AUTHORITY			
ELEVATION	725" G.L. TerMit		
LOCATION	330'N line, 330'W line of NE SW		
COUNTY	DEWITT		



6-19N-3E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Bieber, Bob Well No. #1
Address R.R. #1 Box #111 Carlock IL
Driller Mashburn, Robert License No. 102-3084
11. Permit No. 03900796 Date 06/20/96
12. Water from sand 13. County DeWitt
at depth 230 to 282 ft. Sec. 7
14. Screen: Diam. 5 in. Twp. 19 N
Length: 4 ft. Slot 20 Rge. 3 E
Elev.

NE NE SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	278

16. Size hole below casing: _____ in.
17. Static level 122 ft. below casing top which is 1 ft. above ground level. Pumping level 128 ft. when pumping at 15 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	19	19
gray clay	31	50
sand	2	52
gray clay	75	127
drift	6	133
gray clay	97	230
fine sand	18	248
medium sand	17	265
coarse sand	17	282

Household - Private

DeWitt 12-039-21239-00 07-19N-03E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Douglas, Dick Well No. #1
    Address 605 S Jackson Clinton IL
    Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 018880 Date 08/15/90
12. Water from sand 13. County DeWitt
    at depth 215 to 258 ft. Sec. 7
14. Screen: Diam. 5 in. Twp. 19 N
    Length: 4 ft. Slot 20 Rge. 3 E
    Elev.

SW SW SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	254

16. Size hole below casing: _____ in.
17. Static level 98 ft. below casing top which is 1 ft. above ground level. Pumping level 99 ft. when pumping at _____ gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	24	24
blue clay	38	62
brown drift	5	67
green clay	7	74
gray clay	141	215
fine sand	20	235
medium	11	246
coarse sand	12	258

Household - Private

DeWitt 12-039-20971-00 07-19N-03E

LOG OF WATER WELL

Property owner Glenn McBride, Weldon, Ill. Well No. 1

Drilled by Woellner Bros, Wapella Year 1940.

Formations passed through	Thickness	Depth of Bottom
soil Co. no. 146	1	1
Yellow Clay	15	16
Blue Clay	46	62
Sift	1	63
Green Clay	10	73
Hard Pan	4	77
Sand & gravel	3	80

[Continue on back if necessary]

Finished in Gravel at 77 to 80 ft.

Cased with 4 inch Black pipe from 0 to 77 ft.

and inch from to ft.

Size hole below casing inch. Static level from surf. 29 ft.

Tested capacity 5- gal. per min. Temperature °F.

Water lowered to ft. in. in 5- hrs. min.

Length of test 6 hrs. min. Screen Johnson

Slot 25- Diam. 3½" Length 4 Bottom set at 80 ft.

[Show location in Section Plat]

Township name Creek Elev. Sec. 7

Description of location 600' W., 144' S. of NE Cor. NE. Twp. 19N Rge. 3E

Signed W. Woellner County Dewitt

Copy for Illinois State Geological Survey Index: 7-19N-3E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Rearden, Don Well No. _____
Address 777 Christopher Forsyth IL
Driller Mashburn, Robert License No. 102-3084
11. Permit No. 03901196 Date 07/09/96
12. Water from sand 13. County DeWitt
at depth 225 to 282 ft. Sec. 7
14. Screen: Diam. 5 in. Twp. 19 N
Length: 4 ft. Slot 15 Rge. 3 E
Elev. _____

NE NE SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	278

16. Size hole below casing: _____ in.
17. Static level 117 ft. below casing top which is 1 ft. above ground level. Pumping level 122 ft. when pumping at 15 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	19	19
gray clay	39	58
sand	3	61
gray clay	63	124
drift	7	131
green clay	3	134
gray clay	91	225
fine sand	15	240
medium sand	42	282

Household - Private

DeWitt 12-039-21250-00 07-19N-03E

Town Clinton Township Texas Map No.
Company Woollen Brothers No. R. 2E
Farm Hullinger, E. V. No. T. Sec. 9
Authority Woollen Brothers, Wapella
Elevation 735 TM 19
Collector N
Confidential Date Drilled 1939
204' N. line, 332' W. line of NW SE

No. Co. No. 117	Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Top soil	4		4	
	Clay, yellow	12		16	
	Clay, blue	60		76	
	Driftwood	2		78	
	Clay, green	4		82	
	Hardpan	8		90	
	2" of sand at			90	
	Hardpan	48		138	
	Sand and gravel	5		143	
	Water struck at 138'				
	Water level from surface 90'				
	Capacity tested to 5 g.p.m.				
	Water lowered to 95'				
	4" casing				
	3' Cook screen, diam. 3 3/4", size slot 25				
	2½" red jacket cylinder				
	108' of 1¼" drop pipe				
	108' of 3/8" iron pump rod				

NO ENVELOPE

~~ORIGINAL FILED~~

COUNTY Dewitt INDEX NO.
DRILL RECORD 9-19N-2E
(12880—20M) ILLINOIS GEOLOGICAL SURVEY, URBANA (12-41)

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Rohrscheib, Sid & Krista Well No. #1
Address R.R. #21 Box #52 Bloomington IL
Well address R.R. Clinton, IL
Lot _____ Subd _____ ISWS P# 311387
Driller Mashburn, Robert License No. 102-3084
Permit No. 03901899 Date 05/05/1999
Water from sand County DeWitt
at depth 247 to 275 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot 12

Sec. 9
Twp. 19 N
Rge. 2 E
Elev. _____

SW NW SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	267

Size hole below casing: _____ in.
Static level 128 ft. below casing top which is 1 ft. above ground level. Pumping level 130 ft. when pumping at 15 gpm for 2 hours.

Formations passed through	Thickness	Bottom
topsoil	2	2
yellow clay	19	21
gray clay	47	68
drift	3	71
green clay	6	77
gray clay	170	247
fine sand	8	255
medium sand	20	275
limestone at	0	275

Household - Private

DeWitt 12-039-21395-00 9-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Banta, Emily Well No. _____
Address 15 Bradley Ct. Clinton IL
Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 017974 Date 05/16/90
12. Water from sand 13. County DeWitt
at depth 264 to 284 ft.
14. Screen: Diam. 5 in.
Length: 4 ft. Slot 15

Sec. 9
Twp. 19 N
Rge. 2 E
Elev. 735 TM

SW SW NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-2	280

16. Size hole below casing: _____ in.
17. Static level 116 ft. below casing top which is 2 ft. above ground level. Pumping level 118 ft. when pumping at 15 gpm for 1 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	24	24
blue clay	34	58
green clay	3	61
gray clay	203	264
medium sand	20	284
limestone at	0	284

Household - Private

DeWitt 12-039-20958-00 09-19N-02E

FICE BUILDING, SPRINGFIELD,
SURVEYS SECTION. BE SURE TO

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed 11-76

10. Dept. Mines and Minerals permit No. 70087 Year 78
11. Property owner MAX WALDEN Well No. 2
Address Clinton Ill
Driller B.E. MASHBURN License No. 92-520
12. Water from Sand & Gravel Formation 13. County DeWitt
at depth 223 to 279 ft. Sec. 10
14. Screen: Diam. 4 in. Twp. 19N
Length: 6 ft. Slot 15 Rng. 2E
Elev. 665

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	T+C 11 lbs	3	274

SHOW LOCATION IN SECTION PLAT
120'NL, 420'WL,
SW SE SE
(permit)

16. Size Hole below casing: 4 in.
17. Static level 98 ft. below casing top which is 1 ft. above ground level. Pumping level 100 ft. when pumping at 10 gpm for 4 hours. **Sub. pump set at 120'**

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
yellow clay	22	22
blue clay	23	45
sandy blue clay	17	62
green clay	12	74
grey clay Hard gritty	149	223
sand & gravel	56	279
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED Bruce Mashburn DATE Jan. 78

FILED

COUNTY No. 20699

DEWITT

10-19N-2E

ICE BUILDING, SPRINGFIELD,
RVEYS SECTION. BE SURE TO

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed 7-77

0. Dept. Mines and Minerals permit No. 70086 Year 77
1. Property owner Max Walden Well No. 1
   Address CLINTON Ill.
   Driller BE Mashburn License No. 92-520
2. Water from Sand (Formation) 13. County DeWitt
   at depth 212 to 265 ft. Sec. 10
   Twp. 19N
   Rng. 2E
   Elev. 650
14. Screen: Diam. 4 in.
    Length: 4 ft. Slot 15

			•

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	T+C 11 lbs.		

SHOW LOCATION IN SECTION PLAT
70'SL, 110'EL, NW SE SE (permit)

16. Size Hole below casing: 4 in.
17. Static level 90 ft. below casing top which is 1 ft. above ground level. Pumping level 94 ft. when pumping at 10 gpm for 4 hours. **Sub. pump set at 120'**

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
yellow clay	20	20
blue "	16	36
sand & gravel	4	40
green clay	11	51
grey clay hard gritty	161	212
sand & gravel	53	265
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED Bruce Mashburn DATE Jan. 78

LICED

COUNTY No. 20700

DEWITT

10-19N-2E

FFICE BUILDING, SPRINGFIELD,
SURVEYS SECTION. BE SURE TO

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed 8-25-68

10. Dept. Mines and Minerals permit No. NF4713 Year 68
11. Property owner MAX WALDEN Well No. 1
    Address Route 51 - CLINTON, Ill.
    Driller B.E. MASHBURN License No. 92-520
12. Water from Sand (Formation) 13. County DeWITT
    at depth 256 to 260 ft.
    Sec. 10
    Twp. 19N
    Rng. 2E
    Elev. 655
14. Screen: Diam. 4 in.
    Length: 4 ft. Slot 16

SHOW LOCATION IN SECTION PLAT

350' SL, 200' EL of SW (permit)

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	T+C 11 lbs	3	256

16. Size Hole below casing: 4 in.
17. Static level 79 ft. below casing top which is 1 ft. above ground level. Pumping level 80 ft. when pumping at 14 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
yellow clay	21	21
blue clay	24	45
green clay	5	50
grey clay-sandy	30	85
Hard grey clay	34	119
dark grey clay - hard	76	195
sand + gravel	65	260
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED Bruce E. Mashburn DATE Sept. 25, 68

COUNTY No. 339

DEWITT 10-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Irvin, Stan Well No. #1
Address R. R. #2 Clinton IL
Driller Layten, James G. License No. 102-2243
11. Permit No. 112245 Date 05/09/84
12. Water from gravel 13. County DeWitt
at depth 95 to 104 ft. Sec. 10
14. Screen: Diam. 5 in. Twp. 19 N
Length: 4 ft. Slot 20 Rge. 2 E
Elev.

SE NW SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	0	99
5			

16. Size hole below casing: _____in.
17. Static level 56 ft. below casing top which is 0 ft. above ground level. Pumping level_____ft. when pumping at _____ gpm for_____hours.

18. Formations passed through	Thickness	Bottom
no record	53	53
sand & gravel	4	57
no record	21	78
sand & gravel	2	80
no record	1	81
sand & gravel	4	85
no record	10	95
sand & gravel	9	104

DeWitt 12-039-20939-00 10-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Cyrulick, Shelby Well No. _____
Address R.R. 2 Box 132 W Clinton IL
Well address R.R. 2 Clinton, IL
Lot 1 Subd Banta Lakes ISWS P# 348870
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-013-03 Date 06/16/2003
Water from sand County DeWitt
at depth 262 to 282 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot _____

Sec. 9
Twp. 19 N
Rge. 2 E
Elev. _____

NW NW SW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	274
5	SS SCREEN 12 & 15	274	282

Size hole below casing: _____ in.
Static level 124 ft. below casing top which is 1 ft. above ground level. Pumping level 130 ft. when pumping at 40 gpm for 2 hours.

Formations passed through	Thickness	Bottom
topsoil	2	2
yellow clay	17	19
gray clay	45	64
drift	4	68
green clay	5	73
gray clay	189	262
sand	20	282
limestone at	0	282

Private Water Well

DeWitt 12-039-21622-00 9-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Purdue, Rodney Well No. #1
Address 310 S. College Apt. A Lincoln IL
Well address 875E 450N Heritage Rd. Clinton, IL
Lot _____ Subd _____ ISWS P# 339565
Driller Layten, James License No. 102-2243
Permit No. 039-035-01 Date 10/24/2001
Water from sand & gravel County DeWitt
at depth 235 to 265 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 20

Sec. 9
Twp. 19 N
Rge. 2 E
Elev. _____

SW SE SE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	-1	210
5	SDR 17	210	270
5	STAINLESS STL SCREEN	270	274

Size hole below casing: _____ in.
Static level 115 ft. below casing top which is 1 ft. above ground level. Pumping level 117 ft. when pumping at 13 gpm for _____ hours.

Formations passed through	Thickness	Bottom
topsoil	2	2
yellow clay	13	15
gray clay	14	29
gray clay with gravel streaks	2	31
gray clay	19	50
sand & gravel	1	51
gray clay	32	83
sand & gravel	1	84
gray clay	9	93

Household - Private

DeWitt 12-039-21527-00 9-19N-2E

Formations passed through (continued)	Thickness	Bottom
sand & gravel	3	96
gray clay	39	135
sand & gravel	2	137
gray clay	98	235
fine to medium sand	30	265
medium to coarse sand	10	275
shale & limestone	2	277

Household - Private

DeWitt 12-039-21527-00 9-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Clinton Landfill, Inc. Well No. #1
    Address R.R. #2 P.O. Box #557 Clinton IL
    Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 000586 Date 03/17/88
12. Water from sand 13. County DeWitt
    at depth 238 to 281 ft.
14. Screen: Diam. 5 in.
    Length: 4 ft. Slot 15

Sec. 10
Twp. 19 N
Rge. 2 E
Elev. 722.57M

15. Casing and Liner Pipe NE NE SE

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-2	277

16. Size hole below casing: _____ in.
17. Static level 108 ft. below casing top which is 2 ft. above ground level. Pumping level 112 ft. when pumping at 60 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	16	16
gray clay	57	73
sand & gravel	17	90
gray clay	148	238
fine sand	26	264
medium/coarse sand	17	281

Household - Private

DeWitt 12-039-20872-00 10-19N-02E

EQUESTED AND MAIL ORIGINAL TO STATE DE
616, STATE OFFICE BUILDING, SPRINGFIELD,
ICAL / WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed July 12, 1973

10. Property owner Larry Cisco Well No. _____
Address Atlanta Ill
Driller Ray Nelment License No. 92-68
11. Permit No. NA 19437 Date June 8-73
12. Water from sand & gravel Formation 13. County Dewitt
at depth 86 to 88 ft.
14. Screen: Diam. none
Length: _____ ft. Slot _____

Sec. 10
Twp. 19N.
Rge. 2E.
Elev. _____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)

SHOW LOCATION IN SECTION PLAT
100'SL, 200'EL
NW
(permit)

16. Size Hole below casing: none in.
17. Static level 40 ft. below casing top which is 1 ft. above ground level. Pumping level 47 ft. when pumping at 6 gpm for 18 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top soil	3	3
Yellow Clay	22	25
Blue Clay	61	86
sand & gravel	2	88

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Ray Nelment DATE Dec. 2-73

COUNTY No. 612

DEWITT

10-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Martin, Warren Well No. _____
Address R.R. #2, Box #218 Clinton IL
Driller Mashburn, Robert License No. 102-3084
11. Permit No. 03900595 Date 04/18/95
12. Water from sand 13. County DeWitt
at depth 252 to 288 ft.
14. Screen: Diam. 5 in.
Length: 4 ft. Slot 15

Sec. 10
Twp. 19 N
Rge. 2 E
Elev. _____

SW NW NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	284

16. Size hole below casing: _____ in.
17. Static level 126 ft. below casing top which is 1 ft. above ground level. Pumping level 130 ft. when pumping at 15 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	14	14
gray clay	36	50
sand	2	52
drift	6	58
green clay	14	72
gray clay	180	252
fine sand	15	267
fine to medium sand	21	288
limestone at	0	288

Household - Private

DeWitt 12-039-21185-00 10-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Moore, C.H. Trust Estate Well No. #2
Address 121 S. Center St. Clinton IL
Driller Sims, R. Marc Jr. License No. 102-3423
11. Permit No. 03901295 Date 05/30/95
12. Water from dry hole 13. County DeWitt
at depth _____ to _____ ft. Sec. 10
14. Screen: Diam. _____ in. Twp. 19 N
Length: _____ ft. Slot _____ Rge. 2 E
Elev. _____

NW NE NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)

16. Size hole below casing: _____ in.
17. Static level _____ ft. below casing top which is _____ ft. above ground level. Pumping level _____ ft. when pumping at _____ gpm for _____ hours.

18. Formations passed through	Thickness	Bottom
top soil	1	1
brown clay	9	10
yellow sand & gravel	4	14
gray clay	46	60
sand & gravel	2	62
gravelly gray clay	8	70
gray clay	24	94
sand streak	1	95
gravelly gray clay	6	101

Household - Private

DeWitt 12-039-21200-00 10-19N-02E

18. Formations passed through (continued)	Thickness	Bottom
interlayered sand gray clay	5	106
sandy gray clay	5	111
fine to medium gray sand	3	114
gray clay	21	135
sand streak	1	136
gray sandy clay	33	169
boulder	1	170
fine gray sand	1	171
sandy gray clay	120	291
limestone - bedrock	2	293

LOG OF WATER WELL

Property owner William Adams Well No. 1

Drilled by Woollen Bros Year 1942

Formations passed through	Thickness	Depth of Bottom
soil	1	1
yellow clay Co. no. 118	19	20
" gravel	2	22
Blue clay soft	10	32
Blue clay hard	5	37
" " soft	6	43
Blk dirt	2	45
green clay	17	62
fine sand	5	67
hard Pan soft	28	95
hard Pan hard	28	123
" " "	8	131
gravel	2	133
hard Pan	1	134

RECEIVED DEC 5 1942 ILLINOIS STATE GEOLOGICAL SURVEY

[Continue on back if necessary]

Finished in gravel at 131 to 133 ft.

Cased with 4 inch Blk pipe from 0 to 131 ft.

and inch from to ft.

Size hole below casing inch. Static level from surf. 53 ft.

Tested capacity 5 gal. per min. Temperature °F.

Water lowered to 125 ft. in. in 1 hrs. min.

Length of test hrs. min. Screen Johnson

Slot 30 Diam. 4 Length 4 Bottom set at 134 ft.

[Show location in Section Plat]

Township name Texas Elev. 710 TM Sec. 11

Description of location Twp. 19N

790' S. line, 669' E. line Rge. 2E

Signed A. S. Woollen County Sewitt

Copy for Illinois State Geological Survey Index: 11-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Ward, Gary Well No. _____
Address #8 Harbord Dr. Bloomington IL
Driller Mashburn, Robert License No. 102-3084
11. Permit No. 039-00296 Date 02/16/96
12. Water from sand 13. County DeWitt
at depth 141 to 145 ft. Sec. 11
14. Screen: Diam. 5 in. Twp. 19 N
Length: 4 ft. Slot 12 Rge. 2 E
Elev. _____

SE NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	141

16. Size hole below casing: _____ in.
17. Static level 68 ft. below casing top which is 1 ft. above ground level. Pumping level 75 ft. when pumping at 12 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	15	15
gray clay	52	67
fine sand	2	69
gray clay	72	141
fine to medium sand	4	145

Household - Private

DeWitt 12-039-21234-00 11-19N-02E

TOWN

TOWNSHIP Texas

R. 2E

COMPANY Woollen Bros. NO.

T. 19N

SEC. 11

FARM Gillen, Mrs. J.P. NO.

DATE DRILLED November 1945

AUTHORITY Woollen Bros.

COLLECTOR

ELEVATION 722 Rolfe

NW cor. of NE

No. Co. no. 119	Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil, yellow clay	12		12	
	Blue clay	47		59	
	Dirty sand, gravel; little water	1		60	
	Blue clay	7		67	
	Gas	1		68	
	Drift	4		72	
	Green clay	8		80	
	Hardpan	17		97	
	Sand, gravel	6		103	
	Total depth			103	

4" hole
100' of pipe, black
Drawn down 6' at 5 g.p.m. for 2 hrs.
Water clear
Water level 60'
Finished in sand, gravel at 97' to 103'

Black Pipe, loose
Armke Johnson Screen, Size 4", Length 3, Slot 30.
New Red Jacket Pump, Length 90, Size 1¼, Way Rod 3/8, Cylinders 2½.

[redacted] NO ENVELOPE

COUNTY Dewitt 11-19N-2E

SAMPLE SET NO.

(84107—20M—6-45)

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Willis, Terry Well No. #2
Address R.R. #2 Box #94 Clinton IL
Driller Layten, James License No. 102-2243
11. Permit No. 03902296 Date 09/03/96
12. Water from gravel 13. County DeWitt
at depth 130 to 143 ft. Sec. 12
14. Screen: Diam. 5 in. Twp. 19 N
Length: 4 ft. Slot 20 Rge. 2 E
Elev.

SE SE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	-1	138

16. Size hole below casing: _____ in.
17. Static level 39 ft. below casing top which is 1 ft. above ground level. Pumping level 41 ft. when pumping at 10 gpm for _____ hours.

18. Formations passed through	Thickness	Bottom
yellow clay	22	22
yellow gravel	2	24
yellow clay	3	27
gray clay	15	42
gray gravel	1	43
gray clay	17	60
dirty gravel	10	70
gray clay	5	75
dirty gravel	8	83

Household - Private

DeWitt 12-039-21253-00 12-19N-02E

18. Formations passed through (continued)	Thickness	Bottom
gray clay	47	130
gravel	13	143
gray clay	2	145

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Berry, Walter Well No. _____
    Address R.R. #2 Clinton IL
    Driller DeMent, Ray License No. 092-0686
11. Permit No. 97668 Date 12/02/80
12. Water from sand 13. County DeWitt
    at depth 28 to 70 ft. Sec. 12
14. Screen: Diam._____in. Twp. 19 N
    Length:_____ft. Slot _____ Rge. 2 E
    Elev. _____

SW SE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
4	STEEL 11# FT	0	70

16. Size hole below casing: _____in.
17. Static level 70 ft. below casing top which is 2 ft. above ground level. Pumping level 70 ft. when pumping at 15 gpm for 24 hours.

18. Formations passed through	Thickness	Bottom
top soil	4	4
yellow clay	18	22
blue clay	20	42
sand	28	70

DeWitt 12-039-20777-00 12-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Holt, Joe W. Well No. #2
    Address Clinton IL
    Driller DeMent, Ray License No. 92-68
11. Permit No. NF 10856 Date 05/10/71
12. Water from sand 13. County DeWitt
    at depth 64 to 68 ft.
14. Screen: Diam. 4 in.
    Length: 4 ft. Slot .025

Sec. 12
Twp. 19 N
Rge. 2 E
Elev. 727

580'S 1200'E NWc

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
4	STANDARD PIPE	0	64

Fld Verifd

16. Size hole below casing: _____ in.
17. Static level 40 ft. below casing top which is 1 ft. above ground level. Pumping level 45 ft. when pumping at 5 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
top soil	3	3
yellow clay	18	21
blue clay	43	64
sand & gravel	4	68

DeWitt 12-039-00560-00 12-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Weldon Springs State Park Well No. _____
Address _____
Well address IEPA Well #03900180
Lot _____ Subd _____ ISWS P# _____
Driller _____ License No. _____
Permit No. _____ Date _____
Water from _____ County DeWitt
at depth _____to_____ft.
Screen: Diam._____in.
Length:_____ft. Slot _____

Sec. 12
Twp. 19 N
Rge. 2 E
Elev. _____

NW NW NE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)

Size hole below casing: _____in.
Static level _____ft. below casing top which is _____ft.
above ground level. Pumping level_____0_ft.when pumping at _____
gpm for_____hours.

Formations passed through	Thickness	Bottom

Noncommunity - Public

DeWitt 12-039-21540-00 12-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Weldon Springs State Park Well No. #4
Address Clinton IL
Well address
Lot Subd ISWS P#
Driller Woollen Brothers License No. 21970
Permit No. Date 05/01/1995
Water from sand & gravel County DeWitt
at depth 53 to 57 ft.
Screen: Diam. 4 in.
Length: 4 ft. Slot

Sec. 12
Twp. 19 N
Rge. 2 E
Elev.

1700' S 1320' W NEc

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)

Size hole below casing: in.
Static level ft. below casing top which is ft.
above ground level. Pumping level 0 ft.when pumping at 6
gpm for 1 hours.

Formations passed through	Thickness	Bottom
soil & yellow clay	18	18
blue clay	22	40
brown drift	3	43
green clay	5	48
rock ledge	1	49
gray hardpan	4	53
sand & gravel	4	57

Noncommunity - Public

DeWitt 12-039-21531-00 12-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Weldon Springs State Park Well No. #5
    Address
    Driller Truax Traer Coal Co. License No. 0
11. Permit No. 0 Date
12. Water from coarse sand 13. County DeWitt
    at depth 57 to 60 ft. Sec. 12
14. Screen: Diam. 4 in. Twp. 19 N
    Length: 3 ft. Slot 16 Rge. 2 E
    Elev. 720

3300'N 3100'E SWc

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
4	ID	0	57

Fld Verifd

16. Size hole below casing: 4 in.
17. Static level 36 ft. below casing top which is 0 ft. above ground level. Pumping level 42 ft. when pumping at 12 gpm for 1 hours.

18. Formations passed through	Thickness	Bottom
ss #34188	0	0
yellow clay	15	15
yellow clay- sand mixed	3	18
yellow sand & gravel	14	32
yellow sand - soft	22	54
sand - dirty and stickey	1	55
blue sand & gravel - coarse	5	60

DeWitt 12-039-00024-00 12-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Weldon Springs State Park Well No. _____
Address _____
Driller Woollen Brothers License No. 21970
11. Permit No. _____ Date _____
12. Water from _____ 13. County DeWitt
at depth _____to_____ft. Sec. 12
14. Screen: Diam._____in. Twp. 19 N
Length:_____ft. Slot 25 Rge. 2 E
Elev. _____

15. Casing and Liner Pipe 660'S 2310'W NEc

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
6		-2	

16. Size hole below casing: _____in.
17. Static level 1 ft. below casing top which is 0 ft. above ground level. Pumping level 6 ft. when pumping at 15 gpm for_____hours.

18. Formations passed through	Thickness	Bottom
top soil	1	1
hard yellow clay	11	12
common blue clay	14	26
sand & gravel	1	27
blue clay	5	32
sand & gravel	6	38

Household - Private

DeWitt 12-039-21180-00 12-19N-2E

STATE OFFICE BUILDING, SPRINGFIELD,
AL / WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 5-20-77

10. Property owner Jerry Willis Well No. 3
Address RR 4 Clinton Il
Driller Ray DeMent License No. 92-68
11. Permit No. 60056 Date 5/5/77
12. Water from Sand (Formation) 13. County DeWitt
at depth ____ to 142 ft.
14. Screen: Diam. 4 in.
Length: 3 ft. Slot .025

Sec. 12
Twp. 19N
Rge. 2E
Elev. ____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4½OD	Steel - 11# per ft.	0	142

SHOW LOCATION IN SECTION PLAT

Lot #1, SE SE SW (permit)

16. Size Hole below casing: 10 in.
17. Static level 40 ft. below casing top which is 1 ft. above ground level. Pumping level 45 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	~~THICKNESS~~ TOP	DEPTH OF BOTTOM
~~Topsoil~~ Topsoil	0	35
Yellow clay	35	92
Blue clay	92	127
Sand	127	142

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Ray DeMent DATE 5/20/77

COUNTY No. 20.70.1

DEWITT 12-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Willis, Terry Well No. _____
Address R. R. #2 Clinton IL
Driller DeMent, Ray License No. 092-0686
11. Permit No. 111824 Date 04/10/84
12. Water from sand 13. County DeWitt
at depth 82 to 82 ft. Sec. 12
14. Screen: Diam._____in. Twp. 19 N
Length:_____ft. Slot _____ Rge. 2 E
Elev. 710 TM

100' N 200' W SEc SW SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
4	STEEL 11#/FT	0	82

16. Size hole below casing: _____in.
17. Static level 14 ft. below casing top which is 0 ft. above ground level. Pumping level_____ft. when pumping at 10 gpm for_____hours.

18. Formations passed through	Thickness	Bottom
top soil	2	2
yellow clay	36	38
blue clay	44	82
sand top	0	82

DeWitt 12-039-20940-00 12-19N-02E

TOWN TOWNSHIP

COMPANY Woollen Bros. NO.

FARM Adams, W illiam NO.

DATE DRILLED April 1946

AUTHORITY Woollen Bros.

COLLECTOR ELEVATION

T. 19N R. 2E SEC. 12

SW

Co. no. 120 Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
Soil, yellow clay	15		15	
Yellow sand	6		21	
Blue sand	2		23	
Blue gravel	2		26	
Clay				
Total depth			25	
4" hole				
Drawn down 12' at 4 g.p.m. for 2 hrs.				
Water clear				
Water level 4½'				
Finished in sand, gravel at 21' to 25'				
Pipe Loose				
Johnson Everdur Screen, Size 4",				
Lenght 4', Slot 14.				
Burks Shallow Well Pump Length 21,				
Size 1", 1/4 H.P. Electric				

[redacted] NO ENVELOPE

COUNTY Dewitt

SAMPLE SET NO.

(84107—20M—6-45) 2

~~21~~ 12-19N-~~3~~E

ILLINOIS GEOLOGICAL SURVEY, URBANA

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner State of IL Capital Dev. Board Well No. _____
Address Straton Building Springfield IL
Driller Hatfield, Larry License No. 102-0742
11. Permit No. 03901594 Date 07/15/94
12. Water from _____ 13. County DeWitt
at depth _____ to _____ ft. Sec. 12
14. Screen: Diam. 5 in. Twp. 19 N
Length: 8 ft. Slot 30 Rge. 2 E
Elev. _____

NE NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC	0	133

16. Size hole below casing: _____ in.
17. Static level _____ ft. below casing top which is _____ ft. above ground level. Pumping level _____ ft. when pumping at _____ gpm for _____ hours.

18. Formations passed through	Thickness	Bottom
top soil	2	2
red clay	23	25
yellow clay	20	45
blue clay	50	95
blue sandy clay	15	110
blue clay	9	119
gravel w/fine sand	12	131
gray medium coarse gravel	10	141

Noncommunity - Public

DeWitt 12-039-21177-00 12-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Willis, Terry Well No. #3
Address RR #4 Clinton IL
Driller DeMent, Ray License No. 92-68
11. Permit No. 60056 Date 05/05/77
12. Water from sand 13. County DeWitt
at depth ____ to 142 ft.
14. Screen: Diam. 4 in.
Length: 3 ft. Slot .025

Sec. 12
Twp. 19 N
Rge. 2 E
Elev. ____

SE SE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	STEEL 11# PER FT.	0	142

16. Size hole below casing: ____ in.
17. Static level 40 ft. below casing top which is 1 ft. above ground level. Pumping level 45 ft. when pumping at 10 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
top soil	35	35
yellow clay	57	92
blue clay	35	127
sand	15	142

DeWitt 12-039-20701-00 12-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Weaver, Solomon Well No. _____
Address _____
Driller Truax Traer Coal Co. License No. 0
11. Permit No. _____ Date _____
12. Water from _____ 13. County DeWitt
at depth _____to_____ft.
14. Screen: Diam._____in.
Length:_____ft. Slot _____

Sec. 13
Twp. 19 N
Rge. 2 E
Elev. 727

100'N 1500'E SWc

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)

Fld Verifd

16. Size hole below casing: _____in.
17. Static level _____ft. below casing top which is _____ft. above ground level. Pumping level_____ft. when pumping at _____ gpm for_____hours.

18. Formations passed through	Thickness	Bottom
ss #12964	0	0
no sample	95	95
sand, silty, calcareous	5	100
silt, calcareous, trace humus	5	105
silt, calcareous, trace humus	5	110
no sample	5	115
silt,sandy,calcareous,trace humus	5	120

DeWitt 12-039-00122-00 13-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Baker, Larry Well No. _____
Address 5464 N. Oakland Forsyth IL
Well address _____
Lot _____ Subd _____ ISWS P# 323766
Driller Gaza, John Edward License No. 102-2631
Permit No. 039-024-00 Date 06/01/2000
Water from top of casing County DeWitt
at depth 67 to 270 ft.
Screen: Diam. 3 in.
Length: 4 ft. Slot .012

Sec. 13
Twp. 19 N
Rge. 2 E
Elev. _____

NW NW SE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	-1	266
3	STAINLESS STL SCREEN	266	270

Size hole below casing: _____ in.
Static level 67 ft. below casing top which is 1 ft. above ground level. Pumping level 87 ft. when pumping at 30 gpm for 1 hours.

Formations passed through	Thickness	Bottom
silt clay brown trace sand trace gravel	15	15
silt clay brn-gray trace sand & gravel	10	25
silt clay gray little sand trace gravel	45	70
silt clay peat dark brown	5	75
till sand & gravel very hard	105	180
sand brown fine-medium	15	195
silt clay gray trace sand	30	225
sand fine-medium brown	25	250
sand medium-coarse with gravel	20	270

Household - Private

DeWitt 12-039-21440-00 13-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Austin, Larry Well No. #1
Address 220 N. Pine Maroa IL
Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 017298 Date 03/29/90
12. Water from sand 13. County DeWitt
at depth 236 to 282 ft. Sec. 13
14. Screen: Diam. 5 in. Twp. 19 N
Length: 4 ft. Slot 15 Rge. 2 E
Elev. 730

15. Casing and Liner Pipe 1000' N 2550' W SEc Fld Verifc

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21 PVC	-2	278

16. Size hole below casing: _____ in.
17. Static level 125 ft. below casing top which is 2 ft. above ground level. Pumping level 150 ft. when pumping at 17 gpm for 4 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	22	22
blue clay	40	62
brown drift	3	65
green clay	6	71
gray clay	165	236
fine sand	34	270
fine/medium sand	12	282

Household - Private

DeWitt 12-039-20960-00 13-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner LeBegue, Arlene Well No. #1
Address R.R. #2 P.O. Box #102D Clinton IL
Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 03900592 Date 05/14/92
12. Water from sand 13. County DeWitt
at depth 103 to 108 ft. Sec. 13
14. Screen: Diam. 4 in. Twp. 19 N
Length: 4 ft. Slot 20 Rge. 2 E
Elev.

NE NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
4	PVC SDR 21	-1	104

16. Size hole below casing: _____ in.
17. Static level 6 ft. below casing top which is 1 ft. above ground level. Pumping level 10 ft. when pumping at 15 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	26	26
blue clay	28	54
brown drift	2	56
green clay	2	58
gray clay	45	103
sand & gravel	5	108
gray clay at	0	108

Household - Private

DeWitt 12-039-21018-00 13-19N-02E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Danison, Pat Well No. _____
Address 503 Portland Clinton IL
Well address R.R. Clinton, IL
Lot 7 Subd _____ ISWS P# 320017
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-032-99 Date 09/30/1999
Water from sand County DeWitt
at depth 222 to 276 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot 12

Sec. 13
Twp. 19 N
Rge. 2 E
Elev. _____

SE NW NW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC	-1	268
5	STAINLESS STL SCREEN	268	276

Size hole below casing: _____ in.
Static level 97 ft. below casing top which is 1 ft. above ground level. Pumping level 100 ft. when pumping at 15 gpm for 2 hours.

Formations passed through	Thickness	Bottom
yellow clay & sand	10	10
yellow clay	11	21
gray clay	20	41
sand	2	43
gray clay	28	71
drift	3	74
green clay	7	81
gray clay	141	222
sand	54	276

Household - Private

DeWitt 12-039-21412-00 13-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner McGuire, Larry Well No. #1
Address 514 S. Quincy Clinton IL
Well address R.R. 1 Clinton, IL
Lot _____ Subd _____ ISWS P# 312531
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-028-99 Date 08/05/1999
Water from sand County DeWitt
at depth 51 to 81 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 20

Sec. 13
Twp. 19 N
Rge. 2 E
Elev. _____

NE NW NW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	77
5	STAINLESS STL SCREEN	77	81

Size hole below casing: _____ in.
Static level 50 ft. below casing top which is 1 ft. above ground level. Pumping level 52 ft. when pumping at 12 gpm for 2 hours.

Formations passed through	Thickness	Bottom
yellow clay	28	28
gray clay	23	51
medium to coarse sand	14	65
coarse sand & gravel	16	81

Household - Private

DeWitt 12-039-21413-00 13-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Ward, Gary & Dolores Well No. #1
Address R.R. 2 Box 84Q Clinton IL
Well address R.R. 2 Box 102P Clinton, IL
Lot _____ Subd _____ ISWS P# 323143
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-007-00 Date 03/22/2000
Water from sand County DeWitt
at depth 200 to 274 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot 12

Sec. 14
Twp. 19 N
Rge. 2 E
Elev. _____

SW NE NE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	266
5	STAINLESS STL SCREEN	266	274

Size hole below casing: _____ in.
Static level 85 ft. below casing top which is 1 ft. above ground level. Pumping level 88 ft. when pumping at 15 gpm for 2 hours.

Formations passed through	Thickness	Bottom
yellow clay	16	16
gray clay	37	53
drift	2	55
green clay	4	59
gray clay	141	200
fine sand	30	230
fine to medium sand	44	274
limestone at	0	274

Household - Private

DeWitt 12-039-21445-00 14-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Cook, Eric & Hallie Well No. #1
Address 1217 Gettyberg Dr. Bloomington IL
Well address R.R. Clinton, IL
Lot _____ Subd _____ ISWS P# 336335
Driller Layten, James License No. 102-2243
Permit No. 039-013-01 Date 06/28/2001
Water from sand & gravel County DeWitt
at depth 235 to 246 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 20

Sec. 14
Twp. 19 N
Rge. 2 E
Elev. _____

NE SE NE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	-1	198
5	SDR 17	199	239
5	STAINLESS STL SCREEN	239	243

Size hole below casing: _____in.
Static level 89 ft. below casing top which is 1 ft. above ground level. Pumping level 90 ft.when pumping at 11 gpm for_____hours.

Formations passed through	Thickness	Bottom
yellow clay	10	10
yellow gravel	2	12
yellow clay	6	18
yellow gravel	10	28
gray clay	4	32
peat	3	35
gray clay	3	38
green clay	7	45
gray clay with some gravel	67	112

Household - Private

DeWitt 12-039-21518-00 14-19N-2E

Formations passed through (continued)	Thickness	Bottom
gravel	2	114
gray clay	5	119
gravel with clay	2	121
gray clay	9	130
gravel with gray clay	10	140
gray clay	22	162
gravel with gray clay	2	164
gray clay	46	210
fine sand with gravel	25	235
medium sand & gravel	11	246

Household - Private

DeWitt 12-039-21518-00 14-19N-2E

EQUESTED AND MAIL ORIGINAL TO STATE
ISUMER HEALTH PROTECTION, 535 WEST
761. DO NOT DETACH GEOLOGICAL/WATER
E PROPER LOCAT

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 5-19-78 +LOAN

10. Property owner CENTRAL Ill BUILDING Well No. 1 LOT 51
Address CLINTON COUNTRY CLUB ACRES
Driller GC MASHBURN JR License No. 102-193
11. Permit No. 63028 Date JUNE 29 1977
12. Water from SAND (Formation) 13. County DEWITT
at depth 224 to 264 ft.
14. Screen: Diam. 4 in.
Length: 8 ft. Slot 12 55
Sec. 15
Twp. 19N
Rge. 2E
Elev. ____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	BLK STEEL 11#	+2	256

SHOW LOCATION IN SECTION PLAT
Lot#51, Cntry. Club Acres, NE SW (permit)

16. Size Hole below casing: ____ in.
17. Static level 78 ft. below casing top which is 2 ft. above ground level. Pumping level 86 ft. when pumping at 30 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
TOP SOIL	2	2
YELLOW CLAY	18	20
BLUE CLAY	50	70
BROWN DRIFT	2	72
GREEN CLAY	4	76
GREY CLAY	148	224
SAND	40	264
STOPPED AT 264'		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED G C Mashburn Sr DATE May 30-78

COUNTY No. 20706

DEWITT 15-19N-2E

EQUESTED AND MAIL ORIGINAL TO STATE
SUMER HEALTH PROTECTION, 535 WEST
61. DO NOT ATTACH GEOLOGICAL/WATER
E PROPER LOCATI

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 12-78

10. Property owner CENTRAL ILL BLDG + LOAN Well No. 3 LOT 44
Address 211 S QUINCY CLINTON
Driller GC MASHBURN JR License No. 102 193
11. Permit No. 73242 Date APRIL 19 - 78
12. Water from SAND (Formation) 13. County DEWITT
at depth 212 to 253 ft. Sec. 15
14. Screen: Diam. 4 in. Twp. 19N
Length: 2 ft. Slot 12 Rge. 2E
Elev. ____

SHOW LOCATION IN SECTION PLAT
Lot#44, Cntry Club Acres, NE SW (permit)

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	BLK STEEL 11#	-4	245

16. Size Hole below casing: — in.
17. Static level 60 ft. below casing top which is 2 ft. above ground level. Pumping level 65 ft. when pumping at 60 gpm for 2 hours. Sub. pump set at 88'

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	16	16
GREY CLAY	196	212
FINE SAND	25	237
COURSE SAND	16	253
LIME STONE AT 253'		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE Sep 5 - 79

COUNTY No. 20704

DEWITT 15-19N-2E

QUESTED AND MAIL ORIGINAL TO STATE
UMER HEALTH PROTECTION, 535 WEST
1. DO NOT ATTACH GEOLOGICAL/WATER
PROPER LOCATI

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 12-78

10. Property owner CENTRAL Ill BLDG + LOAN Well No. L LOT 48
Address 211 S QUINCY CLINTON
Driller G.C. MASHBURN JR License No. 102 193
11. Permit No. 73247 Date APRIL 19-78
12. Water from SAND (Formation) 13. County DEWITT
at depth 215 to 260 ft. Sec. 15
14. Screen: Diam. 4 in. Twp. 19N
Length: 8 ft. Slot 20 Rge. 2E
Elev. ____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	BLK STEEL 11#	-3	252

SHOW LOCATION IN SECTION PLAT
Lot#48, Cntry Club Acres, NE SW (permit)

16. Size Hole below casing: — in.
17. Static level 55 ft. below casing top which is 2 ft. above ground level. Pumping level 60 ft. when pumping at 60 gpm for 2 hours. Sub. pump set at 88'

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	18	18
GREY CLAY	197	215
FINE SAND	20	235
COURSE SAND	25	260
LIME STONE AT 260		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED G.C. Mashburn Jr. DATE Jan 5-79

COUNTY No. 20205

DEWITT 15-19N-2E

QUESTED AND MAIL ORIGINAL TO STATE
JMER HEALTH PROTECTION, 535 WEST
. DO NOT DETACH GEOLOGICAL/WATER
PROPER LOCATI

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 12-78

10. Property owner CENTRAL Ill. BLDG & LOAN Well No. ~~2~~ 4 LOT 39
Address 211 S QUINCY CLINTON
Driller GC MASHBURN JR License No. 102 193
11. Permit No. 73249 Date APRIL 19 78
12. Water from SAND (Formation) 13. County DEWITT
at depth 180 to 245 ft. Sec. 15
14. Screen: Diam. 4 in. Twp. 19N
Length: 8 ft. Slot 20 Rge. 2E
Elev. ____

SHOW LOCATION IN SECTION PLAT

Lot #39, Cntry Clubb Acres, NE SW (permit)

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	BLK STEEL 11#	-3	237

16. Size Hole below casing: — in.
17. Static level 45 ft. below casing top which is 2 ft. above ground level. Pumping level 50 ft. when pumping at 60 gpm for 2 hours. Sub. pump set at 88'

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	16	16
GREY CLAY	164	180
FINE SAND	40	220
COURSE SAND	25	245
LIMESTONE AT 245		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED GC Mashburn Jr DATE JAN 5 - 79

COUNTY No. 20703

DEWITT 15-19N-2E

ESTED AND MAIL ORIGINAL TO STATE
IMER HEALTH PROTECTION, 535 WEST
. DO NOT DETACH GEOLOGICAL/WATER
PROPER LOCATI

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 12-78

10. Property owner CENTRAL ILL BLDG + LOAN Well No. 2 LOT 32
Address 211 S QUINCY CLINTON
Driller G C MASHBURN JR License No. 102 193
11. Permit No. 73250 Date APRIL 19 - 78
12. Water from SAND (Formation) 13. County DEWITT
at depth 190 to 248 ft.
14. Screen: Diam. 4 in.
Length: 8 ft. Slot 20

Sec. 15
Twp. 19N
Rge. 2E
Elev. ____

SHOW LOCATION IN SECTION PLAT

Lot #32, Cntry Club Acres, NE SW (permit)

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	BLK STEEL 11#	-3	240

16. Size Hole below casing: — in.
17. Static level 47 ft. below casing top which is 2 ft. above ground level. Pumping level 55 ft. when pumping at 65 gpm for 2 hours. Sub. pump set at 88'

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	16	16
GREY CLAY	174	190
FINE SAND	30	220
COURSE SAND	28	248
LIMESTONE AT 248		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED G C Mashburn Jr DATE Jan 5 - 79

DEWITT COUNTY No. 20702 15-19N-2E

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed November 2, 1970

10. Dept. Mines and Minerals permit No. NF 09555 Year 1970
11. Property owner Jim BRAY + LANE Well No. 1
    Address RT 2 CLINTON
    Driller MASHBURN BROS License No. 92-203
12. Water from SAND Formation
    at depth 284 to 290 ft.
13. County DEWITT
    Sec. 15
    Twp. 19N
    Rng. 2E
    Elev. 718 BM
14. Screen: Diam. 4 in.
    Length: 6 ft. Slot 18 + 16

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	BLK STEEL 11#	+1	284

SHOW LOCATION IN SECTION PLAT

250' SL, 100' WL of NW SE SW (permit)

16. Size Hole below casing: NONE in.
17. Static level 89 ft. below casing top which is 1 ft. above ground level. Pumping level 91 ft. when pumping at 17 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	22	22
BLUE CLAY	42	64
BROWN DRIFT	2	66
GRAY CLAY	166	232
FINE SAND	48	280
COURSE SAND + GRAVEL	10	290
NOT THRU SAND AT 290		
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED Mashburn Bros DATE Nov 9, 1970

COUNTY No. 546

Town Clinton Township Texas Map No.
Company Woollen Brothers No. R. 2E
Farm Hartsock, Wm. No. T. Sec. 15
Authority Woollen Brothers, Wapella
Elevation 19 N
Collector
Confidential Date Drilled 1941
51' S. line, 90' E. line of NW

No.	Co. no. 123 Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil	2		2	
	Clay, yellow and gravel	20		22	
	Clay, blue	12		34	
	Drift, black	4		38	
	Clay, green	4		42	
	Clay, gray	28		70	
	Did not go into vein				
	Water flowed 8' above ground level				
	4" well				
	No screen				

NO ENVELOPE

[redacted]

COUNTY Dewitt INDEX NO.
DRILL RECORD 15-19N-2E

(12880—20M) ILLINOIS GEOLOGICAL SURVEY, URBANA (12-41)

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Martin Auction Co. Well No. #1
    Address Rt. #2 Clinton IL
    Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 118605 Date 06/24/85
12. Water from sand 13. County DeWitt
    at depth 172 to 230 ft.
14. Screen: Diam. 5 in.
    Length: 4 ft. Slot 18

Sec. 15
Twp. 19 N
Rge. 2 E
Elev. 643

15. Casing and Liner Pipe 1200' S 2450' E NWc Fld Verif

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21 PVC	-1	226

16. Size hole below casing: _____ in.
17. Static level 56 ft. below casing top which is 1 ft. above ground level. Pumping level 57 ft. when pumping at 15 gpm for 1 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	18	18
blue clay	26	44
brown drift	2	46
green clay	2	48
grey clay	124	172
fine sand	23	195
coarse sand	35	230

Commercial Operation - Business

DeWitt 12-039-20796-00 15-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Lichtenwalter, Greg Well No. #1
    Address R.R. #2 Clinton IL
    Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 000511 Date 03/11/88
12. Water from sand 13. County DeWitt
    at depth 226 to 280 ft.
14. Screen: Diam. 5 in.
    Length: 4 ft. Slot 15

Sec. 16
Twp. 19 N
Rge. 2 E
Elev. 710.5 TM
BM

15. Casing and Liner Pipe SE SE SE

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC	-1	276

16. Size hole below casing: _____ in.
17. Static level 112 ft. below casing top which is 1 ft. above ground level. Pumping level 120 ft. when pumping at 60 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	14	14
gray clay	54	68
brown drift	4	72
green clay	3	75
gray clay	65	140
dirty sand	2	142
gray clay	84	226
fine sand	38	264
coarse sand	16	280

Household - Private

DeWitt 12-039-20873-00 16-19N-02E

HEA

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Rogers, Rodney & Pam Well No. #1
    Address 402 N. Madison Clinton IL
    Driller Layten, James License No. 102-2243
11. Permit No. 03902394 Date 08/19/94
12. Water from sand & gravel 13. County DeWitt
    at depth 152 to 157 ft. Sec. 18
14. Screen: Diam. 5 in. Twp. 19 N
    Length: 4 ft. Slot 20 Rge. 3 E
    Elev.

SE SW NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	-1	152

16. Size hole below casing: _____ in.
17. Static level 50 ft. below casing top which is 1 ft. above ground level. Pumping level 68 ft. when pumping at _____ gpm for 30 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	20	20
gray clay	23	43
gravel	3	46
gray clay	4	50
gravel	8	58
gray clay	5	63
green clay	3	66
gray clay	19	85
gravel	2	87

Household - Private

DeWitt 12-039-21152-00 18-19N-03E

18. Formations passed through (continued)	Thickness	Bottom
gray clay	21	108
streaks of gravel	2	110
sand & gravel (dirty)	2	112
gray clay	1	113
sand & gravel (dirty)	2	115
gray clay	29	144
sand & gravel	1	145
gray clay	7	152
sand & gravel	5	157

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Heiden, Kevin Well No. #1
Address Rt. 1 Box 25 Wapella IL
Well address Route 4 Box 2714 Clinton, IL
Lot _____ Subd _____ ISWS P# 331750
Driller Mashburn, Robert License No. 102-3084
Permit No. 039-044-00 Date 10/30/2000
Water from sand County DeWitt
at depth 146 to 151 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 12

Sec. 18
Twp. 19 N
Rge. 3 E
Elev. _____

SE SW NW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	147
5	STAINLESS STL SCREEN	147	151

Size hole below casing: _____ in.
Static level 48 ft. below casing top which is 1 ft. above ground level. Pumping level 52 ft. when pumping at 12 gpm for 2 hours.

Formations passed through	Thickness	Bottom
yellow clay	18	18
gray clay	44	62
drift	2	64
green clay	9	73
gray clay	73	146
sand	5	151
gray clay at	0	151

Household - Private

DeWitt 12-039-21481-00 18-19N-3E

STATE OFFICE BUILDING, SPRINGFIELD,
AL / WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 6-15-72

10. Property owner Carl Reynolds Well No. 4
Address Decatur Ill.
Driller Ray DeMent License No. 92-68
11. Permit No. NA 14514 Date May-5-72
12. Water from Sand (Formation) 13. County Dewitt
at depth 57 to 62 ft.
14. Screen: Diam. 4 in.
Length: 4 ft. Slot .025

Sec. 18
Twp. 19N
Rge. 3E
Elev. 730 TM BM

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	11 lbs per ft.		
1 ft.	above ground	to	
	58 ft.		

SHOW LOCATION IN SECTION PLAT
200' SL, 100' EL of NE SE (permit)

16. Size Hole below casing: 6 in.
17. Static level 40 ft. below casing top which is 1 ft. above ground level. Pumping level 43 ft. when pumping at 6 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top soil	3	3
Yellow Clay	24	27
Blue Clay	30	57
Sand	5	62

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Ray DeMent DATE Nov. 1-72

COUNTY No. 588

DEWITT 18-19N-3E

16, STATE OFFICE BUILDING, SPRINGFIELD,
CAL / WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 5-10-71

10. Property owner Bob Fatheree Well No. _____
Address R#4 Clinton, Ill.
Driller Earl Woollen License No. 92-556
11. Permit No. NE10265 Date 3-8-71
12. Water from Sand + Gravel (Formation) 13. County DeWitt
at depth 159 to 166 ft.
14. Screen: Diam. 4" in.
Length: 3 ft. Slot .020

Sec. 18
Twp. 19N
Rge. 3E
Elev. 735 TM BM

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	VS	0	163

SHOW LOCATION IN SECTION PLAT
SW SW SW
(permit)

16. Size Hole below casing: _____ in.
17. Static level 60 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 10 gpm for 6 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow clay	16	16
Blue clay	46	62
Drift	1	63
Green clay	3	66
Gray hardpan	11	77
Drift	5	82
Green clay	10	92
Hardpan	67	159
Sand + Gravel	7	166

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Earl Woollen DATE 5-24-71

COUNTY No. 557

DEWITT A 18-19N-3E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Smith, John Well No. #1
Address R.R. #4 Box #2715 Clinton IL
Driller Layten, James License No. 102-2243
11. Permit No. 03901095 Date 05/16/95
12. Water from gravel 13. County DeWitt
at depth 144 to 167 ft.
14. Screen: Diam. 5 in.
Length: 4 ft. Slot 20

Sec. 18
Twp. 19 N
Rge. 3 E
Elev. ____

SW SE NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21	-1	143
5	SDR 21	147	163

16. Size hole below casing: _____ in.
17. Static level 45 ft. below casing top which is 0 ft. above ground level. Pumping level 58 ft. when pumping at 12 gpm for _____ hours.

18. Formations passed through	Thickness	Bottom
yellow clay	16	16
gray clay	31	47
peat	8	55
gray clay	25	80
gravel	1	81
gray clay	55	136
gravel	1	137
gray clay	7	144
gravel	3	147

Household - Private

DeWitt 12-039-21190-00 18-19N-03E

18. Formations passed through (continued)	Thickness	Bottom
gray clay	16	163
gravel	4	167
gray clay at	0	167

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Matherly, Shelby Well No. #1
    Address 23B Manor Hill Rd. Clinton IL
    Driller Sims, Ronald M. Jr. License No. 102-3423
11. Permit No. 03900493 Date 03/12/93
12. Water from sand 13. County DeWitt
    at depth 157 to 164 ft.
14. Screen: Diam. 5 in.
    Length: 4 ft. Slot 14

Sec. 18
Twp. 19 N
Rge. 3 E
Elev. 730 TM BM

NW SW SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	SDR 21 PVC	0	160

16. Size hole below casing: _____ in.
17. Static level 65 ft. below casing top which is 1 ft. above ground level. Pumping level _____ ft. when pumping at 20 gpm for 1 hours.

18. Formations passed through	Thickness	Bottom
brown dirt	1	1
brown clay	14	15
gray clay	57	72
interlayered gray & brown clay	8	80
gray clay w/gravel streak at 97'	53	133
sand streak	1	134
gray clay	8	142
sand streak	1	143
sandy gray clay	14	157

Household - Private

DeWitt 12-039-21041-00 18-19N-03E

18. Formations passed through (continued)	Thickness	Bottom
fine to coarse sand	7	164
gray clay at	0	164

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Curry, William L. Well No. _____
Address Maroa IL
Well address RR Clinton, IL
Lot _____ Subd _____ ISWS P#. _____
Driller Mashburn, Robert License No. 102-3084
Permit No. 03901197 Date 04/17/1997
Water from sand County DeWitt
at depth 227 to 302 ft.
Screen: Diam. 5 in.
Length: 4 ft. Slot 20

Sec. 21
Twp. 19 N
Rge. 2 E
Elev. _____

SE NW SE

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	298

Size hole below casing: _____ in.
Static level 116 ft. below casing top which is 1 ft. above ground level. Pumping level 120 ft. when pumping at 15 gpm for 2 hours.

Formations passed through	Thickness	Bottom
yellow clay	17	17
gray clay	55	72
drift	2	74
green clay	3	77
gray clay	150	227
fine sand	28	255
medium sand	30	285
medium to coarse sand	17	302

Household - Private

DeWitt 12-039-21319-00 21-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Willoughby, Orville E. Well No. #11
Address RR De Witt IL
Driller DeMent Ray License No. 92-686
11. Permit No. 80231 Date 10/02/78
12. Water from sand 13. County DeWitt
at depth 205 to 232 ft.
14. Screen: Diam. 4 in.
Length: 3 ft. Slot .012

Sec. 21
Twp. 19 N
Rge. 2 E
Elev. 690

150'S 200'W NEc

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
4	STEEL 11# PER FT.	0	232

Fld Verifd

16. Size hole below casing: _____ in.
17. Static level 110 ft. below casing top which is 1 ft. above ground level. Pumping level 130 ft. when pumping at 8 gpm for 3 hours.

18. Formations passed through	Thickness	Bottom
top soil	3	3
yellow clay	17	20
blue clay	120	140
dirty sand	1	141
hardpan	64	205
sand	27	232

DeWitt 12-039-20709-00 21-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Snyder, Dan Well No. #1
    Address R.R. #2 P.O. Box #122 Clinton IL
    Driller Mashburn, Grover C. Jr. License No. 102-1930
11. Permit No. 03900791 Date 06/27/91
12. Water from sand 13. County DeWitt
    at depth 64 to 69 ft.
14. Screen: Diam. 5 in.
    Length: 4 ft. Slot 18

Sec. 21
Twp. 19 N
Rge. 2 E
Elev. 730TA
BY

SE NW NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-2	65

16. Size hole below casing: _____ in.
17. Static level 38 ft. below casing top which is 2 ft. above ground level. Pumping level 43 ft. when pumping at 15 gpm for 2 hours.

18. Formations passed through	Thickness	Bottom
yellow clay	19	19
gray clay	45	64
sand & gravel	5	69
gray clay at	0	69

Household - Private

DeWitt 12-039-21003-00 21-19N-02E

TOWN

TOWNSHIP Texas

R. 2E

COMPANY Woollen Brs.

NO.

T. 19N

SEC. 21

FARM Whitehead, Harvey

NO.

DATE DRILLED November 1945

AUTHORITY Woollen Bros.

COLLECTOR

ELEVATION 723 Holfe

NE cor. of NE

No.	Co. no 127 Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil, yellow clay			0-16	
	Blue clay	46		62	
	Like dry gravel				
	Gravel, water	28		90	
	Total depth			90	
	4" hole				
	87' of pipe				
	No draw down				
	5 g.p.m. for 1 hour				
	Water clear				
	Water level 62'				
	Finished in gravel at 62' to 90'				
	Pipe loose, can be slotted at 62 - 90				
	Cook Brass Screen, Size 4", Length 3, Slot 25.				
	Owners Pump				
	[redacted] NO ENVELOPE				

COUNTY Dewitt

21-19N-2E

SAMPLE SET NO.

(84107—20M—6-45)

ILLINOIS GEOLOGICAL SURVEY, URBANA

STATE OFFICE BUILDING, SPRINGFIELD,
AL / WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 4-72

10. Property owner LaVerne Eich Well No. _____
Address Rt 2 Clinton, Ill.
Driller Earl Woollen License No. 92-556
11. Permit No. 14054 Date 3-29-72
12. Water from Sand + Gravel (Formation) 13. County DeWitt
at depth 94 to 97 ft. Sec. 21
14. Screen: Diam. 4 in. Twp. 19N
Length: 3 ft. Slot .025 Rge. 2E
Elev. _____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	US 12#	0	94

SHOW LOCATION IN SECTION PLAT
SE SW SE
(permit)

16. Size Hole below casing: _____ in.
17. Static level 60 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Soil + yellow	16	16
Blue clay	40	56
Drift	1	57
Green clay	9	65
Gray Hardpan	29	94
Sand + Gravel	3	97
clay		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Earl Woollen DATE May 9 '72

COUNTY No. 321

DEWITT 21-19N-2E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Property owner Cyrulick, Mike Well No. _____
Address Rt. #1 Box #293C Clinton IL
Well address same as above
Lot _____ Subd _____ ISWS P# 305327
Driller Mashburn, Robert License No. 102-3084
Permit No. 03902898 Date 08/19/1998
Water from sand County DeWitt
at depth 235 to 300 ft.
Screen: Diam. 5 in.
Length: 8 ft. Slot 15

Sec. 22
Twp. 19 N
Rge. 2 E
Elev. _____

SW NE NW

Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft)	To (ft)
5	PVC SDR 21	-1	292

Size hole below casing: _____ in.
Static level 127 ft. below casing top which is 1 ft. above ground level. Pumping level 129 ft. when pumping at 15 gpm for 2 hours.

Formations passed through	Thickness	Bottom
topsoil	2	2
yellow clay	16	18
gray clay	43	61
drift	2	63
green clay	6	69
gray clay	166	235
fine sand	20	255
medium to coarse sand	45	300

Household - Private

DeWitt 12-039-21357-00 22-19N-2E

ESTED AND MAIL ORIGINAL TO STATE
MER HEALTH PROTECTION, 535 WEST
. DO NOT DETACH GEOLOGICAL/WATER
PROPER LOCATIO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed December, 1979

10. Property owner TOM MICHAELS Well No. 1
Address RT 2 CLINTON
Driller GC MASHBURN JR License No. 102-193
11. Permit No. 91414 Date NOV 15-79
12. Water from SAND (Formation) 13. County DEWITT
at depth 227 to 260 ft.
14. Screen: Diam. 4 in.
Length: 4 ft. Slot 18

Sec. 22
Twp. 19N
Rge. 2E
Elev. 700TM B4

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	SDR 21 PVC	+1	256

SHOW LOCATION IN SECTION PLAT
400'NL 500'WL
NW NE
(permit)

16. Size Hole below casing: — in.
17. Static level 102 ft. below casing top which is 1 ft. above ground level. Pumping level 103 ft. when pumping at 15 gpm for 2 hours. Sub pump set at 125'.

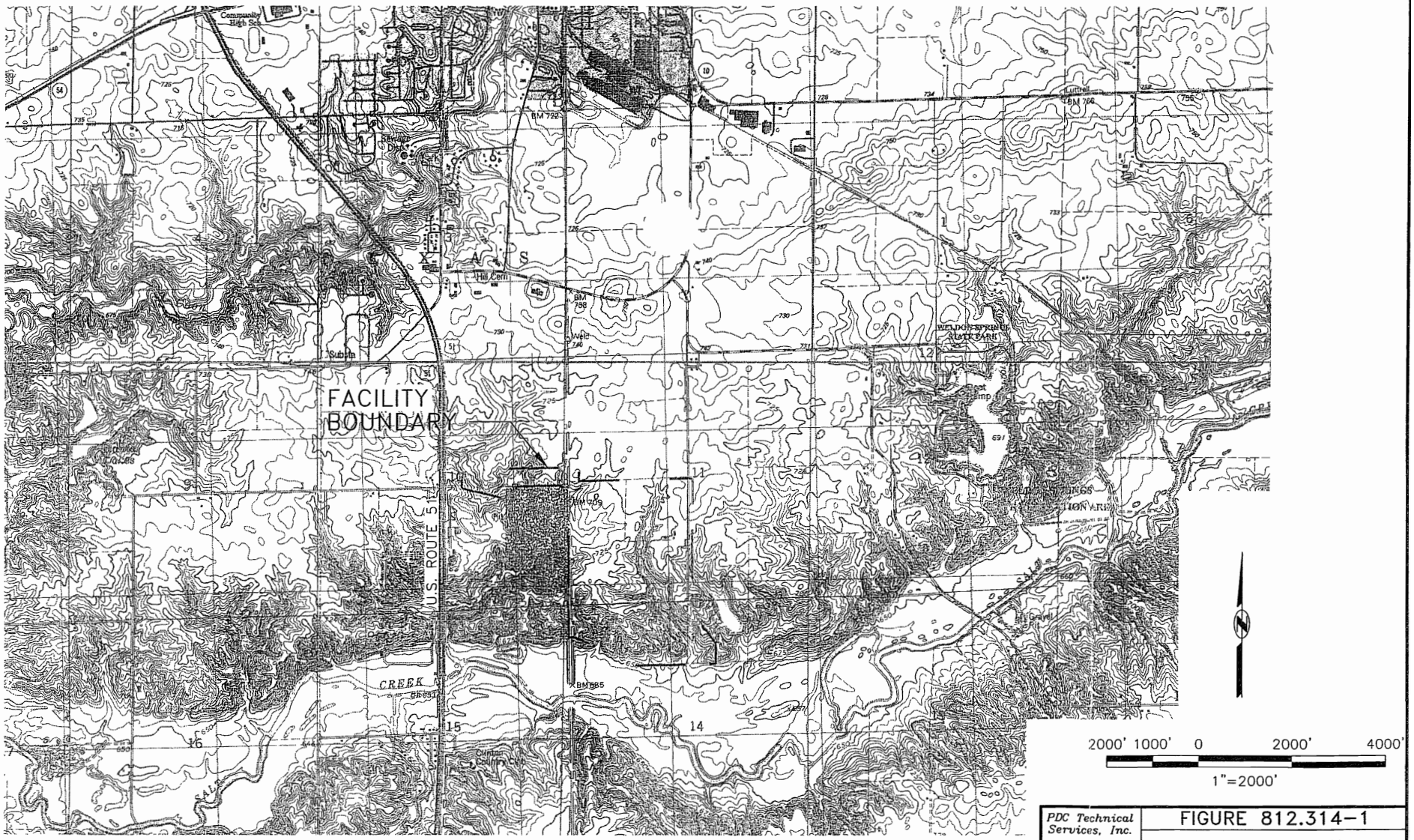
18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	16	16
GREY CLAY	211	227
FINE SAND	18	245
COURSE SAND	15	260
STOPPED AT 260		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE JAN 3 - 1980

DEWITT COUNTY No. 20756 22-19N-2E

CAD DWG NO:911181027 EMPLOYEE NO: 89736 DATE/TIME: 02/16/05 18:20 ACAD-15.



SOURCE: CLINTON (2001), MAROA (2001); ILLINOIS QUAD PHOTO MAPS, USGS 7.5' TOPOGRAPHIC MAPS

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Peoria, Illinois

FIGURE 812.314-1

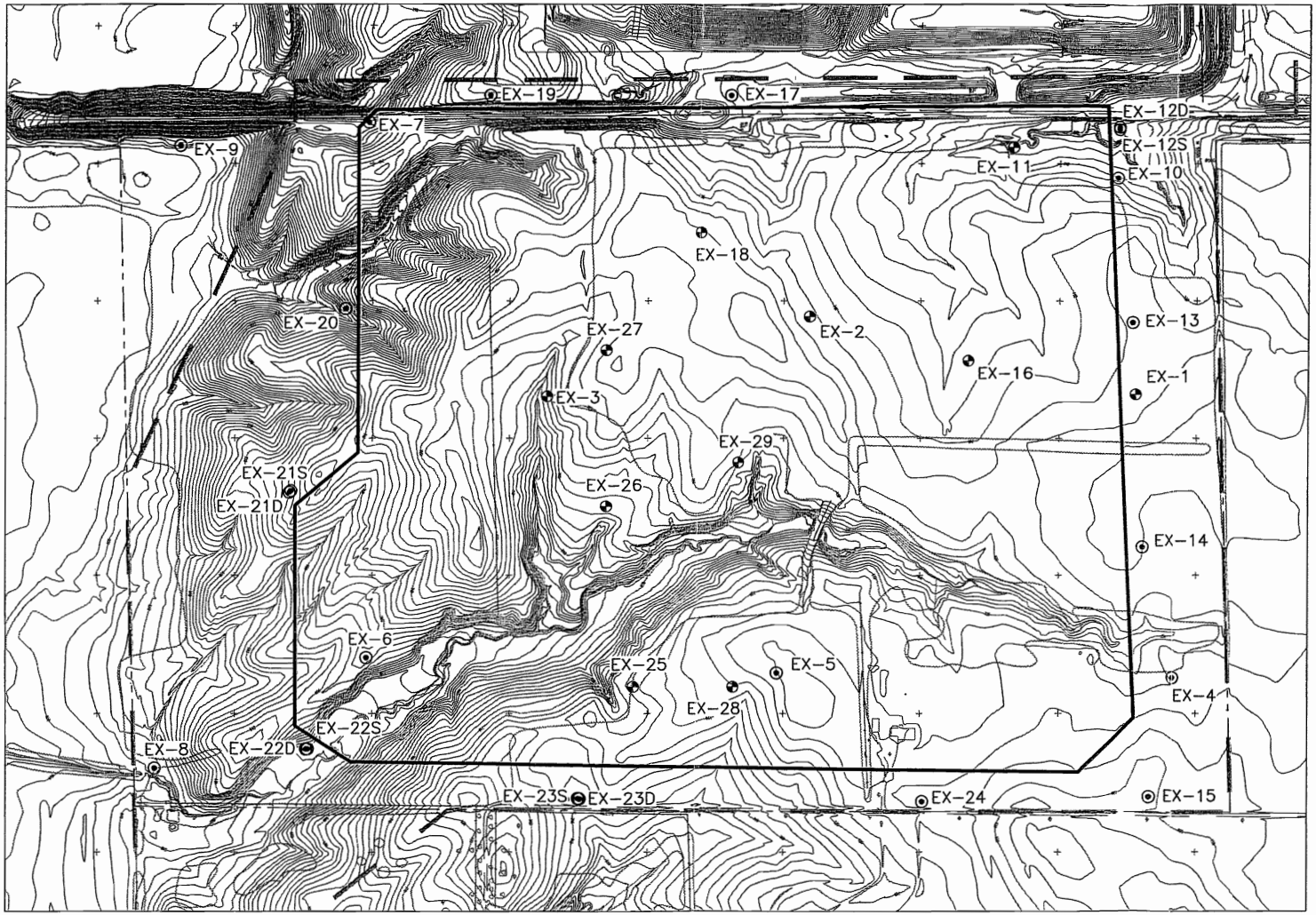
AREA TOPOGRAPHY

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:911181052 EMPLOYEE NO: 9834 DATE/TIME: 02/26/05 09:03 ACAD-15.



400' 200' 0 400' 800'

1"=400'

LEGEND

- PIEZOMETER
- BORING
- PROPERTY LINE
- FACILITY BOUNDARY
- PROPOSED WASTE BOUNDARY

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Peoria, Illinois

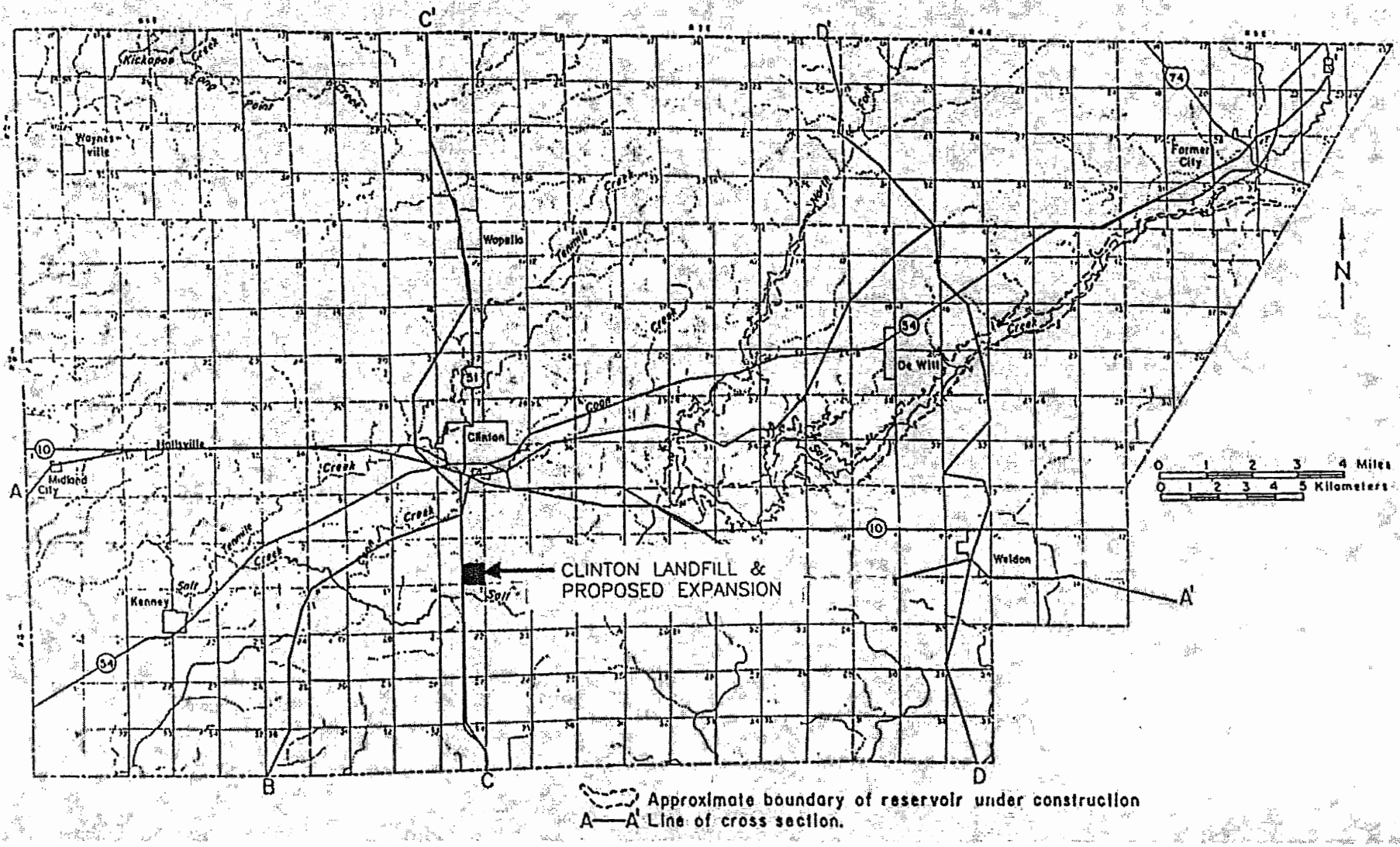
FIGURE 812.314-2

SITE PLAN WITH BORING LOCATIONS

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118



REPRODUCED FROM HUNT & KEMPTON (1977), FIGURE 1

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Peoria, Illinois

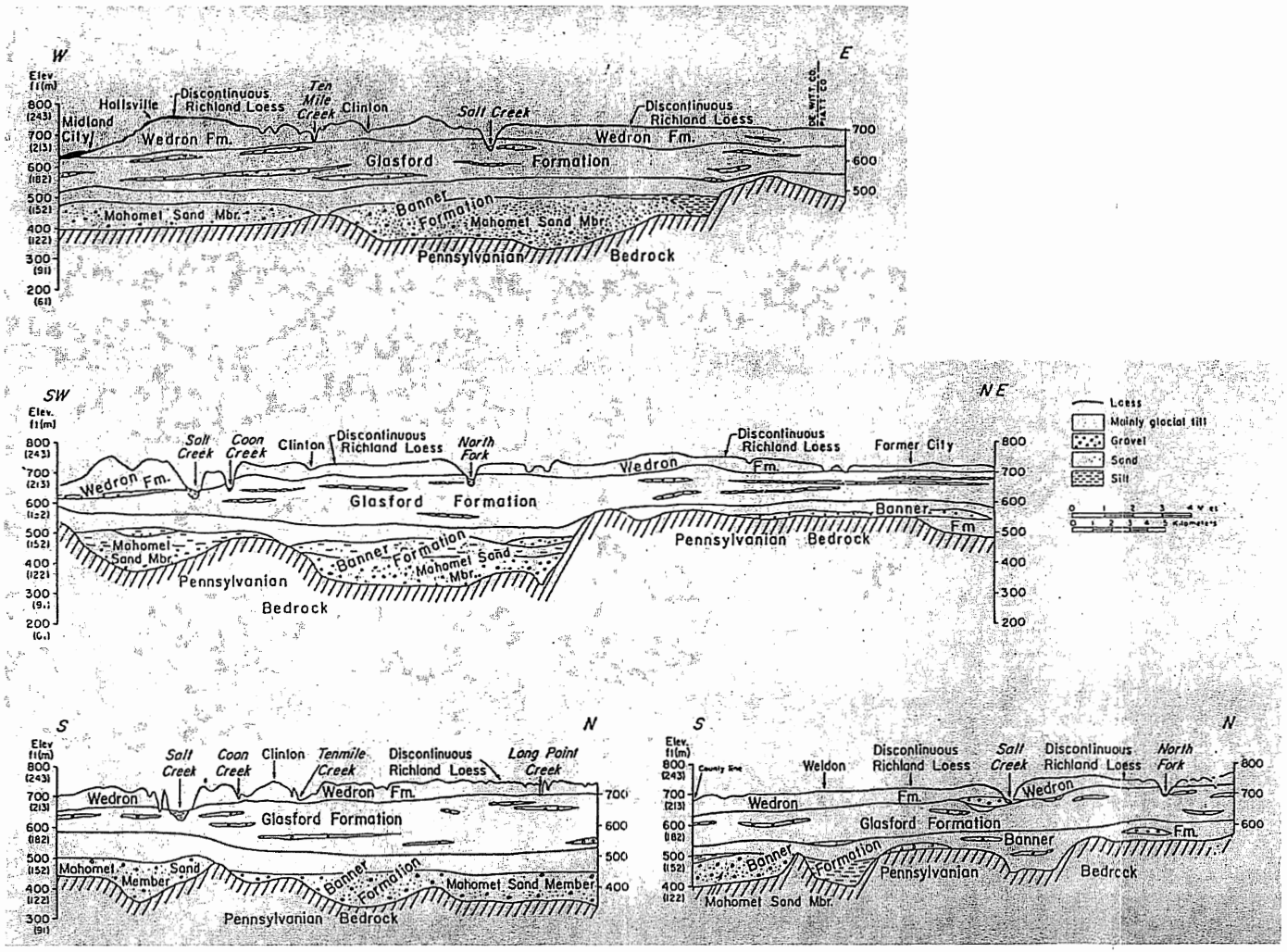
FIGURE 812.314-3

PLAN OF REGIONAL CROSS SECTIONS DE WITT COUNTY, ILLINOIS

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118



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Peoria, Illinois

FIGURE 812.314-4

GENERALIZED CROSS SECTIONS OF THE UNCONSOLIDATED GEOLOGIC MATERIALS

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118

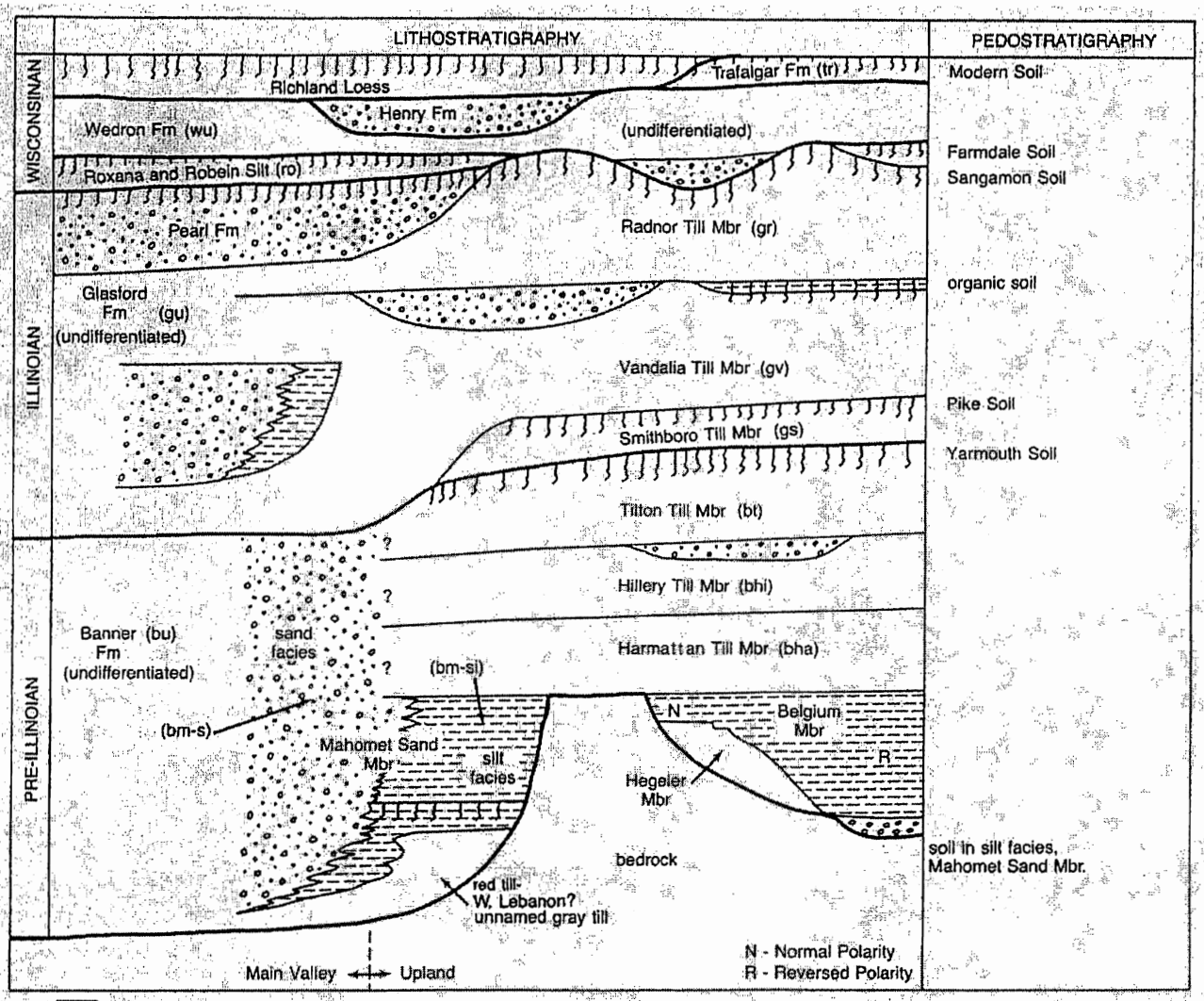
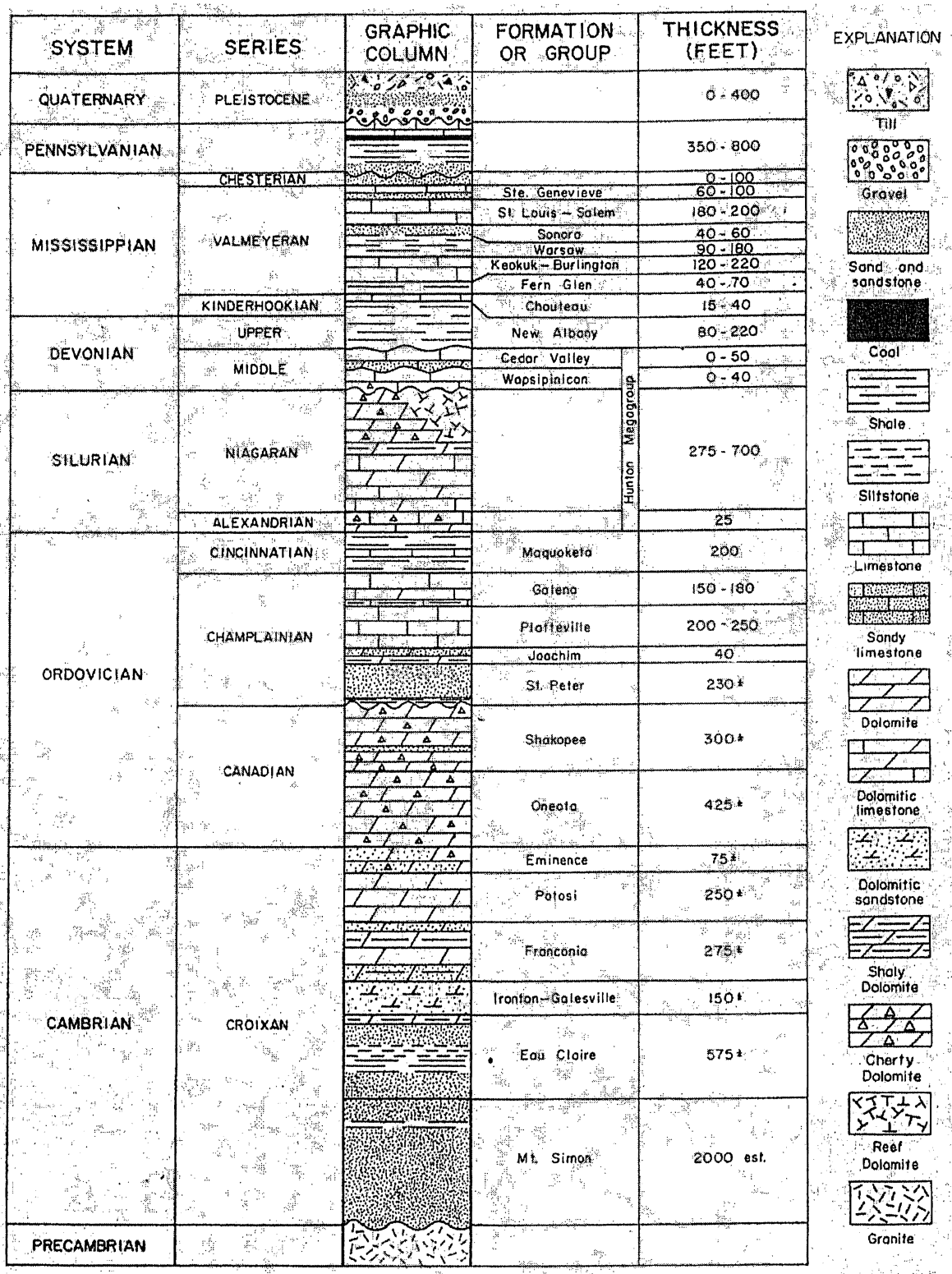


Figure 13. Pleistocene stratigraphy of east-central Illinois.

(KEMPTON ET. AL. 1991)

Illinois Licensed Professional Design Firm 184-001145	PDC Technical Services, Inc. Peoria, Illinois	FIGURE 812.314-5
		PLEISTOCENE STRATIGRAPHY OF EAST-CENTRAL ILLINOIS
		CLINTON LANDFILL NO. 3
		CLINTON, ILLINOIS
		PROJECT NO. 91-118



(HOWARD, 1962, FIGURE 2)

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Peoria, Illinois

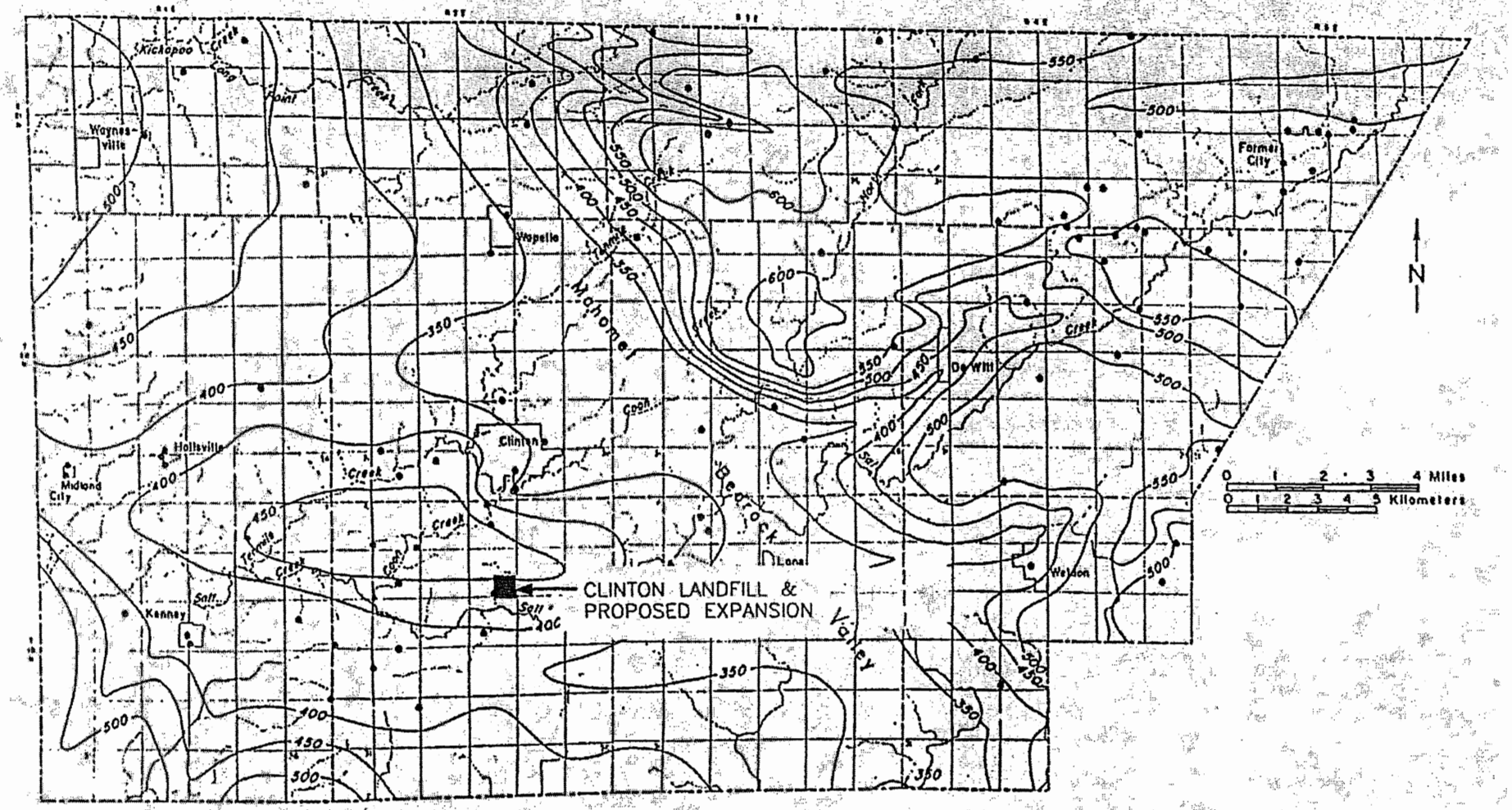
FIGURE 812.314-6

ROCK UNITS UNDER DE WITT COUNTY, ILLINOIS

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118



REPRODUCED FROM HUNT & KEMPTON (1977), FIGURE 3

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FIGURE 812.314-7

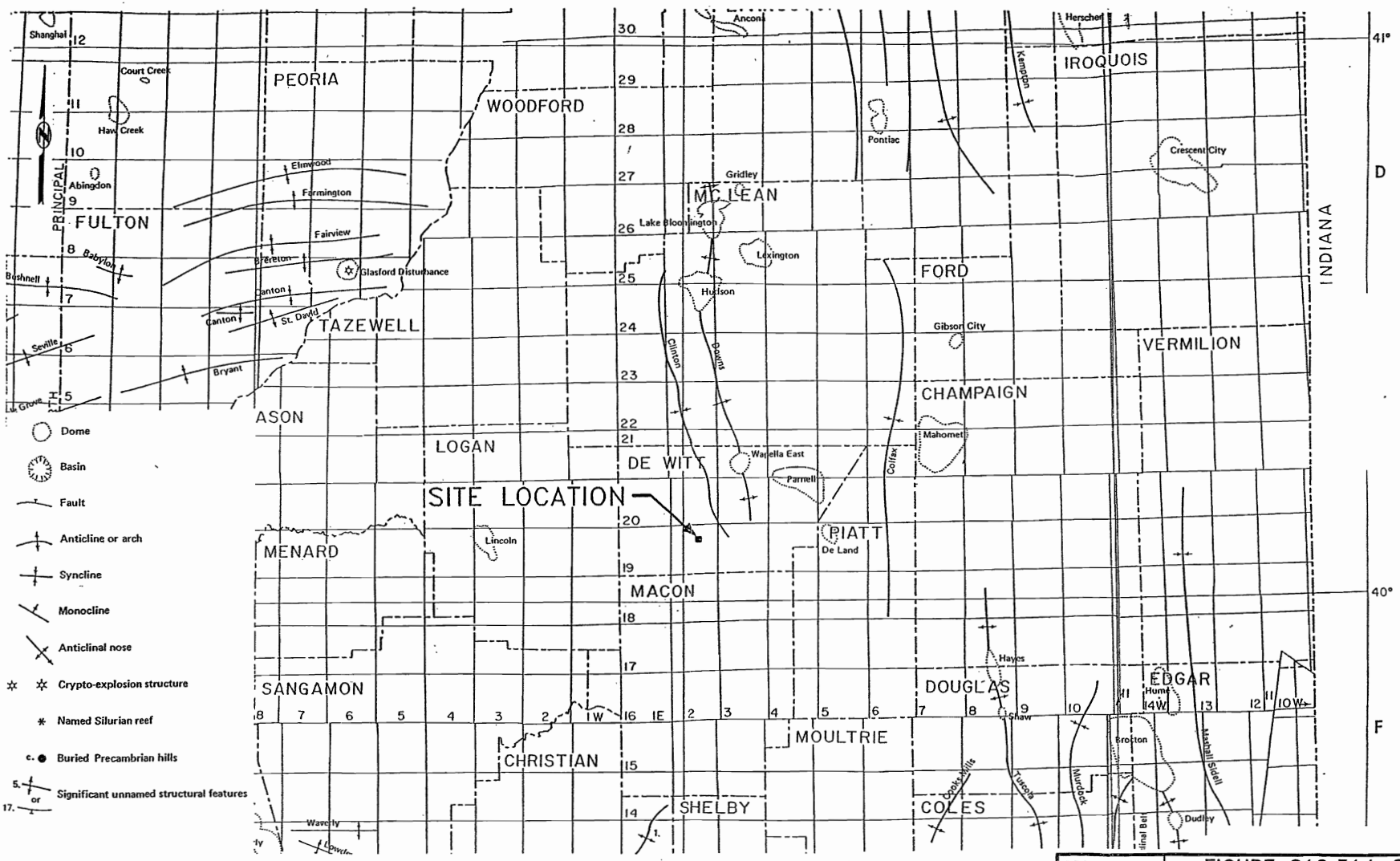
BEDROCK SURFACE TOPOGRAPHY
DE WITT COUNTY, ILLINOIS

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:911181033 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 13:41 ACAD-15.



Source: STRUCTURAL FEATURES OF ILLINOIS
Circular 519 Plate 1
Illinois Institute of Natural Resources
State Geological Survey Division

Illinois Licensed Professional
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Peoria, Illinois

FIGURE 812.314-8

SITE FEATURE MAP

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118

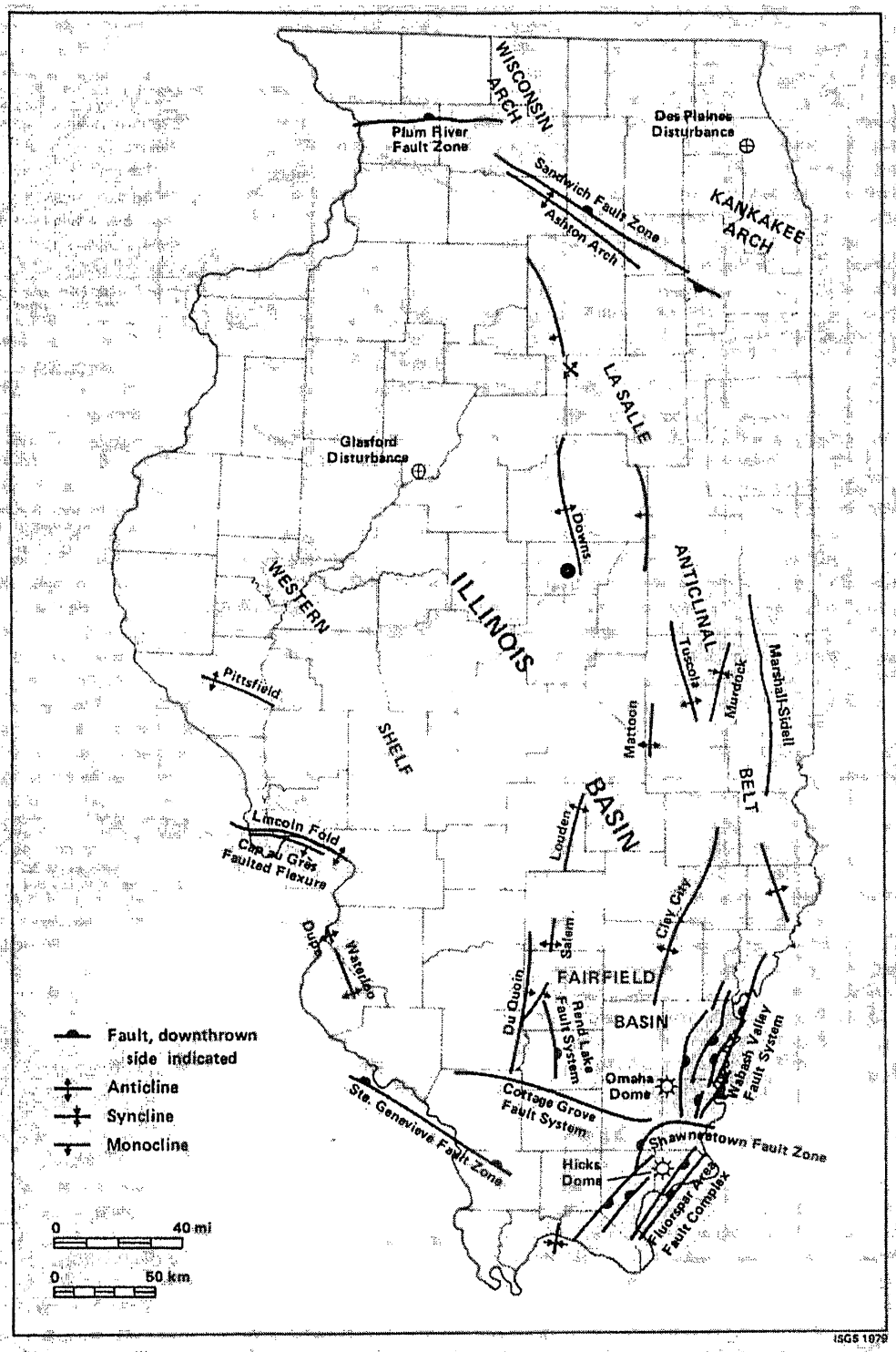

Figure 1. Geologic structures of Illinois (modified after Krausse et al., 1979).

SOURCE: Keys, John N. and Nelson, W. John. "The Rend Lake Fault System in Southern Illinois". Circular 153, Illinois State Geological Survey; Urbana, Illinois, 1980.

● – SITE LOCATION

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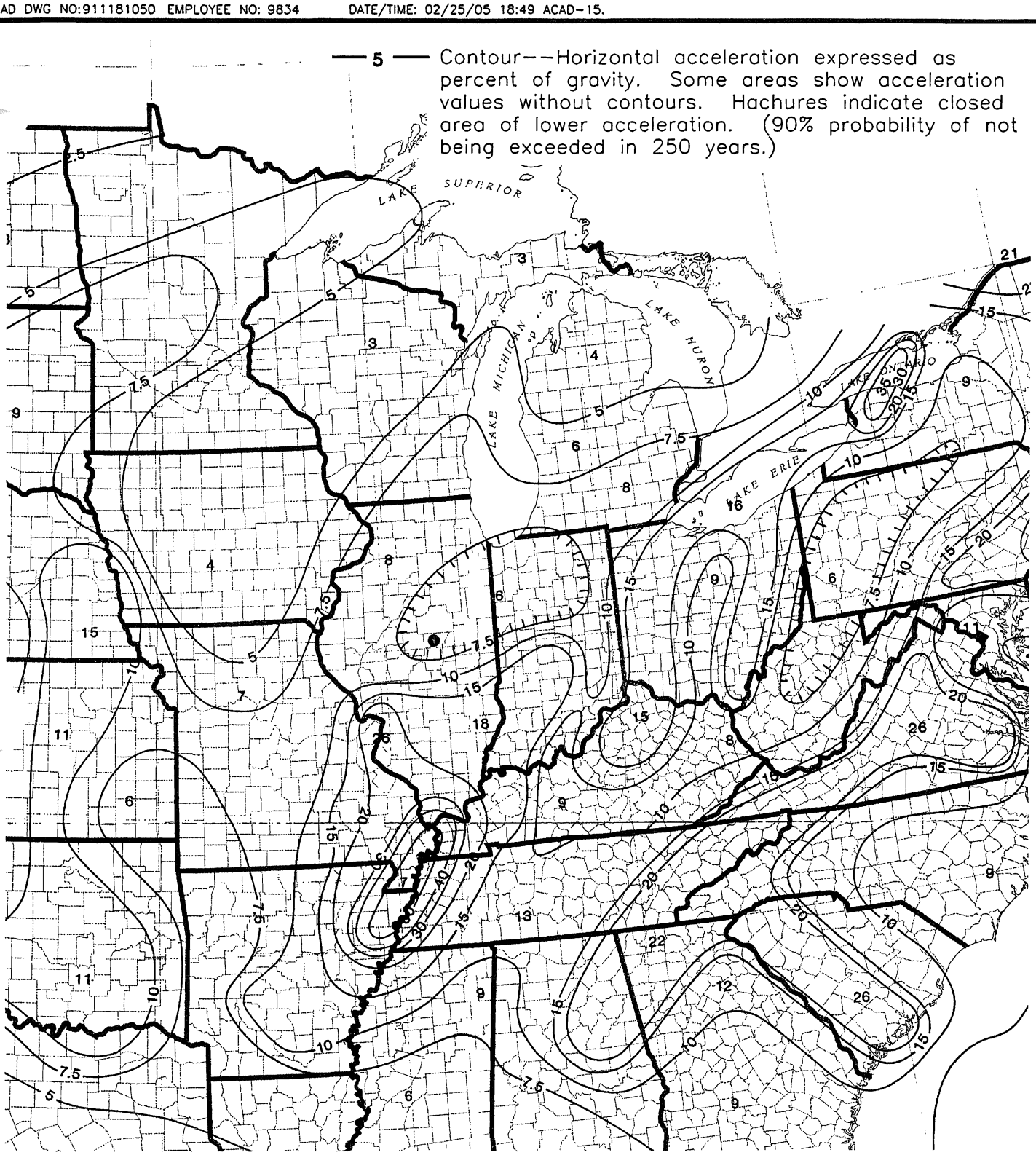
FIGURE 812.314-9

GEOLOGIC STRUCTURE MAP

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-143



(S. T. ALGERMISSEN, D. M. PERKINS, P. C. THENHAUS, S. L. HANSON, AND B. L. BENDER, 1990)

● – SITE LOCATION

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FIGURE 812.314-10

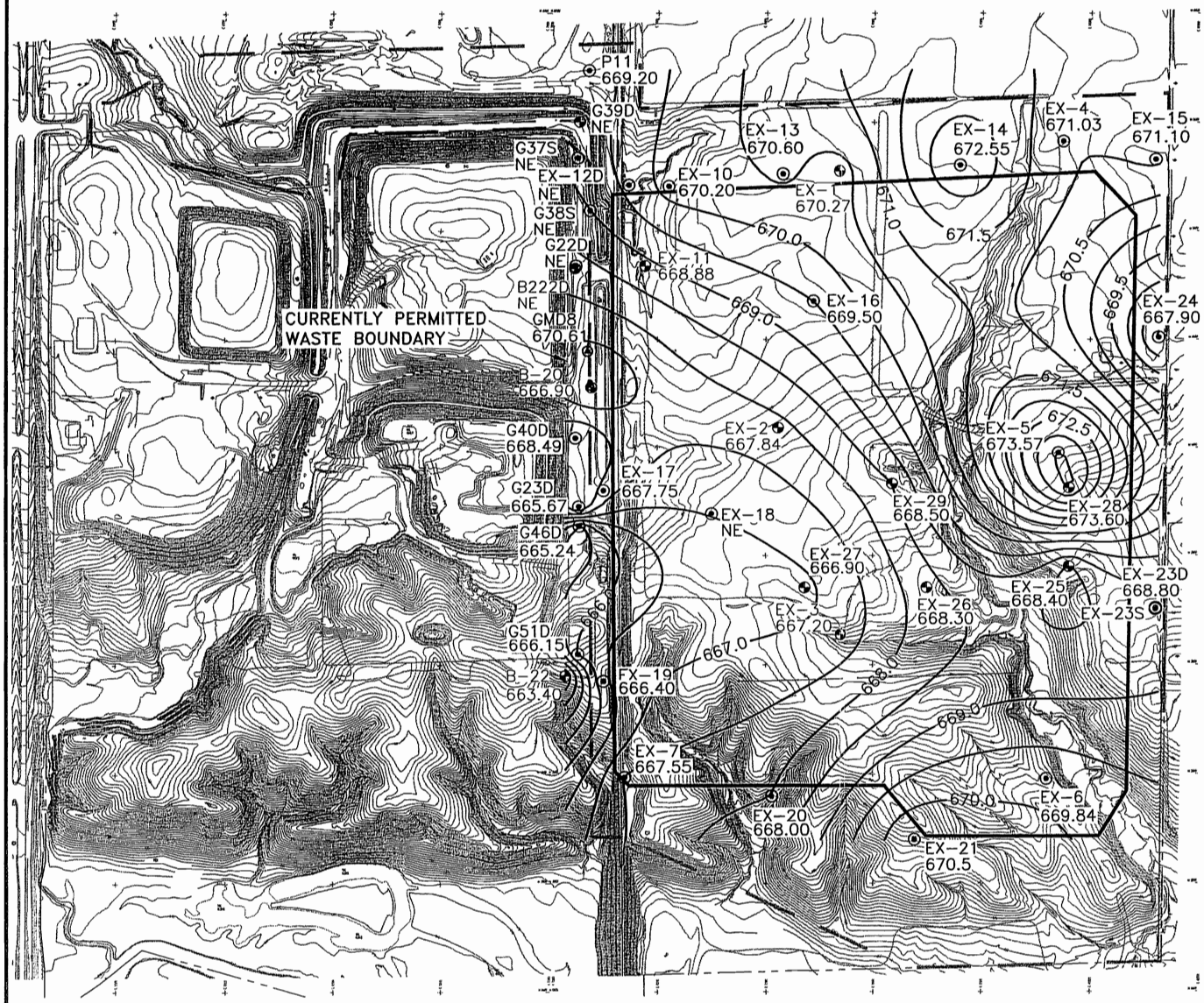
PROBABILISTIC EARTHQUAKE ACCELERATION AND VELOCITY MAP

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-143

CAD DWG NO:91118963 EMPLOYEE NO: 89736 DATE/TIME: 02/16/05 16:24 ACAD-15.



500' 250' 0 500' 100'

1"=500'

LEGEND

- SOIL BORING
- PIEZOMETER
- GAS MONITORING WELL
- 671.5 — ELEVATION CONTOUR (FEET-MEAN SEA LEVEL) TOP OF ROXANA SILT-ROBEIN MEMBER
- 673.60 — ELEVATION (FEET-MEAN SEA LEVEL) TOP OF ROXANA SILT-ROBEIN MEMBER
- NE — ROXANA SILT-ROBEIN MEMBER NOT ENCOUNTERED
- PROPERTY LINE
- FACILITY BOUNDARY
- PROPOSED WASTE BOUNDARY

NOTE: ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE ROXANA SILT-ROBEIN MEMBER ARE SHOWN.

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FIGURE 812.314-11

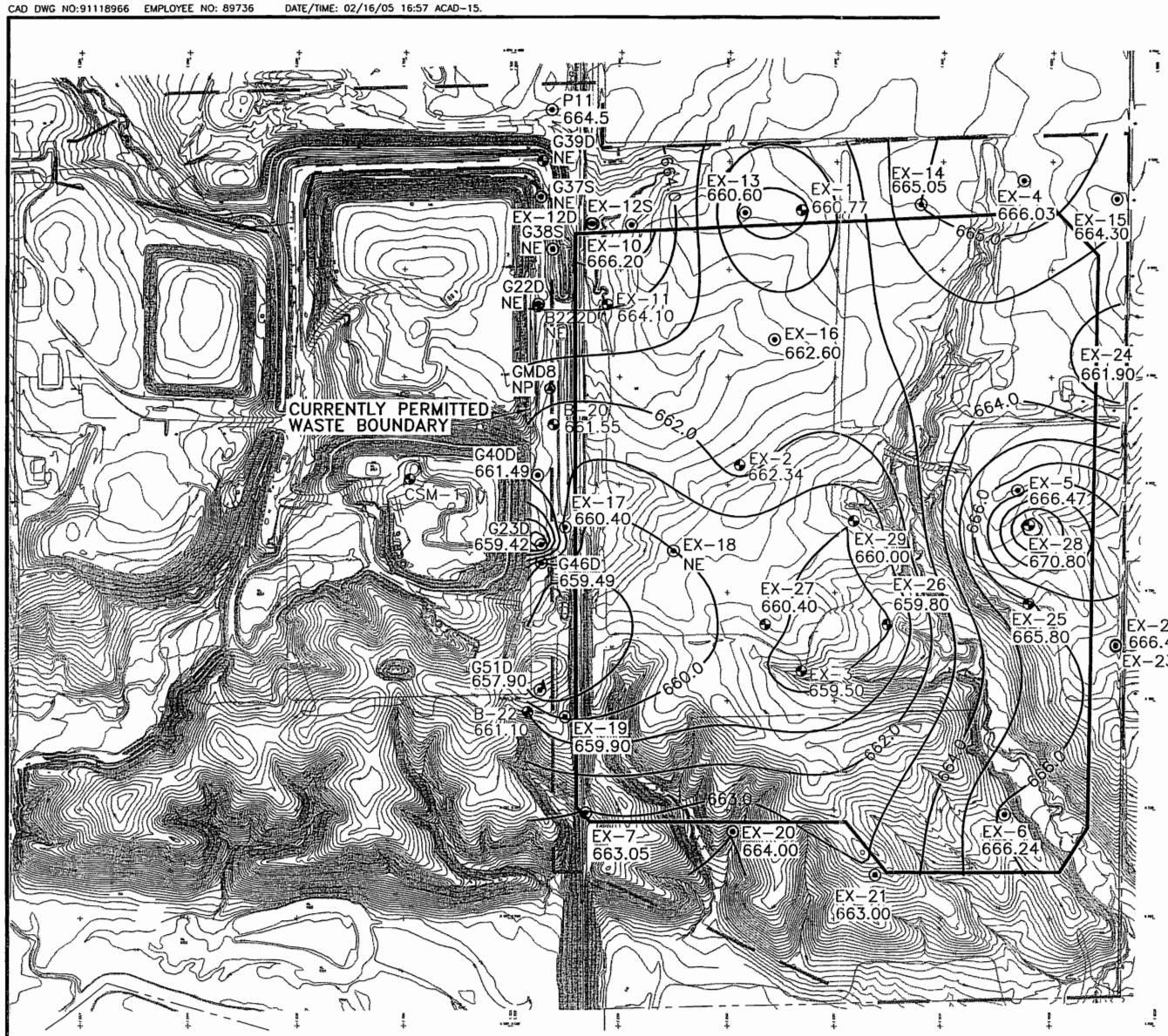
ELEVATION OF THE TOP OF ROXANA SILT-ROBEIN MEMBER

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118.02

CAD DWG NO:91118966 EMPLOYEE NO: 89736 DATE/TIME: 02/16/05 16:57 ACAD-15.



500' 250' 0 500' 100'

1"=500'

LEGEND

	SOIL BORING
	PIEZOMETER
	GAS MONITORING WELL
664.0	ELEVATION CONTOUR (FEET-MEAN SEA LEVEL) BOTTOM OF ROXANA SILT-ROBEIN MEMBER
666.47	ELEVATION (FEET-MEAN SEA LEVEL) BOTTOM OF ROXANA SILT-ROBEIN MEMBER
NE	ROXANA SILT NOT ENCOUNTERED
NP	ROXANA SILT NOT FULLY PENETRATED
	PROPERTY LINE
	FACILITY BOUNDARY
	PROPOSED WASTE BOUNDARY

NOTE: ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE ROXANA SILT-ROBEIN MEMBER ARE SHOWN.

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PDC Technical Services, Inc.

Peoria, Illinois

FIGURE 812.314-12

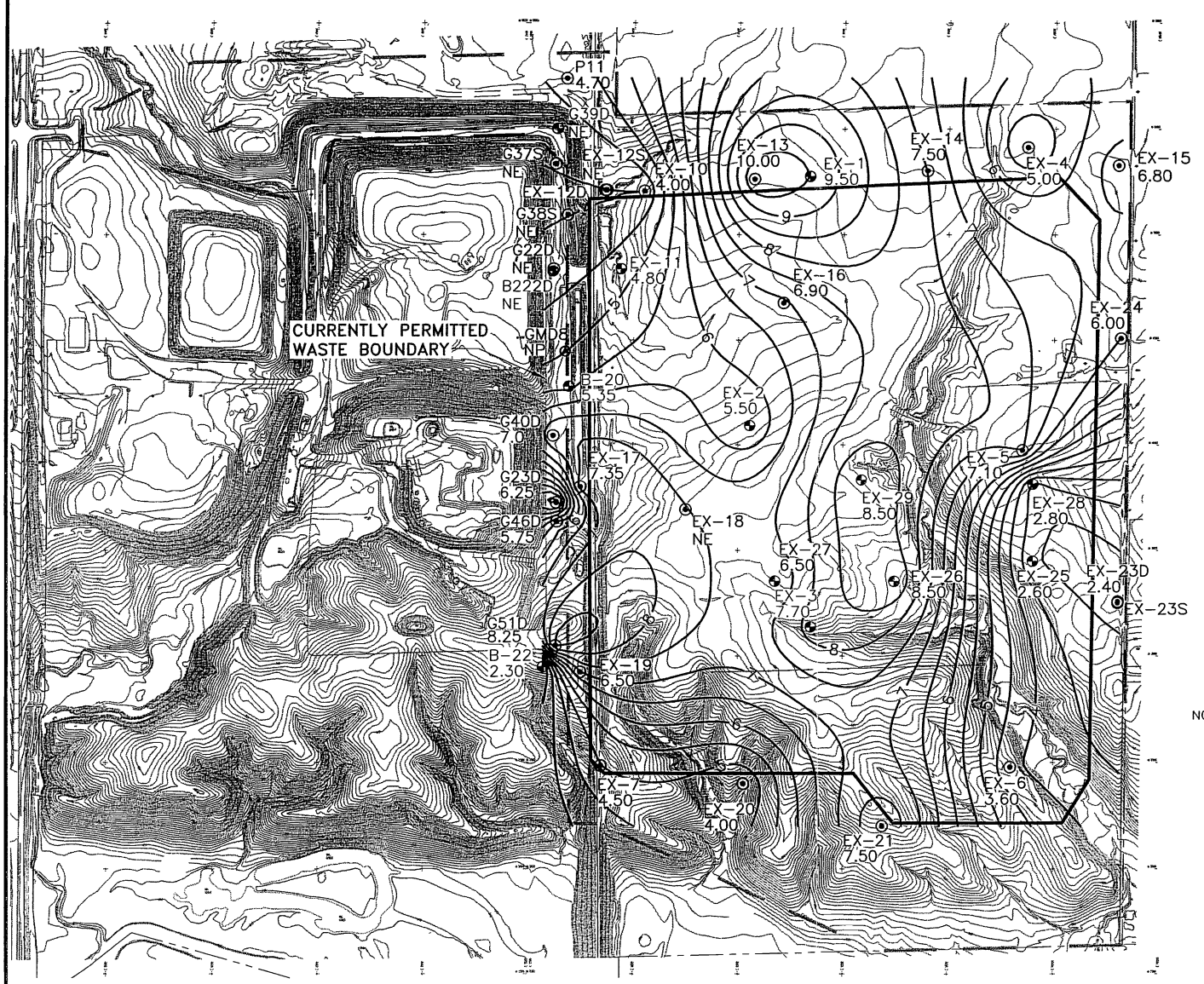
ELEVATION OF THE BOTTOM OF ROXANA SILT-ROBEIN MEMBER

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118.02

CAD DWG NO:91118964 EMPLOYEE NO: 89736 DATE/TIME: 02/16/05 17:13 ACAD-15.



500' 250' 0 500' 100'

1"=500'

LEGEND

	SOIL BORING
	PIEZOMETER
	GAS MONITORING WELL
5	THICKNESS CONTOUR–ROXANA SILT–ROBEIN MEMBER (FEET)
7	THICKNESS–ROXANA SILT–ROBEIN MEMBER (FEET)
NE	ROXANA SILT–ROBEIN MEMBER NOT ENCOUNTERED
NP	ROXANA SILT–ROBEIN MEMBER NOT FULLY PENETRATED
	PROPERTY LINE
	FACILITY BOUNDARY
	PROPOSED WASTE BOUNDARY

NOTE: ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE ROXANA SILT–ROBEIN MEMBER ARE SHOWN.

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Peoria, Illinois

FIGURE 812.314-13

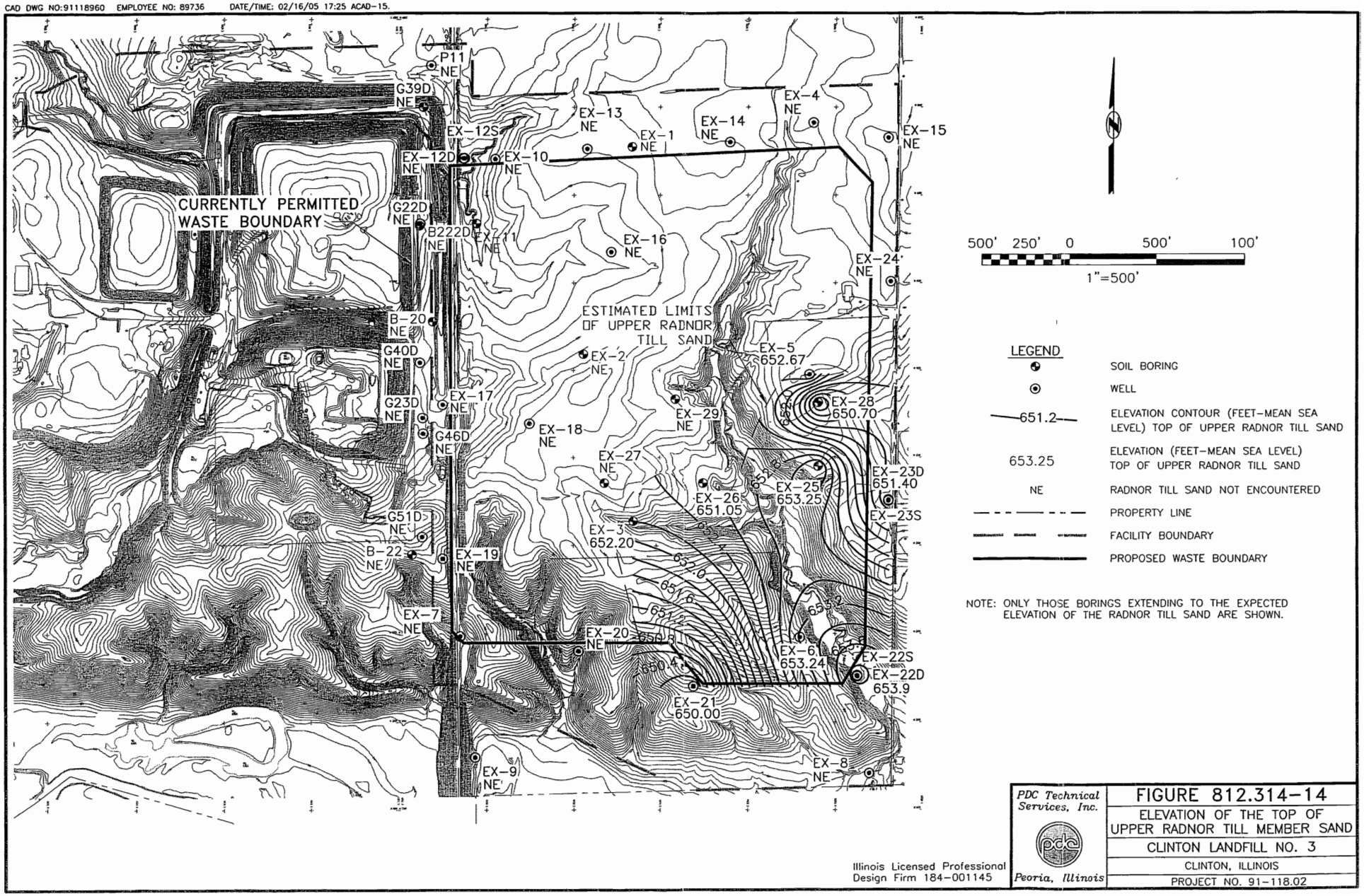
THICKNESS OF THE ROXANA SILT–ROBEIN MEMBER

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118.02

CAD DWG NO:91118960 EMPLOYEE NO: 89736 DATE/TIME: 02/16/05 17:25 ACAD-15.



NOTE: ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE RADNOR TILL SAND ARE SHOWN.

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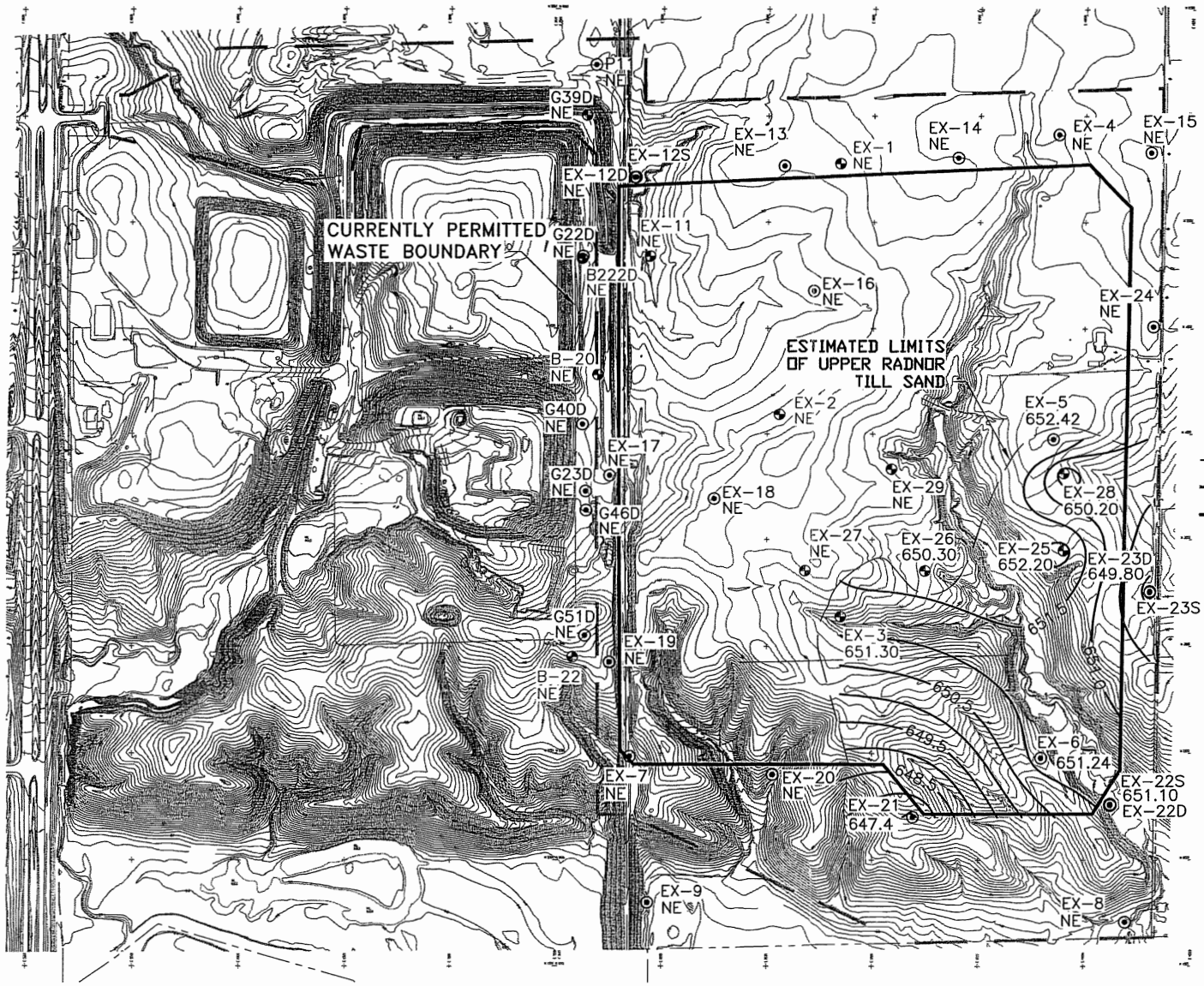
PDC Technical Services, Inc.
Peoria, Illinois

FIGURE 812.314-14
ELEVATION OF THE TOP OF UPPER RADNOR TILL MEMBER SAND
CLINTON LANDFILL NO. 3
CLINTON, ILLINOIS
PROJECT NO. 91-118.02

CAD DWG NO:91118961 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 07:18 ACAD-15.



500' 250' 0 500' 100'

1"=500'

LEGEND

⊕	SOIL BORING
⊙	PIEZOMETER
—649.5—	ELEVATION CONTOUR (FEET-MEAN SEA LEVEL) BOTTOM OF UPPER RADNOR TILL SAND
652.20	ELEVATION (FEET-MEAN SEA LEVEL) BOTTOM OF UPPER RADNOR TILL SAND
NE	RADNOR TILL SAND NOT ENCOUNTERED
— — —	PROPERTY LINE
— — —	FACILITY BOUNDARY
———	PROPOSED WASTE BOUNDARY

NOTE: ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE RADNOR TILL SAND ARE SHOWN.

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PDC Technical Services, Inc.
Peoria, Illinois

FIGURE 812.314-15

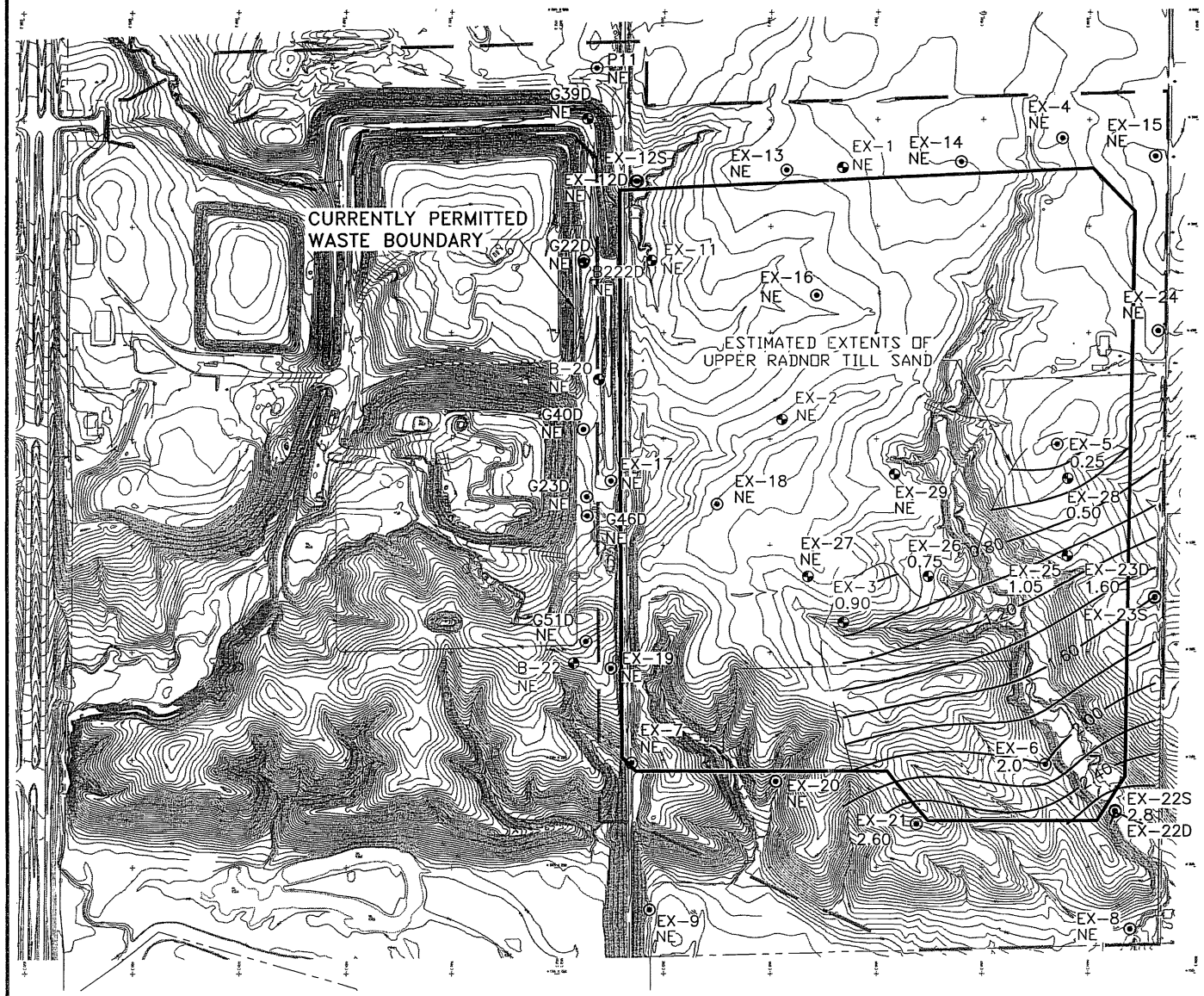
ELEVATION OF THE BOTTOM OF UPPER RADNOR TILL MEMBER SAND

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118.02

CAD DWG NO:91118962 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 07:21 ACAD-15.



500' 250' 0 500' 100'

1"=500'

LEGEND

⊕	SOIL BORING
⊙	PIEZOMETER
NE	RADNOR TILL SAND NOT ENCOUNTERED
—1.20—	THICKNESS CONTOUR – UPPER RADNOR TILL SAND (FEET)
1.05	THICKNESS UPPER RADNOR TILL SAND (FEET)
———	PROPERTY LINE
— — —	FACILITY BOUNDARY
═══	PROPOSED WASTE BOUNDARY

NOTE: ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE RADNOR TILL SAND ARE SHOWN.

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PDC Technical Services, Inc.

Peoria, Illinois

FIGURE 812.314-16

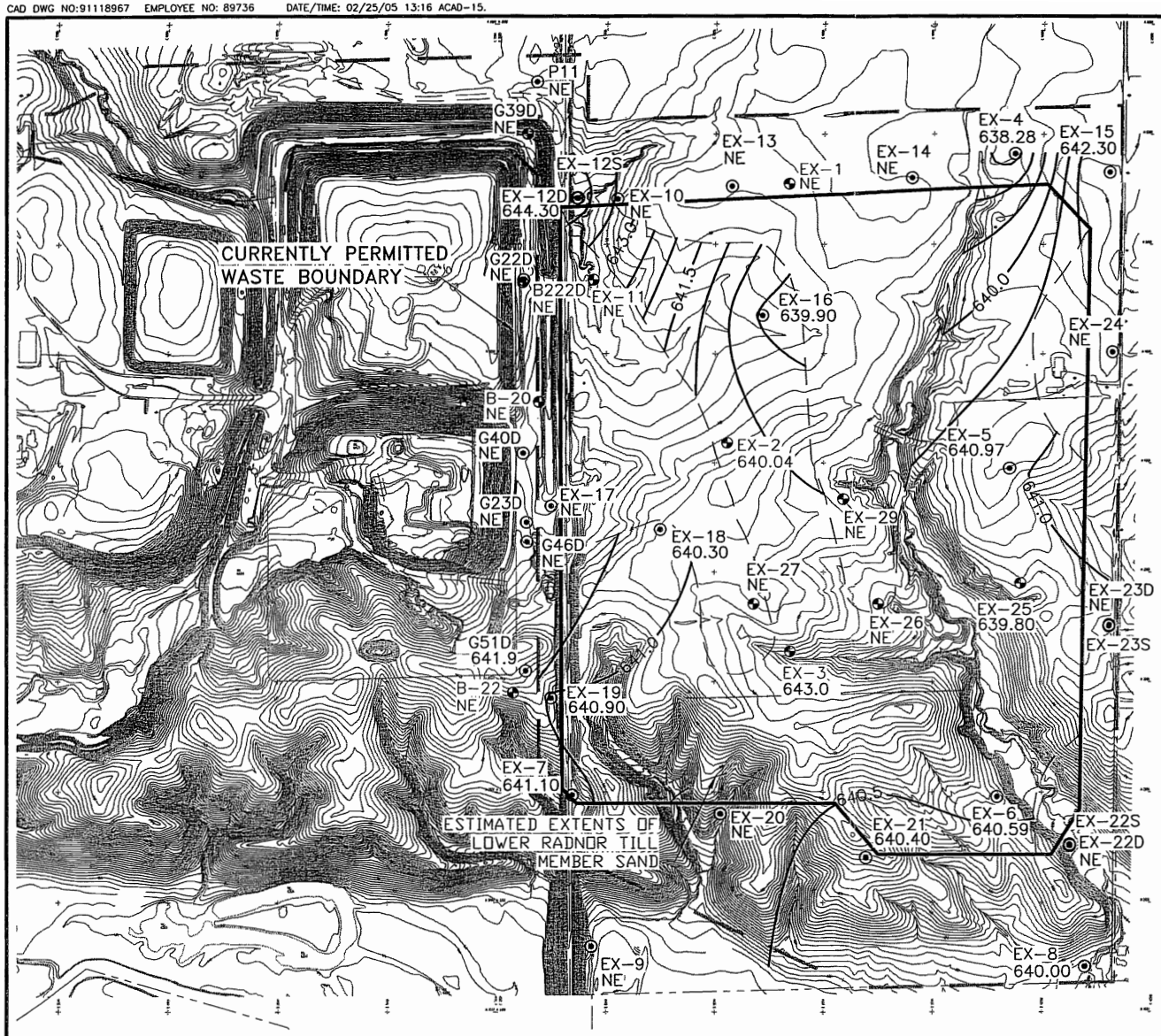
THICKNESS OF RADNOR UPPER TILL MEMBER SAND

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118.02

CAD DWG NO:91118967 EMPLOYEE NO: 89736 DATE/TIME: 02/25/05 13:16 ACAD-15.



500' 250' 0 500' 100'

1"=500'

LEGEND

⊕	SOIL BORING
⊙	WELL
—641.0—	ELEVATION CONTOUR (FEET-MEAN SEA LEVEL) TOP OF LOWER RADNOR TILL SAND
639.80	ELEVATION (FEET-MEAN SEA LEVEL) TOP OF LOWER RADNOR TILL SAND
NE	RADNOR TILL SAND NOT ENCOUNTERED
— — —	PROPERTY LINE
— — —	FACILITY BOUNDARY
———	PROPOSED WASTE BOUNDARY

NOTE: ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE RADNOR TILL SAND ARE SHOWN.

Illinois Licensed Professional Design Firm 184-001145

PDC Technical Services, Inc.
Peoria, Illinois

FIGURE 812.314-17

ELEVATION OF THE TOP OF LOWER RADNOR TILL MEMBER SAND

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118.02

CAD DWG NO:91118968 EMPLOYEE NO: 89736 DATE/TIME: 02/25/05 14:04 ACAD-15.

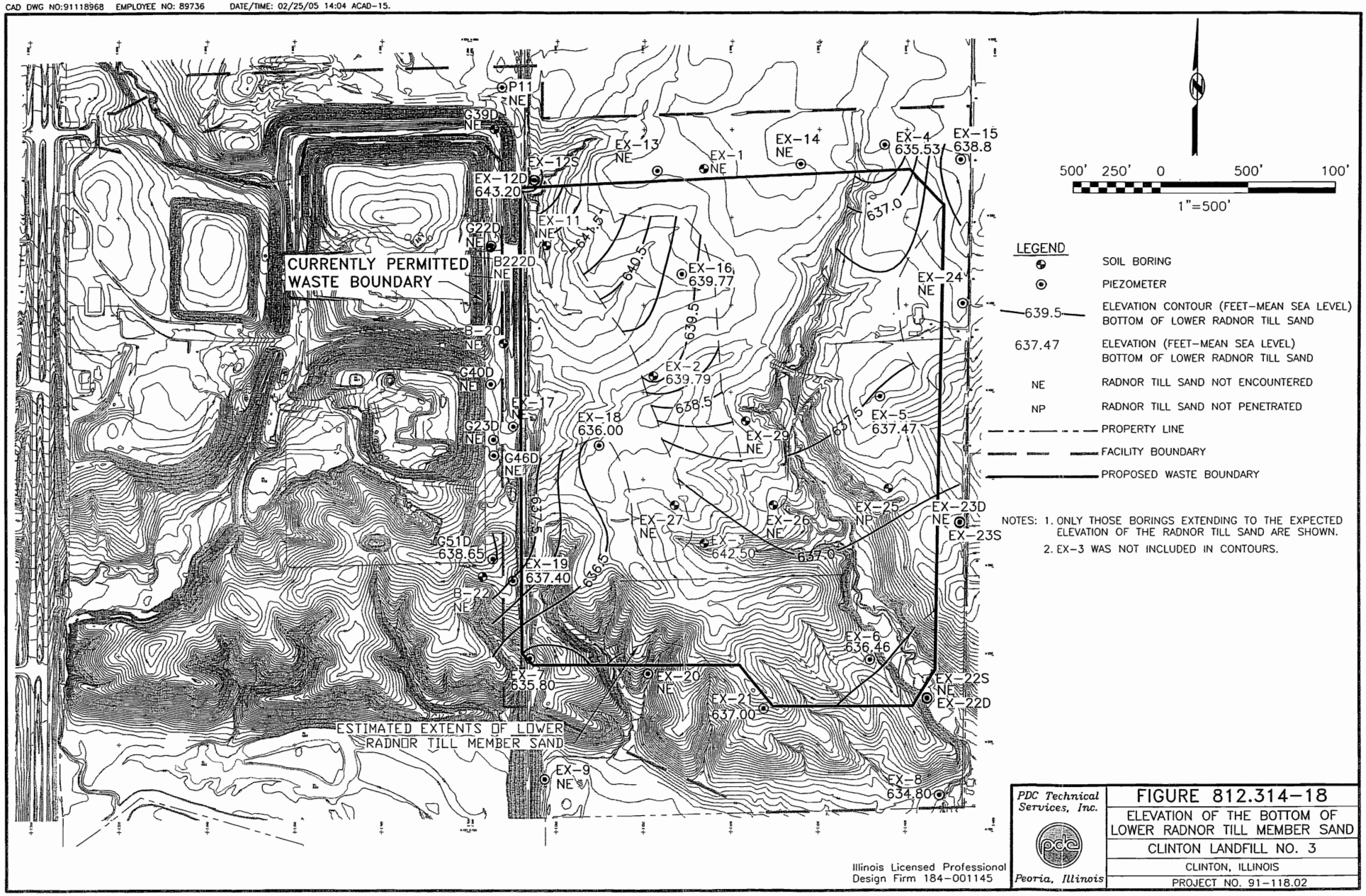


FIGURE 812.314-18

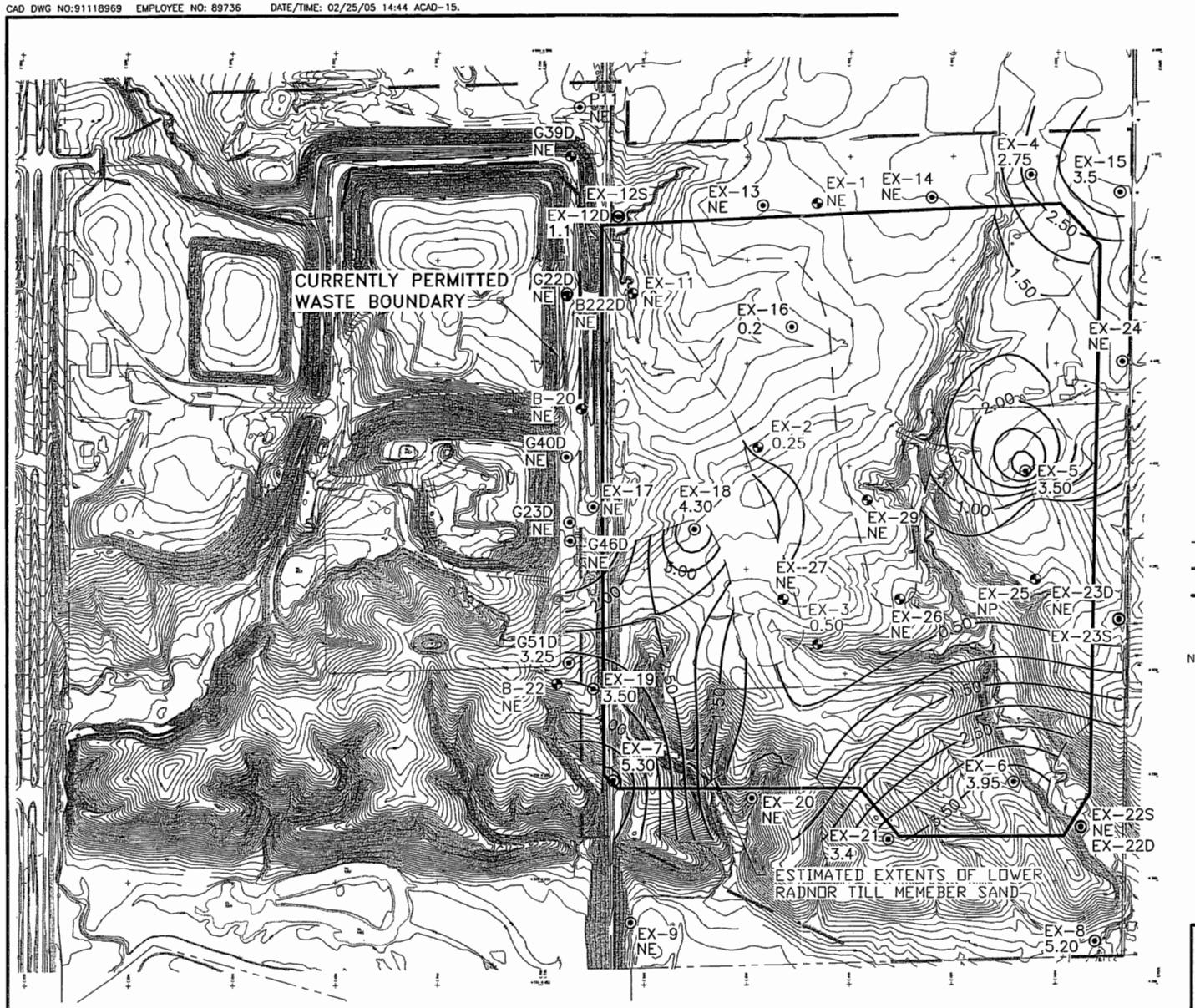
ELEVATION OF THE BOTTOM OF LOWER RADNOR TILL MEMBER SAND

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118.02

CAD DWG NO:91118969 EMPLOYEE NO: 89736 DATE/TIME: 02/25/05 14:44 ACAD-15.



500' 250' 0 500' 100'

1"=500'

LEGEND

⊕	SOIL BORING
⊙	PIEZOMETER
NE	RADNOR TILL SAND NOT ENCOUNTERED
NP	RADNOR TILL SAND NOT PENETRATED
—1.50—	THICKNESS CONTOUR – LOWER RADNOR TILL SAND (FEET)
3.95	THICKNESS LOWER RADNOR TILL SAND (FEET)
— — —	PROPERTY LINE
— — —	FACILITY BOUNDARY
———	PROPOSED WASTE BOUNDARY

NOTE: ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE RADNOR TILL SAND ARE SHOWN.

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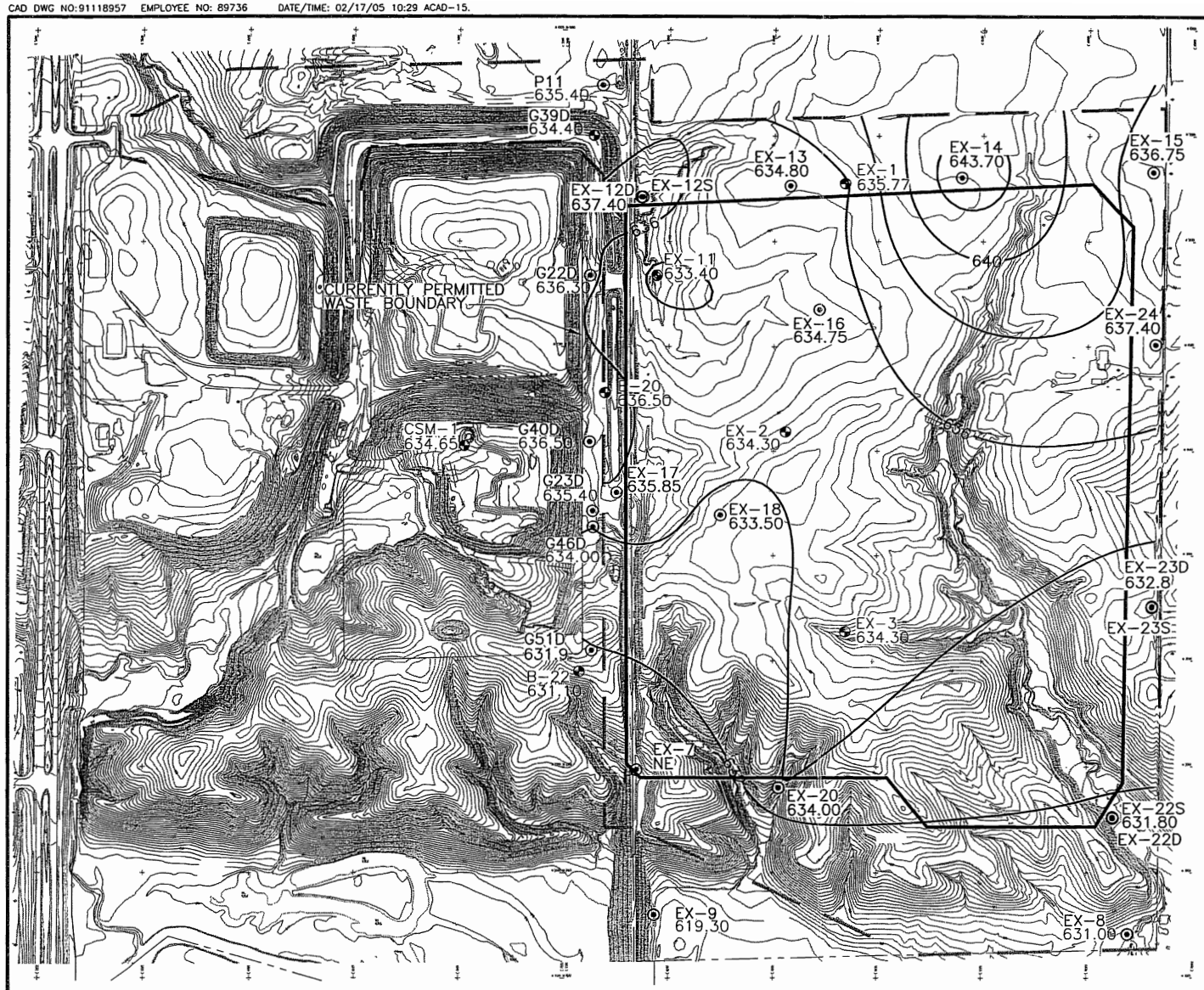
PDC Technical Services, Inc.
Peoria, Illinois

FIGURE 812.314-19
THICKNESS OF LOWER RADNOR TILL MEMBER SAND
CLINTON LANDFILL NO. 3
CLINTON, ILLINOIS
PROJECT NO. 91-118.02

CAD DWG NO:91118957 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 10:29 ACAD-15.



LEGEND

⊕	SOIL BORING
⊙	PIEZOMETER
—636—	ELEVATION CONTOUR (FEET-MEAN SEA LEVEL), TOP OF ORGANIC SOIL
634.30	ELEVATION (FEET-MEAN SEA LEVEL) TOP OF ORGANIC SOIL
NE	ORGANIC SOIL NOT ENCOUNTERED
— - - —	PROPERTY LINE
— — —	FACILITY BOUNDARY
———	PROPOSED WASTE BOUNDARY

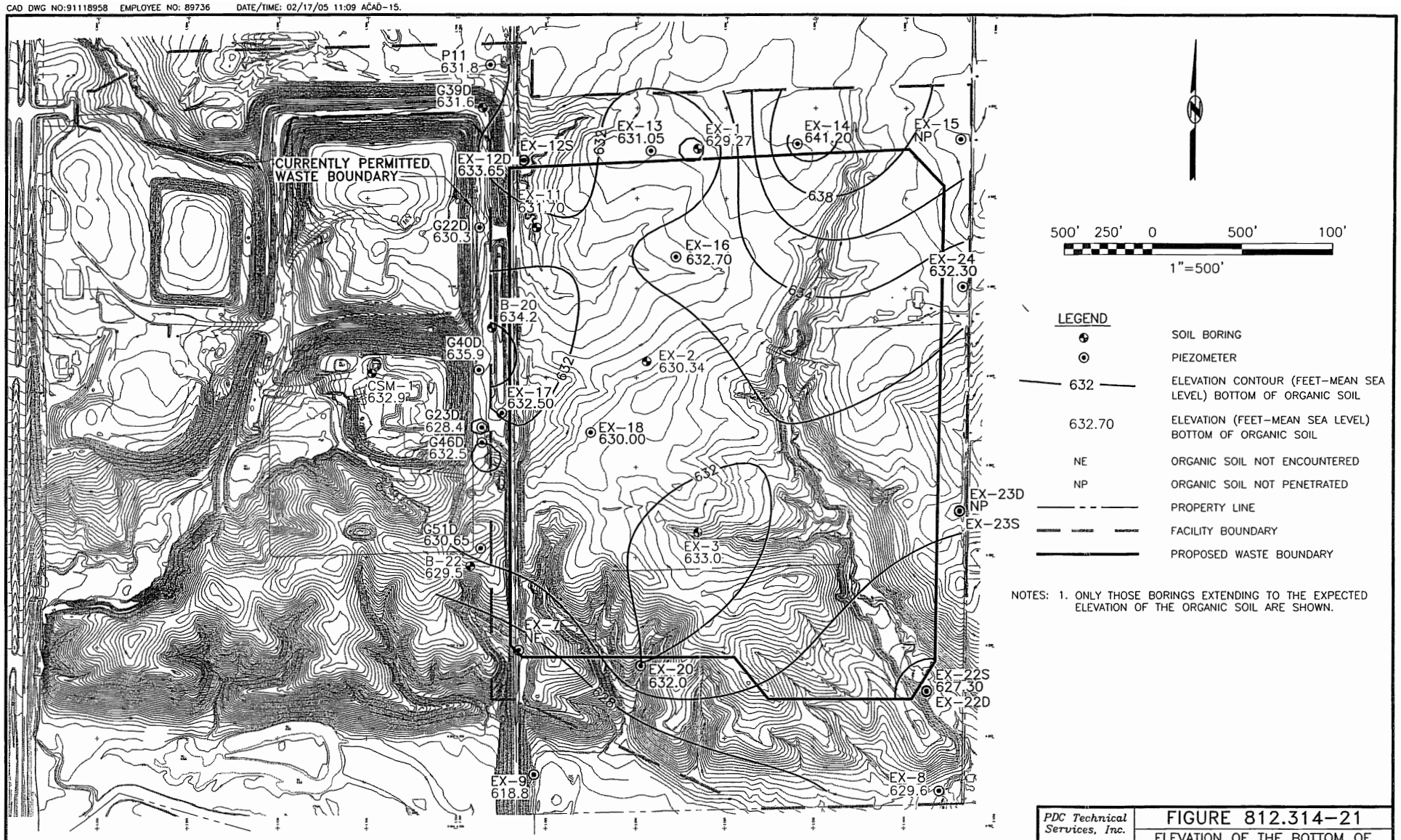
NOTE: ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE ORANIC SOIL ARE SHOWN.

Illinois Licensed Professional Design Firm 184-001145

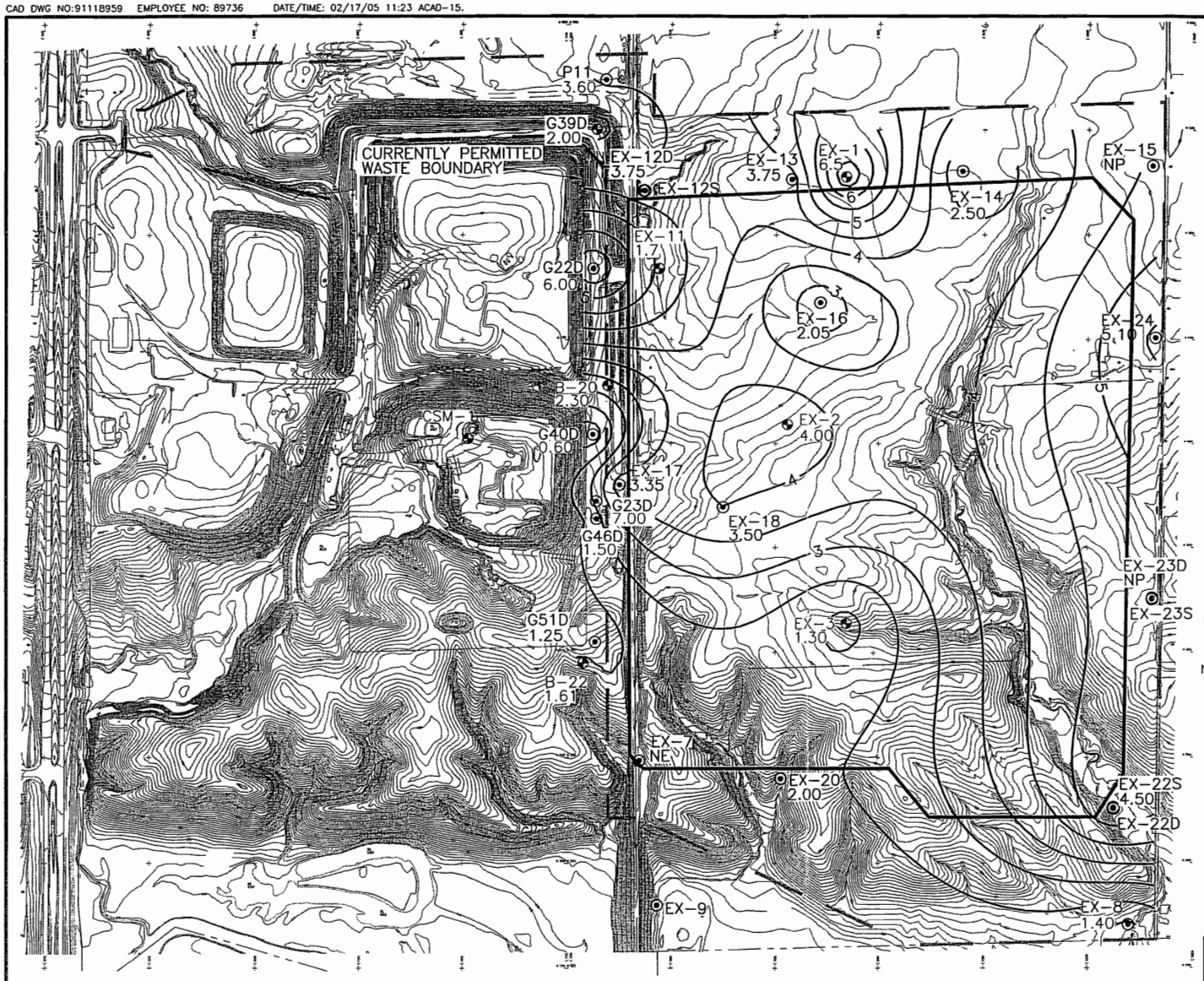
PDC Technical Services, Inc.
Peoria, Illinois

FIGURE 812.314-20
ELEVATION OF THE TOP OF THE ORGANIC SOIL
CLINTON LANDFILL NO. 3
CLINTON, ILLINOIS
PROJECT NO. 91-118.02

CAD DWG NO:91118958 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 11:09 ACAD-15.



CAD DWG NO:91118959 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 11:23 ACAD-15.



500' 250' 0 500' 100'

1"=500'

LEGEND

⊕	SOIL BORING
⊙	PIEZOMETER
—5—	THICKNESS CONTOUR (FEET-MEAN SEA LEVEL) ORGANIC SOIL
5.0	ELEVATION (FEET-MEAN SEA LEVEL) ORGANIC SOIL
NE	ORGANIC SOIL NOT ENCOUNTERED
NP	ORGANIC SOIL NOT PENETRATED
— - - —	PROPERTY LINE
═ ═ ═	FACILITY BOUNDARY
———	PROPOSED WASTE BOUNDARY

NOTES: 1. ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE ORGANIC SOIL ARE SHOWN.
2. G23D NOT INCLUDED IN CONTOURS.

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Peoria, Illinois

FIGURE 812.314-22

THICKNESS OF THE ORGANIC SOIL

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118.02

CAD DWG NO:911181018 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 11:31 ACAD-15.

LEGEND

- PIEZOMETER MONITORING RANDOR TILL SAND
- PIEZOMETER
- 673.67 POTENTIOMETRIC ELEVATION
- BORING
- 672 POTENTIOMETRIC CONTOUR LINE
- NE UPPER RADNOR TILL NOT ENCOUNTERED

400' 200' 0 400' 800'

1"=400'

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FIGURE 812.314-23

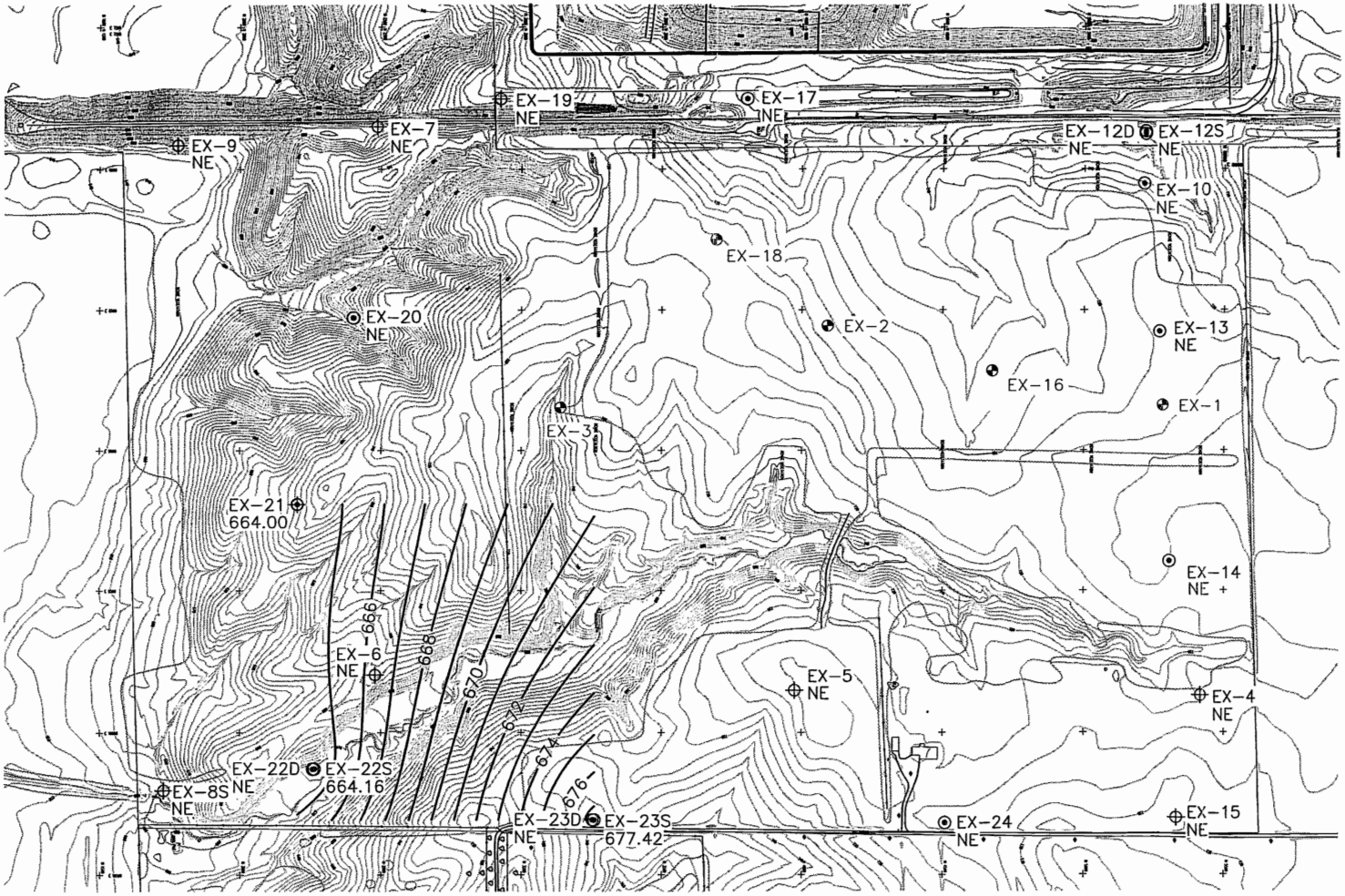
1ST QUARTER 2004 POTENTIOMETRIC CONTOURS-UPPER RADNOR TILL SAND

CLINTON LANDFILL, INC.

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:911181019 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 11:59 ACAD-15.



LEGEND

- PIEZOMETER MONITORING RANDOR TILL SAND
- PIEZOMETER
- 664.16 POTENTIOMETRIC ELEVATION
- BORING
- 672 POTENTIOMETRIC CONTOUR LINE
- NE UPPER RADNOR TILL NOT ENCOUNTERED

400' 200' 0 400' 800'

1"=400'

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FIGURE 812.314-24

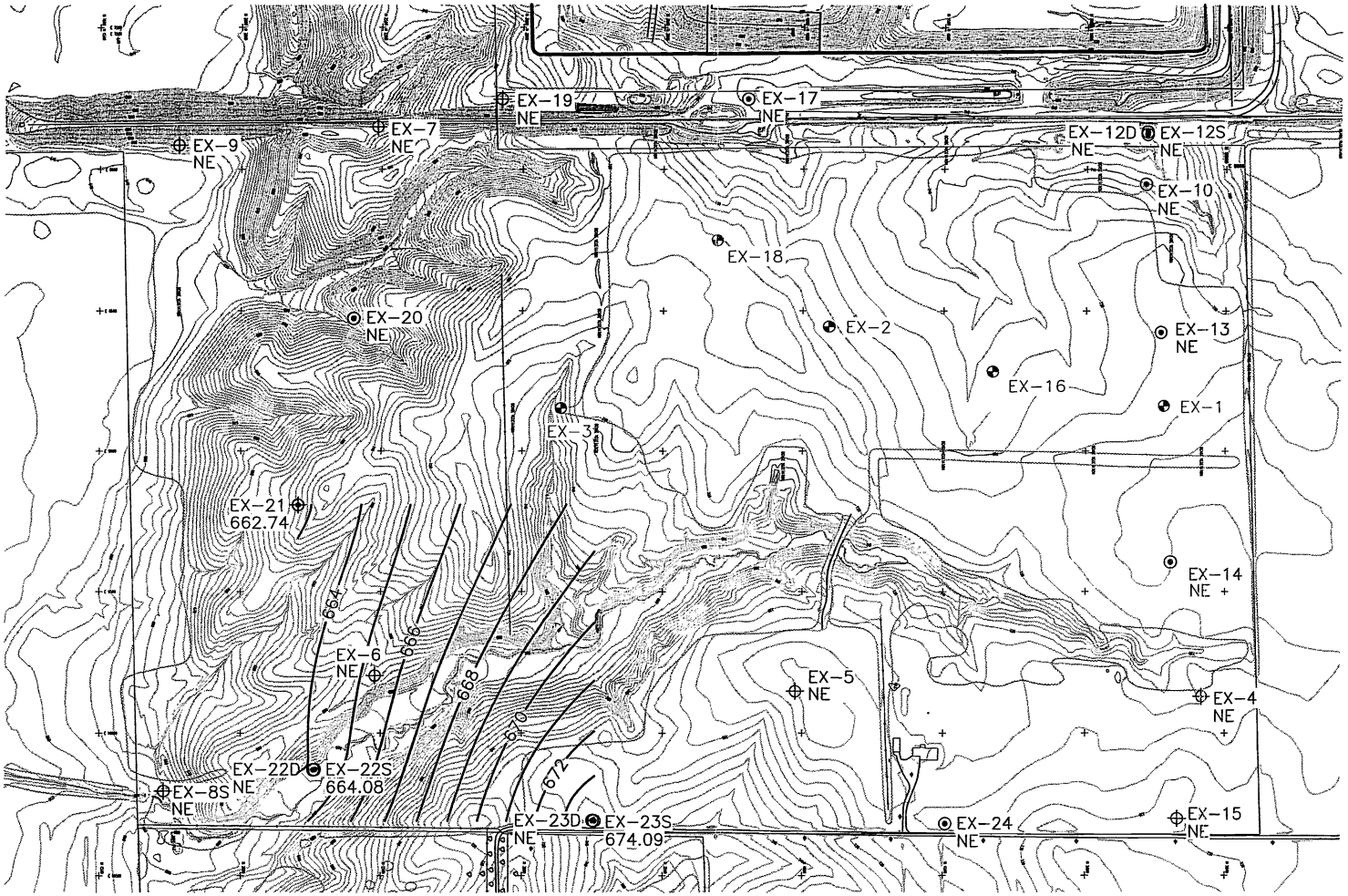
2ND QUARTER 2004 POTENTIOMETRIC CONTOURS-UPPER RADNOR TILL SAND

CLINTON LANDFILL, INC.

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:911181020 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 11:10 ACAD-15.



LEGEND

- PIEZOMETER MONITORING RANDOR TILL SAND
- PIEZOMETER
- 664.08 POTENTIOMETRIC ELEVATION
- BORING
- —672— POTENTIOMETRIC CONTOUR LINE
- NE UPPER RADNOR TILL NOT ENCOUNTERED

400' 200' 0 400' 800'

1"=400'

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FIGURE 812.314-25

3RD QUARTER 2004 POTENTIOMETRIC CONTOURS-UPPER RADNOR TILL SAND

CLINTON LANDFILL, INC.

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:911181021 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 11:09 ACAD-15.

LEGEND

- PIEZOMETER MONITORING RANDOR TILL SAND
- PIEZOMETER
- 664.40 POTENTIOMETRIC ELEVATION
- BORING
- 672 POTENTIOMETRIC CONTOUR LINE
- NE UPPER RADNOR TILL NOT ENCOUNTERED

400' 200' 0 400' 800'

1"=400'

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FIGURE 812.314-26

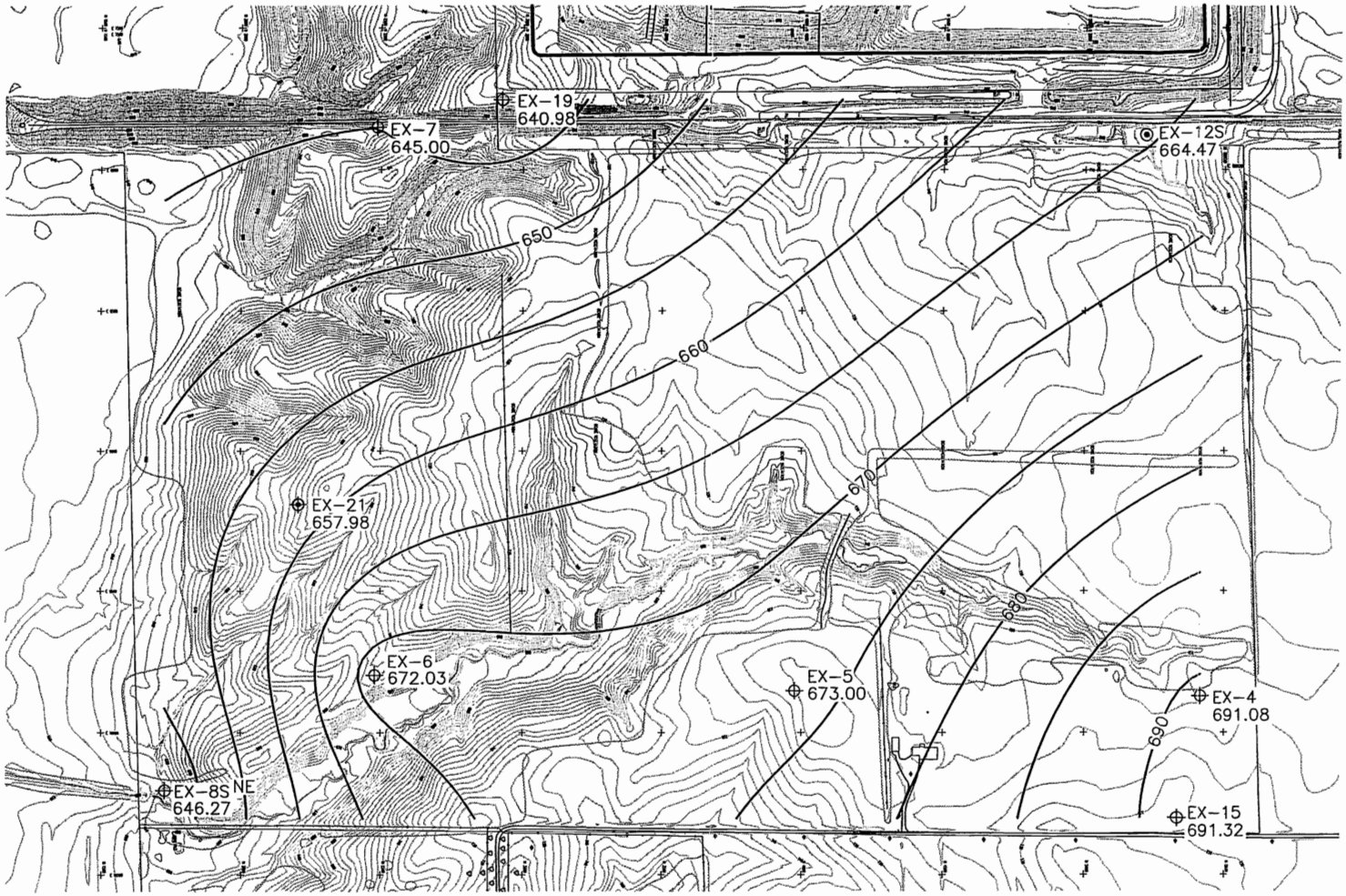
4TH QUARTER 2004 POTENTIOMETRIC CONTOURS-UPPER RADNOR TILL SAND

CLINTON LANDFILL, INC.

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:9111891014 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 11:12 ACAD-15.



LEGEND

- PIEZOMETER MONITORING RANDOR TILL SAND
- PIEZOMETER
- 673.00 POTENTIOMETRIC ELEVATION
- BORING
- 680 POTENTIOMETRIC CONTOUR LINE

400' 200' 0 400' 800'

1"=400'

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FIGURE 812.314-27

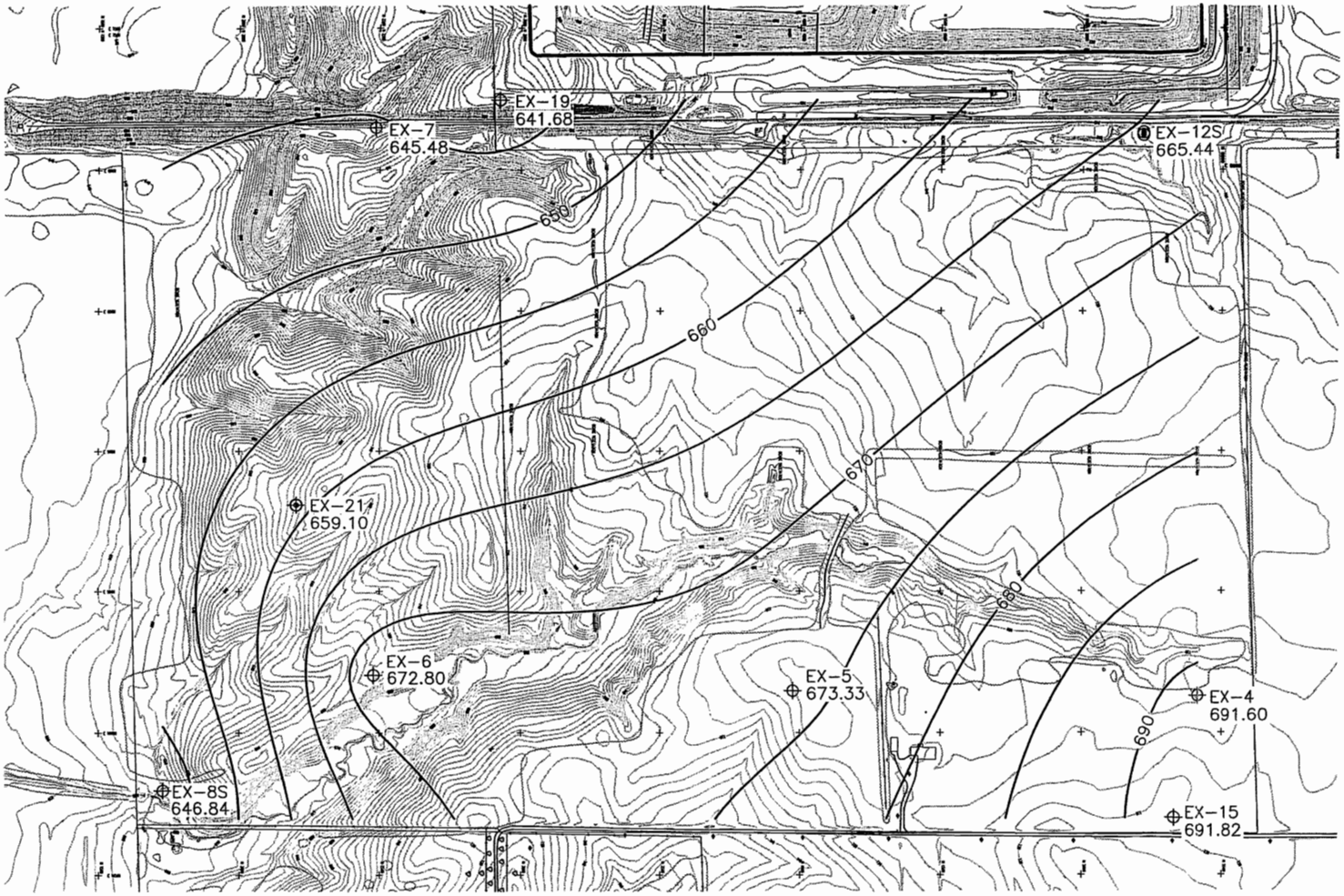
1ST QUARTER 2004 POTENTIOMETRIC CONTOURS-LOWER RADNOR TILL SAND

CLINTON LANDFILL, INC.

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:9111891015 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 11:38 ACAD-15.



LEGEND

- PIEZOMETER MONITORING RANDOR TILL SAND
- PIEZOMETER
- 646.84 POTENTIOMETRIC ELEVATION
- BORING
- 670 POTENTIOMETRIC CONTOUR LINE

400' 200' 0 400' 800'

1"=400'

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Peoria, Illinois

FIGURE 812.314-28

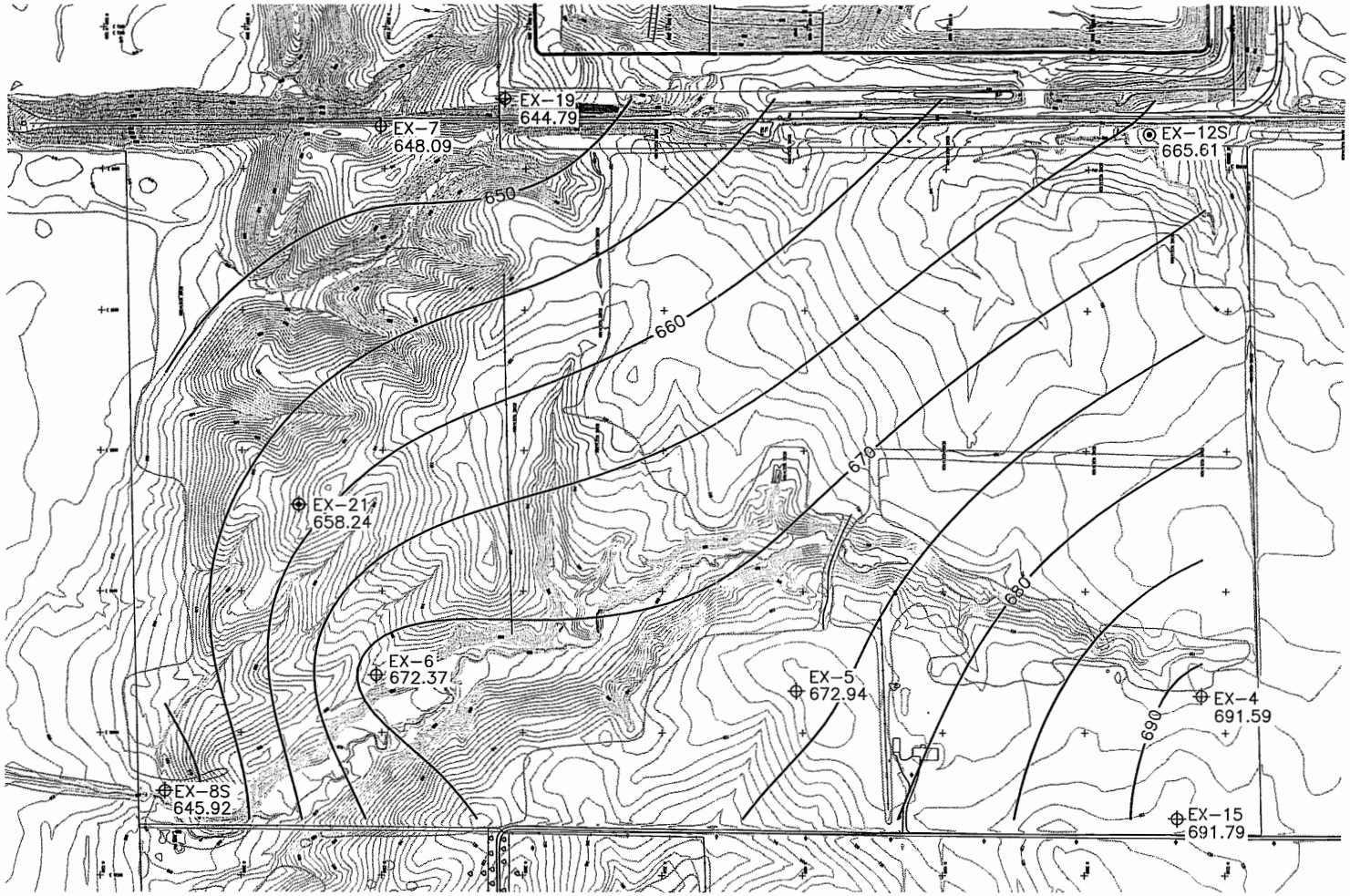
2ND QUARTER 2004 POTENTIOMETRIC CONTOURS-LOWER RADNOR TILL SAND

CLINTON LANDFILL, INC.

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:9111891016 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 11:27 ACAD-15.



LEGEND

- PIEZOMETER MONITORING RANDOR TILL SAND
- PIEZOMETER
- 645.92 POTENTIOMETRIC ELEVATION
- BORING
- 670 POTENTIOMETRIC CONTOUR LINE

400' 200' 0 400' 800'

1"=400'

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Peoria, Illinois

FIGURE 812.314-29

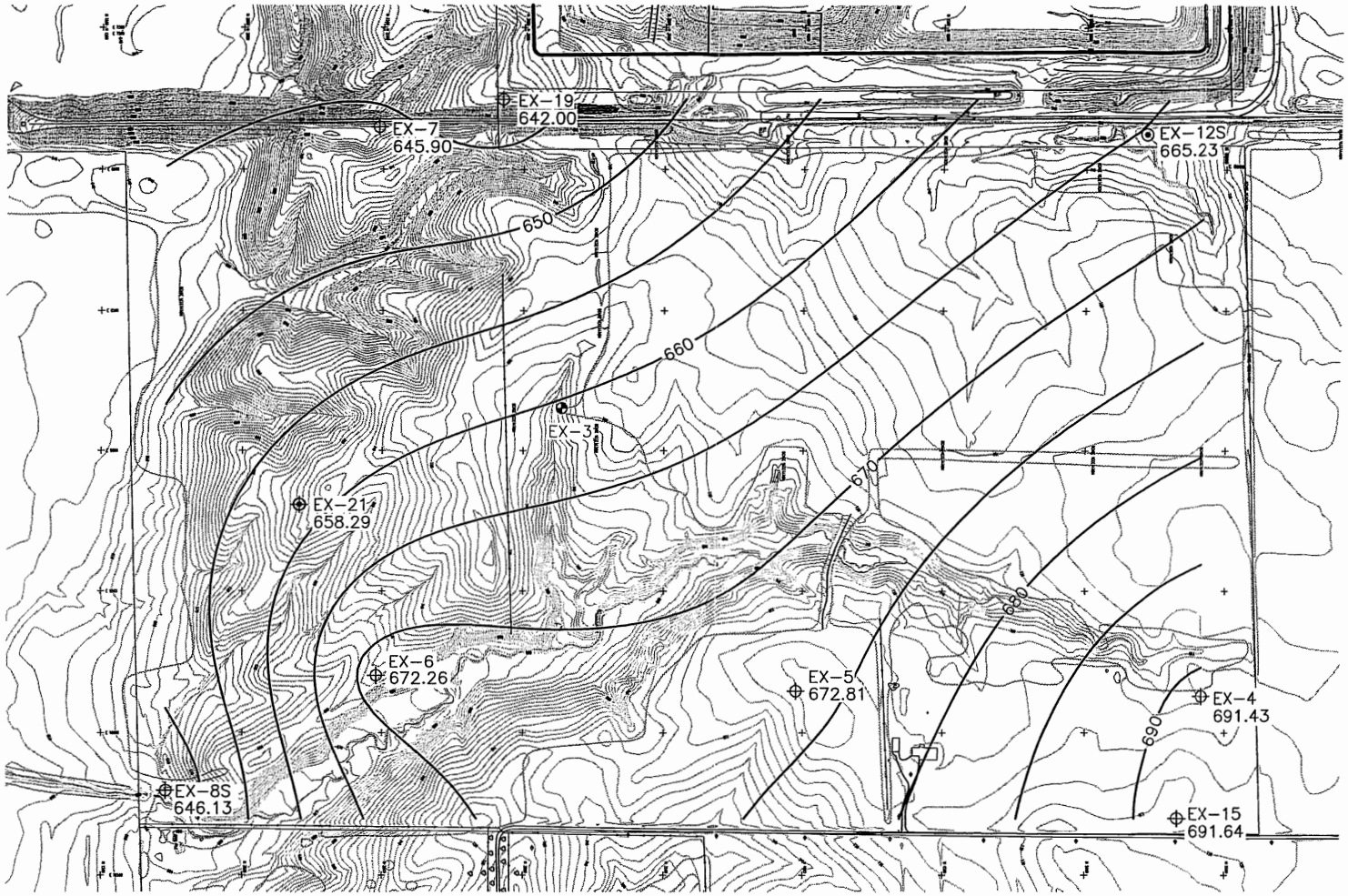
3RD QUARTER 2004 POTENTIOMETRIC CONTOURS-LOWER RADNOR TILL SAND

CLINTON LANDFILL, INC.

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:9111891017 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 11:49 ACAD-15.



LEGEND

- PIEZOMETER MONITORING RANDOR TILL SAND
- PIEZOMETER
- 646.13 POTENTIOMETRIC ELEVATION
- BORING
- 670 POTENTIOMETRIC CONTOUR LINE

400' 200' 0 400' 800'

1"=400'

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Peoria, Illinois

FIGURE 812.314-30

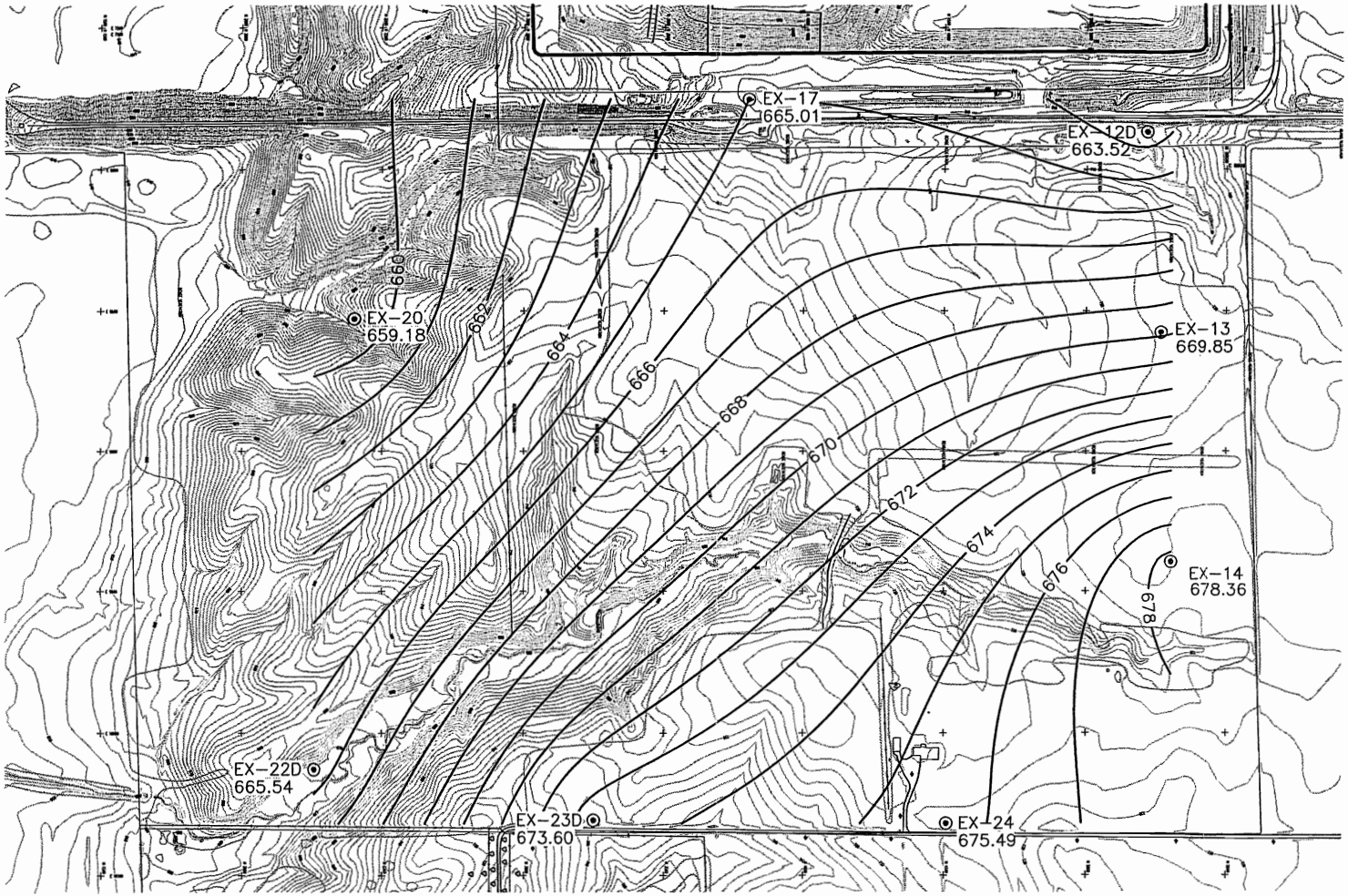
4TH QUARTER 2004 POTENTIOMETRIC CONTOURS-LOWER RADNOR TILL SAND

CLINTON LANDFILL, INC.

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:911181010 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 12:54 ACAD-15.



LEGEND

- ⊙ PIEZOMETER
- 665.54 POTENTIOMETRIC ELEVATION
- BORING
- —672— POTENTIOMETRIC CONTOUR LINE
- NP ORGANIC SOIL NOT PENETRATED

400' 200' 0 400' 800'

1"=400'

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Peoria, Illinois

FIGURE 812.314-31

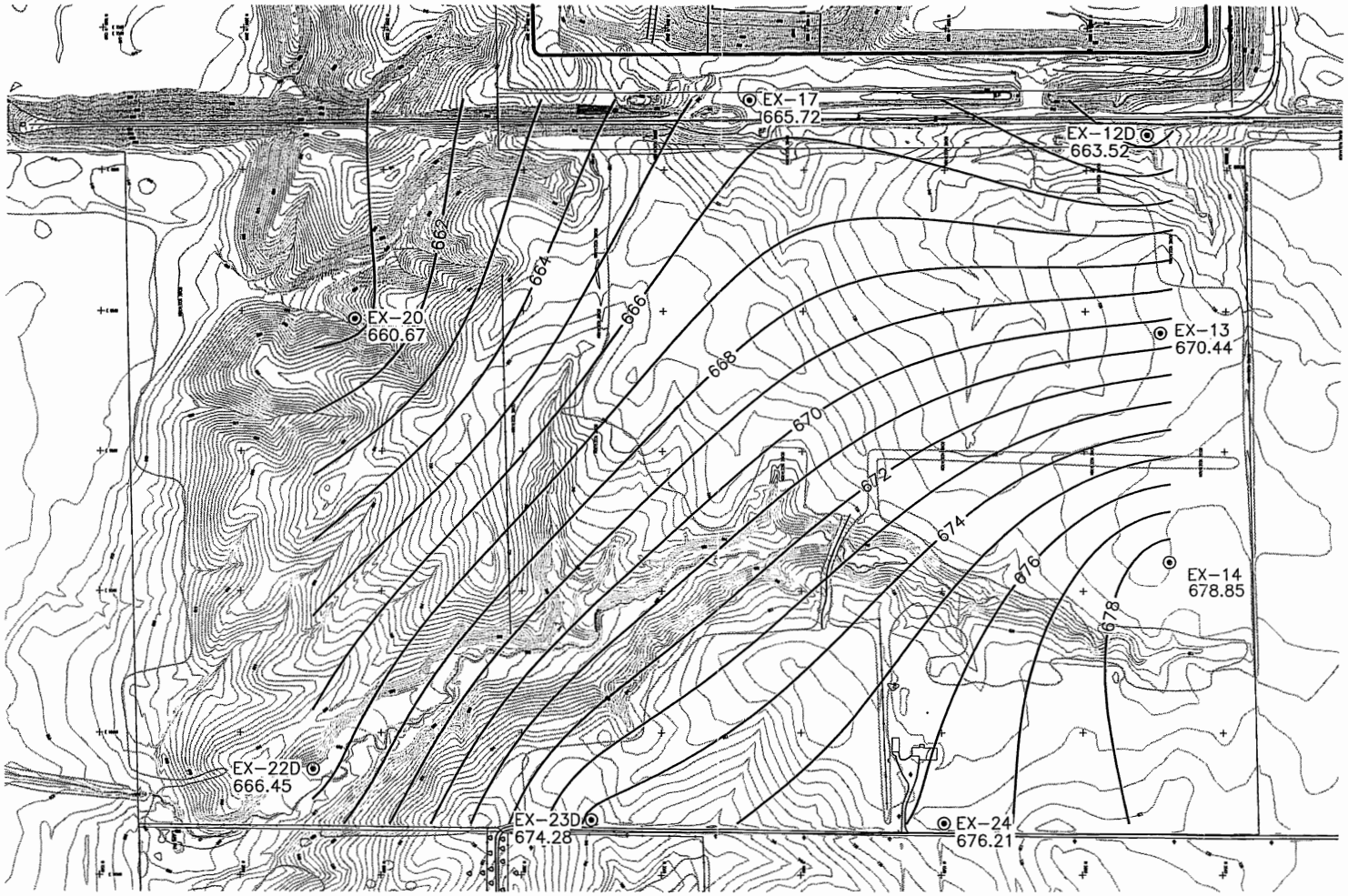
1ST QUARTER 2004 POTENTIOMETRIC CONTOURS-ORGANIC SOIL

CLINTON LANDFILL, INC.

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:911181011 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 13:14 ACAD-15.



LEGEND

- PIEZOMETER
- 663.94 POTENTIOMETRIC ELEVATION
- BORING
- 674 POTENTIOMETRIC CONTOUR LINE
- NP ORGANIC SOIL NOT PENETRATED

400' 200' 0 400' 800'

1"=400'

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Peoria, Illinois

FIGURE 812.314-32

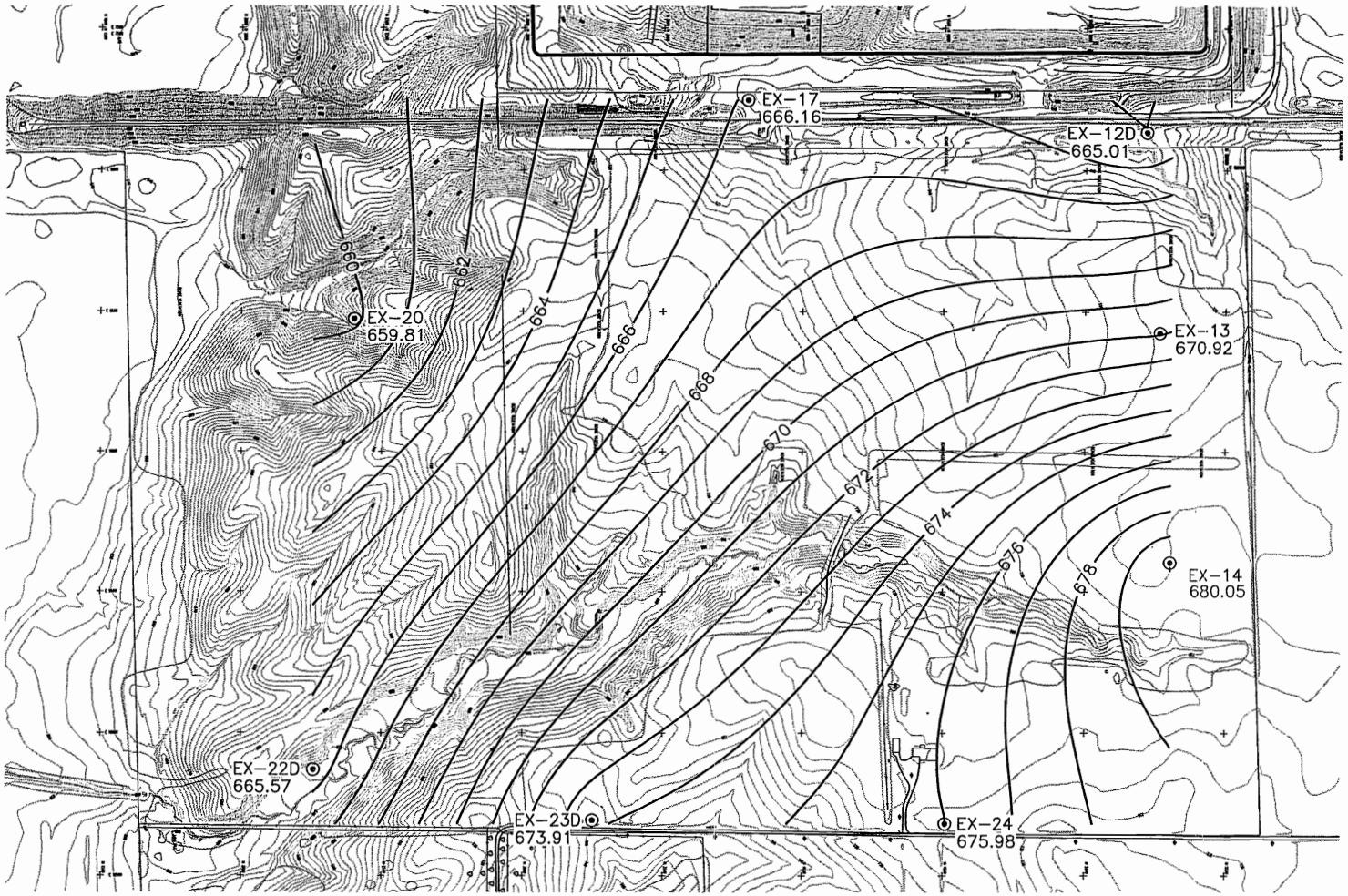
2ND QUARTER 2004 POTENTIOMETRIC CONTOURS-ORGANIC SOIL

CLINTON LANDFILL, INC.

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:911181012 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 13:10 ACAD-15.



LEGEND

⊙	PIEZOMETER
665.57	POTENTIOMETRIC ELEVATION
◉	BORING
—674—	POTENTIOMETRIC CONTOUR LINE
NP	ORGANIC SOIL NOT PENETRATED

400' 200' 0 400' 800'

1"=400'

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FIGURE 812.314-33

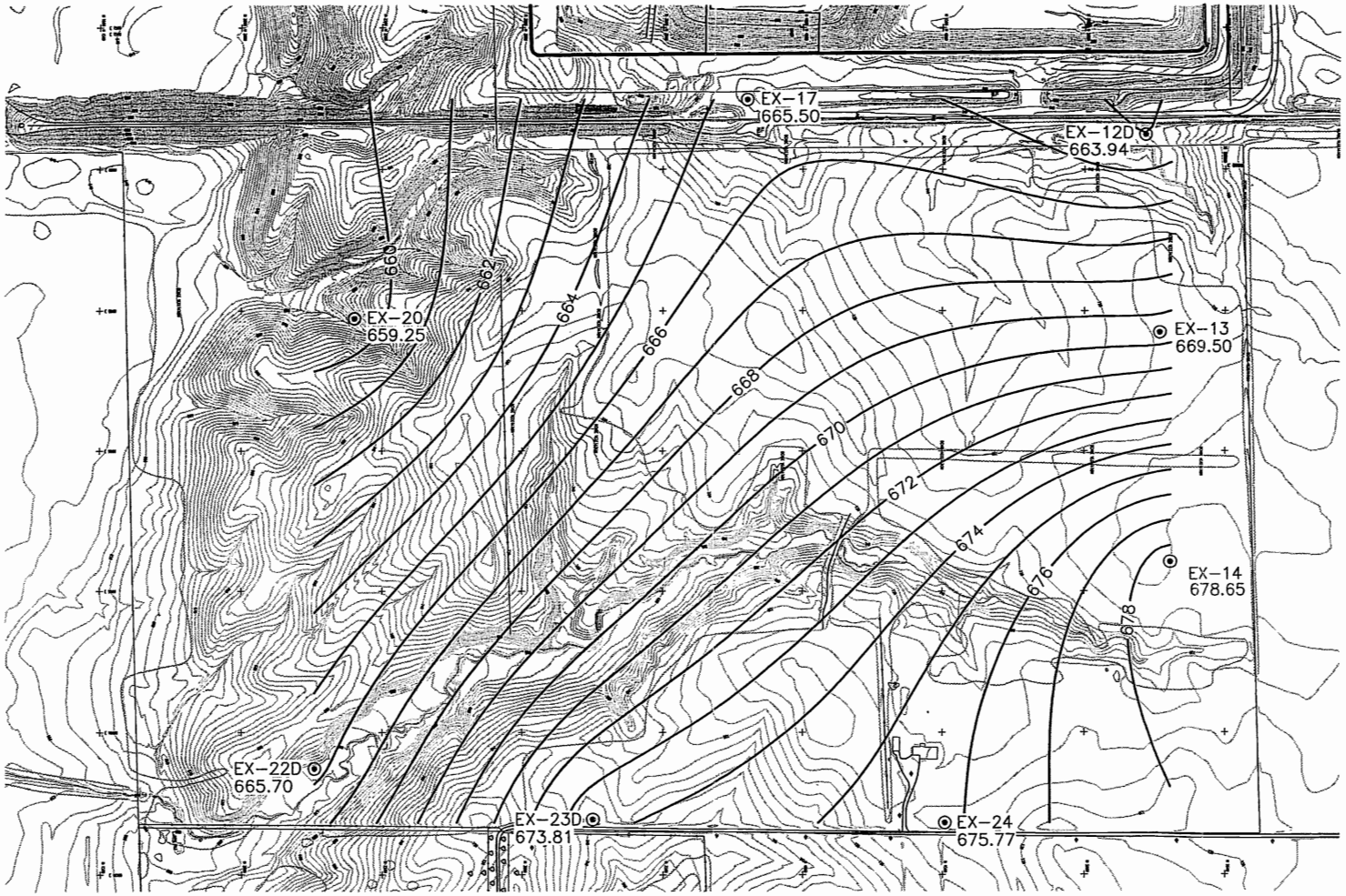
3RD QUARTER 2004 POTENTIOMETRIC CONTOURS-ORGANIC SOIL

CLINTON LANDFILL, INC.

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:911181013 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 13:17 ACAD-15.



LEGEND

⊙	PIEZOMETER
665.70	POTENTIOMETRIC ELEVATION
	BORING
—674—	POTENTIOMETRIC CONTOUR LINE
NP	ORGANIC SOIL NOT PENETRATED

400' 200' 0 400' 800'

1"=400'

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Peoria, Illinois

FIGURE 812.314-34

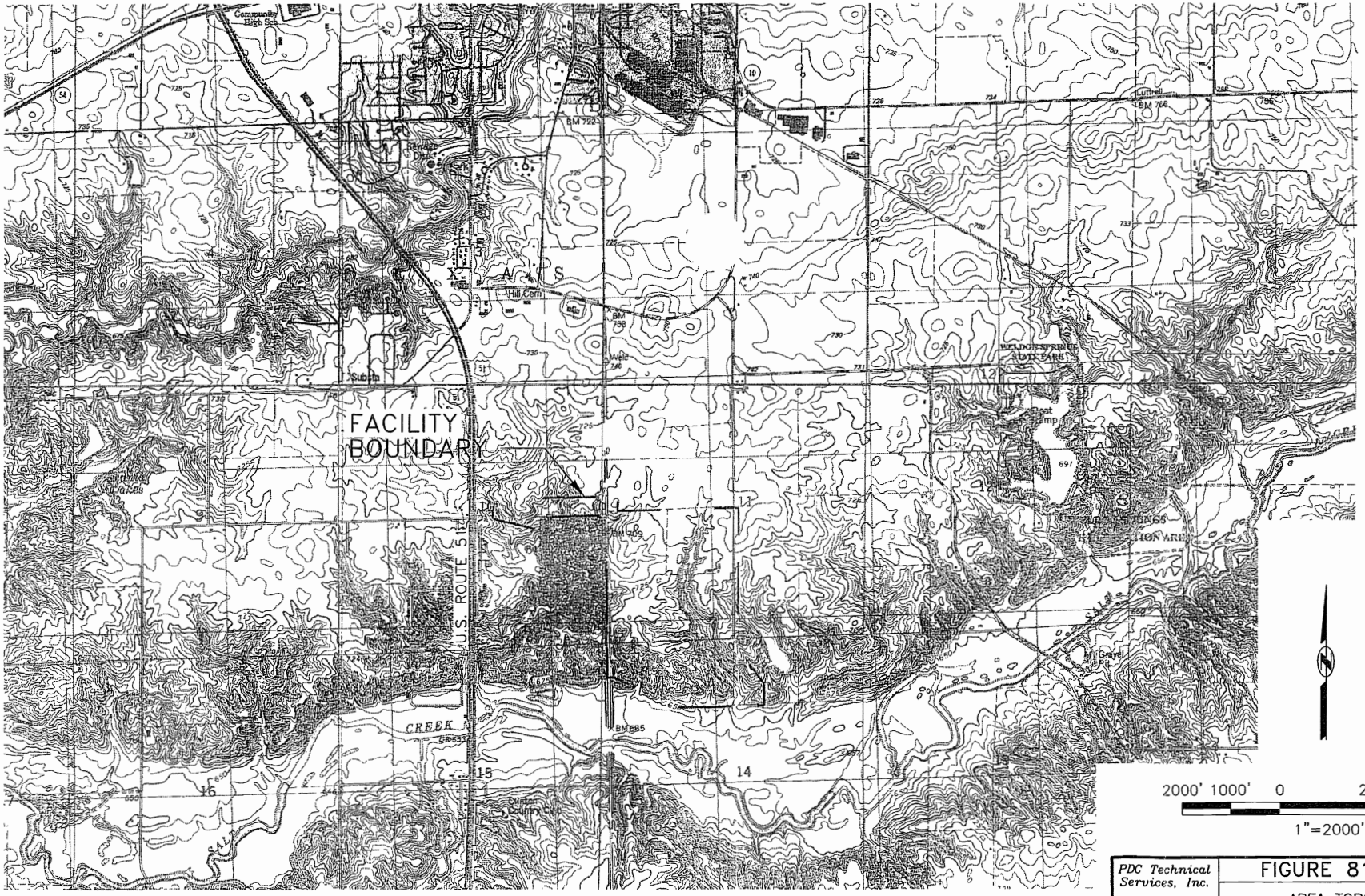
4TH QUARTER 2004 POTENTIOMETRIC CONTOURS-ORGANIC SOIL

CLINTON LANDFILL, INC.

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:911181027 EMPLOYEE NO: 89736 DATE/TIME: 02/16/05 18:20 ACAD-15.



2000' 1000' 0 2000' 4000'

1"=2000'

SOURCE: CLINTON (2001), MAROA (2001); ILLINOIS QUAD PHOTO MAPS, USGS 7.5' TOPOGRAPHIC MAPS

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FIGURE 812.314-1

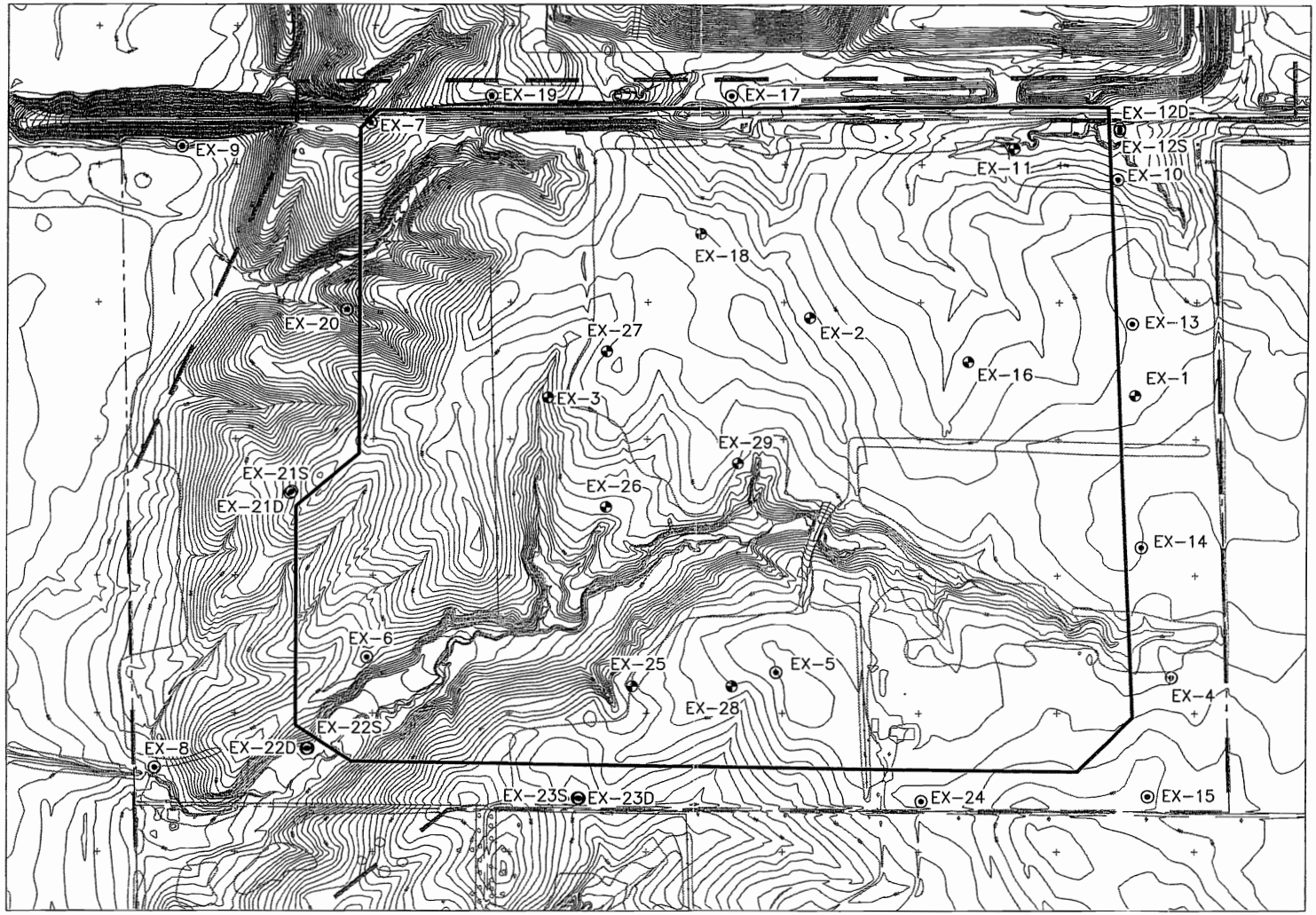
AREA TOPOGRAPHY

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118

CAD DWG NO:911181052 EMPLOYEE NO: 9834 DATE/TIME: 02/26/05 09:03 ACAD-15.



LEGEND

- PIEZOMETER
- BORING
- PROPERTY LINE
- FACILITY BOUNDARY
- PROPOSED WASTE BOUNDARY

400' 200' 0 400' 800'

1"=400'

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Peoria, Illinois

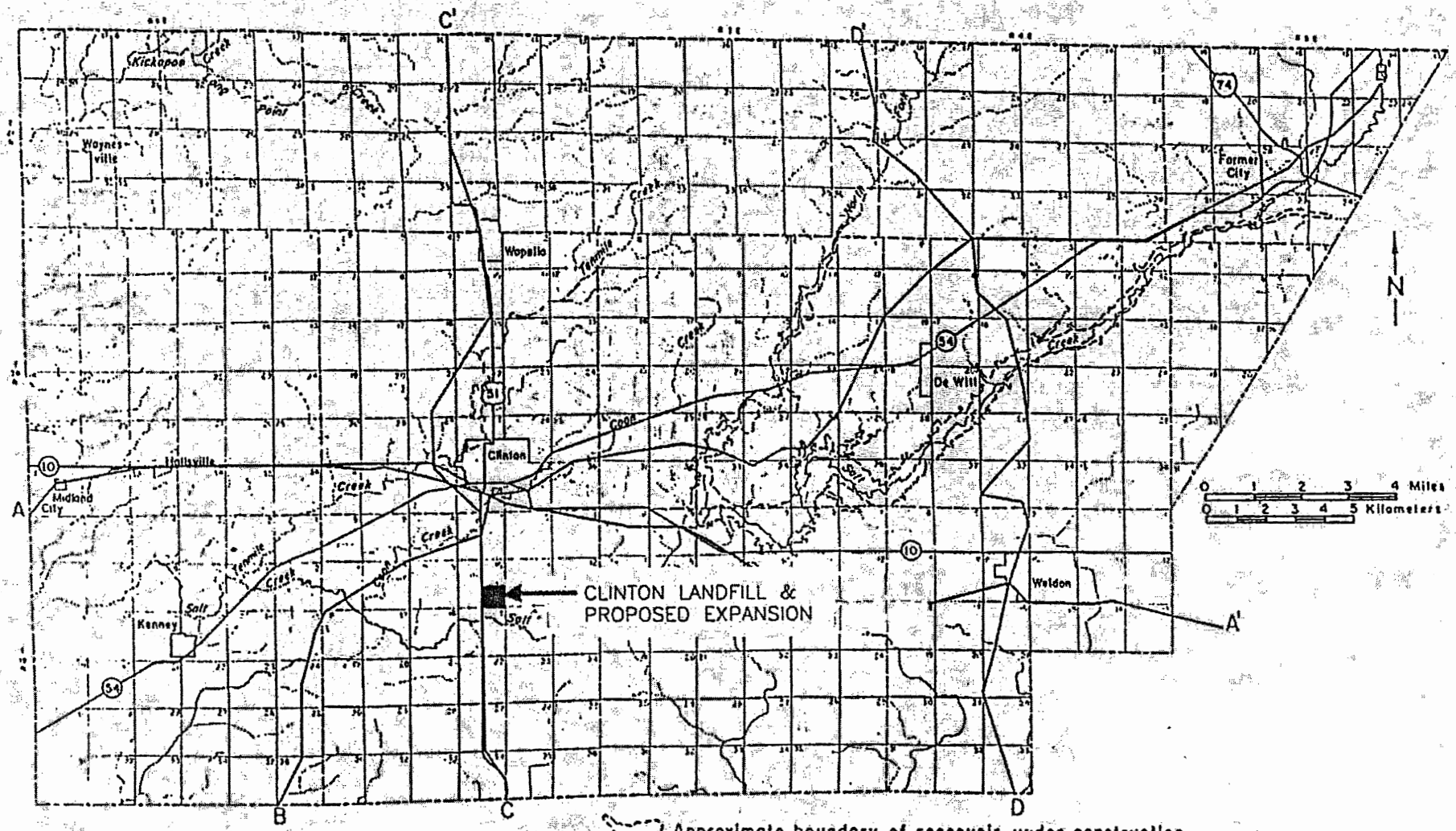
FIGURE 812.314-2

SITE PLAN WITH BORING LOCATIONS

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118



REPRODUCED FROM HUNT & KEMPTON (1977), FIGURE 1

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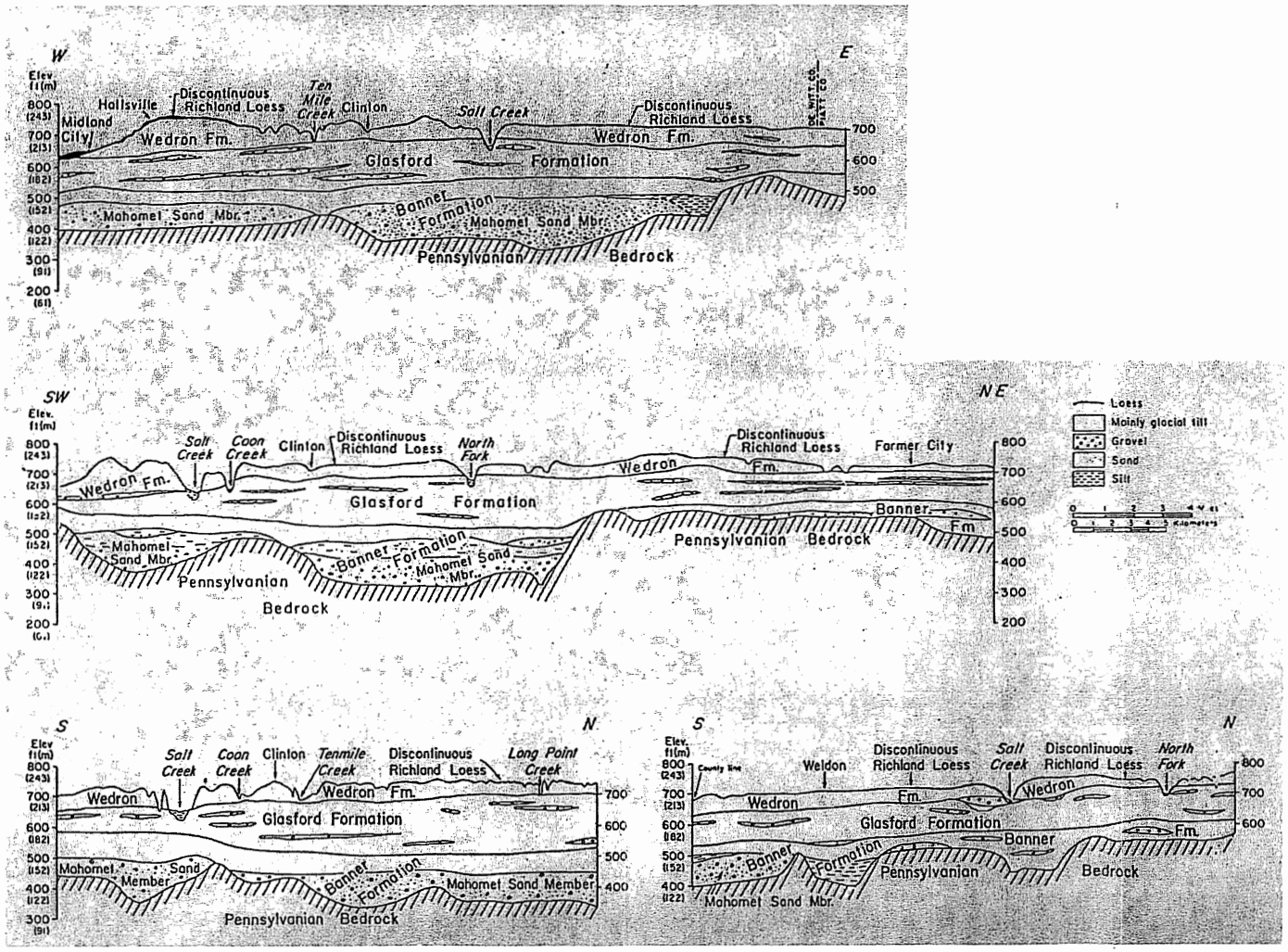
FIGURE 812.314-3

PLAN OF REGIONAL CROSS SECTIONS DE WITT COUNTY, ILLINOIS

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118



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Peoria, Illinois

FIGURE 812.314-4

GENERALIZED CROSS SECTIONS OF THE UNCONSOLIDATED GEOLOGIC MATERIALS

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118

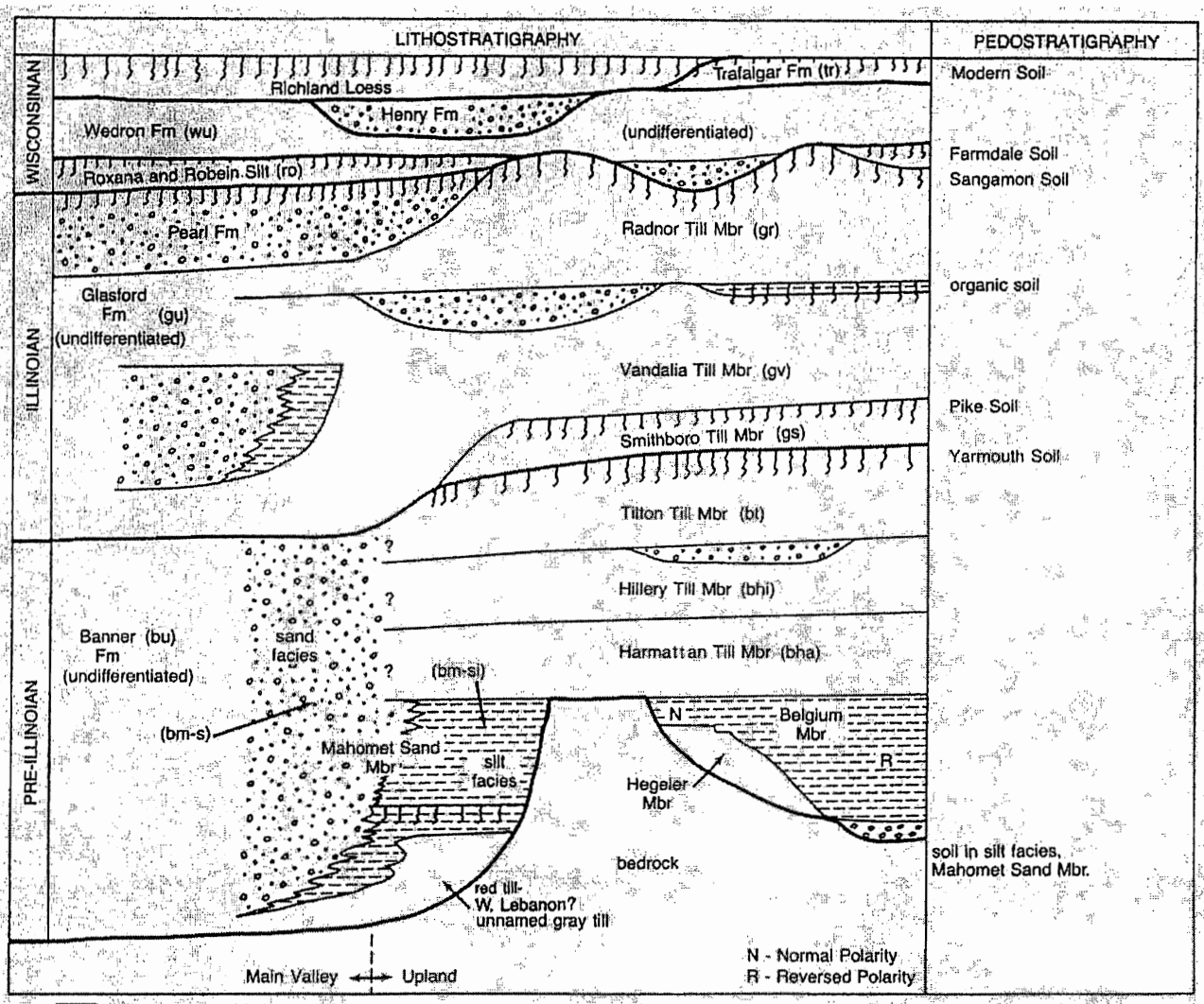
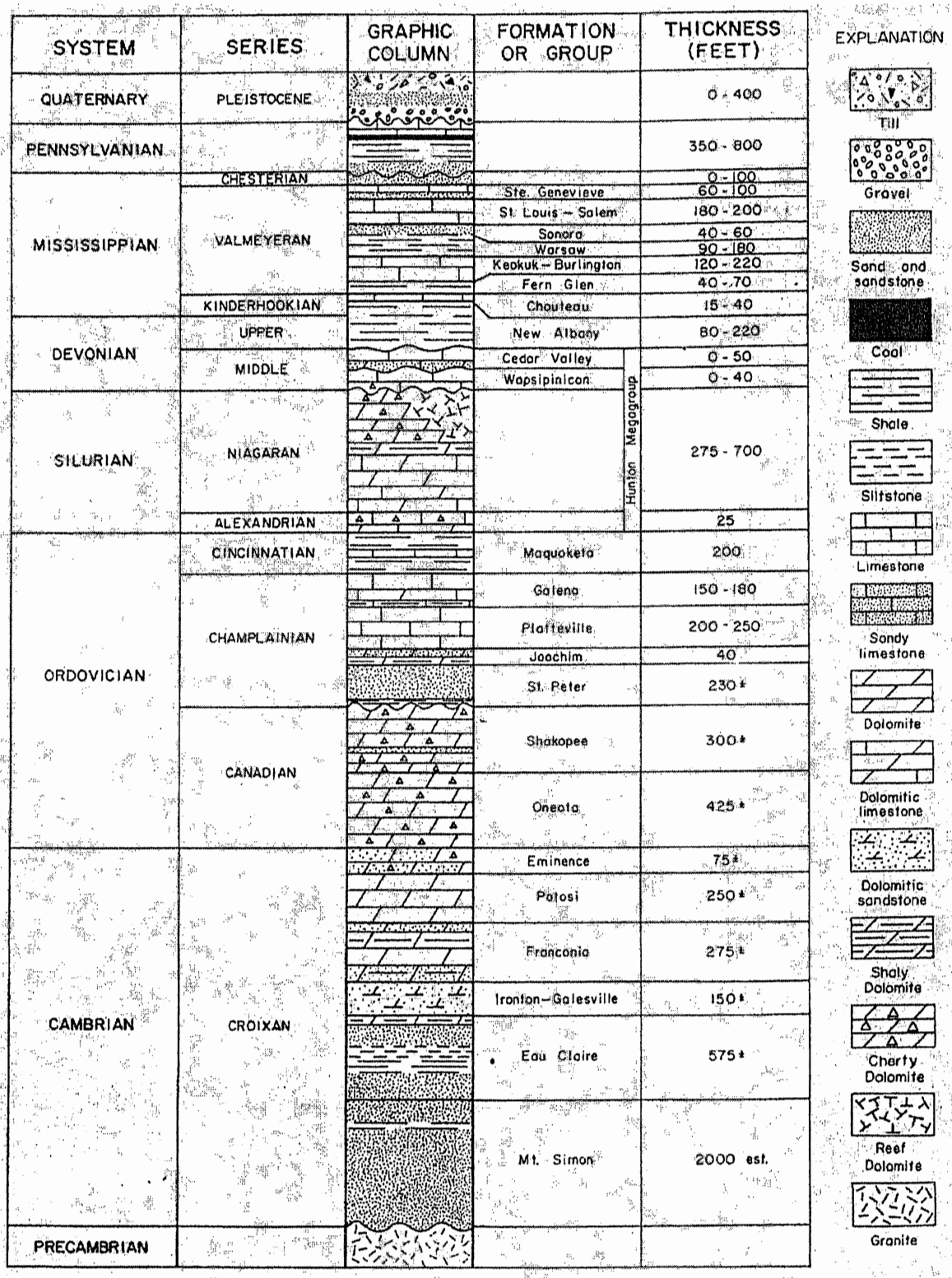


Figure 13. Pleistocene stratigraphy of east-central Illinois.

(KEMPTON ET. AL. 1991)

Illinois Licensed Professional Design Firm 184-001145	PDC Technical Services, Inc. Peoria, Illinois	FIGURE 812.314-5
		PLEISTOCENE STRATIGRAPHY OF EAST-CENTRAL ILLINOIS
		CLINTON LANDFILL NO. 3
		CLINTON, ILLINOIS
		PROJECT NO. 91-118



(HOWARD, 1962, FIGURE 2)

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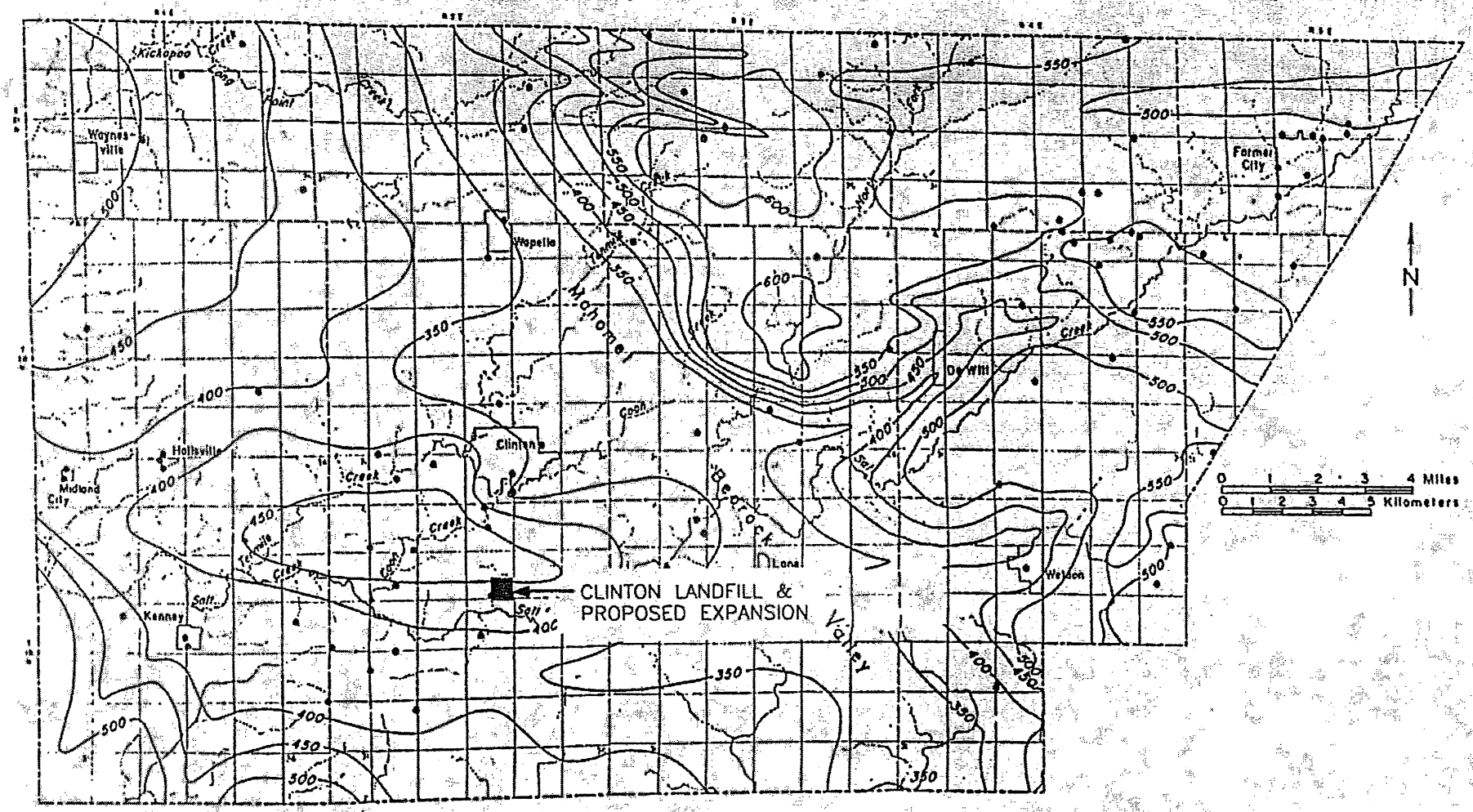
FIGURE 812.314-6

ROCK UNITS UNDER DE WITT COUNTY, ILLINOIS

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118

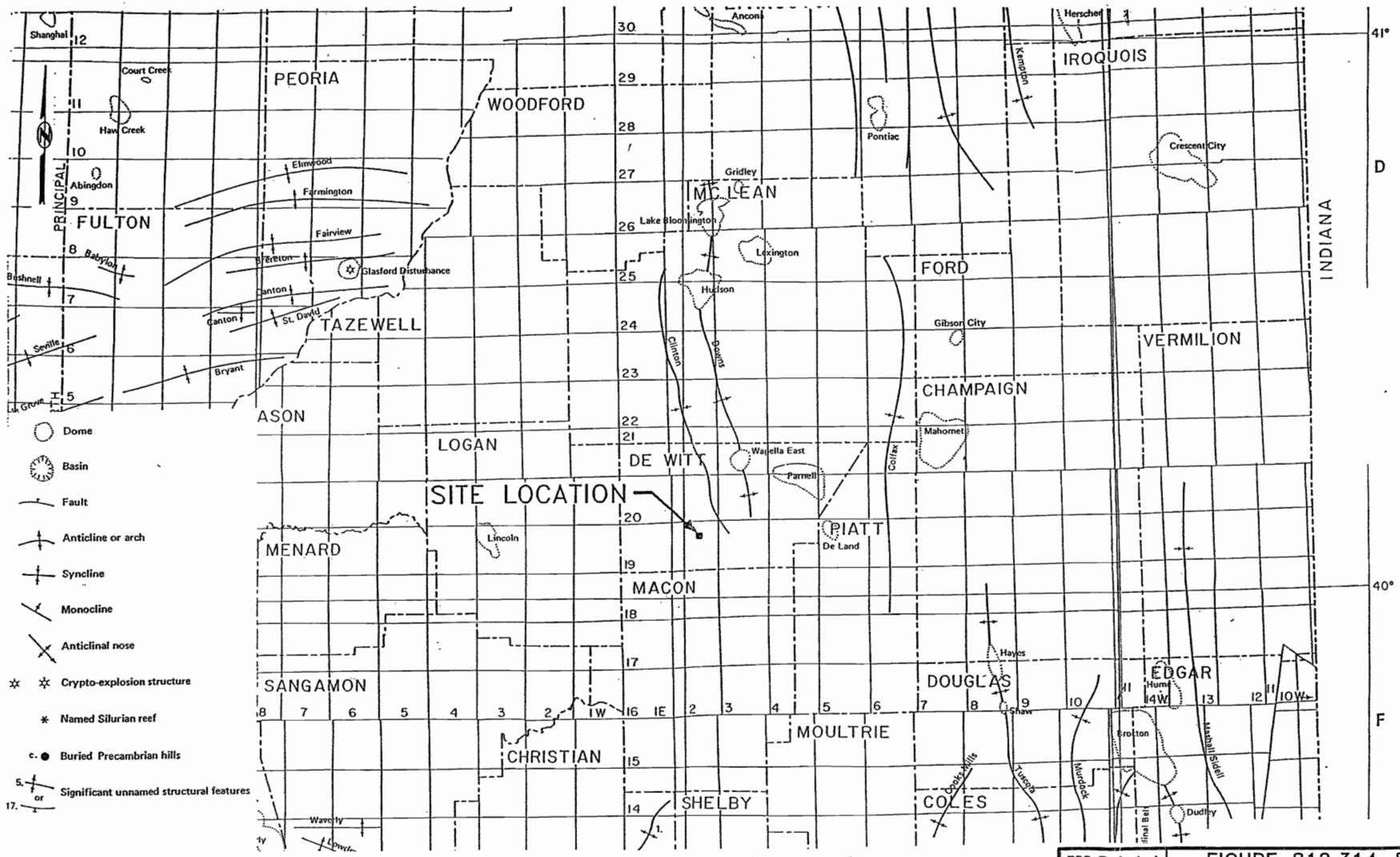


REPRODUCED FROM HUNT & KEMPTON (1977), FIGURE 3

Illinois Licensed Professional
Design Firm 184-001145

PDC Technical Services, Inc. Peoria, Illinois	FIGURE 812.314-7
	BEDROCK SURFACE TOPOGRAPHY DE WITT COUNTY, ILLINOIS
	CLINTON LANDFILL NO. 3
	CLINTON, ILLINOIS
	PROJECT NO. 91-118

CAD DWG NO:911181033 EMPLOYEE NO: 89736 DATE/TIME: 02/17/05 13:41 ACAD-15.



Source: STRUCTURAL FEATURES OF ILLINOIS
Circular 519 Plate 1
Illinois Institute of Natural Resources
State Geological Survey Division

Illinois Licensed Professional
Design Firm 184-001145

PDC Technical Services, Inc.
Peoria, Illinois

FIGURE 812.314-8

SITE FEATURE MAP

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118

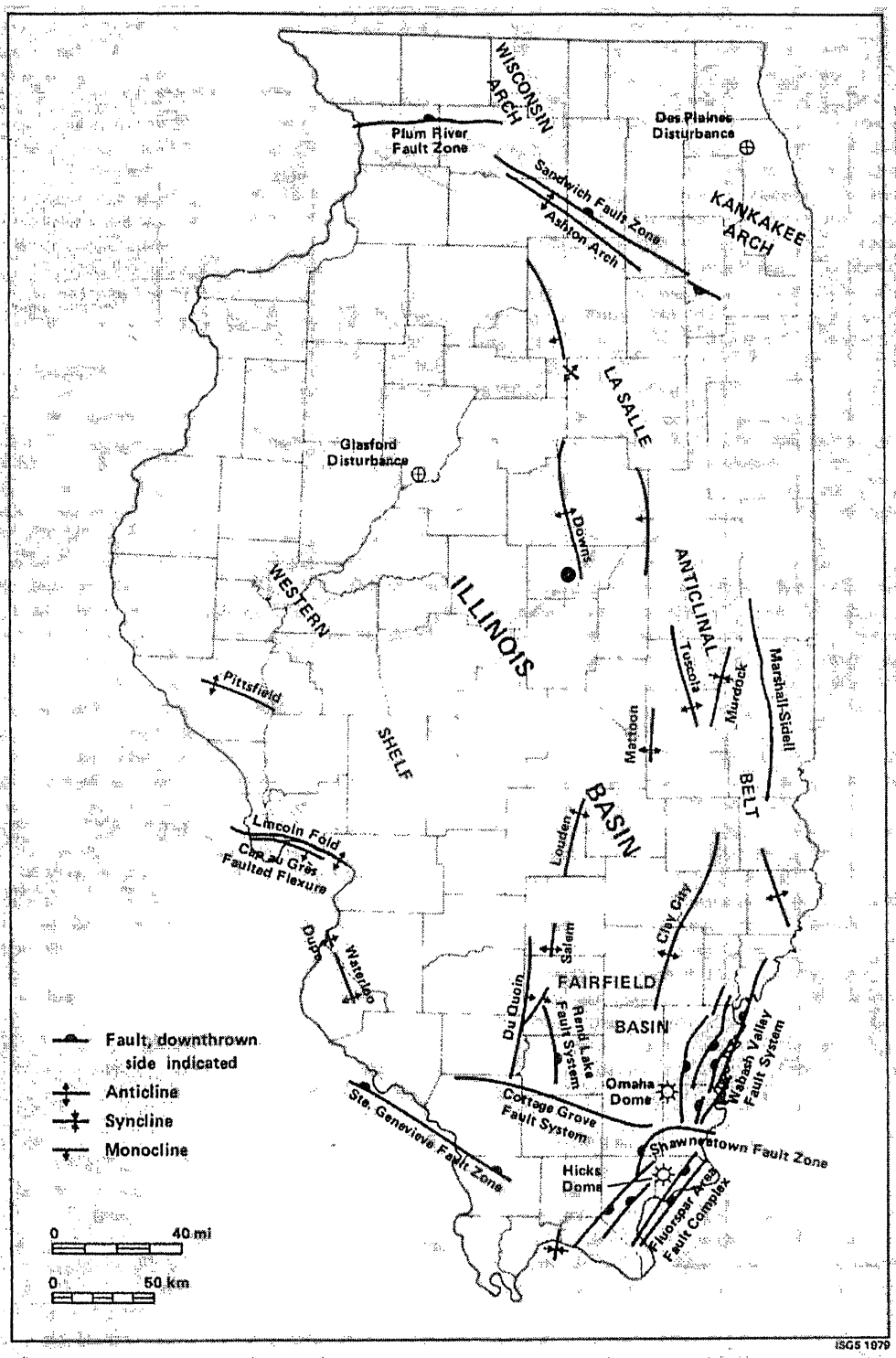


Figure 1. Geologic structures of Illinois (modified after Krausse et al., 1979).

SOURCE: Keys, John N. and Nelson, W. John. "The Rend Lake Fault System in Southern Illinois". Circular 153, Illinois State Geological Survey; Urbana, Illinois, 1980.

● – SITE LOCATION

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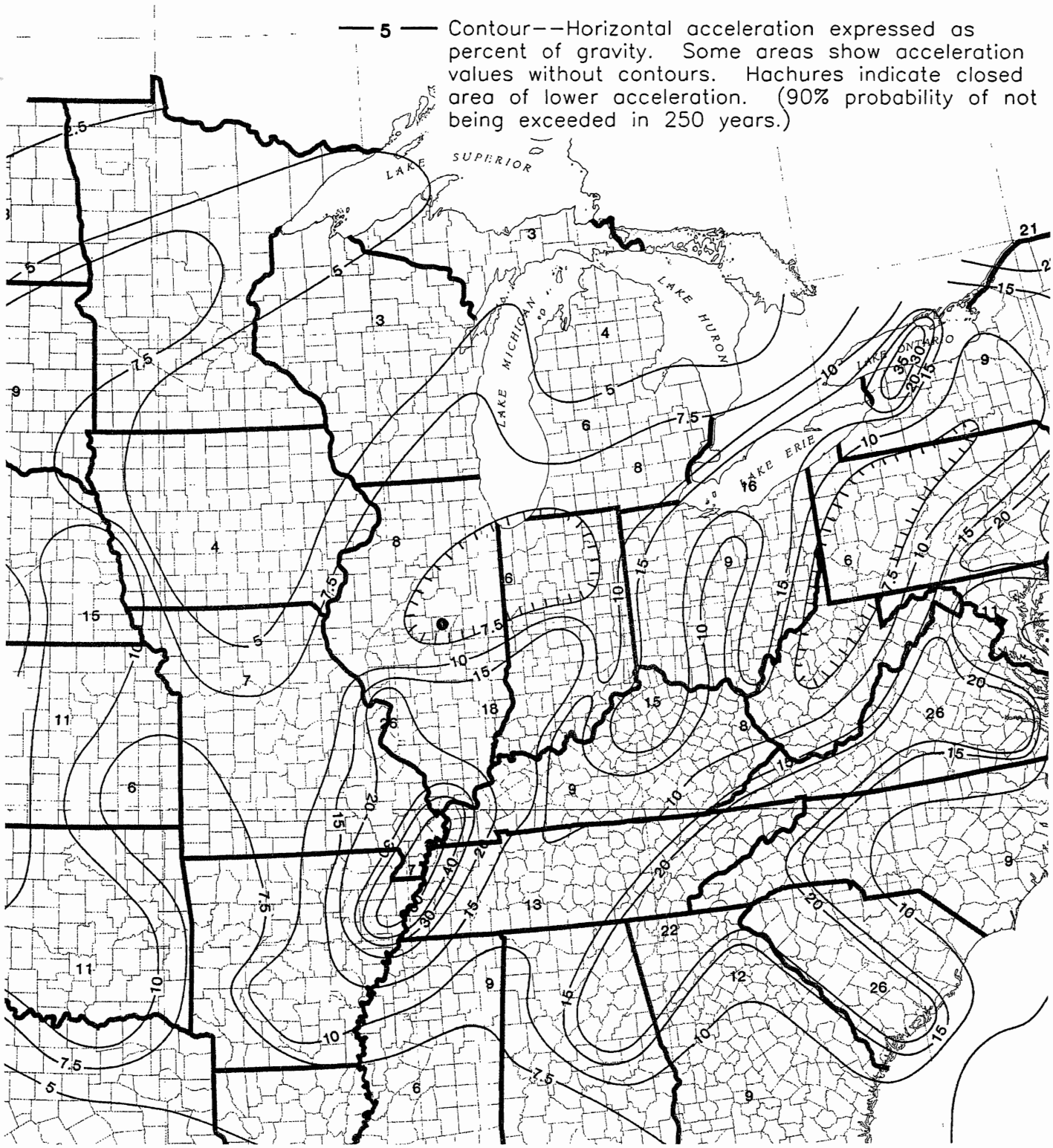
FIGURE 812.314-9

GEOLOGIC STRUCTURE MAP

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-143



(S. T. ALGERMISSEN, D. M. PERKINS, P. C. THENHAUS, S. L. HANSON, AND B. L. BENDER, 1990)

● – SITE LOCATION

Illinois Licensed Professional Design Firm 184-001145

PDC Technical Services, Inc.

Peoria, Illinois

FIGURE 812.314-10

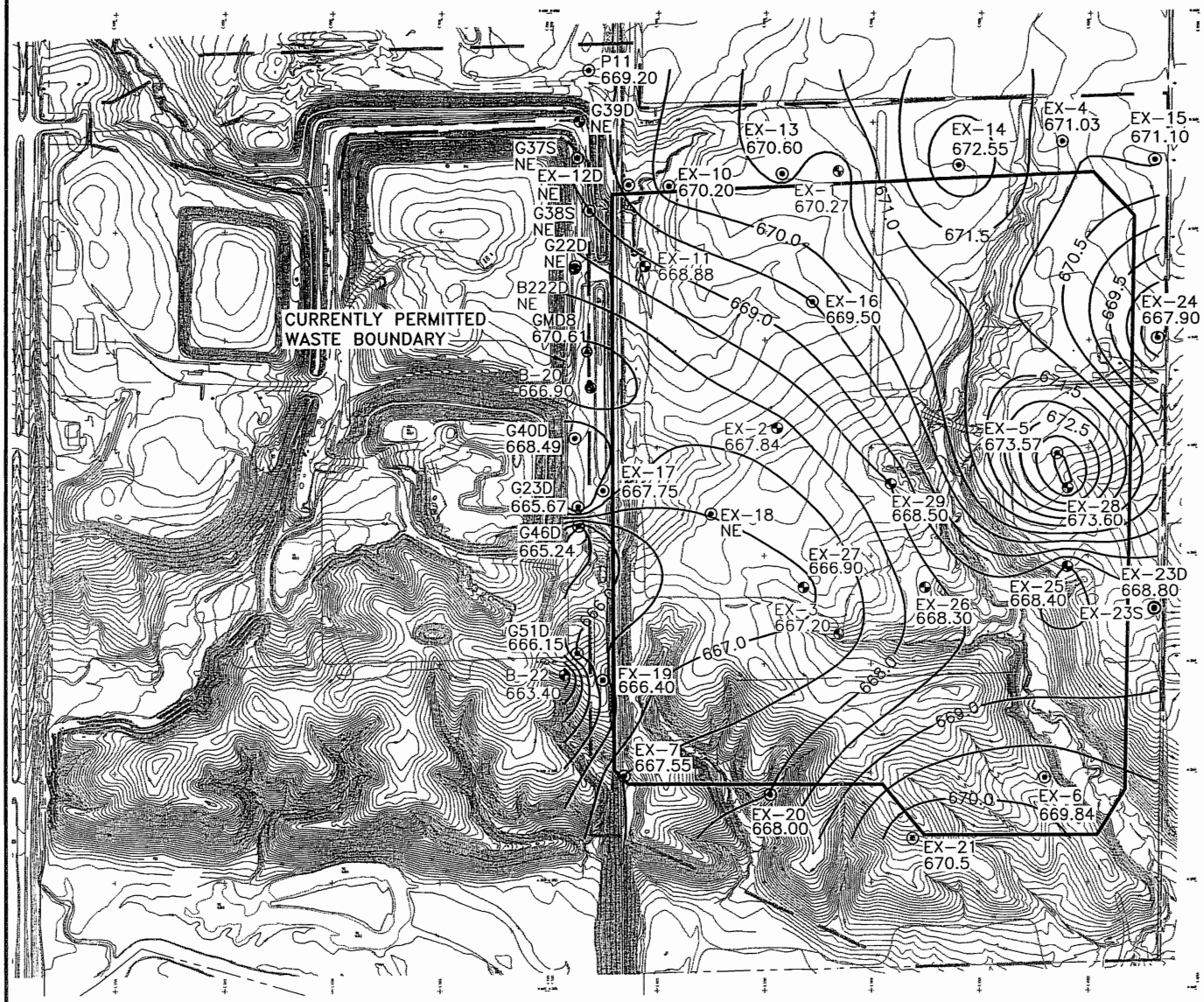
PROBABILISTIC EARTHQUAKE ACCELERATION AND VELOCITY MAP

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-143

CAD DWG NO:91118963 EMPLOYEE NO: 89736 DATE/TIME: 02/16/05 16:24 ACAD-15.



500' 250' 0 500' 100'

1"=500'

LEGEND

⊕	SOIL BORING
⊙	PIEZOMETER
⊛	GAS MONITORING WELL
671.5	ELEVATION CONTOUR (FEET-MEAN SEA LEVEL) TOP OF ROXANA SILT-ROBEIN MEMBER
673.60	ELEVATION (FEET-MEAN SEA LEVEL) TOP OF ROXANA SILT-ROBEIN MEMBER
NE	ROXANA SILT-ROBEIN MEMBER NOT ENCOUNTERED
— — —	PROPERTY LINE
— — —	FACILITY BOUNDARY
———	PROPOSED WASTE BOUNDARY

NOTE: ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE ROXANA SILT-ROBEIN MEMBER ARE SHOWN.

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FIGURE 812.314-11

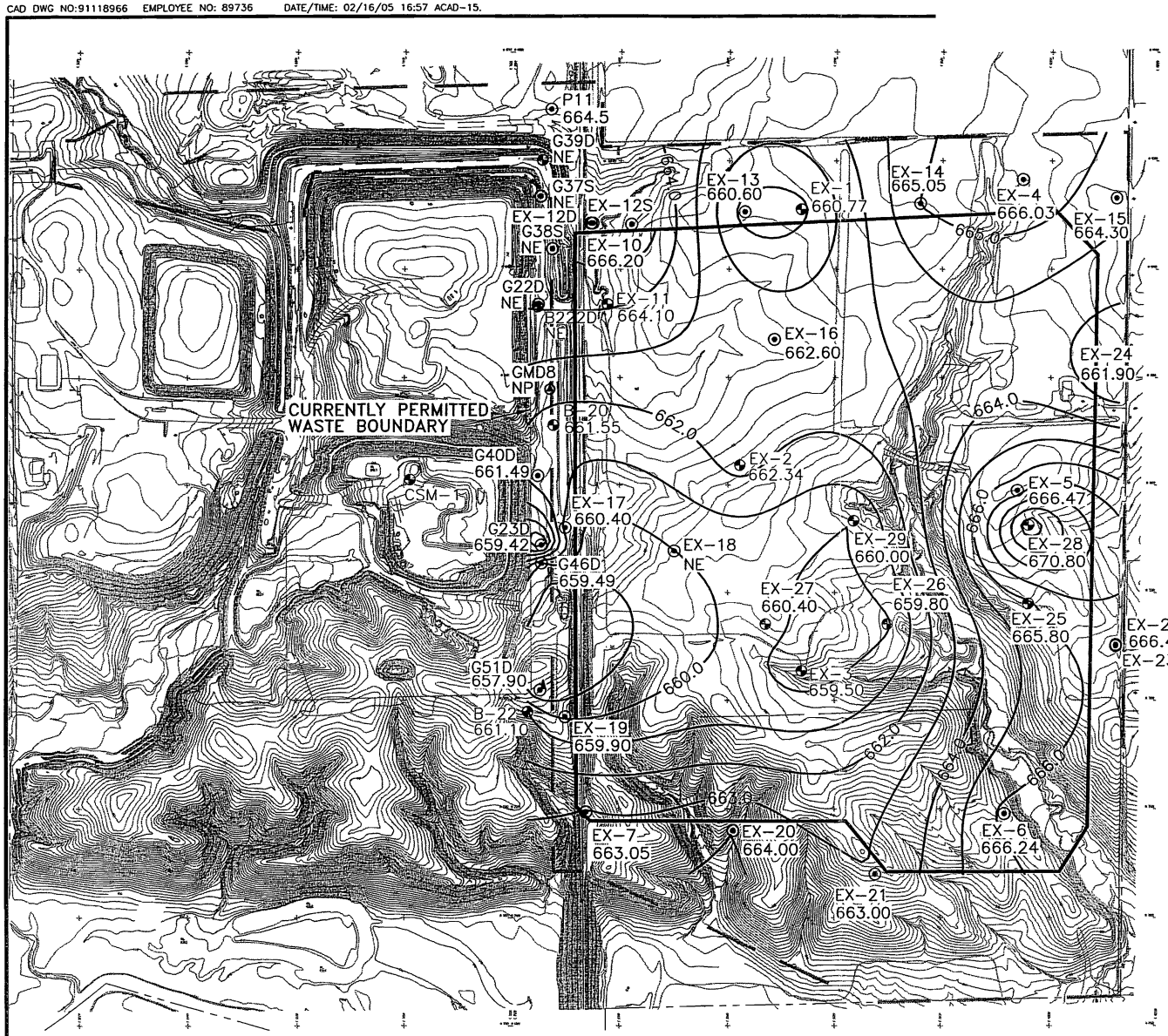
ELEVATION OF THE TOP OF ROXANA SILT-ROBEIN MEMBER

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118.02

CAD DWG NO:91118966 EMPLOYEE NO: 89736 DATE/TIME: 02/16/05 16:57 ACAD-15.



500' 250' 0 500' 100'

1"=500'

LEGEND

⊕	SOIL BORING
⊙	PIEZOMETER
⊛	GAS MONITORING WELL
——664.0——	ELEVATION CONTOUR (FEET-MEAN SEA LEVEL) BOTTOM OF ROXANA SILT-ROBEIN MEMBER
666.47	ELEVATION (FEET-MEAN SEA LEVEL) BOTTOM OF ROXANA SILT-ROBEIN MEMBER
NE	ROXANA SILT NOT ENCOUNTERED
NP	ROXANA SILT NOT FULLY PENETRATED
— — — —	PROPERTY LINE
═══	FACILITY BOUNDARY
———	PROPOSED WASTE BOUNDARY

NOTE: ONLY THOSE BORINGS EXTENDING TO THE EXPECTED ELEVATION OF THE ROXANA SILT-ROBEIN MEMBER ARE SHOWN.

Illinois Licensed Professional Design Firm 184-001145

PDC Technical Services, Inc.
Peoria, Illinois

FIGURE 812.314-12

ELEVATION OF THE BOTTOM OF ROXANA SILT-ROBEIN MEMBER

CLINTON LANDFILL NO. 3

CLINTON, ILLINOIS

PROJECT NO. 91-118.02

ATTACHMENT 1

SITE GEOLOGY AND HYDROGEOLOGY AND SUPPORTING DOCUMENTATION

Shaw®

Volume 3

Application For Permit To Develop A Non-Hazardous Solid Waste Landfill

Submitted to:

Illinois Environmental Protection Agency
Bureau of Land
1021 N. Grand Avenue East
Springfield, Illinois 62794

Submitted by:

Clinton Landfill, Inc.
4700 North Sterling Avenue
P.O. Box 9071
Peoria, Illinois 61612-9071

Clinton Landfill No. 3
DeWitt County, Illinois

January 2005

Certification by Professional Geologist

In accordance with Section 60 of The Professional Geologist Licensing Act, I, John Robert Berry, an Illinois Licensed Professional Geologist, (Illinois License Number 196-000267, expires 3-31-2005) certify that this evaluation of the geologic and hydrogeologic conditions was prepared by me and that the information contained within is true and accurate to the best of my belief.

Signature:

John R. Berry, P.G.
Senior Hydrogeologist

SEAL:

LICENSED PROFESSIONAL GEOLOGIST
JOHN R. BERRY
196-000267
ILLINOIS

Date February 28th, 2005

812.314 DESCRIPTION OF HYDROGEOLOGY

812.314.1 Hydrogeologic Site Investigation (811.315)

A. Published Information Review

A number of published sources were consulted in order to obtain information regarding the climatic, geologic and hydrogeologic conditions in the site region. Published sources consulted included reports and water well logs from the Illinois State Geological Survey (ISGS), water well logs from the Illinois State Water Survey (ISWS), DeWitt Bi-County Health Department, topographic maps from the United States Geological Survey (USGS), and climatic information from the National Oceanic and Atmospheric Administration (NOAA).

Potable water well logs from the ISGS, ISWS, DeWitt Bi-County Health Department are provided in Appendix 812.314-A. Average monthly temperature and rainfall data obtained from NOAA are summarized in Appendix 812.314-B. An area topographic map is provided on Figure 812.314-1.

B. Soil Borings, Groundwater Monitoring Wells and Piezometers

Site geologic and hydrogeologic conditions have been investigated by drilling 29 soil borings on the Clinton Landfill No. 3 site and correlating geologic information from 10 soil borings previously drilled at the adjacent existing Clinton Landfill No. 2 site. The 29 soil borings drilled on the proposed expansion area were conducted in six phases. The drilling program was conducted under the direction of an Illinois Licensed Professional Engineer (P.E.) with field activities and soil descriptions conducted by an Illinois Licensed Professional Geologist (LPG). Boring logs, with Unified Soil Classification System (USCS) soil descriptions (where available), soil sampling details, and well completion details are provided in Appendix 812.314-C. Boring locations are shown on Figure 812.314-2 of this document.

Boring Nos. EX-1 through EX-3 were drilled at the site in December of 1996 by SKS Engineers (SKS) under the direction of a PDC LPG. These borings were drilled using 8-inch outside diameter hollow stem augers (HSA) to depths of approximately 100 to 109.5 feet below ground surface (bgs). Samples were collected at continuous intervals utilizing a standard 5-foot split spoon sampler. The samples were logged in the field by

PDC who selected representative samples for laboratory testing. The borings were grouted closed by pumping either a cement/bentonite or bentonite slurry through the augers using a tremie pipe while the augers were slowly extracted.

Boring Nos. EX-4 through EX-7 were drilled at the site in March through April 2000 by SKS under the direction of a PDC LPG. Boring EX-4 was drilled near the topographical low area of the site and borings EX-5 and EX-6 were drilled near the topographical high areas of the site. These borings were drilled using 8-inch outside diameter HSA to approximately 59 to 94 feet bgs. Samples were collected at continuous intervals utilizing a 5-foot standard split spoon sampler or thin-wall Shelby tube. These borings (EX-4 through EX-7) were converted into piezometers. These piezometers were labeled with the same nomenclature as the borings (i.e., EX-4 for boring EX-4, etc.).

Boring Nos. EX-8 and EX-9 were drilled in April 2001. These borings were drilled by SKS under the direction of a PDC LPG. The borings were drilled using 8 inch outside diameter HSA. These borings were converted into piezometers at their completion. Piezometers EX-8S and EX-8D are nested piezometers and are within 10 feet of each other. Prior to the installation of the nest, the deeper boring (EX-8D) was advanced first with the geology recorded from continuous sampling activities utilizing a 5-foot standard split spoon sampler. At the completion of the boring, the piezometer was installed. Next, a review of the boring log indicated a potential need for a shallow piezometer to monitor a water-bearing unit at a higher elevation. The boring for the shallow piezometer (EX-8S) was then advanced within 10 feet of the deeper boring with no samples being collected. Once the boring was completed to the desired depth/elevation, the piezometer was installed.

Boring Nos. EX-10 and EX-11 were drilled in December 2001 and February 2002, respectively. These borings were drilled by SKS under the direction of a PDC LPG. The borings were drilled using 8 inch outside diameter HSA to depths of approximately 48 to 76 feet bgs. Samples were collected at continuous intervals utilizing a standard 5-foot split spoon sampler. The samples were logged in the field by PDC personnel who selected representative samples for laboratory testing. Boring EX-10 was converted into a piezometer at completion. Boring EX-11 was grouted closed by pumping a bentonite slurry through the augers using a tremie pipe while the augers were slowly extracted.

Boring Nos. EX-12 through EX-24 were drilled in December 2002 through February 2003. These borings

were drilled by SKS under the direction of a PDC LPG. The borings were drilled using 8-inch outside diameter HSA to depths of approximately 41 to 99.5 feet below ground surface (bgs). Samples were collected at continuous intervals utilizing a standard 5-foot split spoon sampler. The samples were logged in the field by PDC who selected representative samples for laboratory testing. Borings EX-12, EX-13, EX-14, EX-15, EX-17, EX-19, EX-20, EX-21, EX-22, EX-23, and EX-24 were converted into piezometers at their completion. A shallow well was installed within 10 feet of existing wells EX-12, EX-22, and EX-23, resulting in a nested pair of wells (shallow and deep) at each location. Borings EX-16 and EX-18 was grouted closed after their completion by pumping a bentonite slurry through the augers using a tremie pipe while the augers were slowly extracted.

The most recent phase of drilling was conducted in October 2003. Boring Nos. EX-25 through EX-29 and the installation of piezometer EX-21S were drilled under the direction of a PDC LPG. The borings were drilled around the south-eastern portion of the proposed facility. The borings were drilled using 8-inch outside diameter HSA to depths of approximately 69 to 79.5 feet bgs. Samples were collected at continuous intervals utilizing a standard 5-foot split spoon sampler. Borings EX-25 through EX-29 were grouted closed by pumping a bentonite slurry through the augers using a tremie pipe while the augers were slowly extracted.

Boring CSM-1 was drilled near the center of the adjacent Clinton Landfill No. 2 site in June 1995 by SKS under the direction of PDC. The purpose of this boring was to document the subsurface geology beyond elevation 590 Mean Sea Level (MSL) and to document the presence of the Mahomet Sand which was believed to be present below the facility. The soil boring confirmed the subsurface geology with the literature (ISGS publications) and with nearby well logs. The geologic units were uniform and correlated with the geology recorded on the adjacent well logs and with regional geologic literature. The boring was drilled using 8-inch HSA at a starting elevation of approximately 636 MSL to a final depth of approximately 156 feet bgs, or 480 MSL, and was continuously sampled utilizing a 5-foot long continuous sampler and a 2-foot long split spoon. The samples were logged in the field by PDC who selected representative samples for laboratory testing. The boring was grouted closed by pumping a cement/bentonite slurry through the augers using a tremie pipe while the augers were slowly extracted.

Boring Nos. B22, G46D, G51D, P223D, G40D, B20, GMD8, G39D, and B-11 were previously drilled along the eastern edge of the adjacent Clinton Landfill No. 2 facility (or western edge of the proposed facility) as part

of permitting and monitoring of the existing facility. Information from these nine borings was used to interpolate the geology of the proposed expansion area.

C. Field Hydraulic Testing and Data Interpretation

PDC has performed in-situ aquifer testing on the piezometers at the proposed Clinton Landfill No. 3 facility. The aquifer testing consisted of rising head and falling head slug test which were performed to estimate the hydraulic conductivity of the saturated unit in which each well is screened.

Falling head slug test procedures consisted of displacing the water level within a well to an elevation higher than the static level. Stainless steel pressure transducers/data recorders were installed within the wells to monitor and record changes in head pressure/water level. These transducers monitored and recorded the water level changes over time until the wells recovered to within 95 percent of the static level. This water level data over time was stored within a portable computer for retrieval and analysis at a later time.

Rising head tests procedures consisted of depressing the water levels within a well below the static level. Stainless steel pressure transducers/data recorders were installed within the well to monitor and record changes in head pressure/water level. These transducers monitored and recorded the water level changes over time until the levels recovered to within 95% of the static level. This water level data over time was stored within a portable computer for retrieval and analysis at a later date.

Once the slug tests were complete, the test data were entered into the software program titled *Aquifer Test* by Waterloo Hydrogeologic, Inc. This program estimates the hydraulic conductivity of the aquifer at the well from the time-recharge data recorded by the data recorders. The hydraulic conductivities of the wells were estimated using the Hvorslev Method. Slug test data and *Aquifer Test* output files and graphs are included in Appendix 812.314-D. Test results are summarized in Table 812.314-1.

D. Laboratory Testing

Laboratory testing of hydraulic conductivity, grain-size distribution, Atterberg limits, density, porosity, ion/cation exchange capacity, total organic carbon and other parameters have been conducted in phases which correspond to the soil boring phases. The tests were performed using the appropriate American Society for Testing and Materials (ASTM) test protocols. Laboratory test data are provided in Section 812.305 (Appendix

812.305-A) of this application. Hydraulic conductivity and pertinent test results are summarized in Table 812.314-2. Table 812.314-3 is provided to show a summary of total organic carbon content test results and Table 812.314-4 is provided to show a summary of soil ion-cation exchange capacity test results. The laboratory data for the soil total organic carbon content results and ion-cation exchange capacity test results are provided in Appendix 812.314-E

In addition to the soils testing, extensive groundwater sampling and testing has been performed to characterize the groundwater quality spatially and with depth. Groundwater quality test data are addressed in Section 812.317 of this application.

812.314.2 Site Description

Clinton Landfill No. 3 is located approximately 1-1/4 miles south of the city of Clinton, Illinois and ½-mile east of Illinois Highway 51. The Clinton Landfill No. 3 area lies directly east of the existing operating facility (Clinton Landfill No. 2) which consists of an approximate 80-acre parcel, of which approximately 63.9 acres is permitted by the Illinois Environmental Protection Agency (IEPA) to operate as a Solid Waste Management Facility. The majority of the proposed expansion area lies within the southwest quarter of Section 11, and the North one-half of the Northwest quarter of Section 14, Township19 North, Range 2 East of the 3rd Principal Meridian, DeWitt County, Illinois.

Figure 812.314-1 is provided to show the location of the Clinton Landfill No. 3. The site is located within the Bloomington Ridged Plain Region of the Till Plains Section of the Central Lowland Physiographic Province. The proposed site is situated in an area of glaciated uplands, bordering Salt Creek. Salt Creek is located approximately 600 feet south of the subject facility. Land use in the region is predominately agricultural, (i.e. row crops and livestock) with some rural single family dwellings scattered throughout the area.

Clinton Landfill No. 3 comprises approximately 225 acres and currently is primarily crop land and timber land. A 5-acre residential parcel (owned by CLI) exists in the eastern portion of the site. The area surrounding the landfill site has a surface water drainage flow direction to the southwest leading into Salt Creek. Relief at the site ranges from a maximum elevation of 729 feet Above Mean Sea Level (AMSL) to approximately 660 feet AMSL.

812.314.3 Climatic Aspects of Study Area

The climate in Illinois is classified as continental. Temperature and precipitation vary significantly both in time and space. Weather patterns are primarily dependent upon the interaction of the different continental air masses over the state. Because of the size of the state, its length north to south, and various climate factors such as temperature and precipitation, normal measurements will vary by several inches of rainfall or 5 to 10 degrees from the north (Chicago area) to the south (at junction of the Ohio and Mississippi Rivers).

The nearest temperature and precipitation data obtained was from the NOAA station in East St. Louis, Illinois, included in the Hydrologic Evaluation of Landfill Performance (HELP) model documentation. Key data are summarized below:

Mean monthly temperatures (degrees Fahrenheit):

- December, January, February: 34, 29, 34
- March, April, May: 43, 56, 66
- June, July, August: 75, 79, 77
- September, October, November 70, 58, 45

Average annual precipitation: 31-33 inches
The prevailing wind direction is southerly.

812.314.4 Regional Geology

The surficial deposits in the DeWitt county region consist of an average of approximately 200 feet of overburden soils which are the direct result of glacial activity that occurred during the geological-aged Pleistocene Epoch. Underlying these glacial-derived soils is Pennsylvanian-aged bedrock of the Bond and Modesto Formations. During the Pleistocene Epoch, glaciers from the earliest glacial advancements eroded deep valleys into the bedrock in central Illinois. One of these valleys is known as the Mahomet Bedrock Valley which occupies a major portion of east-central Illinois and directly underlies the Clinton Landfill site. Subsequent glaciation from the Wisconsinan, Illinoian and pre-Illinoian glacial stages filled in and buried the

Mahomet Bedrock Valley. Geologic cross-sections of glacial deposits in DeWitt County as surveyed by Hunt and Kempton (1977) are shown as Figures 812.314-3 and 812.314-4 (Figure 812.314-3 provides the plan of Sections). This section presents the sequence of glacial till and outwash deposits which resulted from Wisconsinan, Illinoian and pre-Ilinoian glaciation. Figure 812.314-5 is provided to show the Pleistocene stratigraphy of east-central Illinois.

The three episodes of glaciation, the Wisconsinan, Illinoian and pre-Illinoian, deposited an array of sediments on the DeWitt County region. The various soils that are expected to be present in the site vicinity are discussed in detail below. The material descriptions are from Wilman and Frye (1970); Lineback (1970); Hunt and Kempton (1977 and 1991) and Hansel (1996). These deposits are likely to be present in the region of the proposed CLI expansion area.

A. Modern Soil

The topsoil which is expected to cover most of the site consists of a weathered organic profile developed in loess overlying the glacial deposits. This soil is developed on any sediment that underlies the surface. The Modern Soil ranges in thickness from several inches to several feet.

B. Cahokia Alluvium

The Cahokia Alluvium is the youngest deposit mapped in DeWitt County. It ranges from 5 to 20 feet in thickness and occurs along major river valleys. It consists of silts, sands, and some organic material, or the products of erosion and slopewash from upland deposits. This material is present in Salt Creek, which is located south of the site.

C. Henry Formation of the Mason Group

The Henry Formation consists of well sorted, well bedded sand and gravel outwash deposited in valley trains as a result of glaciation. Lenses of clay, silt, organic debris, wood and shells can locally occur in the sand and gravel of the Henry Formation. The formation includes terrace deposits of former valley trains. Minor amounts may be present at the site. The Henry Formation extends from Wisconsin south into McHenry

County trending southwest to Peoria County where it trends southeast to Shelby County, then eastward into Indiana.

D. Peoria Silt of the Mason Group

Four to seven feet of Peoria Silt is expected to be present in the site vicinity. The unit consists of yellow-tan massive loess and includes the Modern Soil in the surface. Locally, the loess may be clay-enriched by the B-zone of the Modern Soil, or by slopewash and colluvium deposited with the windblown silt. It grades from sandy silt in the bluffs of major source valleys to clayey silt away from the bluffs, where it typically is thinner and weathered. It exists throughout Illinois, and regionally from Minnesota north to Louisiana south, east to Ohio and west to Kansas. The Wisconsinan age Peoria Silt has an expandable clay mineral content ranging from 28% to 80%; 15%-74% illite; and 5%-20% kaolinite and chlorite.

E. Morton Tongue of the Peoria Silt, Mason Group

The Morton Tongue consists of a gray to tan calcareous, massive fossiliferous silt bounded by sharp contacts at the top and bottom. It appears locally in DeWitt County as a thin grayish silt layer between deposits of the Tiskilwa Formation and the underlying Robein Member of the Roxana Silt. It exists as a belt that is approximately 30 miles wide and stretches from Bureau County in the north to Shelby County in the south. The Morton Tongue of the Peoria Silt has 46%-76% expandable clay minerals; 12%-30% illite; and 11%-24% kaolinite and chlorite.

F. Tiskilwa Formation,Wisconsinan Wedron Group

The Tiskilwa Formation of the Wisconsinan Wedron Group consists of calcareous, red gray to gray, medium textured clay that contains lenses of gravel, sand, silt, and clay. Typically it oxidizes to red-brown, brown, or yellow brown. The Tiskilwa Formation is volumetrically the largest formation of the Wedron Group. It was deposited as part of the Shelbyville ground moraine in the site vicinity. The Tiskilwa Formation consists of an upper boundary member (Piatt Member) and a lower boundary member (Delavan Member) which are quite similar and often undistinguishable. The two members of the Tiskilwa Formation do not always occur together. The formation trends from Kane County in the north to McLean County in the south, and as far west as western Bureau County. Typical textural composition for the Wisconsinan Tiskilwa Formation is reported

by Willman and Frye (1970) as 27%-30% sand; 34%-38% silt; and 34%-37% clay. Clay minerals range from 6%-20% expandables; 64%-72% illite; and 12%-30% kaolinite and chlorite. The Delevan Member of the Tiskilwa Formation has a typical textural composition of 30%-32% sand; 39%-41% silt; and 27%-31% clay. Clay minerals for the Tiskilwa Formation range from 8%-19% expandables; 67%-81% illite; and 9%-22% kaolinite and chlorite (Willman and Frye, 1970).

G. Roxana Silt

The Roxana Silt is primarily loess, but it locally contains some sand, and commonly the basal unit is silt, sand, and clay colluvium. It is pinkish-tan to yellow-gray in color. It is present throughout the state of Illinois and has an overall north to south lateral extent ranging from Minnesota to Louisiana. The Wisconsinan age Roxana Silt has clay minerals ranging from 46%-54% expandables; 8%-15% illite; and 38%-42% kaolinite and chlorite.

H. Robein Silt Member of the Roxana Silt

The Robein Silt member consists of silts, sandy silts, organic silts, and peat. It is usually a rich dark brown, or even black in color. It is easily recognized and has been dated as 21,000 to 28,000 radiocarbon years before present (B.P.). The organic silts generate methane gas, which is reported to be frequently present in water wells in the area. It is generally less than 5 feet thick, and in many localities it only attains a thickness of a few inches. It is discontinuous in the subsurface over a majority of Illinois. The Robein Member of the Roxana Silt has clay minerals ranging from 9%-77% expandables; 8%-65% illite; and 14%-50% kaolinite and chlorite (Willman and Frye, 1970). No published resources were located on the typical textural composition of this unit.

I. Sangamon Geosol

The Sangamon Geosol is characterized by a brown to black organic-rich soil which was formed by the accumulation of organic debris and silt from sheetwash and possibly eolian deposits. It commonly ranges from 1 to 5 feet in thickness and is present in most of Illinois from the northern border with Wisconsin south to the northern tip of Johnson County in southern Illinois.

J. Berry Clay Member, Illinoian Glasford Formation

The Berry Clay is an accreted soil consisting of clay, silt and sparse small pebbles, and is commonly 2 to 5 feet thick. This member is commonly greenish-blue in color which makes it distinguishable. It occurs at isolated localities throughout the area of Illinoian Drift. The Berry Clay is listed by Willman and Frye (1970) as having 73%-82% expandable clay minerals; 10%-21% illite; and 6%-8% kaolinite and chlorite. Published resources indicating the typical textural composition of the Berry Clay were not found to exist.

K. Radnor Till Member, Illinoian Glasford Formation

The Radnor Till Member is gray silty clay that is compact, and exhibits a high illite content. The Radnor Till Member exists throughout central and east central Illinois and occurs below the Berry Clay. The Radnor Till Member has a typical textural composition of 15%-29% sand; 46%-55% silt; and 25%-30% clay. Clay minerals range from 2%-16% expandables; 66%-84% illite; and 8%-29% kaolinite and chlorite (Willman and Others, 1975).

L. Roby Silt Member, Illinoian Glasford Formation

The Roby Silt Member contains silt, clay, sand and locally contains a fauna of fossil mollusks. The Roby Silt member occurs below the Radnor Till Member, and above the Vandalia Till Member. It can be up to 13 feet in thickness. The Roby Silt is in the earliest part of the Jubileean Substage of the Illinoian Stage. It is a proglacial deposit of the advancing glacier that deposited the Radnor Till, and it was subsequently overridden by that glacier.

M. Vandalia Till Member, Illinoian Glasford Formation

The Vandalia Till Member is generally a sandy, gray, compact clay till with lenticular bodies of silt, sand, and gravel. It is commonly 25 to 50 feet thick, but it is sometimes thicker in some of the valleys in the area. It occurs widely in south-central and east-central Illinois.

N. Smithboro Till Member, Illinoian Glasford Formation

The Smithboro Till Member consists of gray, compact, silty clay till. It is bounded below by its contact with the Yarmouth Soil, or older soils, and at the top by the overlying Mulberry Grove Member (if present) or

Vandalia Till Member. It occurs widely in south-central and east-central Illinois.

O. Yarmouth Soil, Kansan Banner Formation

The Yarmouth Soil is an in-situ soil profile deeply developed in tills of the Banner Formation. It consists of accretionary deposits of fine sediment and organic material. It occurs predominantly in the western and central parts of Illinois.

P. Tilton Till Member, Kansan Banner Formation

The Tilton Till Member is gray, calcareous, hard, silty, sandy clay till. The unit contains considerable silt, sand, and gravel, particularly near its upper and lower boundaries. The lateral extents of the Tilton Till is not addressed in any of the literature reviewed.

Q. Hillary Till Member, Kansan Banner Formation

The Hillary Till Member is reddish brown, calcareous, massive, hard clay till. The units lower part is slightly darker, and its upper part commonly contains streaks of silt. It occurs predominantly in east-central Illinois, most markedly in the Danville area.

R. Harmattan Till Member, Kansan Banner Formation

The Harmattan Till Member is largely a gray, calcareous, dense, hard clay till, but its upper part contains lenticular bodies of gravelly sand. This unit is present mostly in the eastern portions of Illinois.

S. Mahomet Sand Member, Kansan Banner Formation

The Mahomet Sand Member consists of pro-Kansan sand and gravel outwash and contains many silt beds. It exists primarily in the deep bedrock valleys of central and east-central Illinois in thicknesses up to 150 feet. Much thinner deposits of basal sand and gravel outwash of Kansan or Illinoian age may overlie bedrock outside of the bedrock valleys as well. Both the Mahomet Sand Member, where it is present, and basal sands and gravels form good aquifers.

T. Bedrock

Figure 812.314-6 is provided to show a stratigraphic section of the bedrock directly beneath the glacial deposits in DeWitt County, Illinois. Bedrock of the Bond and Modesto Formations of the Pennsylvanian System directly underlie the glacial deposits at the site. Bedrock of the Bond and Modesto Formations consist primarily of shale and sandstone with some thin but significant beds of limestone and coal. The Pennsylvanian-aged rocks range in thickness from 350 to 800 feet. Underlying these rocks is a sequence of interbedded shales, sandstones, limestones and dolomites of the Lower Chesterian, the Valmeyeran, and the Kinderhookian Series of the Mississippian system. The top portion of the Mississippian System is eroded beneath the Pennsylvanian System strata in Dewitt County and has an estimated overall thickness of approximately 800 feet. Figure 812.314-7 is provided to show the bedrock surface topography in Dewitt County.

812.314.5 Structural Features

A literature review was conducted to identify regional bedrock structural features. As shown on Figure 812.314-8, few regional bedrock structural features have been identified in the site region. The nearest identified features are the Clinton syncline and Downs anticline located about 3 and 7 miles northeast of the site, respectively. No evidence of faulting has been found in the region of the site. The nearest known or suspected active faults are associated with the Wabash Valley and Rend Lake Fault systems located about 135 miles southeast and south of the site, respectively. A map showing the location of these faults is provided as Figure 812.314-9.

The site seismicity is controlled by earthquakes that originate in the fault systems of southern Illinois and southeastern Missouri. However, because of the distance of these active fault system from the site, relatively mild ground shaking (expressed as horizontal acceleration) would be expected at the site due to seismic activity. A map showing the estimated horizontal bedrock acceleration with a 90 percent probability of not being exceeded in 250 years is provided as Figure 812.314-10.

812.314.6 Regional Hydrogeology

Withdrawal of groundwater from the glacial material in the region is limited. These deposits often contain well stratified, alternating high and low hydraulic conductivity layers that commonly produce numerous perched and/or confined flow conditions. These conditions are only found when a well is screened in large sand/gravel seam within the glacial silty clay. Although generally the yield from these perched aquifers is low, probabilities of larger yields from sand and gravel deposits are higher along bedrock valleys where the sand and gravel deposits are much thicker. Speculation on regional groundwater flow is difficult because of hydraulic anisotropy within the glacial sediments

Records of wells in the vicinity of the site were obtained from the ISGS, ISWS and Dewitt County Health Department were reviewed. The water well logs indicate that the bedrock is seldom accessed for domestic water supplies in this area due in part to the thickness and higher yield capacity of the Mahomet Sand aquifer which overlies the Pennsylvanian bedrock. Withdrawal from the bedrock aquifers at greater depths would be too highly mineralized for consumption.

A. Water Wells in Site Vicinity

Logs of all water supply wells within 2 miles of the facility that are available from the ISGS, ISWS and Bi-County Health Department are provided in Appendix 812.314-A. Locations of these wells are also shown on the Area Well Location Map provided in Appendix 812.314-A. A summary of these wells is provided in Table 812.314-5.

Locations of wells and probable wells were investigated in the site region. Aerial photographs were reviewed and a visual reconnaissance of the area was conducted to try to locate all potable wells in the site region. Dwellings in the area, for which no water well log was available or listed, was assumed to have a well. These probable well locations are shown on the Area Well Location Map in Appendix 812.314-A.

After reviewing well record documents of water wells nearest to the vicinity of the proposed Clinton Landfill No. 3 facility, 21 wells that are within 3,000 feet of the proposed waste boundary were selected for further study. These wells are designated as; 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 10-8, 10-10, 10-11, 10-12, 10-13, 11-1, 11-2, 11-3, 14-1, 14-2, 14-3, 14-4, 14-5, 15-12, and 15-13. Refer to the Area Well Location Map, included

in Appendix 812.314-A, to view the location of these wells in relation to the proposed Clinton Landfill No. 3. A detailed study of the construction of these wells was performed to determine their screen depth, screen elevation, geologic unit screened, casing depths, and use. This study was limited, however, due to lack of detailed information on well reports/logs which were obtained from the ISGS, ISWS and Bi-County Health Department. From the study the following information was obtained:

- Well numbers 10-1 and 10-2 are listed by both the ISWS and ISGS as domestic water supply wells. They are both located approximately 1,000 feet west of the proposed Clinton Landfill No. 3. 10-1 consists of a 4 inch diameter casing extending from 3 feet bgs to 274 feet bgs. Then a 6 feet long by 4 inch diameter screen is placed at a depth of 273 to 279 feet bgs which correlates to an elevation of approximately 392 to 386 feet AMSL. The water bearing unit is a sand and gravel deposit which occurs from 223 feet bgs to 279 feet bgs or elevation 442 to 386 feet AMSL. Well 10-2 consists of a 4 inch diameter casing and a 4 feet long by 4 inch diameter screen that is placed in a water bearing sand unit that occurs from 212 feet bgs to 265 feet bgs or elevation 438 to 385 feet AMSL. The length of the casing and the depth of the screen were not reported in the reports/logs. The well is terminated at a depth of 265 feet bgs or approximately 385 feet AMSL. Considering the screened elevations of these wells, it is believed that the wells are screened in the Mahomet Sand.

- Well number 10-3 is only listed by the ISWS and is reported as a domestic water supply well. The well is reported to have a depth of only 16 feet bgs (approximately 674 feet AMSL). There is a footnote on the well report that states "water supplied from spring". This implies that the well is screened in a shallow perched zone. Well 10-3 is located approximately 3,200 feet west of the CLI facility in a mobile home park. No information was given regarding the casing depth, screen elevation, or geologic unit screened. It is believed that the well is no longer in use since it is reported that the mobile home park has two domestic wells.

- Well numbers 10-4 and 10-5 are both listed in the ISWS reports and only 10-4 is listed in the ISGS logs. The wells are listed as domestic water supply wells and are located approximately 2,500 feet west of the proposed Clinton Landfill No. 3 in the same mobile home park as Well 10-3. Well 10-4 is reported to extend to a depth of 260 feet bgs, or approximately 395 feet AMSL. The well consists of a 4 inch diameter casing extending from 3 feet bgs to 256 feet bgs and a 4 feet long by 4 inch diameter

screen that is placed in a sand unit that occurs from 195 feet bgs to 260 feet bgs or elevation 438 to 385 feet AMSL. Well 10-5 is reported to extend to a depth of 241 feet bgs, or approximately 434 feet AMSL. No information was found on the casing depth, geologic unit screened, or the screen elevation of well 10-5. Considering the reported elevation of both wells, it is believed that they are screened in the Mahomet Sand Member.

- Well number 10-6 is only listed on the ISWS reports as a domestic well with an overall depth of 76 feet bgs, or approximately 654 feet AMSL. The well is located approximately 3,000 feet west-northwest of the proposed Clinton Landfill No. 3. The proposed monitoring zone beneath the CLI facility is near the elevation that well 10-6 is terminated.

- Well 10-8 is listed on the ISGS logs as a landfill soil boring. The soil boring is located at the northwest corner of the existing CLI facility. It is reported at a depth of 41.5 feet bgs, which is approximately 684.5 feet AMSL. It is assumed that this boring was backfilled immediately after its completion and is of no concern to this study.

- Well number 10-10 is listed by the ISWS and ISGS and is owned by CLI. The well consists of 5 inch diameter casing extending from 2 feet above ground surface to 277 feet bgs and a 4 feet long by 5 inch diameter screen. The screen is set in a sand unit that occurs from 264 feet bgs to 281 feet bgs. The well is terminated at a depth of 281 feet bgs which correlates to elevation 444 feet AMSL. Due to the well depth, it is most likely screened in the Mahomet Sand Member. This well is used by CLI to provide potable water to the current facility office.

- Well number 10-11 is listed by the ISWS and ISGS and is utilized for irrigation. It consists of a 5 inch diameter casing from 2 feet bgs to a depth of 273 feet bgs. The casing is attached to a 7 feet long by 5 inch diameter screen that is placed in a sand unit that occurs from 236 feet bgs to 280 feet bgs. The well is terminated at a depth of 280 feet bgs, or elevation 427 feet AMSL. Due to the wells depth, it is believed to be screened in the Mahomet Sand Member.

- Well Number 10-12 is listed by the ISWS and ISGS and is utilized as a domestic water supply well. No information was found on the casing depth or screen elevation of this well. The well is listed as being placed in a sand and gravel unit that is located from 86 to 88 feet bgs, approximately elevation

639 to 637 feet AMSL. The well is located approximately 3,000 feet west-northwest of the proposed Clinton Landfill No. 3.

- Well number 10-13 is listed by both the ISWS and ISGS and is a domestic well located more than 3,000 feet to the northwest of the proposed expansion area. It consists of a 5 inch diameter casing that is placed at 1 foot above ground surface to a depth of 284 feet bgs. The casing is followed by a 4 feet long by 5 inch diameter screen that is placed in sand at an elevation of 441 feet AMSL to 437 feet AMSL. Due to the depth of the well, it is believed that well is screened in the Mahomet Sand Member.

- Well number 11-1 is listed by the ISWS and ISGS and is a domestic well located approximately 1,700 feet east of the proposed expansion area. The well is cased with 4 inch diameter black pipe to a depth of 131 feet bgs. A 4 feet long by 4 inch diameter screen is placed in a water bearing gravel unit to an elevation of approximately 579 feet AMSL. The well was reported to have a low yield rate of 5 gallons per minute with a head loss of 72 feet in 1 hour of pumping.

- Well number 11-2 is listed by both the ISWS and ISGS. It is a domestic well that is located within the proposed Clinton Landfill No. 3. The well consists of a 5 inch diameter casing that extends from 1 foot bgs to a depth of 141 feet bgs. The casing is followed by a 4 feet long by 5 inch diameter screen that is set in a sand unit that occurs from 141 feet bgs to 145 feet bgs. The well is terminated at 145 feet bgs which correlates to approximately elevation 580 feet AMSL. Due to the location of this well on the facility, it will be abandoned in accordance with Illinois Department of Public Health (IDPH) standards. Proper well abandonment forms will also be submitted to the DeWitt County Health Department.

- Well number 11-3 is a domestic well that is listed by the ISWS and ISGS. It is located more than 2,500 feet north of the proposed Clinton Landfill No. 3. The well has a 4 inch diameter casing that extends from the ground surface to a depth of 100 feet bgs. The casing is followed by a 3 feet long by 4 inch diameter screen that is placed in a sand and gravel unit that occurs from 97 feet bgs to 103 feet bgs. The well is terminated at an approximate elevation of 619 feet AMSL.

- Well number 14-1 is only listed on the ISWS and Bi-County Health Department records. It is a domestic well that is located approximately 1,700 feet east-southeast of the proposed Clinton Landfill

No. 3. The well has a 5 inch diameter casing that extends from the ground surface to a depth of 266 feet bgs. The casing is followed by a 8 feet long by 5 inch diameter stainless steel screen that is placed in a fine- to medium-grained sand unit that occurs from 230 feet bgs to 274 feet bgs. The well is terminated at an approximate elevation of 401 feet AMSL. Considering this well's depth, it is believed to be screened in the Mahomet Sand Member.

- Well number 14-2 is only listed on the ISWS records. It is a domestic well that is located approximately 350 feet east of the proposed Clinton Landfill No. 3. No information was found regarding the casing depth, screen elevation, or geologic unit screened. It extends to a depth of 68 feet bgs, or approximate elevation 652 feet AMSL.

- Well number 14-3 is listed on the ISWS and Bi-County Health Department records. It is a domestic well that is located approximately 2,000 feet east-southeast of the proposed CLI expansion area. The well has a 5 inch diameter casing that extends from the ground surface to a depth of 239 feet bgs. The casing is followed by a 4 feet long by 5 inch diameter stainless steel screen that is placed in a sand and gravel unit that occurs from 235 feet bgs to 246 feet bgs. The well is terminated at an approximate elevation of 452 feet AMSL. Considering this well's depth, it is believed to be screened in the Mahomet Sand Member.

- Well number 14-4 is listed by the ISWS and ISGS and is a domestic well located approximately 1,150 feet east-southeast of the proposed expansion area. The well has a 5 inch diameter casing that extends from the ground surface to a depth of 238 feet bgs. The casing is followed by a 8 feet long by 5 inch diameter stainless steel screen that is placed in a sand unit that occurs from 173 feet bgs to 246 feet bgs. The well is terminated at an approximate elevation of 429 feet AMSL. Considering this well's depth, it is believed to be screened in the Mahomet Sand Member.

- Well number 14-5 is listed by the ISWS and ISGS and is a domestic well located approximately 2,250 feet east-southeast of the proposed expansion area. The well has a 5 inch diameter casing that extends from the ground surface to a depth of 283 feet bgs. The casing is followed by a 8 feet long by 5 inch diameter stainless steel screen that is placed in a sand unit that occurs from 207 feet bgs to 283 feet bgs. The well is terminated at an approximate elevation of 357 feet AMSL. Considering this well's depth, it is believed to be screened in the Mahomet Sand Member.

- Well number 15-12 is a bridge boring that was advanced for engineering purposes. Its total depth was 40.8 feet bgs which corresponds to an approximate elevation of 607 feet AMSL. It is assumed that this boring was backfilled immediately after its completion and is of no concern to this study.

- Well number 15-13 is listed by both the ISWS and ISGS. It is an industrial/commercial water well that is located 3,000 feet west-southwest of the proposed expansion area. It is constructed of a 5 inch diameter casing from 1 foot above ground surface to 226 feet bgs which is followed by a 4 feet long by 5 inch diameter screen. The screen is placed in a sand unit that is encountered at a depth of 172 feet bgs. The well is terminated at a depth of 230 feet bgs, or elevation 413 feet AMSL. Due to the depth of this well, it is believed to be screened in the Mahomet Sand Member.

The City of Clinton derives its community water supply from the Mahomet Sand Member aquifer (Hlinka, 1987). According to the ISWS, the City of Clinton has eleven wells all of which are screened in sand and gravel at depths ranging from 328 to 361 feet bgs. These wells are located approximately 8,600 to 10,500 feet north and north-west of the Clinton Landfill No. 3. Weldon Springs, located east north-east of the proposed Clinton Landfill No. 3, has twelve wells according to the ISWS. These wells are located approximately 3,900 to 6,700 feet east northeast of the proposed Clinton Landfill No. 3 (see Area Well Location Map in Appendix 812.314-A). These wells are screened in sand and gravel at depths ranging from 38 feet to 141 feet below ground surface.

812.314.7 Site Geology

A. Cross Sections

Information from the field investigations was used to compile nine cross-sections that span the site and include the eastern most edge of the existing Clinton Landfill No. 2 site. Geologic cross-sections A through K are provided as Drawing Nos. P-XS2 through P-XS8 (full size drawings attached). Drawing No. P-XS1 shows boring/well locations and plan of sections. Logs of onsite borings, monitoring well and construction details are included in Appendix 812.314-C. It should be noted that soil boring data from the east side of the existing CLI No. 2 facility were used to corroborate geologic information for the proposed expansion area and are provided in Appendix 812.314-C.

B. Overburden

Soil stratigraphy beneath the site is complex, as would be expected in a glaciated region. Sections A through K show the stratigraphic relationship of the unconsolidated materials. These soils were deposited through several modes of deposition which accounts for the complexity of the stratifications. Soil types encountered during the field investigations primarily consist of clays, silts, organic deposits, and sands. In review of the boring data for the site, there appears to be distinct stratigraphic units on site, although each unit may not be continuous across the site.

The upper-most (Wisconsinan-age) soil stratigraphy beneath the site is relatively complex. These soils were deposited during several periods of deposition which account for the complexity of the stratifications. The uppermost units are interpreted as consisting of surficial loessal deposits (Peoria Silt) and Wisconsinan deposits (brown and gray silty clays, clayey silts and sands of the Tiskilwa Formation).

The Tiskilwa Formation is approximately 70 feet thick except where eroded in the present day drainages. The Tiskilwa Formation soils encountered at the site are primarily described as brown, stiff to hard silty clay. The lower portions of this formation is described as gray, medium stiff to very stiff clay. Outwash deposits, consisting of dense to a very dense saturated sands and silts, of the Tiskilwa Formation were encountered at approximate elevation 695 to 705 feet AMSL along the northern edge of the facility, 655 to 675 feet AMSL at the northwestern edge of the facility, and at approximate elevation 668 to 675 feet AMSL at boring EX-3 located at approximately the center of the facility. Eight vertical laboratory hydraulic conductivity tests were performed on the clayey soils of the Tiskilwa Formation. The vertical hydraulic conductivity (k_v) ranged from 2.73×10^{-8} to 8.6×10^{-9} centimeters per second (cm/sec).

The Roxana Silt and Robein Silt Member of the Mason Group of the Wisconsinan Stage underlie the Tiskilwa Formation. This unit consists of dark brown medium stiff to stiff organic silty clay and silt, with peat. This unit was encountered at an approximate elevation of 673 to 658 feet AMSL over the majority of the site except along the south-eastern portion of the facility where it appears to have eroded away. This unit is a marker for the division between the Wisconsinan and Illinoian Stages. Figures 812.314-11 and 812.314-12 are provided to show the elevation of the top and bottom of the Roxana-Robein Silt Member, and Figure 812.314-13 is provided to show the thickness. Four vertical laboratory hydraulic conductivity tests were performed on the soils of the Roxana Silt and Robein Silt Member. The vertical hydraulic conductivity (k_v) ranged from 4.13 x

10^{-8} to 1.55 x 10^{-8} cm/sec. Groundwater was not noted in the Roxana Silt and Robein Silt Member as evidenced in Piezometer EX-10, which is screened in this unit. Numerous excavations at the CLI No. 2 facility have also not encountered water in this unit based upon observations and conversations with the site manager.

Glacial deposits of the Sangamonian substage were encountered beneath the Roxana Silt and Robein Silt Member. These soils primarily consist of hard silty clays, with few interbeds of clayey silts and sand deposits. The sand deposits associated with these soils are interpreted as being outwash deposits. Most of these outwash units appear to be discontinuous across the site. The upper-most unit encountered in the deposits is interpreted as the Berry Clay Member. This unit is distinguishable due to it's blue-green/blue-gray color. The Berry Clay unit ranges in thickness from 0 to 10 feet at the facility. Nine vertical laboratory hydraulic conductivity tests were performed on the clayey soils of this formation. The k_v ranged from 8.43 x 10^{-8} cm/sec to 1.35 x 10^{-8} cm/sec. This unit is somewhat continuous across the proposed Clinton Landfill No. 3 except where it has been eroded.

The next unit encountered is interpreted as the Radnor Till Member. Nine vertical laboratory hydraulic conductivity tests were performed on the clayey soils of this formation. The k_v ranged from 9.36 x 10^{-8} cm/sec to 1.64 x 10^{-8} cm/sec. The few sand deposits associated with these soils are interpreted as being outwash deposits. Two outwash sand units were identified in the Radnor Till Member at the site. The first unit, termed herein as the Upper Radnor Till Sand, was encountered in the south-eastern portion of the facility at the site at approximate elevation 653 to 650 ft. AMSL. This unit was encountered in borings EX-3, EX-5, EX-6, EX-21, EX-22, EX-23, and EX-28. Figures 812.314-14 and 812.314-15 are provided to show the elevation of the top and bottom of the Upper Radnor Till Sand, and Figure 812.314-16 is provided to show the thickness. Three piezometers were installed to monitor this unit, EX-21S, EX-22S, and EX-23S. Insitu-slug testing on these piezometers revealed hydraulic conductivities in the Upper Radnor Till sand to range from 1.26 x 10^{-4} cm/sec to 7.94 x 10^{-6} cm/sec.

The next outwash sand unit encountered in the Radnor Till Member is termed herein as the Lower Radnor Till Sand. This unit was encountered in many of the borings at the site around approximate elevation 644 to 640 ft. AMSL at the site. However, this unit is not continuous across the facility. Figures 812.314-17 and 812.314-18 are provided to show the elevation of the top and bottom of the Lower Radnor Till Sand, and Figure 812.314-19 is provided to show the thickness. Insitu-slug testing was conducted on piezometers which are screened in

the Lower Radnor Till Sand. The results ranged from 1.28 x 10^{-3} cm/sec. to 3.17 x 10^{-5} cm/sec.

The next unit encountered (in most boring locations) is interpreted as an intra-till organic soil within the Radnor Till Member and is termed herein as the Organic Soil. This unit is unnamed according to literature research. It most likely represents an inter-glacial substage during Illinoian glaciation between the Jubileean and Monican Substages. Figure 812.314-5 shows this unit as an organic soil at the base of the Radnor Till Member. The unit consists of organic deposits (with peat), silt, clay, and sand that range in thickness from 1.3 to 10 feet across the site. This deposit is present at the site at an approximate elevation of 637 to 627 feet AMSL. In-situ slug testing revealed hydraulic conductivity values ranging from 2.66 x 10^{-3} to 9.04 x 10^{-6} cm/sec. Figures 812.314-20 and 812.314-21 are provided to show the elevation of the top and bottom of Organic Soil, and Figure 812.314-22 is provided to show the thickness.

The next unit that is encountered is interpreted as consisting of silty clays, clayey silts, silts and outwash sands of the Vandalia Till Member. This unit is interpreted to be encountered at an approximate elevation 630 AMSL. Two laboratory k_v tests were performed on the clayey soils in this unit. The laboratory k_v test results ranged from 1.87 x 10^{-8} to 1.7 x 10^{-8} cm/sec.

The Smithboro Till Member, the Yarmouth Soil, which is a marker between the Illinoian and pre-Illinoian (Kansan) glaciation period, the Tilton Till Member, Hillary Till Member, and finally the Mahomet Sand Member of the Kansan Banner Formation were encountered during the drilling of boring CSM-1 at the Clinton Landfill No. 2 site. These units are well below the invert of the proposed Clinton Landfill No. 3 as shown on the geologic cross sections.

The last unit encountered is interpreted as the Mahomet Sand Member of the Kansan Banner Formation. This unit was encountered at approximate elevation 487 ft. AMSL during drilling activities of boring CSM-1 at the Clinton Landfill No. 2 site.

C. Bedrock

Bedrock was not encountered during drilling activities at the site. The bedrock is assumed to be present at elevations ranging from 400 to 450 ft. MSL as shown on Figure 812.314-7, which shows the bedrock surface topography of DeWitt County, Illinois. Geologic cross-section I (Drawing No. PXS-7) shows that bedrock

was encountered at approximate elevation 400 ft. AMSL at water well 14-1, which is located approximately 1700 feet southeast of the facility.

812.314.8 Site Hydrogeology

The overburden deposits comprise the uppermost aquifers at the proposed Clinton Landfill No. 3 facility. Three water-bearing units within the overburden deposits have been identified. While other water-bearing units are present at the site, the three units identified are interpreted as being the upper-most water-bearing units below the proposed Clinton Landfill No. 3 floor. The first unit, interpreted as an outwash sand of the Radnor Till Member, is located at an approximate elevation of 653 to 647 feet AMSL. This unit is termed herein the Upper Radnor Till Sand. The next unit, also interpreted as an outwash sand, is present at an approximate elevation of 644 to 637 feet AMSL beneath the facility. This unit is termed herein the Lower Radnor Till Sand. The final unit encountered is an organic soil which is at an approximate elevation of 643 to 627 feet AMSL across the site.

Table 812.314-6 is provided to show a summary of the piezometers currently installed at the facility including unit monitored and screen elevation.

A. Upper Radnor Till Sand

The Upper Radnor Till Sand attains a maximum thickness of 2.8 feet at piezometer EX-22S. Piezometers EX-21S, EX-22S, and EX-23S are screened in this unit in the southeastern portion of the facility. Figure 812.314-14 is provided to show the elevation of the top of sand. Figure 812.314-15 is provided to show the bottom elevation of the sand and Figure 812.314-16 is provided to show the thickness of the sand at the facility. Piezometers EX-21S, EX-22S, and EX-23S are screened in the "upper-most aquifer" in the eastern and southern portions of the facility. Water level measurements were obtained from these piezometers during the four quarters of 2003 and 2004. Four contour maps showing the potentiometric surface in this sand unit during the four quarters of 2004 were prepared. These maps are presented as Figures 812.314-23 through 812.314-26. Groundwater elevations (Fourth Quarter 2004) are shown on the Geologic Cross-sections (Drawing Nos. P-XS2 through P-XS8). Historical water levels are summarized in Table 812.314-7 and shown graphically in Appendix 812.314-F.

The potentiometric contour maps show the groundwater flow of the Upper Radnor Till Sand is toward the

southeast. For the time period monitored, the potentiometric elevations in the individual wells range from as high as 677.42 ft. AMSL in piezometer EX-23S to as low as 660.32 ft. AMSL in EX-21S.

Flow rates within the Upper Radnor Till Sand under the site were calculated using Darcy's Law in the forms: $V = KI$, to estimate average flow velocity; and $V = KI/n_e$ to estimate interstitial flow velocity. The flow rate (v) was calculated using the geometric mean hydraulic conductivity value (k) from the in-situ hydraulic conductivity test data. An effective porosity (n_e) of 0.35 (US EPA, 1990) and average hydraulic gradient (I) of 7.87×10^{-3} were used. The flow rate calculations are shown on Table 812.314-8.

B. Lower Radnor Till Sand

The Lower Radnor Till Sand attains a maximum thickness of 5.3 feet at piezometer EX-7S. Piezometers EX-4, EX-5, EX-6, EX-7, EX8S, EX-12S, EX-19, and EX-21S are screened in this unit at the facility. Figure 812.314-17 is provided to show the elevation of the top of sand. Figure 812.314-18 is provided to show the bottom elevation of the sand and Figure 812.314-19 is provided to show the thickness of the sand at the facility. Water level measurements were obtained from these piezometers during the four quarters of 2003 and 2004. Four contour maps showing the potentiometric surface in this sand unit during the four quarters of 2004 were prepared. These maps are presented as Figures 812.314-27 through 812.314-30. Groundwater elevations (Fourth Quarter 2004) are shown on the Geologic Cross-sections (attached as Drawing Nos. P-XS2 through P-XS8) Historical water levels are summarized in Table 812.314-7 and shown graphically in Appendix 812.314-F.

The potentiometric contour maps show the groundwater flow of the Lower Radnor Till Sand is toward the southeast. For the time period monitored, the potentiometric elevations in the individual wells range from as as high as 691.82 in piezometer EX-15 to as low as 639.89 in EX-19.

Flow rates within the Lower Radnor Till Sand under the site were calculated using Darcy's Law in the forms: $V = KI$, to estimate average flow velocity; and $V = KI/n_e$ to estimate interstitial flow velocity. The flow rate (v) was calculated using the geometric mean hydraulic conductivity value (k) from the in-situ hydraulic conductivity test data for the "upper-most aquifer". An effective porosity (n_e) of 0.35 (USEPA, 1990) and average hydraulic gradient (I) of 1.24×10^{-2} were used. The flow rate calculations are shown on Table 812.314-8.

C. Organic Soil

The Organic Soil attains a maximum thickness of 10 feet at well G23D which is located on the west side of the site. Piezometers EX-11, EX-12D, EX-13, EX-7, EX-14, EX-17, EX-20, and EX-24 are screened in this unit at the facility. Figure 812.314-20 is provided to show the elevation of the this unit. Figure 812.314-21 is provided to show the bottom elevation and Figure 812.314-22 is provided to show the thickness of the unit at the facility. Water level measurements were obtained from these piezometers during the four quarters of 2003 and 2004. Four contour maps showing the potentiometric surface in this sand unit during the four quarters of 2004 were prepared. These maps are presented as Figures 812.314-31 through 812.314-34. Groundwater elevations (Fourth Quarter 2004) are shown on the Geologic Cross-sections (Drawing Nos. P-XS2 through P-XS8). Historical water levels are summarized in Table 812.314-7 and shown graphically in Appendix 812.314-F.

The potentiometric contour maps show the groundwater flow of the Organic Soil is toward the southwest. For the time period monitored, the potentiometric elevations in the individual wells range from as high as 675.77 in piezometer EX-24 to as low as 659.18.89 in EX-20.

Flow rates within the Organic Soil under the site were calculated using Darcy's Law in the forms: $V = KI$, to estimate average flow velocity; and $V = KI/n_e$ to estimate interstitial flow velocity. The flow rate (v) was calculated using the geometric mean hydraulic conductivity value (k) from the in-situ hydraulic conductivity test data for the "upper-most aquifer". An effective porosity (n_e) of 0.45 (US EPA, 1990) and average hydraulic gradient (I) of 6.06×10^{-3} were used. The flow rate calculations are shown on Table 812.314-8.

812.314.9 References

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TABLES

TABLE 812.314-1

SUMMARY OF SLUG TEST RESULTS

Clinton Landfill No. 3

Well No.	Geologic Unit	Hvorslev Method		
		Hydraulic Conductivity (K), cm/sec.		Geometric Mean K (cm/sec.)
		Falling Head (K_f)	Rising Head (K_r)	
EX-22S	Upper Radnor Till Sand	9.39E-05	1.36E-04	1.13E-04
EX-23S	Upper Radnor Till Sand	1.13E-05	7.94E-06	9.47E-06
EX-21S	Upper Radnor Till Sand	1.50E-04	1.73E-04	1.61E-04
			Geometric Mean, all wells:	**5.57E-05**

Well No.	Geologic Unit	Hvorslev Method		
		Hydraulic Conductivity (K), cm/sec.		Geometric Mean K (cm/sec.)
		Falling Head (K_f)	Rising Head (K_r)	
EX-12S	Lower Radnor Till Sand	3.22E-04	2.70E-04	2.95E-04
EX-4	Lower Radnor Till Sand	3.12E-05	3.22E-05	3.17E-05
EX-5	Lower Radnor Till Sand	1.49E-03	1.10E-03	1.28E-03
EX-6	Lower Radnor Till Sand	4.66E-03	4.00E-03	4.32E-03
EX-8S	Lower Radnor Till Sand	9.93E-04	8.63E-04	9.26E-04
EX-21	Lower Radnor Till Sand	5.23E-04	4.76E-04	4.99E-04
			Geometric Mean, all wells:	**5.37E-04**

Well No.	Geologic Unit	Hvorslev Method		
		Hydraulic Conductivity (K), cm/sec.		Geometric Mean K (cm/sec.)
		Falling Head (K_f)	Rising Head (K_r)	
EX-12D	Organic Soil	5.97E-05	7.75E-05	6.80E-05
EX-13	Organic Soil	6.77E-06	4.23E-06	5.35E-06
EX-14	Organic Soil	1.14E-05	6.88E-06	8.86E-06
EX-17	Organic Soil	2.76E-05	1.81E-05	2.24E-05
EX-20	Organic Soil	8.68E-05	8.59E-05	8.63E-05
EX-22D	Organic Soil	1.07E-04	8.09E-05	9.30E-05
EX-23D	Organic Soil	2.64E-03	2.69E-03	2.66E-03
EX-24	Organic Soil	3.79E-05	4.94E-05	4.33E-05
			Geometric Mean, all wells:	**5.35E-05**

Note: cm/sec. = centimeters per second

TABLE 812-314-2
SUMMARY OF LABORATORY TESTING OF SITE SOILS
Clinton Landfill No. 3

Geologic Unit	Boring No.	Sample Elevation ft. (AMSL)	Soil Type	Kv (cm/sec.)	Dry Density (gm/cc)	Porosity (n)
Tiskilwa Formation	EX-21	688	Silty Clay	2.73E-08	1.98	0.275
Tiskilwa Formation	CLG1&2*	689.9	Silty Clay	NT	2.04	0.241
Tiskilwa Formation	B-20	703.3	Clayey Silt	8.60E-09	NM	NM
Tiskilwa Formation	EX-13	680	Silty Clay	2.24E-08	2.03	0.237
Tiskilwa Formation	EX-16	677.5	Silty Clay	1.71E-08	2.02	0.275
Tiskilwa Formation	EX-17	685	Silty Clay	1.66E-08	1.96	0.281
Tiskilwa Formation	EX-23	676	Sandy Clay	1.22E-08	2.20	0.265
Tiskilwa Formation	EX-24	695	Silty Clay	1.40E-08	2.15	0.237
Roxanna/Robein	EX-13	670	Clayey Silt	1.55E-08	1.18	0.539
Roxanna/Robein	EX-16	667.5	Organic Clay	4.13E-08	1.1	0.574
Roxanna/Robein	EX-21	670	Sandy Clay	2.58E-08	2.04	0.259
Roxanna/Robein	EX-24	670	Sandy Clay	3.56E-08	1.95	0.265
Roxanna/Robein	CLG 5*	662.9	Silty Clay	NT	1.52	0.425
Berry Clay	CLG3&4*	665.9	Silty Clay	NT	2.05	0.235
Berry Clay	EX-6	661	Silty Clay	1.35E-08	1.84	0.379
Berry Clay	EX-7	658.8	Silty Clay	8.43E-08	1.9	0.379
Berry Clay	EX-13	660	Silty Clay	1.78E-08	1.89	0.338
Berry Clay	EX-16	659.8	Silty Clay	3.42E-08	1.98	0.270
Berry Clay	EX-19	658	Silty Clay	2.71E-08	1.72	0.333
Berry Clay	EX-21	662	Silty Clay	1.87E-08	1.86	0.301
Berry Clay	EX-24	665	Silty Clay	3.26E-08	1.79	0.333
Berry Clay	EX-24	659	Silty Clay	6.29E-08	1.69	0.355
Radnor Till	EX-16	645	Silty Clay	7.66E-08	2.09	0.194
Radnor Till	EX-19	649	Silty Clay	5.93E-08	2.23	0.206
Radnor Till	EX-23	648.5	Silty Clay	4.92E-08	1.87	0.219
Radnor Till	EX-4	644.53	Silty Clay	4.20E-08	2.22	0.233
Radnor Till	EX-4	659.53	Silty Clay	5.79E-08	2.16	0.283
Radnor Till	EX-5	657.97	Silty Clay	2.05E-08	2.17	0.276
Radnor Till	EX-5	647.97	Silty Clay	1.64E-08	2.32	0.197
Radnor Till	EX-6	644.24	Silty Clay	2.91E-08	2.12	0.446
Radnor Till	EX-7	643.8	Silty Clay	9.36E-08	2.35	0.174
Vandalia Till	P223D-1A	623.15	Silty Clay	1.87E-08	2.11	NM
Vandalia Till	B-11 (P-11)	626.5	Clayey Silt	1.70E-08	NM	NM

Mean Kv Value by Formation

Radnor Till Mean:	4.94E-08
Berry Clay Mean:	3.64E-08
Roxanna/Robein Mean:	2.96E-08
Tiskilwa Formation Mean:	1.69E-08
Berry Clay/Radnor Mean:	4.33E-08
Vandalia Till Mean:	1.79E-08

Mean n Value by Formation

Radnor Till Mean:	0.248
Berry Clay Mean:	0.325
Roxanna/Robein Mean:	0.413
Tiskilwa Formation Mean:	0.259
Berry Clay/Radnor Mean:	0.286

Notes:
1) ft. AMSL = Elevation in feet above mean sea level
2) Kv = vertical hydraulic conductivity
3) cm/sec. = centimeters per second
4) gm/cc = grams per cubic centimeter
5) * CLG boring was advanced next to B-23
6) NM = Not measured

TABLE 812.314-3
TOTAL ORGANIC CONTENT
FROM SELECTED BORINGS
Clinton Landfill No. 3

Boring ID Number	Geologic Unit	Sample Elev. (ft-MSL)	Date Collected	Total Organic Content (%)
EX-14	Berry Clay	659	12/16/2002	8.8
	Radnor Till	642	12/16/2002	1.4
EX-13	Roxanna Silt	671	12/20/2002	10.0
	Radnor Till	655.5	12/20/2002	1.8
	Berry Clay	661.5	12/20/2002	1.8
	Organic Soil	633	12/23/2002	3.0
EX-12	Berry Clay	660	12/27/2002	2.0
EX-17	Berry Clay	657	1/3/2003	2.0
EX-15	Tiskilwa Formation	673	1/7/2003	0.94
	Berry Clay	662	1/7/2003	1.8
	Radnor Till	657	1/7/2003	0.93
	Radnor Till	646	1/7/2003	0.53
EX-24	Radnor Till	643	1/9/2003	0.54
	Sangamon Soil	636	1/9/2003	3.7
EX-16	Tiskilwa Formation	672.5	1/15/2003	1.00
	Tiskilwa Formation	669.5	1/15/2003	1.1
	Roxanna Silt	668	1/15/2003	7.9
	Organic Soil	634	1/15/2003	7.3
EX-18	Radnor Till	649	1/20/2003	1.2
	Radnor Till	641	1/20/2003	0.56
	Radnor Till	638	1/20/2003	0.49
	Organic Soil	632	1/20/2003	1.9
EX-19	Roxanna Silt	663	1/22/2003	2.5
	Radnor Till	646	1/22/2003	0.57
EX-20	Roxanna Silt	665	1/31/2003	2.20
	Radnor Till	645	2/3/2003	1.1
EX-21	Tiskilwa Formation	690	1/29/2003	1.4
	Tiskilwa Formation	675	1/29/2003	1.6
	Roxanna Silt	670	1/30/2003	5.7
	Radnor Till	652	1/30/2003	1.0
	Radnor Till	643	1/30/2003	0.93
EX-22	Berry Clay	660	1/28/2003	1.4
	Radnor Till	655	1/28/2003	2.5
	Radnor Till	648	1/28/2003	1.3
	Radnor Till	644	1/28/2003	1.4

Notes:
1. Samples collected from 5-foot split-spoon sampler.
2. ft-MSL = feet above Mean Sea Level datum; value was estimated by PDC Technical Services, Inc. field personnel based on ground surface elevation data provided by SKS Engineers, Inc. at the time of sample collection.
3. Total Organic Content = by American Society for Testing and Materials (ASTM) Standard D2974-00 *"Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils"*.
4. % = Percent

TABLE 812.314-4
SOIL CATION EXCHANGE CAPACITY RESULTS
Clinton Landfill No. 3

Soil Boring	Ground Surface Elevation (Ft. AMSL)	Sample Depth (ft-bgs)	Sample Elevation (Ft. AMSL)	Cation Exchange Capacity (CEC) Result (meq/100g)
EX-4	724.53	67	657.53	0.8
EX-4	724.53	82	642.53	1.65
EX-5	727.97	72	655.97	0.95
EX-5	727.97	82	645.97	1.38
EX-5	727.97	91.5	636.47	1.65
EX-6	694.24	31	663.24	2.6
EX-6	694.24	52	642.24	1.38
EX-7	691.8	31	660.8	2.25
EX-7	691.8	46	645.8	0.95

Notes:
1) Ground Surface Elevation is elevation at time soil boring was drilled
2) Ft. AMSL = Feet Above Mean Sea Level
3) ft-bgs = feet below ground surface
4) meq/100g = milliequivalents per 100 grams
5) Cation Exchange Capacity analysis performed by PDC Laboratories, Inc. - Peoria, IL.

TABLE 812.314-5

POTABLE WATER WELL DATA SUMMARY – WELLS WITHIN 2 MILES

Clinton Landfill No. 3

Well No.	Well Location	Distance from Site (feet)	Boring Completion Depth (ft. bgs)	Approx. Water Bearing Unit Elev. (ft. AMSL)	Date Installed	Use	Aquifer Type
1-A	T19N-R2E, Section 1	7200	35	N/A	08/00/1944	Domestic	NR
1-1	T19N-R2E, Section 1	7700	90	668	08/05/1941	Domestic	Unconsolidated
1-2	T19N-R2E, Section 1	6200	129	612	10/25/1975	Domestic	Unconsolidated
1-3	T19N-R2E, Section 1	6700	75	675	00/00/1971	Community Supply	Unconsolidated
2-1	T19N-R2E, Section 2	6450	320	482	09/11/1996	Domestic	Unconsolidated
2-2	T19N-R2E, Section 2	4750	314	487	10/16/1997	State Highway Dept.	Unconsolidated
2-3	T19N-R2E, Section 2	4700	96	644	08/20/1940	Domestic	Unconsolidated
2-4	T19N-R2E, Section 2	6500	323	492	07/01/1992	Domestic	Unconsolidated
2-5	T19N-R2E, Section 2	5200	17	725	NR	Monitoring	Unconsolidated
2-6	T19N-R2E, Section 2	5350	17	725	NR	Monitoring	Unconsolidated
2-7	T19N-R2E, Section 2	5200	17	725	NR	Monitoring	Unconsolidated
2-8	T19N-R2E, Section 2	4950	17	725	NR	Monitoring	Unconsolidated
2-9	T19N-R2E, Section 2	4750	17	725	NR	Monitoring	Unconsolidated
2-10	T19N-R2E, Section 2	4900	10	723	NR	Monitoring	Unconsolidated
2-11	T19N-R2E, Section 2	7700	335	N/A	04/21/1997	Dry Hole	N/A
3-1	T19N-R2E, Section 3	4900	291	458	08/00/1988	Domestic	Unconsolidated
3-2	T19N-R2E, Section 3	4650	290	463	10/22/1987	Industrial/Comm.	Unconsolidated
3-3	T19N-R2E, Section 3	5100	34	N/A	00/00/1926	Domestic	Unconsolidated
3-4	T19N-R2E, Section 3	4800	295	595	03/24/1999	Domestic	Unconsolidated
3-5	T19N-R2E, Section 3	5100	335	N/A	05/20/1997	Soil Boring	Bedrock
3-6	T19N-R2E, Section 3	5600	173	550	12/00/1945	Industrial/Comm.	Unconsolidated
3-7	T19N-R2E, Section 3	6000	288	456	05/21/1992	Domestic	Unconsolidated
3-8	T19N-R2E, Section 3	6000	283	470	05/28/1992	Domestic	Unconsolidated
3-9	T19N-R2E, Section 3	5800	93	631	04/15/1980	Domestic	Unconsolidated
3-10	T19N-R2E, Section 3	6200	280	450	11/08/1945	Industrial/Comm.	Unconsolidated

TABLE 812.314-5

POTABLE WATER WELL DATA SUMMARY – WELLS WITHIN 2 MILES

Clinton Landfill No. 3

Well No.	Well Location	Distance from Site (feet)	Boring Completion Depth (ft. bgs)	Approx. Water Bearing Unit Elev. (ft. AMSL)	Date Installed	Use	Aquifer Type
3-11	T19N-R2E, Section 3	6400	286	444	11/00/1993	Domestic	Unconsolidated
3-12	T19N-R2E, Section 3	6400	286	445	11/00/1993	Domestic	Unconsolidated
3-13	T19N-R2E, Section 3	6400	289	441	11/00/1993	Domestic	Unconsolidated
3-14	T19N-R2E, Section 3	6400	289	N/A	11/00/1993	Domestic	Unconsolidated
3-15	T19N-R2E, Section 3	6400	286	444	11/00/1993	Domestic	Unconsolidated
3-16	T19N-R2E, Section 3	7600	302	412	06/23/1992	Domestic	Unconsolidated
3-17	T19N-R2E, Section 3	6850	315	465	11/10/1998	Domestic	Unconsolidated
3-18	T19N-R2E, Section 3	7200	86	N/A	07/00/1935	Soil Boring	Unconsolidated
3-19	T19N-R2E, Section 3	8600	303	437	07/26/1991	Community Supply	NR
3-20	T19N-R2E, Section 3	9000	150	570	00/00/1900	Domestic	NR
4-A	T19N-R2E, Section 4	5800	86	NR	11/00/1939	NR	NR
4-1	T19N-R2E, Section 4	8400	142	601	06/29/1978	Industrial/Comm.	Unconsolidated
4-2	T19N-R2E, Section 4	8400	138	604	09/12/1978	Industrial/Comm.	Unconsolidated
4-3	T19N-R2E, Section 4	10200	140	585	06/19/2000	Domestic	Unconsolidated
4-4	T19N-R2E, Section 4	10050	291	439	08/02/2000	Domestic	Unconsolidated
4-5	T19N-R2E, Section 4	7100	294	431	09/08/1998	Domestic	Bedrock
4-6	T19N-R2E, Section 4	7300	276	449	08/18/1999	Domestic	Unconsolidated
4-7	T19N-R2E, Section 4	7400	136	590	00/00/1964	Domestic	Unconsolidated
4-8	T19N-R2E, Section 4	8750	79	646	07/16/1995	Domestic	Unconsolidated
4-9	T19N-R2E, Section 4	8600	128	614	11/20/1971	Domestic	Unconsolidated
4-10	T19N-R2E, Section 4	9600	35	685	00/00/1900	Domestic	NR
4-11	T19N-R2E, Section 4	9800	36	694	00/00/0000	Domestic	Unconsolidated
4-13	T19N-R2E, Section 4	10500	144	586	06/24/2001	Domestic	Unconsolidated
6-6	T19N-R3E, Section 6	9800	320	475	10/04/1984	Non-Community	Unconsolidated
8-1	T19N-R3E, Section 8	9000	195	530	08/26/1966	Domestic	Unconsolidated
8-2	T19N-R3E, Section 8	8800	243	482	06/00/1972	Domestic	Unconsolidated

TABLE 812.314-5

POTABLE WATER WELL DATA SUMMARY – WELLS WITHIN 2 MILES

Clinton Landfill No. 3

Well No.	Well Location	Distance from Site (feet)	Boring Completion Depth (ft. bgs)	Approx. Water Bearing Unit Elev. (ft. AMSL)	Date Installed	Use	Aquifer Type
8-3	T19N-R3E, Section 8	8900	127	601	10/15/1972	Domestic	Unconsolidated
9-1	T19N-R2E, Section 9	5750	96	636	00/00/1951	Domestic	Unconsolidated
9-2	T19N-R2E, Section 9	5750	88	647	00/00/1916	Domestic	NR
9-3	T19N-R2E, Section 9	7700	155	570	00/00/1900	Domestic	Unconsolidated
9-4	T19N-R2E, Section 9	7900	143	592	09/16/1939	Domestic	Unconsolidated
9-5	T19N-R2E, Section 9	10600	275	477	05/21/1999	Domestic	Unconsolidated
9-6	T19N-R2E, Section 9	10650	284	454	06/22/1990	Domestic	Unconsolidated
9-7	T19N-R2E, Section 9	6900	143	577	NR	Domestic	NR
10-1	T19N-R2E, Sect. 10	900	279	442	11/00/1976	Domestic	Unconsolidated
10-2	T19N-R2E, Sect. 10	900	265	438	07/00/1977	Domestic	Unconsolidated
10-3	T19N-R2E, Sect. 10	3200	16	674	00/00/1900	Domestic	NR
10-4	T19N-R2E, Sect. 10	3000	260	395	08/25/1968	Domestic	Unconsolidated
10-5	T19N-R2E, Sect. 10	3200	241	434	05/12/1967	Domestic	Unconsolidated
10-6	T19N-R2E, Sect. 10	3000	76	654	11/00/1930	Domestic	NR
10-7	T19N-R2E, Sect. 10	4400	104	630	05/14/1984	Domestic	Unconsolidated
10-8	T19N-R2E, Sect. 10	2600	415	N/A	02/15/1974	Soil Boring	N/A
10-9	T19N-R2E, Sect. 10	5200	510	N/A	01/02/1968	Soil Boring	N/A
10-10	T19N-R2E, Sect. 10	1700	281	461	05/11/1988	Industrial/Comm.	Unconsolidated
10-11	T19N-R2E, Sect. 10	3000	280	474	09/00/1988	Irrigation	Unconsolidated
10-12	T19N-R2E, Sect. 10	3000	88	629	07/12/1973	Domestic	Unconsolidated
10-13	T19N-R2E, Sect. 10	2800	288	473	05/31/1995	Domestic	Unconsolidated
10-14	T19N-R2E, Sect. 10	5450	18	NR	07/00/1975	Monitoring	NR
10-15	T19N-R2E, Sect. 10	4500	293	Dry Hole	05/30/1995	Domestic	N/A
10-16	T19N-R2E, Sect. 10	4500	85	660	09/12/1995	Domestic	Unconsolidated
10-17	T19N-R2E, Sect. 10	4500	130	610	00/00/1912	Domestic	NR
11-1	T19N-R2E, Sect. 11	1650	134	579	09/16/1942	Domestic	Unconsolidated
11-2	T19N-R2E, Sect. 11	On-site	145	583	04/09/1996	Domestic	Unconsolidated

TABLE 812.314-5

POTABLE WATER WELL DATA SUMMARY – WELLS WITHIN 2 MILES

Clinton Landfill No. 3

Well No.	Well Location	Distance from Site (feet)	Boring Completion Depth (ft. bgs)	Approx. Water Bearing Unit Elev. (ft. AMSL)	Date Installed	Use	Aquifer Type
11-3	T19N-R2E, Sect. 11	2500	103	625	11/05/1945	Domestic	Unconsolidated
12-A	T19N-R2E, Sect. 12	7900	6	714	00/00/0000	NR	NR
12-1	T19N-R2E, Sect. 12	6500	82	567	06/07/1984	Domestic	Unconsolidated
12-2	T19N-R2E, Sect. 12	6000	8	635	00/00/1900	Domestic	NR
12-3	T19N-R2E, Sect. 12	5100	142	533	03/20/1977	Domestic	Unconsolidated
12-4	T19N-R2E, Sect. 12	4400	70	682	12/10/1980	Domestic	Unconsolidated
12-5	T19N-R2E, Sect. 12	4600	145	572	09/03/1996	Domestic	Unconsolidated
12-6	T19N-R2E, Sect. 12	3800	25	704	04/05/1946	Domestic	Unconsolidated
12-7	T19N-R2E, Sect. 12	5600	141	560	00/00/1995	Unused	NR
12-8	T19N-R2E, Sect. 12	5800	141	554	07/08/1994	Highway Dept.	Unconsolidated
12-9	T19N-R2E, Sect. 12	6450	135	557	00/00/1939	Sealed	NR
12-10	T19N-R2E, Sect. 12	5800	60	660	00/00/1959	Community Supply	NR
12-11	T19N-R2E, Sect. 12	5700	47	665	00/00/1949	Sealed	NR
12-12	T19N-R2E, Sect. 12	3900	140	600	00/00/1975	Community Supply	NR
12-13	T19N-R2E, Sect. 12	7300	57	668	00/00/1955	Abandoned	NR
12-14	T19N-R2E, Sect. 12	3700	68	662	07/03/1971	Domestic	Unconsolidated
12-15	T19N-R2E, Sect. 12	6200	57	663	00/00/0000	Monitoring	Unconsolidated
12-16	T19N-R2E, Sect. 12	5050	75	650	00/00/1893	Domestic	NR
12-17	T19N-R2E, Sect. 12	6100	Surface	N/A	NR	Spring	N/A
12-18	T19N-R2E, Sect. 12	6500	38	687	00/00/1955	Community Supply	NR
12-19	T19N-R2E, Sect. 12	6700	73	NR	00/00/1950	Community Supply	NR
12-20	T19N-R2E, Sect. 12	6500	10	N/A	00/00/1940	Abandoned	N/A
13-1	T19N-R2E, Sect. 13	6300	127	598	10/02/1943	Domestic	Unconsolidated
13-2	T19N-R2E, Sect. 13	6100	120	N/A	00/00/0000	Soil Boring	N/A

TABLE 812.314-5

POTABLE WATER WELL DATA SUMMARY – WELLS WITHIN 2 MILES

Clinton Landfill No. 3

Well No.	Well Location	Distance from Site (feet)	Boring Completion Depth (ft. bgs)	Approx. Water Bearing Unit Elev. (ft. AMSL)	Date Installed	Use	Aquifer Type
13-3	T19N-R2E, Sect. 13	6300	270	430	06/24/2000	Domestic	Unconsolidated
13-4	T19N-R2E, Sect. 13	6300	282	454	04/27/1990	Domestic	Unconsolidated
13-5	T19N-R2E, Sect. 13	5800	108	597	05/14/1992	Domestic	NR
13-6	T19N-R2E, Sect. 13	7950	60	655	00/00/1920	Domestic	NR
13-7	T19N-R2E, Sect. 13	3700	276	375	10/26/1999	Domestic	Unconsolidated
13-8	T19N-R2E, Sect.. 13	3750	81	605	09/01/1999	Domestic	Unconsolidated
13-9	T19N-R2E, Sect. 13	6550	38	617	11/14/1989	Domestic	NR
13-10	T19N-R2E, Sect. 13	7000	70	605	00/00/1909	Domestic	Unconsolidated
13-11	T19N-R2E, Sect. 13	7550	108	592	07/02/1992	Domestic	Unconsolidated
14-1	T19N-R2E, Sect. 14	1700	274	410	05/17/2000	Domestic	Bedrock
13-12	T19N-R2E, Sect. 13	3900	286	429	05/19/2003	Domestic	Unconsolidated
14-2	T19N-R2E, Sect. 14	350	68	652	05/14/1963	Domestic	Unconsolidated
14-3	T19N-R2E, Sect. 14	2000	243	452	08/21/2001	Domestic	Unconsolidated
14-4	T19N-R2E, Sect. 14	1150	246	502	03/26/2002	Domestic	Unconsolidated
14-5	T19N-R2E, Sect. 14	2250	283	433	04/23/2002	Domestic	Unconsolidated
15-1	T19N-R2E, Sect. 15	5000	264	451	06/29/1977	Domestic	Unconsolidated
15-2	T19N-R2E, Sect. 15	5100	253	468	04/19/1978	Domestic	Unconsolidated
15-3	T19N-R2E, Sect. 15	5150	260	465	04/19/1978	Domestic	Unconsolidated
15-4	T19N-R2E, Sect. 15	5000	245	468	04/19/1978	Domestic	Unconsolidated
15-5	T19N-R2E, Sect. 15	4750	248	485	04/19/1978	Domestic	Unconsolidated
15-6	T19N-R2E, Sect. 15	5500	290	416	11/02/1970	Domestic	Unconsolidated
15-7	T19N-R2E, Sect. 15	6250	236	439	08/09/1961	Domestic	Unconsolidated
15-8	T19N-R2E, Sect. 15	6250	222	430	00/00/1962	Domestic	Unconsolidated
15-9	T19N-R2E, Sect. 15	4800	251	425	00/00/1971	Domestic	NR
15-10	T19N-R2E, Sect. 15	3800	70	590	04/22/1941	Domestic	Unconsolidated
15-11	T19N-R2E, Sect. 15	3800	13	645	00/00/1921	Domestic	Unconsolidated
15-12	T19N-R2E, Sect. 15	2700	41	607	06/00/1959	Test Hole	N/A

TABLE 812.314-5

POTABLE WATER WELL DATA SUMMARY – WELLS WITHIN 2 MILES

Clinton Landfill No. 3

Well No.	Well Location	Distance from Site (feet)	Boring Completion Depth (ft. bgs)	Approx. Water Bearing Unit Elev. (ft. AMSL)	Date Installed	Use	Aquifer Type
15-13	T19N-R2E, Sect. 15	3250	230	470	09/24/1985	Industrial/Comm.	Unconsolidated
15-14	T19N-R2E, Sect. 15	4900	242	445	10/24/2001	Domestic	Unconsolidated
16-1	T19N-R2E, Sect. 16	7700	280	484	05/05/1988	Domestic	Unconsolidated
16-2	T19N-R2E, Sect. 16	9400	71	604	00/00/1964	Domestic	Unconsolidated
16-3	T19N-R2E, Sect. 16	10700	110	590	00/00/1928	Domestic	NR
16-4	T19N-R2E, Sect. 16	5800	74	571	10/09/2001	Domestic	Unconsolidated
16-5	T19N-R2E, Sect. 16	6000	74	N/A	07/24/2001	Domestic	NR
17-1	T19N-R2E, Sect. 17	11300	242	433	00/00/1963	Domestic	Unconsolidated
17-2	T19N-R2E, Sect. 17	11800	302	373	11/08/1989	Domestic	Unconsolidated
18-1	T19N-R3E, Sect. 18	10600	90	640	00/00/1967	Domestic	Unconsolidated
18-2	T19N-R3E, Sect. 18	10350	157	593	09/19/1994	Domestic	Unconsolidated
18-3	T19N-R3E, Sect. 18	9300	22	705	00/00/1900	Domestic	NR
18-4	T19N-R3E, Sect. 18	9100	166	586	05/10/1971	Domestic	Unconsolidated
18-6	T19N-R3E, Sect. 18	9800	167	606	06/15/1995	Domestic	Unconsolidated
18-7	T19N-R3E, Sect. 18	9950	164	593	05/15/1993	Domestic	Unconsolidated
18-9	T19N-R3E, Sect. 18	9400	151	559	05/10/2002	Domestic	Unconsolidated
18-10	T19N-R3E, Sect. 18	10300	304	472	06/19/2001	Domestic	Unconsolidated
19-3	T19N-R3E, Sect. 19	9700	80	650	00/00/1900	Domestic	NR
21-1	T19N-R2E, Sect. 21	10800	302	423	06/11/1997	Domestic	Unconsolidated
21-2	T19N-R2E, Sect. 21	10550	110	590	10/18/1943	Domestic	Unconsolidated
21-3	T19N-R2E, Sect. 21	8550	232	495	10/18/1978	Domestic	Unconsolidated
21-4	T19N-R2E, Sect. 21	10100	69	661	07/02/1991	Domestic	Unconsolidated
21-5	T19N-R2E, Sect. 21	7600	90	638	11/00/1945	Domestic	Unconsolidated
21-6	T19N-R2E, Sect. 21	10500	97	613	04/00/1972	Domestic	Unconsolidated
21-7	T19N-R2E, Sect. 21	10600	296	419	08/27/2001	Domestic	Unconsolidated
21-8	T19N-R2E, Sect. 21	12000	296	488	07/23/2001	Domestic	Unconsolidated
22-1	T19N-R2E, Sect. 22	9900	86	635	12/08/1999	Domestic	Unconsolidated

TABLE 812.314-5

POTABLE WATER WELL DATA SUMMARY – WELLS WITHIN 2 MILES

Clinton Landfill No. 3

Well No.	Well Location	Distance from Site (feet)	Boring Completion Depth (ft. bgs)	Approx. Water Bearing Unit Elev. (ft. AMSL)	Date Installed	Use	Aquifer Type
22-2	T19N-R2E, Sect. 22	9950	93	605	00/00/1900	Domestic	Unconsolidated
22-3	T19N-R2E, Sect. 22	7300	150	575	00/00/1916	Domestic	NR
22-4	T19N-R2E, Sect. 22	7350	300	400	08/31/1998	Domestic	Unconsolidated
22-5	T19N-R2E, Sect. 22	5850	260	478	12/00/1979	Domestic	Unconsolidated
22-6	T19N-R2E, Sect. 22	5650	77	639	06/11/1947	Industrial/Comm.	Unconsolidated
22-7	T19N-R2E, Sect. 22	9700	76	629	10/19/2001	Domestic	Unconsolidated
22-8	T19N-R2E, Sect. 22	9350	76	632	10/10/2001	Domestic	Unconsolidated
22-9	T19N-R2E, Sect. 22	10750	88	613	06/26/2002	Domestic	Unconsolidated
23-1	T19N-R2E, Sect. 23	6400	93	625	06/12/1943	Domestic	Unconsolidated
23-2	T19N-R2E, Sect. 23	6250	150	575	00/00/1921	Domestic	NR
23-3	T19N-R2E, Sect. 23	5800	145	NR	00/00/1918	Domestic	Unconsolidated
23-4	T19N-R2E, Sect. 23	4750	28	699	11/15/1989	Domestic	NR
24-2	T19N-R2E, Sect. 24	9600	292	486	08/15/1994	Domestic	Unconsolidated
24-3	T19N-R2E, Sect. 24	9300	125	605	00/00/1920	Domestic	NR
24-4	T19N-R2E, Sect. 24	8200	150	575	00/00/1920	Domestic	NR
26-2	T19N-R2E, Sect. 26	10550	130	605	00/00/1916	Domestic	NR
33-1	T20N-R2E, Sect. 33	9200	115	620	07/26/1946	Domestic	Unconsolidated
33-4	T20N-R2E, Sect. 33	10100	29	701	09/30/1987	Domestic	Unconsolidated
33-5	T20N-R2E, Sect. 33	11400	120	638	01/13/2003	Domestic	Unconsolidated
34-1	T20N-R2E, Sect. 34	9300	105	611	05/26/1992	Domestic	NR
34-2	T20N-R2E, Sect. 34	9700	360	N/A	05/11/1972	Test Hole	N/A
34-3	T20N-R2E, Sect. 34	9800	356	369	01/00/1973	Industrial/Comm.	Unconsolidated
34-4	T20N-R2E, Sect. 34	9900	320	N/A	11/16/1971	Test Hole	N/A
34-5	T20N-R2E, Sect. 34	9950	339	N/A	11/18/1971	Test Hole	N/A
34-6	T20N-R2E, Sect. 34	10450	360	NR	00/00/1954	Test Well	NR
34-7	T20N-R2E, Sect. 34	10300	100	635	10/10/1941	Domestic	Unconsolidated
34-8	T20N-R2E, Sect. 34	10550	338	434	00/00/1973	Community	NR

TABLE 812.314-5

POTABLE WATER WELL DATA SUMMARY – WELLS WITHIN 2 MILES

Clinton Landfill No. 3

Well No.	Well Location	Distance from Site (feet)	Boring Completion Depth (ft. bgs)	Approx. Water Bearing Unit Elev. (ft. AMSL)	Date Installed	Use	Aquifer Type
						Supply	
34-9	T20N-R2E, Sect. 34	10500	346	435	00/00/1972	Community Supply	NR
34-11	T20N-R2E, Sect. 34	10500	372	N/A	00/00/1954	Test Hole	N/A
34-12	T20N-R2E, Sect. 34	10300	349	NR	00/00/1954	Test Well	N/A
34-15	T20N-R2E, Sect. 34	9600	360	NR	00/00/1923	NR	NR
34-17	T20N-R2E, Sect. 34	10200	345	385	00/00/1948	NR	NR
34-18	T20N-R2E, Sect. 34	10300	345	385	00/00/1954	Test Hole	N/A
34-21	T20N-R2E, Sect. 34	10000	361	379	00/00/1946	NR	NR
34-22	T20N-R2E, Sect. 34	8750	105	630	06/24/1992	Domestic	Unconsolidated
35-1	T20N-R2E, Sect. 35	8300	81	642	08/15/1971	Domestic	Unconsolidated
35-2	T20N-R2E, Sect. 35	9600	324	402	00/00/1962	Non-Community	NR
35-5	T20N-R2E, Sect. 35	10550	78	658	02/00/1946	Domestic	Unconsolidated
36-1	T20N-R2E, Sect. 36	10600	65	N/A	00/00/1925	Domestic	Unconsolidated
36-2	T20N-R2E, Sect. 36	10450	57	N/A	00/00/0000	Domestic	Unconsolidated

Notes:

1) ft. bgs = feet below ground surface
2) ft. AMSL = feet above mean sea level
3) N/A = Not Applicable
4) NR = Not Reported
5) Sources: Illinois State Water Survey (Private Well Database and PIC's Database) and Illinois State Geological Survey

TABLE 812.314-6
PIEZOMETER INFORMATION
CLINTON LANDFILL NO. 3

Well	Surface Grade (ft. AMSL)	Well Depth (ft. bgs)	Geologic Unit Monitored	Screen Elevation (ft. AMSL)	Elevation Top of Sand Pack (ft. AMSL)	Unit	Unit Elevation (ft. AMSL)	Unit Thickness (ft.)
EX-4	724.53	93.5	Lower Radnor Till Sand	631.38 - 641.03	643.33	Sand	635.53 - 638.28	2.75
EX-5	727.97	92	Lower Radnor Till Sand	636.32 - 646	648.47	Sand	637.47 - 640.97	3.5
EX-6	694.24	57.9	Lower Radnor Till Sand	636.69 - 646.37	651.74	Sand	635.8 - 641.1	5.3
EX-7	691.8	58	Lower Radnor Till Sand	634.15 - 643.91	646.3	Sand	635.8 - 641.1	5.3
EX-8S	654.1	22.5	Lower Radnor Till Sand	631.64 - 641.52	646.1	Sand	634.8 - 640	5.2
EX-9	648.3	27.5	Alluvial Deposits	620.85 - 630.59	633	Clayey/Sandy Silt, Sand, Gravelly Sand	619.3 - 632.8	13.5
EX-12S	705.4	65.5	Lower Randor Till Sand	640.25 - 649.88	651.88	Sand	643.2 - 644.3	1.1
EX-12D	705.4	77	Organic Soil	629.75 -639.37	642.15	Sand & Gravel	633.65 -637.4	3.75
EX-13	722.6	94	Organic Soil	628.64 - 638.42	640.6	Clayey Silt, Silt, Peat	631.05 - 634.8	3.75
EX-14	726.8	93	Organic Soil	634.14 - 643.84	645.8	Clayey Silt, Silt, Peat	641.2 - 643.7	2.5
EX-15	731.1	92.5	Lower Radnor Till Sand	638.94 - 648.65	651.1	Sand	638.8 - 641.9	3.1
EX-17	715	86.5	Organic Soil	628.84 - 638.47	641	Sand, Clayey Silt, Peat	632.5 - 635.85	3.35
EX-19	718.4	84	Lower Radnor Till Sand	634.44 - 644.22	647	Sand, Clayey Silt	637.4 - 640.9	3.5
EX-20	673.5	43	Organic Soil	631.34 - 641.11	644	Sand	632.0 -634.0	2
EX-21D	701	66.8	Lower Radnor Till Sand	634.24 643.88	646.5	Sand	637 - 640.4	3.4
EX-21S	700.4	57.6	Upper Randor Till Sand	643.13 - 652.83	654.9	Silty Sand	647.4 - 650.00	2.6
EX-22S	667	17.8	Upper Randor Till Sand	649.18 - 658.95	661	Sand, Clayey Sand	651.1 - 653.9	2.8
EX-22D	667.1	40.2	Organic Soil	627.24 - 636.97	639.1	Sand, Clayey Silt, Peat	627.3 - 631.8	4.5
EX-23S	711	69	Upper Randor Till Sand	642.34 - 652.01	657	Sand, Gravelly Sand	641.8 - 651.4	9.6
EX-23D	710.8	87.5	Organic Soil	623.3 - 633.41	635.3	Clayey Silt, Sand, Peat	622.8 631.6	8.8
EX-24	727.4	97.5	Organic Soil	630.25 - 639.94	641.94	Silt, Peat, Clayey Silt, Sandy Silt	632.3 -637.4	5.1

Notes:
1. ft. AMSL = feet above mean sea level
2. ft. bgs = feet below ground surface
3. ft. = feet

TABLE 812.314-7
Groundwater Elevations - 2003 through 2004
Clinton Landfill No. 3

Well	3/21/2003	6/17/2003	8/25/2003	10/15/2003	1/15/2004	4/28/2004	8/31/2004	11/18/2004
EX-4	691.44	691.17	691.50	691.08	691.08	691.60	691.59	691.43
EX-5	672.60	672.69	671.76	671.77	673.00	673.33	672.94	672.81
EX-6	672.05	672.11	671.14	671.11	672.03	672.80	672.37	672.26
EX-7	644.52	643.81	643.03	643.00	645.00	645.48	648.09	645.90
EX-8S	646.49	646.19	643.99	643.66	646.27	646.84	645.92	646.13
EX-12S	665.39	665.46	664.55	664.33	664.47	665.44	665.61	665.23
EX-12D	664.41	664.89	662.76	662.53	663.52	663.52	665.01	663.94
EX-13	670.54	670.76	669.90	669.86	669.85	670.44	670.92	669.50
EX-14	678.72	678.06	678.23	678.35	678.36	678.85	680.05	678.65
EX-15	691.66	691.48	691.17	691.28	691.32	691.82	691.79	691.64
EX-17	665.26	665.43	665.10	664.97	665.01	665.72	666.16	665.50
EX-19	639.95	639.89	640.10	640.34	640.98	641.68	644.79	642.00
EX-20	658.23	658.93	657.48	657.19	659.18	660.67	659.81	659.25
EX-21S	NA	NA	NA	660.32	661.61	664.00	662.74	662.48
EX-21D	658.15	658.23	656.35	656.12	657.98	659.10	658.24	658.29
EX-22S	664.02	663.65	660.06	659.53	663.67	664.16	664.08	664.40
EX-22D	665.61	665.29	663.94	663.40	665.54	666.45	665.57	665.70
EX-23S	673.91	673.82	673.10	673.05	673.67	677.42	674.09	674.01
EX-23D	673.61	673.65	672.73	672.76	673.60	674.28	673.91	673.81
EX-24	675.56	675.73	675.06	675.08	675.49	676.21	675.98	675.77

Notes:
1) Values are in feet Above Mean Sea Level (ft. AMSL)
2) NA = Not Applicable. Well EX-21S was not installed

TABLE 812.314-8
Flow Rates in the Water Bearing Units
Clinton Landfill No. 3

Quarter Water Table Elevation Measured	Groundwater Gradient (i) (feet/foot)	Groundwater Flow Velocity (V) (feet/day)
Upper Radnor Till		
1st Quarter of 2004	7.85E-03	3.54E-03
2nd Quarter of 2004	8.74E-03	3.94E-03
3rd Quarter of 2004	7.39E-03	3.34E-03
4th Quarter of 2004	7.51E-03	3.39E-03
Average =	7.87E-03	3.55E-03
Lower Radnor Till		
1st Quarter of 2004	1.23E-02	5.36E-02
2nd Quarter of 2004	1.23E-02	5.36E-02
3rd Quarter of 2004	1.16E-02	5.06E-02
4th Quarter of 2004	1.22E-02	5.29E-02
Average =	1.21E-02	5.27E-02
Organic Soil		
1st Quarter of 2004	5.90E-03	1.99E-03
2nd Quarter of 2004	5.62E-03	1.90E-03
3rd Quarter of 2004	5.85E-03	1.98E-03
4th Quarter of 2004	5.97E-03	2.02E-03
Average =	5.83E-03	1.97E-03

Notes:

1. Hydraulic gradients (i) for the Upper Radnor Till sand is estimated using potentiometric data from wells EX-21S and EX-23S.
   Hydraulic gradients (i) for the Lower Radnor Till sand is estimated using potentiometric from wells EX-7 and EX-15.
   Hydraulic gradients (i) for the Organic Soil are estimated using potentiometric data data from wells EX-20 and EX-24.
2. Average groundwater flow velocity, V = K i/n.
3. Average hydraulic conductivity (K): Upper Radnor Till sand = 1.58E-01 feet per day;
   Lower Radnor Till sand = 1.52 feet per day;
   Organic Soil = 1.52E-01 feet per day;
4. n = Effective porosity of the Upper and Lower Radnor Till sands = 0.35 (from published ranges).
   n = Effective porosity of the Organic Soil = 0.45 (from published ranges).

FIGURES

MEAN THICKNESS OF BERRY CLAY/RANDOR TILL BETWEEN THE CHEMICAL WASTE UNIT CLAY LINER SUBGRADE AND THE LOWER RADNOR TILL SAND

Number of triangles: 1264
Mean thickness: 22.77 ft.
Minimum triangle area: 0.00
Maximum triangle area: 12912.09
2D surface area: 647262.61
3D surface area: 647723.03
Minimum grade: 0.00%
Maximum grade: 89.58%
Average grade: 2.34%

Maximum thickness = 32.0 ft.
Minimum thickness = 16.0 ft.

PREVIOUS THICKNESS DOCUMENTATION FOR THE LOWER RADNOR TILL SAND AND ORGANIC SOIL

Shaw®

TABLE 812.316-1

Thickness of Geological Units
Clinton Landfill No. 3

Boring/ Well	Geologic Unit	Top Elevation	Bottom Elevation	Thickness (feet)
EX-3	Upper Radnor Till Sand	652.2	651.3	0.9
EX-5	Upper Radnor Till Sand	652.67	652.42	0.25
EX-6	Upper Radnor Till Sand	653.24	651.24	2
EX-21	Upper Radnor Till Sand	650	647.4	2.6
EX-22	Upper Radnor Till Sand	653.9	651.1	2.8
EX-23	Upper Radnor Till Sand	651.4	649.8	1.6
EX-25	Upper Radnor Till Sand	653.25	652.2	1.05
EX-28	Upper Radnor Till Sand	650.7	650.2	0.5
	Mean:	**652.17**	**650.71**	**1.46**

Boring/ Well	Geologic Unit	Top Elevation	Bottom Elevation	Thickness (feet)
EX-2	Lower Radnor Till Sand	640.02	639.77	0.25
EX-3	Lower Radnor Till Sand	643.00	642.50	0.50
EX-4	Lower Radnor Till Sand	638.28	635.53	2.75
EX-5	Lower Radnor Till Sand	640.97	637.47	3.50
EX-6	Lower Radnor Till Sand	640.59	636.64	3.95
EX-7	Lower Radnor Till Sand	641.10	635.80	5.30
EX-8	Lower Radnor Till Sand	640.00	634.80	5.20
EX-12	Lower Radnor Till Sand	644.30	643.20	1.10
EX-15	Lower Radnor Till Sand	642.30	638.80	3.50
EX-16	Lower Radnor Till Sand	639.90	639.70	0.20
EX-19	Lower Radnor Till Sand	640.90	637.40	3.50
EX-21	Lower Radnor Till Sand	640.40	637.00	3.40
G51D	Lower Radnor Till Sand	641.90	638.65	3.25
	Mean:	**641.05**	**638.25**	**2.80**

Boring/ Well	Geologic Unit	Top Elevation	Bottom Elevation	Thickness (feet)
EX-1	Organic Soil	635.77	629.27	6.50
EX-2	Organic Soil	634.30	630.30	4.00
EX-3	Organic Soil	634.30	633.00	1.30
EX-8	Organic Soil	631.00	629.60	1.40
EX-11	Organic Soil	633.40	631.70	1.70
EX-12	Organic Soil	637.40	633.65	3.75
EX-13	Organic Soil	634.80	631.05	3.75
EX-14	Organic Soil	643.70	641.20	2.50
EX-16	Organic Soil	634.75	632.70	2.05
EX-17	Organic Soil	635.85	632.50	3.35
EX-18	Organic Soil	633.50	630.00	3.50
EX-20	Organic Soil	634.00	632.00	2.00
EX-22	Organic Soil	631.80	627.30	4.50
EX-23	Organic Soil	632.80	622.80	10.00
EX-24	Organic Soil	637.40	632.30	5.10
P-11	Organic Soil	635.40	631.80	3.60
G39D	Organic Soil	634.40	631.60	2.80
G22D	Organic Soil	636.30	630.30	6.00
B-20	Organic Soil	636.50	634.20	2.30
B-22	Organic Soil	631.10	629.50	1.60
G40D	Organic Soil	636.50	635.90	0.60
G23D	Organic Soil	635.40	628.40	7.00
G46D	Organic Soil	634.00	632.50	1.50
G51D	Organic Soil	631.90	630.65	1.25
	Mean:	**634.84**	**631.43**	**3.42**

Notes:

1) Elevations are in feet Above Mean Sea Level (ft. AMSL)

LABORATORY TEST RESULTS USED FOR THE GENERATION OF SITE-SPECIFIC TOTAL POROSITIES PRESENTED IN TABLE 812.314-2

Shaw®

TABLE 812.314-2
SUMMARY OF LABORATORY TESTING OF SITE SOILS
Clinton Landfill No. 3

Geologic Unit	Boring No.	Sample Elevation ft. (AMSL)	Soil Type	Kv (cm/sec.)	Dry Density (gm/cc)	Porosity (n)	Estimated Effective Porosity
Tiskilwa Formation	EX-21	688	Silty Clay	2.73E-08	1.98	0.275	0.232
Tiskilwa Formation	CLG1&2*	689.9	Silty Clay	NT	2.04	0.241	0.203
Tiskilwa Formation	B-20	703.3	Clayey Silt	8.60E-09	NM	NM	NM
Tiskilwa Formation	EX-13	680	Silty Clay	2.24E-08	2.03	0.237	0.199
Tiskilwa Formation	EX-16	677.5	Silty Clay	1.71E-08	2.02	0.275	0.232
Tiskilwa Formation	EX-17	685	Silty Clay	1.66E-08	1.96	0.281	0.236
Tiskilwa Formation	EX-23	676	Sandy Clay	1.22E-08	2.20	0.265	0.223
Tiskilwa Formation	EX-24	695	Silty Clay	1.40E-08	2.15	0.237	0.199
Roxanna/Robein	EX-13	670	Clayey Silt	1.55E-08	1.18	0.539	0.523
Roxanna/Robein	EX-16	667.5	Organic Clay	4.13E-08	1.1	0.574	0.557
Roxanna/Robein	EX-21	670	Sandy Clay	2.58E-08	2.04	0.259	0.251
Roxanna/Robein	EX-24	670	Sandy Clay	3.56E-08	1.95	0.265	0.257
Roxanna/Robein	CLG 5*	662.9	Silty Clay	NT	1.52	0.425	0.412
Berry Clay	CLG3&4*	665.9	Silty Clay	NT	2.05	0.235	0.191
Berry Clay	EX-6	661	Silty Clay	1.35E-08	1.84	0.379	0.308
Berry Clay	EX-7	658.8	Silty Clay	8.43E-08	1.9	0.379	0.308
Berry Clay	EX-13	660	Silty Clay	1.78E-08	1.89	0.338	0.274
Berry Clay	EX-16	659.8	Silty Clay	3.42E-08	1.98	0.270	0.219
Berry Clay	EX-19	658	Silty Clay	2.71E-08	1.72	0.333	0.270
Berry Clay	EX-21	662	Silty Clay	1.87E-08	1.86	0.301	0.244
Berry Clay	EX-24	665	Silty Clay	3.26E-08	1.79	0.333	0.270
Berry Clay	EX-24	659	Silty Clay	6.29E-08	1.69	0.355	0.288
Radnor Till	EX-16	645	Silty Clay	7.66E-08	2.09	0.194	0.163
Radnor Till	EX-19	649	Silty Clay	5.93E-08	2.23	0.206	0.174
Radnor Till	EX-23	648.5	Silty Clay	4.92E-08	1.87	0.219	0.184
Radnor Till	EX-4	644.53	Silty Clay	4.20E-08	2.22	0.233	0.196
Radnor Till	EX-4	659.53	Silty Clay	5.79E-08	2.16	0.283	0.238
Radnor Till	EX-5	657.97	Silty Clay	2.05E-08	2.17	0.276	0.232
Radnor Till	EX-5	647.97	Silty Clay	1.64E-08	2.32	0.197	0.166
Radnor Till	EX-6	644.24	Silty Clay	2.91E-08	2.12	0.446	0.375
Radnor Till	EX-7	643.8	Silty Clay	9.36E-08	2.35	0.174	0.146
Vandalia Till	P223D-1A	623.15	Silty Clay	1.87E-08	2.11	NM	NM
Vandalia Till	B-11 (P-11)	626.5	Clayey Silt	1.70E-08	NM	NM	NM

Mean Kv Value by Formation

Radnor Till Mean:	4.94E-08
Berry Clay Mean:	3.64E-08
Roxanna/Robein Mean:	2.96E-08
Tiskilwa Formation Mean:	1.69E-08
Berry Clay/Radnor Mean:	4.33E-08
Vandalia Till Mean:	1.79E-08

Mean n Value by Formation

Radnor Till Mean:	0.248
Berry Clay Mean:	0.325
Roxanna/Robein Mean:	0.413
Tiskilwa Formation Mean:	0.259
Berry Clay/Radnor Mean:	0.286

Notes:
1) ft. AMSL = Elevation in feet above mean sea level
2) Kv = vertical hydraulic conductivity
3) cm/sec. = centimeters per second
4) gm/cc = grams per cubic centimeter
5) * CLG boring was advanced next to B-23
6) NM = Not measured
7) Estimated effective porosity was based on Sara, M. N. (1994). Standard Handbook for Solid and Hazardous Waste Facility Assessments, Lewis Publishers, U.S., Page 5-57

Mean Estimated Effective Porosity by Formation

Radnor Till Mean:	0.208
Berry Clay Mean:	0.263
Roxanna/Robein Mean:	0.400
Tiskilwa Formation Mean:	0.217
Berry Clay/Radnor Mean:	0.236

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April 3, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification:	EX-21-688	Sample Obtained By:	SKS
Sample Depth/Elevation:	688		
Description:	BROWN TISKILWA - Lean Clay w/Sand, Little Gravel		
USCS Classification:	CL		
Natural Moisture Content:	13.0%	Liquid Limit: 28.0	Soil Particle Sizes: Gravel ____ Silt ____
		Plasticity Index: 15.0	Sand ____ Clay ____

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	12.6%
Diameter:	7.28 cm.			Final Moisture:	14.4%
Length:	6.8 cm.	Wet Weight Before Test:	631.9 gm.	Dry Density:	1.98 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	642.0 gm.	Void Ratio:	0.38
Volume:	283.05 cu. cm.	Dry Weight:	561.4 gm.	Initial Saturation:	87.47%

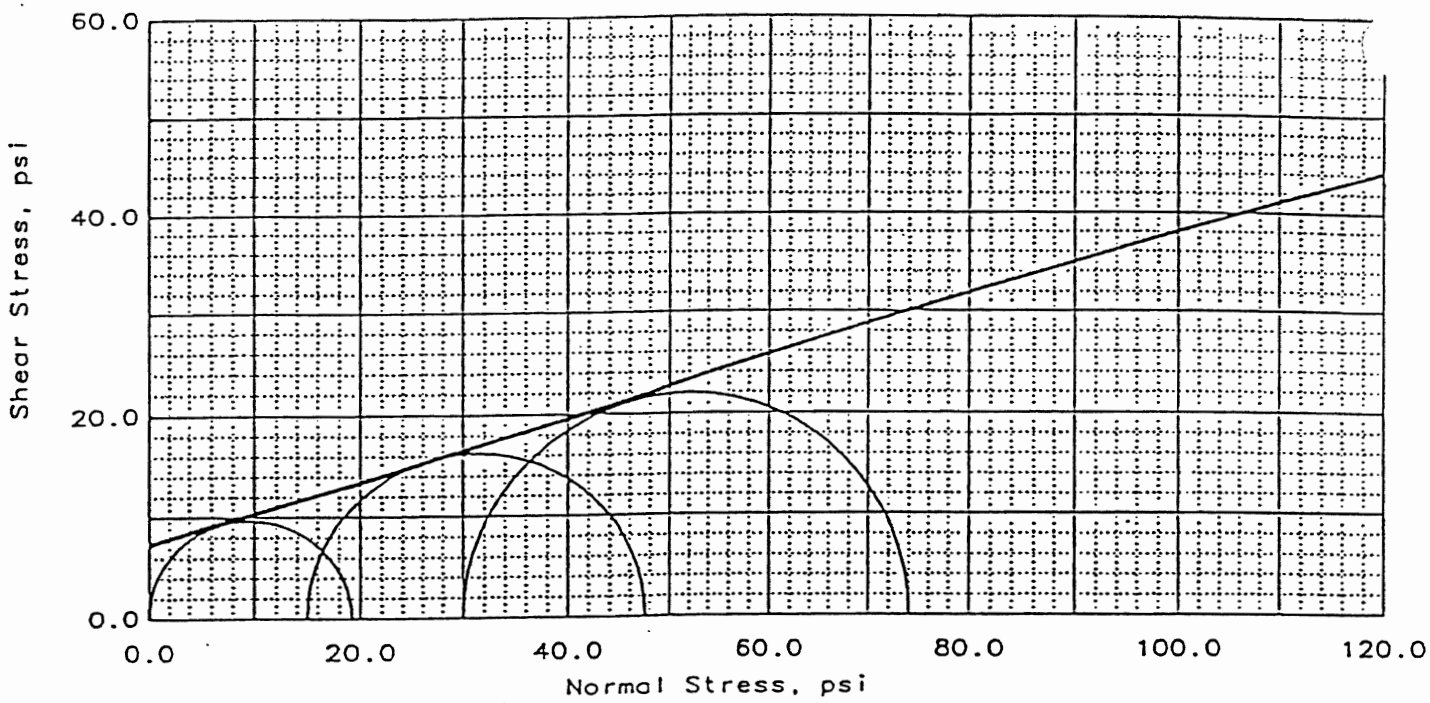
Testing Data and Results

Test Apparatus:	GEOTEST				
Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 °C
Hydraulic Gradient:	20.69			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	4.15 hours	Amount of Flow	16.423 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	15.135 ml	Permeability: (k) =	2.73E-08 cm/sec

Remarks:

By: Robert Wright

TRIAXIAL SHEAR TEST REPORT



Type of Test: Unconsolidated undrained Sample Type: 3" Shelby Tube

No.	FLUID PRESS. psi		MAX. STRENGTH psi		ULT. STRENGTH psi		PRINCIPAL STRESSES AT FAILURE psi	
	Cell	Back	Deviator	Pore	Deviator	Pore	σ_1	σ_3
1	0	0	19.2	0.0	19.2	0.0	19.2	
2	15	0	32.5	0.0	26.0	0.0	47.5	15.0
3	30	0	44.0	0.0	44.0	0.0	74.0	30.0

No.	SAMPLE PARAMETERS						
	% Water Content	Dry Dens. pcf	Saturation	Void Ratio	Diameter in	Height in	Time to fail minutes
1	12.0	125.1	95.5 %	0.3371	2.83	5.60	14
2	11.1	127.9	96.5 %	0.3077	2.83	5.60	9
3	11.0	126.7	92.2 %	0.3203	2.84	5.60	19

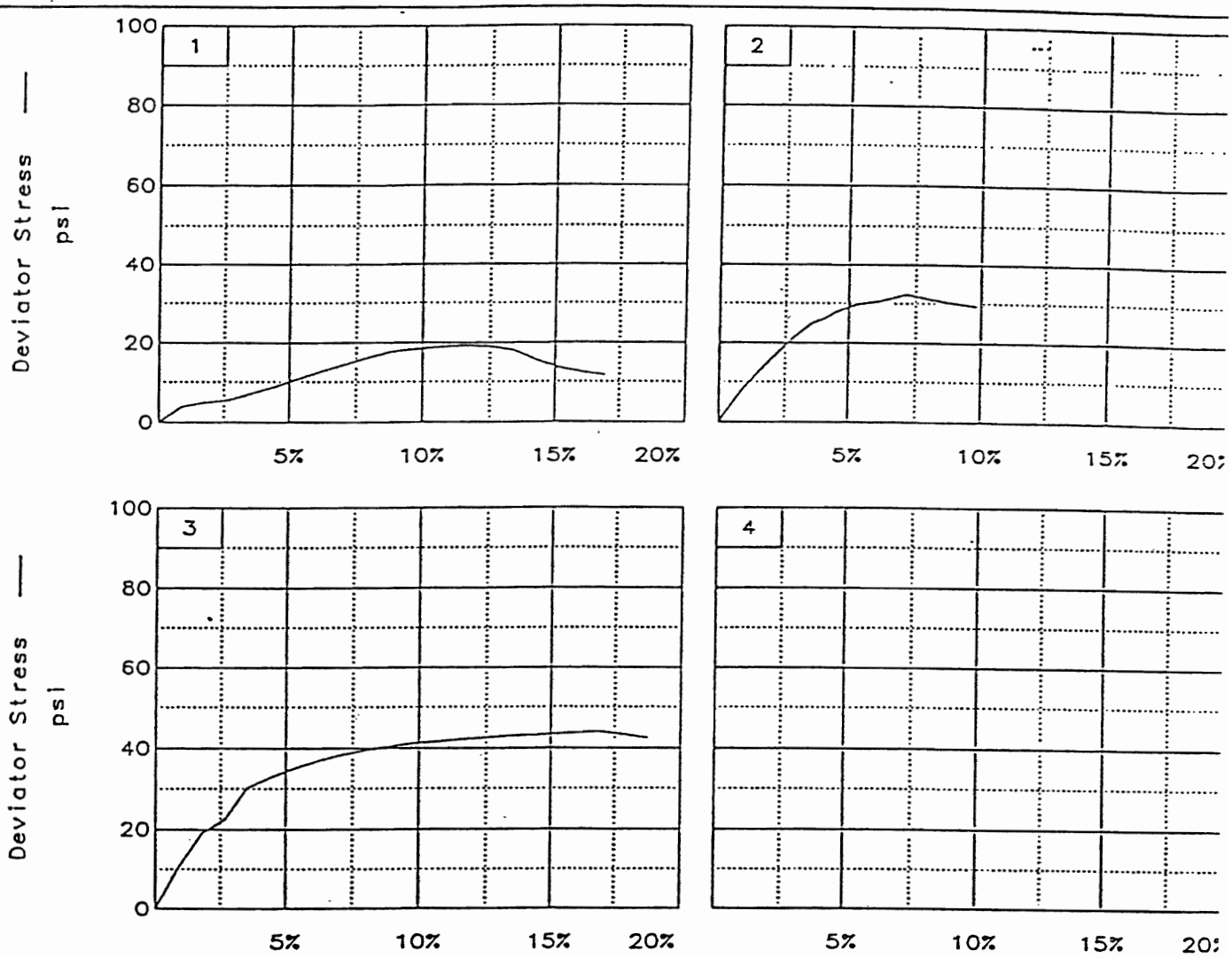
MOHR-COULOMB STRENGTH PARAMETERS		MATERIAL DESCRIPTION
	Total	Brown Weathered
Strength intercept, c=	7.2 psi	Glacial SILTY CLAY Till
Friction angle, ϕ =	17.1 deg	LL= PI=
Tangent ϕ =	0.31	

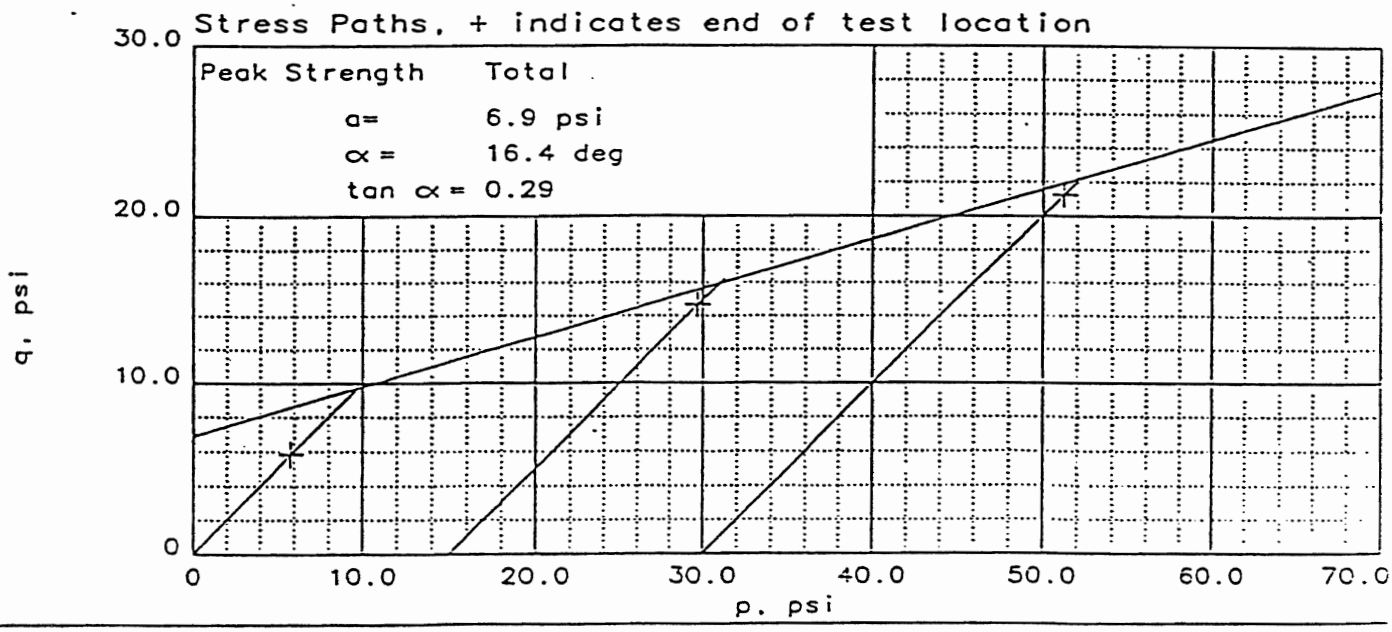
CLIENT: Peoria Disposal Company
Peoria, Illinois
PROJECT: CLINTON LANDFILL
Peoria, Illinois
LOCATION: CLG 1 and 2; 12'-16'
Brown Silty Clay

DATE: 9-20-93
File: CLIN1
REMARKS:

TRIAXIAL SHEAR TEST REPORT
WHITNEY & ASSOCIATES

Proj. No.:
Page 1/2 Fig. No. ____





Client: Peoria Disposal Company Peoria, Illinois

Project: CLINTON LANDFILL Peoria, Illinois

Location: CLG 1 and 2; 12'-16'

File: CLIN1 Project No.: Page 2/2 Fig. No. ____

TELEPHONE
309-673-2131
TESTS * INVESTIGATIONS
ANALYSIS * DESIGN * EVALUATIONS
CONSULTATION * REPORTS * INSPECTIONS
ARBITRATION * EXPERT WITNESS TESTIMONY
SOILS * PORTLAND CEMENT CONCRETE
BITUMINOUS CONCRETE * STEEL
ASPHALT * AGGREGATES * EMULSIONS
POZOLANIC MATERIALS * LIME

WHITNEY & ASSOCIATES
INCORPORATED
2406 West Nebraska Avenue
PEORIA, ILLINOIS 61604-3193

TELEFAX
309-673-3050
GEOTECHNICAL ENGINEERING
CONSTRUCTION QUALITY CONTROL
SUBSURFACE EXPLORATIONS
ENVIRONMENTAL INVESTIGATIONS
MONITORING WELL INSTALLATIONS
BUILT-UP ROOF INVESTIGATIONS
WELDER CERTIFICATIONS
INSURANCE INVESTIGATIONS

November 16, 1993

Mr. John Berry
PDC Technical Services, Inc.
P. O. Box 9071
Peoria, Illinois 61612-9071

Re: Geotechnical Information
Clinton Landfill
Clinton, Illinois

Dear Mr. Berry:

In response to your request, we respectfully transmit the following geotechnical information for the above referenced project site. Our geotechnical definition of porosity as indicated below is the volume of voids in a sample divided by the total sample volume.

SAMPLE DESIGNATION	SAMPLE DEPTH-FEET	SAMPLE DESCRIPTION	NATURAL MOISTURE CONTENT-%	NATURAL DRY DENSITY-PCF	SAMPLE POROSITY-%
CLG 1 & 2	12.0 - 16.0	Brown, Weathered GLACIAL SILTY CLAY TILL	11.5	127.5	24.1
CLG 3 & 4	38.0 - 46.0	Gray, Unweathered GLACIAL SILTY CLAY TILL	11.0	128.0	23.5
CLG 5	40.0 - 42.0	Black SILTY CLAY Organic Topsoil	27.5	95.0	42.5

Should you have any questions or comments whatsoever in regard to this brief transmittal, or if any additional information is desired, do not hesitate to contact us at your convenience.

Respectfully submitted,

WHITNEY & ASSOCIATES

(By) James R. Krusemark
James R. Krusemark, E.I.T.

(By) Richard R. Whitney
Richard R. Whitney, P. E.

JRK/RRW:rma

WHITNEY & ASSOCIATES
PEORIA, ILLINOIS

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April 3, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS
ASTM D-5084

Sample and Classification Data

Sample Identification: EX-13-680
Sample Obtained By: SKS
Sample Depth/Elevation: 680
Description: GRAY TISKILWA - CL - Lean Clay,with Sand, Trace Gravel
USCS Classification: CL
Natural Moisture Content: 11.7%
Liquid Limit: 22.0
Plasticity Index: 10.0
Soil Particle Sizes: Gravel ____ Silt ____ Sand ____ Clay ____

Test Specimen Data

Specimen Type: FLEXIBLE WALL
Diameter: 7.28 cm.
Length: 7.5 cm.
Area: 41.62 sq. cm.
Volume: 312.19 cu. cm.
Wet Weight Before Test: 711.4 gm.
Wet Weight After Test: 709.7 gm.
Dry Weight: 634.6 gm.
Initial Moisture: 12.1%
Final Moisture: 11.8%
Dry Density: 2.03 gm./cc.
Void Ratio: 0.31
Initial Saturation: 102.26%

Testing Data and Results

Test Apparatus: GEOTEST
Cell Confining Pressure 30.0 psi = 2,110.20 cm of H_2O
Back Pressure 25.0 psi = 1,758.50 cm of H_2O
Driving Pressure 2.0 psi = 140.68 cm of H_2O
Hydraulic Gradient: 18.76
Time Req'd. for Saturation: 24 hours Amount of Flow 12.69 ml
Time for Permeability Test: 166.6 hours Amount of Flow 11.256 ml
Permeant Liquid: 0.005 N $CaSO_4$
Temperature: 24.0 °C
Temperature Correction Factor: 0.91

Permeability: (k) = 2.24E-08 cm/sec

Remarks:

By: Robert Wright

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April 4, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS
ASTM D-5084

Sample and Classification Data

Sample Identification: EX-16-677.5
Sample Obtained By: SKS
Sample Depth/Elevation: 677.5
Description: GRAY TISKILWA, Lean Clay, with Sand, Trace Gravel
USCS Classification: CL
Natural Moisture Content: 13.9%
Liquid Limit: _
Plasticity Index: _
Soil Particle Sizes: Gravel _ Silt _ Sand _ Clay _

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	14.2%
Diameter:	7.28 cm.			Final Moisture:	14.2%
Length:	6.05 cm.	Wet Weight Before Test:	580.2 gm.	Dry Density:	2.02 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	580.2 gm.	Void Ratio:	0.38
Volume:	251.83 cu. cm.	Dry Weight:	508.0 gm.	Initial Saturation:	100.00%

Testing Data and Results

Test Apparatus: GEOTEST

Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 °C
Hydraulic Gradient:	23.25			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	6.75 hours	Amount of Flow	11.228 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	10.675 ml	Permeability: (k) =	1.71E-08 cm/sec

Remarks:

By: Robert Wright

SKS ENGINEERS, INC.

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April 3, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification:	EX-17-685	Sample Obtained By:	SKS
Sample Depth/Elevation:	685		
Description:	GRAY TISKILWA - Lean Clay, with Sand, Little Gravel		
USCS Classification:	CL		
Natural Moisture Content:	14.9%	Liquid Limit: 25.0	Soil Particle Sizes: Gravel ____ Silt ____
		Plasticity Index: 13.0	Sand ____ Clay ____

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	14.8%
Diameter:	7.28 cm.			Final Moisture:	14.6%
Length:	6.75 cm.	Wet Weight Before Test:	632.2 gm.	Dry Density:	1.96 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	631.6 gm.	Void Ratio:	0.39
Volume:	280.97 cu. cm.	Dry Weight:	550.9 gm.	Initial Saturation:	100.74%

Testing Data and Results

Test Apparatus:	GEOTEST				
Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 °C
Hydraulic Gradient:	20.84			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	2 hours	Amount of Flow	9.5125 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	9.253 ml	Permeability: (k) =	1.66E-08 cm/sec

Remarks:

By: Robert Wright

SKS ENGINEERS, INC.

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April 6, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification:	EX-23-676	Sample Obtained By:	SKS
Sample Depth/Elevation:	676		
Description:	GRAY TISKILWA – Sandy Lean Clay, Trace Gravel		
USCS Classification:	CL		
Natural Moisture Content:	12.7%	Liquid Limit: 28.0	Soil Particle Sizes: Gravel ____ Silt ____
		Plasticity Index: 15.0	Sand ____ Clay ____

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	13.0%
Diameter:	7.28 cm.			Final Moisture:	13.5%
Length:	5.2 cm.	Wet Weight Before Test:	536.8 gm.	Dry Density:	2.20 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	539.2 gm.	Void Ratio:	0.36
Volume:	216.45 cu. cm.	Dry Weight:	475.2 gm.	Initial Saturation:	96.25%

Testing Data and Results

Test Apparatus:	GEOTEST				
Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 °C
Hydraulic Gradient:	27.05			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	20.5 hours	Amount of Flow	9.5875 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	8.8325 ml	Permeability: (k) =	1.22E-08 cm/sec

Remarks:

By: Robert Wright

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April 3, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: CLI #3

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification: EX-24-695

Sample Obtained By: SKS

Sample Depth/Elevation: 695

Description: GRAY TISKILWA - Sandy Lean Clay, Little Gravel - CL

USCS Classification: CL

Natural Moisture Content: 11.6%

Liquid Limit: 23.0

Plasticity Index: 12.0

Soil Particle Sizes: Gravel ____ Silt ____ Sand ____ Clay ____

Test Specimen Data

Specimen Type: FLEXIBLE WALL

Diameter: 7.28 cm.

Length: 6.5 cm.

Area: 41.62 sq. cm.

Volume: 270.56 cu. cm.

Wet Weight Before Test: 645.4 gm.

Wet Weight After Test: 648.4 gm.

Dry Weight: 580.7 gm.

Initial Moisture: 11.1%

Final Moisture: 11.7%

Dry Density: 2.15 gm./cc.

Void Ratio: 0.31

Initial Saturation: 95.57%

Testing Data and Results

Test Apparatus: GEOTEST

Cell Confining Pressure 30.0 psi = 2,110.20 cm of H_2O

Back Pressure 25.0 psi = 1,758.50 cm of H_2O

Driving Pressure 2.0 psi = 140.68 cm of H_2O

Hydraulic Gradient: 21.64

Time Req'd. for Saturation: 1 hours Amount of Flow 8.3125 ml

Time for Permeability Test: 166.6 hours Amount of Flow 8.136 ml

Permeant Liquid: 0.005 N $CaSO_4$

Temperature: 24.0 °C

Temperature Correction Factor: 0.91

Permeability: (k) = 1.40E-08 cm/sec

Remarks:

By: Robert Wright

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April 3, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification:	EX-13-670	Sample Obtained By:	SKS
Sample Depth/Elevation:	670		
Description:	BROWN ROBEIN/ROXANA - Lean Clayey Silt, Trace Organics		
USCS Classification:	ML		
Natural Moisture Content:	40.7%	Liquid Limit: 41.0	Soil Particle Sizes: Gravel ____ Silt ____
		Plasticity Index: 12.0	Sand ____ Clay ____

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	43.2%
Diameter:	7.28 cm.			Final Moisture:	44.0%
Length:	7 cm.	Wet Weight Before Test:	491.9 gm.	Dry Density:	1.18 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	494.6 gm.	Void Ratio:	1.17
Volume:	291.37 cu. cm.	Dry Weight:	343.4 gm.	Initial Saturation:	98.21%

Testing Data and Results

Test Apparatus:	GEOTEST				
Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 °C
Hydraulic Gradient:	20.10			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	48 hours	Amount of Flow	14.368 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	8.36 ml	Permeability: (k) =	1.55E-08 cm/sec

Remarks:

By: Robert Wright

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April 6, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS
ASTM D-5084

Sample and Classification Data

Sample Identification: EX-16-667.5
Sample Obtained By: SKS
Sample Depth/Elevation: 667.5
Description: BROWN-DARK GRAY ROBEIN/ROXANA, Organic Clay - OL
USCS Classification:
Natural Moisture Content: 42.7%
Liquid Limit: 49.0
Plasticity Index: 15.0
Soil Particle Sizes: Gravel ____ Silt ____ Sand ____ Clay ____

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	48.9%
Diameter:	7.28 cm.			Final Moisture:	51.0%
Length:	6.7 cm.	Wet Weight Before Test:	457.8 gm.	Dry Density:	1.10 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	464.2 gm.	Void Ratio:	1.35
Volume:	278.89 cu. cm.	Dry Weight:	307.4 gm.	Initial Saturation:	95.92%

Testing Data and Results

Test Apparatus: GEOTEST

Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 °C
Hydraulic Gradient:	21.00			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	6.25 hours	Amount of Flow	25.419 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	23.24 ml	Permeability: (k) =	4.13E-08 cm/sec

Remarks:

By: Robert Wright

SKS ENGINEERS, INC.

CONSULTING ENGINEERS

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April 3, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification:	EX-21-670	Sample Obtained By:	SKS
Sample Depth/Elevation:	670		
Description:	GRAY ROBEIN/ROXANA - Sandy Lean Clay, Little Gravel		
USCS Classification:	CL		

Natural Moisture Content:	11.4%	Liquid Limit:	18.0	Soil Particle Sizes:	Gravel	Silt	
		Plasticity Index:	9.0		Sand	Clay	

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	11.7%
Diameter:	7.28 cm.			Final Moisture:	13.3%
Length:	5.75 cm.	Wet Weight Before Test:	545.5 gm.	Dry Density:	2.04 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	553.3 gm.	Void Ratio:	0.35
Volume:	239.34 cu. cm.	Dry Weight:	488.4 gm.	Initial Saturation:	87.98%

Testing Data and Results

Test Apparatus:	GEOTEST				
Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 °C
Hydraulic Gradient:	24.47			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	4.75 hours	Amount of Flow	19.125 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	16.913 ml	Permeability: (k) =	2.58E-08 cm/sec

Remarks:

By: Robert Wright

SKS ENGINEERS, INC.

CONSULTING ENGINEERS

2900 N. MARTIN LUTHER KING, JR. DRIVE • DECATUR, ILLINOIS 62526

217-877-2100 • FAX 217-877-4816
www.sksengineers.com

April 6, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification:	EX-24-670	Sample Obtained By:	SKS
Sample Depth/Elevation:	670		
Description:	GRAY ROBEIN/ROXANA – Sandy Lean Clay, Little Gravel		
USCS Classification:	CL		
Natural Moisture Content:	12.6%	Liquid Limit: 24.0	Soil Particle Sizes: Gravel / Silt
		Plasticity Index: 13.0	Sand / Clay

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	13.8%
Diameter:	7.28 cm.			Final Moisture:	13.7%
Length:	7.2 cm.	Wet Weight Before Test:	663.9 gm.	Dry Density:	1.95 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	663.2 gm.	Void Ratio:	0.36
Volume:	299.70 cu. cm.	Dry Weight:	583.3 gm.	Initial Saturation:	100.88%

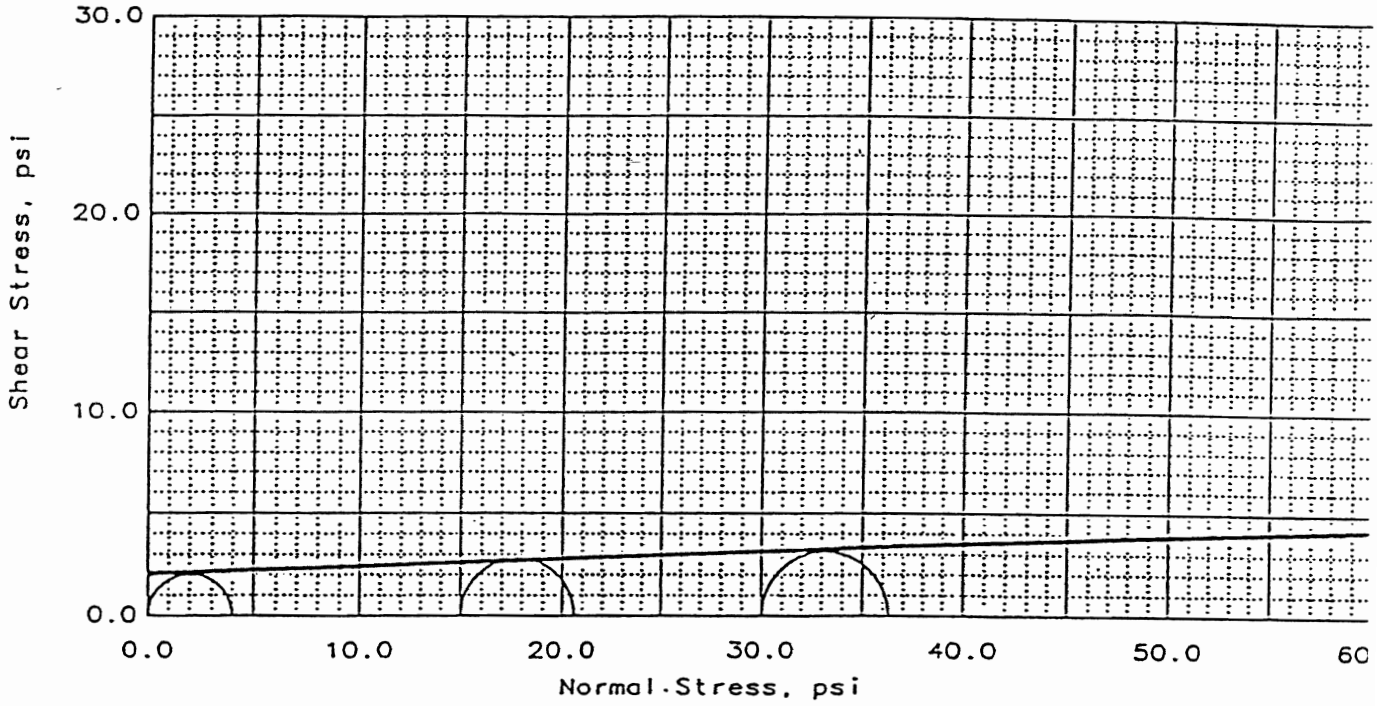
Testing Data and Results

Test Apparatus:	GEOTEST				
Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 °C
Hydraulic Gradient:	19.54			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	2 hours	Amount of Flow	20.96 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	18.64 ml	Permeability: (k) =	3.56E-08 cm/sec

Remarks:

By: Robert Wright

TRIAXIAL SHEAR TEST REPORT



Type of Test: Unconsolidated undrained Sample Type: 2" Remolded

No.	FLUID PRESS. psi		MAX. STRENGTH psi		ULT. STRENGTH psi		PRINCIPAL STRES AT FAILURE ps	
	Cell	Back	Deviator	Pore	Deviator	Pore	σ_1	
1	0	0	4.0	0.0	4.0	0.0	4.0	0
2	15	0	5.6	0.0	5.6	0.0	20.6	15
3	30	0	6.3	0.0	6.3	0.0	36.3	30

No.	SAMPLE PARAMETERS						
	% Water Content	Dry Dens. pcf	Satur-ation	Void Ratio	Diameter in	Height in	Time to fc minutes
1	28.5	95.0	101.8 %	0.7418	2.08	4.22	12
2	25.8	96.0	94.4 %	0.7235	2.11	4.22	16
3	27.8	94.9	99.2 %	0.7423	2.10	4.30	14

MOHR-COULOMB STRENGTH PARAMETERS		MATERIAL DESCRIPTION
	Total	Black SILTY CLAY
Strength intercept, c=	2.0 psi	ORGANIC TOPSOIL
Friction angle, ϕ =	2.1 deg	LL= PI=
Tangent ϕ =	0.04	

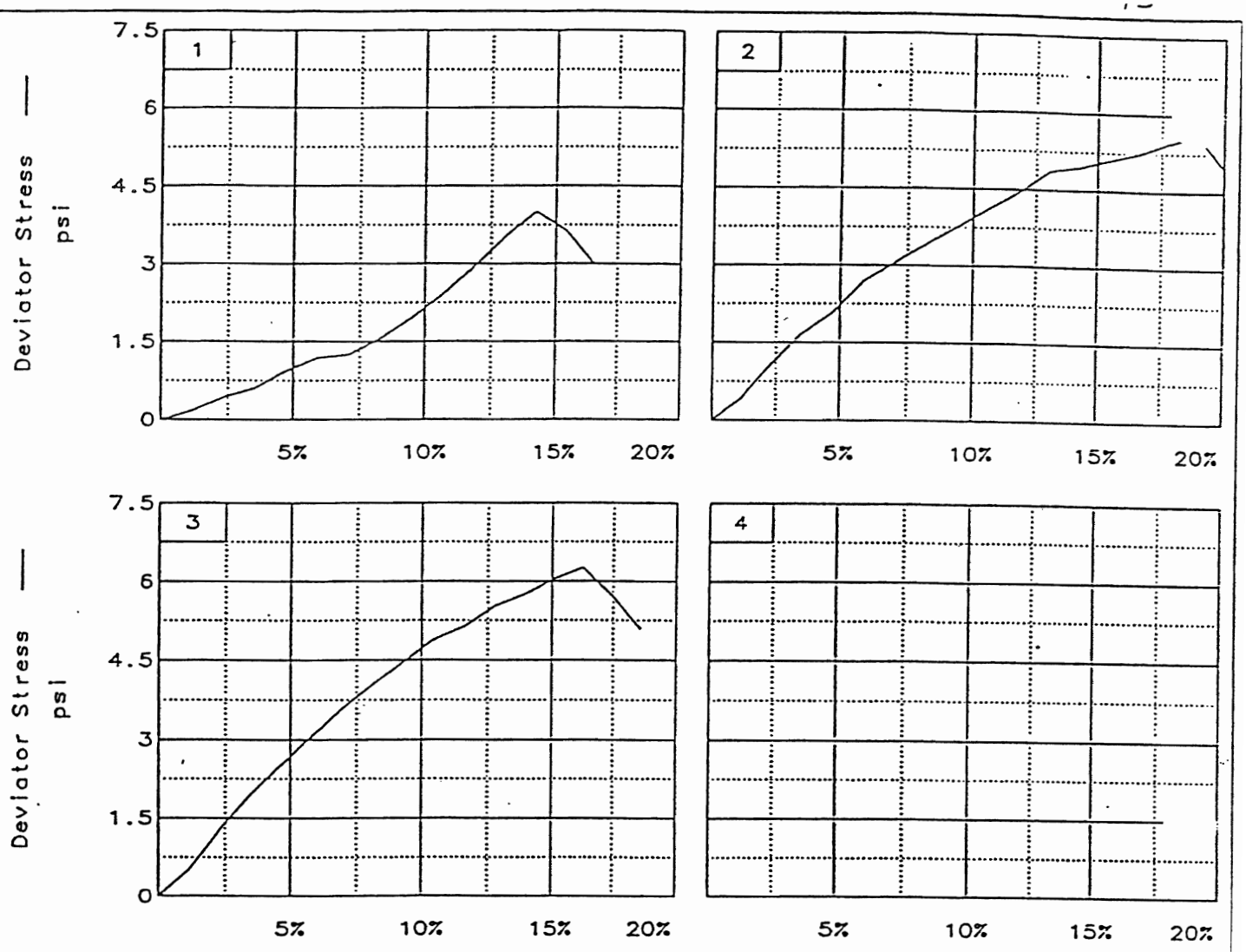
CLIENT: Peoria Disposal Company
Peoria, Illinois
PROJECT: CLINTON LANDFILL
Clinton, Illinois
LOCATION: CLG 5; 40'-42'
Organic Top Soil

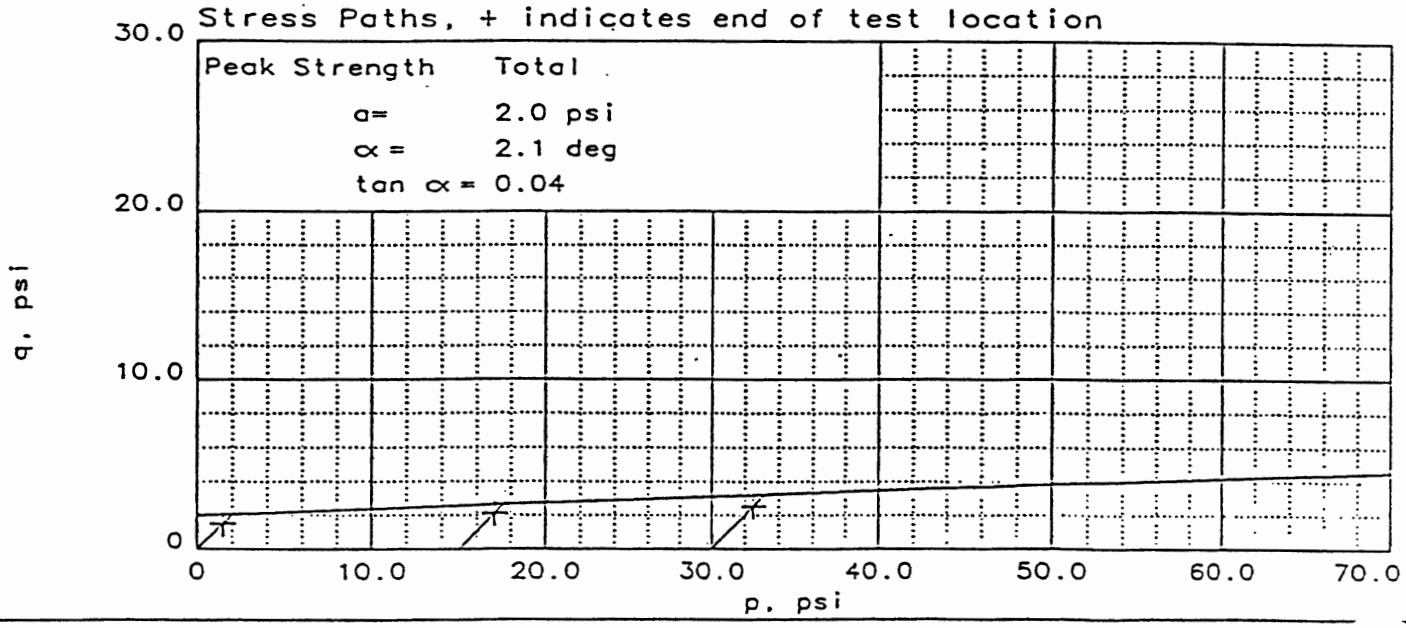
DATE: 9-20-93
File: CLIN3
REMARKS:

TRIAXIAL SHEAR TEST REPORT

WHITNEY & ASSOCIATES

Proj. No.:
Page 1/2 Fig. No. —





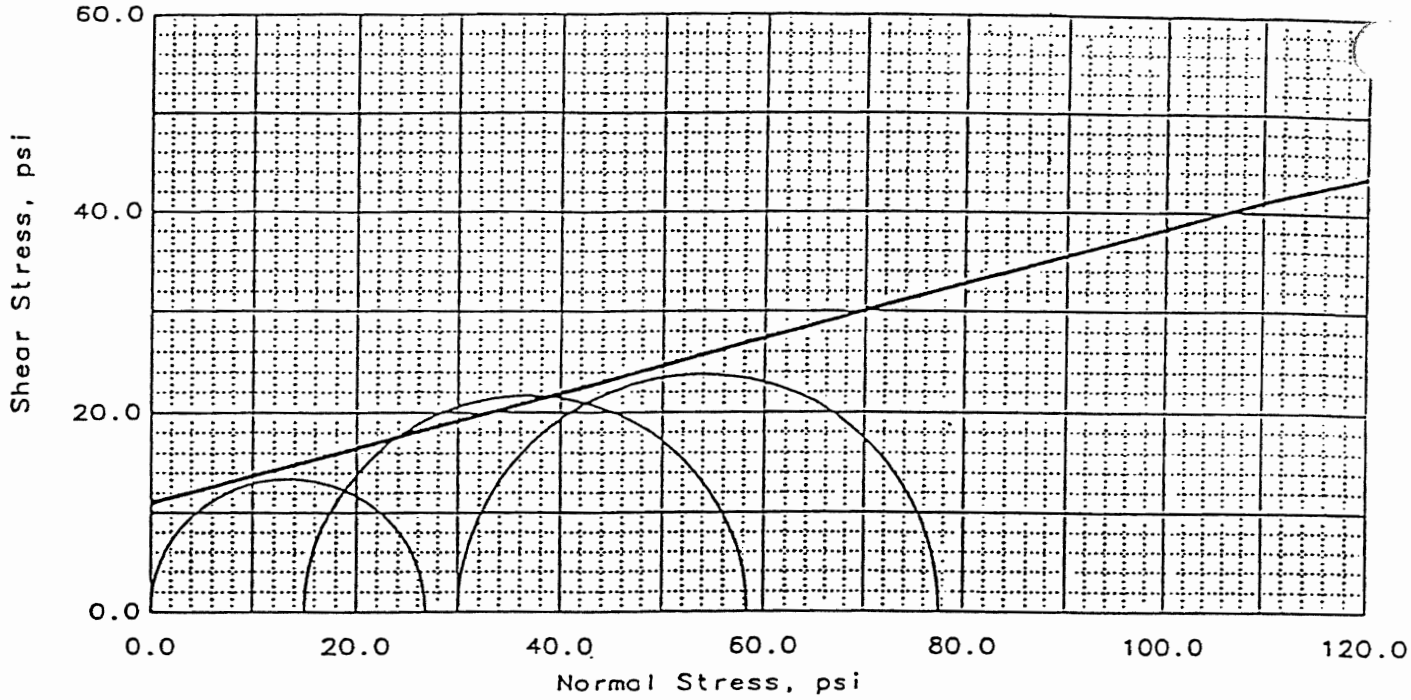
Client: Peoria Disposal Company Peoria, Illinois

Project: CLINTON LANDFILL Clinton, Illinois

Location: CLG 5; 40'-42'

File: CLIN3 Project No.: Page 2/2 Fig. No. ____

TRIAXIAL SHEAR TEST REPORT



Type of Test: Unconsolidated undrained Sample Type: 3" Shelby Tube

No.	FLUID PRESS. psi		MAX. STRENGTH psi		ULT. STRENGTH psi		PRINCIPAL STRESSES AT FAILURE psi	
	Cell	Back	Deviator	Pore	Deviator	Pore	σ_1	
1	0	0	26.8	0.0	26.8	0.0	26.8	[illegible]
2	15	0	43.4	0.0	43.2	0.0	58.4	15.0
3	30	0	47.6	0.0	47.6	0.0	77.6	30.0

No.	SAMPLE PARAMETERS						
	% Water Content	Dry Dens. pcf	Satur-ation	Void Ratio	Diameter in	Height in	Time to fail minutes
1	11.5	126.9	96.7 %	0.3188	2.83	5.60	13
2	11.0	128.9	98.7 %	0.2984	2.82	5.60	18
3	10.7	128.5	94.8 %	0.3022	2.83	5.60	20

MOHR-COULOMB STRENGTH PARAMETERS		MATERIAL DESCRIPTION
	Total	Gray Unweathered
Strength intercept, c=	10.9 psi	Glacial SILTY CLAY TILL
Friction angle, ϕ =	15.3 deg	LL= PI=
Tangent ϕ =	0.27	

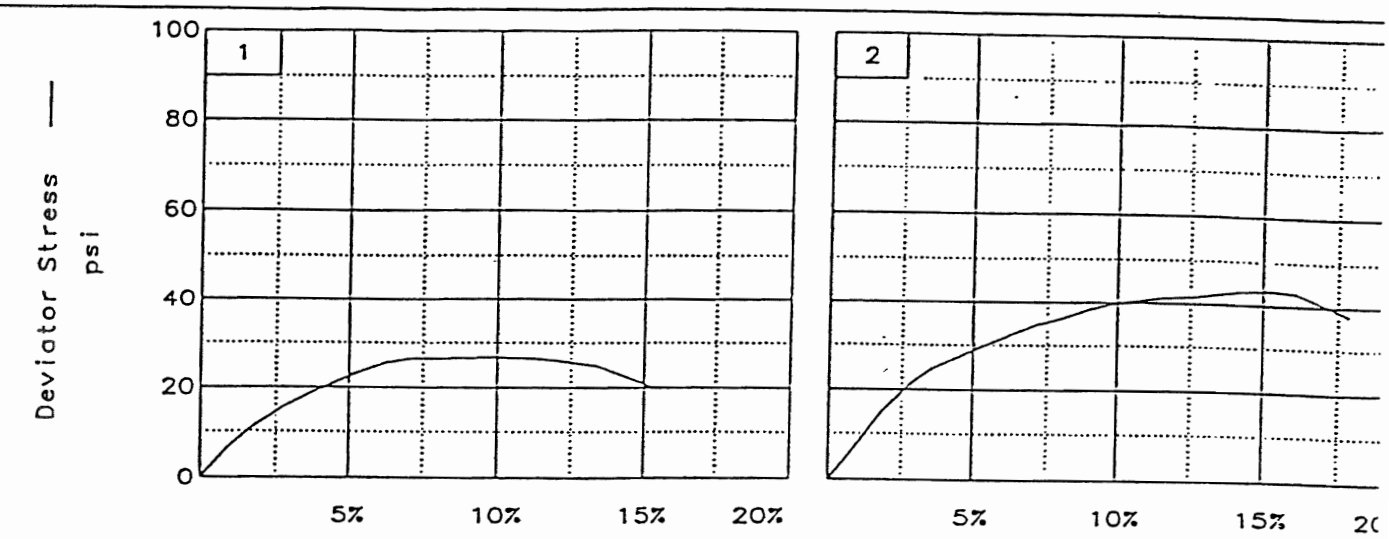
CLIENT: Peoria Disposal Company
Peoria, Illinois
PROJECT: CLINTON LANDFILL
Peoria, Illinois
LOCATION: CLG 3 and 4; 38'-46'
Gray Silty Clay

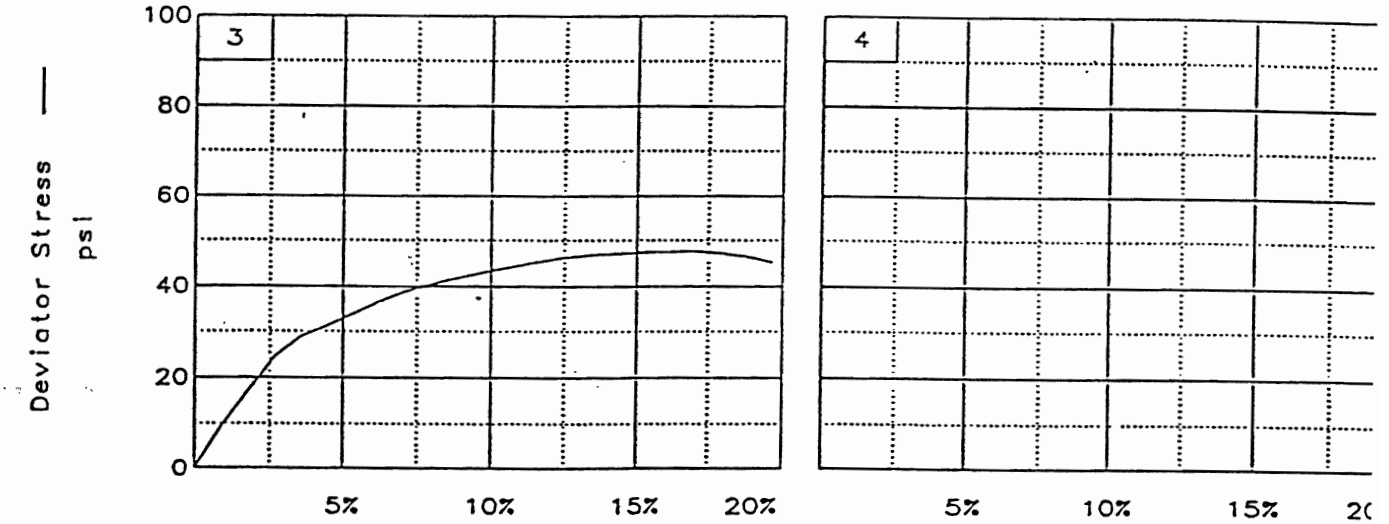
DATE: 9-20-93
File: CLIN2
REMARKS:

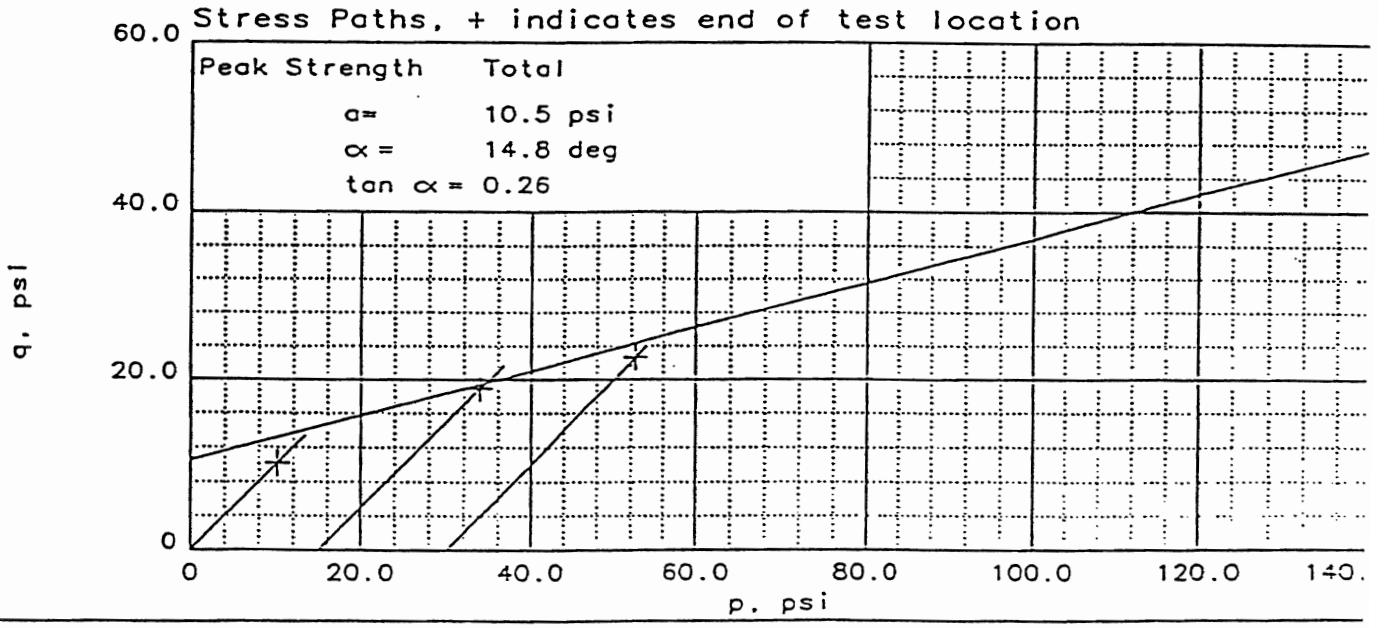
TRIAXIAL SHEAR TEST REPORT

WHITNEY & ASSOCIATES

Proj. No.:
Page 1/2 Fig. No. _____







Client: Peoria Disposal Company Peoria, Illinois

Project: CLINTON LANDFILL Peoria, Illinois

Location: CLG 3 and 4; 38'-46'

File: CLIN2 Project No.: Page 2/2 Fig. No. ____

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CONSULTING ENGINEERS
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PERMEABILITY & CLASSIFICATION TEST RESULTS

PROJECT: CLI
DATE: May 15, 2000
PROJECT NO.: 07665
CLIENT: PDC
REPORT NO: 07665-1

==========

SAMPLE IDENTIFICATION: EX-6 DEPTH/ELEV: 32'-34'

CLASSIFICATION; USCS: CL

DESCRIPTION: Dark Gray, medium-high plasticity, SILTY CLAY, trace sand, trace gravel

SOIL PARTICLE SIZES
GRAVEL %: SAND %: SILT %: CLAY %: *

NATURAL MOISTURE %: 18.4 DENSITY;lb/ft3 NATURAL: 114.6
LIQUID LIMIT : MAX. DRY;lb/ft3: REMOLDED: 0.0
PLASTICITY INDEX : PROCTOR;DEG OF COMPACTION (D698):

PERMEABILITY (k), cm/sec: 1.35E-8 **

= = = = = = = = = = = PERMEABILITY TEST DETAILS = = = = = = = = = = =

SAMPLES OBTAINED BY: SKS TYPE OF SAMPLE: 3" THIN-WALL TUBE

SPECIMEN DATA
DIAMETER;cm: 7.188 INITIAL DENSITY;pcf: 135.6
LENGTH;cm: 6.350 DRY UNIT DENSITY;pcf: 114.6
AREA;cm2: 40.58 INITIAL MOISTURE; %: 18.4
VOLUME;cm3: 257.7 FINAL MOISTURE; %: 19.6
INITIAL SATURATION; %: 33.7 FLOW ORIENTATION: -V
TEST APPARATUS: GEOTEST

TEST PRESSURES
CELL/CONFINING; psi: 30.0
SAMPLE BACK PRESSURE;psi: 25.0
DRIVING PRESSURE; psi: 2.0 HYDRAULIC GRADIENT: 22.1
PERMEANT LIQUID: 0.005 N CaSO4

TIME OF TEST; SATURATION: 22.0 Hrs PERMEABILITY: 75.5 Hrs
FLOW THRU SPECIMEN; TOTAL: 4.19 ml PERMEABILITY TEST: 3.51 ml
TEMPERATURE CORRECTION; TEMPERATURE: 22.5 C FACTOR: 0.942

REMARKS:

* Percentage of silt and clay fractions is based on 0.005mm as the division between the fractions (Unified Soil Classification System)

** Hydraulic conductivity test conducted in accordance with ASTM D 5084-90 unless noted otherwise. E-8 equals 10 to the minus 8 (exponent); cm3 equals cubic centimeters; The 2 in H2O is a subscript.

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PERMEABILITY & CLASSIFICATION TEST RESULTS

PROJECT: CLI
DATE: May 15, 2000
PROJECT NO.: 07665
CLIENT: PDC
REPORT NO: 07665-1

==========

SAMPLE IDENTIFICATION: EX-7 DEPTH/ELEV: 32'-34'

CLASSIFICATION; USCS: CL

DESCRIPTION: Greenish Dark Gray, medium-high plasticity, SILTY CLAY, trace sand, trace gravel

SOIL PARTICLE SIZES
GRAVEL %: SAND %: SILT %: CLAY %: *

NATURAL MOISTURE %: 17.6 DENSITY;lb/ft3 NATURAL: 118.4
LIQUID LIMIT : MAX. DRY;lb/ft3: REMOLDED: 0.0
PLASTICITY INDEX : PROCTOR;DEG OF COMPACTION (D698):

PERMEABILITY (k), cm/sec: 8.43E-8 **

= = = = = = = = = = = PERMEABILITY TEST DETAILS = = = = = = = = = = =

SAMPLES OBTAINED BY: SKS TYPE OF SAMPLE: 3" THIN-WALL TUBE

SPECIMEN DATA
DIAMETER;cm: 7.188 INITIAL DENSITY;pcf: 139.3
LENGTH;cm: 6.401 DRY UNIT DENSITY;pcf: 118.4
AREA;cm2: 40.58 INITIAL MOISTURE; %: 17.6
VOLUME;cm3: 259.8 FINAL MOISTURE; %: 19.1
INITIAL SATURATION; %: 33.39 FLOW ORIENTATION: -V
TEST APPARATUS: GEOTEST

TEST PRESSURES
CELL/CONFINING; psi: 30.0
SAMPLE BACK PRESSURE;psi: 25.0
DRIVING PRESSURE; psi: 2.0 HYDRAULIC GRADIENT: 22.
PERMEANT LIQUID: 0.005 N CaSO4

TIME OF TEST; SATURATION: 17.0 Hrs PERMEABILITY: 76.0 Hrs
FLOW THRU SPECIMEN; TOTAL: 22.89 ml PERMEABILITY TEST: 21.84 ml
TEMPERATURE CORRECTION; TEMPERATURE: 22.5 C FACTOR: 0.942

REMARKS:

* Percentage of silt and clay fractions is based on 0.005mm as the division between the fractions (Unified Soil Classification System)

** Hydraulic conductivity test conducted in accordance with ASTM D 5084-90 unless noted otherwise. E-8 equals 10 to the minus 8 (exponent); cm3 equals cubic centimeters; The 2 in H2O is a subscript.

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www.sksengineers.com

April 4, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification:	EX-13-660	Sample Obtained By:	SKS
Sample Depth/Elevation:	660		
Description:	DARK GRAY-GRAY BERRY CLAY - Lean Clay		
USCS Classification:	CL		

Natural Moisture Content:	16.5%	Liquid Limit:	37.0	Soil Particle Sizes:	Gravel	____	Silt	____
		Plasticity Index:	25.0		Sand	____	Clay	____

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	17.1%
Diameter:	7.28 cm.			Final Moisture:	19.1%
Length:	6.5 cm.	Wet Weight Before Test:	597.5 gm.	Dry Density:	1.89 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	608.1 gm.	Void Ratio:	0.51
Volume:	270.56 cu. cm.	Dry Weight:	510.4 gm.	Initial Saturation:	89.15%

Testing Data and Results

Test Apparatus:	GEOTEST				
Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 °C
Hydraulic Gradient:	21.64			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	2.25 hours	Amount of Flow	12.369 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	10.35 ml	Permeability: (k) =	1.78E-08 cm/sec

Remarks:

By: Robert Wright

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www.sksengineers.com

April 3, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification:	EX-16-659.8	Sample Obtained By:	SKS
Sample Depth/Elevation:	659.8		
Description:	DARK GRAY BERRY CLAY - Lean Clay		
USCS Classification:	CL		
Natural Moisture Content:	16.5%	Liquid Limit:	--
		Plasticity Index:	--
Soil Particle Sizes:	Gravel	Silt	
	Sand	Clay	

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	14.0%
Diameter:	7.28 cm.			Final Moisture:	14.0%
Length:	8.5 cm.	Wet Weight Before Test:	797.8 gm.	Dry Density:	1.98 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	797.4 gm.	Void Ratio:	0.37
Volume:	353.81 cu. cm.	Dry Weight:	699.6 gm.	Initial Saturation:	100.41%

Testing Data and Results

Test Apparatus:	GEOTEST				
Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 ^oC
Hydraulic Gradient:	16.55			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	1.25 hours	Amount of Flow	17.038 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	15.185 ml	Permeability: (k) =	3.42E-08 cm/sec

Remarks:

By: Robert Wright

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April 3, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification:	EX-19-658	Sample Obtained By:	SKS
Sample Depth/Elevation:	658		
Description:	GRAY BERRY CLAY - Lean Clay w/Sand		
USCS Classification:	CL		
Natural Moisture Content:	18.8%	Liquid Limit:	—
		Plasticity Index:	—
Soil Particle Sizes:	Gravel	Silt	
	Sand	Clay	

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	18.8%
Diameter:	7.28 cm.			Final Moisture:	19.0%
Length:	6.7 cm.	Wet Weight Before Test:	570.4 gm.	Dry Density:	1.72 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	571.2 gm.	Void Ratio:	0.50
Volume:	278.89 cu. cm.	Dry Weight:	480.2 gm.	Initial Saturation:	99.12%

Testing Data and Results

Test Apparatus:	GEOTEST				
Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 ^oC
Hydraulic Gradient:	21.00			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	6.5 hours	Amount of Flow	17.918 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	15.275 ml	Permeability: (k) =	2.71E-08 cm/sec

Remarks:

By: Robert Wright

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April 3, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS
ASTM D-5084

Sample and Classification Data

Sample Identification: EX-21-662
Sample Obtained By: SKS
Sample Depth/Elevation: 662
Description: GRAY BERRY CLAY - Sand Lean Clay, Trace Gravel - CL
USCS Classification: CL
Natural Moisture Content: 15.0%
Liquid Limit: 38.0
Plasticity Index: 25.0
Soil Particle Sizes: Gravel ____ Silt ____ Sand ____ Clay ____

Test Specimen Data

Specimen Type: FLEXIBLE WALL
Diameter: 7.28 cm.
Length: 6.4 cm.
Area: 41.62 sq. cm.
Volume: 266.40 cu. cm.
Wet Weight Before Test: 566.7 gm.
Wet Weight After Test: 574.2 gm.
Dry Weight: 494.8 gm.
Initial Moisture: 14.5%
Final Moisture: 16.0%
Dry Density: 1.86 gm./cc.
Void Ratio: 0.43
Initial Saturation: 90.55%

Testing Data and Results

Test Apparatus: GEOTEST
Cell Confining Pressure 30.0 psi = 2,110.20 cm of H_2O
Back Pressure 25.0 psi = 1,758.50 cm of H_2O
Driving Pressure 2.0 psi = 140.68 cm of H_2O
Hydraulic Gradient: 21.98
Time Req'd. for Saturation: 24 hours Amount of Flow 20.33 ml
Time for Permeability Test: 166.6 hours Amount of Flow 11.03 ml
Permeant Liquid: 0.005 N $CaSO_4$
Temperature: 24.0 °C
Temperature Correction Factor: 0.91

Permeability: (k) = 1.87E-08 cm/sec

Remarks:

By: Robert Wright

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April 3, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification: EX-24-665-

Sample Obtained By: SKS

Sample Depth/Elevation: 665

Description: DARK GRAY-BROWN BERRY CLAY - Lean Clay w/Sand - CL

USCS Classification: CL

Natural Moisture Content: 23.2%

Liquid Limit:

Plasticity Index:

Soil Particle Sizes: Gravel ____ Silt ____ Sand ____ Clay ____

Test Specimen Data

Specimen Type: FLEXIBLE WALL

Diameter: 7.28 cm.

Length: 6.7 cm.

Area: 41.62 sq. cm.

Volume: 278.89 cu. cm.

Wet Weight Before Test: 594.8 gm.

Wet Weight After Test: 594.8 gm.

Dry Weight: 500.1 gm.

Initial Moisture: 18.9%

Final Moisture: 18.9%

Dry Density: 1.79 gm./cc.

Void Ratio: 0.50

Initial Saturation: 100.00%

Testing Data and Results

Test Apparatus: GEOTEST

Cell Confining Pressure 30.0 psi = 2,110.20 cm of H_2O

Back Pressure 25.0 psi = 1,758.50 cm of H_2O

Driving Pressure 2.0 psi = 140.68 cm of H_2O

Hydraulic Gradient: 21.00

Time Req'd. for Saturation: 6.5 hours Amount of Flow 20.369 ml

Time for Permeability Test: 166.6 hours Amount of Flow 18.37 ml

Permeant Liquid: 0.005 N $CaSO_4$

Temperature: 24.0 °C

Temperature Correction Factor: 0.91

Permeability: (k) = 3.26E-08 cm/sec

Remarks:

By: Robert Wright

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April 3, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification: **EX-24-659**

Sample Obtained By: **SKS**

Sample Depth/Elevation: **659**

Description: ~~GRAY RANDOR TILL~~ BERRY CLAY - Sandy Lean Clay, Trace Gravel - CL

USCS Classification:

Natural Moisture Content: **20.4%**

Liquid Limit:

Plasticity Index:

Soil Particle Sizes: Gravel, Sand, Silt, Clay

Test Specimen Data

Specimen Type: **FLEXIBLE WALL**

Diameter: **7.28** cm.

Length: **6.7** cm.

Area: **41.62** sq. cm.

Volume: **278.89** cu. cm.

Wet Weight Before Test: **570.2** gm.

Wet Weight After Test: **571.0** gm.

Dry Weight: **472.4** gm.

Initial Moisture: **20.7%**

Final Moisture: **20.9%**

Dry Density: **1.69** gm./cc.

Void Ratio: **0.55**

Initial Saturation: **99.19%**

Testing Data and Results

Test Apparatus: **GEOTEST**

Cell Confining Pressure **30.0** psi = **2,110.20** cm of H_2O

Back Pressure **25.0** psi = **1,758.50** cm of H_2O

Driving Pressure **2.0** psi = **140.68** cm of H_2O

Hydraulic Gradient: **21.00**

Time Req'd. for Saturation: **2** hours Amount of Flow **76.56** ml

Time for Permeability Test: **166.6** hours Amount of Flow **35.438** ml

Permeant Liquid: **0.005** N $CaSO_4$

Temperature: **24.0** °C

Temperature Correction Factor: **0.91**

Permeability: (k) = 6.29E-08 cm/sec

Remarks:

By: Robert Wright

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April 3, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: CLI #3

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification: EX-16-645

Sample Obtained By: SKS

Sample Depth/Elevation: 645

Description: GRAY RANDOR TILL - Sandy Lean Clay, Little Gravel

USCS Classification: CL

Natural Moisture Content: 6.6%

Liquid Limit: 16.0

Plasticity Index: 5.0

Soil Particle Sizes: Gravel ____ Sand ____ Clay ____

Test Specimen Data

Specimen Type: FLEXIBLE WALL

Diameter: 7.26 cm.

Length: 7.4 cm.

Area: 41.40 sq. cm.

Volume: 306.33 cu. cm.

Wet Weight Before Test: 689.7 gm.

Wet Weight After Test: 699.1 gm.

Dry Weight: 640.3 gm.

Initial Moisture: 7.7%

Final Moisture: 9.2%

Dry Density: 2.09 gm./cc.

Void Ratio: 0.24

Initial Saturation: 84.01%

Testing Data and Results

Test Apparatus: GEOTEST

Cell Confining Pressure 30.0 psi = 2,110.20 cm of H_2O

Back Pressure 25.0 psi = 1,758.50 cm of H_2O

Driving Pressure 2.0 psi = 140.68 cm of H_2O

Hydraulic Gradient: 19.01

Time Req'd. for Saturation: 2.15 hours Amount of Flow 4.025 ml

Time for Permeability Test: 166.6 hours Amount of Flow 38.825 ml

Permeant Liquid: 0.005 N $CaSO_4$

Temperature: 24.0 °C

Temperature Correction Factor: 0.91

Permeability: (k) = 7.66E-08 cm/sec

Remarks:

By: Robert Wright

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www.sksengineers.com

April 6, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS
ASTM D-5084

Sample and Classification Data

Sample Identification: EX-19-649
Sample Obtained By: SKS
Sample Depth/Elevation: 649
Description: GRAY RADNOR TILL - Lean Clay w/Sand, Trace Gravel
USCS Classification: CL
Natural Moisture Content: 9.7%
Liquid Limit: 20.0
Plasticity Index: 9.0
Soil Particle Sizes: Gravel ____ Silt ____ Sand ____ Clay ____

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	9.8%
Diameter:	7.28 cm.			Final Moisture:	10.0%
Length:	7 cm.	Wet Weight Before Test:	711.7 gm.	Dry Density:	2.23 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	713.2 gm.	Void Ratio:	0.26
Volume:	291.37 cu. cm.	Dry Weight:	648.4 gm.	Initial Saturation:	97.69%

Testing Data and Results

Test Apparatus:	GEOTEST				
Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 °C
Hydraulic Gradient:	20.10			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	6.5 hours	Amount of Flow	32.332 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	31.977 ml	Permeability: (k) =	5.93E-08 cm/sec

Remarks:

By: Robert Wright

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April 6, 2003

Project No. 18330

PDC Technical Services
P.O. Box 9071
Peoria, IL 61612-9071

ATTN: Mr. George Armstrong

RE: **CLI #3**

PERMEABILITY TEST RESULTS

ASTM D-5084

Sample and Classification Data

Sample Identification: EX-23-648.5
Sample Obtained By: SKS
Sample Depth/Elevation: 648.5
Description: GRAY RANDOR TILL - Sandy Lean Clay, Trace Gravel - CL
USCS Classification: CL
Natural Moisture Content: 10.2%
Liquid Limit: 18.0
Plasticity Index: 12.0
Soil Particle Sizes: Gravel ____ Silt ____ Sand ____ Clay ____

Test Specimen Data

Specimen Type:	FLEXIBLE WALL			Initial Moisture:	9.5%
Diameter:	7.28 cm.			Final Moisture:	10.7%
Length:	9 cm.	Wet Weight Before Test:	766.3 gm.	Dry Density:	1.87 gm./cc.
Area:	41.62 sq. cm.	Wet Weight After Test:	774.3 gm.	Void Ratio:	0.28
Volume:	374.62 cu. cm.	Dry Weight:	699.7 gm.	Initial Saturation:	89.28%

Testing Data and Results

Test Apparatus: GEOTEST

Cell Confining Pressure	30.0 psi =	2,110.20 cm of H_2O		Permeant Liquid:	0.005 N $CaSO_4$
Back Pressure	25.0 psi =	1,758.50 cm of H_2O			
Driving Pressure	2.0 psi =	140.68 cm of H_2O		Temperature:	24.0 °C
Hydraulic Gradient:	15.63			Temperature Correction Factor:	0.91
Time Req'd. for Saturation:	17.25 hours	Amount of Flow	22.65 ml		
Time for Permeability Test:	166.6 hours	Amount of Flow	20.63 ml	Permeability: (k) =	4.92E-08 cm/sec

Remarks:

By: Robert Wright

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PERMEABILITY & CLASSIFICATION TEST RESULTS

PROJECT: CLI
DATE: May 15, 2000
PROJECT NO.: 07665
CLIENT: PDC
REPORT NO: 07665-1

==========

SAMPLE IDENTIFICATION: EX-4 DEPTH/ELEV: 79'-81'

CLASSIFICATION; USCS: CL

DESCRIPTION: Gray, low plasticity, SILTY CLAY, little-some sand, trace gravel

SOIL PARTICLE SIZES
GRAVEL %: SAND %: SILT %: CLAY %: *

NATURAL MOISTURE %: 8.4 DENSITY;lb/ft3 NATURAL: 139.0
LIQUID LIMIT : MAX. DRY;lb/ft3: REMOLDED: 0.0
PLASTICITY INDEX : PROCTOR;DEG OF COMPACTION (D698):

PERMEABILITY (k), cm/sec: 4.2E-8 **

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SAMPLES OBTAINED BY: SKS TYPE OF SAMPLE: 3" THIN-WALL TUBE

SPECIMEN DATA
DIAMETER;cm: 7.620 INITIAL DENSITY;pcf: 150.7
LENGTH;cm: 6.274 DRY UNIT DENSITY;pcf: 139.0
AREA;cm2: 45.60 INITIAL MOISTURE; %: 8.4
VOLUME;cm3: 286.1 FINAL MOISTURE; %: 9.2
INITIAL SATURATION; %: 18.71 FLOW ORIENTATION: -V
TEST APPARATUS: GEOTEST

TEST PRESSURES
CELL/CONFINING; psi: 30.0
SAMPLE BACK PRESSURE;psi: 25.0
DRIVING PRESSURE; psi: 2.0 HYDRAULIC GRADIENT: 22.4
PERMEANT LIQUID: 0.005 N CaSO4

TIME OF TEST; SATURATION: 4.5 Hrs PERMEABILITY: 166.6 Hrs
FLOW THRU SPECIMEN; TOTAL: 34.69 ml PERMEABILITY TEST: 27.67 ml
TEMPERATURE CORRECTION; TEMPERATURE: 23. C FACTOR: 0.931

REMARKS:

* Percentage of silt and clay fractions is based on 0.005 mm as the division between the fractions (Unified Soil Classification System)

** Hydraulic conductivity test conducted in accordance with ASTM D 5084-90 unless noted otherwise. E-8 equals 10 to the minus 8 (exponent); cm3 equals cubic centimeters; The 2 in H2O is a subscript.

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PERMEABILITY & CLASSIFICATION TEST RESULTS

PROJECT: CLI
DATE: May 15, 2000
PROJECT NO.: 07665
CLIENT: PDC
REPORT NO: 07665-1

==========

SAMPLE IDENTIFICATION: EX-4 DEPTH/ELEV: 64'-66'

CLASSIFICATION; USCS: CL

DESCRIPTION: Gray, low plasticity, SILTY CLAY, little-some sand, trace gravel

SOIL PARTICLE SIZES
GRAVEL %: SAND %: SILT %: CLAY %: *

NATURAL MOISTURE %: 12.6 DENSITY;lb/ft3 NATURAL: 135.1
LIQUID LIMIT : MAX. DRY;lb/ft3: REMOLDED: 0.0
PLASTICITY INDEX : PROCTOR;DEG OF COMPACTION (D698):

PERMEABILITY (k), cm/sec: 5.79E-8 **

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SAMPLES OBTAINED BY: SKS TYPE OF SAMPLE: 3" THIN-WALL TUBE

SPECIMEN DATA
DIAMETER;cm: 7.188 INITIAL DENSITY;pcf: 152.0
LENGTH;cm: 6.274 DRY UNIT DENSITY;pcf: 135.1
AREA;cm2: 40.58 INITIAL MOISTURE; %: 12.6
VOLUME;cm3: 254.6 FINAL MOISTURE; %: 12.7
INITIAL SATURATION; %: 27.18 FLOW ORIENTATION: -V
TEST APPARATUS: GEOTEST

TEST PRESSURES
CELL/CONFINING; psi: 30.0
SAMPLE BACK PRESSURE;psi: 25.0
DRIVING PRESSURE; psi: 2.0 HYDRAULIC GRADIENT: 22.4
PERMEANT LIQUID: 0.005 N CaSO4

TIME OF TEST; SATURATION: 21.3 Hrs PERMEABILITY: 80.0 Hrs
FLOW THRU SPECIMEN; TOTAL: 17.50 ml PERMEABILITY TEST: 16.28 ml
TEMPERATURE CORRECTION; TEMPERATURE: 23.1 C FACTOR: 0.931

REMARKS:

* Percentage of silt and clay fractions is based on 0.005 mm as the division between the fractions (Unified Soil Classification System)

** Hydraulic conductivity test conducted in accordance with ASTM D 5084-90 unless noted otherwise. E-8 equals 10 to the minus 8 (exponent); cm3 equals cubic centimeters; The 2 in H2O is a subscript.

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PERMEABILITY & CLASSIFICATION TEST RESULTS

PROJECT: CLI
DATE: May 15, 2000
PROJECT NO.: 07665
CLIENT: PDC
REPORT NO: 07665-1

==========

SAMPLE IDENTIFICATION: EX-5 DEPTH/ELEV: 69'-71'

CLASSIFICATION; USCS: CL

DESCRIPTION: Gray, low plasticity, SILTY CLAY, little-some sand, trace gravel

SOIL PARTICLE SIZES
GRAVEL %: SAND %: SILT %: CLAY %: *

NATURAL MOISTURE %: 12.1 DENSITY;lb/ft3 NATURAL: 135.8
LIQUID LIMIT : MAX. DRY;lb/ft3: REMOLDED: 0.0
PLASTICITY INDEX : PROCTOR;DEG OF COMPACTION (D698):

PERMEABILITY (k), cm/sec: 2.05E-8 **

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SAMPLES OBTAINED BY: SKS TYPE OF SAMPLE: 3" THIN-WALL TUBE

SPECIMEN DATA
DIAMETER;cm: 7.188 INITIAL DENSITY;pcf: 152.1
LENGTH;cm: 6.350 DRY UNIT DENSITY;pcf: 135.8
AREA;cm2: 40.58 INITIAL MOISTURE; %: 12.1
VOLUME;cm3: 257.7 FINAL MOISTURE; %: 12.9
INITIAL SATURATION; %: 26.25 FLOW ORIENTATION: -V
TEST APPARATUS: GEOTEST

TEST PRESSURES
CELL/CONFINING; psi: 30.0
SAMPLE BACK PRESSURE;psi: 25.0
DRIVING PRESSURE; psi: 2.0 HYDRAULIC GRADIENT: 22.1
PERMEANT LIQUID: 0.005 N CaSO4

TIME OF TEST; SATURATION: 20.0 Hrs PERMEABILITY: 96.0 Hrs
FLOW THRU SPECIMEN; TOTAL: 8.83 ml PERMEABILITY TEST: 6.85 ml
TEMPERATURE CORRECTION; TEMPERATURE: 23.1 C FACTOR: 0.931

REMARKS:

* Percentage of silt and clay fractions is based on 0.005mm as the division between the fractions (Unified Soil Classification System)

** Hydraulic conductivity test conducted in accordance with ASTM D 5084-90 unless noted otherwise. E-8 equals 10 to the minus 8 (exponent); cm3 equals cubic centimeters; The 2 in H2O is a subscript.

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PERMEABILITY & CLASSIFICATION TEST RESULTS

PROJECT: CLI
DATE: May 15, 2000
PROJECT NO.: 07665
CLIENT: PDC
REPORT NO: 07665-1

==========

SAMPLE IDENTIFICATION: EX-5 DEPTH/ELEV: 79'-81'-82

CLASSIFICATION; USCS: CL

DESCRIPTION: Gray, low plasticity, SILTY CLAY, little-some sand, trace gravel

SOIL PARTICLE SIZES
GRAVEL %: SAND %: SILT %: CLAY %: *

NATURAL MOISTURE %: 7.8 DENSITY;lb/ft3 NATURAL: 144.7
LIQUID LIMIT : MAX. DRY;lb/ft3: REMOLDED: 0.0
PLASTICITY INDEX : PROCTOR;DEG OF COMPACTION (D698):

PERMEABILITY (k), cm/sec: 1.64E-8 **

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SAMPLES OBTAINED BY: SKS TYPE OF SAMPLE: 3" THIN-WALL TUBE

SPECIMEN DATA
DIAMETER;cm: 7.442 INITIAL DENSITY;pcf: 155.9
LENGTH;cm: 6.350 DRY UNIT DENSITY;pcf: 144.7
AREA;cm2: 43.50 INITIAL MOISTURE; %: 7.8
VOLUME;cm3: 276.2 FINAL MOISTURE; %: 8.9
INITIAL SATURATION; %: 18.08 FLOW ORIENTATION: -V
TEST APPARATUS: GEOTEST

TEST PRESSURES
CELL/CONFINING; psi: 30.0
SAMPLE BACK PRESSURE;psi: 25.0
DRIVING PRESSURE; psi: 2.0 HYDRAULIC GRADIENT: 22.1
PERMEANT LIQUID: 0.005 N CaSO4

TIME OF TEST; SATURATION: 19.5 Hrs PERMEABILITY: 372.0 Hrs
FLOW THRU SPECIMEN; TOTAL: 24.75 ml PERMEABILITY TEST: 22.76 ml
TEMPERATURE CORRECTION; TEMPERATURE: 23.1 C FACTOR: 0.931

REMARKS:

* Percentage of silt and clay fractions is based on 0.005mm as the division between the fractions (Unified Soil Classification System)

** Hydraulic conductivity test conducted in accordance with ASTM D 5084-90 unless noted otherwise. E-8 equals 10 to the minus 8 (exponent); cm3 equals cubic centimeters; The 2 in H2O is a subscript.

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PERMEABILITY & CLASSIFICATION TEST RESULTS

PROJECT: CLI
DATE: May 15, 2000
PROJECT NO.: 07665
CLIENT: PDC
REPORT NO: 07665-1

==========

SAMPLE IDENTIFICATION: EX-6 DEPTH/ELEV: 49'-51'

CLASSIFICATION; USCS: CL

DESCRIPTION: Gray, low plasticity, SILTY CLAY, little-some sand, trace gravel

SOIL PARTICLE SIZES
GRAVEL %: SAND %: SILT %: CLAY %: *

NATURAL MOISTURE %: 19.7 DENSITY;lb/ft3 NATURAL: 110.8
LIQUID LIMIT : MAX. DRY;lb/ft3: REMOLDED: 0.0
PLASTICITY INDEX : PROCTOR;DEG OF COMPACTION (D698):

PERMEABILITY (k), cm/sec: 2.91E-8 **

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SAMPLES OBTAINED BY: SKS TYPE OF SAMPLE: 3" THIN-WALL TUBE

SPECIMEN DATA
DIAMETER;cm: 7.188 INITIAL DENSITY;pcf: 132.6
LENGTH;cm: 6.350 DRY UNIT DENSITY;pcf: 110.8
AREA;cm2: 40.58 INITIAL MOISTURE; %: 19.7
VOLUME;cm3: 257.7 FINAL MOISTURE; %: 18.8
INITIAL SATURATION; %: 34.89 FLOW ORIENTATION: -V
TEST APPARATUS: GEOTEST

TEST PRESSURES
CELL/CONFINING; psi: 30.0
SAMPLE BACK PRESSURE;psi: 25.0
DRIVING PRESSURE; psi: 2.0 HYDRAULIC GRADIENT: 22.1
PERMEANT LIQUID: 0.005 N CaSO4

TIME OF TEST; SATURATION: 21.9 Hrs PERMEABILITY: 74.8 Hrs
FLOW THRU SPECIMEN; TOTAL: 8.11 ml PERMEABILITY TEST: 7.46 ml
TEMPERATURE CORRECTION; TEMPERATURE: 22.5 C FACTOR: 0.942

REMARKS:

* Percentage of silt and clay fractions is based on 0.005mm as the division between the fractions (Unified Soil Classification System)

** Hydraulic conductivity test conducted in accordance with ASTM D 5084-90 unless noted otherwise. E-8 equals 10 to the minus 8 (exponent); cm3 equals cubic centimeters; The 2 in H2O is a subscript.

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PERMEABILITY & CLASSIFICATION TEST RESULTS

PROJECT: CLI
DATE: May 15, 2000
PROJECT NO.: 07665
CLIENT: PDC
REPORT NO: 07665-1

==========

SAMPLE IDENTIFICATION: EX-7 DEPTH/ELEV: 47'-49'

CLASSIFICATION; USCS: CL

DESCRIPTION: Gray, low plasticity, SILTY CLAY, little-some sand, trace gravel

SOIL PARTICLE SIZES
GRAVEL %: SAND %: SILT %: CLAY %: *

NATURAL MOISTURE %: 6.2 DENSITY;lb/ft3 NATURAL: 146.7
LIQUID LIMIT : MAX. DRY;lb/ft3: REMOLDED: 0.0
PLASTICITY INDEX : PROCTOR;DEG OF COMPACTION (D698):

PERMEABILITY (k), cm/sec: 9.36E-8 **

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SAMPLES OBTAINED BY: SKS TYPE OF SAMPLE: 3" THIN-WALL TUBE

SPECIMEN DATA
DIAMETER;cm: 7.188 INITIAL DENSITY;pcf: 155.8
LENGTH;cm: 6.375 DRY UNIT DENSITY;pcf: 146.7
AREA;cm2: 40.58 INITIAL MOISTURE; %: 6.2
VOLUME;cm3: 258.7 FINAL MOISTURE; %: 9.0
INITIAL SATURATION; %: 14.55 FLOW ORIENTATION: -V
TEST APPARATUS: GEOTEST

TEST PRESSURES
CELL/CONFINING; psi: 30.0
SAMPLE BACK PRESSURE;psi: 25.0
DRIVING PRESSURE; psi: 2.0 HYDRAULIC GRADIENT: 22.1
PERMEANT LIQUID: 0.005 N CaSO4

TIME OF TEST; SATURATION: 20.8 Hrs PERMEABILITY: 75.5 Hrs
FLOW THRU SPECIMEN; TOTAL: 29.62 ml PERMEABILITY TEST: 24.18 ml
TEMPERATURE CORRECTION; TEMPERATURE: 22.46 C FACTOR: 0.942

REMARKS:

* Percentage of silt and clay fractions is based on 0.005mm as the division between the fractions (Unified Soil Classification System)

** Hydraulic conductivity test conducted in accordance with ASTM D 5084-90 unless noted otherwise. E-8 equals 10 to the minus 8 (exponent); cm3 equals cubic centimeters; The 2 in H2O is a subscript.

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PERMEABILITY & CLASSIFICATION TEST RESULTS

PROJECT: CLINTON LANDFILL DATE: October 20, 1995
PROJECT NO.: I9-55965-67
CLIENT: PEORIA DISPOSAL COMPANY REPORT NO: 55965-2
Sheet 1 of 6

==========

SAMPLE IDENTIFICATION: P 223D-1A DEPTH/ELEV: 81.0

CLASSIFICATION; USCS: CL

DESCRIPTION: Gray, low plasticity SILTY CLAY, Some-With Sand, Trace Gravel

SOIL PARTICLE SIZES
GRAVEL %: SAND %: SILT %: CLAY %: *

NATURAL MOISTURE %: 10.8 DENSITY;lb/ft3 NATURAL: 132.6
LIQUID LIMIT : MAX. DRY;lb/ft3: REMOLDED: 0.0
PLASTICITY INDEX : PROCTOR;DEG OF COMPACTION ( ):

PERMEABILITY (k), cm/sec: 1.87E-8 **

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SAMPLES OBTAINED BY: SKS TYPE OF SAMPLE: 3" THIN-WALL TUBE

SPECIMEN DATA
DIAMETER;cm: 7.226 INITIAL DENSITY;pcf: 146.9
LENGTH;cm: 7.493 DRY UNIT DENSITY;pcf: 132.6
AREA;cm2: 41.01 INITIAL MOISTURE; %: 10.8
VOLUME;cm3: 307.3 FINAL MOISTURE; %:
INITIAL SATURATION; %: 110.6 FLOW ORIENTATION: V
TEST APPARATUS: GEOTEST

TEST PRESSURES
CELL/CONFINING; psi: 65.0
SAMPLE BACK PRESSURE;psi: 60.0
DRIVING PRESSURE; psi: 2.0 HYDRAULIC GRADIENT: 18.8
PERMEANT LIQUID: 0.005 N $CaSO_4$

TIME OF TEST; SATURATION: 29.0 Hrs PERMEABILITY: 166.6 Hrs
FLOW THRU SPECIMEN; TOTAL: 12.36 ml PERMEABILITY TEST: 9.14 ml
TEMPERATURE CORRECTION; TEMPERATURE: 22.4 C FACTOR: 0.944

REMARKS:

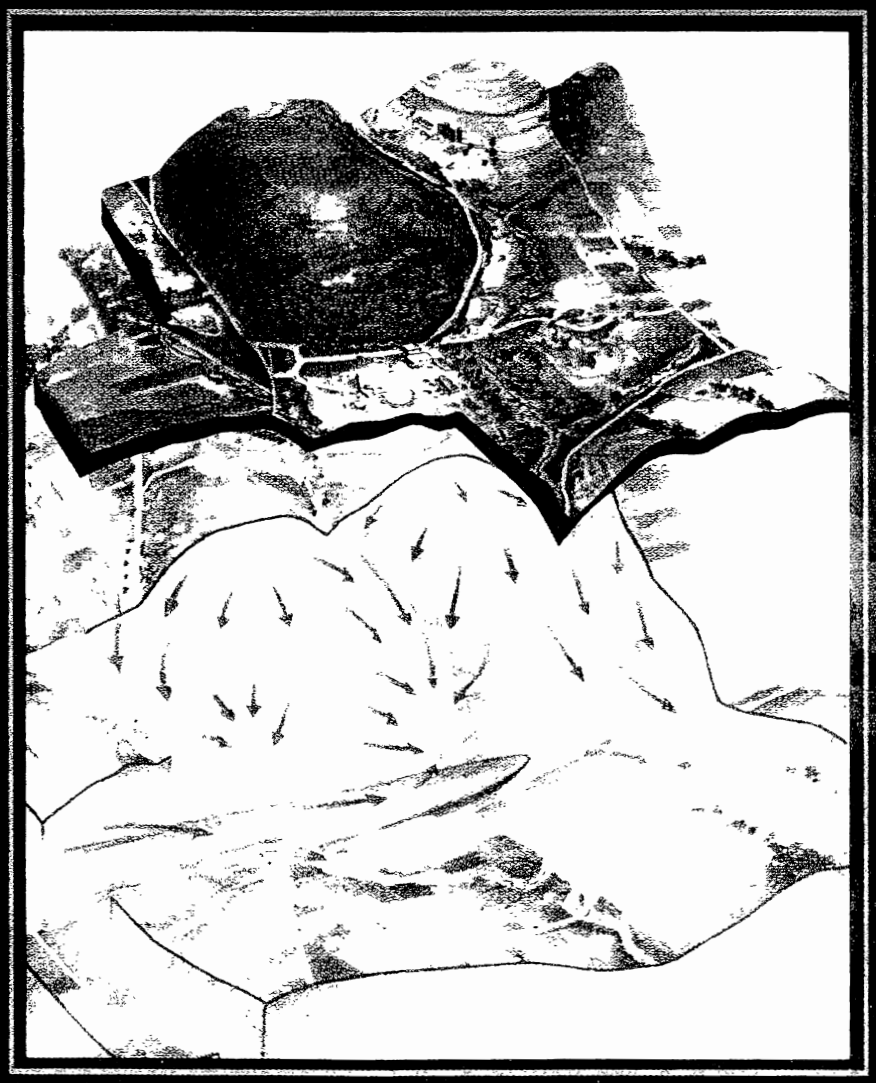
* Percentage of silt and clay fractions is based on 0.002mm as the division between the fractions (Unified Soil Classification System)

* Hydraulic conductivity test conducted in accordance with ASTM D 5084-90 unless noted otherwise. E-8 equals 10 to the minus 8 (exponent); cm3 equals cubic centimeters; The 2 in H_2O is a subscript.

ESTIMATED EFFECTIVE POROSITIES LITERATURE AND PERCENTAGE DIFFERENCE TABLE

Shaw®

STANDARD HANDBOOK for SOLID and HAZARDOUS WASTE FACILITY ASSESSMENTS



Martin N. Sara

STANDARD HANDBOOK for SOLID and HAZARDOUS WASTE FACILITY ASSESSMENTS

Martin N. Sara

LEWIS PUBLISHERS
Boca Raton Ann Arbor London Tokyo

Cover art was produced by Ramesh Venkatakrishnan

Library of Congress Cataloging-in-Publication Data

Sara, Martin N., 1946–
Standard handbook for solid and hazardous waste facility assessments / Martin N. Sara
p. cm.
Includes bibliographical references and index.
ISBN 0-87371-318-4
1. Waste disposal in the ground. 2. Hazardous waste sites. 3. Environmental geotechnology. I. Title.
TD795.7.S24 1993
628.4'456–dc20 93-5644
CIP

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Published by Lewis Publishers, an imprint of CRC Press

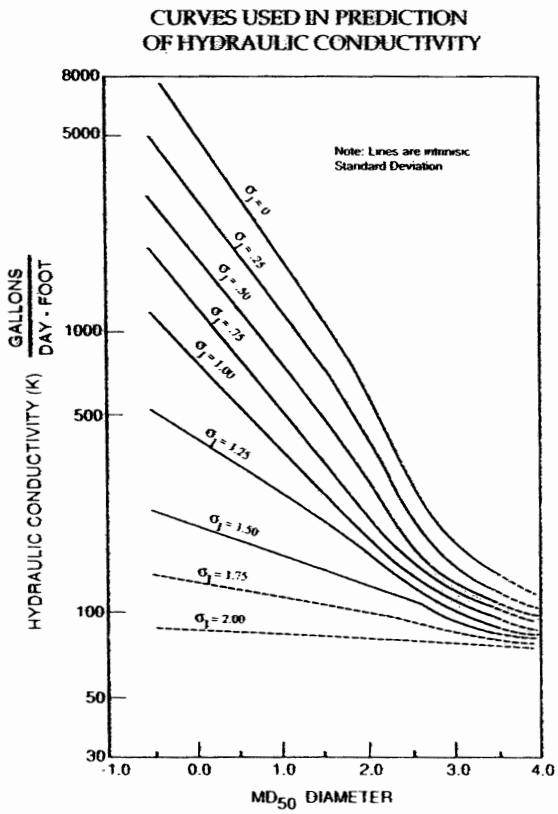
No claim to original U.S. Government works
International Standard Book Number 0-87371-318-4
Library of Congress Card Number 93-5644
Printed in the United States of America 2 3 4 5 6 7 8 9 0
Printed on acid-free paper

read directly off the various density hydraulic conductivity graphs (see Figure 5-36). The uniformity coefficient (Cu) is defined as the ratio of the D_{60} size of the soil (the size than which 60% of the soil is finer) to the D_{10}.

The above can be used where appropriate, to support field tests of hydraulic conductivity. Building an adequate data base of both field and laboratory hydraulic conductivity tests then provides the basis for definition of vertical and horizontal components of hydraulic conductivity in later flow net constructions.

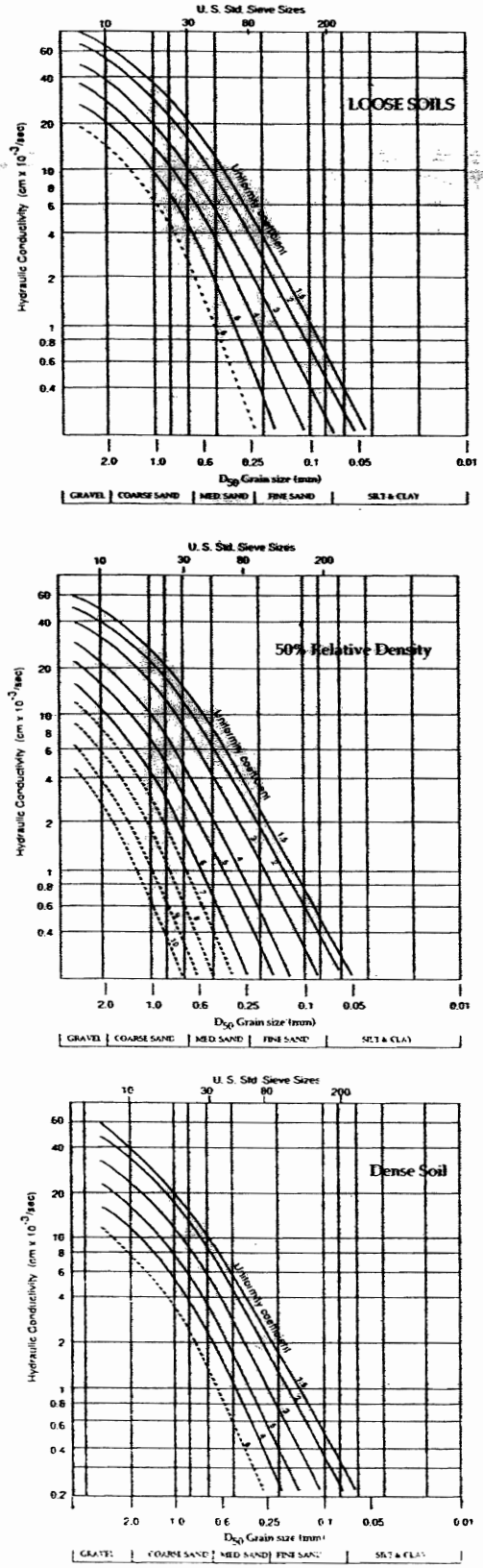
5.6.7 Laboratory Tests For Effective Porosity

An important aquifer characteristic of geologic environments used in time of travel calculations, is effective porosity. Fetter (1980) defines effective porosity as follows: "The amount of interconnected pore space through which fluids can pass, expressed as a percent of bulk volume. Part of the total porosity will be occupied by static fluid being held to the mineral surface by surface tension, so effective porosity will be less than total porosity." The relative value of effective porosity for fine grained sediments such as clays has been the point of significant disagreements between regulatory agencies and



Source. Modified from Masch & Denny, 1966, WRR Vol 2 No. 4

Figure 5-35 Masch and Denny Curves



Source: Modified from Powers(1981)

Figure 5-36 Powers Curves for Density and K

the regulated community for a number of years since effective porosity is used in the following equation of seepage velocity:

$$V = \frac{Ki}{n_e} \qquad \text{Equation 5-39}$$

V is the average lineal velocity;
n_e is the effective porosity.
i is the gradient, and K is hydraulic conductivity.

There is a current controversy centering around using very low values of ne for fine grained clay sediments. A U.S. EPA guidance document (EPA 1986) proposed using values of effective porosity on the level of 1% for clays. The basis of this low figure is from specific yield determinations of sediments derived from water supply literature (see Walton 1970, p. 34). However, the Glossary of Geology (1987) defines effective porosity as follows: "The percentage of the total volume of a given mass of soil or rock that consists of interconnected interstices. The use of this term as a syn. of specific yield is to be "discouraged." The definition of effective porosity is recognized as not synonymous with specific yield in the technical literature. This departure of n_e from specific yield is especially important in fine grained sediments, since the value of lineal velocity V is so dependent on effective porosity. For example, using a low effective porosity of 1% (as compared to 30%) for a clay confining unit, will change the calculations of lineal velocity as follows:

Assuming $K = 1 \times 10^{-7}$ cm/sec
$i = dh/dl = 0.5$
$n_e = 0.01, 0.30$
1.57 m/year (at 0.01 n_e)
0.053 m/year (at 0.30 n_e)

Considering the average facility can have thirty years of active life the difference in the two calculations can represent the difference between breaking through confining units some thirty times faster than with the larger value of n_e. The controversy surrounding n_e is difficult, in some ways to understand on a scientific basis, considering effective porosity can be calculated from breakthrough column tests. The following test is described for quantification of n_e for a series of glacial till (confining unit) samples. This testing was performed to: 1) determine the effective transport porosity; and, 2) to allow evaluation of the effect of leachate on the hydraulic conductivity of these potential clay liner materials. These results can ultimately be used in design of recompacted clay liners for future hazardous waste disposal cells at a potential site, and can be used to estimate effective porosity of unfractured confining unit materials.

A testing program should include both hydraulic conductivity testing and saline solution breakthrough evaluation of a number of confining unit samples. In addition, one should also conduct several reverse breakthrough tests using fresh water as the permeant.

Breakthrough and Leachate Solutions

The initial stages of laboratory tests for specific porosity, including saturation and hydraulic conductivity determination, should be conducted using actual site water obtained during the site assessment investigation.

An example tracer solution used for the column breakthrough portion of the tests consisted of a lithium chloride salt in water. The concentrations of lithium and chloride in the breakthrough tracer solution for the example below were:

- Lithium: 4,800 mg/l
- Chloride: 25,000 mg/l

Experience with the initial portion of column breakthrough testing shows that one will observe that the chloride ions will pass through soil samples at a much faster rate than the lithium ions. The likely reason is that due to cation exchange effects within the clay particles slowed down the passage of the lithium ions. The variation of the observed chloride concentration with time is considered to be the more accurate indicator of breakthrough time and, hence, pore fluid velocity. Therefore, only chloride ion concentrations is measured for the reverse breakthrough tests to maintain a conservative approach to the testing program.

The tracer solution is placed into a tri-axial cell upgradient accumulator (see Figure 5-33) and the concentration of lithium and chloride is then measured in the fluid that permeates out of the sample and is collected in the downgradient accumulator. During the initial portion of the test a gradient of 5 pounds per square inch (psi) is imposed on the sample. One may find with low hydraulic conductivity geologic test materials there is a resistant low flow rate, therefore, the gradient may be increased later in the test program to 10 psi. During the breakthrough portion of the test, at least 2 pore volumes of fluid should be passed through the sample.

Determination of Effective Porosity

Based on the principles of Darcian flow, the velocity

(v) of a soluble constituent flowing through a porous dium can be estimated using the Equation 5-39:

$$v = Ki/n_e$$

where:
K is the hydraulic conductivity);
i = the hydraulic gradient, and,
n_e = the effective porosity.

For the purposes of calculating breakthrough velocity, breakthrough is defined as the point where the constituent concentration in the permeant leaving the sample is fifty percent of that entering the sample. The effective porosity is the porosity through which flow is actually occurring. As such, it is always less than or equal to the total porosity. The incorporation of effective porosity into the Darcy equation, then, takes into account bound water and closed voids within the sample.

Since it is typical for effective porosity samples under going testing have different values for hydraulic conductivity, it would be considered appropriate to examine the change in concentration of the constituent being measured in the permeant (in this case, chloride) leaving the sample in terms of the number of pore volumes of fluid passing through the sample. Since these small samples are relatively homogeneous, the ratio of the effective porosity to the total porosity is equal to the number of pore volumes passing through the sample at breakthrough. Values of effective porosity based on this method of analysis are shown in Table 5-9. The effective porosity obtained in the test series for glacial tills ranged from 0.26 to 0.34. (Golder 1987)

These values can be compared with work performed by Rawls, Brakensiek & Saxton (1982) on 1,323 soils with 5,350 horizons from 32 states that provided the total porosity, residual saturation, and effective porosity (among other soil properties) for this large spectrum of soil tests. Table 5-10 shows effective porosity for clay at 38.5%. This value is consistent with column tests performed in site investigations for clays.

Table 5-9 Summary of Effective Porosity Results

Sample	Porosity	Pore Volumes at Breakthrough	Effective Porosity
TP-1	0.38	1.05	0.29
TP-3	0.38	0.68	0.26
TP-5	0.39	0.88	0.34
TP-9	0.38	0.88	0.33

5.6.8 Laboratory Hydraulic Properties Of Rocks

Samples for laboratory testing should be selected from available cores, and should be representative of site bedrock geologic units. Where possible, horizontal and vertical plugs of 25 mm diameter should be cut from drilled rock cores of 50–100 mm diameter. However, if the sample is friable and subject to breakup in handling, testing it may not be possible to measure hydraulic conductivity. The engineer should keep in mind that such laboratory procedures represent tests on core that is essentially so disturbed in terms of preservation of open discontinuities as to be of limited actual value.

Hydraulic Conductivity

The hydraulic conductivity of rock plugs can be measured in a standard gas permeameter, with nitrogen as the test fluid (API, 1966), with results empirically corrected for gas slippage and expressed for water at 20°C (approximate ground–water temperature in the field).

Effective Porosity, Bulk, and Matrix Density

The rock plugs or sample fragments may then be tested by the liquid resaturation method, employing propanol as the test fluid (API, 1966) in order to avoid a swelling reaction with any altered clayey materials, a situation that would lead to erroneous permeability determinations.

Pore–Size Distribution and Specific Yield

If the rock has exceptional porosity, further laboratory measurements can be undertaken on a smaller number of selected samples to investigate the distribution of pore–sizes and gravity–drainage characteristics.

When dealing with friable rock, the preferred method is by mercury injection porosimeter (Fatt, 1956). This technique involves forcing mercury into the pore spaces of the sample, progressively smaller pore necks being invaded at successively higher pressures, generating a curve of invaded pore–volume against injection–pressure.

The curves should be examined in detail to determine if an incomplete invasion of mercury has occurred. This could result from one of two reasons: either there exist many pores that are too small to be invaded, or some of the

TABLE 5-10 Porosity, Residual Saturation, and Effective Porosity of Common Soils

Texture Class	Sample Size	Total Porosity (ϕ) cm^3/cm^3	Residual Saturation (ϕ_r) cm^3/cm^3	Effective Porosity (ϕ_e) cm^3/cm^3
Sand	762	0.437 (0.374: 0.500)	0.020 (0.001: 0.039)	0.417 (0.354: 0.480)
Loamy Sand	338	0.437 (0.368: 0.506)	0.035 (0.003: 0.067)	0.401 (0.329: 0.473)
Sandy Loam	666	0.453 (0.351: 0.555)	0.041 (0.0: 0.106)	0.412 (0.283: 0.541)
Loam	383	0.463 (0.375: 0.551)	0.027 (0.0: 0.074)	0.434 (0.334: 0.534)
Silt Loam	1206	0.501 (0.420: 0.582)	0.015 (0.0: 0.058)	0.486 (0.394: 0.578)
Sandy Clay Loam	498	0.398 (0.332: 0.464)	0.068 (0.0: 0.137)	0.330 (0.235: 0.425)
Clay Loam	366	0.464 (0.409: 0.519)	0.076 (0.0: 0.174)	0.390 (0.279: 0.501)
Silty Clay Loam	689	0.471 (0.428: 0.524)	0.040 (0.0: 0.118)	0.432 (0.347: 0.517)
Sandy Clay	45	0.430 (0.370: 0.490)	0.109 (0.0: 0.205)	0.321 (0.207: 0.435)
Silty Clay	127	0.479 (0.425: 0.533)	0.056 (0.0: 0.136)	0.423 (0.334: 0.512)
Clay	291	0.475 (0.427: 0.523)	0.090 (0.0: 0.195)	0.385 (0.269: 0.501)

**First line is the mean value
Second line is + one standard deviation about the mean

Reference: Rawls, W.J., D.C. Brakensiek, K.E. Saxton 1982
Transactions of the ASCE Soil & Water Division Paper 81-2510. pp. 1318

Effective Porosities by Soil Type from SARA 1994

Texture Class	Sample Size	Total Porosity	Residual Saturation	Effective Porosity	Percentage Difference Between Total Porosity and Effective Porosity
Sand	762	0.437	0.020	0.417	0.046
Loamy Sand	338	0.437	0.035	0.401	0.082
Sandy Loam	666	0.453	0.041	0.412	0.091
Loam	383	0.463	0.027	0.434	0.063
Silt Loam	1206	0.501	0.015	0.486	0.030
Sandy Clay Loam	498	0.398	0.068	0.330	0.171
Clay Loam	366	0.464	0.076	0.390	0.159
Silty Clay Loam	689	0.471	0.040	0.432	0.083
Sandy Clay	45	0.430	0.109	0.321	0.253
Silty Clay	127	0.479	0.056	0.423	0.117
Clay	291	0.475	0.090	0.385	0.189

ESTIMATED EFFECTIVE POROSITIES FOR THE CLAY LINER, COMPACTED CLAY FILL, BERRY CLAY/RADNOR TILL, LOWER RADNOR TILL SAND, AND ORGANIC SOIL

Shaw®

Vertical Permeability of Clay Liner and In-Situ Soil Below Liner - Initial Fill Area

Clinton Landfill #2

Type of Liner	Location	Boring	Northing ft	Easting ft	Sample Elevation ft	Dry Density lb/cu.ft	Porosity	Vertical Permeability Kv, cm/s	Kv, cm/s Recompacted Clay Liner	Kv, cm/s In-Situ S Below Liner
East Half										
In-situ	Floor	B-1	5092	7212	671.0	123.9	0.265	1.82E-08		1.82E-08
In-situ	Floor	B-2	5100	7284	670.4	124.1	0.264	1.5E-08		1.5E-08
In-situ	Floor	B-4	5100	7473	668.6	83.8	0.499	1.65E-06		
In-situ	Floor	B-5	5231	7210	669.9	128.4	0.238	7.0E-09		7.0E-09
In-situ	Floor	B-6	5230	7269	670.0	124.8	0.259	9.52E-09		9.52E-09
In-situ	Floor	B-7	5233	7368	670.9	128.0	0.241	1.05E-08		1.05E-08
In-situ	Sidewall	B-9	5229	7580	691.0	120.4	0.286	5.28E-08		5.28E-08
In-situ	Floor	B-10	5360	7224	671.4	125.7	0.254	1.08E-08		1.08E-08
In-situ	Floor	B-11	5360	7282	670.8	126.2	0.251	9.21E-09		9.21E-09
In-situ	Floor	B-12	5355	7361	671.0	123.2	0.269	7.53E-09		7.53E-09
In-situ	Floor	B-13	5360	7476	671.0	123.2	0.269	4.41E-07		
In-situ	Sidewall	B-14	5421	7376	690.5	116.0	0.312	1.35E-08		1.35E-08
Recompacted	East Berm		5201	7590	686.8	129.1	0.234	1.01E-08		
Recompacted	South Berm		5059	7286	683.3	125.6	0.255	4.43E-09		
Recompacted	Floor		5151	7306	680.0	130.1	0.239	1.22E-08	1.22E-08	
Recompacted	Floor		5261	7456	675.0	127.4	0.250	4.97E-08	4.97E-08	
Recompacted	Floor		5300	7496	680.0	117.9	0.301	1.12E-08	1.12E-08	
Recompacted	Floor		5355	7276	681.0	122.7	0.272	6.36E-09	6.36E-09	
Recompacted	Sidewall		5410	7476	693.0	106.2	0.370	1.39E-09		
West Half										
Recompacted	North Berm				698.0	128.4	0.250	1.5E-08		
Recompacted	South Berm				688.0	128.9	0.246	1.7E-08		
Recompacted	Floor		40' W of E berm, 150' S of N berm		677.8	122.8	0.319	8.4E-09	8.4E-09	
Recompacted	Floor		150' S of N berm, 150' E of W berm		681.0	122.8	0.326	1.1E-08	1.1E-08	
Recompacted	West Berm		150' S of N berm		694.0	135.0	0.295	1.1E-08		
Recompacted	North Berm		100 E of W berm		698.0	122.8	0.331	2.7E-08		
Recompacted	West Berm	ST1	120' S of N berm		681.0	111.2	NM	3.7E-08		
Recompacted	West Berm	ST2	230' S of N berm		683.0	118.2	NM	6.0E-09		
In-situ	Floor	T-2	5319	7009	675.2	121.4	NM	1.6E-08		1.6E-08
In-situ	Floor	T-3	5321	7092	675.6	126.4	NM	3.1E-08		3.1E-08
In-situ	Floor	T-4	5224	6926	680.5	111.1	NM	3.4E-08		3.4E-08
In-situ	Floor	T-7	5090	6927	677.0	119.7	NM	3.7E-08		3.7E-08
					Mean Kv =			8.36E-08	1.65E-08	1.94E-08

Results

Mean Kv of Recompacted Soil Liner (Floor Only) =	1.65E-08	cm/s
Mean Kv of In-Situ Soil Below Recompacted Clay Liner =	1.94E-08	cm/s
Mean Porosity of Recompacted Clay Liner =	0.288	
Mean Porosity of In-Situ Soil Below Clay Liner =	0.264	
Mean Dry Density of Recompacted Clay Liner =	122.9	lb/cu.ft
Mean Dry Density of In-Situ Soil Below Clay Liner =	122.8	lb/cu.ft

* 0.29

* Estimated Effective Porosity = 0.29 - 0.29 x 0.159 = 0.24

Notes:

1. B-1 = Boring #B-1; ST1 = Shelby Tube #ST-1; T-1 = Boring #T-1
2. If in-situ soil Kv values are greater than 1.0E-07, the corresponding Kv and dry density values were not used in calculating mean, because recompacted liner was installed at those locations.
3. NM = Not measured
4. cm/s = centimeters per second; lb/cu.ft = pounds per cubic feet
5. Reference: Liner Certification Reports for Initial Fill Area by SKS.

* Maximum Effective Porosity = 0.33 - 0.33 x 0.159 = 0.28

* Minimum Effective Porosity 0.24 - 0.24 x 0.159 = 0.20

SOILS DATA FOR INITIAL FILL AREA LINER

CLINTON LANDFILL, INC. #2

BORING/LOCATION		SAMPLE ELEV., ft-msl	MATERIAL	DRY DENSITY lb/cu.ft	DRY DENSITY g/c.c.	VOID RATIO	POROSITY	VERT. K cm/s
EAST HALF								
East Berm	N5201/E7590	686.8	CL	129.1	2.068	0.3059	0.234	1.01E-08
South Berm	N5059/E7286	683.3	CL	125.6	2.012	0.3420	0.255	4.43E-09
Floor	N5151/E7306	680.0	CL	130.1	2.084	0.3144	0.239	1.22E-08
Floor	N5261/E7456	675.0	CL	127.4	2.041	0.3325	0.250	4.97E-08
Floor	N5300/E7496	680.0	CL	117.9	1.889	0.4300	0.301	1.12E-08
Floor	N5355/E7276	681.0	CL	122.7	1.965	0.3737	0.272	6.36E-09
Sidewall	N5410/E7476	693.0	CL	106.2	1.701	0.5869	0.370	1.39E-09
Points below 3 foot thick earth liner:								
B-1	N5092/E7212	671.0	CL	123.9	1.985	0.3606	0.265	1.82E-08
B-2	N5100/E7284	670.4	CL	124.1	1.988	0.3580	0.264	1.5E-08
B-4	N5100/E7473	668.6	MH	83.8	1.342	0.9960	0.499	1.65E-06
B-5	N5231/E7210	669.9	CL	128.4	2.057	0.3123	0.238	7E-09
B-6	N5230/E7269	670.0	CL	124.8	1.999	0.3503	0.259	9.52E-09
B-7	N5233/E7368	670.9	CL	128	2.050	0.3172	0.241	1.05E-08
B-9	N5229/E7580	691.0	CL	120.4	1.929	0.3997	0.286	5.28E-08
B-10	N5360/E7224	671.4	CL	125.7	2.014	0.3408	0.254	1.08E-08
B-11	N5360/E7282	670.8	CL	126.2	2.022	0.3359	0.251	9.21E-09
B-12	N5355/E7361	671.0	CL	123.2	1.974	0.3685	0.269	7.53E-09
B-13	N5360/E7476	671.0	CL	123.2	1.974	0.3680	0.269	4.41E-07
B-14	N5421/E7376	690.5	CL	116	1.858	0.4536	0.312	1.35E-08
WEST HALF								
North Berm		697 - 699	CL	128.4	2.057	0.333	0.250	1.5E-08
South Berm		687 - 689	CL	128.9	2.065	0.326	0.246	1.7E-08
Floor	40' W of E berm, 150' S of N berm	676.8 - 678.8	CL	122.8	1.967	0.468	0.319	8.4E-09
Floor	150' S of N berm, 150' E of W berm	680 - 682	CL	122.8	1.967	0.484	0.326	1.1E-08
West Berm	150' S of N berm	693 - 695	CL	135.0	2.163	0.418	0.295	1.1E-08
North Berm	100 E of W berm	697 - 699	CL	122.8	1.967	0.495	0.331	2.7E-08
West Berm	120' S of N berm	680 - 682	CL	111.2	1.781	NM	--	3.7E-08
West Berm	230' S of N berm	682 - 684	CL	118.2	1.893	NM	--	6E-09
Points below 3 foot thick earth liner:								
Boring T-2	N5319/E7009	675.2	CL	121.4	1.945	NM	NM	1.6E-08
Boring T-3	N5321/E7092	675.6	CL	126.4	2.025	NM	NM	3.1E-08
Boring T-4	N5224/E6926	680.5	CL	111.1	1.780	NM	NM	3.4E-08
Boring T-7	N5090/E6927	677	CL	119.7	1.917	NM	NM	3.7E-08

Notes:

1. NM = not measured; Elev. ft-msl = elevation in feet above mean sea level
2. lb/cu.ft = pounds per cubic feet; g/c.c. = grams per cubic centimeter; cm/s = centimeters per second
3. Vert. K = vertical hydraulic conductivity (permeability)
4. Reference: Liner Certification Reports for Initial Fill Area by SKS.

TABLE 812.314-2
SUMMARY OF LABORATORY TESTING OF SITE SOILS
Clinton Landfill No. 3

Geologic Unit	Boring No.	Sample Elevation ft. (AMSL)	Soil Type	Kv (cm/sec.)	Dry Density (gm/cc)	Porosity (n)	Estimated Effective Porosity
Tiskilwa Formation	EX-21	688	Silty Clay	2.73E-08	1.98	0.275	0.232
Tiskilwa Formation	CLG1&2*	689.9	Silty Clay	NT	2.04	0.241	0.203
Tiskilwa Formation	B-20	703.3	Clayey Silt	8.60E-09	NM	NM	NM
Tiskilwa Formation	EX-13	680	Silty Clay	2.24E-08	2.03	0.237	0.199
Tiskilwa Formation	EX-16	677.5	Silty Clay	1.71E-08	2.02	0.275	0.232
Tiskilwa Formation	EX-17	685	Silty Clay	1.66E-08	1.96	0.281	0.236
Tiskilwa Formation	EX-23	676	Sandy Clay	1.22E-08	2.20	0.265	0.223
Tiskilwa Formation	EX-24	695	Silty Clay	1.40E-08	2.15	0.237	0.199
Roxanna/Robein	EX-13	670	Clayey Silt	1.55E-08	1.18	0.539	0.523
Roxanna/Robein	EX-16	667.5	Organic Clay	4.13E-08	1.1	0.574	0.557
Roxanna/Robein	EX-21	670	Sandy Clay	2.58E-08	2.04	0.259	0.251
Roxanna/Robein	EX-24	670	Sandy Clay	3.56E-08	1.95	0.265	0.257
Roxanna/Robein	CLG 5*	662.9	Silty Clay	NT	1.52	0.425	0.412
Berry Clay	CLG3&4*	665.9	Silty Clay	NT	2.05	0.235	0.191
Berry Clay	EX-6	661	Silty Clay	1.35E-08	1.84	0.379	0.308
Berry Clay	EX-7	658.8	Silty Clay	8.43E-08	1.9	0.379	0.308
Berry Clay	EX-13	660	Silty Clay	1.78E-08	1.89	0.338	0.274
Berry Clay	EX-16	659.8	Silty Clay	3.42E-08	1.98	0.270	0.219
Berry Clay	EX-19	658	Silty Clay	2.71E-08	1.72	0.333	0.270
Berry Clay	EX-21	662	Silty Clay	1.87E-08	1.86	0.301	0.244
Berry Clay	EX-24	665	Silty Clay	3.26E-08	1.79	0.333	0.270
Berry Clay	EX-24	659	Silty Clay	6.29E-08	1.69	0.355	0.288
Radnor Till	EX-16	645	Silty Clay	7.66E-08	2.09	0.194	0.163
Radnor Till	EX-19	649	Silty Clay	5.93E-08	2.23	0.206	0.174
Radnor Till	EX-23	648.5	Silty Clay	4.92E-08	1.87	0.219	0.184
Radnor Till	EX-4	644.53	Silty Clay	4.20E-08	2.22	0.233	0.196
Radnor Till	EX-4	659.53	Silty Clay	5.79E-08	2.16	0.283	0.238
Radnor Till	EX-5	657.97	Silty Clay	2.05E-08	2.17	0.276	0.232
Radnor Till	EX-5	647.97	Silty Clay	1.64E-08	2.32	0.197	0.166
Radnor Till	EX-6	644.24	Silty Clay	2.91E-08	2.12	0.446	0.375
Radnor Till	EX-7	643.8	Silty Clay	9.36E-08	2.35	0.174	0.146
Vandalia Till	P223D-1A	623.15	Silty Clay	1.87E-08	2.11	NM	NM
Vandalia Till	B-11 (P-11)	626.5	Clayey Silt	1.70E-08	NM	NM	NM

Mean Kv Value by Formation

Radnor Till Mean:	4.94E-08
Berry Clay Mean:	3.64E-08
Roxanna/Robein Mean:	2.96E-08
Tiskilwa Formation Mean:	1.69E-08
Berry Clay/Radnor Mean:	4.33E-08
Vandalia Till Mean:	1.79E-08

Mean n Value by Formation

Radnor Till Mean:	0.248
Berry Clay Mean:	0.325
Roxanna/Robein Mean:	0.413
Tiskilwa Formation Mean:	0.259
Berry Clay/Radnor Mean:	0.286

Notes:
1) ft. AMSL = Elevation in feet above mean sea level
2) Kv = vertical hydraulic conductivity
3) cm/sec. = centimeters per second
4) gm/cc = grams per cubic centimeter
5) * CLG boring was advanced next to B-23
6) NM = Not measured
7) Estimated effective porosity was based on Sara, M. N. (1994). Standard Handbook for Solid and Hazardous Waste Facility Assessments, Lewis Publishers, U.S., Page 5-57.

Mean Estimated Effective Porosity by Formation

Radnor Till Mean:	0.208
Berry Clay Mean:	0.263
Roxanna/Robein Mean:	0.400
Tiskilwa Formation Mean:	0.217
Berry Clay/Radnor Mean:	0.236

GROUNDWATER ENGINEERING

WILLIAM C. WALTON

EFFECTIVE POROSITIES ARE ESTIMATED, BASED ON SARA, M.N. (1994). STANDARD HANDBOOK FOR SOLID AND HAZARDOUS WASTE FACILITY ASSESSMENTS.

Appendix B
Representative Aquifer System Characteristic Values

Table B.1. Porosity

Deposit	Porosity (dimensionless)
Volcanic, pumice	0.80 — 0.90
Peat	0.60 — 0.80
Silt	0.35 — 0.60
Clay	0.35 — 0.55
Loess	0.40 — 0.55
Sand, dune	0.35 — 0.45
* Sand, fine	0.25 — 0.55
Sand, coarse	0.30 — 0.45
Gravel, coarse	0.25 — 0.35
Sand and gravel	0.20 — 0.35
Till	0.25 — 0.45
Siltstone	0.25 — 0.40
Sandstone	0.25 — 0.50
Volcanic, vesicular	0.10 — 0.50
Volcanic, tuff	0.10 — 0.40
Limestone	0.05 — 0.55
Schist	0.05 — 0.50
Basalt	0.05 — 0.35
Shale	0.01 — 0.10
Volcanic, dense	0.01 — 0.10
Igneous, dense	0.01 — 0.05
Salt bed	0.005— 0.03

(After Davis, 1969; Johnson, 1967; Morris and Johnson, 1967; Davis and DeWiest, 1966; Marsily, 1986, pp. 68,79; Rasmusussen, 1964, pp. 317-325; Polubarinova-Kochina, 1962; Freeze and Cherry, 1979, p. 404-410; Walton, 1988, pp. 19-23, 58)

MAXIMUM EFFECTIVE POROSITY
$= 0.55 - 0.55 \times 0.046$
$= 0.52$

MINIMUM EFFECTIVE POROSITY
$= 0.25 - 0.25 \times 0.046$
$= 0.24$

TOTAL AVERAGE POROSITY = 0.40

AVERAGE EFFECTIVE POROSITY =
$0.40 - 0.40 \times 0.046$
$= 0.40 - 0.0184$
$= 0.38$

HDPE POROSITY

Shaw®

MIGRATI

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de

Sublayers

The number of sublayers in each layer is primarily used in the output of the calculated concentrations with depth: a concentration will be calculated at each sublayer interface.

The maximum thickness of each sublayer is 5 units. The number of sublayers is automatically increased if required to keep their thickness to less than 5. For example, if the layer thickness was 50 m and it had 5 sublayers (giving a sublayer thickness of 10), the program will automatically adjust the number of sublayers to 10.

If the time-varying properties is selected, the accuracy of the results will depend on the number of sublayers.

Thickness

The thickness of the layer must be specified, this is the total thickness of all the sublayers in the layer.

Dry Density

The dry density of the layer, expressed in consistent units with those used throughout the model.

Porosity

This is the porosity of the layer, which must be greater than 0 and less than or equal to 1. If the layer is being used to represent a geomembrane the porosity should be set to 1.

POROSITY OF HDPE

orizontal & Vertical iffusion/ Dispersion Coefficients

These are the horizontal and vertical coefficients of hydrodynamic dispersion for the layer:

$$D_x = D_m + D_{mx}$$
$$D_z = D_m + D_{mz}$$

where,

D_m and D_m = diffusion coefficients for the species,
D_{mx} and D_{mz} = coefficients of mechanical dispersion.

For intact clayey layers, diffusion will usually be the controlling factor and dispersion will often be negligible [Gillham and Cherry, 1982, Rowe, 1987]. In sandy layers, dispersion will tend to be the controlling factor.

Velocities

$$V_x = nv_1$$
$$V_z = nv_1$$

where,

n = effective porosity,
v_1 and v_1 = seepage or groundwater velocities.

Distribution Coefficient

This is the distribution coefficient for the layer. The sorption-desorption of a non-conservative species of contaminant is assumed to be linear such that:

$$S = K_d * c$$

where,

S = solute sorbed per unit weight of soil,
K_d = distribution (partitioning) coefficient,
c = concentration of contaminant.

This is a reasonable approximation for low concentrations of contaminant, however at high concentrations sorption may not be linear and more complex relationships should be used. If there is no sorption (i.e., a conservative species) the distribution coefficient is zero.

Half-Life

If the contaminant species experiences radioactive or biological decay in a layer, this option can be used to specify the half-life of the species in the layer. First order (exponential) decay is assumed for both radioactive and biological decay, eg.

$$c(t) = c(0)\, e^{-\lambda t}$$

where,

$c(t)$ = concentration at time t,
$c(0)$ = initial concentration,
λ = decay constant = 0.693147/half-life.

If there is no decay of the species in the layer, the half-life should be specified as zero which is the same as an infinite half-life (i.e. $\lambda = 0$).

VERTICAL SEEPAGE VELOCITY

		Client:	**PDC**	
		Project:	**Clinton Landfill No. 3**	
		Calculated By:	**DJD**	**Date: 11/10/08**
Title:	**Giroud et al. Calculation**	**Checked By:**	**JPV**	**Date: 11/10/08**

Problem Statement

Calculate outward leakage through the composite liner design based on Giroud et al. (1989).

Given

1 Outward gradient with 1 foot of head on the liner during operational and post-closure periods.
2 Poor contact between the geomembrane and the compacted soil liner (CSL) is considered.
3 The Illinois Environmental Protection Agency (IEPA) has recommended four geomembrane defects per acre (an area of 4 cm^2 per acre).

Solution

The volumetric rate of leakage through geomembrane defect (Q) expressed in m^3/s/ acre =

$$= 1.15\ hw^{0.9}\ a^{0.1}\ ks^{0.74}$$ Giroud et al. (1989)

Where,

hw =	Head buildup on top of the composite liner
a =	Area of the geomembrane defects
ks =	Saturated hydraulic conductivity of the CSL
Q =	Volumetric rate of leakage = $1.15\ hw^{0.9}\ a^{0.1}\ ks^{0.74}$
q_v =	Vertical leakage rate in m/s = (Q/1 acre/4047 m^2)

1) 1 foot of head on CSL (1 E-07 cm/s).

hw =	Head buildup on top of the composite liner =	1.0 ft =	0.3048 m
a =	Area of the geomembrane defects =	4.00 cm^2/acre=	0.0004 m^2/acre
ks =	Saturated hydraulic conductivity of the CSL=	1E-07 cm/s =	1E-09 m/s
Q =	Volumetric rate of leakage = $1.15\ hw^{0.9}\ a^{0.1}\ ks^{0.74}$ =	3.95E-08 m^3/s/ acre	
q_v =	Vertical leakage rate in m/s = (Q/1 acre/4047 m^2) =	9.77E-12 m/s =	**3.08E-04 m/y**

Reference

Giroud, J.P., A. Khatami, and K. Badu-Tweneboah. Geotextiles and Geomembranes, Vol. 8, 1989, pp. 337 - 340.

LEACHATE DATA

Shaw®

MAX PCB = 200ppb AND <200 N.D.

APPENDIX 312.316 - E: LEACHATE DATA - CLINTON LANDFILL No. 2
3rd Quarter 1995 through 4th Quarter 2004

Name	Collect Date	Parameter	Units	Concentration	Detection Limit
PooledLeachate	5/6/2003	Antimony, Total	ug/l	18	3
PooledLeachate	4/28/2004	Antimony, Total	ug/l	ND	3
PooledLeachate	4/28/2004	Antimony, Total	ug/l	ND	3
PooledLeachate	4/28/2004	Antimony, Total	ug/l	ND	3
PooledLeachate	4/28/2004	Antimony, Total	ug/l	ND	3
PooledLeachate	7/27/1995	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	7/27/1995	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	2/1/1996	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	2/19/1996	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/13/1996	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	4/7/1997	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/19/1997	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/17/2000	Aroclor 1016	ug/l	ND	1
PooledLeachate	5/17/2000	Aroclor 1016	ug/l	ND	1
PooledLeachate	5/17/2000	Aroclor 1016	ug/l	ND	1
PooledLeachate	5/17/2000	Aroclor 1016	ug/l	ND	1
PooledLeachate	5/18/2001	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/18/2001	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/18/2001	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/24/2001	Aroclor 1016	ug/l	200	100
PooledLeachate	8/30/2001	Aroclor 1016	ug/l	ND	1
PooledLeachate	8/30/2001	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1016	ug/l	ND	0.5
PooledLeachate	4/28/2004	Aroclor 1016	ug/l	ND	5
PooledLeachate	4/28/2004	Aroclor 1016	ug/l	ND	5
PooledLeachate	4/28/2004	Aroclor 1016	ug/l	ND	5
PooledLeachate	4/28/2004	Aroclor 1016	ug/l	ND	5
PooledLeachate	7/27/1995	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	7/27/1995	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	2/1/1996	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	2/19/1996	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	5/13/1996	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1221	ug/l	ND	0.5

APPENDIX 312.316 - E: LEACHATE DATA - CLINTON LANDFILL No. 2
3rd Quarter 1995 through 4th Quarter 2004

Name	Collect Date	Parameter	Units	Concentration	Detection Limit
PooledLeachate	10/4/1996	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	4/7/1997	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	5/19/1997	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1221	ug/l	ND	0.5
PooledLeachate	5/17/2000	Aroclor 1221	ug/l	ND	2
PooledLeachate	5/17/2000	Aroclor 1221	ug/l	ND	2
PooledLeachate	5/17/2000	Aroclor 1221	ug/l	ND	2
PooledLeachate	5/17/2000	Aroclor 1221	ug/l	ND	2
PooledLeachate	5/18/2001	Aroclor 1221	ug/l	ND	1
PooledLeachate	5/18/2001	Aroclor 1221	ug/l	ND	1
PooledLeachate	5/18/2001	Aroclor 1221	ug/l	ND	1
PooledLeachate	5/24/2001	Aroclor 1221	ug/l	ND	200
PooledLeachate	8/30/2001	Aroclor 1221	ug/l	ND	2
PooledLeachate	8/30/2001	Aroclor 1221	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1221	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1221	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1221	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1221	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1221	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1221	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1221	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1221	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1221	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1221	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1221	ug/l	ND	1
PooledLeachate	4/28/2004	Aroclor 1221	ug/l	ND	10
PooledLeachate	4/28/2004	Aroclor 1221	ug/l	ND	10
PooledLeachate	4/28/2004	Aroclor 1221	ug/l	ND	10
PooledLeachate	4/28/2004	Aroclor 1221	ug/l	ND	10
PooledLeachate	7/27/1995	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	7/27/1995	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	2/1/1996	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	2/19/1996	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/13/1996	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	4/7/1997	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/19/1997	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1232	ug/l	ND	0.5

APPENDIX 312.316 - E: LEACHATE DATA - CLINTON LANDFILL No. 2
3rd Quarter 1995 through 4th Quarter 2004

Name	Collect Date	Parameter	Units	Concentration	Detection Limit
PooledLeachate	04/22/1999	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/17/2000	Aroclor 1232	ug/l	ND	1
PooledLeachate	5/17/2000	Aroclor 1232	ug/l	ND	1
PooledLeachate	5/17/2000	Aroclor 1232	ug/l	ND	1
PooledLeachate	5/17/2000	Aroclor 1232	ug/l	ND	1
PooledLeachate	5/18/2001	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/18/2001	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/18/2001	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/24/2001	Aroclor 1232	ug/l	ND	100
PooledLeachate	8/30/2001	Aroclor 1232	ug/l	ND	1
PooledLeachate	8/30/2001	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1232	ug/l	ND	0.5
PooledLeachate	4/28/2004	Aroclor 1232	ug/l	ND	5
PooledLeachate	4/28/2004	Aroclor 1232	ug/l	ND	5
PooledLeachate	4/28/2004	Aroclor 1232	ug/l	ND	5
PooledLeachate	4/28/2004	Aroclor 1232	ug/l	ND	5
PooledLeachate	7/27/1995	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	7/27/1995	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	2/1/1996	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	2/19/1996	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/13/1996	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	4/7/1997	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/19/1997	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/17/2000	Aroclor 1242	ug/l	ND	1
PooledLeachate	5/17/2000	Aroclor 1242	ug/l	ND	1
PooledLeachate	5/17/2000	Aroclor 1242	ug/l	ND	1
PooledLeachate	5/17/2000	Aroclor 1242	ug/l	ND	1
PooledLeachate	5/18/2001	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/18/2001	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/18/2001	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/24/2001	Aroclor 1242	ug/l	ND	100
PooledLeachate	8/30/2001	Aroclor 1242	ug/l	ND	1
PooledLeachate	8/30/2001	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1242	ug/l	ND	0.5

APPENDIX 312.316 - E: LEACHATE DATA - CLINTON LANDFILL No. 2
3rd Quarter 1995 through 4th Quarter 2004

Name	Collect Date	Parameter	Units	Concentration	Detection Limit
PooledLeachate	4/29/2002	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1242	ug/l	ND	0.5
PooledLeachate	4/28/2004	Aroclor 1242	ug/l	ND	5
PooledLeachate	4/28/2004	Aroclor 1242	ug/l	ND	5
PooledLeachate	4/28/2004	Aroclor 1242	ug/l	ND	5
PooledLeachate	4/28/2004	Aroclor 1242	ug/l	ND	5
PooledLeachate	7/27/1995	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	7/27/1995	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	2/1/1996	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	2/19/1996	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/13/1996	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	4/7/1997	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/19/1997	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/17/2000	Aroclor 1248	ug/l	ND	1
PooledLeachate	5/17/2000	Aroclor 1248	ug/l	ND	1
PooledLeachate	5/17/2000	Aroclor 1248	ug/l	ND	1
PooledLeachate	5/17/2000	Aroclor 1248	ug/l	ND	1
PooledLeachate	5/18/2001	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/18/2001	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/18/2001	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/24/2001	Aroclor 1248	ug/l	ND	100
PooledLeachate	8/30/2001	Aroclor 1248	ug/l	ND	1
PooledLeachate	8/30/2001	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	4/29/2002	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	5/6/2003	Aroclor 1248	ug/l	ND	0.5
PooledLeachate	4/28/2004	Aroclor 1248	ug/l	ND	5
PooledLeachate	4/28/2004	Aroclor 1248	ug/l	ND	5
PooledLeachate	4/28/2004	Aroclor 1248	ug/l	ND	5
PooledLeachate	4/28/2004	Aroclor 1248	ug/l	ND	5
PooledLeachate	7/27/1995	Aroclor 1254	ug/l	ND	0.5

APPENDIX 312.316 - E: LEACHATE DATA - CLINTON LANDFILL No. 2
3rd Quarter 1995 through 4th Quarter 2004

Name	Collect Date	Parameter	Units	Concentration	Detection Limit
PooledLeachate	7/27/1995	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	2/1/1996	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	2/19/1996	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	5/13/1996	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	4/7/1997	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	5/19/1997	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1254	ug/l	ND	0.5
PooledLeachate	5/17/2000	Aroclor 1254	ug/l	ND	2
PooledLeachate	5/17/2000	Aroclor 1254	ug/l	ND	2
PooledLeachate	5/17/2000	Aroclor 1254	ug/l	ND	2
PooledLeachate	5/17/2000	Aroclor 1254	ug/l	ND	2
PooledLeachate	5/18/2001	Aroclor 1254	ug/l	ND	1
PooledLeachate	5/18/2001	Aroclor 1254	ug/l	ND	1
PooledLeachate	5/18/2001	Aroclor 1254	ug/l	ND	1
PooledLeachate	5/24/2001	Aroclor 1254	ug/l	ND	200
PooledLeachate	8/30/2001	Aroclor 1254	ug/l	ND	2
PooledLeachate	8/30/2001	Aroclor 1254	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1254	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1254	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1254	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1254	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1254	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1254	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1254	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1254	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1254	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1254	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1254	ug/l	ND	1
PooledLeachate	4/28/2004	Aroclor 1254	ug/l	ND	10
PooledLeachate	4/28/2004	Aroclor 1254	ug/l	ND	10
PooledLeachate	4/28/2004	Aroclor 1254	ug/l	ND	10
PooledLeachate	4/28/2004	Aroclor 1254	ug/l	ND	10
PooledLeachate	7/27/1995	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	7/27/1995	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	11/3/1995	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	2/1/1996	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	2/19/1996	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	5/13/1996	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	8/21/1996	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	10/4/1996	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	2/13/1997	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	4/7/1997	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	5/19/1997	Aroclor 1260	ug/l	ND	0.5

APPENDIX 312.316 - E: LEACHATE DATA - CLINTON LANDFILL No. 2
3rd Quarter 1995 through 4th Quarter 2004

Name	Collect Date	Parameter	Units	Concentration	Detection Limit
PooledLeachate	8/20/1997	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	8/20/1997	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	5/27/1998	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	04/22/1999	Aroclor 1260	ug/l	ND	0.5
PooledLeachate	5/17/2000	Aroclor 1260	ug/l	ND	2
PooledLeachate	5/17/2000	Aroclor 1260	ug/l	ND	2
PooledLeachate	5/17/2000	Aroclor 1260	ug/l	ND	2
PooledLeachate	5/17/2000	Aroclor 1260	ug/l	ND	2
PooledLeachate	5/18/2001	Aroclor 1260	ug/l	ND	1
PooledLeachate	5/18/2001	Aroclor 1260	ug/l	ND	1
PooledLeachate	5/18/2001	Aroclor 1260	ug/l	ND	1
PooledLeachate	5/24/2001	Aroclor 1260	ug/l	ND	200
PooledLeachate	8/30/2001	Aroclor 1260	ug/l	ND	2
PooledLeachate	8/30/2001	Aroclor 1260	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1260	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1260	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1260	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1260	ug/l	ND	1
PooledLeachate	4/29/2002	Aroclor 1260	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1260	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1260	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1260	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1260	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1260	ug/l	ND	1
PooledLeachate	5/6/2003	Aroclor 1260	ug/l	ND	1
PooledLeachate	4/28/2004	Aroclor 1260	ug/l	ND	10
PooledLeachate	4/28/2004	Aroclor 1260	ug/l	ND	10
PooledLeachate	4/28/2004	Aroclor 1260	ug/l	ND	10
PooledLeachate	4/28/2004	Aroclor 1260	ug/l	ND	10
~~PooledLeachate~~	~~7/27/1995~~	~~Arsenic, Total~~	~~ug/l~~	~~47~~	~~1~~
PooledLeachate	7/27/1995	Arsenic, Total	ug/l	15	1
PooledLeachate	11/3/1995	Arsenic, Total	ug/l	42	1
PooledLeachate	11/3/1995	Arsenic, Total	ug/l	7	1
PooledLeachate	2/1/1996	Arsenic, Total	ug/l	9	1
PooledLeachate	2/19/1996	Arsenic, Total	ug/l	18	1
PooledLeachate	5/13/1996	Arsenic, Total	ug/l	150	1
PooledLeachate	8/21/1996	Arsenic, Total	ug/l	11	1
PooledLeachate	8/21/1996	Arsenic, Total	ug/l	10	1
PooledLeachate	10/4/1996	Arsenic, Total	ug/l	40	1
PooledLeachate	10/4/1996	Arsenic, Total	ug/l	7	1
PooledLeachate	2/13/1997	Arsenic, Total	ug/l	30	1
PooledLeachate	2/13/1997	Arsenic, Total	ug/l	4	1
PooledLeachate	4/7/1997	Arsenic, Total	ug/l	9	1
PooledLeachate	5/19/1997	Arsenic, Total	ug/l	18	1
PooledLeachate	8/20/1997	Arsenic, Total	ug/l	16	1
PooledLeachate	8/20/1997	Arsenic, Total	ug/l	4	1
PooledLeachate	12/18/1997	Arsenic, Total	ug/l	71	1
PooledLeachate	12/18/1997	Arsenic, Total	ug/l	59	1
PooledLeachate	12/18/1997	Arsenic, Total	ug/l	21	1
PooledLeachate	12/18/1997	Arsenic, Total	ug/l	6	1
PooledLeachate	2/19/1998	Arsenic, Total	ug/l	15	1
PooledLeachate	2/19/1998	Arsenic, Total	ug/l	12	1
PooledLeachate	2/19/1998	Arsenic, Total	ug/l	7	1
PooledLeachate	2/19/1998	Arsenic, Total	ug/l	2	1
PooledLeachate	5/27/1998	Arsenic, Total	ug/l	16	1
PooledLeachate	5/27/1998	Arsenic, Total	ug/l	13	1
PooledLeachate	5/27/1998	Arsenic, Total	ug/l	11	1
PooledLeachate	5/27/1998	Arsenic, Total	ug/l	5	1

MAX PENTACHLOROPHEN = < 5 N.D.

MAX DETECTED = 0.76

APPENDIX 312.316 - E: LEACHATE DATA - CLINTON LANDFILL No. 2
3rd Quarter 1995 through 4th Quarter 2004

Name	Collect Date	Parameter	Units	Concentration	Detection Limit
PooledLeachate	5/6/2003	o-Xylene	ug/l	2	1
PooledLeachate	4/28/2004	o-Xylene	ug/l	ND	1
PooledLeachate	4/28/2004	o-Xylene	ug/l	19	1
PooledLeachate	4/28/2004	o-Xylene	ug/l	2	1
PooledLeachate	4/28/2004	o-Xylene	ug/l	2	1
PooledLeachate	7/27/1995	Parathion	ug/l	ND	2
PooledLeachate	7/27/1995	Parathion	ug/l	ND	2
PooledLeachate	5/27/1998	Parathion	ug/l	ND	0.2
PooledLeachate	5/27/1998	Parathion	ug/l	ND	0.2
PooledLeachate	5/27/1998	Parathion	ug/l	ND	0.2
PooledLeachate	5/27/1998	Parathion	ug/l	ND	0.2
PooledLeachate	04/22/1999	Parathion	ug/l	ND	0.2
PooledLeachate	04/22/1999	Parathion	ug/l	ND	0.2
PooledLeachate	04/22/1999	Parathion	ug/l	ND	0.2
PooledLeachate	04/22/1999	Parathion	ug/l	ND	0.2
PooledLeachate	5/17/2000	Parathion	ug/l	ND	0.4
PooledLeachate	5/17/2000	Parathion	ug/l	ND	0.4
PooledLeachate	5/17/2000	Parathion	ug/l	ND	0.4
PooledLeachate	5/17/2000	Parathion	ug/l	ND	0.4
PooledLeachate	5/18/2001	Parathion	ug/l	ND	0.2
PooledLeachate	5/18/2001	Parathion	ug/l	ND	0.2
PooledLeachate	5/18/2001	Parathion	ug/l	ND	0.2
PooledLeachate	5/24/2001	Parathion	ug/l	ND	0.4
PooledLeachate	8/30/2001	Parathion	ug/l	ND	0.4
PooledLeachate	8/30/2001	Parathion	ug/l	ND	0.2
PooledLeachate	4/29/2002	Parathion	ug/l	ND	0.2
PooledLeachate	4/29/2002	Parathion	ug/l	ND	0.2
PooledLeachate	4/29/2002	Parathion	ug/l	ND	0.2
PooledLeachate	4/29/2002	Parathion	ug/l	ND	0.2
PooledLeachate	4/29/2002	Parathion	ug/l	ND	0.2
PooledLeachate	5/6/2003	Parathion	ug/l	ND	0.2
PooledLeachate	5/6/2003	Parathion	ug/l	ND	0.2
PooledLeachate	5/6/2003	Parathion	ug/l	ND	0.2
PooledLeachate	5/6/2003	Parathion	ug/l	ND	0.2
PooledLeachate	5/6/2003	Parathion	ug/l	ND	0.2
PooledLeachate	5/6/2003	Parathion	ug/l	ND	0.2
PooledLeachate	4/28/2004	Parathion	ug/l	ND	2
PooledLeachate	4/28/2004	Parathion	ug/l	ND	1
PooledLeachate	4/28/2004	Parathion	ug/l	ND	2
PooledLeachate	4/28/2004	Parathion	ug/l	ND	2
PooledLeachate	7/27/1995	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	7/27/1995	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	11/3/1995	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	11/3/1995	Pentachlorophenol	ug/l	ND	0.25
PooledLeachate	2/1/1996	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	2/19/1996	Pentachlorophenol	ug/l	ND	0.2
PooledLeachate	5/13/1996	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	8/21/1996	Pentachlorophenol	ug/l	ND	5
PooledLeachate	8/21/1996	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	10/4/1996	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	10/4/1996	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	2/13/1997	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	2/13/1997	Pentachlorophenol	ug/l	0.05	0.05
PooledLeachate	5/19/1997	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	8/20/1997	Pentachlorophenol	ug/l	0.08	0.05
PooledLeachate	5/27/1998	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	5/27/1998	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	5/27/1998	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	5/27/1998	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	04/22/1999	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	04/22/1999	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	04/22/1999	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	04/22/1999	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	5/17/2000	Pentachlorophenol	ug/l	ND	0.1

APPENDIX 312.316 - E: LEACHATE DATA - CLINTON LANDFILL No. 2
3rd Quarter 1995 through 4th Quarter 2004

Name	Collect Date	Parameter	Units	Concentration	Detection Limit
PooledLeachate	5/17/2000	Pentachlorophenol	ug/l	ND	0.1
PooledLeachate	5/17/2000	Pentachlorophenol	ug/l	0.1	0.1
PooledLeachate	5/17/2000	Pentachlorophenol	ug/l	0.064	0.0641
PooledLeachate	5/18/2001	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	5/18/2001	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	5/18/2001	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	8/30/2001	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	8/30/2001	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	4/29/2002	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	4/29/2002	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	4/29/2002	Pentachlorophenol	ug/l	ND	0.05
* PooledLeachate	4/29/2002	Pentachlorophenol	ug/l	0.76	0.5
PooledLeachate	4/29/2002	Pentachlorophenol	ug/l	0.057	0.05
PooledLeachate	5/6/2003	Pentachlorophenol	ug/l	ND	0.1
PooledLeachate	5/6/2003	Pentachlorophenol	ug/l	ND	0.1
PooledLeachate	5/6/2003	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	5/6/2003	Pentachlorophenol	ug/l	ND	0.05
PooledLeachate	5/6/2003	Pentachlorophenol	ug/l	ND	0.1
PooledLeachate	5/6/2003	Pentachlorophenol	ug/l	ND	0.1
PooledLeachate	4/28/2004	Pentachlorophenol	ug/l	ND	0.5
PooledLeachate	4/28/2004	Pentachlorophenol	ug/l	ND	0.5
PooledLeachate	4/28/2004	Pentachlorophenol	ug/l	ND	0.5
PooledLeachate	4/28/2004	Pentachlorophenol	ug/l	ND	0.5
PooledLeachate	5/27/1998	pH, Field Aqueous	s.u.	7.46	0
PooledLeachate	5/27/1998	pH, Field Aqueous	s.u.	7.25	0
PooledLeachate	5/27/1998	pH, Field Aqueous	s.u.	7.25	0
PooledLeachate	5/27/1998	pH, Field Aqueous	s.u.	7.14	0
PooledLeachate	5/27/1998	pH, Field Aqueous	s.u.	6.81	0
PooledLeachate	5/27/1998	pH, Field Aqueous	s.u.	6.8	0
PooledLeachate	5/27/1998	pH, Field Aqueous	s.u.	6.77	0
PooledLeachate	5/27/1998	pH, Field Aqueous	s.u.	6.19	0
PooledLeachate	01/19/1999	pH, Field Aqueous	s.u.	7.18	0
PooledLeachate	01/19/1999	pH, Field Aqueous	s.u.	7.16	0
PooledLeachate	01/19/1999	pH, Field Aqueous	s.u.	6.91	0
PooledLeachate	01/19/1999	pH, Field Aqueous	s.u.	6.86	0
PooledLeachate	04/22/1999	pH, Field Aqueous	s.u.	8.13	0
PooledLeachate	04/22/1999	pH, Field Aqueous	s.u.	7.77	0
PooledLeachate	04/22/1999	pH, Field Aqueous	s.u.	7.15	0
PooledLeachate	04/22/1999	pH, Field Aqueous	s.u.	6.96	0
PooledLeachate	04/22/1999	pH, Field Aqueous	s.u.	6.96	0
PooledLeachate	04/22/1999	pH, Field Aqueous	s.u.	6.93	0
PooledLeachate	04/22/1999	pH, Field Aqueous	s.u.	6.87	0
PooledLeachate	04/22/1999	pH, Field Aqueous	s.u.	6.73	0
PooledLeachate	07/23/1999	pH, Field Aqueous	s.u.	7.26	0
PooledLeachate	07/23/1999	pH, Field Aqueous	s.u.	7.18	0
PooledLeachate	07/23/1999	pH, Field Aqueous	s.u.	7.13	0
PooledLeachate	07/23/1999	pH, Field Aqueous	s.u.	6.83	0
PooledLeachate	07/23/1999	pH, Field Aqueous	s.u.	6.78	0
PooledLeachate	10/21/1999	pH, Field Aqueous	s.u.	7.86	0
PooledLeachate	10/21/1999	pH, Field Aqueous	s.u.	7.02	0
PooledLeachate	10/21/1999	pH, Field Aqueous	s.u.	6.79	0
PooledLeachate	10/21/1999	pH, Field Aqueous	s.u.	6.61	0
PooledLeachate	10/21/1999	pH, Field Aqueous	s.u.	5.96	0
PooledLeachate	5/17/2000	pH, Field Aqueous	s.u.	7.77	0
PooledLeachate	5/17/2000	pH, Field Aqueous	s.u.	7.51	0
PooledLeachate	5/17/2000	pH, Field Aqueous	s.u.	7.47	0
PooledLeachate	5/17/2000	pH, Field Aqueous	s.u.	6.9	0
PooledLeachate	5/18/2001	pH, Field Aqueous	s.u.	7.24	0
PooledLeachate	5/18/2001	pH, Field Aqueous	s.u.	7.06	0
PooledLeachate	5/18/2001	pH, Field Aqueous	s.u.	6.68	0
PooledLeachate	5/24/2001	pH, Field Aqueous	s.u.	7.79	0
PooledLeachate	7/9/2001	pH, Field Aqueous	s.u.	7.31	0
PooledLeachate	8/30/2001	pH, Field Aqueous	s.u.	7.62	0
PooledLeachate	8/30/2001	pH, Field Aqueous	s.u.	7.54	0

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2005
Clinton Landfill No. 2

MAX PCBS = <10 N.D.

PENTACHLOROPHENOL <0.5 N.D.

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	1,1,1,2-Tetrachloroethane (µg/L)	4/26/2005	<1.000	1
L301	1,1,1-Trichloroethane (µg/L)	4/26/2005	<1.000	1
L301	1,1,2,2-Tetrachloroethane (µg/L)	4/26/2005	<1.000	1
L301	1,1,2-Trichloroethane (µg/L)	4/26/2005	<1.000	1
L301	1,1-Dichloroethane (µg/L)	4/26/2005	1	1
L301	1,1-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L301	1,1-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L301	1,2,3-Trichlorobenzene (µg/L)	4/26/2005	<1.000	1
L301	1,2,3-Trichloropropane (µg/L)	4/26/2005	<1.000	1
L301	1,2,4-Trichlorobenzene (µg/L)	4/26/2005	<1.000	1
L301	1,2,4-Trimethylbenzene (µg/L)	4/26/2005	<1.000	1
L301	1,2-Dibromo-3-chloropropane (µg/L)	4/26/2005	<0.050	0.05
L301	1,2-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
L301	1,2-Dichloroethane (µg/L)	4/26/2005	<1.000	1
L301	1,2-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L301	1,3,5-Trimethylbenzene (µg/L)	4/26/2005	<1.000	1
L301	1,3-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
L301	1,3-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L301	1,4-Dichlorobenzene (µg/L)	4/26/2005	2	1
L301	1-Propanol (µg/L)	4/26/2005	<1000.000	1000
L301	2,2-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L301	2,4,6-Trichlorophenol (µg/L)	4/26/2005	<10.000	10
L301	2,4-D (µg/L)	4/26/2005	<1.000	1
L301	2,4-Dichlorophenol (µg/L)	4/26/2005	<10.000	10
L301	2,4-Dimethylphenol (µg/L)	4/26/2005	<10.000	10
L301	2,4-Dinitrophenol (µg/L)	4/26/2005	<50.000	50
L301	2,4-Dinitrotoluene (µg/L)	4/26/2005	<10.000	10
L301	2,6-Dinitrotoluene (µg/L)	4/26/2005	<10.000	10
L301	2-Butanone (MEK) (µg/L)	4/26/2005	<5.000	5
L301	2-Chloroethyl vinyl ether (µg/L)	4/26/2005	<10.000	10
L301	2-Chloronaphthalene (µg/L)	4/26/2005	<10.000	10
L301	2-Chlorophenol (µg/L)	4/26/2005	<10.000	10
L301	2-Chlorotoluene (µg/L)	4/26/2005	<1.000	1
L301	2-Hexanone (MBK) (µg/L)	4/26/2005	<5.000	5
L301	2-Propanol (µg/L)	4/26/2005	<1000.000	1000
L301	3,3-Dichlorobenzidine (µg/L)	4/26/2005	<20.000	20
L301	4,4'-DDD (µg/L)	4/26/2005	<0.500	0.5
L301	4,4'-DDE (µg/L)	4/26/2005	<0.500	0.5
L301	4,4'-DDT (µg/L)	4/26/2005	<0.500	0.5
L301	4,6-Dinitro-2-methylphenol (µg/L)	4/26/2005	<50.000	50
L301	4-Bromophenyl phenyl ether (µg/L)	4/26/2005	<10.000	10
L301	4-Chlorophenyl phenyl ether (µg/L)	4/26/2005	<10.000	10

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	4-Chlorotoluene (µg/L)	4/26/2005	<1.000	1
L301	4-Methyl-2-Pentanone(MIBK) (µg/L)	4/26/2005	<5.000	5
L301	4-Methylphenol(p-cresol) (µg/L)	4/26/2005	<10.000	10
L301	4-Nitrophenol (µg/L)	4/26/2005	<10.000	10
L301	Acenaphthene (µg/L)	4/26/2005	<10.000	10
L301	Acetone (µg/L)	4/26/2005	<10.000	10
L301	Alachlor (µg/L)	4/26/2005	<4.000	4
L301	Aldicarb (µg/L)	4/26/2005	<4.000	4
L301	Aldrin (µg/L)	4/26/2005	<0.500	0.5
L301	Alkalinity, Bicarb Total (mg/L)	4/26/2005	3100	2
L301	alpha-BHC (µg/L)	4/26/2005	<0.500	0.5
L301	Aluminum - Total (µg/L)	4/26/2005	160	10
L301	Ammonia, Total (mg/L)	2/16/2005	300	50
L301	Ammonia, Total (mg/L)	4/26/2005	260	1
L301	Ammonia, Total (mg/L)	7/29/2005	300	0.1
L301	Ammonia, Total (mg/L)	10/13/2005	380	2.5
L301	Anthracene (µg/L)	4/26/2005	<10.000	10
L301	Antimony Total, GFAA (µg/L)	4/26/2005	<3.000	3
L301	Aroclor 1016 (µg/L)	4/26/2005	<5.000	5
L301	Aroclor 1221 (µg/L)	4/26/2005	<5.000	5
L301	Aroclor 1232 (µg/L)	4/26/2005	<5.000	5
L301	Aroclor 1242 (µg/L)	4/26/2005	<5.000	5
L301	Aroclor 1248 (µg/L)	4/26/2005	<5.000	5
L301	Aroclor 1254 (µg/L)	4/26/2005	<5.000	5
L301	Aroclor 1260 (µg/L)	4/26/2005	<5.000	5
L301	Arsenic Total,GFAA (µg/L)	2/16/2005	26	1
L301	Arsenic Total,GFAA (µg/L)	4/26/2005	16	1
L301	Arsenic Total,GFAA (µg/L)	7/29/2005	21	1
L301	Arsenic Total,GFAA (µg/L)	10/13/2005	22	1
L301	Atrazine (µg/L)	4/26/2005	<2.000	2
L301	Barium - Total (µg/L)	2/16/2005	1100	2
L301	Barium - Total (µg/L)	4/26/2005	1100	2
L301	Barium - Total (µg/L)	7/29/2005	1000	2
L301	Barium - Total (µg/L)	10/13/2005	1300	2
L301	Benzene (µg/L)	4/26/2005	5	1
L301	Benzo(a)anthracene (µg/L)	4/26/2005	<10.000	10
L301	Benzo(a)pyrene (µg/L)	4/26/2005	<10.000	10
L301	Benzo(b)fluoranthene (µg/L)	4/26/2005	<10.000	10
L301	Benzo(ghi)perylene (µg/L)	4/26/2005	<10.000	10
L301	Benzo(k)fluoranthene (µg/L)	4/26/2005	<10.000	10
L301	Beryllium - Total (µg/L)	4/26/2005	<1.000	1
L301	beta-BHC (µg/L)	4/26/2005	<0.500	0.5
L301	bis(2-chloroethoxy) methane (µg/L)	4/26/2005	<10.000	10
L301	bis(2-Chloroethyl) ether (µg/L)	4/26/2005	<10.000	10
L301	bis(2-Ethylhexyl) phthalate (µg/L)	4/26/2005	<10.000	10

5ppb

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	Bis(chloromethyl)ether (µg/L)	4/26/2005	<10000.000	10000
L301	BOD 5 (mg/L)	2/16/2005	34	4
L301	BOD 5 (mg/L)	4/26/2005	24	4
L301	BOD 5 (mg/L)	7/29/2005	25	4
L301	BOD 5 (mg/L)	10/13/2005	34	4
L301	Boron, Total (µg/L)	4/26/2005	10000	10
L301	Bromobenzene (µg/L)	4/26/2005	<1.000	1
L301	Bromochloromethane (µg/L)	4/26/2005	<1.000	1
L301	Bromodichloromethane (µg/L)	4/26/2005	<1.000	1
L301	Bromoform (µg/L)	4/26/2005	<1.000	1
L301	Bromomethane (µg/L)	4/26/2005	<2.000	2
L301	Butyl benzyl phthalate (µg/L)	4/26/2005	<10.000	10
L301	Cadmium - Total (µg/L)	2/16/2005	<1.000	1
L301	Cadmium - Total (µg/L)	4/26/2005	<1.000	1
L301	Cadmium - Total (µg/L)	7/29/2005	<1.000	1
L301	Cadmium - Total (µg/L)	10/13/2005	<1.000	1
L301	Calcium - Total (mg/L)	4/26/2005	120	0.1
L301	Carbofuran (µg/L)	4/26/2005	<15.000	15
L301	Carbon disulfide (µg/L)	4/26/2005	2	1
L301	Carbon tetrachloride (µg/L)	4/26/2005	<1.000	1
L301	Chlordane (Tech) (µg/L)	4/26/2005	<10.000	10
L301	Chloride, Total (mg/L)	4/26/2005	1200	62.5
L301	Chlorobenzene (µg/L)	4/26/2005	3	1
L301	Chloroethane (µg/L)	4/26/2005	4	2
L301	Chloroform (µg/L)	4/26/2005	<1.000	1
L301	Chloromethane (µg/L)	4/26/2005	<2.000	2
L301	Chromium - Total (µg/L)	2/16/2005	59	4
L301	Chromium - Total (µg/L)	4/26/2005	39	4
L301	Chromium - Total (µg/L)	7/29/2005	55	0.004
L301	Chromium - Total (µg/L)	10/13/2005	73	4
L301	Chromium, Hexavalent (µg/L)	2/16/2005	<25.000	25
L301	Chromium, Hexavalent (µg/L)	7/29/2005	<10.000	10
L301	Chromium, Hexavalent (µg/L)	10/13/2005	<10.000	10
L301	Chrysene (µg/L)	4/26/2005	<10.000	10
L301	cis-1,2-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L301	cis-1,3-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L301	Cobalt - Total (µg/L)	4/26/2005	8	2
L301	COD (mg/L)	2/16/2005	690	6
L301	COD (mg/L)	4/26/2005	620	6
L301	COD (mg/L)	7/29/2005	700	6
L301	COD (mg/L)	10/13/2005	780	6
L301	Coliform, Fecal, A MF (ct/100)	2/16/2005	<10.000	10
L301	Coliform, Fecal, A MF (ct/100)	4/26/2005	<10.000	10
L301	Coliform, Fecal, A MF (ct/100)	7/29/2005	220	10
L301	Coliform, Fecal, A MF (ct/100)	10/13/2005	<10.000	10

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	Copper - Total (µg/L)	2/16/2005	22	3
L301	Copper - Total (µg/L)	4/26/2005	12	3
L301	Copper - Total (µg/L)	7/29/2005	14	3
L301	Copper - Total (µg/L)	10/13/2005	26	0.003
L301	Cyanide - Total (mg/L)	2/16/2005	<0.005	0.005
L301	Cyanide - Total (mg/L)	4/26/2005	<0.005	0.005
L301	Cyanide - Total (mg/L)	7/29/2005	0.008	0.005
L301	Cyanide - Total (mg/L)	10/13/2005	0.014	0.005
L301	delta-BHC (µg/L)	4/26/2005	<0.500	0.5
L301	Dibenzo(a,h)anthracene (µg/L)	4/26/2005	<10.000	10
L301	Dibromochloromethane (µg/L)	4/26/2005	<1.000	1
L301	Dibromomethane (µg/L)	4/26/2005	<1.000	1
L301	Dichlorodifluoromethane (µg/L)	4/26/2005	<2.000	2
L301	Dieldrin (µg/L)	4/26/2005	<0.500	0.5
L301	Diethyl phthalate (µg/L)	4/26/2005	<10.000	10
L301	Dimethyl phthalate (µg/L)	4/26/2005	<10.000	10
L301	Di-n-butyl phthalate (µg/L)	4/26/2005	<10.000	10
L301	Di-n-octyl phthalate (µg/L)	4/26/2005	<10.000	10
L301	Dioxin Screen (µg/L)	4/26/2005	<10.000	10
L301	Endosulfan I (µg/L)	4/26/2005	<0.500	0.5
L301	Endosulfan II (µg/L)	4/26/2005	<0.500	0.5
L301	Endosulfan Sulfate (µg/L)	4/26/2005	<0.500	0.5
L301	Endrin (µg/L)	4/26/2005	<0.500	0.5
L301	Endrin aldehyde (µg/L)	4/26/2005	<0.500	0.5
L301	Ethyl acetate (µg/L)	4/26/2005	<10.000	10
L301	Ethyl benzene (µg/L)	4/26/2005	<1.000	1
L301	Ethylene dibromide (µg/L)	4/26/2005	<0.050	0.05
L301	Fluoranthene (µg/L)	4/26/2005	<10.000	10
L301	Fluorene (µg/L)	4/26/2005	<10.000	10
L301	Fluoride, Total (mg/L)	2/16/2005	1.5	0.25
L301	Fluoride, Total (mg/L)	4/26/2005	0.33	0.25
L301	Fluoride, Total (mg/L)	7/29/2005	0.31	0.25
L301	Fluoride, Total (mg/L)	10/13/2005	0.36	0.25
L301	gamma-BHC (Lindane) (µg/L)	4/26/2005	<0.500	0.5
L301	Heptachlor (µg/L)	4/26/2005	<0.500	0.5
L301	Heptachlor epoxide (µg/L)	4/26/2005	<0.500	0.5
L301	Hexachlorobenzene (µg/L)	4/26/2005	<10.000	10
L301	Hexachlorobutadiene (µg/L)	4/26/2005	<10.000	10
L301	Hexachlorocyclopentadiene (µg/L)	4/26/2005	<10.000	10
L301	Hexachloroethane (µg/L)	4/26/2005	<10.000	10
L301	Indeno(1,2,3-cd)pyrene (µg/L)	4/26/2005	<10.000	10
L301	Iodomethane (µg/L)	4/26/2005	<1.000	1
L301	Iron - Total (µg/L)	2/16/2005	15000	10
L301	Iron - Total (µg/L)	4/26/2005	5700	10
L301	Iron - Total (µg/L)	7/29/2005	7000	10

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	Iron - Total (µg/L)	10/13/2005	10000	10
L301	Isopropyl benzene (µg/L)	4/26/2005	1	1
L301	Lead Total, GFAA (µg/L)	2/16/2005	11	1
L301	Lead Total, GFAA (µg/L)	4/26/2005	2	1
L301	Lead Total, GFAA (µg/L)	7/29/2005	12	1
L301	Lead Total, GFAA (µg/L)	10/13/2005	18	1
L301	m/p-Xylene (µg/L)	4/26/2005	2	1
L301	Magnesium - Total (mg/L)	4/26/2005	290	0.1
L301	Manganese - Total (µg/L)	2/16/2005	290	1
L301	Manganese - Total (µg/L)	4/26/2005	130	1
L301	Manganese - Total (µg/L)	7/29/2005	110	1
L301	Manganese - Total (µg/L)	10/13/2005	120	1
L301	Mercury - Total (µg/L)	2/16/2005	<0.200	0.2
L301	Mercury - Total (µg/L)	4/26/2005	<0.200	0.2
L301	Mercury - Total (µg/L)	7/29/2005	<0.200	0.2
L301	Mercury - Total (µg/L)	10/13/2005	<0.200	0.2
L301	Methoxychlor (µg/L)	4/26/2005	<2.000	2
L301	Methylene chloride (µg/L)	4/26/2005	<5.000	5
L301	Naphthalene (µg/L)	4/26/2005	<10.000	10
L301	n-Butanol (µg/L)	4/26/2005	<1000.000	1000
L301	n-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L301	Nickel - Total (µg/L)	2/16/2005	160	5
L301	Nickel - Total (µg/L)	4/26/2005	160	5
L301	Nickel - Total (µg/L)	7/29/2005	160	5
L301	Nickel - Total (µg/L)	10/13/2005	180	5
L301	Nitrate/Nitrite as N, Total (mg/L)	4/26/2005	0.15	0.02
L301	Nitrobenzene (µg/L)	4/26/2005	<10.000	10
L301	N-Nitrosodimethylamine (µg/L)	4/26/2005	<10.000	10
L301	N-Nitroso-Di-n-propylamine (µg/L)	4/26/2005	<10.000	10
L301	N-nitrosodiphenylamine (µg/L)	4/26/2005	<10.000	10
L301	n-Propylbenzene (µg/L)	4/26/2005	<1.000	1
L301	Oil and grease (mg/L)	2/16/2005	<17.000	17
L301	Oil and grease (mg/L)	4/26/2005	<6.000	6
L301	Oil and grease (mg/L)	7/29/2005	<5.000	5
L301	Oil and grease (mg/L)	10/13/2005	9.7	5
L301	o-Xylene (µg/L)	4/26/2005	<1.000	1
L301	Parathion (µg/L)	4/26/2005	<2.000	2
L301	Pentachlorophenol (µg/L)	4/26/2005	<0.500	0.5
L301	pH, Aqueous (s.u.)	2/16/2005	6.57	0
L301	pH, Aqueous (s.u.)	4/26/2005	7.13	0
L301	pH, Aqueous (s.u.)	7/29/2005	7.06	0
L301	pH, Aqueous (s.u.)	10/13/2005	7.05	0
L301	Phenanthrene (µg/L)	4/26/2005	<10.000	10
L301	Phenols, Total low range (µg/L)	2/16/2005	48	5
L301	Phenols, Total low range (µg/L)	4/26/2005	53	5

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	Phenols, Total low range (µg/L)	7/29/2005	51	5
L301	Phenols, Total low range (µg/L)	10/13/2005	14	5
L301	Phosphorous, Total (µg/L)	2/16/2005	2800	50
L301	Phosphorous, Total (µg/L)	4/26/2005	2400	50
L301	Phosphorous, Total (µg/L)	7/29/2005	3100	50
L301	Phosphorous, Total (µg/L)	10/13/2005	2400	50
L301	P-Isopropyltoluene (µg/L)	4/26/2005	<1.000	1
L301	Potassium - Total (mg/L)	4/26/2005	300	0.1
L301	Pyrene (µg/L)	4/26/2005	<10.000	10
L301	sec-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L301	Selenium Total, GFAA (µg/L)	4/26/2005	16	1
L301	Silver - Total (µg/L)	2/16/2005	<5.000	5
L301	Silver - Total (µg/L)	4/26/2005	<5.000	5
L301	Silver - Total (µg/L)	7/29/2005	<5.000	5
L301	Silver - Total (µg/L)	10/13/2005	<5.000	5
L301	Silvex (µg/L)	4/26/2005	<0.500	0.5
L301	Sodium - Total (mg/L)	4/26/2005	1300	0.1
L301	Specific Conductance, Field (µmhos/cm)	2/16/2005	7650	0
L301	Specific Conductance, Field (µmhos/cm)	4/26/2005	6480	0
L301	Specific Conductance, Field (µmhos/cm)	7/29/2005	9560	0
L301	Specific Conductance, Field (µmhos/cm)	10/13/2005	10460	0
L301	Styrene (µg/L)	4/26/2005	<1.000	1
L301	Sulfate, Total (mg/L)	4/26/2005	220	35
L301	tert-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L301	Tetrachloroethene (µg/L)	4/26/2005	<1.000	1
L301	Tetrahydrofuran (µg/L)	4/26/2005	61	20
L301	Thallium Total, GFAA (µg/L)	4/26/2005	<1.000	1
L301	Tin Total, GFAA (µg/L)	4/26/2005	<60.000	60
L301	TOC (mg/L)	4/26/2005	150	0.5
L301	Toluene (µg/L)	4/26/2005	<1.000	1
L301	Total Dissolved Solids (mg/L)	2/16/2005	4900	51
L301	Total Dissolved Solids (mg/L)	4/26/2005	4800	51
L301	Total Dissolved Solids (mg/L)	7/29/2005	5300	51
L301	Total Dissolved Solids (mg/L)	10/13/2005	5900	51
L301	Total Suspended Solids (mg/L)	2/16/2005	240	5
L301	Total Suspended Solids (mg/L)	4/26/2005	22	2
L301	Total Suspended Solids (mg/L)	7/29/2005	32	2
L301	Total Suspended Solids (mg/L)	10/13/2005	100	3.3
L301	Toxaphene (µg/L)	4/26/2005	<10.000	10
L301	trans-1,2-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L301	trans-1,3-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L301	trans-1,4-Dichloro-2-butene (µg/L)	4/26/2005	<1.000	1
L301	Trichloroethene (µg/L)	4/26/2005	<1.000	1
L301	Trichlorofluoromethane (µg/L)	4/26/2005	<1.000	1
L301	Vinyl acetate (µg/L)	4/26/2005	<5.000	5

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	Vinyl chloride (µg/L)	4/26/2005	<2.000	2
L301	Xylenes - Total (µg/L)	4/26/2005	3	3
L301	Zinc - Total (µg/L)	2/16/2005	76	6
L301	Zinc - Total (µg/L)	4/26/2005	14	6
L301	Zinc - Total (µg/L)	7/29/2005	21	6
L301	Zinc - Total (µg/L)	10/13/2005	36	6
L304	1,1,1,2-Tetrachloroethane (µg/L)	4/26/2005	<1.000	1
L304	1,1,1-Trichloroethane (µg/L)	4/26/2005	<1.000	1
L304	1,1,2,2-Tetrachloroethane (µg/L)	4/26/2005	<1.000	1
L304	1,1,2-Trichloroethane (µg/L)	4/26/2005	<1.000	1
L304	1,1-Dichloroethane (µg/L)	4/26/2005	<1.000	1
L304	1,1-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L304	1,1-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L304	1,2,3-Trichlorobenzene (µg/L)	4/26/2005	<1.000	1
L304	1,2,3-Trichloropropane (µg/L)	4/26/2005	<1.000	1
L304	1,2,4-Trichlorobenzene (µg/L)	4/26/2005	<1.000	1
L304	1,2,4-Trimethylbenzene (µg/L)	4/26/2005	1	1
L304	1,2-Dibromo-3-chloropropane (µg/L)	4/26/2005	<0.050	0.05
L304	1,2-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
L304	1,2-Dichloroethane (µg/L)	4/26/2005	<1.000	1
L304	1,2-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L304	1,3,5-Trimethylbenzene (µg/L)	4/26/2005	<1.000	1
L304	1,3-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
L304	1,3-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L304	1,4-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
L304	1-Propanol (µg/L)	4/26/2005	<1000.000	1000
L304	2,2-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L304	2,4,6-Trichlorophenol (µg/L)	4/26/2005	<10.000	10
L304	2,4-D (µg/L)	4/26/2005	<0.100	0.1
L304	2,4-Dichlorophenol (µg/L)	4/26/2005	<10.000	10
L304	2,4-Dimethylphenol (µg/L)	4/26/2005	<10.000	10
L304	2,4-Dinitrophenol (µg/L)	4/26/2005	<50.000	50
L304	2,4-Dinitrotoluene (µg/L)	4/26/2005	<10.000	10
L304	2,6-Dinitrotoluene (µg/L)	4/26/2005	<10.000	10
L304	2-Butanone (MEK) (µg/L)	4/26/2005	47	5
L304	2-Chloroethyl vinyl ether (µg/L)	4/26/2005	<10.000	10
L304	2-Chloronaphthalene (µg/L)	4/26/2005	<10.000	10
L304	2-Chlorophenol (µg/L)	4/26/2005	<10.000	10
L304	2-Chlorotoluene (µg/L)	4/26/2005	<1.000	1
L304	2-Hexanone (MBK) (µg/L)	4/26/2005	<5.000	5
L304	2-Propanol (µg/L)	4/26/2005	<1000.000	1000
L304	3,3-Dichlorobenzidine (µg/L)	4/26/2005	<20.000	20
L304	4,4'-DDD (µg/L)	4/26/2005	<0.500	0.5
L304	4,4'-DDE (µg/L)	4/26/2005	<0.500	0.5
L304	4,4'-DDT (µg/L)	4/26/2005	<0.500	0.5

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	4,6-Dinitro-2-methylphenol (µg/L)	4/26/2005	<50.000	50
L304	4-Bromophenyl phenyl ether (µg/L)	4/26/2005	<10.000	10
L304	4-Chlorophenyl phenyl ether (µg/L)	4/26/2005	<10.000	10
L304	4-Chlorotoluene (µg/L)	4/26/2005	<1.000	1
L304	4-Methyl-2-Pentanone(MIBK) (µg/L)	4/26/2005	<5.000	5
L304	4-Methylphenol(p-cresol) (µg/L)	4/26/2005	15	10
L304	4-Nitrophenol (µg/L)	4/26/2005	<10.000	10
L304	Acenaphthene (µg/L)	4/26/2005	<10.000	10
L304	Acetone (µg/L)	4/26/2005	80	10
L304	Alachlor (µg/L)	4/26/2005	<4.000	4
L304	Aldicarb (µg/L)	4/26/2005	<4.000	4
L304	Aldrin (µg/L)	4/26/2005	<0.500	0.5
L304	Alkalinity, Bicarb Total (mg/L)	4/26/2005	2800	2
L304	alpha-BHC (µg/L)	4/26/2005	<0.500	0.5
L304	Aluminum - Total (µg/L)	4/26/2005	10	10
L304	Ammonia, Total (mg/L)	2/15/2005	160	10
L304	Ammonia, Total (mg/L)	4/26/2005	270	1
L304	Ammonia, Total (mg/L)	7/29/2005	440	0.1
L304	Anthracene (µg/L)	4/26/2005	<10.000	10
L304	Antimony Total, GFAA (µg/L)	4/26/2005	<3.000	3
L304	Aroclor 1016 (µg/L)	4/26/2005	<5.000	5
L304	Aroclor 1221 (µg/L)	4/26/2005	<5.000	5
L304	Aroclor 1232 (µg/L)	4/26/2005	<5.000	5
L304	Aroclor 1242 (µg/L)	4/26/2005	<5.000	5
L304	Aroclor 1248 (µg/L)	4/26/2005	<5.000	5
L304	Aroclor 1254 (µg/L)	4/26/2005	<5.000	5
L304	Aroclor 1260 (µg/L)	4/26/2005	<5.000	5
L304	Arsenic Total,GFAA (µg/L)	2/15/2005	25	1
L304	Arsenic Total,GFAA (µg/L)	4/26/2005	18	1
L304	Arsenic Total,GFAA (µg/L)	7/29/2005	18	1
L304	Atrazine (µg/L)	4/26/2005	<2.000	2
L304	Barium - Total (µg/L)	2/15/2005	560	2
L304	Barium - Total (µg/L)	4/26/2005	790	2
L304	Barium - Total (µg/L)	7/29/2005	300	2
L304	Benzene (µg/L)	4/26/2005	3	1
L304	Benzo(a)anthracene (µg/L)	4/26/2005	<10.000	10
L304	Benzo(a)pyrene (µg/L)	4/26/2005	<10.000	10
L304	Benzo(b)fluoranthene (µg/L)	4/26/2005	<10.000	10
L304	Benzo(ghi)perylene (µg/L)	4/26/2005	<10.000	10
L304	Benzo(k)fluoranthene (µg/L)	4/26/2005	<10.000	10
L304	Beryllium - Total (µg/L)	4/26/2005	<1.000	1
L304	beta-BHC (µg/L)	4/26/2005	<0.500	0.5
L304	bis(2-chloroethoxy) methane (µg/L)	4/26/2005	<10.000	10
L304	bis(2-Chloroethyl) ether (µg/L)	4/26/2005	<10.000	10
L304	bis(2-Ethylhexyl) phthalate (µg/L)	4/26/2005	<10.000	10

5 ppb

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	Bis(chloromethyl)ether (µg/L)	4/26/2005	<10000.000	10000
L304	BOD 5 (mg/L)	2/15/2005	37	4
L304	BOD 5 (mg/L)	4/26/2005	69	4
L304	BOD 5 (mg/L)	7/29/2005	36	4
L304	Boron, Total (µg/L)	4/26/2005	11000	10
L304	Bromobenzene (µg/L)	4/26/2005	<1.000	1
L304	Bromochloromethane (µg/L)	4/26/2005	<1.000	1
L304	Bromodichloromethane (µg/L)	4/26/2005	<1.000	1
L304	Bromoform (µg/L)	4/26/2005	<1.000	1
L304	Bromomethane (µg/L)	4/26/2005	<2.000	2
L304	Butyl benzyl phthalate (µg/L)	4/26/2005	<10.000	10
L304	Cadmium - Total (µg/L)	2/15/2005	<1.000	1
L304	Cadmium - Total (µg/L)	4/26/2005	<1.000	1
L304	Cadmium - Total (µg/L)	7/29/2005	<1.000	1
L304	Calcium - Total (mg/L)	4/26/2005	220	0.1
L304	Carbofuran (µg/L)	4/26/2005	<15.000	15
L304	Carbon disulfide (µg/L)	4/26/2005	5	1
L304	Carbon tetrachloride (µg/L)	4/26/2005	<1.000	1
L304	Chlordane (Tech) (µg/L)	4/26/2005	<10.000	10
L304	Chloride, Total (mg/L)	4/26/2005	1400	62.5
L304	Chlorobenzene (µg/L)	4/26/2005	<1.000	1
L304	Chloroethane (µg/L)	4/26/2005	3	2
L304	Chloroform (µg/L)	4/26/2005	<1.000	1
L304	Chloromethane (µg/L)	4/26/2005	<2.000	2
L304	Chromium - Total (µg/L)	2/15/2005	32	4
L304	Chromium - Total (µg/L)	4/26/2005	50	4
L304	Chromium - Total (µg/L)	7/29/2005	72	0.004
L304	Chromium, Hexavalent (µg/L)	2/15/2005	<5.000	5
L304	Chromium, Hexavalent (µg/L)	7/29/2005	<50.000	50
L304	Chrysene (µg/L)	4/26/2005	<10.000	10
L304	cis-1,2-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L304	cis-1,3-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L304	Cobalt - Total (µg/L)	4/26/2005	6	2
L304	COD (mg/L)	2/15/2005	400	6
L304	COD (mg/L)	4/26/2005	620	6
L304	COD (mg/L)	7/29/2005	740	6
L304	Coliform, Fecal, A MF (ct/100)	2/15/2005	<10.000	10
L304	Coliform, Fecal, A MF (ct/100)	4/26/2005	570	10
L304	Coliform, Fecal, A MF (ct/100)	7/29/2005	<10.000	10
L304	Copper - Total (µg/L)	2/15/2005	16	3
L304	Copper - Total (µg/L)	4/26/2005	6	3
L304	Copper - Total (µg/L)	7/29/2005	11	3
L304	Cyanide - Total (mg/L)	2/15/2005	<0.005	0.005
L304	Cyanide - Total (mg/L)	4/26/2005	<0.005	0.005
L304	Cyanide - Total (mg/L)	7/29/2005	<0.005	0.005

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	delta-BHC (µg/L)	4/26/2005	<0.500	0.5
L304	Dibenzo(a,h)anthracene (µg/L)	4/26/2005	<10.000	10
L304	Dibromochloromethane (µg/L)	4/26/2005	<1.000	1
L304	Dibromomethane (µg/L)	4/26/2005	<1.000	1
L304	Dichlorodifluoromethane (µg/L)	4/26/2005	<2.000	2
L304	Dieldrin (µg/L)	4/26/2005	<0.500	0.5
L304	Diethyl phthalate (µg/L)	4/26/2005	<10.000	10
L304	Dimethyl phthalate (µg/L)	4/26/2005	<10.000	10
L304	Di-n-butyl phthalate (µg/L)	4/26/2005	<10.000	10
L304	Di-n-octyl phthalate (µg/L)	4/26/2005	<10.000	10
L304	Dioxin Screen (µg/L)	4/26/2005	<10.000	10
L304	Endosulfan I (µg/L)	4/26/2005	<0.500	0.5
L304	Endosulfan II (µg/L)	4/26/2005	<0.500	0.5
L304	Endosulfan Sulfate (µg/L)	4/26/2005	<0.500	0.5
L304	Endrin (µg/L)	4/26/2005	<0.500	0.5
L304	Endrin aldehyde (µg/L)	4/26/2005	<0.500	0.5
L304	Ethyl acetate (µg/L)	4/26/2005	<10.000	10
L304	Ethyl benzene (µg/L)	4/26/2005	<1.000	1
L304	Ethylene dibromide (µg/L)	4/26/2005	<0.050	0.05
L304	Fluoranthene (µg/L)	4/26/2005	<10.000	10
L304	Fluorene (µg/L)	4/26/2005	<10.000	10
L304	Fluoride, Total (mg/L)	2/15/2005	0.36	0.25
L304	Fluoride, Total (mg/L)	4/26/2005	0.43	0.25
L304	Fluoride, Total (mg/L)	7/29/2005	0.34	0.25
L304	gamma-BHC (Lindane) (µg/L)	4/26/2005	<0.500	0.5
L304	Heptachlor (µg/L)	4/26/2005	<0.500	0.5
L304	Heptachlor epoxide (µg/L)	4/26/2005	<0.500	0.5
L304	Hexachlorobenzene (µg/L)	4/26/2005	<10.000	10
L304	Hexachlorobutadiene (µg/L)	4/26/2005	<10.000	10
L304	Hexachlorocyclopentadiene (µg/L)	4/26/2005	<10.000	10
L304	Hexachloroethane (µg/L)	4/26/2005	<10.000	10
L304	Indeno(1,2,3-cd)pyrene (µg/L)	4/26/2005	<10.000	10
L304	Iodomethane (µg/L)	4/26/2005	<1.000	1
L304	Iron - Total (µg/L)	2/15/2005	8200	10
L304	Iron - Total (µg/L)	4/26/2005	4900	10
L304	Iron - Total (µg/L)	7/29/2005	2100	50
L304	Isopropyl benzene (µg/L)	4/26/2005	2	1
L304	Lead Total, GFAA (µg/L)	2/15/2005	5	1
L304	Lead Total, GFAA (µg/L)	4/26/2005	1	1
L304	Lead Total, GFAA (µg/L)	7/29/2005	2	1
L304	m/p-Xylene (µg/L)	4/26/2005	2	1
L304	Magnesium - Total (mg/L)	4/26/2005	220	0.1
L304	Manganese - Total (µg/L)	2/15/2005	1700	1
L304	Manganese - Total (µg/L)	4/26/2005	1000	1
L304	Manganese - Total (µg/L)	7/29/2005	98	1

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	Mercury - Total (µg/L)	2/15/2005	0.3	0.2
L304	Mercury - Total (µg/L)	4/26/2005	<0.200	0.2
L304	Mercury - Total (µg/L)	7/29/2005	<0.200	0.2
L304	Methoxychlor (µg/L)	4/26/2005	<2.000	2
L304	Methylene chloride (µg/L)	4/26/2005	<5.000	5
L304	Naphthalene (µg/L)	4/26/2005	<10.000	10
L304	n-Butanol (µg/L)	4/26/2005	<1000.000	1000
L304	n-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L304	Nickel - Total (µg/L)	2/15/2005	100	5
L304	Nickel - Total (µg/L)	4/26/2005	160	5
L304	Nickel - Total (µg/L)	7/29/2005	140	5
L304	Nitrate/Nitrite as N, Total (mg/L)	4/26/2005	<0.020	0.02
L304	Nitrobenzene (µg/L)	4/26/2005	<10.000	10
L304	N-Nitrosodimethylamine (µg/L)	4/26/2005	<10.000	10
L304	N-Nitroso-Di-n-propylamine (µg/L)	4/26/2005	<10.000	10
L304	N-nitrosodiphenylamine (µg/L)	4/26/2005	<10.000	10
L304	n-Propylbenzene (µg/L)	4/26/2005	<1.000	1
L304	Oil and grease (mg/L)	2/15/2005	<5.000	5
L304	Oil and grease (mg/L)	4/26/2005	<6.000	6
L304	Oil and grease (mg/L)	7/29/2005	<5.000	5
L304	o-Xylene (µg/L)	4/26/2005	1	1
L304	Parathion (µg/L)	4/26/2005	<2.000	2
L304	Pentachlorophenol (µg/L)	4/26/2005	<0.500	0.5
L304	pH, Aqueous (s.u.)	2/15/2005	6.67	0
L304	pH, Aqueous (s.u.)	4/26/2005	6.75	0
L304	pH, Aqueous (s.u.)	7/29/2005	7.43	0
L304	Phenanthrene (µg/L)	4/26/2005	<10.000	10
L304	Phenols, Total low range (µg/L)	2/15/2005	99	5
L304	Phenols, Total low range (µg/L)	4/26/2005	71	5
L304	Phenols, Total low range (µg/L)	7/29/2005	46	5
L304	Phosphorous, Total (µg/L)	2/15/2005	630	50
L304	Phosphorous, Total (µg/L)	4/26/2005	1400	50
L304	Phosphorous, Total (µg/L)	7/29/2005	690	50
L304	P-Isopropyltoluene (µg/L)	4/26/2005	<1.000	1
L304	Potassium - Total (mg/L)	4/26/2005	180	0.1
L304	Pyrene (µg/L)	4/26/2005	<10.000	10
L304	sec-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L304	Selenium Total, GFAA (µg/L)	4/26/2005	23	1
L304	Silver - Total (µg/L)	2/15/2005	<5.000	5
L304	Silver - Total (µg/L)	4/26/2005	<5.000	5
L304	Silver - Total (µg/L)	7/29/2005	<5.000	5
L304	Silvex (µg/L)	4/26/2005	<0.500	0.5
L304	Sodium - Total (mg/L)	4/26/2005	1200	0.1
L304	Specific Conductance, Field (µmhos/cm)	2/15/2005	4970	0
L304	Specific Conductance, Field (µmhos/cm)	4/26/2005	5970	0

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	Specific Conductance, Field (µmhos/cm)	7/29/2005	9810	0
L304	Styrene (µg/L)	4/26/2005	<1.000	1
L304	Sulfate, Total (mg/L)	4/26/2005	7.8	1
L304	tert-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L304	Tetrachloroethene (µg/L)	4/26/2005	<1.000	1
L304	Tetrahydrofuran (µg/L)	4/26/2005	150	20
L304	Thallium Total, GFAA (µg/L)	4/26/2005	<1.000	1
L304	Tin Total, GFAA (µg/L)	4/26/2005	<60.000	60
L304	TOC (mg/L)	4/26/2005	180	0.5
L304	Toluene (µg/L)	4/26/2005	2	1
L304	Total Dissolved Solids (mg/L)	2/15/2005	7200	51
L304	Total Dissolved Solids (mg/L)	4/26/2005	4300	51
L304	Total Dissolved Solids (mg/L)	7/29/2005	5200	51
L304	Total Suspended Solids (mg/L)	2/15/2005	200	5
L304	Total Suspended Solids (mg/L)	4/26/2005	10	2
L304	Total Suspended Solids (mg/L)	7/29/2005	32	2
L304	Toxaphene (µg/L)	4/26/2005	<10.000	10
L304	trans-1,2-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L304	trans-1,3-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L304	trans-1,4-Dichloro-2-butene (µg/L)	4/26/2005	<1.000	1
L304	Trichloroethene (µg/L)	4/26/2005	<1.000	1
L304	Trichlorofluoromethane (µg/L)	4/26/2005	<1.000	1
L304	Vinyl acetate (µg/L)	4/26/2005	<5.000	5
L304	Vinyl chloride (µg/L)	4/26/2005	<2.000	2
L304	Xylenes - Total (µg/L)	4/26/2005	3	3
L304	Zinc - Total (µg/L)	2/15/2005	55	6
L304	Zinc - Total (µg/L)	4/26/2005	22	6
L304	Zinc - Total (µg/L)	7/29/2005	12	6
L305	1,1,1,2-Tetrachloroethane (µg/L)	4/26/2005	<1.000	1
L305	1,1,1-Trichloroethane (µg/L)	4/26/2005	<1.000	1
L305	1,1,2,2-Tetrachloroethane (µg/L)	4/26/2005	<1.000	1
L305	1,1,2-Trichloroethane (µg/L)	4/26/2005	<1.000	1
L305	1,1-Dichloroethane (µg/L)	4/26/2005	1	1
L305	1,1-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L305	1,1-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L305	1,2,3-Trichlorobenzene (µg/L)	4/26/2005	<1.000	1
L305	1,2,3-Trichloropropane (µg/L)	4/26/2005	<1.000	1
L305	1,2,4-Trichlorobenzene (µg/L)	4/26/2005	<1.000	1
L305	1,2,4-Trimethylbenzene (µg/L)	4/26/2005	1	1
L305	1,2-Dibromo-3-chloropropane (µg/L)	4/26/2005	<0.050	0.05
L305	1,2-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
L305	1,2-Dichloroethane (µg/L)	4/26/2005	2	1
L305	1,2-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L305	1,3,5-Trimethylbenzene (µg/L)	4/26/2005	<1.000	1
L305	1,3-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	1,3-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L305	1,4-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
L305	1-Propanol (µg/L)	4/26/2005	<1000.000	1000
L305	2,2-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L305	2,4,6-Trichlorophenol (µg/L)	4/26/2005	<10.000	10
L305	2,4-D (µg/L)	4/26/2005	<1.000	1
L305	2,4-Dichlorophenol (µg/L)	4/26/2005	<10.000	10
L305	2,4-Dimethylphenol (µg/L)	4/26/2005	<10.000	10
L305	2,4-Dinitrophenol (µg/L)	4/26/2005	<50.000	50
L305	2,4-Dinitrotoluene (µg/L)	4/26/2005	<10.000	10
L305	2,6-Dinitrotoluene (µg/L)	4/26/2005	<10.000	10
L305	2-Butanone (MEK) (µg/L)	4/26/2005	230	50
L305	2-Chloroethyl vinyl ether (µg/L)	4/26/2005	<10.000	10
L305	2-Chloronaphthalene (µg/L)	4/26/2005	<10.000	10
L305	2-Chlorophenol (µg/L)	4/26/2005	<10.000	10
L305	2-Chlorotoluene (µg/L)	4/26/2005	<1.000	1
L305	2-Hexanone (MBK) (µg/L)	4/26/2005	<5.000	5
L305	2-Propanol (µg/L)	4/26/2005	<1000.000	1000
L305	3,3-Dichlorobenzidine (µg/L)	4/26/2005	<20.000	20
L305	4,4'-DDD (µg/L)	4/26/2005	<0.500	0.5
L305	4,4'-DDE (µg/L)	4/26/2005	<0.500	0.5
L305	4,4'-DDT (µg/L)	4/26/2005	<0.500	0.5
L305	4,6-Dinitro-2-methylphenol (µg/L)	4/26/2005	<50.000	50
L305	4-Bromophenyl phenyl ether (µg/L)	4/26/2005	<10.000	10
L305	4-Chlorophenyl phenyl ether (µg/L)	4/26/2005	<10.000	10
L305	4-Chlorotoluene (µg/L)	4/26/2005	<1.000	1
L305	4-Methyl-2-Pentanone(MIBK) (µg/L)	4/26/2005	18	5
L305	4-Methylphenol(p-cresol) (µg/L)	4/26/2005	<10.000	10
L305	4-Nitrophenol (µg/L)	4/26/2005	<10.000	10
L305	Acenaphthene (µg/L)	4/26/2005	<10.000	10
L305	Acetone (µg/L)	4/26/2005	480	100
L305	Alachlor (µg/L)	4/26/2005	<4.000	4
L305	Aldicarb (µg/L)	4/26/2005	<4.000	4
L305	Aldrin (µg/L)	4/26/2005	<0.500	0.5
L305	Alkalinity, Bicarb Total (mg/L)	4/26/2005	1500	2
L305	alpha-BHC (µg/L)	4/26/2005	<0.500	0.5
L305	Aluminum - Total (µg/L)	4/26/2005	60	10
L305	Ammonia, Total (mg/L)	4/26/2005	42	0.6
L305	Ammonia, Total (mg/L)	7/29/2005	190	0.1
L305	Anthracene (µg/L)	4/26/2005	<10.000	10
L305	Antimony Total, GFAA (µg/L)	4/26/2005	<3.000	3
L305	Aroclor 1016 (µg/L)	4/26/2005	<5.000	5
L305	Aroclor 1221 (µg/L)	4/26/2005	<5.000	5
L305	Aroclor 1232 (µg/L)	4/26/2005	<5.000	5
L305	Aroclor 1242 (µg/L)	4/26/2005	<5.000	5

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	Aroclor 1248 (µg/L)	4/26/2005	<5.000	5
L305	Aroclor 1254 (µg/L)	4/26/2005	<5.000	5
L305	Aroclor 1260 (µg/L)	4/26/2005	<5.000	5
L305	Arsenic Total,GFAA (µg/L)	4/26/2005	8	1
L305	Arsenic Total,GFAA (µg/L)	7/29/2005	20	1
L305	Atrazine (µg/L)	4/26/2005	<2.000	2
L305	Barium - Total (µg/L)	4/26/2005	660	2
L305	Barium - Total (µg/L)	7/29/2005	670	2
L305	Benzene (µg/L)	4/26/2005	5	1
L305	Benzo(a)anthracene (µg/L)	4/26/2005	<10.000	10
L305	Benzo(a)pyrene (µg/L)	4/26/2005	<10.000	10
L305	Benzo(b)fluoranthene (µg/L)	4/26/2005	<10.000	10
L305	Benzo(ghi)perylene (µg/L)	4/26/2005	<10.000	10
L305	Benzo(k)fluoranthene (µg/L)	4/26/2005	<10.000	10
L305	Beryllium - Total (µg/L)	4/26/2005	<1.000	1
L305	beta-BHC (µg/L)	4/26/2005	<0.500	0.5
L305	bis(2-chloroethoxy) methane (µg/L)	4/26/2005	<10.000	10
L305	bis(2-Chloroethyl) ether (µg/L)	4/26/2005	<10.000	10
L305	bis(2-Ethylhexyl) phthalate (µg/L)	4/26/2005	<10.000	10
L305	Bis(chloromethyl)ether (µg/L)	4/26/2005	<10000.000	10000
L305	BOD 5 (mg/L)	4/26/2005	43	4
L305	BOD 5 (mg/L)	7/29/2005	45	4
L305	Boron, Total (µg/L)	4/26/2005	1600	10
L305	Bromobenzene (µg/L)	4/26/2005	<1.000	1
L305	Bromochloromethane (µg/L)	4/26/2005	<1.000	1
L305	Bromodichloromethane (µg/L)	4/26/2005	<1.000	1
L305	Bromoform (µg/L)	4/26/2005	<1.000	1
L305	Bromomethane (µg/L)	4/26/2005	<2.000	2
L305	Butyl benzyl phthalate (µg/L)	4/26/2005	<10.000	10
L305	Cadmium - Total (µg/L)	4/26/2005	<1.000	1
L305	Cadmium - Total (µg/L)	7/29/2005	<1.000	1
L305	Calcium - Total (mg/L)	4/26/2005	370	0.1
L305	Carbofuran (µg/L)	4/26/2005	<15.000	15
L305	Carbon disulfide (µg/L)	4/26/2005	9	1
L305	Carbon tetrachloride (µg/L)	4/26/2005	<1.000	1
L305	Chlordane (Tech) (µg/L)	4/26/2005	<10.000	10
L305	Chloride, Total (mg/L)	4/26/2005	220	6.25
L305	Chlorobenzene (µg/L)	4/26/2005	<1.000	1
L305	Chloroethane (µg/L)	4/26/2005	2	2
L305	Chloroform (µg/L)	4/26/2005	<1.000	1
L305	Chloromethane (µg/L)	4/26/2005	<2.000	2
L305	Chromium - Total (µg/L)	4/26/2005	16	4
L305	Chromium - Total (µg/L)	7/29/2005	44	0.004
L305	Chromium, Hexavalent (µg/L)	7/29/2005	<50.000	50
L305	Chrysene (µg/L)	4/26/2005	<10.000	10

5ppb

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	cis-1,2-Dichloroethene (µg/L)	4/26/2005	1	1
L305	cis-1,3-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L305	Cobalt - Total (µg/L)	4/26/2005	<2.000	2
L305	COD (mg/L)	4/26/2005	150	6
L305	COD (mg/L)	7/29/2005	380	6
L305	Coliform, Fecal, A MF (ct/100)	4/26/2005	<10.000	10
L305	Coliform, Fecal, A MF (ct/100)	7/29/2005	<10.000	10
L305	Copper - Total (µg/L)	4/26/2005	<3.000	3
L305	Copper - Total (µg/L)	7/29/2005	27	3
L305	Cyanide - Total (mg/L)	4/26/2005	<0.005	0.005
L305	Cyanide - Total (mg/L)	7/29/2005	<0.005	0.005
L305	delta-BHC (µg/L)	4/26/2005	<0.500	0.5
L305	Dibenzo(a,h)anthracene (µg/L)	4/26/2005	<10.000	10
L305	Dibromochloromethane (µg/L)	4/26/2005	<1.000	1
L305	Dibromomethane (µg/L)	4/26/2005	<1.000	1
L305	Dichlorodifluoromethane (µg/L)	4/26/2005	<2.000	2
L305	Dieldrin (µg/L)	4/26/2005	<0.500	0.5
L305	Diethyl phthalate (µg/L)	4/26/2005	<10.000	10
L305	Dimethyl phthalate (µg/L)	4/26/2005	<10.000	10
L305	Di-n-butyl phthalate (µg/L)	4/26/2005	<10.000	10
L305	Di-n-octyl phthalate (µg/L)	4/26/2005	<10.000	10
L305	Dioxin Screen (µg/L)	4/26/2005	<10.000	10
L305	Endosulfan I (µg/L)	4/26/2005	<0.500	0.5
L305	Endosulfan II (µg/L)	4/26/2005	<0.500	0.5
L305	Endosulfan Sulfate (µg/L)	4/26/2005	<0.500	0.5
L305	Endrin (µg/L)	4/26/2005	<0.500	0.5
L305	Endrin aldehyde (µg/L)	4/26/2005	<0.500	0.5
L305	Ethyl acetate (µg/L)	4/26/2005	<10.000	10
L305	Ethyl benzene (µg/L)	4/26/2005	6	1
L305	Ethylene dibromide (µg/L)	4/26/2005	<0.050	0.05
L305	Fluoranthene (µg/L)	4/26/2005	<10.000	10
L305	Fluorene (µg/L)	4/26/2005	<10.000	10
L305	Fluoride, Total (mg/L)	4/26/2005	0.31	0.25
L305	Fluoride, Total (mg/L)	7/29/2005	0.32	0.25
L305	gamma-BHC (Lindane) (µg/L)	4/26/2005	<0.500	0.5
L305	Heptachlor (µg/L)	4/26/2005	<0.500	0.5
L305	Heptachlor epoxide (µg/L)	4/26/2005	<0.500	0.5
L305	Hexachlorobenzene (µg/L)	4/26/2005	<10.000	10
L305	Hexachlorobutadiene (µg/L)	4/26/2005	<10.000	10
L305	Hexachlorocyclopentadiene (µg/L)	4/26/2005	<10.000	10
L305	Hexachloroethane (µg/L)	4/26/2005	<10.000	10
L305	Indeno(1,2,3-cd)pyrene (µg/L)	4/26/2005	<10.000	10
L305	Iodomethane (µg/L)	4/26/2005	<1.000	1
L305	Iron - Total (µg/L)	4/26/2005	6100	10
L305	Iron - Total (µg/L)	7/29/2005	3800	50

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	Isopropyl benzene (µg/L)	4/26/2005	<1.000	1
L305	Lead Total, GFAA (µg/L)	4/26/2005	<1.000	1
L305	Lead Total, GFAA (µg/L)	7/29/2005	12	1
L305	m/p-Xylene (µg/L)	4/26/2005	5	1
L305	Magnesium - Total (mg/L)	4/26/2005	140	0.1
L305	Manganese - Total (µg/L)	4/26/2005	1900	1
L305	Manganese - Total (µg/L)	7/29/2005	1300	1
L305	Mercury - Total (µg/L)	4/26/2005	<0.200	0.2
L305	Mercury - Total (µg/L)	7/29/2005	<0.200	0.2
L305	Methoxychlor (µg/L)	4/26/2005	<2.000	2
L305	Methylene chloride (µg/L)	4/26/2005	<5.000	5
L305	Naphthalene (µg/L)	4/26/2005	<10.000	10
L305	n-Butanol (µg/L)	4/26/2005	<1000.000	1000
L305	n-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L305	Nickel - Total (µg/L)	4/26/2005	38	5
L305	Nickel - Total (µg/L)	7/29/2005	66	5
L305	Nitrate/Nitrite as N, Total (mg/L)	4/26/2005	0.079	0.02
L305	Nitrobenzene (µg/L)	4/26/2005	<10.000	10
L305	N-Nitrosodimethylamine (µg/L)	4/26/2005	<10.000	10
L305	N-Nitroso-Di-n-propylamine (µg/L)	4/26/2005	<10.000	10
L305	N-nitrosodiphenylamine (µg/L)	4/26/2005	<10.000	10
L305	n-Propylbenzene (µg/L)	4/26/2005	<1.000	1
L305	Oil and grease (mg/L)	4/26/2005	<6.000	6
L305	Oil and grease (mg/L)	7/29/2005	<6.000	6
L305	o-Xylene (µg/L)	4/26/2005	4	1
L305	Parathion (µg/L)	4/26/2005	<2.000	2
L305	Pentachlorophenol (µg/L)	4/26/2005	<0.500	0.5
L305	pH, Aqueous (s.u.)	4/26/2005	6.67	0
L305	pH, Aqueous (s.u.)	7/29/2005	6.74	0
L305	Phenanthrene (µg/L)	4/26/2005	<10.000	10
L305	Phenols, Total low range (µg/L)	4/26/2005	130	5
L305	Phenols, Total low range (µg/L)	7/29/2005	76	5
L305	Phosphorous, Total (µg/L)	4/26/2005	1100	50
L305	Phosphorous, Total (µg/L)	7/29/2005	1500	50
L305	P-Isopropyltoluene (µg/L)	4/26/2005	<1.000	1
L305	Potassium - Total (mg/L)	4/26/2005	37	0.1
L305	Pyrene (µg/L)	4/26/2005	<10.000	10
L305	sec-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L305	Selenium Total, GFAA (µg/L)	4/26/2005	4	1
L305	Silver - Total (µg/L)	4/26/2005	<5.000	5
L305	Silver - Total (µg/L)	7/29/2005	<5.000	5
L305	Silvex (µg/L)	4/26/2005	<0.500	0.5
L305	Sodium - Total (mg/L)	4/26/2005	220	0.1
L305	Specific Conductance, Field (µmhos/cm)	4/26/2005	1440	0
L305	Specific Conductance, Field (µmhos/cm)	7/29/2005	5960	0

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	Styrene (µg/L)	4/26/2005	<1.000	1
L305	Sulfate, Total (mg/L)	4/26/2005	43	17.5
L305	tert-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L305	Tetrachloroethene (µg/L)	4/26/2005	<1.000	1
L305	Tetrahydrofuran (µg/L)	4/26/2005	220	20
L305	Thallium Total, GFAA (µg/L)	4/26/2005	1	1
L305	Tin Total, GFAA (µg/L)	4/26/2005	<60.000	60
L305	TOC (mg/L)	4/26/2005	50	0.5
L305	Toluene (µg/L)	4/26/2005	25	1
L305	Total Dissolved Solids (mg/L)	4/26/2005	1600	51
L305	Total Dissolved Solids (mg/L)	7/29/2005	3000	51
L305	Total Suspended Solids (mg/L)	4/26/2005	8	2
L305	Total Suspended Solids (mg/L)	7/29/2005	54	5
L305	Toxaphene (µg/L)	4/26/2005	<10.000	10
L305	trans-1,2-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L305	trans-1,3-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L305	trans-1,4-Dichloro-2-butene (µg/L)	4/26/2005	<1.000	1
L305	Trichloroethene (µg/L)	4/26/2005	<1.000	1
L305	Trichlorofluoromethane (µg/L)	4/26/2005	<1.000	1
L305	Vinyl acetate (µg/L)	4/26/2005	<5.000	5
L305	Vinyl chloride (µg/L)	4/26/2005	3	2
L305	Xylenes - Total (µg/L)	4/26/2005	9	3
L305	Zinc - Total (µg/L)	4/26/2005	31	6
L305	Zinc - Total (µg/L)	7/29/2005	83	6
L32E	1,1,1,2-Tetrachloroethane (µg/L)	4/26/2005	<1.000	1
L32E	1,1,1-Trichloroethane (µg/L)	4/26/2005	<1.000	1
L32E	1,1,2,2-Tetrachloroethane (µg/L)	4/26/2005	<1.000	1
L32E	1,1,2-Trichloroethane (µg/L)	4/26/2005	<1.000	1
L32E	1,1-Dichloroethane (µg/L)	4/26/2005	<1.000	1
L32E	1,1-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L32E	1,1-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L32E	1,2,3-Trichlorobenzene (µg/L)	4/26/2005	<1.000	1
L32E	1,2,3-Trichloropropane (µg/L)	4/26/2005	<1.000	1
L32E	1,2,4-Trichlorobenzene (µg/L)	4/26/2005	<1.000	1
L32E	1,2,4-Trimethylbenzene (µg/L)	4/26/2005	18	1
L32E	1,2-Dibromo-3-chloropropane (µg/L)	4/26/2005	<0.050	0.05
L32E	1,2-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
L32E	1,2-Dichloroethane (µg/L)	4/26/2005	<1.000	1
L32E	1,2-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L32E	1,3,5-Trimethylbenzene (µg/L)	4/26/2005	7	1
L32E	1,3-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
L32E	1,3-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L32E	1,4-Dichlorobenzene (µg/L)	4/26/2005	3	1
L32E	1-Propanol (µg/L)	4/26/2005	<1000.000	1000
L32E	2,2-Dichloropropane (µg/L)	4/26/2005	<1.000	1

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L32E	2,4,6-Trichlorophenol (µg/L)	4/26/2005	<10.000	10
L32E	2,4-D (µg/L)	4/26/2005	<1.000	1
L32E	2,4-Dichlorophenol (µg/L)	4/26/2005	<10.000	10
L32E	2,4-Dimethylphenol (µg/L)	4/26/2005	<10.000	10
L32E	2,4-Dinitrophenol (µg/L)	4/26/2005	<50.000	50
L32E	2,4-Dinitrotoluene (µg/L)	4/26/2005	<10.000	10
L32E	2,6-Dinitrotoluene (µg/L)	4/26/2005	<10.000	10
L32E	2-Butanone (MEK) (µg/L)	4/26/2005	<5.000	5
L32E	2-Chloroethyl vinyl ether (µg/L)	4/26/2005	<10.000	10
L32E	2-Chloronaphthalene (µg/L)	4/26/2005	<10.000	10
L32E	2-Chlorophenol (µg/L)	4/26/2005	<10.000	10
L32E	2-Chlorotoluene (µg/L)	4/26/2005	<1.000	1
L32E	2-Hexanone (MBK) (µg/L)	4/26/2005	<5.000	5
L32E	2-Propanol (µg/L)	4/26/2005	<1000.000	1000
L32E	3,3-Dichlorobenzidine (µg/L)	4/26/2005	<20.000	20
L32E	4,4'-DDD (µg/L)	4/26/2005	<0.500	0.5
L32E	4,4'-DDE (µg/L)	4/26/2005	<0.500	0.5
L32E	4,4'-DDT (µg/L)	4/26/2005	<0.500	0.5
L32E	4,6-Dinitro-2-methylphenol (µg/L)	4/26/2005	<50.000	50
L32E	4-Bromophenyl phenyl ether (µg/L)	4/26/2005	<10.000	10
L32E	4-Chlorophenyl phenyl ether (µg/L)	4/26/2005	<10.000	10
L32E	4-Chlorotoluene (µg/L)	4/26/2005	<1.000	1
L32E	4-Methyl-2-Pentanone(MIBK) (µg/L)	4/26/2005	<5.000	5
L32E	4-Methylphenol(p-cresol) (µg/L)	4/26/2005	<10.000	10
L32E	4-Nitrophenol (µg/L)	4/26/2005	<10.000	10
L32E	Acenaphthene (µg/L)	4/26/2005	<10.000	10
L32E	Acetone (µg/L)	4/26/2005	24	10
L32E	Alachlor (µg/L)	4/26/2005	<4.000	4
L32E	Aldicarb (µg/L)	4/26/2005	<4.000	4
L32E	Aldrin (µg/L)	4/26/2005	<0.500	0.5
L32E	Alkalinity, Bicarb Total (mg/L)	4/26/2005	5300	2
L32E	alpha-BHC (µg/L)	4/26/2005	<0.500	0.5
L32E	Aluminum - Total (µg/L)	4/26/2005	250	10
L32E	Ammonia, Total (mg/L)	2/16/2005	960	50
L32E	Ammonia, Total (mg/L)	4/26/2005	990	10
L32E	Ammonia, Total (mg/L)	7/29/2005	1500	10
L32E	Ammonia, Total (mg/L)	10/13/2005	1000	5
L32E	Anthracene (µg/L)	4/26/2005	<10.000	10
L32E	Antimony Total, GFAA (µg/L)	4/26/2005	<3.000	3
L32E	Aroclor 1016 (µg/L)	4/26/2005	<5.000	5
L32E	Aroclor 1221 (µg/L)	4/26/2005	<5.000	5
L32E	Aroclor 1232 (µg/L)	4/26/2005	<5.000	5
L32E	Aroclor 1242 (µg/L)	4/26/2005	<5.000	5
L32E	Aroclor 1248 (µg/L)	4/26/2005	<5.000	5
L32E	Aroclor 1254 (µg/L)	4/26/2005	<5.000	5

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L32E	Aroclor 1260 (µg/L)	4/26/2005	<5.000	5
L32E	Arsenic Total,GFAA (µg/L)	2/16/2005	60	1
L32E	Arsenic Total,GFAA (µg/L)	4/26/2005	44	1
L32E	Arsenic Total,GFAA (µg/L)	7/29/2005	50	1
L32E	Arsenic Total,GFAA (µg/L)	10/13/2005	47	1
L32E	Atrazine (µg/L)	4/26/2005	<2.000	2
L32E	Barium - Total (µg/L)	2/16/2005	330	2
L32E	Barium - Total (µg/L)	4/26/2005	420	2
L32E	Barium - Total (µg/L)	7/29/2005	540	2
L32E	Barium - Total (µg/L)	10/13/2005	420	2
L32E	Benzene (µg/L)	4/26/2005	6	1
L32E	Benzo(a)anthracene (µg/L)	4/26/2005	<10.000	10
L32E	Benzo(a)pyrene (µg/L)	4/26/2005	<10.000	10
L32E	Benzo(b)fluoranthene (µg/L)	4/26/2005	<10.000	10
L32E	Benzo(ghi)perylene (µg/L)	4/26/2005	<10.000	10
L32E	Benzo(k)fluoranthene (µg/L)	4/26/2005	<10.000	10
L32E	Beryllium - Total (µg/L)	4/26/2005	<1.000	1
L32E	beta-BHC (µg/L)	4/26/2005	<0.500	0.5
L32E	bis(2-chloroethoxy) methane (µg/L)	4/26/2005	<10.000	10
L32E	bis(2-Chloroethyl) ether (µg/L)	4/26/2005	<10.000	10
L32E	bis(2-Ethylhexyl) phthalate (µg/L)	4/26/2005	<10.000	10
L32E	Bis(chloromethyl)ether (µg/L)	4/26/2005	<10000.000	10000
L32E	BOD 5 (mg/L)	2/16/2005	110	4
L32E	BOD 5 (mg/L)	4/26/2005	100	4
L32E	BOD 5 (mg/L)	7/29/2005	120	4
L32E	BOD 5 (mg/L)	10/13/2005	91	4
L32E	Boron, Total (µg/L)	4/26/2005	38000	10
L32E	Bromobenzene (µg/L)	4/26/2005	<1.000	1
L32E	Bromochloromethane (µg/L)	4/26/2005	<1.000	1
L32E	Bromodichloromethane (µg/L)	4/26/2005	<1.000	1
L32E	Bromoform (µg/L)	4/26/2005	<1.000	1
L32E	Bromomethane (µg/L)	4/26/2005	<2.000	2
L32E	Butyl benzyl phthalate (µg/L)	4/26/2005	<10.000	10
L32E	Cadmium - Total (µg/L)	2/16/2005	<1.000	1
L32E	Cadmium - Total (µg/L)	4/26/2005	<1.000	1
L32E	Cadmium - Total (µg/L)	7/29/2005	<1.000	1
L32E	Cadmium - Total (µg/L)	10/13/2005	<1.000	1
L32E	Calcium - Total (mg/L)	4/26/2005	44	0.1
L32E	Carbofuran (µg/L)	4/26/2005	<15.000	15
L32E	Carbon disulfide (µg/L)	4/26/2005	6	1
L32E	Carbon tetrachloride (µg/L)	4/26/2005	<1.000	1
L32E	Chlordane (Tech) (µg/L)	4/26/2005	<10.000	10
L32E	Chloride, Total (mg/L)	4/26/2005	2200	62.5
L32E	Chlorobenzene (µg/L)	4/26/2005	2	1
L32E	Chloroethane (µg/L)	4/26/2005	<2.000	2

S 50 ppb

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L32E	Chloroform (µg/L)	4/26/2005	<1.000	1
L32E	Chloromethane (µg/L)	4/26/2005	<2.000	2
L32E	Chromium - Total (µg/L)	2/16/2005	110	4
L32E	Chromium - Total (µg/L)	4/26/2005	110	4
L32E	Chromium - Total (µg/L)	7/29/2005	150	0.004
L32E	Chromium - Total (µg/L)	10/13/2005	92	4
L32E	Chromium, Hexavalent (µg/L)	2/16/2005	<5.000	5
L32E	Chromium, Hexavalent (µg/L)	7/29/2005	<50.000	50
L32E	Chromium, Hexavalent (µg/L)	10/13/2005	<50.000	50
L32E	Chrysene (µg/L)	4/26/2005	<10.000	10
L32E	cis-1,2-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L32E	cis-1,3-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L32E	Cobalt - Total (µg/L)	4/26/2005	35	2
L32E	COD (mg/L)	2/16/2005	1700	6
L32E	COD (mg/L)	4/26/2005	1600	6
L32E	COD (mg/L)	7/29/2005	2300	6
L32E	COD (mg/L)	10/13/2005	1500	6
L32E	Coliform, Fecal, A MF (ct/100)	2/16/2005	<10.000	10
L32E	Coliform, Fecal, A MF (ct/100)	4/26/2005	<10.000	10
L32E	Coliform, Fecal, A MF (ct/100)	7/29/2005	<10.000	10
L32E	Coliform, Fecal, A MF (ct/100)	10/13/2005	300	10
L32E	Copper - Total (µg/L)	2/16/2005	54	3
L32E	Copper - Total (µg/L)	4/26/2005	12	3
L32E	Copper - Total (µg/L)	7/29/2005	35	3
L32E	Copper - Total (µg/L)	10/13/2005	43	0.003
L32E	Cyanide - Total (mg/L)	2/16/2005	<0.005	0.005
L32E	Cyanide - Total (mg/L)	4/26/2005	0.015	0.005
L32E	Cyanide - Total (mg/L)	7/29/2005	<0.005	0.005
L32E	Cyanide - Total (mg/L)	10/13/2005	0.012	0.005
L32E	delta-BHC (µg/L)	4/26/2005	<0.500	0.5
L32E	Dibenzo(a,h)anthracene (µg/L)	4/26/2005	<10.000	10
L32E	Dibromochloromethane (µg/L)	4/26/2005	<1.000	1
L32E	Dibromomethane (µg/L)	4/26/2005	<1.000	1
L32E	Dichlorodifluoromethane (µg/L)	4/26/2005	<2.000	2
L32E	Dieldrin (µg/L)	4/26/2005	<0.500	0.5
L32E	Diethyl phthalate (µg/L)	4/26/2005	<10.000	10
L32E	Dimethyl phthalate (µg/L)	4/26/2005	<10.000	10
L32E	Di-n-butyl phthalate (µg/L)	4/26/2005	<10.000	10
L32E	Di-n-octyl phthalate (µg/L)	4/26/2005	<10.000	10
L32E	Dioxin Screen (µg/L)	4/26/2005	<10.000	10
L32E	Endosulfan I (µg/L)	4/26/2005	<0.500	0.5
L32E	Endosulfan II (µg/L)	4/26/2005	<0.500	0.5
L32E	Endosulfan Sulfate (µg/L)	4/26/2005	<0.500	0.5
L32E	Endrin (µg/L)	4/26/2005	<0.500	0.5
L32E	Endrin aldehyde (µg/L)	4/26/2005	<0.500	0.5

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L32E	Ethyl acetate (µg/L)	4/26/2005	<10.000	10
L32E	Ethyl benzene (µg/L)	4/26/2005	20	1
L32E	Ethylene dibromide (µg/L)	4/26/2005	<0.050	0.05
L32E	Fluoranthene (µg/L)	4/26/2005	<10.000	10
L32E	Fluorene (µg/L)	4/26/2005	<10.000	10
L32E	Fluoride, Total (mg/L)	2/16/2005	17	0.25
L32E	Fluoride, Total (mg/L)	4/26/2005	14	0.25
L32E	Fluoride, Total (mg/L)	7/29/2005	16	0.25
L32E	Fluoride, Total (mg/L)	10/13/2005	8.5	0.25
L32E	gamma-BHC (Lindane) (µg/L)	4/26/2005	<0.500	0.5
L32E	Heptachlor (µg/L)	4/26/2005	<0.500	0.5
L32E	Heptachlor epoxide (µg/L)	4/26/2005	<0.500	0.5
L32E	Hexachlorobenzene (µg/L)	4/26/2005	<10.000	10
L32E	Hexachlorobutadiene (µg/L)	4/26/2005	<10.000	10
L32E	Hexachlorocyclopentadiene (µg/L)	4/26/2005	<10.000	10
L32E	Hexachloroethane (µg/L)	4/26/2005	<10.000	10
L32E	Indeno(1,2,3-cd)pyrene (µg/L)	4/26/2005	<10.000	10
L32E	Iodomethane (µg/L)	4/26/2005	<1.000	1
L32E	Iron - Total (µg/L)	2/16/2005	9400	10
L32E	Iron - Total (µg/L)	4/26/2005	3000	10
L32E	Iron - Total (µg/L)	7/29/2005	5400	50
L32E	Iron - Total (µg/L)	10/13/2005	6400	10
L32E	Isopropyl benzene (µg/L)	4/26/2005	3	1
L32E	Lead Total, GFAA (µg/L)	2/16/2005	9	1
L32E	Lead Total, GFAA (µg/L)	4/26/2005	<1.000	1
L32E	Lead Total, GFAA (µg/L)	7/29/2005	3	1
L32E	Lead Total, GFAA (µg/L)	10/13/2005	3	1
L32E	m/p-Xylene (µg/L)	4/26/2005	41	1
L32E	Magnesium - Total (mg/L)	4/26/2005	140	0.1
L32E	Manganese - Total (µg/L)	2/16/2005	240	1
L32E	Manganese - Total (µg/L)	4/26/2005	120	1
L32E	Manganese - Total (µg/L)	7/29/2005	120	1
L32E	Manganese - Total (µg/L)	10/13/2005	150	1
L32E	Mercury - Total (µg/L)	2/16/2005	0.2	0.2
L32E	Mercury - Total (µg/L)	4/26/2005	<0.200	0.2
L32E	Mercury - Total (µg/L)	7/29/2005	<0.200	0.2
L32E	Mercury - Total (µg/L)	10/13/2005	<0.200	0.2
L32E	Methoxychlor (µg/L)	4/26/2005	<2.000	2
L32E	Methylene chloride (µg/L)	4/26/2005	<5.000	5
L32E	Naphthalene (µg/L)	4/26/2005	<10.000	10
L32E	n-Butanol (µg/L)	4/26/2005	<1000.000	1000
L32E	n-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L32E	Nickel - Total (µg/L)	2/16/2005	290	5
L32E	Nickel - Total (µg/L)	4/26/2005	300	5
L32E	Nickel - Total (µg/L)	7/29/2005	250	5

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L32E	Nickel - Total (µg/L)	10/13/2005	270	5
L32E	Nitrate/Nitrite as N, Total (mg/L)	4/26/2005	<0.020	0.02
L32E	Nitrobenzene (µg/L)	4/26/2005	<10.000	10
L32E	N-Nitrosodimethylamine (µg/L)	4/26/2005	<10.000	10
L32E	N-Nitroso-Di-n-propylamine (µg/L)	4/26/2005	<10.000	10
L32E	N-nitrosodiphenylamine (µg/L)	4/26/2005	<10.000	10
L32E	n-Propylbenzene (µg/L)	4/26/2005	2	1
L32E	Oil and grease (mg/L)	2/16/2005	<21.000	21
L32E	Oil and grease (mg/L)	4/26/2005	6.4	5
L32E	Oil and grease (mg/L)	7/29/2005	15	5
L32E	Oil and grease (mg/L)	10/13/2005	<6.000	6
L32E	o-Xylene (µg/L)	4/26/2005	19	1
L32E	Parathion (µg/L)	4/26/2005	<2.000	2
L32E	Pentachlorophenol (µg/L)	4/26/2005	<0.500	0.5
L32E	pH, Aqueous (s.u.)	2/16/2005	6.61	0
L32E	pH, Aqueous (s.u.)	4/26/2005	7.28	0
L32E	pH, Aqueous (s.u.)	7/29/2005	7.32	0
L32E	pH, Aqueous (s.u.)	10/13/2005	6.85	0
L32E	Phenanthrene (µg/L)	4/26/2005	<10.000	10
L32E	Phenols, Total low range (µg/L)	2/16/2005	2500	250
L32E	Phenols, Total low range (µg/L)	4/26/2005	110	5
L32E	Phenols, Total low range (µg/L)	7/29/2005	170	5
L32E	Phenols, Total low range (µg/L)	10/13/2005	46	5
L32E	Phosphorous, Total (µg/L)	2/16/2005	5400	50
L32E	Phosphorous, Total (µg/L)	4/26/2005	7800	50
L32E	Phosphorous, Total (µg/L)	7/29/2005	6900	50
L32E	Phosphorous, Total (µg/L)	10/13/2005	4400	50
L32E	P-Isopropyltoluene (µg/L)	4/26/2005	5	1
L32E	Potassium - Total (mg/L)	4/26/2005	570	0.1
L32E	Pyrene (µg/L)	4/26/2005	<10.000	10
L32E	sec-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L32E	Selenium Total, GFAA (µg/L)	4/26/2005	30	1
L32E	Silver - Total (µg/L)	2/16/2005	<5.000	5
L32E	Silver - Total (µg/L)	4/26/2005	<5.000	5
L32E	Silver - Total (µg/L)	7/29/2005	<5.000	5
L32E	Silver - Total (µg/L)	10/13/2005	<5.000	5
L32E	Silvex (µg/L)	4/26/2005	<0.500	0.5
L32E	Sodium - Total (mg/L)	4/26/2005	1600	0.1
L32E	Specific Conductance, Field (µmhos/cm)	2/16/2005	11490	0
L32E	Specific Conductance, Field (µmhos/cm)	4/26/2005	11430	0
L32E	Specific Conductance, Field (µmhos/cm)	7/29/2005	16640	0
L32E	Specific Conductance, Field (µmhos/cm)	10/13/2005	13100	0
L32E	Styrene (µg/L)	4/26/2005	1	1
L32E	Sulfate, Total (mg/L)	4/26/2005	33	17.5
L32E	tert-Butylbenzene (µg/L)	4/26/2005	<1.000	1

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L32E	Tetrachloroethene (µg/L)	4/26/2005	<1.000	1
L32E	Tetrahydrofuran (µg/L)	4/26/2005	510	200
L32E	Thallium Total, GFAA (µg/L)	4/26/2005	<1.000	1
L32E	Tin Total, GFAA (µg/L)	4/26/2005	<60.000	60
L32E	TOC (mg/L)	4/26/2005	300	0.5
L32E	Toluene (µg/L)	4/26/2005	27	1
L32E	Total Dissolved Solids (mg/L)	2/16/2005	6400	51
L32E	Total Dissolved Solids (mg/L)	4/26/2005	6500	51
L32E	Total Dissolved Solids (mg/L)	7/29/2005	7800	51
L32E	Total Dissolved Solids (mg/L)	10/13/2005	6500	51
L32E	Total Suspended Solids (mg/L)	2/16/2005	800	5
L32E	Total Suspended Solids (mg/L)	4/26/2005	17	2
L32E	Total Suspended Solids (mg/L)	7/29/2005	40	2.5
L32E	Total Suspended Solids (mg/L)	10/13/2005	58	2
L32E	Toxaphene (µg/L)	4/26/2005	<10.000	10
L32E	trans-1,2-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L32E	trans-1,3-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L32E	trans-1,4-Dichloro-2-butene (µg/L)	4/26/2005	<1.000	1
L32E	Trichloroethene (µg/L)	4/26/2005	<1.000	1
L32E	Trichlorofluoromethane (µg/L)	4/26/2005	<1.000	1
L32E	Vinyl acetate (µg/L)	4/26/2005	<5.000	5
L32E	Vinyl chloride (µg/L)	4/26/2005	<2.000	2
L32E	Xylenes - Total (µg/L)	4/26/2005	60	3
L32E	Zinc - Total (µg/L)	2/16/2005	150	6
L32E	Zinc - Total (µg/L)	4/26/2005	17	6
L32E	Zinc - Total (µg/L)	7/29/2005	100	6
L32E	Zinc - Total (µg/L)	10/13/2005	62	6
L32W	1,1,1,2-Tetrachloroethane (µg/L)	4/26/2005	<1.000	1
L32W	1,1,1-Trichloroethane (µg/L)	4/26/2005	<1.000	1
L32W	1,1,2,2-Tetrachloroethane (µg/L)	4/26/2005	<1.000	1
L32W	1,1,2-Trichloroethane (µg/L)	4/26/2005	<1.000	1
L32W	1,1-Dichloroethane (µg/L)	4/26/2005	1	1
L32W	1,1-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L32W	1,1-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L32W	1,2,3-Trichlorobenzene (µg/L)	4/26/2005	<1.000	1
L32W	1,2,3-Trichloropropane (µg/L)	4/26/2005	<1.000	1
L32W	1,2,4-Trichlorobenzene (µg/L)	4/26/2005	<1.000	1
L32W	1,2,4-Trimethylbenzene (µg/L)	4/26/2005	6	1
L32W	1,2-Dibromo-3-chloropropane (µg/L)	4/26/2005	<0.050	0.05
L32W	1,2-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
L32W	1,2-Dichloroethane (µg/L)	4/26/2005	<1.000	1
L32W	1,2-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L32W	1,3,5-Trimethylbenzene (µg/L)	4/26/2005	2	1
L32W	1,3-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
L32W	1,3-Dichloropropane (µg/L)	4/26/2005	<1.000	1

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L32W	1,4-Dichlorobenzene (µg/L)	4/26/2005	3	1
L32W	1-Propanol (µg/L)	4/26/2005	<1000.000	1000
L32W	2,2-Dichloropropane (µg/L)	4/26/2005	<1.000	1
L32W	2,4,6-Trichlorophenol (µg/L)	4/26/2005	<10.000	10
L32W	2,4-D (µg/L)	4/26/2005	<1.000	1
L32W	2,4-Dichlorophenol (µg/L)	4/26/2005	<10.000	10
L32W	2,4-Dimethylphenol (µg/L)	4/26/2005	<10.000	10
L32W	2,4-Dinitrophenol (µg/L)	4/26/2005	<50.000	50
L32W	2,4-Dinitrotoluene (µg/L)	4/26/2005	<10.000	10
L32W	2,6-Dinitrotoluene (µg/L)	4/26/2005	<10.000	10
L32W	2-Butanone (MEK) (µg/L)	4/26/2005	<5.000	5
L32W	2-Chloroethyl vinyl ether (µg/L)	4/26/2005	<10.000	10
L32W	2-Chloronaphthalene (µg/L)	4/26/2005	<10.000	10
L32W	2-Chlorophenol (µg/L)	4/26/2005	<10.000	10
L32W	2-Chlorotoluene (µg/L)	4/26/2005	<1.000	1
L32W	2-Hexanone (MBK) (µg/L)	4/26/2005	<5.000	5
L32W	2-Propanol (µg/L)	4/26/2005	<1000.000	1000
L32W	3,3-Dichlorobenzidine (µg/L)	4/26/2005	<20.000	20
L32W	4,4'-DDD (µg/L)	4/26/2005	<0.100	0.1
L32W	4,4'-DDE (µg/L)	4/26/2005	<0.100	0.1
L32W	4,4'-DDT (µg/L)	4/26/2005	<0.100	0.1
L32W	4,6-Dinitro-2-methylphenol (µg/L)	4/26/2005	<50.000	50
L32W	4-Bromophenyl phenyl ether (µg/L)	4/26/2005	<10.000	10
L32W	4-Chlorophenyl phenyl ether (µg/L)	4/26/2005	<10.000	10
L32W	4-Chlorotoluene (µg/L)	4/26/2005	<1.000	1
L32W	4-Methyl-2-Pentanone(MIBK) (µg/L)	4/26/2005	<5.000	5
L32W	4-Methylphenol(p-cresol) (µg/L)	4/26/2005	<10.000	10
L32W	4-Nitrophenol (µg/L)	4/26/2005	<10.000	10
L32W	Acenaphthene (µg/L)	4/26/2005	<10.000	10
L32W	Acetone (µg/L)	4/26/2005	42	10
L32W	Alachlor (µg/L)	4/26/2005	<4.000	4
L32W	Aldicarb (µg/L)	4/26/2005	<4.000	4
L32W	Aldrin (µg/L)	4/26/2005	<0.050	0.05
L32W	Alkalinity, Bicarb Total (mg/L)	4/26/2005	4500	2
L32W	alpha-BHC (µg/L)	4/26/2005	<0.050	0.05
L32W	Aluminum - Total (µg/L)	4/26/2005	920	10
L32W	Ammonia, Total (mg/L)	2/16/2005	680	50
L32W	Ammonia, Total (mg/L)	4/26/2005	800	10
L32W	Ammonia, Total (mg/L)	7/29/2005	980	0.1
L32W	Ammonia, Total (mg/L)	10/13/2005	940	10
L32W	Anthracene (µg/L)	4/26/2005	<10.000	10
L32W	Antimony Total, GFAA (µg/L)	4/26/2005	4	3
L32W	Aroclor 1016 (µg/L)	4/26/2005	<0.500	0.5
L32W	Aroclor 1221 (µg/L)	4/26/2005	<1.000	1
L32W	Aroclor 1232 (µg/L)	4/26/2005	<0.500	0.5

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L32W	Aroclor 1242 (µg/L)	4/26/2005	<0.500	0.5
L32W	Aroclor 1248 (µg/L)	4/26/2005	<0.500	0.5
L32W	Aroclor 1254 (µg/L)	4/26/2005	<1.000	1
L32W	Aroclor 1260 (µg/L)	4/26/2005	<1.000	1
L32W	Arsenic Total,GFAA (µg/L)	2/16/2005	140	1
L32W	Arsenic Total,GFAA (µg/L)	4/26/2005	190	1
L32W	Arsenic Total,GFAA (µg/L)	7/29/2005	160	1
L32W	Arsenic Total,GFAA (µg/L)	10/13/2005	130	1
L32W	Atrazine (µg/L)	4/26/2005	<2.000	2
L32W	Barium - Total (µg/L)	2/16/2005	630	2
L32W	Barium - Total (µg/L)	4/26/2005	880	2
L32W	Barium - Total (µg/L)	7/29/2005	650	2
L32W	Barium - Total (µg/L)	10/13/2005	620	2
L32W	Benzene (µg/L)	4/26/2005	4	1
L32W	Benzo(a)anthracene (µg/L)	4/26/2005	<10.000	10
L32W	Benzo(a)pyrene (µg/L)	4/26/2005	<10.000	10
L32W	Benzo(b)fluoranthene (µg/L)	4/26/2005	<10.000	10
L32W	Benzo(ghi)perylene (µg/L)	4/26/2005	<10.000	10
L32W	Benzo(k)fluoranthene (µg/L)	4/26/2005	<10.000	10
L32W	Beryllium - Total (µg/L)	4/26/2005	<1.000	1
L32W	beta-BHC (µg/L)	4/26/2005	<0.050	0.05
L32W	bis(2-chloroethoxy) methane (µg/L)	4/26/2005	<10.000	10
L32W	bis(2-Chloroethyl) ether (µg/L)	4/26/2005	<10.000	10
L32W	bis(2-Ethylhexyl) phthalate (µg/L)	4/26/2005	<10.000	10
L32W	Bis(chloromethyl)ether (µg/L)	4/26/2005	<10000.000	10000
L32W	BOD 5 (mg/L)	2/16/2005	60	4
L32W	BOD 5 (mg/L)	4/26/2005	100	4
L32W	BOD 5 (mg/L)	7/29/2005	130	4
L32W	BOD 5 (mg/L)	10/13/2005	83	4
L32W	Boron, Total (µg/L)	4/26/2005	21000	10
L32W	Bromobenzene (µg/L)	4/26/2005	<1.000	1
L32W	Bromochloromethane (µg/L)	4/26/2005	<1.000	1
L32W	Bromodichloromethane (µg/L)	4/26/2005	<1.000	1
L32W	Bromoform (µg/L)	4/26/2005	<1.000	1
L32W	Bromomethane (µg/L)	4/26/2005	<2.000	2
L32W	Butyl benzyl phthalate (µg/L)	4/26/2005	<10.000	10
L32W	Cadmium - Total (µg/L)	2/16/2005	<1.000	1
L32W	Cadmium - Total (µg/L)	4/26/2005	<1.000	1
L32W	Cadmium - Total (µg/L)	7/29/2005	<1.000	1
L32W	Cadmium - Total (µg/L)	10/13/2005	<1.000	1
L32W	Calcium - Total (mg/L)	4/26/2005	110	0.1
L32W	Carbofuran (µg/L)	4/26/2005	<15.000	15
L32W	Carbon disulfide (µg/L)	4/26/2005	14	1
L32W	Carbon tetrachloride (µg/L)	4/26/2005	<1.000	1
L32W	Chlordane (Tech) (µg/L)	4/26/2005	<0.500	0.5

1 ppb

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L32W	Chloride, Total (mg/L)	4/26/2005	2100	62.5
L32W	Chlorobenzene (µg/L)	4/26/2005	<1.000	1
L32W	Chloroethane (µg/L)	4/26/2005	<2.000	2
L32W	Chloroform (µg/L)	4/26/2005	<1.000	1
L32W	Chloromethane (µg/L)	4/26/2005	<2.000	2
L32W	Chromium - Total (µg/L)	2/16/2005	120	4
L32W	Chromium - Total (µg/L)	4/26/2005	140	4
L32W	Chromium - Total (µg/L)	7/29/2005	130	0.004
L32W	Chromium - Total (µg/L)	10/13/2005	120	4
L32W	Chromium, Hexavalent (µg/L)	2/16/2005	<5.000	5
L32W	Chromium, Hexavalent (µg/L)	7/29/2005	<100.000	100
L32W	Chromium, Hexavalent (µg/L)	10/13/2005	<50.000	50
L32W	Chrysene (µg/L)	4/26/2005	<10.000	10
L32W	cis-1,2-Dichloroethene (µg/L)	4/26/2005	2	1
L32W	cis-1,3-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L32W	Cobalt - Total (µg/L)	4/26/2005	30	2
L32W	COD (mg/L)	2/16/2005	1700	6
L32W	COD (mg/L)	4/26/2005	1800	6
L32W	COD (mg/L)	7/29/2005	2000	6
L32W	COD (mg/L)	10/13/2005	2000	6
L32W	Coliform, Fecal, A MF (ct/100)	2/16/2005	<10.000	10
L32W	Coliform, Fecal, A MF (ct/100)	4/26/2005	<10.000	10
L32W	Coliform, Fecal, A MF (ct/100)	7/29/2005	<10.000	10
L32W	Coliform, Fecal, A MF (ct/100)	10/13/2005	<10.000	10
L32W	Copper - Total (µg/L)	2/16/2005	12	3
L32W	Copper - Total (µg/L)	4/26/2005	31	3
L32W	Copper - Total (µg/L)	7/29/2005	120	3
L32W	Copper - Total (µg/L)	10/13/2005	52	0.003
L32W	Cyanide - Total (mg/L)	2/16/2005	<0.005	0.005
L32W	Cyanide - Total (mg/L)	4/26/2005	<0.005	0.005
L32W	Cyanide - Total (mg/L)	7/29/2005	0.006	0.005
L32W	Cyanide - Total (mg/L)	10/13/2005	0.014	0.005
L32W	delta-BHC (µg/L)	4/26/2005	<0.050	0.05
L32W	Dibenzo(a,h)anthracene (µg/L)	4/26/2005	<10.000	10
L32W	Dibromochloromethane (µg/L)	4/26/2005	<1.000	1
L32W	Dibromomethane (µg/L)	4/26/2005	<1.000	1
L32W	Dichlorodifluoromethane (µg/L)	4/26/2005	<2.000	2
L32W	Dieldrin (µg/L)	4/26/2005	<0.100	0.1
L32W	Diethyl phthalate (µg/L)	4/26/2005	<10.000	10
L32W	Dimethyl phthalate (µg/L)	4/26/2005	<10.000	10
L32W	Di-n-butyl phthalate (µg/L)	4/26/2005	<10.000	10
L32W	Di-n-octyl phthalate (µg/L)	4/26/2005	<10.000	10
L32W	Dioxin Screen (µg/L)	4/26/2005	<10.000	10
L32W	Endosulfan I (µg/L)	4/26/2005	<0.050	0.05
L32W	Endosulfan II (µg/L)	4/26/2005	<0.100	0.1

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L32W	Endosulfan Sulfate (µg/L)	4/26/2005	<0.100	0.1
L32W	Endrin (µg/L)	4/26/2005	<0.100	0.1
L32W	Endrin aldehyde (µg/L)	4/26/2005	<0.500	0.5
L32W	Ethyl acetate (µg/L)	4/26/2005	<10.000	10
L32W	Ethyl benzene (µg/L)	4/26/2005	19	1
L32W	Ethylene dibromide (µg/L)	4/26/2005	<0.050	0.05
L32W	Fluoranthene (µg/L)	4/26/2005	<10.000	10
L32W	Fluorene (µg/L)	4/26/2005	<10.000	10
L32W	Fluoride, Total (mg/L)	2/16/2005	0.68	0.25
L32W	Fluoride, Total (mg/L)	4/26/2005	0.74	0.25
L32W	Fluoride, Total (mg/L)	7/29/2005	0.77	0.25
L32W	Fluoride, Total (mg/L)	10/13/2005	0.72	0.25
L32W	gamma-BHC (Lindane) (µg/L)	4/26/2005	<0.050	0.05
L32W	Heptachlor (µg/L)	4/26/2005	<0.050	0.05
L32W	Heptachlor epoxide (µg/L)	4/26/2005	<0.050	0.05
L32W	Hexachlorobenzene (µg/L)	4/26/2005	<10.000	10
L32W	Hexachlorobutadiene (µg/L)	4/26/2005	<10.000	10
L32W	Hexachlorocyclopentadiene (µg/L)	4/26/2005	<10.000	10
L32W	Hexachloroethane (µg/L)	4/26/2005	<10.000	10
L32W	Indeno(1,2,3-cd)pyrene (µg/L)	4/26/2005	<10.000	10
L32W	Iodomethane (µg/L)	4/26/2005	<1.000	1
L32W	Iron - Total (µg/L)	2/16/2005	1100	10
L32W	Iron - Total (µg/L)	4/26/2005	2000	10
L32W	Iron - Total (µg/L)	7/29/2005	1800	50
L32W	Iron - Total (µg/L)	10/13/2005	1700	10
L32W	Isopropyl benzene (µg/L)	4/26/2005	1	1
L32W	Lead Total, GFAA (µg/L)	2/16/2005	3	1
L32W	Lead Total, GFAA (µg/L)	4/26/2005	4	1
L32W	Lead Total, GFAA (µg/L)	7/29/2005	4	1
L32W	Lead Total, GFAA (µg/L)	10/13/2005	2	1
L32W	m/p-Xylene (µg/L)	4/26/2005	21	1
L32W	Magnesium - Total (mg/L)	4/26/2005	180	0.1
L32W	Manganese - Total (µg/L)	2/16/2005	200	1
L32W	Manganese - Total (µg/L)	4/26/2005	260	1
L32W	Manganese - Total (µg/L)	7/29/2005	240	1
L32W	Manganese - Total (µg/L)	10/13/2005	210	1
L32W	Mercury - Total (µg/L)	2/16/2005	<0.200	0.2
L32W	Mercury - Total (µg/L)	4/26/2005	<0.200	0.2
L32W	Mercury - Total (µg/L)	7/29/2005	<0.200	0.2
L32W	Mercury - Total (µg/L)	10/13/2005	<0.200	0.2
L32W	Methoxychlor (µg/L)	4/26/2005	<0.500	0.5
L32W	Methylene chloride (µg/L)	4/26/2005	<5.000	5
L32W	Naphthalene (µg/L)	4/26/2005	<10.000	10
L32W	n-Butanol (µg/L)	4/26/2005	<1000.000	1000
L32W	n-Butylbenzene (µg/L)	4/26/2005	<1.000	1

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L32W	Nickel - Total (µg/L)	2/16/2005	180	5
L32W	Nickel - Total (µg/L)	4/26/2005	250	5
L32W	Nickel - Total (µg/L)	7/29/2005	180	5
L32W	Nickel - Total (µg/L)	10/13/2005	180	5
L32W	Nitrate/Nitrite as N, Total (mg/L)	4/26/2005	0.096	0.02
L32W	Nitrobenzene (µg/L)	4/26/2005	<10.000	10
L32W	N-Nitrosodimethylamine (µg/L)	4/26/2005	<10.000	10
L32W	N-Nitroso-Di-n-propylamine (µg/L)	4/26/2005	<10.000	10
L32W	N-nitrosodiphenylamine (µg/L)	4/26/2005	<10.000	10
L32W	n-Propylbenzene (µg/L)	4/26/2005	<1.000	1
L32W	Oil and grease (mg/L)	2/16/2005	<17.000	17
L32W	Oil and grease (mg/L)	4/26/2005	<5.000	5
L32W	Oil and grease (mg/L)	7/29/2005	6.6	5
L32W	Oil and grease (mg/L)	10/13/2005	6.5	5
L32W	o-Xylene (µg/L)	4/26/2005	13	1
L32W	Parathion (µg/L)	4/26/2005	<2.000	2
L32W	Pentachlorophenol (µg/L)	4/26/2005	<0.500	0.5
L32W	pH, Aqueous (s.u.)	2/16/2005	7.18	0
L32W	pH, Aqueous (s.u.)	4/26/2005	7.36	0
L32W	pH, Aqueous (s.u.)	7/29/2005	7.33	0
L32W	pH, Aqueous (s.u.)	10/13/2005	7.26	0
L32W	Phenanthrene (µg/L)	4/26/2005	<10.000	10
L32W	Phenols, Total low range (µg/L)	2/16/2005	12000	1250
L32W	Phenols, Total low range (µg/L)	4/26/2005	150	5
L32W	Phenols, Total low range (µg/L)	7/29/2005	180	5
L32W	Phenols, Total low range (µg/L)	10/13/2005	110	5
L32W	Phosphorous, Total (µg/L)	2/16/2005	4200	50
L32W	Phosphorous, Total (µg/L)	4/26/2005	7200	50
L32W	Phosphorous, Total (µg/L)	7/29/2005	4900	50
L32W	Phosphorous, Total (µg/L)	10/13/2005	4600	50
L32W	P-Isopropyltoluene (µg/L)	4/26/2005	3	1
L32W	Potassium - Total (mg/L)	4/26/2005	510	0.1
L32W	Pyrene (µg/L)	4/26/2005	<10.000	10
L32W	sec-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L32W	Selenium Total, GFAA (µg/L)	4/26/2005	29	1
L32W	Silver - Total (µg/L)	2/16/2005	<5.000	5
L32W	Silver - Total (µg/L)	4/26/2005	<5.000	5
L32W	Silver - Total (µg/L)	7/29/2005	<5.000	5
L32W	Silver - Total (µg/L)	10/13/2005	<5.000	5
L32W	Silvex (µg/L)	4/26/2005	<0.500	0.5
L32W	Sodium - Total (mg/L)	4/26/2005	1600	0.1
L32W	Specific Conductance, Field (µmhos/cm)	2/16/2005	5200	0
L32W	Specific Conductance, Field (µmhos/cm)	4/26/2005	9500	0
L32W	Specific Conductance, Field (µmhos/cm)	7/29/2005	13100	0
L32W	Specific Conductance, Field (µmhos/cm)	10/13/2005	12800	0

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L32W	Styrene (µg/L)	4/26/2005	2	1
L32W	Sulfate, Total (mg/L)	4/26/2005	30	17.5
L32W	tert-Butylbenzene (µg/L)	4/26/2005	<1.000	1
L32W	Tetrachloroethene (µg/L)	4/26/2005	<1.000	1
L32W	Tetrahydrofuran (µg/L)	4/26/2005	25	20
L32W	Thallium Total, GFAA (µg/L)	4/26/2005	<1.000	1
L32W	Tin Total, GFAA (µg/L)	4/26/2005	<60.000	60
L32W	TOC (mg/L)	4/26/2005	520	0.5
L32W	Toluene (µg/L)	4/26/2005	28	1
L32W	Total Dissolved Solids (mg/L)	2/16/2005	6200	51
L32W	Total Dissolved Solids (mg/L)	4/26/2005	6400	51
L32W	Total Dissolved Solids (mg/L)	7/29/2005	6900	51
L32W	Total Dissolved Solids (mg/L)	10/13/2005	6500	51
L32W	Total Suspended Solids (mg/L)	2/16/2005	2.8	2
L32W	Total Suspended Solids (mg/L)	4/26/2005	32	2
L32W	Total Suspended Solids (mg/L)	7/29/2005	22	2
L32W	Total Suspended Solids (mg/L)	10/13/2005	12	2
L32W	Toxaphene (µg/L)	4/26/2005	<0.500	0.5
L32W	trans-1,2-Dichloroethene (µg/L)	4/26/2005	<1.000	1
L32W	trans-1,3-Dichloropropene (µg/L)	4/26/2005	<1.000	1
L32W	trans-1,4-Dichloro-2-butene (µg/L)	4/26/2005	<1.000	1
L32W	Trichloroethene (µg/L)	4/26/2005	<1.000	1
L32W	Trichlorofluoromethane (µg/L)	4/26/2005	<1.000	1
L32W	Vinyl acetate (µg/L)	4/26/2005	<5.000	5
L32W	Vinyl chloride (µg/L)	4/26/2005	<2.000	2
L32W	Xylenes - Total (µg/L)	4/26/2005	35	3
L32W	Zinc - Total (µg/L)	2/16/2005	56	6
L32W	Zinc - Total (µg/L)	4/26/2005	94	6
L32W	Zinc - Total (µg/L)	7/29/2005	130	6
L32W	Zinc - Total (µg/L)	10/13/2005	49	6
LCMP	1,1,1,2-Tetrachloroethane (µg/L)	4/26/2005	<1.000	1
LCMP	1,1,1-Trichloroethane (µg/L)	4/26/2005	<1.000	1
LCMP	1,1,2,2-Tetrachloroethane (µg/L)	4/26/2005	<1.000	1
LCMP	1,1,2-Trichloroethane (µg/L)	4/26/2005	<1.000	1
LCMP	1,1-Dichloroethane (µg/L)	4/26/2005	<1.000	1
LCMP	1,1-Dichloroethene (µg/L)	4/26/2005	<1.000	1
LCMP	1,1-Dichloropropene (µg/L)	4/26/2005	<1.000	1
LCMP	1,2,3-Trichlorobenzene (µg/L)	4/26/2005	<1.000	1
LCMP	1,2,3-Trichloropropane (µg/L)	4/26/2005	<1.000	1
LCMP	1,2,4-Trichlorobenzene (µg/L)	4/26/2005	<1.000	1
LCMP	1,2,4-Trimethylbenzene (µg/L)	4/26/2005	4	1
LCMP	1,2-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
LCMP	1,2-Dichloroethane (µg/L)	4/26/2005	<1.000	1
LCMP	1,2-Dichloropropane (µg/L)	4/26/2005	<1.000	1
LCMP	1,3,5-Trimethylbenzene (µg/L)	4/26/2005	1	1

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
LCMP	1,3-Dichlorobenzene (µg/L)	4/26/2005	<1.000	1
LCMP	1,3-Dichloropropane (µg/L)	4/26/2005	<1.000	1
LCMP	1,4-Dichlorobenzene (µg/L)	4/26/2005	1	1
LCMP	1-Propanol (µg/L)	4/26/2005	<1000.000	1000
LCMP	2,2-Dichloropropane (µg/L)	4/26/2005	<1.000	1
LCMP	2,4,5-T (µg/L)	4/26/2005	<0.500	0.5
LCMP	2,4,5-Trichlorophenol (µg/L)	4/26/2005	<10.000	10
LCMP	2,4,6-Trichlorophenol (µg/L)	4/26/2005	<10.000	10
LCMP	2,4-D (µg/L)	4/26/2005	<1.000	1
LCMP	2,4-Dichlorophenol (µg/L)	4/26/2005	<10.000	10
LCMP	2,4-Dimethylphenol (µg/L)	4/26/2005	<10.000	10
LCMP	2,4-Dinitrophenol (µg/L)	4/26/2005	<50.000	50
LCMP	2,4-Dinitrotoluene (µg/L)	4/26/2005	<10.000	10
LCMP	2,6-Dinitrotoluene (µg/L)	4/26/2005	<10.000	10
LCMP	2-Butanone (MEK) (µg/L)	4/26/2005	66	5
LCMP	2-Chloroethyl vinyl ether (µg/L)	4/26/2005	<10.000	10
LCMP	2-Chloronaphthalene (µg/L)	4/26/2005	<10.000	10
LCMP	2-Chlorophenol (µg/L)	4/26/2005	<10.000	10
LCMP	2-Chlorotoluene (µg/L)	4/26/2005	<1.000	1
LCMP	2-Hexanone (MBK) (µg/L)	4/26/2005	<5.000	5
LCMP	2-Methylphenol(o-cresol) (µg/L)	4/26/2005	<10.000	10
LCMP	2-Nitrophenol (µg/L)	4/26/2005	<10.000	10
LCMP	2-Propanol (µg/L)	4/26/2005	<1000.000	1000
LCMP	3,3-Dichlorobenzidine (µg/L)	4/26/2005	<20.000	20
LCMP	3-Methylphenol(m-cresol) (µg/L)	4/26/2005	<10.000	10
LCMP	4,4'-DDD (µg/L)	4/26/2005	<0.500	0.5
LCMP	4,4'-DDE (µg/L)	4/26/2005	<0.500	0.5
LCMP	4,4'-DDT (µg/L)	4/26/2005	<0.500	0.5
LCMP	4,6-Dinitro-2-methylphenol (µg/L)	4/26/2005	<50.000	50
LCMP	4-Bromophenyl phenyl ether (µg/L)	4/26/2005	<10.000	10
LCMP	4-Chloro-3-methylphenol (µg/L)	4/26/2005	<10.000	10
LCMP	4-Chlorophenyl phenyl ether (µg/L)	4/26/2005	<10.000	10
LCMP	4-Chlorotoluene (µg/L)	4/26/2005	<1.000	1
LCMP	4-Methyl-2-Pentanone(MIBK) (µg/L)	4/26/2005	7	5
LCMP	4-Methylphenol(p-cresol) (µg/L)	4/26/2005	<10.000	10
LCMP	4-Nitrophenol (µg/L)	4/26/2005	<10.000	10
LCMP	Acenaphthene (µg/L)	4/26/2005	<10.000	10
LCMP	Acenaphthylene (µg/L)	4/26/2005	<10.000	10
LCMP	Acetone (µg/L)	4/26/2005	120	10
LCMP	Acrolein (µg/L)	4/26/2005	<50.000	50
LCMP	Acrylonitrile (µg/L)	4/26/2005	<50.000	50
LCMP	Aldrin (µg/L)	4/26/2005	<0.500	0.5
LCMP	alpha-BHC (µg/L)	4/26/2005	<0.500	0.5
LCMP	Anthracene (µg/L)	4/26/2005	<10.000	10
LCMP	Aroclor 1016 (µg/L)	4/26/2005	<5.000	5

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
LCMP	Aroclor 1221 (µg/L)	4/26/2005	<5.000	5
LCMP	Aroclor 1232 (µg/L)	4/26/2005	<5.000	5
LCMP	Aroclor 1242 (µg/L)	4/26/2005	<5.000	5
LCMP	Aroclor 1248 (µg/L)	4/26/2005	<5.000	5
LCMP	Aroclor 1254 (µg/L)	4/26/2005	<5.000	5
LCMP	Aroclor 1260 (µg/L)	4/26/2005	<5.000	5
LCMP	Arsenic Total,GFAA (µg/L)	4/26/2005	44	1
LCMP	Barium - Total (µg/L)	4/26/2005	610	2
LCMP	Benzene (µg/L)	4/26/2005	4	1
LCMP	Benzo(a)anthracene (µg/L)	4/26/2005	<10.000	10
LCMP	Benzo(a)pyrene (µg/L)	4/26/2005	<10.000	10
LCMP	Benzo(b)fluoranthene (µg/L)	4/26/2005	<10.000	10
LCMP	Benzo(ghi)perylene (µg/L)	4/26/2005	<10.000	10
LCMP	Benzo(k)fluoranthene (µg/L)	4/26/2005	<10.000	10
LCMP	beta-BHC (µg/L)	4/26/2005	<0.500	0.5
LCMP	bis(2-chloroethoxy) methane (µg/L)	4/26/2005	<10.000	10
LCMP	bis(2-Chloroethyl) ether (µg/L)	4/26/2005	<10.000	10
LCMP	bis(2-Chloroisopropyl) ether (µg/L)	4/26/2005	<10.000	10
LCMP	bis(2-Ethylhexyl) phthalate (µg/L)	4/26/2005	<10.000	10
LCMP	Bis(chloromethyl)ether (µg/L)	4/26/2005	<10000.000	10000
LCMP	Bromobenzene (µg/L)	4/26/2005	<1.000	1
LCMP	Bromochloromethane (µg/L)	4/26/2005	<1.000	1
LCMP	Bromodichloromethane (µg/L)	4/26/2005	<1.000	1
LCMP	Bromoform (µg/L)	4/26/2005	<1.000	1
LCMP	Bromomethane (µg/L)	4/26/2005	<2.000	2
LCMP	Butyl benzyl phthalate (µg/L)	4/26/2005	<10.000	10
LCMP	Cadmium - Total (µg/L)	4/26/2005	<1.000	1
LCMP	Carbon disulfide (µg/L)	4/26/2005	4	1
LCMP	Carbon tetrachloride (µg/L)	4/26/2005	<1.000	1
LCMP	Chlordane (Tech) (µg/L)	4/26/2005	<10.000	10
LCMP	Chlorobenzene (µg/L)	4/26/2005	1	1
LCMP	Chloroethane (µg/L)	4/26/2005	2	2
LCMP	Chloroform (µg/L)	4/26/2005	<1.000	1
LCMP	Chloromethane (µg/L)	4/26/2005	<2.000	2
LCMP	Chromium - Total (µg/L)	4/26/2005	51	4
LCMP	Chromium, Hexavalent (µg/L)	4/26/2005	<10.000	10
LCMP	Chrysene (µg/L)	4/26/2005	<10.000	10
LCMP	cis-1,2-Dichloroethene (µg/L)	4/26/2005	<1.000	1
LCMP	cis-1,3-Dichloropropene (µg/L)	4/26/2005	<1.000	1
LCMP	Cresol, Total (µg/L)	4/26/2005	<30.000	30
LCMP	Dalapon (µg/L)	4/26/2005	<15.000	15
LCMP	delta-BHC (µg/L)	4/26/2005	<0.500	0.5
LCMP	Dibenzo(a,h)anthracene (µg/L)	4/26/2005	<10.000	10
LCMP	Dibromochloromethane (µg/L)	4/26/2005	<1.000	1
LCMP	Dibromomethane (µg/L)	4/26/2005	<1.000	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
LCMP	Dichlorodifluoromethane (µg/L)	4/26/2005	<2.000	2
LCMP	Dieldrin (µg/L)	4/26/2005	<0.500	0.5
LCMP	Diethyl phthalate (µg/L)	4/26/2005	<10.000	10
LCMP	Dimethyl phthalate (µg/L)	4/26/2005	<10.000	10
LCMP	Di-n-butyl phthalate (µg/L)	4/26/2005	<10.000	10
LCMP	Di-n-octyl phthalate (µg/L)	4/26/2005	<10.000	10
LCMP	Dinoseb (µg/L)	4/26/2005	<2.000	2
LCMP	Dioxin Screen (µg/L)	4/26/2005	<50.000	50
LCMP	Endosulfan I (µg/L)	4/26/2005	<0.500	0.5
LCMP	Endosulfan II (µg/L)	4/26/2005	<0.500	0.5
LCMP	Endosulfan Sulfate (µg/L)	4/26/2005	<0.500	0.5
LCMP	Endrin (µg/L)	4/26/2005	<0.500	0.5
LCMP	Endrin aldehyde (µg/L)	4/26/2005	<0.500	0.5
LCMP	Ethyl acetate (µg/L)	4/26/2005	<10.000	10
LCMP	Ethyl benzene (µg/L)	4/26/2005	7	1
LCMP	Ethyl methacrylate (µg/L)	4/26/2005	<5.000	5
LCMP	Flashpoint, Closed Cup (deg F)	4/26/2005	200	50
LCMP	Fluoranthene (µg/L)	4/26/2005	<10.000	10
LCMP	Fluorene (µg/L)	4/26/2005	<10.000	10
LCMP	gamma-BHC (Lindane) (µg/L)	4/26/2005	<0.500	0.5
LCMP	Heptachlor (µg/L)	4/26/2005	<0.500	0.5
LCMP	Heptachlor epoxide (µg/L)	4/26/2005	<0.500	0.5
LCMP	Hexachlorobenzene (µg/L)	4/26/2005	<10.000	10
LCMP	Hexachlorobutadiene (µg/L)	4/26/2005	<10.000	10
LCMP	Hexachlorocyclopentadiene (µg/L)	4/26/2005	<10.000	10
LCMP	Hexachloroethane (µg/L)	4/26/2005	<10.000	10
LCMP	Indeno(1,2,3-cd)pyrene (µg/L)	4/26/2005	<10.000	10
LCMP	Iodomethane (µg/L)	4/26/2005	<1.000	1
LCMP	Isophorone (µg/L)	4/26/2005	<10.000	10
LCMP	Isopropyl benzene (µg/L)	4/26/2005	1	1
LCMP	Lead Total, GFAA (µg/L)	4/26/2005	<1.000	1
LCMP	m/p-Xylene (µg/L)	4/26/2005	11	1
LCMP	Mercury - Total (µg/L)	4/26/2005	<0.020	0.02
LCMP	Methoxychlor (µg/L)	4/26/2005	<2.000	2
LCMP	Methylene chloride (µg/L)	4/26/2005	<5.000	5
LCMP	Naphthalene (µg/L)	4/26/2005	<10.000	10
LCMP	n-Butanol (µg/L)	4/26/2005	<1000.000	1000
LCMP	n-Butylbenzene (µg/L)	4/26/2005	<1.000	1
LCMP	Nitrobenzene (µg/L)	4/26/2005	<10.000	10
LCMP	N-Nitrosodimethylamine (µg/L)	4/26/2005	<10.000	10
LCMP	N-Nitroso-Di-n-propylamine (µg/L)	4/26/2005	<10.000	10
LCMP	N-nitrosodiphenylamine (µg/L)	4/26/2005	<10.000	10
LCMP	n-Propylbenzene (µg/L)	4/26/2005	1	1
LCMP	o-Xylene (µg/L)	4/26/2005	6	1
LCMP	Pentachlorophenol (µg/L)	4/26/2005	<0.500	0.5

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
LCMP	pH, Field Aqueous (s.u.)	4/26/2005	7.13	0
LCMP	Phenanthrene (µg/L)	4/26/2005	<10.000	10
LCMP	Phenol (µg/L)	4/26/2005	<10.000	10
LCMP	Picloram (µg/L)	4/26/2005	<2.000	2
LCMP	P-Isopropyltoluene (µg/L)	4/26/2005	1	1
LCMP	Pyrene (µg/L)	4/26/2005	<10.000	10
LCMP	Pyridine (µg/L)	4/26/2005	<10.000	10
LCMP	sec-Butylbenzene (µg/L)	4/26/2005	<1.000	1
LCMP	Selenium Total, GFAA (µg/L)	4/26/2005	15	1
LCMP	Silver - Total (µg/L)	4/26/2005	<5.000	5
LCMP	Silvex (µg/L)	4/26/2005	<0.500	0.5
LCMP	Specific Conductance, Field (µmhos/cm)	4/26/2005	6990	0
LCMP	Styrene (µg/L)	4/26/2005	<1.000	1
LCMP	tert-Butylbenzene (µg/L)	4/26/2005	<1.000	1
LCMP	Tetrachloroethene (µg/L)	4/26/2005	<1.000	1
LCMP	Tetrahydrofuran (µg/L)	4/26/2005	180	20
LCMP	Toluene (µg/L)	4/26/2005	16	1
LCMP	Toxaphene (µg/L)	4/26/2005	<10.000	10
LCMP	trans-1,2-Dichloroethene (µg/L)	4/26/2005	<1.000	1
LCMP	trans-1,3-Dichloropropene (µg/L)	4/26/2005	<1.000	1
LCMP	trans-1,4-Dichloro-2-butene (µg/L)	4/26/2005	<1.000	1
LCMP	Trichloroethene (µg/L)	4/26/2005	<1.000	1
LCMP	Trichlorofluoromethane (µg/L)	4/26/2005	<1.000	1
LCMP	Vinyl acetate (µg/L)	4/26/2005	<5.000	5
LCMP	Vinyl chloride (µg/L)	4/26/2005	<2.000	2
LCMP	Xylenes - Total (µg/L)	4/26/2005	17	3

Notes

1. µg/L = micrograms per liter = parts per billion (ppb)
2. mg/L = milligrams per liter = parts per million (ppm)
3. umhos/cm = micromohs per centimeter
4. s.u. = standard units
5. cfu/100 mL = colony forming units per 100 milliliters
6. <= compound not detected at the specified laboratory method detection limit

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2006
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	1,1,1,2-Tetrachloroethane (µg/L)	4/ 5/2006	<1	1
L301	1,1,1-Trichloroethane (µg/L)	4/ 5/2006	<1	1
L301	1,1,2,2-Tetrachloroethane (µg/L)	4/ 5/2006	<1	1
L301	1,1,2-Trichloroethane (µg/L)	4/ 5/2006	<1	1
L301	1,1-Dichloroethane (µg/L)	4/ 5/2006	<1	1
L301	1,1-Dichloroethene (µg/L)	4/ 5/2006	<1	1
L301	1,1-Dichloropropene (µg/L)	4/ 5/2006	<1	1
L301	1,2,3-Trichlorobenzene (µg/L)	4/ 5/2006	<1	1
L301	1,2,3-Trichloropropane (µg/L)	4/ 5/2006	<1	1
L301	1,2,4-Trichlorobenzene (µg/L)	4/ 5/2006	<1	1
L301	1,2,4-Trimethylbenzene (µg/L)	4/ 5/2006	<1	1
L301	1,2-Dibromo-3-chloropropane (µg/L)	4/ 5/2006	<0.050	0.05
L301	1,2-Dichlorobenzene (µg/L)	4/ 5/2006	<1	1
L301	1,2-Dichloroethane (µg/L)	4/ 5/2006	<1	1
L301	1,2-Dichloropropane (µg/L)	4/ 5/2006	<1	1
L301	1,3,5-Trimethylbenzene (µg/L)	4/ 5/2006	<1	1
L301	1,3-Dichlorobenzene (µg/L)	4/ 5/2006	<1	1
L301	1,3-Dichloropropane (µg/L)	4/ 5/2006	<1	1
L301	1,4-Dichlorobenzene (µg/L)	4/ 5/2006	3	1
L301	1-Propanol (µg/L)	4/ 5/2006	<1000	1000
L301	2,2-Dichloropropane (µg/L)	4/ 5/2006	<1	1
L301	2,4,6-Trichlorophenol (µg/L)	4/ 5/2006	<100	100
L301	2,4-D (µg/L)	4/ 5/2006	<1	1
L301	2,4-Dichlorophenol (µg/L)	4/ 5/2006	<100	100
L301	2,4-Dimethylphenol (µg/L)	4/ 5/2006	<100	100
L301	2,4-Dinitrophenol (µg/L)	4/ 5/2006	<500	500
L301	2,4-Dinitrotoluene (µg/L)	4/ 5/2006	<100	100
L301	2,6-Dinitrotoluene (µg/L)	4/ 5/2006	<100	100
L301	2-Butanone (MEK) (µg/L)	4/ 5/2006	<5	5
L301	2-Chloroethyl vinyl ether (µg/L)	4/ 5/2006	<10	10
L301	2-Chloronaphthalene (µg/L)	4/ 5/2006	<100	100
L301	2-Chlorophenol (µg/L)	4/ 5/2006	<100	100
L301	2-Chlorotoluene (µg/L)	4/ 5/2006	<1	1
L301	2-Hexanone (MBK) (µg/L)	4/ 5/2006	<5	5
L301	3,3-Dichlorobenzidine (µg/L)	4/ 5/2006	<200	200
L301	4,4'-DDD (µg/L)	4/ 5/2006	<1	1
L301	4,4'-DDE (µg/L)	4/ 5/2006	<1	1
L301	4,4'-DDT (µg/L)	4/ 5/2006	<1	1
L301	4,6-Dinitro-2-methylphenol (µg/L)	4/ 5/2006	<500	500
L301	4-Bromophenyl phenyl ether (µg/L)	4/ 5/2006	<100	100
L301	4-Chlorophenyl phenyl ether (µg/L)	4/ 5/2006	<100	100

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2006
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	4-Chlorotoluene (µg/L)	4/ 5/2006	<1	1
L301	4-Methyl-2-Pentanone(MIBK) (µg/L)	4/ 5/2006	<5	5
L301	4-Methylphenol(p-cresol) (µg/L)	4/ 5/2006	<100	100
L301	4-Nitrophenol (µg/L)	4/ 5/2006	<100	100
L301	Acenaphthene (µg/L)	4/ 5/2006	<100	100
L301	Acetone (µg/L)	4/ 5/2006	<10	10
L301	Alachlor (µg/L)	4/ 5/2006	<4	4
L301	Aldicarb (µg/L)	4/ 5/2006	<4	4
L301	Aldrin (µg/L)	4/ 5/2006	<0.5	0.5
L301	Alkalinity, Bicarb Total (mg/L)	4/ 5/2006	620	2
L301	alpha-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L301	Aluminum, Total (µg/L)	4/ 5/2006	270	1
L301	Ammonia, Total (mg/L)	1/18/2006	230	2.5
L301	Ammonia, Total (mg/L)	4/ 5/2006	21	0.5
L301	Ammonia, Total (mg/L)	8/22/2006	350	1
L301	Ammonia, Total (mg/L)	10/13/2006	340	1
L301	Anthracene (µg/L)	4/ 5/2006	<100	100
L301	Antimony, Total (µg/L)	4/ 5/2006	<3	3
L301	Aroclor 1016 (µg/L)	4/ 5/2006	<5	5
L301	Aroclor 1221 (µg/L)	4/ 5/2006	<10	10
L301	Aroclor 1232 (µg/L)	4/ 5/2006	<5	5
L301	Aroclor 1242 (µg/L)	4/ 5/2006	<5	5
L301	Aroclor 1248 (µg/L)	4/ 5/2006	<5	5
L301	Aroclor 1254 (µg/L)	4/ 5/2006	<10	10
L301	Aroclor 1260 (µg/L)	4/ 5/2006	<10	10
L301	Arsenic, Total (µg/L)	1/18/2006	24	1
L301	Arsenic, Total (µg/L)	4/ 5/2006	6	1
L301	Arsenic, Total (µg/L)	8/22/2006	26	1
L301	Arsenic, Total (µg/L)	10/13/2006	19	1
L301	Atrazine (µg/L)	4/ 5/2006	<2	2
L301	Barium, Total (µg/L)	1/18/2006	1,100	2
L301	Barium, Total (µg/L)	4/ 5/2006	190	2
L301	Barium, Total (µg/L)	8/22/2006	1,000	2
L301	Barium, Total (µg/L)	10/13/2006	1,400	2
L301	Benzene (µg/L)	4/ 5/2006	2	1
L301	Benzo(a)anthracene (µg/L)	4/ 5/2006	<100	100
L301	Benzo(a)pyrene (µg/L)	4/ 5/2006	<100	100
L301	Benzo(b)fluoranthene (µg/L)	4/ 5/2006	<100	100
L301	Benzo(ghi)perylene (µg/L)	4/ 5/2006	<100	100
L301	Benzo(k)fluoranthene (µg/L)	4/ 5/2006	<100	100
L301	Beryllium, Total (µg/L)	4/ 5/2006	<1	1

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SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2006
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	beta-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L301	bis(2-chloroethoxy) methane (µg/L)	4/ 5/2006	<100	100
L301	bis(2-Chloroethyl) ether (µg/L)	4/ 5/2006	<100	100
L301	bis(2-Ethylhexyl) phthalate (µg/L)	4/ 5/2006	<100	100
L301	Bis(chloromethyl)ether (µg/L)	4/ 5/2006	<10000	10000
L301	Biological Oxygen Demand (mg/L)	1/18/2006	24	4
L301	Biological Oxygen Demand (mg/L)	4/ 5/2006	<4	4
L301	Biological Oxygen Demand (mg/L)	8/22/2006	25	4
L301	Biological Oxygen Demand (mg/L)	10/13/2006	33	4
L301	Boron, Total (µg/L)	4/ 5/2006	880	100
L301	Bromobenzene (µg/L)	4/ 5/2006	<1	1
L301	Bromochloromethane (µg/L)	4/ 5/2006	<1	1
L301	Bromodichloromethane (µg/L)	4/ 5/2006	<1	1
L301	Bromoform (µg/L)	4/ 5/2006	<1	1
L301	Bromomethane (µg/L)	4/ 5/2006	<2	2
L301	Butyl benzyl phthalate (µg/L)	4/ 5/2006	<100	100
L301	Cadmium, Total (µg/L)	1/18/2006	<1	1
L301	Cadmium, Total (µg/L)	4/ 5/2006	<1	1
L301	Cadmium, Total (µg/L)	8/22/2006	<1	1
L301	Cadmium, Total (µg/L)	10/13/2006	<1	1
L301	Calcium, Total (mg/L)	4/ 5/2006	450	0.1
L301	Carbofuran (µg/L)	4/ 5/2006	<15	15
L301	Carbon disulfide (µg/L)	4/ 5/2006	<1	1
L301	Carbon tetrachloride (µg/L)	4/ 5/2006	<1	1
L301	Chlordane (Tech) (µg/L)	4/ 5/2006	<5	5
L301	Chloride, Total (mg/L)	4/ 5/2006	110	0.5
L301	Chlorobenzene (µg/L)	4/ 5/2006	<1	1
L301	Chloroethane (µg/L)	4/ 5/2006	2	2
L301	Chloroform (µg/L)	4/ 5/2006	<1	1
L301	Chloromethane (µg/L)	4/ 5/2006	<2	2
L301	Chromium, Total (µg/L)	1/18/2006	130	4
L301	Chromium, Total (µg/L)	4/ 5/2006	6.3	4
L301	Chromium, Total (µg/L)	8/22/2006	54	4
L301	Chromium, Total (µg/L)	10/13/2006	69	4
L301	Chromium, Hexavalent (µg/L)	1/18/2006	<25	25
L301	Chromium, Hexavalent (µg/L)	8/22/2006	<10	10
L301	Chromium, Hexavalent (µg/L)	10/13/2006	<20	20
L301	Chrysene (µg/L)	4/ 5/2006	<100	100
L301	cis-1,2-Dichloroethene (µg/L)	4/ 5/2006	<1	1
L301	cis-1,3-Dichloropropene (µg/L)	4/ 5/2006	<1	1
L301	Cobalt, Total (µg/L)	4/ 5/2006	<2	2

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2006
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	Chemical Oxygen Demand (mg/L)	1/18/2006	540	6
L301	Chemical Oxygen Demand (mg/L)	4/ 5/2006	73	6
L301	Chemical Oxygen Demand (mg/L)	8/22/2006	730	5
L301	Chemical Oxygen Demand (mg/L)	10/13/2006	660	5
L301	Coliform, Fecal (ct/100)	1/18/2006	<10	10
L301	Coliform, Fecal (ct/100)	4/ 5/2006	<10	10
L301	Coliform, Fecal (ct/100)	8/22/2006	<10	10
L301	Coliform, Fecal (ct/100)	10/13/2006	<10	10
L301	Copper, Total (µg/L)	1/18/2006	27	3
L301	Copper, Total (µg/L)	4/ 5/2006	9.8	3
L301	Copper, Total (µg/L)	8/22/2006	19	3
L301	Copper, Total (µg/L)	10/13/2006	29	3
L301	Cyanide, Total (mg/L)	1/18/2006	<0.005	0.005
L301	Cyanide, Total (mg/L)	4/ 5/2006	<0.005	0.005
L301	Cyanide, Total (mg/L)	8/22/2006	<0.005	0.005
L301	Cyanide, Total (mg/L)	10/13/2006	<0.005	0.005
L301	delta-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L301	Dibenzo(a,h)anthracene (µg/L)	4/ 5/2006	<100	100
L301	Dibromochloromethane (µg/L)	4/ 5/2006	<1	1
L301	Dibromomethane (µg/L)	4/ 5/2006	<1	1
L301	Dichlorodifluoromethane (µg/L)	4/ 5/2006	<2	2
L301	Dieldrin (µg/L)	4/ 5/2006	<1	1
L301	Diethyl phthalate (µg/L)	4/ 5/2006	<100	100
L301	Dimethyl phthalate (µg/L)	4/ 5/2006	<100	100
L301	Di-n-butyl phthalate (µg/L)	4/ 5/2006	<100	100
L301	Di-n-octyl phthalate (µg/L)	4/ 5/2006	<100	100
L301	Dioxin Screen (µg/L)	4/ 5/2006	<100	100
L301	Endosulfan I (µg/L)	4/ 5/2006	<0.5	0.5
L301	Endosulfan II (µg/L)	4/ 5/2006	<1	1
L301	Endosulfan Sulfate (µg/L)	4/ 5/2006	<1	1
L301	Endrin (µg/L)	4/ 5/2006	<1	1
L301	Endrin aldehyde (µg/L)	4/ 5/2006	<1	1
L301	Ethyl acetate (µg/L)	4/ 5/2006	<10	10
L301	Ethyl benzene (µg/L)	4/ 5/2006	<1	1
L301	Ethylene dibromide (µg/L)	4/ 5/2006	<0.050	0.05
L301	Fluoranthene (µg/L)	4/ 5/2006	<100	100
L301	Fluorene (µg/L)	4/ 5/2006	<100	100
L301	Fluoride, Total (mg/L)	1/18/2006	0.33	0.25
L301	Fluoride, Total (mg/L)	4/ 5/2006	<0.250	0.25
L301	Fluoride, Total (mg/L)	8/22/2006	0.3	0.25
L301	Fluoride, Total (mg/L)	10/13/2006	0.28	0.25

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2006
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	gamma-BHC (Lindane) (µg/L)	4/ 5/2006	<0.5	0.5
L301	Heptachlor (µg/L)	4/ 5/2006	<0.5	0.5
L301	Heptachlor epoxide (µg/L)	4/ 5/2006	<0.5	0.5
L301	Hexachlorobenzene (µg/L)	4/ 5/2006	<100	100
L301	Hexachlorobutadiene (µg/L)	4/ 5/2006	<100	100
L301	Hexachlorocyclopentadiene (µg/L)	4/ 5/2006	<100	100
L301	Hexachloroethane (µg/L)	4/ 5/2006	<100	100
L301	Indeno(1,2,3-cd)pyrene (µg/L)	4/ 5/2006	<100	100
L301	Iodomethane (µg/L)	4/ 5/2006	<1	1
L301	Iron, Total (µg/L)	1/18/2006	23,000	10
L301	Iron, Total (µg/L)	4/ 5/2006	5,000	1
L301	Iron, Total (µg/L)	8/22/2006	6,200	10
L301	Iron, Total (µg/L)	10/13/2006	10,000	10
L301	Isopropyl benzene (µg/L)	4/ 5/2006	<1	1
L301	Lead, Total (µg/L)	1/18/2006	<1	1
L301	Lead, Total (µg/L)	4/ 5/2006	2	1
L301	Lead, Total (µg/L)	8/22/2006	2.6	1
L301	Lead, Total (µg/L)	10/13/2006	2.5	1
L301	m/p-Xylene (µg/L)	4/ 5/2006	3	1
L301	Magnesium, Total (mg/L)	4/ 5/2006	140	0.1
L301	Manganese, Total (µg/L)	1/18/2006	260	1
L301	Manganese, Total (µg/L)	4/ 5/2006	43	1
L301	Manganese, Total (µg/L)	8/22/2006	88	1
L301	Manganese, Total (µg/L)	10/13/2006	140	1
L301	Mercury, Total (µg/L)	1/18/2006	<0.2	0.2
L301	Mercury, Total (µg/L)	4/ 5/2006	<0.2	0.2
L301	Mercury, Total (µg/L)	8/22/2006	<0.2	0.2
L301	Mercury, Total (µg/L)	10/13/2006	<0.2	0.2
L301	Methoxychlor (µg/L)	4/ 5/2006	<5	5
L301	Methylene chloride (µg/L)	4/ 5/2006	<5	5
L301	Naphthalene (µg/L)	4/ 5/2006	<100	100
L301	n-Butanol (µg/L)	4/ 5/2006	<1000	1000
L301	n-Butylbenzene (µg/L)	4/ 5/2006	<1	1
L301	Nickel, Total (µg/L)	1/18/2006	170	5
L301	Nickel, Total (µg/L)	4/ 5/2006	26	5
L301	Nickel, Total (µg/L)	8/22/2006	280	5
L301	Nickel, Total (µg/L)	10/13/2006	240	5
L301	Nitrate/Nitrite as N, Total (mg/L)	4/ 5/2006	0.076	2
L301	Nitrobenzene (µg/L)	4/ 5/2006	<100	100
L301	N-Nitrosodimethylamine (µg/L)	4/ 5/2006	<100	100
L301	N-Nitroso-Di-n-propylamine (µg/L)	4/ 5/2006	<100	100

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	N-nitrosodiphenylamine (µg/L)	4/ 5/2006	<100	100
L301	n-Propylbenzene (µg/L)	4/ 5/2006	<1	1
L301	Oil and grease (mg/L)	1/18/2006	<5	5
L301	Oil and grease (mg/L)	4/ 5/2006	<5	5
L301	Oil and grease (mg/L)	8/22/2006	<5	5
L301	Oil and grease (mg/L)	10/13/2006	5	5
L301	o-Xylene (µg/L)	4/ 5/2006	1	1
L301	Parathion (µg/L)	4/ 5/2006	<2	2
L301	Pentachlorophenol (µg/L)	4/ 5/2006	<0.5	0.5
L301	pH, Field (s.u.)	1/18/2006	6.99	0
L301	pH, Field (s.u.)	4/ 5/2006	6.95	0
L301	pH, Field (s.u.)	8/22/2006	7.28	0
L301	pH, Field (s.u.)	10/13/2006	7.38	0
L301	Phenanthrene (µg/L)	4/ 5/2006	<100	100
L301	Phenols, Total (µg/L)	1/18/2006	39	5
L301	Phenols, Total (µg/L)	4/ 5/2006	200	25
L301	Phenols, Total (µg/L)	8/22/2006	24	5
L301	Phenols, Total (µg/L)	10/13/2006	21	5
L301	Phosphorous, Total (µg/L)	1/18/2006	3,700	50
L301	Phosphorous, Total (µg/L)	4/ 5/2006	320	50
L301	Phosphorous, Total (µg/L)	8/22/2006	2,600	50
L301	Phosphorous, Total (µg/L)	10/13/2006	2,800	50
L301	P-Isopropyltoluene (µg/L)	4/ 5/2006	<1	1
L301	Potassium, Total (mg/L)	4/ 5/2006	36	0.1
L301	Pyrene (µg/L)	4/ 5/2006	<100	100
L301	sec-Butylbenzene (µg/L)	4/ 5/2006	<1	1
L301	Selenium, Total (µg/L)	4/ 5/2006	1.8	1
L301	Silver, Total (µg/L)	1/18/2006	<5	5
L301	Silver, Total (µg/L)	4/ 5/2006	<5	5
L301	Silver, Total (µg/L)	8/22/2006	<5	5
L301	Silver, Total (µg/L)	10/13/2006	<5	5
L301	Silvex (µg/L)	4/ 5/2006	<0.5	0.5
L301	Sodium, Total (mg/L)	4/ 5/2006	110	0.1
L301	Specific Conductance, Field (µmhos/cm)	1/18/2006	9,757	0
L301	Specific Conductance, Field (µmhos/cm)	4/ 5/2006	3,790	0
L301	Specific Conductance, Field (µmhos/cm)	8/22/2006	11,280	0
L301	Specific Conductance, Field (µmhos/cm)	10/13/2006	4,120	0
L301	Styrene (µg/L)	4/ 5/2006	<1	1
L301	Sulfate, Total (mg/L)	4/ 5/2006	1,200	75
L301	tert-Butylbenzene (µg/L)	4/ 5/2006	<1	1
L301	Tetrachloroethene (µg/L)	4/ 5/2006	<1	1

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L301	Tetrahydrofuran (µg/L)	4/ 5/2006	54	20
L301	Thallium, Total (µg/L)	4/ 5/2006	<1	1
L301	Tin, Total (µg/L)	4/ 5/2006	<60	60
L301	Total Organic Carbon (mg/L)	4/ 5/2006	22	0.5
L301	Toluene (µg/L)	4/ 5/2006	<1	1
L301	Total Dissolved Solids (mg/L)	1/18/2006	4,900	51
L301	Total Dissolved Solids (mg/L)	4/ 5/2006	2,600	51
L301	Total Dissolved Solids (mg/L)	8/22/2006	6,100	17
L301	Total Dissolved Solids (mg/L)	10/13/2006	6,000	17
L301	Total Suspended Solids (mg/L)	1/18/2006	190	5
L301	Total Suspended Solids (mg/L)	4/ 5/2006	38	0.5
L301	Total Suspended Solids (mg/L)	8/22/2006	24	2
L301	Total Suspended Solids (mg/L)	10/13/2006	120	2
L301	Toxaphene (µg/L)	4/ 5/2006	<5	5
L301	trans-1,2-Dichloroethene (µg/L)	4/ 5/2006	<1	1
L301	trans-1,3-Dichloropropene (µg/L)	4/ 5/2006	<1	1
L301	trans-1,4-Dichloro-2-butene (µg/L)	4/ 5/2006	<1	1
L301	Trichloroethene (µg/L)	4/ 5/2006	<1	1
L301	Trichlorofluoromethane (µg/L)	4/ 5/2006	<1	1
L301	Vinyl acetate (µg/L)	4/ 5/2006	<5	5
L301	Vinyl chloride (µg/L)	4/ 5/2006	<2	2
L301	Xylenes, Total (µg/L)	4/ 5/2006	5	3
L301	Zinc, Total (µg/L)	1/18/2006	36	6
L301	Zinc, Total (µg/L)	4/ 5/2006	25	6
L301	Zinc, Total (µg/L)	8/22/2006	18	6
L301	Zinc, Total (µg/L)	10/13/2006	41	6
L302E	1,1,1,2-Tetrachloroethane (µg/L)	4/ 5/2006	<1	1
L302E	1,1,1-Trichloroethane (µg/L)	4/ 5/2006	<1	1
L302E	1,1,2,2-Tetrachloroethane (µg/L)	4/ 5/2006	<1	1
L302E	1,1,2-Trichloroethane (µg/L)	4/ 5/2006	<1	1
L302E	1,1-Dichloroethane (µg/L)	4/ 5/2006	<1	1
L302E	1,1-Dichloroethene (µg/L)	4/ 5/2006	<1	1
L302E	1,1-Dichloropropene (µg/L)	4/ 5/2006	<1	1
L302E	1,2,3-Trichlorobenzene (µg/L)	4/ 5/2006	<1	1
L302E	1,2,3-Trichloropropane (µg/L)	4/ 5/2006	<1	1
L302E	1,2,4-Trichlorobenzene (µg/L)	4/ 5/2006	<1	1
L302E	1,2,4-Trimethylbenzene (µg/L)	4/ 5/2006	13	1
L302E	1,2-Dibromo-3-chloropropane (µg/L)	4/ 5/2006	<0.050	0.05
L302E	1,2-Dichlorobenzene (µg/L)	4/ 5/2006	<1	1
L302E	1,2-Dichloroethane (µg/L)	4/ 5/2006	<1	1
L302E	1,2-Dichloropropane (µg/L)	4/ 5/2006	<1	1

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L302E	1,3,5-Trimethylbenzene (µg/L)	4/ 5/2006	4	1
L302E	1,3-Dichlorobenzene (µg/L)	4/ 5/2006	<1	1
L302E	1,3-Dichloropropane (µg/L)	4/ 5/2006	<1	1
L302E	1,4-Dichlorobenzene (µg/L)	4/ 5/2006	2	1
L302E	1-Propanol (µg/L)	4/ 5/2006	<1000	1000
L302E	2,2-Dichloropropane (µg/L)	4/ 5/2006	<1	1
L302E	2,4,6-Trichlorophenol (µg/L)	4/ 5/2006	<100	100
L302E	2,4-D (µg/L)	4/ 5/2006	<0.1	0.1
L302E	2,4-Dichlorophenol (µg/L)	4/ 5/2006	<100	100
L302E	2,4-Dimethylphenol (µg/L)	4/ 5/2006	<100	100
L302E	2,4-Dinitrophenol (µg/L)	4/ 5/2006	<500	500
L302E	2,4-Dinitrotoluene (µg/L)	4/ 5/2006	<100	100
L302E	2,6-Dinitrotoluene (µg/L)	4/ 5/2006	<100	100
L302E	2-Butanone (MEK) (µg/L)	4/ 5/2006	<5	5
L302E	2-Chloroethyl vinyl ether (µg/L)	4/ 5/2006	<10	10
L302E	2-Chloronaphthalene (µg/L)	4/ 5/2006	<100	100
L302E	2-Chlorophenol (µg/L)	4/ 5/2006	<100	100
L302E	2-Chlorotoluene (µg/L)	4/ 5/2006	<1	1
L302E	2-Hexanone (MBK) (µg/L)	4/ 5/2006	<5	5
L302E	3,3-Dichlorobenzidine (µg/L)	4/ 5/2006	<200	200
L302E	4,4'-DDD (µg/L)	4/ 5/2006	<1	1
L302E	4,4'-DDE (µg/L)	4/ 5/2006	<1	1
L302E	4,4'-DDT (µg/L)	4/ 5/2006	<1	1
L302E	4,6-Dinitro-2-methylphenol (µg/L)	4/ 5/2006	<500	500
L302E	4-Bromophenyl phenyl ether (µg/L)	4/ 5/2006	<100	100
L302E	4-Chlorophenyl phenyl ether (µg/L)	4/ 5/2006	<100	100
L302E	4-Chlorotoluene (µg/L)	4/ 5/2006	<1	1
L302E	4-Methyl-2-Pentanone(MIBK) (µg/L)	4/ 5/2006	<5	5
L302E	4-Methylphenol(p-cresol) (µg/L)	4/ 5/2006	<100	100
L302E	4-Nitrophenol (µg/L)	4/ 5/2006	<100	100
L302E	Acenaphthene (µg/L)	4/ 5/2006	<100	100
L302E	Acetone (µg/L)	4/ 5/2006	14	10
L302E	Alachlor (µg/L)	4/ 5/2006	<4	4
L302E	Aldicarb (µg/L)	4/ 5/2006	<4	4
L302E	Aldrin (µg/L)	4/ 5/2006	<0.5	0.5
L302E	Alkalinity, Bicarb Total (mg/L)	4/ 5/2006	4,400	2
L302E	alpha-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L302E	Aluminum, Total (µg/L)	4/ 5/2006	600	1
L302E	Ammonia, Total (mg/L)	1/18/2006	940	5
L302E	Ammonia, Total (mg/L)	4/ 5/2006	760	5
L302E	Ammonia, Total (mg/L)	8/22/2006	580	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302E	Ammonia, Total (mg/L)	10/13/2006	1,600	1
L302E	Anthracene (µg/L)	4/ 5/2006	<100	100
L302E	Antimony, Total (µg/L)	4/ 5/2006	<3	3
L302E	Aroclor 1016 (µg/L)	4/ 5/2006	<5	5
L302E	Aroclor 1221 (µg/L)	4/ 5/2006	<10	10
L302E	Aroclor 1232 (µg/L)	4/ 5/2006	<5	5
L302E	Aroclor 1242 (µg/L)	4/ 5/2006	<5	5
L302E	Aroclor 1248 (µg/L)	4/ 5/2006	<5	5
L302E	Aroclor 1254 (µg/L)	4/ 5/2006	<10	10
L302E	Aroclor 1260 (µg/L)	4/ 5/2006	<10	10
L302E	Arsenic, Total (µg/L)	1/18/2006	62	1
L302E	Arsenic, Total (µg/L)	4/ 5/2006	42	1
L302E	Arsenic, Total (µg/L)	8/22/2006	51	1
L302E	Arsenic, Total (µg/L)	10/13/2006	64	1
L302E	Atrazine (µg/L)	4/ 5/2006	<2	2
L302E	Barium, Total (µg/L)	1/18/2006	320	2
L302E	Barium, Total (µg/L)	4/ 5/2006	280	2
L302E	Barium, Total (µg/L)	8/22/2006	600	2
L302E	Barium, Total (µg/L)	10/13/2006	450	2
L302E	Benzene (µg/L)	4/ 5/2006	5	1
L302E	Benzo(a)anthracene (µg/L)	4/ 5/2006	<100	100
L302E	Benzo(a)pyrene (µg/L)	4/ 5/2006	<100	100
L302E	Benzo(b)fluoranthene (µg/L)	4/ 5/2006	<100	100
L302E	Benzo(ghi)perylene (µg/L)	4/ 5/2006	<100	100
L302E	Benzo(k)fluoranthene (µg/L)	4/ 5/2006	<100	100
L302E	Beryllium, Total (µg/L)	4/ 5/2006	<1	1
L302E	beta-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L302E	bis(2-chloroethoxy) methane (µg/L)	4/ 5/2006	<100	100
L302E	bis(2-Chloroethyl) ether (µg/L)	4/ 5/2006	<100	100
L302E	bis(2-Ethylhexyl) phthalate (µg/L)	4/ 5/2006	<100	100
L302E	Bis(chloromethyl)ether (µg/L)	4/ 5/2006	<10000	10000
L302E	Biological Oxygen Demand (mg/L)	1/18/2006	290	4
L302E	Biological Oxygen Demand (mg/L)	4/ 5/2006	95	4
L302E	Biological Oxygen Demand (mg/L)	8/22/2006	49	4
L302E	Biological Oxygen Demand (mg/L)	10/13/2006	95	4
L302E	Boron, Total (µg/L)	4/ 5/2006	27,000	100
L302E	Bromobenzene (µg/L)	4/ 5/2006	<1	1
L302E	Bromochloromethane (µg/L)	4/ 5/2006	<1	1
L302E	Bromodichloromethane (µg/L)	4/ 5/2006	<1	1
L302E	Bromoform (µg/L)	4/ 5/2006	<1	1
L302E	Bromomethane (µg/L)	4/ 5/2006	<2	2

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302E	Butyl benzyl phthalate (µg/L)	4/ 5/2006	<100	100
L302E	Cadmium, Total (µg/L)	1/18/2006	<1	1
L302E	Cadmium, Total (µg/L)	4/ 5/2006	<1	1
L302E	Cadmium, Total (µg/L)	8/22/2006	<1	1
L302E	Cadmium, Total (µg/L)	10/13/2006	<1	1
L302E	Calcium, Total (mg/L)	4/ 5/2006	38	0.1
L302E	Carbofuran (µg/L)	4/ 5/2006	<15	15
L302E	Carbon disulfide (µg/L)	4/ 5/2006	3	1
L302E	Carbon tetrachloride (µg/L)	4/ 5/2006	<1	1
L302E	Chlordane (Tech) (µg/L)	4/ 5/2006	<5	5
L302E	Chloride, Total (mg/L)	4/ 5/2006	2,100	25
L302E	Chlorobenzene (µg/L)	4/ 5/2006	<1	1
L302E	Chloroethane (µg/L)	4/ 5/2006	<2	2
L302E	Chloroform (µg/L)	4/ 5/2006	<1	1
L302E	Chloromethane (µg/L)	4/ 5/2006	<2	2
L302E	Chromium, Total (µg/L)	1/18/2006	150	4
L302E	Chromium, Total (µg/L)	4/ 5/2006	67	4
L302E	Chromium, Total (µg/L)	8/22/2006	97	4
L302E	Chromium, Total (µg/L)	10/13/2006	95	4
L302E	Chromium, Hexavalent (µg/L)	1/18/2006	<50	50
L302E	Chromium, Hexavalent (µg/L)	8/22/2006	<50	50
L302E	Chromium, Hexavalent (µg/L)	10/13/2006	<10	10
L302E	Chrysene (µg/L)	4/ 5/2006	<100	100
L302E	cis-1,2-Dichloroethene (µg/L)	4/ 5/2006	<1	1
L302E	cis-1,3-Dichloropropene (µg/L)	4/ 5/2006	<1	1
L302E	Cobalt, Total (µg/L)	4/ 5/2006	31	2
L302E	Chemical Oxygen Demand (mg/L)	1/18/2006	25,000	6
L302E	Chemical Oxygen Demand (mg/L)	4/ 5/2006	1,500	6
L302E	Chemical Oxygen Demand (mg/L)	8/22/2006	880	5
L302E	Chemical Oxygen Demand (mg/L)	10/13/2006	1,400	5
L302E	Coliform, Fecal (ct/100)	1/18/2006	<10	10
L302E	Coliform, Fecal (ct/100)	4/ 5/2006	<10	10
L302E	Coliform, Fecal (ct/100)	8/22/2006	10	10
L302E	Coliform, Fecal (ct/100)	10/13/2006	5,300	10
L302E	Copper, Total (µg/L)	1/18/2006	42	3
L302E	Copper, Total (µg/L)	4/ 5/2006	45	3
L302E	Copper, Total (µg/L)	8/22/2006	25	3
L302E	Copper, Total (µg/L)	10/13/2006	36	3
L302E	Cyanide, Total (mg/L)	1/18/2006	<0.005	0.005
L302E	Cyanide, Total (mg/L)	4/ 5/2006	0.011	5
L302E	Cyanide, Total (mg/L)	8/22/2006	<0.005	0.005

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302E	Cyanide, Total (mg/L)	10/13/2006	<0.005	0.005
L302E	delta-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L302E	Dibenzo(a,h)anthracene (µg/L)	4/ 5/2006	<100	100
L302E	Dibromochloromethane (µg/L)	4/ 5/2006	<1	1
L302E	Dibromomethane (µg/L)	4/ 5/2006	<1	1
L302E	Dichlorodifluoromethane (µg/L)	4/ 5/2006	<2	2
L302E	Dieldrin (µg/L)	4/ 5/2006	<1	1
L302E	Diethyl phthalate (µg/L)	4/ 5/2006	<100	100
L302E	Dimethyl phthalate (µg/L)	4/ 5/2006	<100	100
L302E	Di-n-butyl phthalate (µg/L)	4/ 5/2006	<100	100
L302E	Di-n-octyl phthalate (µg/L)	4/ 5/2006	<100	100
L302E	Dioxin Screen (µg/L)	4/ 5/2006	<100	100
L302E	Endosulfan I (µg/L)	4/ 5/2006	<0.5	0.5
L302E	Endosulfan II (µg/L)	4/ 5/2006	<1	1
L302E	Endosulfan Sulfate (µg/L)	4/ 5/2006	<1	1
L302E	Endrin (µg/L)	4/ 5/2006	<1	1
L302E	Endrin aldehyde (µg/L)	4/ 5/2006	<1	1
L302E	Ethyl acetate (µg/L)	4/ 5/2006	<10	10
L302E	Ethyl benzene (µg/L)	4/ 5/2006	11	1
L302E	Ethylene dibromide (µg/L)	4/ 5/2006	<0.050	0.05
L302E	Fluoranthene (µg/L)	4/ 5/2006	<100	100
L302E	Fluorene (µg/L)	4/ 5/2006	<100	100
L302E	Fluoride, Total (mg/L)	1/18/2006	15	0.25
L302E	Fluoride, Total (mg/L)	4/ 5/2006	11	25
L302E	Fluoride, Total (mg/L)	8/22/2006	5	0.25
L302E	Fluoride, Total (mg/L)	10/13/2006	8.3	0.25
L302E	gamma-BHC (Lindane) (µg/L)	4/ 5/2006	<0.5	0.5
L302E	Heptachlor (µg/L)	4/ 5/2006	<0.5	0.5
L302E	Heptachlor epoxide (µg/L)	4/ 5/2006	<0.5	0.5
L302E	Hexachlorobenzene (µg/L)	4/ 5/2006	<100	100
L302E	Hexachlorobutadiene (µg/L)	4/ 5/2006	<100	100
L302E	Hexachlorocyclopentadiene (µg/L)	4/ 5/2006	<100	100
L302E	Hexachloroethane (µg/L)	4/ 5/2006	<100	100
L302E	Indeno(1,2,3-cd)pyrene (µg/L)	4/ 5/2006	<100	100
L302E	Iodomethane (µg/L)	4/ 5/2006	<1	1
L302E	Iron, Total (µg/L)	1/18/2006	6,100	10
L302E	Iron, Total (µg/L)	4/ 5/2006	5,200	1
L302E	Iron, Total (µg/L)	8/22/2006	8,300	10
L302E	Iron, Total (µg/L)	10/13/2006	6,300	10
L302E	Isopropyl benzene (µg/L)	4/ 5/2006	3	1
L302E	Lead, Total (µg/L)	1/18/2006	1.1	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302E	Lead, Total (µg/L)	4/ 5/2006	2.2	1
L302E	Lead, Total (µg/L)	8/22/2006	2.5	1
L302E	Lead, Total (µg/L)	10/13/2006	1.3	1
L302E	m/p-Xylene (µg/L)	4/ 5/2006	29	1
L302E	Magnesium, Total (mg/L)	4/ 5/2006	120	0.1
L302E	Manganese, Total (µg/L)	1/18/2006	100	1
L302E	Manganese, Total (µg/L)	4/ 5/2006	9.9	1
L302E	Manganese, Total (µg/L)	8/22/2006	120	1
L302E	Manganese, Total (µg/L)	10/13/2006	94	1
L302E	Mercury, Total (µg/L)	1/18/2006	<0.2	0.2
L302E	Mercury, Total (µg/L)	4/ 5/2006	<0.2	0.2
L302E	Mercury, Total (µg/L)	8/22/2006	<0.2	0.2
L302E	Mercury, Total (µg/L)	10/13/2006	<0.2	0.2
L302E	Methoxychlor (µg/L)	4/ 5/2006	<5	5
L302E	Methylene chloride (µg/L)	4/ 5/2006	<5	5
L302E	Naphthalene (µg/L)	4/ 5/2006	<100	100
L302E	n-Butanol (µg/L)	4/ 5/2006	<1000	1000
L302E	n-Butylbenzene (µg/L)	4/ 5/2006	<1	1
L302E	Nickel, Total (µg/L)	1/18/2006	250	5
L302E	Nickel, Total (µg/L)	4/ 5/2006	250	5
L302E	Nickel, Total (µg/L)	8/22/2006	260	5
L302E	Nickel, Total (µg/L)	10/13/2006	240	5
L302E	Nitrate/Nitrite as N, Total (mg/L)	4/ 5/2006	0.024	2
L302E	Nitrobenzene (µg/L)	4/ 5/2006	<100	100
L302E	N-Nitrosodimethylamine (µg/L)	4/ 5/2006	<100	100
L302E	N-Nitroso-Di-n-propylamine (µg/L)	4/ 5/2006	<100	100
L302E	N-nitrosodiphenylamine (µg/L)	4/ 5/2006	<100	100
L302E	n-Propylbenzene (µg/L)	4/ 5/2006	<1	1
L302E	Oil and grease (mg/L)	1/18/2006	6.9	5
L302E	Oil and grease (mg/L)	4/ 5/2006	<5	5
L302E	Oil and grease (mg/L)	8/22/2006	<6	6
L302E	Oil and grease (mg/L)	10/13/2006	5	5
L302E	o-Xylene (µg/L)	4/ 5/2006	14	1
L302E	Parathion (µg/L)	4/ 5/2006	<2	2
L302E	Pentachlorophenol (µg/L)	4/ 5/2006	<0.050	0.05
L302E	pH, Field (s.u.)	1/18/2006	6.75	0
L302E	pH, Field (s.u.)	4/ 5/2006	7.12	0
L302E	pH, Field (s.u.)	8/22/2006	7.21	0
L302E	pH, Field (s.u.)	10/13/2006	7.55	0
L302E	Phenanthrene (µg/L)	4/ 5/2006	<100	100
L302E	Phenols, Total (µg/L)	1/18/2006	94	5

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302E	Phenols, Total (µg/L)	4/ 5/2006	120	5
L302E	Phenols, Total (µg/L)	8/22/2006	56	5
L302E	Phenols, Total (µg/L)	10/13/2006	620	5
L302E	Phosphorous, Total (µg/L)	1/18/2006	6,400	50
L302E	Phosphorous, Total (µg/L)	4/ 5/2006	5,200	50
L302E	Phosphorous, Total (µg/L)	8/22/2006	3,300	50
L302E	Phosphorous, Total (µg/L)	10/13/2006	6,300	50
L302E	P-Isopropyltoluene (µg/L)	4/ 5/2006	2	1
L302E	Potassium, Total (mg/L)	4/ 5/2006	440	0.1
L302E	Pyrene (µg/L)	4/ 5/2006	<100	100
L302E	sec-Butylbenzene (µg/L)	4/ 5/2006	<1	1
L302E	Selenium, Total (µg/L)	4/ 5/2006	49	1
L302E	Silver, Total (µg/L)	1/18/2006	<5	5
L302E	Silver, Total (µg/L)	4/ 5/2006	<5	5
L302E	Silver, Total (µg/L)	8/22/2006	<5	5
L302E	Silver, Total (µg/L)	10/13/2006	<5	5
L302E	Silvex (µg/L)	4/ 5/2006	<0.050	0.05
L302E	Sodium, Total (mg/L)	4/ 5/2006	1,700	0.2
L302E	Specific Conductance, Field (µmhos/cm)	1/18/2006	12,400	0
L302E	Specific Conductance, Field (µmhos/cm)	4/ 5/2006	12,800	0
L302E	Specific Conductance, Field (µmhos/cm)	8/22/2006	11,820	0
L302E	Specific Conductance, Field (µmhos/cm)	10/13/2006	5,560	0
L302E	Styrene (µg/L)	4/ 5/2006	<1	1
L302E	Sulfate, Total (mg/L)	4/ 5/2006	44	7
L302E	tert-Butylbenzene (µg/L)	4/ 5/2006	<1	1
L302E	Tetrachloroethene (µg/L)	4/ 5/2006	<1	1
L302E	Tetrahydrofuran (µg/L)	4/ 5/2006	440	20
L302E	Thallium, Total (µg/L)	4/ 5/2006	<1	1
L302E	Tin, Total (µg/L)	4/ 5/2006	<60	60
L302E	Total Organic Carbon (mg/L)	4/ 5/2006	400	0.5
L302E	Toluene (µg/L)	4/ 5/2006	6	1
L302E	Total Dissolved Solids (mg/L)	1/18/2006	6,500	51
L302E	Total Dissolved Solids (mg/L)	4/ 5/2006	6,700	51
L302E	Total Dissolved Solids (mg/L)	8/22/2006	6,200	17
L302E	Total Dissolved Solids (mg/L)	10/13/2006	6,800	17
L302E	Total Suspended Solids (mg/L)	1/18/2006	61	3.33
L302E	Total Suspended Solids (mg/L)	4/ 5/2006	23	2
L302E	Total Suspended Solids (mg/L)	8/22/2006	81	2
L302E	Total Suspended Solids (mg/L)	10/13/2006	30	2
L302E	Toxaphene (µg/L)	4/ 5/2006	<5	5
L302E	trans-1,2-Dichloroethene (µg/L)	4/ 5/2006	<1	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302E	trans-1,3-Dichloropropene (µg/L)	4/ 5/2006	<1	1
L302E	trans-1,4-Dichloro-2-butene (µg/L)	4/ 5/2006	<1	1
L302E	Trichloroethene (µg/L)	4/ 5/2006	<1	1
L302E	Trichlorofluoromethane (µg/L)	4/ 5/2006	<1	1
L302E	Vinyl acetate (µg/L)	4/ 5/2006	<5	5
L302E	Vinyl chloride (µg/L)	4/ 5/2006	<2	2
L302E	Xylenes, Total (µg/L)	4/ 5/2006	43	3
L302E	Zinc, Total (µg/L)	1/18/2006	91	6
L302E	Zinc, Total (µg/L)	4/ 5/2006	29	6
L302E	Zinc, Total (µg/L)	8/22/2006	260	6
L302E	Zinc, Total (µg/L)	10/13/2006	27	6
L302W	1,1,1,2-Tetrachloroethane (µg/L)	4/ 5/2006	<5	5
L302W	1,1,1-Trichloroethane (µg/L)	4/ 5/2006	<5	5
L302W	1,1,2,2-Tetrachloroethane (µg/L)	4/ 5/2006	<5	5
L302W	1,1,2-Trichloroethane (µg/L)	4/ 5/2006	<5	5
L302W	1,1-Dichloroethane (µg/L)	4/ 5/2006	<5	5
L302W	1,1-Dichloroethene (µg/L)	4/ 5/2006	<5	5
L302W	1,1-Dichloropropene (µg/L)	4/ 5/2006	<5	5
L302W	1,2,3-Trichlorobenzene (µg/L)	4/ 5/2006	<5	5
L302W	1,2,3-Trichloropropane (µg/L)	4/ 5/2006	<5	5
L302W	1,2,4-Trichlorobenzene (µg/L)	4/ 5/2006	<5	5
L302W	1,2,4-Trimethylbenzene (µg/L)	4/ 5/2006	5	5
L302W	1,2-Dibromo-3-chloropropane (µg/L)	4/ 5/2006	<0.050	0.05
L302W	1,2-Dichlorobenzene (µg/L)	4/ 5/2006	<5	5
L302W	1,2-Dichloroethane (µg/L)	4/ 5/2006	<5	5
L302W	1,2-Dichloropropane (µg/L)	4/ 5/2006	<5	5
L302W	1,3,5-Trimethylbenzene (µg/L)	4/ 5/2006	<5	5
L302W	1,3-Dichlorobenzene (µg/L)	4/ 5/2006	<5	5
L302W	1,3-Dichloropropane (µg/L)	4/ 5/2006	<5	5
L302W	1,4-Dichlorobenzene (µg/L)	4/ 5/2006	<5	5
L302W	1-Propanol (µg/L)	4/ 5/2006	<5000	5000
L302W	2,2-Dichloropropane (µg/L)	4/ 5/2006	<5	5
L302W	2,4,6-Trichlorophenol (µg/L)	4/ 5/2006	<100	100
L302W	2,4-D (µg/L)	4/ 5/2006	<0.1	0.1
L302W	2,4-Dichlorophenol (µg/L)	4/ 5/2006	<100	100
L302W	2,4-Dimethylphenol (µg/L)	4/ 5/2006	<100	100
L302W	2,4-Dinitrophenol (µg/L)	4/ 5/2006	<500	500
L302W	2,4-Dinitrotoluene (µg/L)	4/ 5/2006	<100	100
L302W	2,6-Dinitrotoluene (µg/L)	4/ 5/2006	<100	100
L302W	2-Butanone (MEK) (µg/L)	4/ 5/2006	<25	25
L302W	2-Chloroethyl vinyl ether (µg/L)	4/ 5/2006	<50	50

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302W	2-Chloronaphthalene (µg/L)	4/ 5/2006	<100	100
L302W	2-Chlorophenol (µg/L)	4/ 5/2006	<100	100
L302W	2-Chlorotoluene (µg/L)	4/ 5/2006	<5	5
L302W	2-Hexanone (MBK) (µg/L)	4/ 5/2006	<25	25
L302W	3,3-Dichlorobenzidine (µg/L)	4/ 5/2006	<200	200
L302W	4,4'-DDD (µg/L)	4/ 5/2006	<1	1
L302W	4,4'-DDE (µg/L)	4/ 5/2006	<1	1
L302W	4,4'-DDT (µg/L)	4/ 5/2006	<1	1
L302W	4,6-Dinitro-2-methylphenol (µg/L)	4/ 5/2006	<500	500
L302W	4-Bromophenyl phenyl ether (µg/L)	4/ 5/2006	<100	100
L302W	4-Chlorophenyl phenyl ether (µg/L)	4/ 5/2006	<100	100
L302W	4-Chlorotoluene (µg/L)	4/ 5/2006	<5	5
L302W	4-Methyl-2-Pentanone(MIBK) (µg/L)	4/ 5/2006	<25	25
L302W	4-Methylphenol(p-cresol) (µg/L)	4/ 5/2006	<100	100
L302W	4-Nitrophenol (µg/L)	4/ 5/2006	<100	100
L302W	Acenaphthene (µg/L)	4/ 5/2006	<100	100
L302W	Acetone (µg/L)	4/ 5/2006	<50	50
L302W	Alachlor (µg/L)	4/ 5/2006	<0.4	0.4
L302W	Aldicarb (µg/L)	4/ 5/2006	13	0.4
L302W	Aldrin (µg/L)	4/ 5/2006	0.98	0.5
L302W	Alkalinity, Bicarb Total (mg/L)	4/ 5/2006	4,300	2
L302W	alpha-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L302W	Aluminum, Total (µg/L)	4/ 5/2006	380	1
L302W	Ammonia, Total (mg/L)	1/18/2006	840	5
L302W	Ammonia, Total (mg/L)	4/ 5/2006	9,700	0
L302W	Ammonia, Total (mg/L)	8/22/2006	1,000	1
L302W	Ammonia, Total (mg/L)	10/13/2006	1,500	1
L302W	Anthracene (µg/L)	4/ 5/2006	<100	100
L302W	Antimony, Total (µg/L)	4/ 5/2006	4.8	3
L302W	Aroclor 1016 (µg/L)	4/ 5/2006	<5	5
L302W	Aroclor 1221 (µg/L)	4/ 5/2006	<10	10
L302W	Aroclor 1232 (µg/L)	4/ 5/2006	<5	5
L302W	Aroclor 1242 (µg/L)	4/ 5/2006	<5	5
L302W	Aroclor 1248 (µg/L)	4/ 5/2006	<5	5
L302W	Aroclor 1254 (µg/L)	4/ 5/2006	<10	10
L302W	Aroclor 1260 (µg/L)	4/ 5/2006	<10	10
L302W	Arsenic, Total (µg/L)	1/18/2006	150	1
L302W	Arsenic, Total (µg/L)	4/ 5/2006	150	1
L302W	Arsenic, Total (µg/L)	8/22/2006	160	1
L302W	Arsenic, Total (µg/L)	10/13/2006	230	1
L302W	Atrazine (µg/L)	4/ 5/2006	<0.2	0.2

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302W	Barium, Total (µg/L)	1/18/2006	660	2
L302W	Barium, Total (µg/L)	4/ 5/2006	600	2
L302W	Barium, Total (µg/L)	8/22/2006	630	2
L302W	Barium, Total (µg/L)	10/13/2006	1,000	2
L302W	Benzene (µg/L)	4/ 5/2006	<5	5
L302W	Benzo(a)anthracene (µg/L)	4/ 5/2006	<100	100
L302W	Benzo(a)pyrene (µg/L)	4/ 5/2006	<100	100
L302W	Benzo(b)fluoranthene (µg/L)	4/ 5/2006	<100	100
L302W	Benzo(ghi)perylene (µg/L)	4/ 5/2006	<100	100
L302W	Benzo(k)fluoranthene (µg/L)	4/ 5/2006	<100	100
L302W	Beryllium, Total (µg/L)	4/ 5/2006	<1	1
L302W	beta-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L302W	bis(2-chloroethoxy) methane (µg/L)	4/ 5/2006	<100	100
L302W	bis(2-Chloroethyl) ether (µg/L)	4/ 5/2006	<100	100
L302W	bis(2-Ethylhexyl) phthalate (µg/L)	4/ 5/2006	<100	100
L302W	Bis(chloromethyl)ether (µg/L)	4/ 5/2006	<50000	50000
L302W	Biological Oxygen Demand (mg/L)	1/18/2006	160	4
L302W	Biological Oxygen Demand (mg/L)	4/ 5/2006	170	4
L302W	Biological Oxygen Demand (mg/L)	8/22/2006	88	4
L302W	Biological Oxygen Demand (mg/L)	10/13/2006	180	4
L302W	Boron, Total (µg/L)	4/ 5/2006	19,000	100
L302W	Bromobenzene (µg/L)	4/ 5/2006	<5	5
L302W	Bromochloromethane (µg/L)	4/ 5/2006	<5	5
L302W	Bromodichloromethane (µg/L)	4/ 5/2006	<5	5
L302W	Bromoform (µg/L)	4/ 5/2006	<5	5
L302W	Bromomethane (µg/L)	4/ 5/2006	<10	10
L302W	Butyl benzyl phthalate (µg/L)	4/ 5/2006	<100	100
L302W	Cadmium, Total (µg/L)	1/18/2006	<1	1
L302W	Cadmium, Total (µg/L)	4/ 5/2006	<1	1
L302W	Cadmium, Total (µg/L)	8/22/2006	<1	1
L302W	Cadmium, Total (µg/L)	10/13/2006	<1	1
L302W	Calcium, Total (mg/L)	4/ 5/2006	68	0.1
L302W	Carbofuran (µg/L)	4/ 5/2006	<1.5	1.5
L302W	Carbon disulfide (µg/L)	4/ 5/2006	<5	5
L302W	Carbon tetrachloride (µg/L)	4/ 5/2006	<5	5
L302W	Chlordane (Tech) (µg/L)	4/ 5/2006	<5	5
L302W	Chloride, Total (mg/L)	4/ 5/2006	2,200	25
L302W	Chlorobenzene (µg/L)	4/ 5/2006	<5	5
L302W	Chloroethane (µg/L)	4/ 5/2006	<10	10
L302W	Chloroform (µg/L)	4/ 5/2006	<5	5
L302W	Chloromethane (µg/L)	4/ 5/2006	<10	10

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302W	Chromium, Total (µg/L)	1/18/2006	160	4
L302W	Chromium, Total (µg/L)	4/ 5/2006	120	4
L302W	Chromium, Total (µg/L)	8/22/2006	120	4
L302W	Chromium, Total (µg/L)	10/13/2006	1,400	4
L302W	Chromium, Hexavalent (µg/L)	1/18/2006	<50	50
L302W	Chromium, Hexavalent (µg/L)	8/22/2006	<50	50
L302W	Chromium, Hexavalent (µg/L)	10/13/2006	<10	10
L302W	Chrysene (µg/L)	4/ 5/2006	<100	100
L302W	cis-1,2-Dichloroethene (µg/L)	4/ 5/2006	<5	5
L302W	cis-1,3-Dichloropropene (µg/L)	4/ 5/2006	<5	5
L302W	Cobalt, Total (µg/L)	4/ 5/2006	32	2
L302W	Chemical Oxygen Demand (mg/L)	1/18/2006	4,200	6
L302W	Chemical Oxygen Demand (mg/L)	4/ 5/2006	2,300	6
L302W	Chemical Oxygen Demand (mg/L)	8/22/2006	1,700	5
L302W	Chemical Oxygen Demand (mg/L)	10/13/2006	2,200	5
L302W	Coliform, Fecal (ct/100)	1/18/2006	<10	10
L302W	Coliform, Fecal (ct/100)	4/ 5/2006	<10	10
L302W	Coliform, Fecal (ct/100)	8/22/2006	<10	10
L302W	Coliform, Fecal (ct/100)	10/13/2006	1,170	10
L302W	Copper, Total (µg/L)	1/18/2006	51	3
L302W	Copper, Total (µg/L)	4/ 5/2006	150	3
L302W	Copper, Total (µg/L)	8/22/2006	21	3
L302W	Copper, Total (µg/L)	10/13/2006	180	3
L302W	Cyanide, Total (mg/L)	1/18/2006	0.007	0.005
L302W	Cyanide, Total (mg/L)	4/ 5/2006	0.013	5
L302W	Cyanide, Total (mg/L)	8/22/2006	0.009	0.005
L302W	Cyanide, Total (mg/L)	10/13/2006	<0.005	0.005
L302W	delta-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L302W	Dibenzo(a,h)anthracene (µg/L)	4/ 5/2006	<100	100
L302W	Dibromochloromethane (µg/L)	4/ 5/2006	<5	5
L302W	Dibromomethane (µg/L)	4/ 5/2006	<5	5
L302W	Dichlorodifluoromethane (µg/L)	4/ 5/2006	<10	10
L302W	Dieldrin (µg/L)	4/ 5/2006	<1	1
L302W	Diethyl phthalate (µg/L)	4/ 5/2006	<100	100
L302W	Dimethyl phthalate (µg/L)	4/ 5/2006	<100	100
L302W	Di-n-butyl phthalate (µg/L)	4/ 5/2006	<100	100
L302W	Di-n-octyl phthalate (µg/L)	4/ 5/2006	<100	100
L302W	Dioxin Screen (µg/L)	4/ 5/2006	<100	100
L302W	Endosulfan I (µg/L)	4/ 5/2006	<0.5	0.5
L302W	Endosulfan II (µg/L)	4/ 5/2006	<1	1
L302W	Endosulfan Sulfate (µg/L)	4/ 5/2006	<1	1

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L302W	Endrin (µg/L)	4/ 5/2006	<1	1
L302W	Endrin aldehyde (µg/L)	4/ 5/2006	<1	1
L302W	Ethyl acetate (µg/L)	4/ 5/2006	<50	50
L302W	Ethyl benzene (µg/L)	4/ 5/2006	16	5
L302W	Ethylene dibromide (µg/L)	4/ 5/2006	<0.050	0.05
L302W	Fluoranthene (µg/L)	4/ 5/2006	<100	100
L302W	Fluorene (µg/L)	4/ 5/2006	<100	100
L302W	Fluoride, Total (mg/L)	1/18/2006	0.68	0.25
L302W	Fluoride, Total (mg/L)	4/ 5/2006	0.81	25
L302W	Fluoride, Total (mg/L)	8/22/2006	0.76	0.25
L302W	Fluoride, Total (mg/L)	10/13/2006	0.78	0.25
L302W	gamma-BHC (Lindane) (µg/L)	4/ 5/2006	<0.5	0.5
L302W	Heptachlor (µg/L)	4/ 5/2006	<0.5	0.5
L302W	Heptachlor epoxide (µg/L)	4/ 5/2006	<0.5	0.5
L302W	Hexachlorobenzene (µg/L)	4/ 5/2006	<100	100
L302W	Hexachlorobutadiene (µg/L)	4/ 5/2006	<100	100
L302W	Hexachlorocyclopentadiene (µg/L)	4/ 5/2006	<100	100
L302W	Hexachloroethane (µg/L)	4/ 5/2006	<100	100
L302W	Indeno(1,2,3-cd)pyrene (µg/L)	4/ 5/2006	<100	100
L302W	Iodomethane (µg/L)	4/ 5/2006	<5	5
L302W	Iron, Total (µg/L)	1/18/2006	2,300	10
L302W	Iron, Total (µg/L)	4/ 5/2006	1,900	1
L302W	Iron, Total (µg/L)	8/22/2006	1,500	10
L302W	Iron, Total (µg/L)	10/13/2006	17,000	10
L302W	Isopropyl benzene (µg/L)	4/ 5/2006	<5	5
L302W	Lead, Total (µg/L)	1/18/2006	2.2	1
L302W	Lead, Total (µg/L)	4/ 5/2006	3	1
L302W	Lead, Total (µg/L)	8/22/2006	2.2	1
L302W	Lead, Total (µg/L)	10/13/2006	21	1
L302W	m/p-Xylene (µg/L)	4/ 5/2006	24	5
L302W	Magnesium, Total (mg/L)	4/ 5/2006	140	0.1
L302W	Manganese, Total (µg/L)	1/18/2006	230	1
L302W	Manganese, Total (µg/L)	4/ 5/2006	230	1
L302W	Manganese, Total (µg/L)	8/22/2006	230	1
L302W	Manganese, Total (µg/L)	10/13/2006	340	1
L302W	Mercury, Total (µg/L)	1/18/2006	<0.2	0.2
L302W	Mercury, Total (µg/L)	4/ 5/2006	<0.2	0.2
L302W	Mercury, Total (µg/L)	8/22/2006	<0.2	0.2
L302W	Mercury, Total (µg/L)	10/13/2006	<0.2	0.2
L302W	Methoxychlor (µg/L)	4/ 5/2006	<5	5
L302W	Methylene chloride (µg/L)	4/ 5/2006	<25	25

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2006
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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302W	Naphthalene (µg/L)	4/ 5/2006	<100	100
L302W	n-Butanol (µg/L)	4/ 5/2006	<5000	5000
L302W	n-Butylbenzene (µg/L)	4/ 5/2006	<5	5
L302W	Nickel, Total (µg/L)	1/18/2006	220	5
L302W	Nickel, Total (µg/L)	4/ 5/2006	240	5
L302W	Nickel, Total (µg/L)	8/22/2006	190	5
L302W	Nickel, Total (µg/L)	10/13/2006	620	5
L302W	Nitrate/Nitrite as N, Total (mg/L)	4/ 5/2006	0.029	2
L302W	Nitrobenzene (µg/L)	4/ 5/2006	<100	100
L302W	N-Nitrosodimethylamine (µg/L)	4/ 5/2006	<100	100
L302W	N-Nitroso-Di-n-propylamine (µg/L)	4/ 5/2006	<100	100
L302W	N-nitrosodiphenylamine (µg/L)	4/ 5/2006	<100	100
L302W	n-Propylbenzene (µg/L)	4/ 5/2006	<5	5
L302W	Oil and grease (mg/L)	1/18/2006	<6	6
L302W	Oil and grease (mg/L)	4/ 5/2006	<6	6
L302W	Oil and grease (mg/L)	8/22/2006	<6	6
L302W	Oil and grease (mg/L)	10/13/2006	41	6
L302W	o-Xylene (µg/L)	4/ 5/2006	10	5
L302W	Parathion (µg/L)	4/ 5/2006	<0.2	0.2
L302W	Pentachlorophenol (µg/L)	4/ 5/2006	<0.050	0.05
L302W	pH, Field (s.u.)	1/18/2006	7.15	0
L302W	pH, Field (s.u.)	4/ 5/2006	7.29	0
L302W	pH, Field (s.u.)	8/22/2006	7.39	0
L302W	pH, Field (s.u.)	10/13/2006	7.6	0
L302W	Phenanthrene (µg/L)	4/ 5/2006	<100	100
L302W	Phenols, Total (µg/L)	1/18/2006	140	5
L302W	Phenols, Total (µg/L)	4/ 5/2006	200	25
L302W	Phenols, Total (µg/L)	8/22/2006	130	5
L302W	Phenols, Total (µg/L)	10/13/2006	140	5
L302W	Phosphorous, Total (µg/L)	1/18/2006	6,900	50
L302W	Phosphorous, Total (µg/L)	4/ 5/2006	7,400	50
L302W	Phosphorous, Total (µg/L)	8/22/2006	6,100	50
L302W	Phosphorous, Total (µg/L)	10/13/2006	9,000	50
L302W	P-Isopropyltoluene (µg/L)	4/ 5/2006	<5	5
L302W	Potassium, Total (mg/L)	4/ 5/2006	440	0.1
L302W	Pyrene (µg/L)	4/ 5/2006	<100	100
L302W	sec-Butylbenzene (µg/L)	4/ 5/2006	<5	5
L302W	Selenium, Total (µg/L)	4/ 5/2006	60	1
L302W	Silver, Total (µg/L)	1/18/2006	<5	5
L302W	Silver, Total (µg/L)	4/ 5/2006	<5	5
L302W	Silver, Total (µg/L)	8/22/2006	<5	5

SUMMARY OF LEACHATE MONITORING RESULTS
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Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302W	Silver, Total (µg/L)	10/13/2006	<5	5
L302W	Silvex (µg/L)	4/ 5/2006	<0.050	0.05
L302W	Sodium, Total (mg/L)	4/ 5/2006	2,000	1
L302W	Specific Conductance, Field (µmhos/cm)	1/18/2006	23,100	0
L302W	Specific Conductance, Field (µmhos/cm)	4/ 5/2006	12,900	0
L302W	Specific Conductance, Field (µmhos/cm)	8/22/2006	13,660	0
L302W	Specific Conductance, Field (µmhos/cm)	10/13/2006	6,000	0
L302W	Styrene (µg/L)	4/ 5/2006	<5	5
L302W	Sulfate, Total (mg/L)	4/ 5/2006	6.7	1
L302W	tert-Butylbenzene (µg/L)	4/ 5/2006	<5	5
L302W	Tetrachloroethene (µg/L)	4/ 5/2006	<5	5
L302W	Tetrahydrofuran (µg/L)	4/ 5/2006	390	0
L302W	Thallium, Total (µg/L)	4/ 5/2006	<1	1
L302W	Tin, Total (µg/L)	4/ 5/2006	<60	60
L302W	Total Organic Carbon (mg/L)	4/ 5/2006	630	0.5
L302W	Toluene (µg/L)	4/ 5/2006	90	5
L302W	Total Dissolved Solids (mg/L)	1/18/2006	6,900	51
L302W	Total Dissolved Solids (mg/L)	4/ 5/2006	7,300	51
L302W	Total Dissolved Solids (mg/L)	8/22/2006	6,700	17
L302W	Total Dissolved Solids (mg/L)	10/13/2006	7,200	17
L302W	Total Suspended Solids (mg/L)	1/18/2006	15	2
L302W	Total Suspended Solids (mg/L)	4/ 5/2006	10	2
L302W	Total Suspended Solids (mg/L)	8/22/2006	21	2
L302W	Total Suspended Solids (mg/L)	10/13/2006	350	2
L302W	Toxaphene (µg/L)	4/ 5/2006	<5	5
L302W	trans-1,2-Dichloroethene (µg/L)	4/ 5/2006	<5	5
L302W	trans-1,3-Dichloropropene (µg/L)	4/ 5/2006	<5	5
L302W	trans-1,4-Dichloro-2-butene (µg/L)	4/ 5/2006	<5	5
L302W	Trichloroethene (µg/L)	4/ 5/2006	<5	5
L302W	Trichlorofluoromethane (µg/L)	4/ 5/2006	<5	5
L302W	Vinyl acetate (µg/L)	4/ 5/2006	<25	25
L302W	Vinyl chloride (µg/L)	4/ 5/2006	<10	10
L302W	Xylenes, Total (µg/L)	4/ 5/2006	34	15
L302W	Zinc, Total (µg/L)	1/18/2006	75	6
L302W	Zinc, Total (µg/L)	4/ 5/2006	85	6
L302W	Zinc, Total (µg/L)	8/22/2006	49	6
L302W	Zinc, Total (µg/L)	10/13/2006	510	6
L304	1,1,1,2-Tetrachloroethane (µg/L)	4/ 5/2006	<5	5
L304	1,1,1-Trichloroethane (µg/L)	4/ 5/2006	<5	5
L304	1,1,2,2-Tetrachloroethane (µg/L)	4/ 5/2006	<5	5
L304	1,1,2-Trichloroethane (µg/L)	4/ 5/2006	<5	5

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	1,1-Dichloroethane (µg/L)	4/ 5/2006	<5	5
L304	1,1-Dichloroethene (µg/L)	4/ 5/2006	<5	5
L304	1,1-Dichloropropene (µg/L)	4/ 5/2006	<5	5
L304	1,2,3-Trichlorobenzene (µg/L)	4/ 5/2006	<5	5
L304	1,2,3-Trichloropropane (µg/L)	4/ 5/2006	<5	5
L304	1,2,4-Trichlorobenzene (µg/L)	4/ 5/2006	<5	5
L304	1,2,4-Trimethylbenzene (µg/L)	4/ 5/2006	<5	5
L304	1,2-Dibromo-3-chloropropane (µg/L)	4/ 5/2006	<0.050	0.05
L304	1,2-Dichlorobenzene (µg/L)	4/ 5/2006	<5	5
L304	1,2-Dichloroethane (µg/L)	4/ 5/2006	<5	5
L304	1,2-Dichloropropane (µg/L)	4/ 5/2006	<5	5
L304	1,3,5-Trimethylbenzene (µg/L)	4/ 5/2006	<5	5
L304	1,3-Dichlorobenzene (µg/L)	4/ 5/2006	<5	5
L304	1,3-Dichloropropane (µg/L)	4/ 5/2006	<5	5
L304	1,4-Dichlorobenzene (µg/L)	4/ 5/2006	<5	5
L304	1-Propanol (µg/L)	4/ 5/2006	<5000	5000
L304	2,2-Dichloropropane (µg/L)	4/ 5/2006	<5	5
L304	2,4,6-Trichlorophenol (µg/L)	4/ 5/2006	<100	100
L304	2,4-D (µg/L)	4/ 5/2006	<1	1
L304	2,4-Dichlorophenol (µg/L)	4/ 5/2006	<100	100
L304	2,4-Dimethylphenol (µg/L)	4/ 5/2006	<100	100
L304	2,4-Dinitrophenol (µg/L)	4/ 5/2006	<500	500
L304	2,4-Dinitrotoluene (µg/L)	4/ 5/2006	<100	100
L304	2,6-Dinitrotoluene (µg/L)	4/ 5/2006	<100	100
L304	2-Butanone (MEK) (µg/L)	4/ 5/2006	<25	25
L304	2-Chloroethyl vinyl ether (µg/L)	4/ 5/2006	<50	50
L304	2-Chloronaphthalene (µg/L)	4/ 5/2006	<100	100
L304	2-Chlorophenol (µg/L)	4/ 5/2006	<100	100
L304	2-Chlorotoluene (µg/L)	4/ 5/2006	<5	5
L304	2-Hexanone (MBK) (µg/L)	4/ 5/2006	<25	25
L304	3,3-Dichlorobenzidine (µg/L)	4/ 5/2006	<200	200
L304	4,4'-DDD (µg/L)	4/ 5/2006	<1	1
L304	4,4'-DDE (µg/L)	4/ 5/2006	<1	1
L304	4,4'-DDT (µg/L)	4/ 5/2006	<1	1
L304	4,6-Dinitro-2-methylphenol (µg/L)	4/ 5/2006	<500	500
L304	4-Bromophenyl phenyl ether (µg/L)	4/ 5/2006	<100	100
L304	4-Chlorophenyl phenyl ether (µg/L)	4/ 5/2006	<100	100
L304	4-Chlorotoluene (µg/L)	4/ 5/2006	<5	5
L304	4-Methyl-2-Pentanone(MIBK) (µg/L)	4/ 5/2006	<25	25
L304	4-Methylphenol(p-cresol) (µg/L)	4/ 5/2006	<100	100
L304	4-Nitrophenol (µg/L)	4/ 5/2006	<100	100

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	Acenaphthene (µg/L)	4/ 5/2006	<100	100
L304	Acetone (µg/L)	4/ 5/2006	<50	50
L304	Alachlor (µg/L)	4/ 5/2006	<0.4	0.4
L304	Aldicarb (µg/L)	4/ 5/2006	<0.4	0.4
L304	Aldrin (µg/L)	4/ 5/2006	<0.5	0.5
L304	Alkalinity, Bicarb Total (mg/L)	4/ 5/2006	3,500	2
L304	alpha-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L304	Aluminum, Total (µg/L)	4/ 5/2006	390	1
L304	Ammonia, Total (mg/L)	4/ 5/2006	500	2
L304	Ammonia, Total (mg/L)	8/22/2006	410	1
L304	Ammonia, Total (mg/L)	10/13/2006	470	1
L304	Anthracene (µg/L)	4/ 5/2006	<100	100
L304	Antimony, Total (µg/L)	4/ 5/2006	<3	3
L304	Aroclor 1016 (µg/L)	4/ 5/2006	<5	5
L304	Aroclor 1221 (µg/L)	4/ 5/2006	<10	10
L304	Aroclor 1232 (µg/L)	4/ 5/2006	<5	5
L304	Aroclor 1242 (µg/L)	4/ 5/2006	<5	5
L304	Aroclor 1248 (µg/L)	4/ 5/2006	<5	5
L304	Aroclor 1254 (µg/L)	4/ 5/2006	<10	10
L304	Aroclor 1260 (µg/L)	4/ 5/2006	<10	10
L304	Arsenic, Total (µg/L)	4/ 5/2006	39	1
L304	Arsenic, Total (µg/L)	8/22/2006	3.7	1
L304	Arsenic, Total (µg/L)	10/13/2006	34	1
L304	Atrazine (µg/L)	4/ 5/2006	<0.2	0.2
L304	Barium, Total (µg/L)	4/ 5/2006	950	2
L304	Barium, Total (µg/L)	8/22/2006	92	2
L304	Barium, Total (µg/L)	10/13/2006	920	2
L304	Benzene (µg/L)	4/ 5/2006	<5	5
L304	Benzo(a)anthracene (µg/L)	4/ 5/2006	<100	100
L304	Benzo(a)pyrene (µg/L)	4/ 5/2006	<100	100
L304	Benzo(b)fluoranthene (µg/L)	4/ 5/2006	<100	100
L304	Benzo(ghi)perylene (µg/L)	4/ 5/2006	<100	100
L304	Benzo(k)fluoranthene (µg/L)	4/ 5/2006	<100	100
L304	Beryllium, Total (µg/L)	4/ 5/2006	<1	1
L304	beta-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L304	bis(2-chloroethoxy) methane (µg/L)	4/ 5/2006	<100	100
L304	bis(2-Chloroethyl) ether (µg/L)	4/ 5/2006	<100	100
L304	bis(2-Ethylhexyl) phthalate (µg/L)	4/ 5/2006	<100	100
L304	Bis(chloromethyl)ether (µg/L)	4/ 5/2006	<50000	50000
L304	Biological Oxygen Demand (mg/L)	4/ 5/2006	61	4
L304	Biological Oxygen Demand (mg/L)	8/22/2006	42	4

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	Biological Oxygen Demand (mg/L)	10/13/2006	380	4
L304	Boron, Total (µg/L)	4/ 5/2006	16,000	100
L304	Bromobenzene (µg/L)	4/ 5/2006	<5	5
L304	Bromochloromethane (µg/L)	4/ 5/2006	<5	5
L304	Bromodichloromethane (µg/L)	4/ 5/2006	<5	5
L304	Bromoform (µg/L)	4/ 5/2006	<5	5
L304	Bromomethane (µg/L)	4/ 5/2006	<10	10
L304	Butyl benzyl phthalate (µg/L)	4/ 5/2006	<100	100
L304	Cadmium, Total (µg/L)	4/ 5/2006	<1	1
L304	Cadmium, Total (µg/L)	8/22/2006	<1	1
L304	Cadmium, Total (µg/L)	10/13/2006	<1	1
L304	Calcium, Total (mg/L)	4/ 5/2006	150	0.1
L304	Carbofuran (µg/L)	4/ 5/2006	<1.5	1.5
L304	Carbon disulfide (µg/L)	4/ 5/2006	<5	5
L304	Carbon tetrachloride (µg/L)	4/ 5/2006	<5	5
L304	Chlordane (Tech) (µg/L)	4/ 5/2006	<5	5
L304	Chloride, Total (mg/L)	4/ 5/2006	2,400	0.5
L304	Chlorobenzene (µg/L)	4/ 5/2006	<5	5
L304	Chloroethane (µg/L)	4/ 5/2006	<10	10
L304	Chloroform (µg/L)	4/ 5/2006	<5	5
L304	Chloromethane (µg/L)	4/ 5/2006	<10	10
L304	Chromium, Total (µg/L)	4/ 5/2006	92	4
L304	Chromium, Total (µg/L)	8/22/2006	21	4
L304	Chromium, Total (µg/L)	10/13/2006	48	4
L304	Chromium, Hexavalent (µg/L)	8/22/2006	<10	10
L304	Chromium, Hexavalent (µg/L)	10/13/2006	<10	10
L304	Chrysene (µg/L)	4/ 5/2006	<100	100
L304	cis-1,2-Dichloroethene (µg/L)	4/ 5/2006	<5	5
L304	cis-1,3-Dichloropropene (µg/L)	4/ 5/2006	<5	5
L304	Cobalt, Total (µg/L)	4/ 5/2006	12	2
L304	Chemical Oxygen Demand (mg/L)	4/ 5/2006	1,100	6
L304	Chemical Oxygen Demand (mg/L)	8/22/2006	960	5
L304	Chemical Oxygen Demand (mg/L)	10/13/2006	900	5
L304	Coliform, Fecal (ct/100)	4/ 5/2006	<10	10
L304	Coliform, Fecal (ct/100)	8/22/2006	<10	10
L304	Coliform, Fecal (ct/100)	10/13/2006	<10	10
L304	Copper, Total (µg/L)	4/ 5/2006	19	3
L304	Copper, Total (µg/L)	8/22/2006	85	3
L304	Copper, Total (µg/L)	10/13/2006	16	3
L304	Cyanide, Total (mg/L)	4/ 5/2006	0.007	5
L304	Cyanide, Total (mg/L)	8/22/2006	<0.005	0.005

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	Cyanide, Total (mg/L)	10/13/2006	<0.005	0.005
L304	delta-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L304	Dibenzo(a,h)anthracene (µg/L)	4/ 5/2006	<100	100
L304	Dibromochloromethane (µg/L)	4/ 5/2006	<5	5
L304	Dibromomethane (µg/L)	4/ 5/2006	<5	5
L304	Dichlorodifluoromethane (µg/L)	4/ 5/2006	<10	10
L304	Dieldrin (µg/L)	4/ 5/2006	<1	1
L304	Diethyl phthalate (µg/L)	4/ 5/2006	<100	100
L304	Dimethyl phthalate (µg/L)	4/ 5/2006	<100	100
L304	Di-n-butyl phthalate (µg/L)	4/ 5/2006	<100	100
L304	Di-n-octyl phthalate (µg/L)	4/ 5/2006	<100	100
L304	Dioxin Screen (µg/L)	4/ 5/2006	<100	100
L304	Endosulfan I (µg/L)	4/ 5/2006	<0.5	0.5
L304	Endosulfan II (µg/L)	4/ 5/2006	<1	1
L304	Endosulfan Sulfate (µg/L)	4/ 5/2006	<1	1
L304	Endrin (µg/L)	4/ 5/2006	<1	1
L304	Endrin aldehyde (µg/L)	4/ 5/2006	<1	1
L304	Ethyl acetate (µg/L)	4/ 5/2006	<50	50
L304	Ethyl benzene (µg/L)	4/ 5/2006	<5	5
L304	Ethylene dibromide (µg/L)	4/ 5/2006	<0.050	0.05
L304	Fluoranthene (µg/L)	4/ 5/2006	<100	100
L304	Fluorene (µg/L)	4/ 5/2006	<100	100
L304	Fluoride, Total (mg/L)	4/ 5/2006	0.57	25
L304	Fluoride, Total (mg/L)	8/22/2006	0.46	0.25
L304	Fluoride, Total (mg/L)	10/13/2006	0.37	0.25
L304	gamma-BHC (Lindane) (µg/L)	4/ 5/2006	<0.5	0.5
L304	Heptachlor (µg/L)	4/ 5/2006	<0.5	0.5
L304	Heptachlor epoxide (µg/L)	4/ 5/2006	<0.5	0.5
L304	Hexachlorobenzene (µg/L)	4/ 5/2006	<100	100
L304	Hexachlorobutadiene (µg/L)	4/ 5/2006	<100	100
L304	Hexachlorocyclopentadiene (µg/L)	4/ 5/2006	<100	100
L304	Hexachloroethane (µg/L)	4/ 5/2006	<100	100
L304	Indeno(1,2,3-cd)pyrene (µg/L)	4/ 5/2006	<100	100
L304	Iodomethane (µg/L)	4/ 5/2006	<5	5
L304	Iron, Total (µg/L)	4/ 5/2006	5,700	1
L304	Iron, Total (µg/L)	8/22/2006	7,900	10
L304	Iron, Total (µg/L)	10/13/2006	53,000	10
L304	Isopropyl benzene (µg/L)	4/ 5/2006	<5	5
L304	Lead, Total (µg/L)	4/ 5/2006	3.5	1
L304	Lead, Total (µg/L)	8/22/2006	7.7	1
L304	Lead, Total (µg/L)	10/13/2006	1.2	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	m/p-Xylene (µg/L)	4/ 5/2006	13	5
L304	Magnesium, Total (mg/L)	4/ 5/2006	320	0.1
L304	Manganese, Total (µg/L)	4/ 5/2006	260	1
L304	Manganese, Total (µg/L)	8/22/2006	320	1
L304	Manganese, Total (µg/L)	10/13/2006	230	1
L304	Mercury, Total (µg/L)	4/ 5/2006	<0.2	0.2
L304	Mercury, Total (µg/L)	8/22/2006	<0.2	0.2
L304	Mercury, Total (µg/L)	10/13/2006	<0.2	0.2
L304	Methoxychlor (µg/L)	4/ 5/2006	<5	5
L304	Methylene chloride (µg/L)	4/ 5/2006	<25	25
L304	Naphthalene (µg/L)	4/ 5/2006	<100	100
L304	n-Butanol (µg/L)	4/ 5/2006	<5000	5000
L304	n-Butylbenzene (µg/L)	4/ 5/2006	<5	5
L304	Nickel, Total (µg/L)	4/ 5/2006	220	5
L304	Nickel, Total (µg/L)	8/22/2006	18	5
L304	Nickel, Total (µg/L)	10/13/2006	100	5
L304	Nitrate/Nitrite as N, Total (mg/L)	4/ 5/2006	<0.020	0.02
L304	Nitrobenzene (µg/L)	4/ 5/2006	<100	100
L304	N-Nitrosodimethylamine (µg/L)	4/ 5/2006	<100	100
L304	N-Nitroso-Di-n-propylamine (µg/L)	4/ 5/2006	<100	100
L304	N-nitrosodiphenylamine (µg/L)	4/ 5/2006	<100	100
L304	n-Propylbenzene (µg/L)	4/ 5/2006	<5	5
L304	Oil and grease (mg/L)	4/ 5/2006	<5	5
L304	Oil and grease (mg/L)	8/22/2006	<6	6
L304	Oil and grease (mg/L)	10/13/2006	<6	6
L304	o-Xylene (µg/L)	4/ 5/2006	<5	5
L304	Parathion (µg/L)	4/ 5/2006	<0.2	0.2
L304	Pentachlorophenol (µg/L)	4/ 5/2006	<0.5	0.5
L304	pH, Field (s.u.)	4/ 5/2006	6.99	0
L304	pH, Field (s.u.)	8/22/2006	7.1	0
L304	pH, Field (s.u.)	10/13/2006	7.19	0
L304	Phenanthrene (µg/L)	4/ 5/2006	<100	100
L304	Phenols, Total (µg/L)	4/ 5/2006	130	5
L304	Phenols, Total (µg/L)	8/22/2006	35	5
L304	Phenols, Total (µg/L)	10/13/2006	330	5
L304	Phosphorous, Total (µg/L)	4/ 5/2006	2,200	50
L304	Phosphorous, Total (µg/L)	8/22/2006	97	50
L304	Phosphorous, Total (µg/L)	10/13/2006	1,300	50
L304	P-Isopropyltoluene (µg/L)	4/ 5/2006	<5	5
L304	Potassium, Total (mg/L)	4/ 5/2006	300	0.1
L304	Pyrene (µg/L)	4/ 5/2006	<100	100

SUMMARY OF LEACHATE MONITORING RESULTS
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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	sec-Butylbenzene (µg/L)	4/ 5/2006	<5	5
L304	Selenium, Total (µg/L)	4/ 5/2006	71	1
L304	Silver, Total (µg/L)	4/ 5/2006	<5	5
L304	Silver, Total (µg/L)	8/22/2006	<5	5
L304	Silver, Total (µg/L)	10/13/2006	<5	5
L304	Silvex (µg/L)	4/ 5/2006	<0.5	0.5
L304	Sodium, Total (mg/L)	4/ 5/2006	1,800	0.2
L304	Specific Conductance, Field (µmhos/cm)	4/ 5/2006	11,000	0
L304	Specific Conductance, Field (µmhos/cm)	8/22/2006	11,830	0
L304	Specific Conductance, Field (µmhos/cm)	10/13/2006	3,540	0
L304	Styrene (µg/L)	4/ 5/2006	<5	5
L304	Sulfate, Total (mg/L)	4/ 5/2006	25	0.5
L304	tert-Butylbenzene (µg/L)	4/ 5/2006	<5	5
L304	Tetrachloroethene (µg/L)	4/ 5/2006	<5	5
L304	Tetrahydrofuran (µg/L)	4/ 5/2006	420	0
L304	Thallium, Total (µg/L)	4/ 5/2006	<1	1
L304	Tin, Total (µg/L)	4/ 5/2006	<60	60
L304	Total Organic Carbon (mg/L)	4/ 5/2006	310	0.5
L304	Toluene (µg/L)	4/ 5/2006	<5	5
L304	Total Dissolved Solids (mg/L)	4/ 5/2006	6,800	51
L304	Total Dissolved Solids (mg/L)	8/22/2006	6,200	17
L304	Total Dissolved Solids (mg/L)	10/13/2006	4,900	17
L304	Total Suspended Solids (mg/L)	4/ 5/2006	23	2
L304	Total Suspended Solids (mg/L)	8/22/2006	8	2
L304	Total Suspended Solids (mg/L)	10/13/2006	27	2
L304	Toxaphene (µg/L)	4/ 5/2006	<5	5
L304	trans-1,2-Dichloroethene (µg/L)	4/ 5/2006	<5	5
L304	trans-1,3-Dichloropropene (µg/L)	4/ 5/2006	<5	5
L304	trans-1,4-Dichloro-2-butene (µg/L)	4/ 5/2006	<5	5
L304	Trichloroethene (µg/L)	4/ 5/2006	<5	5
L304	Trichlorofluoromethane (µg/L)	4/ 5/2006	<5	5
L304	Vinyl acetate (µg/L)	4/ 5/2006	<25	25
L304	Vinyl chloride (µg/L)	4/ 5/2006	<10	10
L304	Xylenes, Total (µg/L)	4/ 5/2006	<15	15
L304	Zinc, Total (µg/L)	4/ 5/2006	6.9	6
L304	Zinc, Total (µg/L)	8/22/2006	75	6
L304	Zinc, Total (µg/L)	10/13/2006	23	6
L305	1,1,1,2-Tetrachloroethane (µg/L)	4/ 5/2006	<1	1
L305	1,1,1-Trichloroethane (µg/L)	4/ 5/2006	<1	1
L305	1,1,2,2-Tetrachloroethane (µg/L)	4/ 5/2006	<1	1
L305	1,1,2-Trichloroethane (µg/L)	4/ 5/2006	<1	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	1,1-Dichloroethane (µg/L)	4/ 5/2006	<1	1
L305	1,1-Dichloroethene (µg/L)	4/ 5/2006	<1	1
L305	1,1-Dichloropropene (µg/L)	4/ 5/2006	<1	1
L305	1,2,3-Trichlorobenzene (µg/L)	4/ 5/2006	<1	1
L305	1,2,3-Trichloropropane (µg/L)	4/ 5/2006	<1	1
L305	1,2,4-Trichlorobenzene (µg/L)	4/ 5/2006	<1	1
L305	1,2,4-Trimethylbenzene (µg/L)	4/ 5/2006	<1	1
L305	1,2-Dibromo-3-chloropropane (µg/L)	4/ 5/2006	<0.050	0.05
L305	1,2-Dichlorobenzene (µg/L)	4/ 5/2006	<1	1
L305	1,2-Dichloroethane (µg/L)	4/ 5/2006	1	1
L305	1,2-Dichloropropane (µg/L)	4/ 5/2006	<1	1
L305	1,3,5-Trimethylbenzene (µg/L)	4/ 5/2006	<1	1
L305	1,3-Dichlorobenzene (µg/L)	4/ 5/2006	<1	1
L305	1,3-Dichloropropane (µg/L)	4/ 5/2006	<1	1
L305	1,4-Dichlorobenzene (µg/L)	4/ 5/2006	4	1
L305	1-Propanol (µg/L)	4/ 5/2006	<1000	1000
L305	2,2-Dichloropropane (µg/L)	4/ 5/2006	<1	1
L305	2,4,6-Trichlorophenol (µg/L)	4/ 5/2006	<100	100
L305	2,4-D (µg/L)	4/ 5/2006	<1	1
L305	2,4-Dichlorophenol (µg/L)	4/ 5/2006	<100	100
L305	2,4-Dimethylphenol (µg/L)	4/ 5/2006	<100	100
L305	2,4-Dinitrophenol (µg/L)	4/ 5/2006	<500	500
L305	2,4-Dinitrotoluene (µg/L)	4/ 5/2006	<100	100
L305	2,6-Dinitrotoluene (µg/L)	4/ 5/2006	<100	100
L305	2-Butanone (MEK) (µg/L)	4/ 5/2006	6	5
L305	2-Chloroethyl vinyl ether (µg/L)	4/ 5/2006	<10	10
L305	2-Chloronaphthalene (µg/L)	4/ 5/2006	<100	100
L305	2-Chlorophenol (µg/L)	4/ 5/2006	<100	100
L305	2-Chlorotoluene (µg/L)	4/ 5/2006	<1	1
L305	2-Hexanone (MBK) (µg/L)	4/ 5/2006	<5	5
L305	3,3-Dichlorobenzidine (µg/L)	4/ 5/2006	<200	200
L305	4,4'-DDD (µg/L)	4/ 5/2006	<1	1
L305	4,4'-DDE (µg/L)	4/ 5/2006	<1	1
L305	4,4'-DDT (µg/L)	4/ 5/2006	<1	1
L305	4,6-Dinitro-2-methylphenol (µg/L)	4/ 5/2006	<500	500
L305	4-Bromophenyl phenyl ether (µg/L)	4/ 5/2006	<100	100
L305	4-Chlorophenyl phenyl ether (µg/L)	4/ 5/2006	<100	100
L305	4-Chlorotoluene (µg/L)	4/ 5/2006	<1	1
L305	4-Methyl-2-Pentanone(MIBK) (µg/L)	4/ 5/2006	<5	5
L305	4-Methylphenol(p-cresol) (µg/L)	4/ 5/2006	<100	100
L305	4-Nitrophenol (µg/L)	4/ 5/2006	<100	100

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	Acenaphthene (µg/L)	4/ 5/2006	<100	100
L305	Acetone (µg/L)	4/ 5/2006	12	10
L305	Alachlor (µg/L)	4/ 5/2006	<4	4
L305	Aldicarb (µg/L)	4/ 5/2006	<4	4
L305	Aldrin (µg/L)	4/ 5/2006	<0.5	0.5
L305	Alkalinity, Bicarb Total (mg/L)	4/ 5/2006	1,300	2
L305	alpha-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L305	Aluminum, Total (µg/L)	4/ 5/2006	16,000	1
L305	Ammonia, Total (mg/L)	4/ 5/2006	65	2
L305	Ammonia, Total (mg/L)	8/22/2006	270	1
L305	Ammonia, Total (mg/L)	10/13/2006	300	1
L305	Anthracene (µg/L)	4/ 5/2006	<100	100
L305	Antimony, Total (µg/L)	4/ 5/2006	<3	3
L305	Aroclor 1016 (µg/L)	4/ 5/2006	<5	5
L305	Aroclor 1221 (µg/L)	4/ 5/2006	<10	10
L305	Aroclor 1232 (µg/L)	4/ 5/2006	<5	5
L305	Aroclor 1242 (µg/L)	4/ 5/2006	<5	5
L305	Aroclor 1248 (µg/L)	4/ 5/2006	<5	5
L305	Aroclor 1254 (µg/L)	4/ 5/2006	<10	10
L305	Aroclor 1260 (µg/L)	4/ 5/2006	<10	10
L305	Arsenic, Total (µg/L)	4/ 5/2006	7.7	1
L305	Arsenic, Total (µg/L)	8/22/2006	16	1
L305	Arsenic, Total (µg/L)	10/13/2006	14	1
L305	Atrazine (µg/L)	4/ 5/2006	<2	2
L305	Barium, Total (µg/L)	4/ 5/2006	300	2
L305	Barium, Total (µg/L)	8/22/2006	980	2
L305	Barium, Total (µg/L)	10/13/2006	480	4
L305	Benzene (µg/L)	4/ 5/2006	4	1
L305	Benzo(a)anthracene (µg/L)	4/ 5/2006	<100	100
L305	Benzo(a)pyrene (µg/L)	4/ 5/2006	<100	100
L305	Benzo(b)fluoranthene (µg/L)	4/ 5/2006	<100	100
L305	Benzo(ghi)perylene (µg/L)	4/ 5/2006	<100	100
L305	Benzo(k)fluoranthene (µg/L)	4/ 5/2006	<100	100
L305	Beryllium, Total (µg/L)	4/ 5/2006	<1	1
L305	beta-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L305	bis(2-chloroethoxy) methane (µg/L)	4/ 5/2006	<100	100
L305	bis(2-Chloroethyl) ether (µg/L)	4/ 5/2006	<100	100
L305	bis(2-Ethylhexyl) phthalate (µg/L)	4/ 5/2006	230	0
L305	Bis(chloromethyl)ether (µg/L)	4/ 5/2006	<10000	10000
L305	Biological Oxygen Demand (mg/L)	4/ 5/2006	56	4
L305	Biological Oxygen Demand (mg/L)	8/22/2006	60	4

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	Biological Oxygen Demand (mg/L)	10/13/2006	51	4
L305	Boron, Total (µg/L)	4/ 5/2006	1,100	100
L305	Bromobenzene (µg/L)	4/ 5/2006	<1	1
L305	Bromochloromethane (µg/L)	4/ 5/2006	<1	1
L305	Bromodichloromethane (µg/L)	4/ 5/2006	<1	1
L305	Bromoform (µg/L)	4/ 5/2006	<1	1
L305	Bromomethane (µg/L)	4/ 5/2006	<2	2
L305	Butyl benzyl phthalate (µg/L)	4/ 5/2006	<100	100
L305	Cadmium, Total (µg/L)	4/ 5/2006	<1	1
L305	Cadmium, Total (µg/L)	8/22/2006	<1	1
L305	Cadmium, Total (µg/L)	10/13/2006	<1	1
L305	Calcium, Total (mg/L)	4/ 5/2006	460	0.1
L305	Carbofuran (µg/L)	4/ 5/2006	<15	15
L305	Carbon disulfide (µg/L)	4/ 5/2006	9	1
L305	Carbon tetrachloride (µg/L)	4/ 5/2006	<1	1
L305	Chlordane (Tech) (µg/L)	4/ 5/2006	<5	5
L305	Chloride, Total (mg/L)	4/ 5/2006	680	25
L305	Chlorobenzene (µg/L)	4/ 5/2006	<1	1
L305	Chloroethane (µg/L)	4/ 5/2006	<2	2
L305	Chloroform (µg/L)	4/ 5/2006	<1	1
L305	Chloromethane (µg/L)	4/ 5/2006	<2	2
L305	Chromium, Total (µg/L)	4/ 5/2006	35	4
L305	Chromium, Total (µg/L)	8/22/2006	44	4
L305	Chromium, Total (µg/L)	10/13/2006	42	4
L305	Chromium, Hexavalent (µg/L)	8/22/2006	<10	10
L305	Chromium, Hexavalent (µg/L)	10/13/2006	<10	10
L305	Chrysene (µg/L)	4/ 5/2006	<100	100
L305	cis-1,2-Dichloroethene (µg/L)	4/ 5/2006	2	1
L305	cis-1,3-Dichloropropene (µg/L)	4/ 5/2006	<1	1
L305	Cobalt, Total (µg/L)	4/ 5/2006	<2	2
L305	Chemical Oxygen Demand (mg/L)	4/ 5/2006	250	6
L305	Chemical Oxygen Demand (mg/L)	8/22/2006	500	5
L305	Chemical Oxygen Demand (mg/L)	10/13/2006	390	5
L305	Coliform, Fecal (ct/100)	4/ 5/2006	<10	10
L305	Coliform, Fecal (ct/100)	8/22/2006	<10	10
L305	Coliform, Fecal (ct/100)	10/13/2006	<10	10
L305	Copper, Total (µg/L)	4/ 5/2006	29	3
L305	Copper, Total (µg/L)	8/22/2006	12	3
L305	Copper, Total (µg/L)	10/13/2006	30	3
L305	Cyanide, Total (mg/L)	4/ 5/2006	<0.005	0.005
L305	Cyanide, Total (mg/L)	8/22/2006	<0.005	0.005

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	Cyanide, Total (mg/L)	10/13/2006	<0.005	0.005
L305	delta-BHC (µg/L)	4/ 5/2006	<0.5	0.5
L305	Dibenzo(a,h)anthracene (µg/L)	4/ 5/2006	<100	100
L305	Dibromochloromethane (µg/L)	4/ 5/2006	<1	1
L305	Dibromomethane (µg/L)	4/ 5/2006	<1	1
L305	Dichlorodifluoromethane (µg/L)	4/ 5/2006	<2	2
L305	Dieldrin (µg/L)	4/ 5/2006	<1	1
L305	Diethyl phthalate (µg/L)	4/ 5/2006	<100	100
L305	Dimethyl phthalate (µg/L)	4/ 5/2006	<100	100
L305	Di-n-butyl phthalate (µg/L)	4/ 5/2006	<100	100
L305	Di-n-octyl phthalate (µg/L)	4/ 5/2006	<100	100
L305	Dioxin Screen (µg/L)	4/ 5/2006	<100	100
L305	Endosulfan I (µg/L)	4/ 5/2006	<0.5	0.5
L305	Endosulfan II (µg/L)	4/ 5/2006	<1	1
L305	Endosulfan Sulfate (µg/L)	4/ 5/2006	<1	1
L305	Endrin (µg/L)	4/ 5/2006	<1	1
L305	Endrin aldehyde (µg/L)	4/ 5/2006	<1	1
L305	Ethyl acetate (µg/L)	4/ 5/2006	<10	10
L305	Ethyl benzene (µg/L)	4/ 5/2006	3	1
L305	Ethylene dibromide (µg/L)	4/ 5/2006	<0.050	0.05
L305	Fluoranthene (µg/L)	4/ 5/2006	<100	100
L305	Fluorene (µg/L)	4/ 5/2006	<100	100
L305	Fluoride, Total (mg/L)	4/ 5/2006	<0.250	0.25
L305	Fluoride, Total (mg/L)	8/22/2006	0.32	0.25
L305	Fluoride, Total (mg/L)	10/13/2006	<0.250	0.25
L305	gamma-BHC (Lindane) (µg/L)	4/ 5/2006	<0.5	0.5
L305	Heptachlor (µg/L)	4/ 5/2006	<0.5	0.5
L305	Heptachlor epoxide (µg/L)	4/ 5/2006	<0.5	0.5
L305	Hexachlorobenzene (µg/L)	4/ 5/2006	<100	100
L305	Hexachlorobutadiene (µg/L)	4/ 5/2006	<100	100
L305	Hexachlorocyclopentadiene (µg/L)	4/ 5/2006	<100	100
L305	Hexachloroethane (µg/L)	4/ 5/2006	<100	100
L305	Indeno(1,2,3-cd)pyrene (µg/L)	4/ 5/2006	<100	100
L305	Iodomethane (µg/L)	4/ 5/2006	<1	1
L305	Iron, Total (µg/L)	4/ 5/2006	9,200	1
L305	Iron, Total (µg/L)	8/22/2006	8,000	10
L305	Iron, Total (µg/L)	10/13/2006	21,000	10
L305	Isopropyl benzene (µg/L)	4/ 5/2006	<1	1
L305	Lead, Total (µg/L)	4/ 5/2006	5	1
L305	Lead, Total (µg/L)	8/22/2006	1.5	1
L305	Lead, Total (µg/L)	10/13/2006	3.9	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	m/p-Xylene (µg/L)	4/ 5/2006	5	1
L305	Magnesium, Total (mg/L)	4/ 5/2006	250	0.1
L305	Manganese, Total (µg/L)	4/ 5/2006	1,800	1
L305	Manganese, Total (µg/L)	8/22/2006	640	1
L305	Manganese, Total (µg/L)	10/13/2006	1,300	1
L305	Mercury, Total (µg/L)	4/ 5/2006	<0.2	0.2
L305	Mercury, Total (µg/L)	8/22/2006	<0.2	0.2
L305	Mercury, Total (µg/L)	10/13/2006	<0.2	0.2
L305	Methoxychlor (µg/L)	4/ 5/2006	<5	5
L305	Methylene chloride (µg/L)	4/ 5/2006	<5	5
L305	Naphthalene (µg/L)	4/ 5/2006	<100	100
L305	n-Butanol (µg/L)	4/ 5/2006	<1000	1000
L305	n-Butylbenzene (µg/L)	4/ 5/2006	<1	1
L305	Nickel, Total (µg/L)	4/ 5/2006	46	5
L305	Nickel, Total (µg/L)	8/22/2006	86	5
L305	Nickel, Total (µg/L)	10/13/2006	100	5
L305	Nitrate/Nitrite as N, Total (mg/L)	4/ 5/2006	<0.020	0.02
L305	Nitrobenzene (µg/L)	4/ 5/2006	<100	100
L305	N-Nitrosodimethylamine (µg/L)	4/ 5/2006	<100	100
L305	N-Nitroso-Di-n-propylamine (µg/L)	4/ 5/2006	<100	100
L305	N-nitrosodiphenylamine (µg/L)	4/ 5/2006	<100	100
L305	n-Propylbenzene (µg/L)	4/ 5/2006	<1	1
L305	Oil and grease (mg/L)	4/ 5/2006	<5	5
L305	Oil and grease (mg/L)	8/22/2006	<6	6
L305	Oil and grease (mg/L)	10/13/2006	<5	5
L305	o-Xylene (µg/L)	4/ 5/2006	2	1
L305	Parathion (µg/L)	4/ 5/2006	<2	2
L305	Pentachlorophenol (µg/L)	4/ 5/2006	<0.5	0.5
L305	pH, Field (s.u.)	4/ 5/2006	6.75	0
L305	pH, Field (s.u.)	8/22/2006	7.11	0
L305	pH, Field (s.u.)	10/13/2006	7.03	0
L305	Phenanthrene (µg/L)	4/ 5/2006	<100	100
L305	Phenols, Total (µg/L)	4/ 5/2006	54	5
L305	Phenols, Total (µg/L)	8/22/2006	61	5
L305	Phenols, Total (µg/L)	10/13/2006	19	5
L305	Phosphorous, Total (µg/L)	4/ 5/2006	850	50
L305	Phosphorous, Total (µg/L)	8/22/2006	9,800	50
L305	Phosphorous, Total (µg/L)	10/13/2006	2,000	50
L305	P-Isopropyltoluene (µg/L)	4/ 5/2006	<1	1
L305	Potassium, Total (mg/L)	4/ 5/2006	36	0.1
L305	Pyrene (µg/L)	4/ 5/2006	<100	100

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	sec-Butylbenzene (µg/L)	4/ 5/2006	<1	1
L305	Selenium, Total (µg/L)	4/ 5/2006	16	1
L305	Silver, Total (µg/L)	4/ 5/2006	<5	5
L305	Silver, Total (µg/L)	8/22/2006	<5	5
L305	Silver, Total (µg/L)	10/13/2006	<5	5
L305	Silvex (µg/L)	4/ 5/2006	<0.5	0.5
L305	Sodium, Total (mg/L)	4/ 5/2006	350	0.1
L305	Specific Conductance, Field (µmhos/cm)	4/ 5/2006	4,840	0
L305	Specific Conductance, Field (µmhos/cm)	8/22/2006	7,800	0
L305	Specific Conductance, Field (µmhos/cm)	10/13/2006	3,000	0
L305	Styrene (µg/L)	4/ 5/2006	<1	1
L305	Sulfate, Total (mg/L)	4/ 5/2006	790	70
L305	tert-Butylbenzene (µg/L)	4/ 5/2006	<1	1
L305	Tetrachloroethene (µg/L)	4/ 5/2006	<1	1
L305	Tetrahydrofuran (µg/L)	4/ 5/2006	<20	20
L305	Thallium, Total (µg/L)	4/ 5/2006	<1	1
L305	Tin, Total (µg/L)	4/ 5/2006	<60	60
L305	Total Organic Carbon (mg/L)	4/ 5/2006	48	0.5
L305	Toluene (µg/L)	4/ 5/2006	17	1
L305	Total Dissolved Solids (mg/L)	4/ 5/2006	3,600	51
L305	Total Dissolved Solids (mg/L)	8/22/2006	4,100	17
L305	Total Dissolved Solids (mg/L)	10/13/2006	5,700	17
L305	Total Suspended Solids (mg/L)	4/ 5/2006	66	2
L305	Total Suspended Solids (mg/L)	8/22/2006	33	2
L305	Total Suspended Solids (mg/L)	10/13/2006	100	2
L305	Toxaphene (µg/L)	4/ 5/2006	<5	5
L305	trans-1,2-Dichloroethene (µg/L)	4/ 5/2006	<1	1
L305	trans-1,3-Dichloropropene (µg/L)	4/ 5/2006	<1	1
L305	trans-1,4-Dichloro-2-butene (µg/L)	4/ 5/2006	<1	1
L305	Trichloroethene (µg/L)	4/ 5/2006	<1	1
L305	Trichlorofluoromethane (µg/L)	4/ 5/2006	<1	1
L305	Vinyl acetate (µg/L)	4/ 5/2006	<5	5
L305	Vinyl chloride (µg/L)	4/ 5/2006	2	2
L305	Xylenes, Total (µg/L)	4/ 5/2006	6	3
L305	Zinc, Total (µg/L)	4/ 5/2006	56	6
L305	Zinc, Total (µg/L)	8/22/2006	34	6
L305	Zinc, Total (µg/L)	10/13/2006	42	6
LCMP	1,1,1,2-Tetrachloroethane (µg/L)	4/ 5/2006	<1	1
LCMP	1,1,1-Trichloroethane (µg/L)	4/ 5/2006	<1	1
LCMP	1,1,2,2-Tetrachloroethane (µg/L)	4/ 5/2006	<1	1
LCMP	1,1,2-Trichloroethane (µg/L)	4/ 5/2006	<1	1

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2006
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
LCMP	1,1-Dichloroethane (µg/L)	4/ 5/2006	<1	1
LCMP	1,1-Dichloroethene (µg/L)	4/ 5/2006	<1	1
LCMP	1,1-Dichloropropene (µg/L)	4/ 5/2006	<1	1
LCMP	1,2,3-Trichlorobenzene (µg/L)	4/ 5/2006	<1	1
LCMP	1,2,3-Trichloropropane (µg/L)	4/ 5/2006	<1	1
LCMP	1,2,4-Trichlorobenzene (µg/L)	4/ 5/2006	<1	1
LCMP	1,2,4-Trimethylbenzene (µg/L)	4/ 5/2006	3	1
LCMP	1,2-Dichlorobenzene (µg/L)	4/ 5/2006	<1	1
LCMP	1,2-Dichloroethane (µg/L)	4/ 5/2006	<1	1
LCMP	1,2-Dichloropropane (µg/L)	4/ 5/2006	<1	1
LCMP	1,3,5-Trimethylbenzene (µg/L)	4/ 5/2006	1	1
LCMP	1,3-Dichlorobenzene (µg/L)	4/ 5/2006	<1	1
LCMP	1,3-Dichloropropane (µg/L)	4/ 5/2006	<1	1
LCMP	1,4-Dichlorobenzene (µg/L)	4/ 5/2006	2	1
LCMP	1-Propanol (µg/L)	4/ 5/2006	<1000	1000
LCMP	2,2-Dichloropropane (µg/L)	4/ 5/2006	<1	1
LCMP	2,4,5-Trichlorophenol (µg/L)	4/ 5/2006	<10	10
LCMP	2,4,6-Trichlorophenol (µg/L)	4/ 5/2006	<10	10
LCMP	2,4-D (µg/L)	4/ 5/2006	<1	1
LCMP	2,4-Dichlorophenol (µg/L)	4/ 5/2006	<10	10
LCMP	2,4-Dimethylphenol (µg/L)	4/ 5/2006	<10	10
LCMP	2,4-Dinitrophenol (µg/L)	4/ 5/2006	<50	50
LCMP	2,4-Dinitrotoluene (µg/L)	4/ 5/2006	<10	10
LCMP	2,6-Dinitrotoluene (µg/L)	4/ 5/2006	<10	10
LCMP	2-Butanone (MEK) (µg/L)	4/ 5/2006	<5	5
LCMP	2-Chloroethyl vinyl ether (µg/L)	4/ 5/2006	<10	10
LCMP	2-Chloronaphthalene (µg/L)	4/ 5/2006	<10	10
LCMP	2-Chlorophenol (µg/L)	4/ 5/2006	<10	10
LCMP	2-Chlorotoluene (µg/L)	4/ 5/2006	<1	1
LCMP	2-Hexanone (MBK) (µg/L)	4/ 5/2006	<5	5
LCMP	2-Methylphenol(o-cresol) (µg/L)	4/ 5/2006	<10	10
LCMP	3-Methylphenol(m-cresol) (µg/L)	4/ 5/2006	<10	10
LCMP	4,4'-DDD (µg/L)	4/ 5/2006	<1	1
LCMP	4,4'-DDE (µg/L)	4/ 5/2006	<1	1
LCMP	4,4'-DDT (µg/L)	4/ 5/2006	<1	1
LCMP	4,6-Dinitro-2-methylphenol (µg/L)	4/ 5/2006	<50	50
LCMP	4-Bromophenyl phenyl ether (µg/L)	4/ 5/2006	<10	10
LCMP	4-Chlorophenyl phenyl ether (µg/L)	4/ 5/2006	<10	10
LCMP	4-Chlorotoluene (µg/L)	4/ 5/2006	<1	1
LCMP	4-Methyl-2-Pentanone(MIBK) (µg/L)	4/ 5/2006	5	5
LCMP	4-Methylphenol(p-cresol) (µg/L)	4/ 5/2006	<10	10

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2006
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
LCMP	4-Nitrophenol (µg/L)	4/ 5/2006	<10	10
LCMP	Acenaphthene (µg/L)	4/ 5/2006	<10	10
LCMP	Acetone (µg/L)	4/ 5/2006	21	10
LCMP	Aldrin (µg/L)	4/ 5/2006	<0.5	0.5
LCMP	alpha-BHC (µg/L)	4/ 5/2006	<0.5	0.5
LCMP	Anthracene (µg/L)	4/ 5/2006	<10	10
LCMP	Aroclor 1016 (µg/L)	4/ 5/2006	<5	5
LCMP	Aroclor 1221 (µg/L)	4/ 5/2006	<10	10
LCMP	Aroclor 1232 (µg/L)	4/ 5/2006	<5	5
LCMP	Aroclor 1242 (µg/L)	4/ 5/2006	<5	5
LCMP	Aroclor 1248 (µg/L)	4/ 5/2006	<5	5
LCMP	Aroclor 1254 (µg/L)	4/ 5/2006	<10	10
LCMP	Aroclor 1260 (µg/L)	4/ 5/2006	<10	10
LCMP	Arsenic, Total (µg/L)	4/ 5/2006	50	1
LCMP	Barium, Total (µg/L)	4/ 5/2006	490	2
LCMP	Benzene (µg/L)	4/ 5/2006	3	1
LCMP	Benzo(a)anthracene (µg/L)	4/ 5/2006	<10	10
LCMP	Benzo(a)pyrene (µg/L)	4/ 5/2006	<10	10
LCMP	Benzo(b)fluoranthene (µg/L)	4/ 5/2006	<10	10
LCMP	Benzo(ghi)perylene (µg/L)	4/ 5/2006	<10	10
LCMP	Benzo(k)fluoranthene (µg/L)	4/ 5/2006	<10	10
LCMP	beta-BHC (µg/L)	4/ 5/2006	<0.5	0.5
LCMP	bis(2-chloroethoxy) methane (µg/L)	4/ 5/2006	<10	10
LCMP	bis(2-Chloroethyl) ether (µg/L)	4/ 5/2006	<10	10
LCMP	bis(2-Ethylhexyl) phthalate (µg/L)	4/ 5/2006	100	10
LCMP	Bromobenzene (µg/L)	4/ 5/2006	<1	1
LCMP	Bromochloromethane (µg/L)	4/ 5/2006	<1	1
LCMP	Bromodichloromethane (µg/L)	4/ 5/2006	<1	1
LCMP	Bromoform (µg/L)	4/ 5/2006	<1	1
LCMP	Bromomethane (µg/L)	4/ 5/2006	<2	2
LCMP	Butyl benzyl phthalate (µg/L)	4/ 5/2006	<10	10
LCMP	Cadmium, Total (µg/L)	4/ 5/2006	<1	1
LCMP	Carbon disulfide (µg/L)	4/ 5/2006	4	1
LCMP	Carbon tetrachloride (µg/L)	4/ 5/2006	<1	1
LCMP	Chlordane (Tech) (µg/L)	4/ 5/2006	<5	5
LCMP	Chlorobenzene (µg/L)	4/ 5/2006	<1	1
LCMP	Chloroethane (µg/L)	4/ 5/2006	<2	2
LCMP	Chloroform (µg/L)	4/ 5/2006	<1	1
LCMP	Chloromethane (µg/L)	4/ 5/2006	<2	2
LCMP	Chromium, Total (µg/L)	4/ 5/2006	62	4
LCMP	Chromium, Hexavalent (µg/L)	4/ 5/2006	<100	100

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SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2006
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
LCMP	Chrysene (µg/L)	4/ 5/2006	<10	10
LCMP	cis-1,2-Dichloroethene (µg/L)	4/ 5/2006	<1	1
LCMP	cis-1,3-Dichloropropene (µg/L)	4/ 5/2006	<1	1
LCMP	Cresol, Total (µg/L)	4/ 5/2006	<30	30
LCMP	delta-BHC (µg/L)	4/ 5/2006	<0.5	0.5
LCMP	Dibenzo(a,h)anthracene (µg/L)	4/ 5/2006	<10	10
LCMP	Dibromochloromethane (µg/L)	4/ 5/2006	<1	1
LCMP	Dibromomethane (µg/L)	4/ 5/2006	<1	1
LCMP	Dichlorodifluoromethane (µg/L)	4/ 5/2006	<2	2
LCMP	Dieldrin (µg/L)	4/ 5/2006	<1	1
LCMP	Diethyl phthalate (µg/L)	4/ 5/2006	<10	10
LCMP	Dimethyl phthalate (µg/L)	4/ 5/2006	<10	10
LCMP	Di-n-butyl phthalate (µg/L)	4/ 5/2006	<10	10
LCMP	Di-n-octyl phthalate (µg/L)	4/ 5/2006	<10	10
LCMP	Dioxin Screen (µg/L)	4/ 5/2006	<50	50
LCMP	Endosulfan I (µg/L)	4/ 5/2006	<0.5	0.5
LCMP	Endosulfan II (µg/L)	4/ 5/2006	<1	1
LCMP	Endosulfan Sulfate (µg/L)	4/ 5/2006	<1	1
LCMP	Endrin (µg/L)	4/ 5/2006	<1	1
LCMP	Endrin aldehyde (µg/L)	4/ 5/2006	<1	1
LCMP	Ethyl acetate (µg/L)	4/ 5/2006	<10	10
LCMP	Ethyl benzene (µg/L)	4/ 5/2006	6	1
LCMP	Flashpoint, Closed Cup (deg F)	4/ 5/2006	200	50
LCMP	Fluoranthene (µg/L)	4/ 5/2006	<10	10
LCMP	Fluorene (µg/L)	4/ 5/2006	<10	10
LCMP	gamma-BHC (Lindane) (µg/L)	4/ 5/2006	<0.5	0.5
LCMP	Heptachlor (µg/L)	4/ 5/2006	<0.5	0.5
LCMP	Heptachlor epoxide (µg/L)	4/ 5/2006	<0.5	0.5
LCMP	Hexachlorobenzene (µg/L)	4/ 5/2006	<10	10
LCMP	Hexachlorobutadiene (µg/L)	4/ 5/2006	<10	10
LCMP	Hexachlorocyclopentadiene (µg/L)	4/ 5/2006	<10	10
LCMP	Hexachloroethane (µg/L)	4/ 5/2006	<10	10
LCMP	Indeno(1,2,3-cd)pyrene (µg/L)	4/ 5/2006	<10	10
LCMP	Iodomethane (µg/L)	4/ 5/2006	<1	1
LCMP	Isopropyl benzene (µg/L)	4/ 5/2006	1	1
LCMP	Lead, Total (µg/L)	4/ 5/2006	7.1	1
LCMP	m/p-Xylene (µg/L)	4/ 5/2006	11	1
LCMP	Mercury, Total (µg/L)	4/ 5/2006	<0.2	0.2
LCMP	Methoxychlor (µg/L)	4/ 5/2006	<5	5
LCMP	Methylene chloride (µg/L)	4/ 5/2006	<5	5
LCMP	Naphthalene (µg/L)	4/ 5/2006	<10	10

SUMMARY OF LEACHATE MONITORING RESULTS
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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
LCMP	n-Butanol (µg/L)	4/ 5/2006	<1000	1000
LCMP	n-Butylbenzene (µg/L)	4/ 5/2006	<1	1
LCMP	Nitrobenzene (µg/L)	4/ 5/2006	<10	10
LCMP	N-Nitrosodimethylamine (µg/L)	4/ 5/2006	<10	10
LCMP	N-Nitroso-Di-n-propylamine (µg/L)	4/ 5/2006	<10	10
LCMP	N-nitrosodiphenylamine (µg/L)	4/ 5/2006	<10	10
LCMP	n-Propylbenzene (µg/L)	4/ 5/2006	<1	1
LCMP	o-Xylene (µg/L)	4/ 5/2006	5	1
LCMP	Pentachlorophenol (µg/L)	4/ 5/2006	<0.5	0.5
LCMP	pH, Field (s.u.)	4/ 5/2006	7.08	0
LCMP	Phenanthrene (µg/L)	4/ 5/2006	<10	10
LCMP	Phenol (µg/L)	4/ 5/2006	<10	10
LCMP	P-Isopropyltoluene (µg/L)	4/ 5/2006	<1	1
LCMP	Pyrene (µg/L)	4/ 5/2006	<10	10
LCMP	Pyridine (µg/L)	4/ 5/2006	<10	10
LCMP	sec-Butylbenzene (µg/L)	4/ 5/2006	<1	1
LCMP	Selenium, Total (µg/L)	4/ 5/2006	42	1
LCMP	Silver, Total (µg/L)	4/ 5/2006	<5	5
LCMP	Silvex (µg/L)	4/ 5/2006	<0.5	0.5
LCMP	Specific Conductance, Field (µmhos/cm)	4/ 5/2006	8,760	0
LCMP	Styrene (µg/L)	4/ 5/2006	<1	1
LCMP	tert-Butylbenzene (µg/L)	4/ 5/2006	<1	1
LCMP	Tetrachloroethene (µg/L)	4/ 5/2006	<1	1
LCMP	Tetrahydrofuran (µg/L)	4/ 5/2006	280	20
LCMP	Toluene (µg/L)	4/ 5/2006	20	1
LCMP	Toxaphene (µg/L)	4/ 5/2006	<5	5
LCMP	trans-1,2-Dichloroethene (µg/L)	4/ 5/2006	<1	1
LCMP	trans-1,3-Dichloropropene (µg/L)	4/ 5/2006	<1	1
LCMP	trans-1,4-Dichloro-2-butene (µg/L)	4/ 5/2006	<1	1
LCMP	Trichloroethene (µg/L)	4/ 5/2006	<1	1
LCMP	Trichlorofluoromethane (µg/L)	4/ 5/2006	<1	1
LCMP	Vinyl acetate (µg/L)	4/ 5/2006	<5	5
LCMP	Vinyl chloride (µg/L)	4/ 5/2006	<2	2
LCMP	Xylenes, Total (µg/L)	4/ 5/2006	16	3

Notes

1. µg/L = micrograms per liter = parts per billion (ppb)
2. mg/L = milligrams per liter = parts per million (ppm)
3. umhos/cm = micromohs per centimeter
4. s.u. = standard units
5. cfu/100 mL = colony forming units per 100 milliliters
6. <= compound not detected at the specified laboratory method detection limit

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2007
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	Ammonia, Total (mg/L)	3/ 6/2007	39	2
L301	Ammonia, Total (mg/L)	8/22/2007	310	1
L301	Ammonia, Total (mg/L)	10/16/2007	370	5
L301	Arsenic Total,GFAA (µg/L)	3/ 6/2007	7	1
L301	Arsenic Total,GFAA (µg/L)	8/22/2007	26	1
L301	Arsenic Total,GFAA (µg/L)	10/16/2007	26	1
L301	Barium - Total (µg/L)	3/ 6/2007	180	2
L301	Barium - Total (µg/L)	8/22/2007	970	2
L301	Barium - Total (µg/L)	10/16/2007	1200	2
L301	BOD 5 (mg/L)	3/ 6/2007	<4	4
L301	BOD 5 (mg/L)	8/22/2007	54	4
L301	BOD 5 (mg/L)	10/16/2007	34	4
L301	Cadmium - Total (µg/L)	3/ 6/2007	<1	1
L301	Cadmium - Total (µg/L)	8/22/2007	<1	1
L301	Cadmium - Total (µg/L)	10/16/2007	<1	1
L301	Chromium - Total (µg/L)	3/ 6/2007	42	4
L301	Chromium - Total (µg/L)	8/22/2007	74	4
L301	Chromium - Total (µg/L)	10/16/2007	96	4
L301	Chromium, Hexavalent (µg/L)	3/ 6/2007	<5	5
L301	COD (mg/L)	3/ 6/2007	99	6
L301	COD (mg/L)	8/22/2007	690	6
L301	COD (mg/L)	10/16/2007	870	6
L301	Coliform, Fecal, A MF (ct/100)	3/ 6/2007	400	10
L301	Coliform, Fecal, A MF (ct/100)	8/22/2007	20	10
L301	Coliform, Fecal, A MF (ct/100)	10/16/2007	50	10
L301	Copper - Total (µg/L)	3/ 6/2007	55	3
L301	Copper - Total (µg/L)	8/22/2007	48	3
L301	Copper - Total (µg/L)	10/16/2007	30	3
L301	Cyanide - Total (mg/L)	3/ 6/2007	<0.005	0.005
L301	Cyanide - Total (mg/L)	8/22/2007	<0.005	0.005
L301	Cyanide - Total (mg/L)	10/16/2007	<0.005	0.005
L301	Fluoride, Total (mg/L)	3/ 6/2007	<0.25	0.25
L301	Fluoride, Total (mg/L)	8/22/2007	0.3	0.25
L301	Fluoride, Total (mg/L)	10/16/2007	0.44	0.25
L301	Iron - Total (µg/L)	3/ 6/2007	8800	10
L301	Iron - Total (µg/L)	8/22/2007	10000	10
L301	Iron - Total (µg/L)	10/16/2007	8900	10
L301	Lead Total, GFAA (µg/L)	3/ 6/2007	1.2	1
L301	Lead Total, GFAA (µg/L)	8/22/2007	2.5	1
L301	Lead Total, GFAA (µg/L)	10/16/2007	8.5	1
L301	Manganese - Total (µg/L)	3/ 6/2007	440	1
L301	Manganese - Total (µg/L)	8/22/2007	110	1
L301	Manganese - Total (µg/L)	10/16/2007	120	1
L301	Mercury - Total (µg/L)	3/ 6/2007	<0.2	0.2

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2007
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L301	Mercury - Total (µg/L)	8/22/2007	<0.2	0.2
L301	Mercury - Total (µg/L)	10/16/2007	<0.2	0.2
L301	Nickel - Total (µg/L)	3/ 6/2007	51	5
L301	Nickel - Total (µg/L)	8/22/2007	280	5
L301	Nickel - Total (µg/L)	10/16/2007	330	5
L301	Oil and grease (mg/L)	3/ 6/2007	<5	5
L301	Oil and grease (mg/L)	8/22/2007	<5	5
L301	Oil and grease (mg/L)	10/16/2007	<5	5
L301	pH, Aqueous (s.u.)	3/ 6/2007	9	0
L301	pH, Aqueous (s.u.)	8/22/2007	7.59	0
L301	pH, Aqueous (s.u.)	10/16/2007	7.18	0
L301	Phenols, Total low range (µg/L)	3/ 6/2007	53	5
L301	Phenols, Total low range (µg/L)	8/22/2007	62	5
L301	Phenols, Total low range (µg/L)	10/16/2007	38	5
L301	Phosphorous, Total (µg/L)	3/ 6/2007	640	50
L301	Phosphorous, Total (µg/L)	8/22/2007	2500	50
L301	Phosphorous, Total (µg/L)	10/16/2007	2700	50
L301	Silver - Total (µg/L)	3/ 6/2007	<5	5
L301	Silver - Total (µg/L)	8/22/2007	<5	5
L301	Silver - Total (µg/L)	10/16/2007	<5	5
L301	Specific Conductance, Field (µmhos/cm)	3/ 6/2007	3280	0
L301	Specific Conductance, Field (µmhos/cm)	8/22/2007	853	0
L301	Specific Conductance, Field (µmhos/cm)	10/16/2007	6140	0
L301	Total Dissolved Solids (mg/L)	3/ 6/2007	2900	51
L301	Total Dissolved Solids (mg/L)	8/22/2007	5600	51
L301	Total Dissolved Solids (mg/L)	10/16/2007	6000	51
L301	Total Suspended Solids (mg/L)	3/ 6/2007	79	5
L301	Total Suspended Solids (mg/L)	8/22/2007	38	2
L301	Total Suspended Solids (mg/L)	10/16/2007	160	3.33
L301	Zinc - Total (µg/L)	3/ 6/2007	36	6
L301	Zinc - Total (µg/L)	8/22/2007	40	6
L301	Zinc - Total (µg/L)	10/16/2007	36	6
L302E	1,1,1,2-Tetrachloroethane (µg/L)	5/11/2007	22	1
L302E	1,1,1-Trichloroethane (µg/L)	5/11/2007	<1	1
L302E	1,1,2,2-Tetrachloroethane (µg/L)	5/11/2007	<1	1
L302E	1,1,2-Trichloroethane (µg/L)	5/11/2007	<1	1
L302E	1,1-Dichloroethane (µg/L)	5/11/2007	<1	1
L302E	1,1-Dichloroethene (µg/L)	5/11/2007	<1	1
L302E	1,1-Dichloropropene (µg/L)	5/11/2007	<1	1
L302E	1,2,3-Trichlorobenzene (µg/L)	5/11/2007	<1	1
L302E	1,2,3-Trichloropropane (µg/L)	5/11/2007	<1	1
L302E	1,2,4-Trichlorobenzene (µg/L)	5/11/2007	<1	1
L302E	1,2,4-Trimethylbenzene (µg/L)	5/11/2007	27	1
L302E	1,2-Dibromo-3-chloropropane (µg/L)	5/11/2007	<0.05	0.05

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2007
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302E	1,2-Dichlorobenzene (µg/L)	5/11/2007	<1	1
L302E	1,2-Dichloroethane (µg/L)	5/11/2007	<1	1
L302E	1,2-Dichloropropane (µg/L)	5/11/2007	<1	1
L302E	1,3,5-Trimethylbenzene (µg/L)	5/11/2007	<1	1
L302E	1,3-Dichlorobenzene (µg/L)	5/11/2007	<1	1
L302E	1,3-Dichloropropane (µg/L)	5/11/2007	4	1
L302E	1,4-Dichlorobenzene (µg/L)	5/11/2007	4	1
L302E	2,2-Dichloropropane (µg/L)	5/11/2007	<1	1
L302E	2,4-D (µg/L)	5/11/2007	<0.1	0.1
L302E	2,4-Dichlorophenol (µg/L)	5/11/2007	<10	10
L302E	2,4-Dimethylphenol (µg/L)	5/11/2007	<10	10
L302E	2,4-Dinitrophenol (µg/L)	5/11/2007	<50	50
L302E	2,6-Dinitrotoluene (µg/L)	5/11/2007	<10	10
L302E	2-Butanone (MEK) (µg/L)	5/11/2007	<5	5
L302E	2-Chloroethyl vinyl ether (µg/L)	5/11/2007	<10	10
L302E	2-Chloronaphthalene (µg/L)	5/11/2007	<10	10
L302E	2-Chlorophenol (µg/L)	5/11/2007	<10	10
L302E	2-Chlorotoluene (µg/L)	5/11/2007	<1	1
L302E	2-Hexanone (MBK) (µg/L)	5/11/2007	<5	5
L302E	3,3-Dichlorobenzidine (µg/L)	5/11/2007	<20	20
L302E	4,4'-DDD (µg/L)	5/11/2007	<1	1
L302E	4,4'-DDE (µg/L)	5/11/2007	<1	1
L302E	4,4'-DDT (µg/L)	5/11/2007	<1	1
L302E	4,6-Dinitro-2-methylphenol (µg/L)	5/11/2007	<50	50
L302E	4-Bromophenyl phenyl ether (µg/L)	5/11/2007	<10	10
L302E	4-Chlorophenyl phenyl ether (µg/L)	5/11/2007	<10	10
L302E	4-Chlorotoluene (µg/L)	5/11/2007	<1	1
L302E	4-Methyl-2-Pentanone(MIBK) (µg/L)	5/11/2007	<5	5
L302E	4-Methylphenol(p-cresol) (µg/L)	5/11/2007	<10	10
L302E	4-Nitrophenol (µg/L)	5/11/2007	<10	10
L302E	Acenaphthene (µg/L)	5/11/2007	<10	10
L302E	Acetone (µg/L)	5/11/2007	25	10
L302E	Alachlor (µg/L)	5/11/2007	<4	4
L302E	Aldicarb (µg/L)	5/11/2007	<4	4
L302E	Aldrin (µg/L)	5/11/2007	<0.5	0.5
L302E	Alkalinity, Bicarb Total (mg/L)	5/11/2007	4400	2
L302E	alpha-BHC (µg/L)	5/11/2007	<0.5	0.5
L302E	Aluminum - Total (µg/L)	5/11/2007	400	10
L302E	Ammonia, Total (mg/L)	5/11/2007	780	5
L302E	Ammonia, Total (mg/L)	8/22/2007	8800	250
L302E	Ammonia, Total (mg/L)	10/16/2007	690	10
L302E	Anthracene (µg/L)	5/11/2007	<10	10
L302E	Antimony Total, GFAA (µg/L)	5/11/2007	<3	3
L302E	Aroclor 1016 (µg/L)	5/11/2007	<5	5

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302E	Aroclor 1221 (µg/L)	5/11/2007	<10	10
L302E	Aroclor 1232 (µg/L)	5/11/2007	<5	5
L302E	Aroclor 1242 (µg/L)	5/11/2007	<5	5
L302E	Aroclor 1248 (µg/L)	5/11/2007	<5	5
L302E	Aroclor 1254 (µg/L)	5/11/2007	<10	10
L302E	Aroclor 1260 (µg/L)	5/11/2007	<10	10
L302E	Arsenic Total,GFAA (µg/L)	5/11/2007	52	1
L302E	Arsenic Total,GFAA (µg/L)	8/22/2007	85	1
L302E	Arsenic Total,GFAA (µg/L)	10/16/2007	74	1
L302E	Atrazine (µg/L)	5/11/2007	<2	2
L302E	Barium - Total (µg/L)	5/11/2007	370	2
L302E	Barium - Total (µg/L)	8/22/2007	510	2
L302E	Barium - Total (µg/L)	10/16/2007	410	2
L302E	Benzene (µg/L)	5/11/2007	7	1
L302E	Benzo(a)anthracene (µg/L)	5/11/2007	<10	10
L302E	Benzo(a)pyrene (µg/L)	5/11/2007	<10	10
L302E	Benzo(b)fluoranthene (µg/L)	5/11/2007	<10	10
L302E	Benzo(ghi)perylene (µg/L)	5/11/2007	<10	10
L302E	Benzo(k)fluoranthene (µg/L)	5/11/2007	<10	10
L302E	Beryllium - Total (µg/L)	5/11/2007	<1	1
L302E	beta-BHC (µg/L)	5/11/2007	<0.5	0.5
L302E	bis(2-chloroethoxy) methane (µg/L)	5/11/2007	<10	10
L302E	bis(2-Chloroethyl) ether (µg/L)	5/11/2007	<10	10
L302E	bis(2-Ethylhexyl) phthalate (µg/L)	5/11/2007	<10	10
L302E	Bis(chloromethyl)ether (µg/L)	5/11/2007	<10000	10000
L302E	BOD 5 (mg/L)	5/11/2007	160	4
L302E	BOD 5 (mg/L)	8/22/2007	73	4
L302E	BOD 5 (mg/L)	10/16/2007	86	4
L302E	Bromobenzene (µg/L)	5/11/2007	<1	1
L302E	Bromochloromethane (µg/L)	5/11/2007	<1	1
L302E	Bromodichloromethane (µg/L)	5/11/2007	<1	1
L302E	Bromoform (µg/L)	5/11/2007	<1	1
L302E	Bromomethane (µg/L)	5/11/2007	<2	2
L302E	Butyl benzyl phthalate (µg/L)	5/11/2007	<10	10
L302E	Cadmium - Total (µg/L)	5/11/2007	<1	1
L302E	Cadmium - Total (µg/L)	8/22/2007	<1	1
L302E	Cadmium - Total (µg/L)	10/16/2007	<1	1
L302E	Calcium - Total (mg/L)	5/11/2007	45	0.1
L302E	Carbofuran (µg/L)	5/11/2007	<15	15
L302E	Carbon disulfide (µg/L)	5/11/2007	<1	1
L302E	Carbon tetrachloride (µg/L)	5/11/2007	<1	1
L302E	Chlordane (Tech) (µg/L)	5/11/2007	<5	5
L302E	Chloride, Total (mg/L)	5/11/2007	2200	125
L302E	Chlorobenzene (µg/L)	5/11/2007	2	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302E	Chloroethane (µg/L)	5/11/2007	<2	2
L302E	Chloroform (µg/L)	5/11/2007	<1	1
L302E	Chloromethane (µg/L)	5/11/2007	<2	2
L302E	Chromium - Total (µg/L)	5/11/2007	120	4
L302E	Chromium - Total (µg/L)	8/22/2007	130	4
L302E	Chromium - Total (µg/L)	10/16/2007	100	4
L302E	Chrysene (µg/L)	5/11/2007	<10	10
L302E	cis-1,2-Dichloroethene (µg/L)	5/11/2007	<1	1
L302E	cis-1,3-Dichloropropene (µg/L)	5/11/2007	<1	1
L302E	Cobalt - Total (µg/L)	5/11/2007	34	2
L302E	COD (mg/L)	5/11/2007	1400	6
L302E	COD (mg/L)	8/22/2007	1700	6
L302E	COD (mg/L)	10/16/2007	1700	6
L302E	Coliform, Fecal, A MF (ct/100)	5/11/2007	3100	10
L302E	Coliform, Fecal, A MF (ct/100)	8/22/2007	60000	10
L302E	Coliform, Fecal, A MF (ct/100)	10/16/2007	800	10
L302E	Copper - Total (µg/L)	5/11/2007	30	3
L302E	Copper - Total (µg/L)	8/22/2007	74	3
L302E	Copper - Total (µg/L)	10/16/2007	32	3
L302E	Cyanide - Total (mg/L)	5/11/2007	<0.005	0.005
L302E	Cyanide - Total (mg/L)	8/22/2007	<0.005	0.005
L302E	Cyanide - Total (mg/L)	10/16/2007	<0.005	0.005
L302E	delta-BHC (µg/L)	5/11/2007	<0.5	0.5
L302E	Dibenzo(a,h)anthracene (µg/L)	5/11/2007	<10	10
L302E	Dibromochloromethane (µg/L)	5/11/2007	<1	1
L302E	Dibromomethane (µg/L)	5/11/2007	<1	1
L302E	Dichlorodifluoromethane (µg/L)	5/11/2007	<2	2
L302E	Dieldrin (µg/L)	5/11/2007	<1	1
L302E	Diethyl phthalate (µg/L)	5/11/2007	<10	10
L302E	Dimethyl phthalate (µg/L)	5/11/2007	<10	10
L302E	Di-n-butyl phthalate (µg/L)	5/11/2007	<10	10
L302E	Di-n-octyl phthalate (µg/L)	5/11/2007	<10	10
L302E	Dioxin Screen (µg/L)	5/11/2007	<10	10
L302E	Endosulfan I (µg/L)	5/11/2007	<0.5	0.5
L302E	Endosulfan II (µg/L)	5/11/2007	<1	1
L302E	Endosulfan Sulfate (µg/L)	5/11/2007	<1	1
L302E	Endrin (µg/L)	5/11/2007	<1	1
L302E	Endrin aldehyde (µg/L)	5/11/2007	<1	1
L302E	Ethyl acetate (µg/L)	5/11/2007	<10	10
L302E	Ethyl benzene (µg/L)	5/11/2007	25	1
L302E	Ethylene dibromide (µg/L)	5/11/2007	<0.05	0.05
L302E	Fluoranthene (µg/L)	5/11/2007	<10	10
L302E	Fluorene (µg/L)	5/11/2007	<10	10
L302E	Fluoride, Total (mg/L)	5/11/2007	8.8	0.25

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302E	Fluoride, Total (mg/L)	8/22/2007	7.3	0.25
L302E	Fluoride, Total (mg/L)	10/16/2007	43	0.25
L302E	gamma-BHC (Lindane) (µg/L)	5/11/2007	<0.5	0.5
L302E	Heptachlor (µg/L)	5/11/2007	<0.5	0.5
L302E	Heptachlor epoxide (µg/L)	5/11/2007	<0.5	0.5
L302E	Hexachlorobenzene (µg/L)	5/11/2007	<10	10
L302E	Hexachlorobutadiene (µg/L)	5/11/2007	<10	10
L302E	Hexachlorocyclopentadiene (µg/L)	5/11/2007	<10	10
L302E	Hexachloroethane (µg/L)	5/11/2007	<10	10
L302E	Indeno(1,2,3-cd)pyrene (µg/L)	5/11/2007	<10	10
L302E	Iodomethane (µg/L)	5/11/2007	<1	1
L302E	Iron - Total (µg/L)	5/11/2007	4400	10
L302E	Iron - Total (µg/L)	8/22/2007	11000	10
L302E	Iron - Total (µg/L)	10/16/2007	5100	10
L302E	Isopropyl benzene (µg/L)	5/11/2007	9	1
L302E	Lead Total, GFAA (µg/L)	5/11/2007	1.3	1
L302E	Lead Total, GFAA (µg/L)	8/22/2007	1.5	1
L302E	Lead Total, GFAA (µg/L)	10/16/2007	<1	1
L302E	m/p-Xylene (µg/L)	5/11/2007	38	1
L302E	Magnesium - Total (mg/L)	5/11/2007	86	0.1
L302E	Manganese - Total (µg/L)	5/11/2007	76	1
L302E	Manganese - Total (µg/L)	8/22/2007	90	1
L302E	Manganese - Total (µg/L)	10/16/2007	66	1
L302E	Mercury - Total (µg/L)	5/11/2007	<0.2	0.2
L302E	Mercury - Total (µg/L)	8/22/2007	<0.2	0.2
L302E	Mercury - Total (µg/L)	10/16/2007	<0.2	0.2
L302E	Methoxychlor (µg/L)	5/11/2007	<5	5
L302E	Methylene chloride (µg/L)	5/11/2007	<5	5
L302E	Naphthalene (µg/L)	5/11/2007	<10	10
L302E	n-Butanol (µg/L)	5/11/2007	<10000	1000
L302E	n-Butylbenzene (µg/L)	5/11/2007	<1	1
L302E	Nickel - Total (µg/L)	5/11/2007	270	5
L302E	Nickel - Total (µg/L)	8/22/2007	270	5
L302E	Nickel - Total (µg/L)	10/16/2007	250	5
L302E	Nitrate/Nitrite as N, Total (mg/L)	5/11/2007	0.11	0.02
L302E	Nitrobenzene (µg/L)	5/11/2007	<10	10
L302E	N-Nitrosodimethylamine (µg/L)	5/11/2007	<10	10
L302E	N-Nitroso-Di-n-propylamine (µg/L)	5/11/2007	<10	10
L302E	N-nitrosodiphenylamine (µg/L)	5/11/2007	<10	10
L302E	n-Propylbenzene (µg/L)	5/11/2007	<1	1
L302E	Oil and grease (mg/L)	5/11/2007	<5	5
L302E	Oil and grease (mg/L)	8/22/2007	<5	5
L302E	Oil and grease (mg/L)	10/16/2007	<5	5
L302E	o-Xylene (µg/L)	5/11/2007	18	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302E	Parathion (µg/L)	5/11/2007	<2	2
L302E	Pentachlorophenol (µg/L)	5/11/2007	<0.05	0.05
L302E	pH, Aqueous (s.u.)	5/11/2007	7.25	0
L302E	pH, Aqueous (s.u.)	8/22/2007	7.38	0
L302E	pH, Aqueous (s.u.)	10/16/2007	7.09	0
L302E	Phenanthrene (µg/L)	5/11/2007	<10	10
L302E	Phenols, Total low range (µg/L)	5/11/2007	79	5
L302E	Phenols, Total low range (µg/L)	8/22/2007	140	5
L302E	Phenols, Total low range (µg/L)	10/16/2007	71	5
L302E	Phosphorous, Total (µg/L)	5/11/2007	6100	50
L302E	Phosphorous, Total (µg/L)	8/22/2007	8200	50
L302E	Phosphorous, Total (µg/L)	10/16/2007	5500	50
L302E	P-Isopropyltoluene (µg/L)	5/11/2007	3	1
L302E	Potassium - Total (mg/L)	5/11/2007	420	0.1
L302E	Pyrene (µg/L)	5/11/2007	<10	10
L302E	sec-Butylbenzene (µg/L)	5/11/2007	<1	1
L302E	Selenium Total, GFAA (µg/L)	5/11/2007	42	1
L302E	Silver - Total (µg/L)	5/11/2007	<5	5
L302E	Silver - Total (µg/L)	8/22/2007	<5	5
L302E	Silver - Total (µg/L)	10/16/2007	<5	5
L302E	Silvex (µg/L)	5/11/2007	<0.05	0.05
L302E	Sodium - Total (mg/L)	5/11/2007	1900	1
L302E	Specific Conductance, Field (µmhos/cm)	5/11/2007	10300	0
L302E	Specific Conductance, Field (µmhos/cm)	8/22/2007	1114	0
L302E	Specific Conductance, Field (µmhos/cm)	10/16/2007	7160	0
L302E	Styrene (µg/L)	5/11/2007	<1	1
L302E	Sulfate, Total (mg/L)	5/11/2007	39	1.25
L302E	tert-Butylbenzene (µg/L)	5/11/2007	<1	1
L302E	Tetrachloroethene (µg/L)	5/11/2007	10	1
L302E	Tetrahydrofuran (µg/L)	5/11/2007	520	20
L302E	Thallium Total, GFAA (µg/L)	5/11/2007	<1	1
L302E	Tin Total, GFAA (µg/L)	5/11/2007	<60	60
L302E	TOC (mg/L)	5/11/2007	400	0.5
L302E	Toluene (µg/L)	5/11/2007	9	1
L302E	Total Dissolved Solids (mg/L)	5/11/2007	6900	51
L302E	Total Dissolved Solids (mg/L)	8/22/2007	7100	51
L302E	Total Dissolved Solids (mg/L)	10/16/2007	6400	51
L302E	Total Suspended Solids (mg/L)	5/11/2007	20	2
L302E	Total Suspended Solids (mg/L)	8/22/2007	35	2.5
L302E	Total Suspended Solids (mg/L)	10/16/2007	20	2
L302E	Toxaphene (µg/L)	5/11/2007	<5	5
L302E	trans-1,2-Dichloroethene (µg/L)	5/11/2007	<1	1
L302E	trans-1,3-Dichloropropene (µg/L)	5/11/2007	<1	1
L302E	trans-1,4-Dichloro-2-butene (µg/L)	5/11/2007	<1	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302E	Trichloroethene (µg/L)	5/11/2007	<1	1
L302E	Trichlorofluoromethane (µg/L)	5/11/2007	<1	1
L302E	Vinyl acetate (µg/L)	5/11/2007	<5	5
L302E	Vinyl chloride (µg/L)	5/11/2007	<2	2
L302E	Xylenes - Total (µg/L)	5/11/2007	55	3
L302E	Zinc - Total (µg/L)	5/11/2007	56	6
L302E	Zinc - Total (µg/L)	8/22/2007	65	6
L302E	Zinc - Total (µg/L)	10/16/2007	21	6
L302W	1,1,1,2-Tetrachloroethane (µg/L)	5/11/2007	<5	5
L302W	1,1,1-Trichloroethane (µg/L)	5/11/2007	<5	5
L302W	1,1,2,2-Tetrachloroethane (µg/L)	5/11/2007	<5	5
L302W	1,1,2-Trichloroethane (µg/L)	5/11/2007	<5	5
L302W	1,1-Dichloroethane (µg/L)	5/11/2007	<5	5
L302W	1,1-Dichloroethene (µg/L)	5/11/2007	<5	5
L302W	1,1-Dichloropropene (µg/L)	5/11/2007	<5	5
L302W	1,2,3-Trichlorobenzene (µg/L)	5/11/2007	<5	5
L302W	1,2,3-Trichloropropane (µg/L)	5/11/2007	<5	5
L302W	1,2,4-Trichlorobenzene (µg/L)	5/11/2007	<5	5
L302W	1,2,4-Trimethylbenzene (µg/L)	5/11/2007	12	5
L302W	1,2-Dibromo-3-chloropropane (µg/L)	5/11/2007	<0.05	0.05
L302W	1,2-Dichlorobenzene (µg/L)	5/11/2007	<5	5
L302W	1,2-Dichloroethane (µg/L)	5/11/2007	<5	5
L302W	1,2-Dichloropropane (µg/L)	5/11/2007	<5	5
L302W	1,3,5-Trimethylbenzene (µg/L)	5/11/2007	<5	5
L302W	1,3-Dichlorobenzene (µg/L)	5/11/2007	<5	5
L302W	1,3-Dichloropropane (µg/L)	5/11/2007	<5	5
L302W	1,4-Dichlorobenzene (µg/L)	5/11/2007	5	5
L302W	2,2-Dichloropropane (µg/L)	5/11/2007	<5	5
L302W	2,4-D (µg/L)	5/11/2007	<1	1
L302W	2,4-Dichlorophenol (µg/L)	5/11/2007	<10	10
L302W	2,4-Dimethylphenol (µg/L)	5/11/2007	<10	10
L302W	2,4-Dinitrophenol (µg/L)	5/11/2007	<50	50
L302W	2,6-Dinitrotoluene (µg/L)	5/11/2007	<10	10
L302W	2-Butanone (MEK) (µg/L)	5/11/2007	<25	25
L302W	2-Chloroethyl vinyl ether (µg/L)	5/11/2007	<50	50
L302W	2-Chloronaphthalene (µg/L)	5/11/2007	<10	10
L302W	2-Chlorophenol (µg/L)	5/11/2007	<10	10
L302W	2-Chlorotoluene (µg/L)	5/11/2007	<5	5
L302W	2-Hexanone (MBK) (µg/L)	5/11/2007	<25	25
L302W	3,3-Dichlorobenzidine (µg/L)	5/11/2007	<20	20
L302W	4,4'-DDD (µg/L)	5/11/2007	<1	1
L302W	4,4'-DDE (µg/L)	5/11/2007	<1	1
L302W	4,4'-DDT (µg/L)	5/11/2007	<1	1
L302W	4,6-Dinitro-2-methylphenol (µg/L)	5/11/2007	<50	50

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302W	4-Bromophenyl phenyl ether (µg/L)	5/11/2007	<10	10
L302W	4-Chlorophenyl phenyl ether (µg/L)	5/11/2007	<10	10
L302W	4-Chlorotoluene (µg/L)	5/11/2007	<5	5
L302W	4-Methyl-2-Pentanone(MIBK) (µg/L)	5/11/2007	<25	25
L302W	4-Methylphenol(p-cresol) (µg/L)	5/11/2007	<10	10
L302W	4-Nitrophenol (µg/L)	5/11/2007	<10	10
L302W	Acenaphthene (µg/L)	5/11/2007	<10	10
L302W	Acetone (µg/L)	5/11/2007	50	50
L302W	Alachlor (µg/L)	5/11/2007	<4	4
L302W	Aldicarb (µg/L)	5/11/2007	<4	4
L302W	Aldrin (µg/L)	5/11/2007	<0.5	0.5
L302W	Alkalinity, Bicarb Total (mg/L)	5/11/2007	4700	2
L302W	alpha-BHC (µg/L)	5/11/2007	<0.5	0.5
L302W	Aluminum - Total (µg/L)	5/11/2007	21000	10
L302W	Ammonia, Total (mg/L)	3/ 6/2007	980	20
L302W	Ammonia, Total (mg/L)	5/11/2007	920	5
L302W	Ammonia, Total (mg/L)	8/22/2007	9100	250
L302W	Ammonia, Total (mg/L)	10/16/2007	810	10
L302W	Anthracene (µg/L)	5/11/2007	<10	10
L302W	Antimony Total, GFAA (µg/L)	5/11/2007	38	3
L302W	Aroclor 1016 (µg/L)	5/11/2007	<5	5
L302W	Aroclor 1221 (µg/L)	5/11/2007	<10	10
L302W	Aroclor 1232 (µg/L)	5/11/2007	<5	5
L302W	Aroclor 1242 (µg/L)	5/11/2007	<5	5
L302W	Aroclor 1248 (µg/L)	5/11/2007	<5	5
L302W	Aroclor 1254 (µg/L)	5/11/2007	<10	10
L302W	Aroclor 1260 (µg/L)	5/11/2007	<10	10
L302W	Arsenic Total,GFAA (µg/L)	3/ 6/2007	200	1
L302W	Arsenic Total,GFAA (µg/L)	5/11/2007	260	1
L302W	Arsenic Total,GFAA (µg/L)	8/22/2007	460	1
L302W	Arsenic Total,GFAA (µg/L)	10/16/2007	280	1
L302W	Atrazine (µg/L)	5/11/2007	<2	2
L302W	Barium - Total (µg/L)	3/ 6/2007	1200	2
L302W	Barium - Total (µg/L)	5/11/2007	1400	2
L302W	Barium - Total (µg/L)	8/22/2007	2800	4
L302W	Barium - Total (µg/L)	10/16/2007	1300	2
L302W	Benzene (µg/L)	5/11/2007	<5	5
L302W	Benzo(a)anthracene (µg/L)	5/11/2007	<10	10
L302W	Benzo(a)pyrene (µg/L)	5/11/2007	<10	10
L302W	Benzo(b)fluoranthene (µg/L)	5/11/2007	<10	10
L302W	Benzo(ghi)perylene (µg/L)	5/11/2007	<10	10
L302W	Benzo(k)fluoranthene (µg/L)	5/11/2007	<10	10
L302W	Beryllium - Total (µg/L)	5/11/2007	1.3	1
L302W	beta-BHC (µg/L)	5/11/2007	<0.5	0.5

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302W	bis(2-chloroethoxy) methane (µg/L)	5/11/2007	<10	10
L302W	bis(2-Chloroethyl) ether (µg/L)	5/11/2007	<10	10
L302W	bis(2-Ethylhexyl) phthalate (µg/L)	5/11/2007	35	10
L302W	Bis(chloromethyl)ether (µg/L)	5/11/2007	<50000	50000
L302W	BOD 5 (mg/L)	3/ 6/2007	600	4
L302W	BOD 5 (mg/L)	5/11/2007	320	4
L302W	BOD 5 (mg/L)	8/22/2007	250	4
L302W	BOD 5 (mg/L)	10/16/2007	220	4
L302W	Bromobenzene (µg/L)	5/11/2007	<5	5
L302W	Bromochloromethane (µg/L)	5/11/2007	<5	5
L302W	Bromodichloromethane (µg/L)	5/11/2007	<5	5
L302W	Bromoform (µg/L)	5/11/2007	<5	5
L302W	Bromomethane (µg/L)	5/11/2007	<10	10
L302W	Butyl benzyl phthalate (µg/L)	5/11/2007	<10	10
L302W	Cadmium - Total (µg/L)	3/ 6/2007	<1	1
L302W	Cadmium - Total (µg/L)	5/11/2007	1.7	1
L302W	Cadmium - Total (µg/L)	8/22/2007	5.6	1
L302W	Cadmium - Total (µg/L)	10/16/2007	2	1
L302W	Calcium - Total (mg/L)	5/11/2007	90	0.1
L302W	Carbofuran (µg/L)	5/11/2007	<15	15
L302W	Carbon disulfide (µg/L)	5/11/2007	15	5
L302W	Carbon tetrachloride (µg/L)	5/11/2007	<5	5
L302W	Chlordane (Tech) (µg/L)	5/11/2007	<5	5
L302W	Chloride, Total (mg/L)	5/11/2007	2200	125
L302W	Chlorobenzene (µg/L)	5/11/2007	<5	5
L302W	Chloroethane (µg/L)	5/11/2007	<10	10
L302W	Chloroform (µg/L)	5/11/2007	<5	5
L302W	Chloromethane (µg/L)	5/11/2007	<10	10
L302W	Chromium - Total (µg/L)	3/ 6/2007	1200	4
L302W	Chromium - Total (µg/L)	5/11/2007	2500	4
L302W	Chromium - Total (µg/L)	8/22/2007	6100	8
L302W	Chromium - Total (µg/L)	10/16/2007	2200	4
L302W	Chromium, Hexavalent (µg/L)	3/ 6/2007	<5	5
L302W	Chrysene (µg/L)	5/11/2007	<10	10
L302W	cis-1,2-Dichloroethene (µg/L)	5/11/2007	<5	5
L302W	cis-1,3-Dichloropropene (µg/L)	5/11/2007	<5	5
L302W	Cobalt - Total (µg/L)	5/11/2007	45	2
L302W	COD (mg/L)	3/ 6/2007	4600	6
L302W	COD (mg/L)	5/11/2007	2700	6
L302W	COD (mg/L)	8/22/2007	5600	6
L302W	COD (mg/L)	10/16/2007	3300	6
L302W	Coliform, Fecal, A MF (ct/100)	3/ 6/2007	1300	10
L302W	Coliform, Fecal, A MF (ct/100)	5/11/2007	41000	10
L302W	Coliform, Fecal, A MF (ct/100)	8/22/2007	7000	10

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L302W	Coliform, Fecal, A MF (ct/100)	10/16/2007	40	10
L302W	Copper - Total (µg/L)	3/ 6/2007	42	3
L302W	Copper - Total (µg/L)	5/11/2007	100	3
L302W	Copper - Total (µg/L)	8/22/2007	260	6
L302W	Copper - Total (µg/L)	10/16/2007	100	3
L302W	Cyanide - Total (mg/L)	3/ 6/2007	<0.005	0.005
L302W	Cyanide - Total (mg/L)	5/11/2007	0.005	0.005
L302W	Cyanide - Total (mg/L)	8/22/2007	0.014	0.005
L302W	Cyanide - Total (mg/L)	10/16/2007	<0.005	0.005
L302W	delta-BHC (µg/L)	5/11/2007	<0.5	0.5
L302W	Dibenzo(a,h)anthracene (µg/L)	5/11/2007	<10	10
L302W	Dibromochloromethane (µg/L)	5/11/2007	<5	5
L302W	Dibromomethane (µg/L)	5/11/2007	<5	5
L302W	Dichlorodifluoromethane (µg/L)	5/11/2007	<10	10
L302W	Dieldrin (µg/L)	5/11/2007	<1	1
L302W	Diethyl phthalate (µg/L)	5/11/2007	<10	10
L302W	Dimethyl phthalate (µg/L)	5/11/2007	<10	10
L302W	Di-n-butyl phthalate (µg/L)	5/11/2007	<10	10
L302W	Di-n-octyl phthalate (µg/L)	5/11/2007	<10	10
L302W	Dioxin Screen (µg/L)	5/11/2007	<10	10
L302W	Endosulfan I (µg/L)	5/11/2007	<0.5	0.5
L302W	Endosulfan II (µg/L)	5/11/2007	<1	1
L302W	Endosulfan Sulfate (µg/L)	5/11/2007	<1	1
L302W	Endrin (µg/L)	5/11/2007	<1	1
L302W	Endrin aldehyde (µg/L)	5/11/2007	<1	1
L302W	Ethyl acetate (µg/L)	5/11/2007	<50	50
L302W	Ethyl benzene (µg/L)	5/11/2007	26	5
L302W	Ethylene dibromide (µg/L)	5/11/2007	<0.05	0.05
L302W	Fluoranthene (µg/L)	5/11/2007	<10	10
L302W	Fluorene (µg/L)	5/11/2007	<10	10
L302W	Fluoride, Total (mg/L)	3/ 6/2007	0.54	0.25
L302W	Fluoride, Total (mg/L)	5/11/2007	0.72	0.25
L302W	Fluoride, Total (mg/L)	8/22/2007	0.73	0.25
L302W	Fluoride, Total (mg/L)	10/16/2007	0.77	0.25
L302W	gamma-BHC (Lindane) (µg/L)	5/11/2007	<0.5	0.5
L302W	Heptachlor (µg/L)	5/11/2007	<0.5	0.5
L302W	Heptachlor epoxide (µg/L)	5/11/2007	<0.5	0.5
L302W	Hexachlorobenzene (µg/L)	5/11/2007	<10	10
L302W	Hexachlorobutadiene (µg/L)	5/11/2007	<10	10
L302W	Hexachlorocyclopentadiene (µg/L)	5/11/2007	<10	10
L302W	Hexachloroethane (µg/L)	5/11/2007	<10	10
L302W	Indeno(1,2,3-cd)pyrene (µg/L)	5/11/2007	<10	10
L302W	Iodomethane (µg/L)	5/11/2007	<5	5
L302W	Iron - Total (µg/L)	3/ 6/2007	25000	10

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L302W	Iron - Total (µg/L)	5/11/2007	52000	10
L302W	Iron - Total (µg/L)	8/22/2007	110000	10
L302W	Iron - Total (µg/L)	10/16/2007	44000	10
L302W	Isopropyl benzene (µg/L)	5/11/2007	<5	5
L302W	Lead Total, GFAA (µg/L)	3/ 6/2007	11	1
L302W	Lead Total, GFAA (µg/L)	5/11/2007	31	1
L302W	Lead Total, GFAA (µg/L)	8/22/2007	80	2
L302W	Lead Total, GFAA (µg/L)	10/16/2007	31	1
L302W	m/p-Xylene (µg/L)	5/11/2007	34	5
L302W	Magnesium - Total (mg/L)	5/11/2007	100	0.1
L302W	Manganese - Total (µg/L)	3/ 6/2007	500	1
L302W	Manganese - Total (µg/L)	5/11/2007	510	1
L302W	Manganese - Total (µg/L)	8/22/2007	750	2
L302W	Manganese - Total (µg/L)	10/16/2007	430	1
L302W	Mercury - Total (µg/L)	3/ 6/2007	<0.2	0.2
L302W	Mercury - Total (µg/L)	5/11/2007	0.3	0.2
L302W	Mercury - Total (µg/L)	8/22/2007	0.74	0.2
L302W	Mercury - Total (µg/L)	10/16/2007	0.24	0.2
L302W	Methoxychlor (µg/L)	5/11/2007	<5	5
L302W	Methylene chloride (µg/L)	5/11/2007	<25	25
L302W	Naphthalene (µg/L)	5/11/2007	<10	10
L302W	n-Butanol (µg/L)	5/11/2007	<5000	5000
L302W	n-Butylbenzene (µg/L)	5/11/2007	<5	5
L302W	Nickel - Total (µg/L)	3/ 6/2007	71	5
L302W	Nickel - Total (µg/L)	5/11/2007	1700	5
L302W	Nickel - Total (µg/L)	8/22/2007	4200	10
L302W	Nickel - Total (µg/L)	10/16/2007	1200	5
L302W	Nitrate/Nitrite as N, Total (mg/L)	5/11/2007	<0.1	0.1
L302W	Nitrobenzene (µg/L)	5/11/2007	<10	10
L302W	N-Nitrosodimethylamine (µg/L)	5/11/2007	<10	10
L302W	N-Nitroso-Di-n-propylamine (µg/L)	5/11/2007	<10	10
L302W	N-nitrosodiphenylamine (µg/L)	5/11/2007	<10	10
L302W	n-Propylbenzene (µg/L)	5/11/2007	<5	5
L302W	Oil and grease (mg/L)	3/ 6/2007	400	5
L302W	Oil and grease (mg/L)	5/11/2007	43	5
L302W	Oil and grease (mg/L)	8/22/2007	190	5
L302W	Oil and grease (mg/L)	10/16/2007	160	5
L302W	o-Xylene (µg/L)	5/11/2007	15	5
L302W	Parathion (µg/L)	5/11/2007	<2	2
L302W	Pentachlorophenol (µg/L)	5/11/2007	<0.5	0.5
L302W	pH, Aqueous (s.u.)	3/ 6/2007	8	0
L302W	pH, Aqueous (s.u.)	5/11/2007	7.42	0
L302W	pH, Aqueous (s.u.)	8/22/2007	7.32	0
L302W	pH, Aqueous (s.u.)	10/16/2007	7.21	0

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L302W	Phenanthrene (µg/L)	5/11/2007	<10	10
L302W	Phenols, Total low range (µg/L)	3/ 6/2007	200	5
L302W	Phenols, Total low range (µg/L)	5/11/2007	360	25
L302W	Phenols, Total low range (µg/L)	8/22/2007	570	25
L302W	Phenols, Total low range (µg/L)	10/16/2007	170	5
L302W	Phosphorous, Total (µg/L)	3/ 6/2007	8600	50
L302W	Phosphorous, Total (µg/L)	5/11/2007	12000	50
L302W	Phosphorous, Total (µg/L)	8/22/2007	21000	100
L302W	Phosphorous, Total (µg/L)	10/16/2007	12000	500
L302W	P-Isopropyltoluene (µg/L)	5/11/2007	12	5
L302W	Potassium - Total (mg/L)	5/11/2007	370	0.1
L302W	Pyrene (µg/L)	5/11/2007	<10	10
L302W	sec-Butylbenzene (µg/L)	5/11/2007	<5	5
L302W	Selenium Total, GFAA (µg/L)	5/11/2007	42	1
L302W	Silver - Total (µg/L)	3/ 6/2007	<5	5
L302W	Silver - Total (µg/L)	5/11/2007	<5	5
L302W	Silver - Total (µg/L)	8/22/2007	<10	10
L302W	Silver - Total (µg/L)	10/16/2007	<5	5
L302W	Silvex (µg/L)	5/11/2007	<0.5	0.5
L302W	Sodium - Total (mg/L)	5/11/2007	1900	1
L302W	Specific Conductance, Field (µmhos/cm)	3/ 6/2007	11280	0
L302W	Specific Conductance, Field (µmhos/cm)	5/11/2007	10380	0
L302W	Specific Conductance, Field (µmhos/cm)	8/22/2007	1250	0
L302W	Specific Conductance, Field (µmhos/cm)	10/16/2007	7200	0
L302W	Styrene (µg/L)	5/11/2007	<5	5
L302W	Sulfate, Total (mg/L)	5/11/2007	96	7
L302W	tert-Butylbenzene (µg/L)	5/11/2007	<5	5
L302W	Tetrachloroethene (µg/L)	5/11/2007	<5	5
L302W	Tetrahydrofuran (µg/L)	5/11/2007	290	100
L302W	Thallium Total, GFAA (µg/L)	5/11/2007	<1	1
L302W	Tin Total, GFAA (µg/L)	5/11/2007	<60	60
L302W	TOC (mg/L)	5/11/2007	630	0.5
L302W	Toluene (µg/L)	5/11/2007	46	5
L302W	Total Dissolved Solids (mg/L)	3/ 6/2007	7900	51
L302W	Total Dissolved Solids (mg/L)	5/11/2007	7600	51
L302W	Total Dissolved Solids (mg/L)	8/22/2007	7500	51
L302W	Total Dissolved Solids (mg/L)	10/16/2007	7200	51
L302W	Total Suspended Solids (mg/L)	3/ 6/2007	2100	50
L302W	Total Suspended Solids (mg/L)	5/11/2007	830	25
L302W	Total Suspended Solids (mg/L)	8/22/2007	720	25
L302W	Total Suspended Solids (mg/L)	10/16/2007	600	25
L302W	Toxaphene (µg/L)	5/11/2007	<5	5
L302W	trans-1,2-Dichloroethene (µg/L)	5/11/2007	<5	5
L302W	trans-1,3-Dichloropropene (µg/L)	5/11/2007	<5	5

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L302W	trans-1,4-Dichloro-2-butene (µg/L)	5/11/2007	<5	5
L302W	Trichloroethene (µg/L)	5/11/2007	<5	5
L302W	Trichlorofluoromethane (µg/L)	5/11/2007	<5	5
L302W	Vinyl acetate (µg/L)	5/11/2007	<25	25
L302W	Vinyl chloride (µg/L)	5/11/2007	<10	10
L302W	Xylenes - Total (µg/L)	5/11/2007	49	15
L302W	Zinc - Total (µg/L)	3/ 6/2007	360	6
L302W	Zinc - Total (µg/L)	5/11/2007	1400	6
L302W	Zinc - Total (µg/L)	8/22/2007	1600	12
L302W	Zinc - Total (µg/L)	10/16/2007	520	6
L304	1,1,1,2-Tetrachloroethane (µg/L)	5/11/2007	26	1
L304	1,1,1-Trichloroethane (µg/L)	5/11/2007	2	1
L304	1,1,2,2-Tetrachloroethane (µg/L)	5/11/2007	<1	1
L304	1,1,2-Trichloroethane (µg/L)	5/11/2007	<1	1
L304	1,1-Dichloroethane (µg/L)	5/11/2007	<1	1
L304	1,1-Dichloroethene (µg/L)	5/11/2007	<1	1
L304	1,1-Dichloropropene (µg/L)	5/11/2007	<1	1
L304	1,2,3-Trichlorobenzene (µg/L)	5/11/2007	<1	1
L304	1,2,3-Trichloropropane (µg/L)	5/11/2007	<1	1
L304	1,2,4-Trichlorobenzene (µg/L)	5/11/2007	<1	1
L304	1,2,4-Trimethylbenzene (µg/L)	5/11/2007	22	1
L304	1,2-Dibromo-3-chloropropane (µg/L)	5/11/2007	<0.05	0.05
L304	1,2-Dichlorobenzene (µg/L)	5/11/2007	<1	1
L304	1,2-Dichloroethane (µg/L)	5/11/2007	<1	1
L304	1,2-Dichloropropane (µg/L)	5/11/2007	<1	1
L304	1,3,5-Trimethylbenzene (µg/L)	5/11/2007	<1	1
L304	1,3-Dichlorobenzene (µg/L)	5/11/2007	<1	1
L304	1,3-Dichloropropane (µg/L)	5/11/2007	5	1
L304	1,4-Dichlorobenzene (µg/L)	5/11/2007	3	1
L304	2,2-Dichloropropane (µg/L)	5/11/2007	<1	1
L304	2,4-D (µg/L)	5/11/2007	<1	1
L304	2,4-Dichlorophenol (µg/L)	5/11/2007	<10	10
L304	2,4-Dimethylphenol (µg/L)	5/11/2007	<10	10
L304	2,4-Dinitrophenol (µg/L)	5/11/2007	<50	50
L304	2,6-Dinitrotoluene (µg/L)	5/11/2007	<10	10
L304	2-Butanone (MEK) (µg/L)	5/11/2007	7	5
L304	2-Chloroethyl vinyl ether (µg/L)	5/11/2007	<10	10
L304	2-Chloronaphthalene (µg/L)	5/11/2007	<10	10
L304	2-Chlorophenol (µg/L)	5/11/2007	<10	10
L304	2-Chlorotoluene (µg/L)	5/11/2007	<1	1
L304	2-Hexanone (MBK) (µg/L)	5/11/2007	<5	5
L304	3,3-Dichlorobenzidine (µg/L)	5/11/2007	<20	20
L304	4,6-Dinitro-2-methylphenol (µg/L)	5/11/2007	<50	50
L304	4-Bromophenyl phenyl ether (µg/L)	5/11/2007	<10	10

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L304	4-Chlorophenyl phenyl ether (µg/L)	5/11/2007	<10	10
L304	4-Chlorotoluene (µg/L)	5/11/2007	<1	1
L304	4-Methyl-2-Pentanone(MIBK) (µg/L)	5/11/2007	<5	5
L304	4-Methylphenol(p-cresol) (µg/L)	5/11/2007	<10	10
L304	4-Nitrophenol (µg/L)	5/11/2007	<10	10
L304	Acenaphthene (µg/L)	5/11/2007	<10	10
L304	Acetone (µg/L)	5/11/2007	32	10
L304	Alachlor (µg/L)	5/11/2007	<0.4	0.4
L304	Aldicarb (µg/L)	5/11/2007	1.6	0.4
L304	Alkalinity, Bicarb Total (mg/L)	5/11/2007	3500	2
L304	Aluminum - Total (µg/L)	5/11/2007	160	10
L304	Ammonia, Total (mg/L)	5/11/2007	430	5
L304	Ammonia, Total (mg/L)	8/22/2007	390	5
L304	Ammonia, Total (mg/L)	10/16/2007	380	5
L304	Anthracene (µg/L)	5/11/2007	<10	10
L304	Antimony Total, GFAA (µg/L)	5/11/2007	<3	3
L304	Arsenic Total,GFAA (µg/L)	5/11/2007	37	1
L304	Arsenic Total,GFAA (µg/L)	8/22/2007	43	1
L304	Arsenic Total,GFAA (µg/L)	10/16/2007	40	1
L304	Atrazine (µg/L)	5/11/2007	<0.2	0.2
L304	Barium - Total (µg/L)	5/11/2007	850	2
L304	Barium - Total (µg/L)	8/22/2007	830	2
L304	Barium - Total (µg/L)	10/16/2007	52	2
L304	Benzene (µg/L)	5/11/2007	5	1
L304	Benzo(a)anthracene (µg/L)	5/11/2007	<10	10
L304	Benzo(a)pyrene (µg/L)	5/11/2007	<10	10
L304	Benzo(b)fluoranthene (µg/L)	5/11/2007	<10	10
L304	Benzo(ghi)perylene (µg/L)	5/11/2007	<10	10
L304	Benzo(k)fluoranthene (µg/L)	5/11/2007	<10	10
L304	Beryllium - Total (µg/L)	5/11/2007	<1	1
L304	bis(2-chloroethoxy) methane (µg/L)	5/11/2007	<10	10
L304	bis(2-Chloroethyl) ether (µg/L)	5/11/2007	<10	10
L304	bis(2-Ethylhexyl) phthalate (µg/L)	5/11/2007	<10	10
L304	Bis(chloromethyl)ether (µg/L)	5/11/2007	<10000	10000
L304	BOD 5 (mg/L)	5/11/2007	55	4
L304	BOD 5 (mg/L)	8/22/2007	600	4
L304	BOD 5 (mg/L)	10/16/2007	45	4
L304	Bromobenzene (µg/L)	5/11/2007	<1	1
L304	Bromochloromethane (µg/L)	5/11/2007	<1	1
L304	Bromodichloromethane (µg/L)	5/11/2007	<1	1
L304	Bromoform (µg/L)	5/11/2007	<1	1
L304	Bromomethane (µg/L)	5/11/2007	<2	2
L304	Butyl benzyl phthalate (µg/L)	5/11/2007	<10	10
L304	Cadmium - Total (µg/L)	5/11/2007	<1	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	Cadmium - Total (µg/L)	8/22/2007	<1	1
L304	Cadmium - Total (µg/L)	10/16/2007	<1	1
L304	Calcium - Total (mg/L)	5/11/2007	140	0.1
L304	Carbofuran (µg/L)	5/11/2007	<1.5	1.5
L304	Carbon disulfide (µg/L)	5/11/2007	<1	1
L304	Carbon tetrachloride (µg/L)	5/11/2007	<1	1
L304	Chloride, Total (mg/L)	5/11/2007	2200	125
L304	Chlorobenzene (µg/L)	5/11/2007	<1	1
L304	Chloroethane (µg/L)	5/11/2007	<2	2
L304	Chloroform (µg/L)	5/11/2007	<1	1
L304	Chloromethane (µg/L)	5/11/2007	<2	2
L304	Chromium - Total (µg/L)	5/11/2007	67	4
L304	Chromium - Total (µg/L)	8/22/2007	84	4
L304	Chromium - Total (µg/L)	10/16/2007	72	4
L304	Chrysene (µg/L)	5/11/2007	<10	10
L304	cis-1,2-Dichloroethene (µg/L)	5/11/2007	<1	1
L304	cis-1,3-Dichloropropene (µg/L)	5/11/2007	<1	1
L304	Cobalt - Total (µg/L)	5/11/2007	13	2
L304	COD (mg/L)	5/11/2007	830	6
L304	COD (mg/L)	8/22/2007	1500	6
L304	COD (mg/L)	10/16/2007	450	6
L304	Coliform, Fecal, A MF (ct/100)	5/11/2007	<10	10
L304	Coliform, Fecal, A MF (ct/100)	8/22/2007	30	10
L304	Coliform, Fecal, A MF (ct/100)	10/16/2007	10	10
L304	Copper - Total (µg/L)	5/11/2007	26	3
L304	Copper - Total (µg/L)	8/22/2007	66	3
L304	Copper - Total (µg/L)	10/16/2007	24	3
L304	Cyanide - Total (mg/L)	5/11/2007	<0.005	0.005
L304	Cyanide - Total (mg/L)	8/22/2007	<0.005	0.005
L304	Cyanide - Total (mg/L)	10/16/2007	0.006	0.005
L304	Dibenzo(a,h)anthracene (µg/L)	5/11/2007	<10	10
L304	Dibromochloromethane (µg/L)	5/11/2007	<1	1
L304	Dibromomethane (µg/L)	5/11/2007	<1	1
L304	Dichlorodifluoromethane (µg/L)	5/11/2007	<2	2
L304	Diethyl phthalate (µg/L)	5/11/2007	<10	10
L304	Dimethyl phthalate (µg/L)	5/11/2007	<10	10
L304	Di-n-butyl phthalate (µg/L)	5/11/2007	<10	10
L304	Di-n-octyl phthalate (µg/L)	5/11/2007	<10	10
L304	Dioxin Screen (µg/L)	5/11/2007	<10	10
L304	Ethyl acetate (µg/L)	5/11/2007	<10	10
L304	Ethyl benzene (µg/L)	5/11/2007	4	1
L304	Ethylene dibromide (µg/L)	5/11/2007	<0.05	0.05
L304	Fluoranthene (µg/L)	5/11/2007	<10	10
L304	Fluorene (µg/L)	5/11/2007	<10	10

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2007
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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	Fluoride, Total (mg/L)	5/11/2007	0.56	0.25
L304	Fluoride, Total (mg/L)	8/22/2007	0.44	0.25
L304	Fluoride, Total (mg/L)	10/16/2007	0.47	0.25
L304	Hexachlorobenzene (µg/L)	5/11/2007	<10	10
L304	Hexachlorobutadiene (µg/L)	5/11/2007	<10	10
L304	Hexachlorocyclopentadiene (µg/L)	5/11/2007	<10	10
L304	Hexachloroethane (µg/L)	5/11/2007	<10	10
L304	Indeno(1,2,3-cd)pyrene (µg/L)	5/11/2007	<10	10
L304	Iodomethane (µg/L)	5/11/2007	<1	1
L304	Iron - Total (µg/L)	5/11/2007	4700	10
L304	Iron - Total (µg/L)	8/22/2007	11000	10
L304	Iron - Total (µg/L)	10/16/2007	8100	10
L304	Isopropyl benzene (µg/L)	5/11/2007	12	1
L304	Lead Total, GFAA (µg/L)	5/11/2007	1.6	1
L304	Lead Total, GFAA (µg/L)	8/22/2007	2.1	1
L304	Lead Total, GFAA (µg/L)	10/16/2007	1.6	1
L304	m/p-Xylene (µg/L)	5/11/2007	17	1
L304	Magnesium - Total (mg/L)	5/11/2007	180	0.1
L304	Manganese - Total (µg/L)	5/11/2007	200	1
L304	Manganese - Total (µg/L)	8/22/2007	340	1
L304	Manganese - Total (µg/L)	10/16/2007	260	1
L304	Mercury - Total (µg/L)	5/11/2007	<0.2	0.2
L304	Mercury - Total (µg/L)	8/22/2007	<0.2	0.2
L304	Mercury - Total (µg/L)	10/16/2007	<0.2	0.2
L304	Methylene chloride (µg/L)	5/11/2007	<5	5
L304	Naphthalene (µg/L)	5/11/2007	<10	10
L304	n-Butanol (µg/L)	5/11/2007	<1000	1000
L304	n-Butylbenzene (µg/L)	5/11/2007	<1	1
L304	Nickel - Total (µg/L)	5/11/2007	160	5
L304	Nickel - Total (µg/L)	8/22/2007	140	5
L304	Nickel - Total (µg/L)	10/16/2007	130	5
L304	Nitrate/Nitrite as N, Total (mg/L)	5/11/2007	0.12	0.1
L304	Nitrobenzene (µg/L)	5/11/2007	<10	10
L304	N-Nitrosodimethylamine (µg/L)	5/11/2007	<10	10
L304	N-Nitroso-Di-n-propylamine (µg/L)	5/11/2007	<10	10
L304	N-nitrosodiphenylamine (µg/L)	5/11/2007	<10	10
L304	n-Propylbenzene (µg/L)	5/11/2007	3	1
L304	Oil and grease (mg/L)	5/11/2007	<5	5
L304	Oil and grease (mg/L)	8/22/2007	<5	5
L304	Oil and grease (mg/L)	10/16/2007	<5	5
L304	o-Xylene (µg/L)	5/11/2007	4	1
L304	Parathion (µg/L)	5/11/2007	<0.2	0.2
L304	Pentachlorophenol (µg/L)	5/11/2007	<0.5	0.5
L304	pH, Aqueous (s.u.)	5/11/2007	7.03	0

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	pH, Aqueous (s.u.)	8/22/2007	7.12	0
L304	pH, Aqueous (s.u.)	10/16/2007	7.1	0
L304	Phenanthrene (µg/L)	5/11/2007	<10	10
L304	Phenols, Total low range (µg/L)	5/11/2007	43	5
L304	Phenols, Total low range (µg/L)	8/22/2007	700	50
L304	Phenols, Total low range (µg/L)	10/16/2007	87	5
L304	Phosphorous, Total (µg/L)	5/11/2007	1500	50
L304	Phosphorous, Total (µg/L)	8/22/2007	1100	50
L304	Phosphorous, Total (µg/L)	10/16/2007	1300	50
L304	P-Isopropyltoluene (µg/L)	5/11/2007	<1	1
L304	Potassium - Total (mg/L)	5/11/2007	230	0.1
L304	Pyrene (µg/L)	5/11/2007	<10	10
L304	sec-Butylbenzene (µg/L)	5/11/2007	<1	1
L304	Selenium Total, GFAA (µg/L)	5/11/2007	39	1
L304	Silver - Total (µg/L)	5/11/2007	<5	5
L304	Silver - Total (µg/L)	8/22/2007	<5	5
L304	Silver - Total (µg/L)	10/16/2007	<5	5
L304	Silvex (µg/L)	5/11/2007	<0.5	0.5
L304	Sodium - Total (mg/L)	5/11/2007	1700	1
L304	Specific Conductance, Field (µmhos/cm)	5/11/2007	8480	0
L304	Specific Conductance, Field (µmhos/cm)	8/22/2007	860	0
L304	Specific Conductance, Field (µmhos/cm)	10/16/2007	5410	0
L304	Styrene (µg/L)	5/11/2007	<1	1
L304	Sulfate, Total (mg/L)	5/11/2007	29	3.5
L304	tert-Butylbenzene (µg/L)	5/11/2007	<1	1
L304	Tetrachloroethene (µg/L)	5/11/2007	16	1
L304	Tetrahydrofuran (µg/L)	5/11/2007	590	20
L304	Thallium Total, GFAA (µg/L)	5/11/2007	<1	1
L304	Tin Total, GFAA (µg/L)	5/11/2007	<60	60
L304	TOC (mg/L)	5/11/2007	260	0.5
L304	Toluene (µg/L)	5/11/2007	6	1
L304	Total Dissolved Solids (mg/L)	5/11/2007	6500	51
L304	Total Dissolved Solids (mg/L)	8/22/2007	5700	51
L304	Total Dissolved Solids (mg/L)	10/16/2007	5500	51
L304	Total Suspended Solids (mg/L)	5/11/2007	13	2
L304	Total Suspended Solids (mg/L)	8/22/2007	100	4.2
L304	Total Suspended Solids (mg/L)	10/16/2007	67	3.33
L304	trans-1,2-Dichloroethene (µg/L)	5/11/2007	<1	1
L304	trans-1,3-Dichloropropene (µg/L)	5/11/2007	<1	1
L304	trans-1,4-Dichloro-2-butene (µg/L)	5/11/2007	<1	1
L304	Trichloroethene (µg/L)	5/11/2007	<1	1
L304	Trichlorofluoromethane (µg/L)	5/11/2007	<1	1
L304	Vinyl acetate (µg/L)	5/11/2007	<5	5
L304	Vinyl chloride (µg/L)	5/11/2007	<2	2

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L304	Xylenes - Total (µg/L)	5/11/2007	21	3
L304	Zinc - Total (µg/L)	5/11/2007	30	6
L304	Zinc - Total (µg/L)	8/22/2007	30	6
L304	Zinc - Total (µg/L)	10/16/2007	20	6
L305	1,1,1,2-Tetrachloroethane (µg/L)	5/11/2007	19	1
L305	1,1,1-Trichloroethane (µg/L)	5/11/2007	<1	1
L305	1,1,2,2-Tetrachloroethane (µg/L)	5/11/2007	<1	1
L305	1,1,2-Trichloroethane (µg/L)	5/11/2007	<1	1
L305	1,1-Dichloroethane (µg/L)	5/11/2007	<1	1
L305	1,1-Dichloroethene (µg/L)	5/11/2007	<1	1
L305	1,1-Dichloropropene (µg/L)	5/11/2007	<1	1
L305	1,2,3-Trichlorobenzene (µg/L)	5/11/2007	<1	1
L305	1,2,3-Trichloropropane (µg/L)	5/11/2007	<1	1
L305	1,2,4-Trichlorobenzene (µg/L)	5/11/2007	<1	1
L305	1,2,4-Trimethylbenzene (µg/L)	5/11/2007	9	1
L305	1,2-Dibromo-3-chloropropane (µg/L)	5/11/2007	<0.05	0.05
L305	1,2-Dichlorobenzene (µg/L)	5/11/2007	<1	1
L305	1,2-Dichloroethane (µg/L)	5/11/2007	<1	1
L305	1,2-Dichloropropane (µg/L)	5/11/2007	<1	1
L305	1,3,5-Trimethylbenzene (µg/L)	5/11/2007	<1	1
L305	1,3-Dichlorobenzene (µg/L)	5/11/2007	<1	1
L305	1,3-Dichloropropane (µg/L)	5/11/2007	<1	1
L305	1,4-Dichlorobenzene (µg/L)	5/11/2007	2	1
L305	2,2-Dichloropropane (µg/L)	5/11/2007	<1	1
L305	2,4-D (µg/L)	5/11/2007	<1	1
L305	2,4-Dichlorophenol (µg/L)	5/11/2007	<10	10
L305	2,4-Dimethylphenol (µg/L)	5/11/2007	<10	10
L305	2,4-Dinitrophenol (µg/L)	5/11/2007	<50	50
L305	2,6-Dinitrotoluene (µg/L)	5/11/2007	<10	10
L305	2-Butanone (MEK) (µg/L)	5/11/2007	<5	5
L305	2-Chloroethyl vinyl ether (µg/L)	5/11/2007	<10	10
L305	2-Chloronaphthalene (µg/L)	5/11/2007	<10	10
L305	2-Chlorophenol (µg/L)	5/11/2007	<10	10
L305	2-Chlorotoluene (µg/L)	5/11/2007	<1	1
L305	2-Hexanone (MBK) (µg/L)	5/11/2007	<5	5
L305	3,3-Dichlorobenzidine (µg/L)	5/11/2007	<20	20
L305	4,4'-DDD (µg/L)	5/11/2007	<1	1
L305	4,4'-DDE (µg/L)	5/11/2007	<1	1
L305	4,4'-DDT (µg/L)	5/11/2007	<1	1
L305	4,6-Dinitro-2-methylphenol (µg/L)	5/11/2007	<50	50
L305	4-Bromophenyl phenyl ether (µg/L)	5/11/2007	<10	10
L305	4-Chlorophenyl phenyl ether (µg/L)	5/11/2007	<10	10
L305	4-Chlorotoluene (µg/L)	5/11/2007	<1	1
L305	4-Methyl-2-Pentanone(MIBK) (µg/L)	5/11/2007	<5	5

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	4-Methylphenol(p-cresol) (µg/L)	5/11/2007	<10	10
L305	4-Nitrophenol (µg/L)	5/11/2007	<10	10
L305	Acenaphthene (µg/L)	5/11/2007	<10	10
L305	Acetone (µg/L)	5/11/2007	20	10
L305	Alachlor (µg/L)	5/11/2007	<4	4
L305	Aldicarb (µg/L)	5/11/2007	<4	4
L305	Aldrin (µg/L)	5/11/2007	<0.5	0.5
L305	Alkalinity, Bicarb Total (mg/L)	5/11/2007	1700	2
L305	alpha-BHC (µg/L)	5/11/2007	<0.5	0.5
L305	Aluminum - Total (µg/L)	5/11/2007	7300	10
L305	Ammonia, Total (mg/L)	3/ 6/2007	110	5
L305	Ammonia, Total (mg/L)	5/11/2007	120	1
L305	Anthracene (µg/L)	5/11/2007	<10	10
L305	Antimony Total, GFAA (µg/L)	5/11/2007	<3	3
L305	Aroclor 1016 (µg/L)	5/11/2007	<5	5
L305	Aroclor 1221 (µg/L)	5/11/2007	<10	10
L305	Aroclor 1232 (µg/L)	5/11/2007	<5	5
L305	Aroclor 1242 (µg/L)	5/11/2007	<5	5
L305	Aroclor 1248 (µg/L)	5/11/2007	<5	5
L305	Aroclor 1254 (µg/L)	5/11/2007	<10	10
L305	Aroclor 1260 (µg/L)	5/11/2007	<10	10
L305	Arsenic Total,GFAA (µg/L)	3/ 6/2007	11	1
L305	Arsenic Total,GFAA (µg/L)	5/11/2007	16	1
L305	Atrazine (µg/L)	5/11/2007	<2	2
L305	Barium - Total (µg/L)	3/ 6/2007	170	2
L305	Barium - Total (µg/L)	5/11/2007	170	2
L305	Benzene (µg/L)	5/11/2007	3	1
L305	Benzo(a)anthracene (µg/L)	5/11/2007	<10	10
L305	Benzo(a)pyrene (µg/L)	5/11/2007	<10	10
L305	Benzo(b)fluoranthene (µg/L)	5/11/2007	<10	10
L305	Benzo(ghi)perylene (µg/L)	5/11/2007	<10	10
L305	Benzo(k)fluoranthene (µg/L)	5/11/2007	<10	10
L305	Beryllium - Total (µg/L)	5/11/2007	<1	1
L305	beta-BHC (µg/L)	5/11/2007	<0.5	0.5
L305	bis(2-chloroethoxy) methane (µg/L)	5/11/2007	<10	10
L305	bis(2-Chloroethyl) ether (µg/L)	5/11/2007	<10	10
L305	bis(2-Ethylhexyl) phthalate (µg/L)	5/11/2007	11	10
L305	Bis(chloromethyl)ether (µg/L)	5/11/2007	<10000	10000
L305	BOD 5 (mg/L)	3/ 6/2007	74	4
L305	BOD 5 (mg/L)	5/11/2007	98	4
L305	Bromobenzene (µg/L)	5/11/2007	<1	1
L305	Bromochloromethane (µg/L)	5/11/2007	<1	1
L305	Bromodichloromethane (µg/L)	5/11/2007	<1	1
L305	Bromoform (µg/L)	5/11/2007	<1	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	Bromomethane (µg/L)	5/11/2007	<2	2
L305	Butyl benzyl phthalate (µg/L)	5/11/2007	<10	10
L305	Cadmium - Total (µg/L)	3/ 6/2007	<1	1
L305	Cadmium - Total (µg/L)	5/11/2007	<1	1
L305	Calcium - Total (mg/L)	5/11/2007	580	0.1
L305	Carbofuran (µg/L)	5/11/2007	<15	15
L305	Carbon disulfide (µg/L)	5/11/2007	1	1
L305	Carbon tetrachloride (µg/L)	5/11/2007	<1	1
L305	Chlordane (Tech) (µg/L)	5/11/2007	<5	5
L305	Chloride, Total (mg/L)	5/11/2007	1800	125
L305	Chlorobenzene (µg/L)	5/11/2007	<1	1
L305	Chloroethane (µg/L)	5/11/2007	<2	2
L305	Chloroform (µg/L)	5/11/2007	<1	1
L305	Chloromethane (µg/L)	5/11/2007	<2	2
L305	Chromium - Total (µg/L)	3/ 6/2007	91	4
L305	Chromium - Total (µg/L)	5/11/2007	63	4
L305	Chromium, Hexavalent (µg/L)	3/ 6/2007	<5	5
L305	Chrysene (µg/L)	5/11/2007	<10	10
L305	cis-1,2-Dichloroethene (µg/L)	5/11/2007	<1	1
L305	cis-1,3-Dichloropropene (µg/L)	5/11/2007	<1	1
L305	Cobalt - Total (µg/L)	5/11/2007	4.8	2
L305	COD (mg/L)	3/ 6/2007	730	6
L305	COD (mg/L)	5/11/2007	520	6
L305	Coliform, Fecal, A MF (ct/100)	3/ 6/2007	<10	10
L305	Coliform, Fecal, A MF (ct/100)	5/11/2007	<10	10
L305	Copper - Total (µg/L)	3/ 6/2007	24	3
L305	Copper - Total (µg/L)	5/11/2007	36	3
L305	Cyanide - Total (mg/L)	3/ 6/2007	<0.005	0.005
L305	Cyanide - Total (mg/L)	5/11/2007	<0.005	0.005
L305	delta-BHC (µg/L)	5/11/2007	<0.5	0.5
L305	Dibenzo(a,h)anthracene (µg/L)	5/11/2007	<10	10
L305	Dibromochloromethane (µg/L)	5/11/2007	<1	1
L305	Dibromomethane (µg/L)	5/11/2007	<1	1
L305	Dichlorodifluoromethane (µg/L)	5/11/2007	<2	2
L305	Dieldrin (µg/L)	5/11/2007	<1	1
L305	Diethyl phthalate (µg/L)	5/11/2007	<10	10
L305	Dimethyl phthalate (µg/L)	5/11/2007	<10	10
L305	Di-n-butyl phthalate (µg/L)	5/11/2007	<10	10
L305	Di-n-octyl phthalate (µg/L)	5/11/2007	<10	10
L305	Dioxin Screen (µg/L)	5/11/2007	<10	10
L305	Endosulfan I (µg/L)	5/11/2007	<0.5	0.5
L305	Endosulfan II (µg/L)	5/11/2007	<1	1
L305	Endosulfan Sulfate (µg/L)	5/11/2007	<1	1
L305	Endrin (µg/L)	5/11/2007	<1	1

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Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	Endrin aldehyde (µg/L)	5/11/2007	<1	1
L305	Ethyl acetate (µg/L)	5/11/2007	<10	10
L305	Ethyl benzene (µg/L)	5/11/2007	1	1
L305	Ethylene dibromide (µg/L)	5/11/2007	<0.05	0.05
L305	Fluoranthene (µg/L)	5/11/2007	<10	10
L305	Fluorene (µg/L)	5/11/2007	<10	10
L305	Fluoride, Total (mg/L)	3/ 6/2007	<0.25	0.25
L305	Fluoride, Total (mg/L)	5/11/2007	<0.25	0.25
L305	gamma-BHC (Lindane) (µg/L)	5/11/2007	<0.5	0.5
L305	Heptachlor (µg/L)	5/11/2007	<0.5	0.5
L305	Heptachlor epoxide (µg/L)	5/11/2007	<0.5	0.5
L305	Hexachlorobenzene (µg/L)	5/11/2007	<10	10
L305	Hexachlorobutadiene (µg/L)	5/11/2007	<10	10
L305	Hexachlorocyclopentadiene (µg/L)	5/11/2007	<10	10
L305	Hexachloroethane (µg/L)	5/11/2007	<10	10
L305	Indeno(1,2,3-cd)pyrene (µg/L)	5/11/2007	<10	10
L305	Iodomethane (µg/L)	5/11/2007	<1	1
L305	Iron - Total (µg/L)	3/ 6/2007	37000	10
L305	Iron - Total (µg/L)	5/11/2007	28000	10
L305	Isopropyl benzene (µg/L)	5/11/2007	<1	1
L305	Lead Total, GFAA (µg/L)	3/ 6/2007	5.5	1
L305	Lead Total, GFAA (µg/L)	5/11/2007	7.2	1
L305	m/p-Xylene (µg/L)	5/11/2007	2	1
L305	Magnesium - Total (mg/L)	5/11/2007	270	0.1
L305	Manganese - Total (µg/L)	3/ 6/2007	1500	1
L305	Manganese - Total (µg/L)	5/11/2007	1300	1
L305	Mercury - Total (µg/L)	3/ 6/2007	<0.2	0.2
L305	Mercury - Total (µg/L)	5/11/2007	<0.2	0.2
L305	Methoxychlor (µg/L)	5/11/2007	<5	5
L305	Methylene chloride (µg/L)	5/11/2007	<5	5
L305	Naphthalene (µg/L)	5/11/2007	<10	10
L305	n-Butanol (µg/L)	5/11/2007	<10000	1000
L305	n-Butylbenzene (µg/L)	5/11/2007	<1	1
L305	Nickel - Total (µg/L)	3/ 6/2007	120	5
L305	Nickel - Total (µg/L)	5/11/2007	130	5
L305	Nitrate/Nitrite as N, Total (mg/L)	5/11/2007	<0.1	0.1
L305	Nitrobenzene (µg/L)	5/11/2007	<10	10
L305	N-Nitrosodimethylamine (µg/L)	5/11/2007	<10	10
L305	N-Nitroso-Di-n-propylamine (µg/L)	5/11/2007	<10	10
L305	N-nitrosodiphenylamine (µg/L)	5/11/2007	<10	10
L305	n-Propylbenzene (µg/L)	5/11/2007	<1	1
L305	Oil and grease (mg/L)	3/ 6/2007	18	5
L305	Oil and grease (mg/L)	5/11/2007	5.2	5
L305	o-Xylene (µg/L)	5/11/2007	1	1

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2007
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	Parathion (µg/L)	5/11/2007	<2	2
L305	Pentachlorophenol (µg/L)	5/11/2007	<0.5	0.5
L305	pH, Aqueous (s.u.)	3/ 6/2007	6.8	0
L305	pH, Aqueous (s.u.)	5/11/2007	6.5	0
L305	Phenanthrene (µg/L)	5/11/2007	<10	10
L305	Phenols, Total low range (µg/L)	3/ 6/2007	70	5
L305	Phenols, Total low range (µg/L)	5/11/2007	57	5
L305	Phosphorous, Total (µg/L)	3/ 6/2007	1500	50
L305	Phosphorous, Total (µg/L)	5/11/2007	680	50
L305	P-Isopropyltoluene (µg/L)	5/11/2007	<1	1
L305	Potassium - Total (mg/L)	5/11/2007	48	0.1
L305	Pyrene (µg/L)	5/11/2007	<10	10
L305	sec-Butylbenzene (µg/L)	5/11/2007	<1	1
L305	Selenium Total, GFAA (µg/L)	5/11/2007	37	1
L305	Silver - Total (µg/L)	3/ 6/2007	<5	5
L305	Silver - Total (µg/L)	5/11/2007	<5	5
L305	Silvex (µg/L)	5/11/2007	<0.5	0.5
L305	Sodium - Total (mg/L)	5/11/2007	1200	1
L305	Specific Conductance, Field (µmhos/cm)	3/ 6/2007	730	0
L305	Specific Conductance, Field (µmhos/cm)	5/11/2007	6590	0
L305	Specific Conductance, Field (µmhos/cm)	8/22/2007	0	0
L305	Styrene (µg/L)	5/11/2007	<1	1
L305	Sulfate, Total (mg/L)	5/11/2007	1500	125
L305	tert-Butylbenzene (µg/L)	5/11/2007	<1	1
L305	Tetrachloroethene (µg/L)	5/11/2007	7	1
L305	Tetrahydrofuran (µg/L)	5/11/2007	<20	20
L305	Thallium Total, GFAA (µg/L)	5/11/2007	<1	1
L305	Tin Total, GFAA (µg/L)	5/11/2007	<60	60
L305	TOC (mg/L)	5/11/2007	120	0.5
L305	Toluene (µg/L)	5/11/2007	3	1
L305	Total Dissolved Solids (mg/L)	3/ 6/2007	6400	51
L305	Total Dissolved Solids (mg/L)	5/11/2007	7400	51
L305	Total Suspended Solids (mg/L)	3/ 6/2007	700	25
L305	Total Suspended Solids (mg/L)	5/11/2007	270	5
L305	Toxaphene (µg/L)	5/11/2007	<5	5
L305	trans-1,2-Dichloroethene (µg/L)	5/11/2007	<1	1
L305	trans-1,3-Dichloropropene (µg/L)	5/11/2007	<1	1
L305	trans-1,4-Dichloro-2-butene (µg/L)	5/11/2007	<1	1
L305	Trichloroethene (µg/L)	5/11/2007	<1	1
L305	Trichlorofluoromethane (µg/L)	5/11/2007	<1	1
L305	Vinyl acetate (µg/L)	5/11/2007	<5	5
L305	Vinyl chloride (µg/L)	5/11/2007	<2	2
L305	Xylenes - Total (µg/L)	5/11/2007	4	3
L305	Zinc - Total (µg/L)	3/ 6/2007	130	6

SUMMARY OF LEACHATE MONITORING RESULTS
FOR CALENDAR YEAR 2007
Clinton Landfill No. 2

Well ID	Parameter (Unit)	Sample Date	Result	Detection Limit
L305	Zinc - Total (µg/L)	5/11/2007	89	6

Notes
1. µg/L = micrograms per liter = parts per billion (ppb)
2. mg/L = milligrams per liter = parts per million (ppm)
3. umhos/cm = micromohs per centimeter
4. s.u. = standard units
5. cfu/100 mL = colony forming units per 100 milliliters
6. <= compound not detected at the specified laboratory method detection limit

L301	423081	4/23/2008	1,1,1,2-Tetrachloroethane	ug/l	ND		1
L301	423081	4/23/2008	1,1,1-Trichloroethane	ug/l	ND		1
L301	423081	4/23/2008	1,1,2,2-Tetrachloroethane	ug/l	ND		1
L301	423081	4/23/2008	1,1,2-Trichloroethane	ug/l	ND		1
L301	423081	4/23/2008	1,1-Dichloroethane	ug/l	ND		1
L301	423081	4/23/2008	1,1-Dichloroethene	ug/l	ND		1
L301	423081	4/23/2008	1,1-Dichloropropene	ug/l	ND		1
L301	423081	4/23/2008	1,2,3-Trichlorobenzene	ug/l	ND		1
L301	423081	4/23/2008	1,2,3-Trichloropropane	ug/l	ND		1
L301	423081	4/23/2008	1,2,4-Trichlorobenzene	ug/l	ND		1
L301	423081	4/23/2008	1,2,4-Trimethylbenzene	ug/l	ND		1
L301	423081	4/23/2008	1,2-Dibromo-3-chloropropane	ug/l	ND		0.05
L301	423081	4/23/2008	1,2-Dichlorobenzene	ug/l	ND		1
L301	423081	4/23/2008	1,2-Dichloroethane	ug/l	ND		1
L301	423081	4/23/2008	1,2-Dichloropropane	ug/l	ND		1
L301	423081	4/23/2008	1,3 Dichloropropane	ug/l	ND		1
L301	423081	4/23/2008	1,3,5-Trimethylbenzene	ug/l	ND		1
L301	423081	4/23/2008	1,3-Dichlorobenzene	ug/l	ND		1
L301	423081	4/23/2008	1,4-Dichlorobenzene	ug/l		2	1
L301	423081	4/23/2008	2,2-Dichloropropane	ug/l	ND		1
L301	423081	4/23/2008	2,4-D	ug/l	ND		1
L301	423081	4/23/2008	2,4-Dichlorophenol	ug/l	ND		10
L301	423081	4/23/2008	2,4-Dimethylphenol	ug/l	ND		10
L301	423081	4/23/2008	2,4-Dinitrophenol	ug/l	ND		50
L301	423081	4/23/2008	2,6-Dinitrotoluene	ug/l	ND		10
L301	423081	4/23/2008	2-Butanone (MEK)	ug/l		5	5
L301	423081	4/23/2008	2-Chloroethylvinyl ether	ug/l	ND		10
L301	423081	4/23/2008	2-Chloronaphthalene	ug/l	ND		10
L301	423081	4/23/2008	2-Chlorophenol	ug/l	ND		10
L301	423081	4/23/2008	2-Chlorotoluene	ug/l	ND		1
L301	423081	4/23/2008	2-Hexanone (MBK)	ug/l	ND		5
L301	423081	4/23/2008	4,4'-DDD	ug/l	ND		0.1
L301	423081	4/23/2008	4,4'-DDE	ug/l	ND		0.1
L301	423081	4/23/2008	4,4'-DDT	ug/l	ND		0.1
L301	423081	4/23/2008	4,6-Dinitro-2-methylphenol	ug/l	ND		50
L301	423081	4/23/2008	4-Bromophenyl-phenylether	ug/l	ND		10
L301	423081	4/23/2008	4-Chlorophenyl-phenylether	ug/l	ND		10
L301	423081	4/23/2008	4-Chlorotoluene	ug/l	ND		1
L301	423081	4/23/2008	4-Methyl-2-Pentanone(MIBK)	ug/l	ND		5
L301	423081	4/23/2008	4-Methylphenol(p-cresol)	ug/l	ND		10
L301	423081	4/23/2008	4-Nitrophenol	ug/l	ND		10
L301	423081	4/23/2008	Acenaphthene	ug/l	ND		10
L301	423081	4/23/2008	Acetone	ug/l		33	10
L301	423081	4/23/2008	Alachlor	ug/l	ND		4
L301	423081	4/23/2008	Aldicarb	ug/l	ND		4
L301	423081	4/23/2008	Aldrin	ug/l	ND		0.05
L301	423081	4/23/2008	Alkalinity, Bicarb Total	mg/l		2800	2
L301	423081	4/23/2008	alpha-BHC	ug/l	ND		0.05
L301	423081	4/23/2008	Aluminum - Total	ug/l		280	10
L301	44081	4/4/2008	Ammonia, Total	mg/l		100	1
L301	423081	4/23/2008	Ammonia, Total	mg/l		330	2
L301	423081	4/23/2008	Anthracene	ug/l	ND		10
L301	423081	4/23/2008	Antimony Total, GFAA	ug/l	ND		3
L301	44081	4/4/2008	Arsenic Total, GFAA	ug/l		8	1
L301	423081	4/23/2008	Arsenic Total, GFAA	ug/l		27	1
L301	423081	4/23/2008	Atrazine	ug/l	ND		2
L301	44081	4/4/2008	Barium - Total	ug/l		360	2
L301	423081	4/23/2008	Barium - Total	ug/l		970	2
L301	423081	4/23/2008	Benzene	ug/l		10	1
L301	423081	4/23/2008	Benzo(a)anthracene	ug/l	ND		10

L301	423081	4/23/2008	Benzo(a)pyrene	ug/l	ND		10
L301	423081	4/23/2008	Benzo(b)fluoranthene	ug/l	ND		10
L301	423081	4/23/2008	Benzo(g,h,i)perylene	ug/l	ND		10
L301	423081	4/23/2008	Benzo(k)fluoranthene	ug/l	ND		10
L301	423081	4/23/2008	Beryllium - Total	ug/l	ND		1
L301	423081	4/23/2008	beta-BHC	ug/l	ND		0.05
L301	423081	4/23/2008	Bis(2-chloroethoxy)methane	ug/l	ND		10
L301	423081	4/23/2008	Bis(2-chloroethyl)ether	ug/l	ND		10
L301	423081	4/23/2008	Bis(2-ethylhexyl)phthalate	ug/l	ND		10
L301	44081	4/4/2008	BOD 5	mg/l		58	4
L301	423081	4/23/2008	BOD 5	mg/l		33	4
L301	423081	4/23/2008	Bromobenzene	ug/l	ND		1
L301	423081	4/23/2008	Bromochloromethane	ug/l	ND		1
L301	423081	4/23/2008	Bromodichloromethane	ug/l	ND		1
L301	423081	4/23/2008	Bromoform	ug/l	ND		1
L301	423081	4/23/2008	Bromomethane	ug/l	ND		2
L301	423081	4/23/2008	Butyl benzyl phthalate	ug/l	ND		10
L301	44081	4/4/2008	Cadmium - Total	ug/l	ND		1
L301	423081	4/23/2008	Cadmium - Total	ug/l	ND		1
L301	423081	4/23/2008	Calcium - Total	mg/l		98	0.1
L301	423081	4/23/2008	Carbofuran	ug/l	ND		15
L301	423081	4/23/2008	Carbon Disulfide	ug/l	ND		1
L301	423081	4/23/2008	Carbon Tetrachloride	ug/l	ND		1
L301	423081	4/23/2008	Chlordane (Tech)	ug/l	ND		0.5
L301	423081	4/23/2008	Chloride, Total	mg/l		1800	62.5
L301	423081	4/23/2008	Chlorobenzene	ug/l		4	1
L301	423081	4/23/2008	Chloroethane	ug/l	ND		2
L301	423081	4/23/2008	Chloroform	ug/l	ND		1
L301	423081	4/23/2008	Chloromethane	ug/l	ND		2
L301	44081	4/4/2008	Chromium - Total	ug/l		35	4
L301	423081	4/23/2008	Chromium - Total	ug/l		49	4
L301	44081	4/4/2008	Chromium, Hexavalent	mg/l	ND		0.005
L301	423081	4/23/2008	Chrysene	ug/l	ND		10
L301	423081	4/23/2008	cis-1,2-Dichloroethene	ug/l	ND		1
L301	423081	4/23/2008	cis-1,3-Dichloropropene	ug/l	ND		1
L301	423081	4/23/2008	Cobalt - Total	ug/l		12	2
L301	44081	4/4/2008	COD	mg/l		360	6
L301	423081	4/23/2008	COD	mg/l		660	6
L301	44081	4/4/2008	Coliform, Fecal, A MF	ct/100	ND		10
L301	423081	4/23/2008	Coliform, Fecal, A MF	ct/100		50	10
L301	44081	4/4/2008	Copper - Total	ug/l		9.3	3
L301	423081	4/23/2008	Copper - Total	ug/l		24	3
L301	44081	4/4/2008	Cyanide - Total	mg/l	ND		0.005
L301	423081	4/23/2008	Cyanide - Total	mg/l	ND		0.005
L301	423081	4/23/2008	delta-BHC	ug/l	ND		0.05
L301	423081	4/23/2008	Dibenzo(a,h)anthracene	ug/l	ND		10
L301	423081	4/23/2008	Dibromochloromethane	ug/l	ND		1
L301	423081	4/23/2008	Dibromomethane	ug/l	ND		1
L301	423081	4/23/2008	Dichlorodifluoromethane	ug/l	ND		2
L301	423081	4/23/2008	Dieldrin	ug/l	ND		0.1
L301	423081	4/23/2008	Diethyl phthalate	ug/l	ND		10
L301	423081	4/23/2008	Dimethyl phthalate	ug/l	ND		10
L301	423081	4/23/2008	Di-n-butyl phthalate	ug/l	ND		10
L301	423081	4/23/2008	di-n-octyl phthalate	ug/l	ND		10
L301	423081	4/23/2008	Dioxin Screen	ug/l	ND		10
L301	423081	4/23/2008	Endosulfan I	ug/l	ND		0.05
L301	423081	4/23/2008	Endosulfan II	ug/l	ND		0.1
L301	423081	4/23/2008	Endosulfan Sulfate	ug/l	ND		0.1
L301	423081	4/23/2008	Endrin	ug/l	ND		0.1
L301	423081	4/23/2008	Endrin Aldehyde	ug/l	ND		0.1

L301	423081	4/23/2008	Ethyl Acetate	ug/l	ND		10
L301	423081	4/23/2008	Ethylbenzene	ug/l	ND		1
L301	423081	4/23/2008	Ethylene dibromide	ug/l	ND		0.05
L301	423081	4/23/2008	Fluoranthene	ug/l	ND		10
L301	423081	4/23/2008	Fluorene	ug/l	ND		10
L301	44081	4/4/2008	Fluoride, Total	mg/l	ND		0.25
L301	423081	4/23/2008	Fluoride, Total	mg/l		0.48	0.25
L301	423081	4/23/2008	gamma-BHC (Lindane)	ug/l	ND		0.05
L301	423081	4/23/2008	Heptachlor	ug/l	ND		0.05
L301	423081	4/23/2008	Heptachlor epoxide	ug/l	ND		0.05
L301	423081	4/23/2008	Hexachlorobenzene	ug/l	ND		10
L301	423081	4/23/2008	Hexachlorobutadiene	ug/l	ND		10
L301	423081	4/23/2008	Hexachlorocyclopentadiene	ug/l	ND		10
L301	423081	4/23/2008	Hexachloroethane	ug/l	ND		10
L301	423081	4/23/2008	Indeno(1,2,3-cd)pyrene	ug/l	ND		10
L301	423081	4/23/2008	Iodomethane	ug/l	ND		1
L301	44081	4/4/2008	Iron - Total	ug/l		3600	10
L301	423081	4/23/2008	Iron - Total	ug/l		5500	10
L301	423081	4/23/2008	Isopropylbenzene	ug/l	ND		1
L301	44081	4/4/2008	Lead Total, GFAA	ug/l		2.1	1
L301	423081	4/23/2008	Lead Total, GFAA	ug/l		4.6	1
L301	423081	4/23/2008	m/p-Xylene	ug/l		1	1
L301	423081	4/23/2008	Magnesium - Total	mg/l		200	0.1
L301	44081	4/4/2008	Manganese - Total	ug/l		540	1
L301	423081	4/23/2008	Manganese - Total	ug/l		130	1
L301	44081	4/4/2008	Mercury - Total	ug/l	ND		0.2
L301	423081	4/23/2008	Mercury - Total	ug/l	ND		0.2
L301	423081	4/23/2008	Methoxychlor	ug/l	ND		0.5
L301	423081	4/23/2008	Methylene Chloride	ug/l	ND		5
L301	423081	4/23/2008	Naphthalene	ug/l	ND		10
L301	423081	4/23/2008	N-butanol	ug/l	ND		1000
L301	423081	4/23/2008	n-Butylbenzene	ug/l	ND		1
L301	44081	4/4/2008	Nickel - Total	ug/l		90	5
L301	423081	4/23/2008	Nickel - Total	ug/l		250	5
L301	423081	4/23/2008	Nitrate/Nitrite as N, Total	mg/l		0.45	0.3
L301	423081	4/23/2008	Nitrobenzene	ug/l	ND		10
L301	423081	4/23/2008	n-nitrosodimethylamine	ug/l	ND		10
L301	423081	4/23/2008	N-nitrosodi-n-propylamine	ug/l	ND		10
L301	423081	4/23/2008	N-nitrosodiphenylamine	ug/l	ND		10
L301	423081	4/23/2008	n-Propylbenzene	ug/l	ND		1
L301	44081	4/4/2008	Oil and grease	mg/l	ND		6
L301	423081	4/23/2008	Oil and grease	mg/l	ND		5
L301	423081	4/23/2008	o-Xylene	ug/l	ND		1
L301	423081	4/23/2008	Parathion	ug/l	ND		2
L301	423081	4/23/2008	Pentachlorophenol	ug/l	ND		0.5
L301	44081	4/4/2008	pH, Aqueous	units		6.9	0
L301	423081	4/23/2008	pH, Aqueous	units		7.02	0
L301	423081	4/23/2008	Phenanthrene	ug/l	ND		10
L301	44081	4/4/2008	Phenols, Total low range	ug/l		150	5
L301	423081	4/23/2008	Phenols, Total low range	ug/l		44	5
L301	44081	4/4/2008	Phosphorous, Total	ug/l		990	0.05
L301	423081	4/23/2008	Phosphorous, Total	ug/l		2400	0.05
L301	423081	4/23/2008	p-Isopropyltoluene	ug/l	ND		1
L301	423081	4/23/2008	Potassium - Total	mg/l		310	0.1
L301	423081	4/23/2008	Pyrene	ug/l	ND		10
L301	423081	4/23/2008	sec-Butylbenzene	ug/l	ND		1
L301	423081	4/23/2008	Selenium Total, GFAA	ug/l		28	1
L301	44081	4/4/2008	Silver, Total	ug/l	ND		5
L301	423081	4/23/2008	Silver, Total	ug/l	ND		5
L301	423081	4/23/2008	Silvex	ug/l	ND		0.5

L301	423081	4/23/2008	Sodium, Total	mg/l		1400	1
L301	44081	4/4/2008	Specific Conductance, Field	umhos/cm		522	0
L301	423081	4/23/2008	Specific Conductance, Field	umhos/cm		941	0
L301	423081	4/23/2008	Styrene	ug/l	ND		1
L301	423081	4/23/2008	Sulfate, Total	mg/l		220	12.5
L301	423081	4/23/2008	tert-Butylbenzene	ug/l	ND		1
L301	423081	4/23/2008	Tetrachloroethene	ug/l	ND		1
L301	423081	4/23/2008	Tetrahydrofuran	ug/l		94	20
L301	423081	4/23/2008	Thallium Total, GFAA	ug/l	ND		1
L301	423081	4/23/2008	Tin Total, GFAA	ug/l	ND		60
L301	423081	4/23/2008	TOC	mg/l		160	0.5
L301	423081	4/23/2008	Toluene	ug/l	ND		1
L301	44081	4/4/2008	Total Dissolved Solids	mg/l		3400	51
L301	423081	4/23/2008	Total Dissolved Solids	mg/l		5500	51
L301	44081	4/4/2008	Total Suspended Solids	mg/l		48	4
L301	423081	4/23/2008	Total Suspended Solids	mg/l		33	6.666667
L301	423081	4/23/2008	Toxaphene	ug/l	ND		0.5
L301	423081	4/23/2008	trans-1,2-Dichloroethene	ug/l	ND		1
L301	423081	4/23/2008	trans-1,3-Dichloropropene	ug/l	ND		1
L301	423081	4/23/2008	trans-1,4-Dichloro-2-Butene	ug/l	ND		1
L301	423081	4/23/2008	Trichloroethene	ug/l	ND		1
L301	423081	4/23/2008	Trichlorofluoromethane	ug/l	ND		1
L301	423081	4/23/2008	Vinyl Acetate	ug/l	ND		5
L301	423081	4/23/2008	Vinyl Chloride	ug/l	ND		2
L301	423081	4/23/2008	Xylenes - Total	ug/l	ND		3
L301	44081	4/4/2008	Zinc - Total	ug/l		180	6
L301	423081	4/23/2008	Zinc - Total	ug/l		36	6
L302E	423082	4/23/2008	1,1,1,2-Tetrachloroethane	ug/l	ND		1
L302E	423082	4/23/2008	1,1,1-Trichloroethane	ug/l	ND		1
L302E	423082	4/23/2008	1,1,2,2-Tetrachloroethane	ug/l	ND		1
L302E	423082	4/23/2008	1,1,2-Trichloroethane	ug/l	ND		1
L302E	423082	4/23/2008	1,1-Dichloroethane	ug/l	ND		1
L302E	423082	4/23/2008	1,1-Dichloroethene	ug/l	ND		1
L302E	423082	4/23/2008	1,1-Dichloropropene	ug/l	ND		1
L302E	423082	4/23/2008	1,2,3-Trichlorobenzene	ug/l	ND		1
L302E	423082	4/23/2008	1,2,3-Trichloropropane	ug/l	ND		1
L302E	423082	4/23/2008	1,2,4-Trichlorobenzene	ug/l	ND		1
L302E	423082	4/23/2008	1,2,4-Trimethylbenzene	ug/l		7	1
L302E	423082	4/23/2008	1,2-Dibromo-3-chloropropane	ug/l	ND		0.05
L302E	423082	4/23/2008	1,2-Dichlorobenzene	ug/l	ND		1
L302E	423082	4/23/2008	1,2-Dichloroethane	ug/l	ND		1
L302E	423082	4/23/2008	1,2-Dichloropropane	ug/l	ND		1
L302E	423082	4/23/2008	1,3 Dichloropropane	ug/l	ND		1
L302E	423082	4/23/2008	1,3,5-Trimethylbenzene	ug/l	ND		1
L302E	423082	4/23/2008	1,3-Dichlorobenzene	ug/l	ND		1
L302E	423082	4/23/2008	1,4-Dichlorobenzene	ug/l		2	1
L302E	423082	4/23/2008	2,2-Dichloropropane	ug/l	ND		1
L302E	423082	4/23/2008	2,4-D	ug/l	ND		1
L302E	423082	4/23/2008	2,4-Dichlorophenol	ug/l	ND		10
L302E	423082	4/23/2008	2,4-Dimethylphenol	ug/l	ND		10
L302E	423082	4/23/2008	2,4-Dinitrophenol	ug/l	ND		50
L302E	423082	4/23/2008	2,6-Dinitrotoluene	ug/l	ND		10
L302E	423082	4/23/2008	2-Butanone (MEK)	ug/l	ND		5
L302E	423082	4/23/2008	2-Chloroethylvinyl ether	ug/l	ND		10
L302E	423082	4/23/2008	2-Chloronaphthalene	ug/l	ND		10
L302E	423082	4/23/2008	2-Chlorophenol	ug/l	ND		10
L302E	423082	4/23/2008	2-Chlorotoluene	ug/l	ND		1
L302E	423082	4/23/2008	2-Hexanone (MBK)	ug/l	ND		5
L302E	423082	4/23/2008	4,4'-DDD	ug/l	ND		0.1
L302E	423082	4/23/2008	4,4'-DDE	ug/l	ND		0.1

L302E	423082	4/23/2008	4,4'-DDT	ug/l	ND		0.1
L302E	423082	4/23/2008	4,6-Dinitro-2-methylphenol	ug/l	ND		50
L302E	423082	4/23/2008	4-Bromophenyl-phenylether	ug/l	ND		10
L302E	423082	4/23/2008	4-Chlorophenyl-phenylether	ug/l	ND		10
L302E	423082	4/23/2008	4-Chlorotoluene	ug/l	ND		1
L302E	423082	4/23/2008	4-Methyl-2-Pentanone(MIBK)	ug/l	ND		5
L302E	423082	4/23/2008	4-Methylphenol(p-cresol)	ug/l	ND		10
L302E	423082	4/23/2008	4-Nitrophenol	ug/l	ND		10
L302E	423082	4/23/2008	Acenaphthene	ug/l	ND		10
L302E	423082	4/23/2008	Acetone	ug/l	ND		10
L302E	423082	4/23/2008	Alachlor	ug/l	ND		4
L302E	423082	4/23/2008	Aldicarb	ug/l	ND		4
L302E	423082	4/23/2008	Aldrin	ug/l	ND		0.05
L302E	423082	4/23/2008	Alkalinity, Bicarb Total	mg/l		2900	2
L302E	423082	4/23/2008	alpha-BHC	ug/l	ND		0.05
L302E	423082	4/23/2008	Aluminum - Total	ug/l		570	10
L302E	423082	4/23/2008	Ammonia, Total	mg/l		510	2
L302E	423082	4/23/2008	Anthracene	ug/l	ND		10
L302E	423082	4/23/2008	Antimony Total, GFAA	ug/l	ND		3
L302E	423082	4/23/2008	Arsenic Total, GFAA	ug/l		43	1
L302E	423082	4/23/2008	Atrazine	ug/l	ND		2
L302E	423082	4/23/2008	Barium - Total	ug/l		640	2
L302E	423082	4/23/2008	Benzene	ug/l		10	1
L302E	423082	4/23/2008	Benzo(a)anthracene	ug/l	ND		10
L302E	423082	4/23/2008	Benzo(a)pyrene	ug/l	ND		10
L302E	423082	4/23/2008	Benzo(b)fluoranthene	ug/l	ND		10
L302E	423082	4/23/2008	Benzo(g,h,i)perylene	ug/l	ND		10
L302E	423082	4/23/2008	Benzo(k)fluoranthene	ug/l	ND		10
L302E	423082	4/23/2008	Beryllium - Total	ug/l	ND		1
L302E	423082	4/23/2008	beta-BHC	ug/l	ND		0.05
L302E	423082	4/23/2008	Bis(2-chloroethoxy)methane	ug/l	ND		10
L302E	423082	4/23/2008	Bis(2-chloroethyl)ether	ug/l	ND		10
L302E	423082	4/23/2008	Bis(2-ethylhexyl)phthalate	ug/l	ND		10
L302E	423082	4/23/2008	Bis(chloromethyl)ether	ug/l	ND		10000
L302E	423082	4/23/2008	BOD 5	mg/l		37	4
L302E	423082	4/23/2008	Bromobenzene	ug/l	ND		1
L302E	423082	4/23/2008	Bromochloromethane	ug/l	ND		1
L302E	423082	4/23/2008	Bromodichloromethane	ug/l	ND		1
L302E	423082	4/23/2008	Bromoform	ug/l	ND		1
L302E	423082	4/23/2008	Bromomethane	ug/l	ND		2
L302E	423082	4/23/2008	Butyl benzyl phthalate	ug/l	ND		10
L302E	423082	4/23/2008	Cadmium - Total	ug/l	ND		1
L302E	423082	4/23/2008	Calcium - Total	mg/l		78	0.1
L302E	423082	4/23/2008	Carbofuran	ug/l	ND		15
L302E	423082	4/23/2008	Carbon Disulfide	ug/l	ND		1
L302E	423082	4/23/2008	Carbon Tetrachloride	ug/l	ND		1
L302E	423082	4/23/2008	Chlordane (Tech)	ug/l	ND		0.5
L302E	423082	4/23/2008	Chloride, Total	mg/l		1800	62.5
L302E	423082	4/23/2008	Chlorobenzene	ug/l		3	1
L302E	423082	4/23/2008	Chloroethane	ug/l	ND		2
L302E	423082	4/23/2008	Chloroform	ug/l	ND		1
L302E	423082	4/23/2008	Chloromethane	ug/l	ND		2
L302E	423082	4/23/2008	Chromium - Total	ug/l		70	4
L302E	423082	4/23/2008	Chrysene	ug/l	ND		10
L302E	423082	4/23/2008	cis-1,2-Dichloroethene	ug/l	ND		1
L302E	423082	4/23/2008	cis-1,3-Dichloropropene	ug/l	ND		1
L302E	423082	4/23/2008	Cobalt - Total	ug/l		20	2
L302E	423082	4/23/2008	COD	mg/l		910	6
L302E	423082	4/23/2008	Coliform, Fecal, A MF	ct/100		2700	10
L302E	423082	4/23/2008	Copper - Total	ug/l		49	3

L302E	423082	4/23/2008	Cyanide - Total	mg/l	ND		0.005
L302E	423082	4/23/2008	delta-BHC	ug/l	ND		0.05
L302E	423082	4/23/2008	Dibenzo(a,h)anthracene	ug/l	ND		10
L302E	423082	4/23/2008	Dibromochloromethane	ug/l	ND		1
L302E	423082	4/23/2008	Dibromomethane	ug/l	ND		1
L302E	423082	4/23/2008	Dichlorodifluoromethane	ug/l	ND		2
L302E	423082	4/23/2008	Dieldrin	ug/l	ND		0.1
L302E	423082	4/23/2008	Diethyl phthalate	ug/l	ND		10
L302E	423082	4/23/2008	Dimethyl phthalate	ug/l	ND		10
L302E	423082	4/23/2008	Di-n-butyl phthalate	ug/l	ND		10
L302E	423082	4/23/2008	di-n-octyl phthalate	ug/l	ND		10
L302E	423082	4/23/2008	Dioxin Screen	ug/l	ND		10
L302E	423082	4/23/2008	Endosulfan I	ug/l	ND		0.05
L302E	423082	4/23/2008	Endosulfan II	ug/l	ND		0.1
L302E	423082	4/23/2008	Endosulfan Sulfate	ug/l	ND		0.1
L302E	423082	4/23/2008	Endrin	ug/l	ND		0.1
L302E	423082	4/23/2008	Endrin Aldehyde	ug/l	ND		0.1
L302E	423082	4/23/2008	Ethyl Acetate	ug/l	ND		10
L302E	423082	4/23/2008	Ethylbenzene	ug/l		13	1
L302E	423082	4/23/2008	Ethylene dibromide	ug/l	ND		0.05
L302E	423082	4/23/2008	Fluoranthene	ug/l	ND		10
L302E	423082	4/23/2008	Fluorene	ug/l	ND		10
L302E	423082	4/23/2008	Fluoride, Total	mg/l		4.2	0.25
L302E	423082	4/23/2008	gamma-BHC (Lindane)	ug/l	ND		0.05
L302E	423082	4/23/2008	Heptachlor	ug/l	ND		0.05
L302E	423082	4/23/2008	Heptachlor epoxide	ug/l	ND		0.05
L302E	423082	4/23/2008	Hexachlorobenzene	ug/l	ND		10
L302E	423082	4/23/2008	Hexachlorobutadiene	ug/l	ND		10
L302E	423082	4/23/2008	Hexachlorocyclopentadiene	ug/l	ND		10
L302E	423082	4/23/2008	Hexachloroethane	ug/l	ND		10
L302E	423082	4/23/2008	Indeno(1,2,3-cd)pyrene	ug/l	ND		10
L302E	423082	4/23/2008	Iodomethane	ug/l	ND		1
L302E	423082	4/23/2008	Iron - Total	ug/l		4800	10
L302E	423082	4/23/2008	Isopropylbenzene	ug/l		5	1
L302E	423082	4/23/2008	Lead Total, GFAA	ug/l		1.2	1
L302E	423082	4/23/2008	m/p-Xylene	ug/l		19	1
L302E	423082	4/23/2008	Magnesium - Total	mg/l		150	0.1
L302E	423082	4/23/2008	Manganese - Total	ug/l		110	1
L302E	423082	4/23/2008	Mercury - Total	ug/l	ND		0.2
L302E	423082	4/23/2008	Methoxychlor	ug/l	ND		0.5
L302E	423082	4/23/2008	Methylene Chloride	ug/l	ND		5
L302E	423082	4/23/2008	Naphthalene	ug/l	ND		10
L302E	423082	4/23/2008	N-butanol	ug/l	ND		1000
L302E	423082	4/23/2008	n-Butylbenzene	ug/l	ND		1
L302E	423082	4/23/2008	Nickel - Total	ug/l		240	5
L302E	423082	4/23/2008	Nitrate/Nitrite as N, Total	mg/l	ND		0.2
L302E	423082	4/23/2008	Nitrobenzene	ug/l	ND		10
L302E	423082	4/23/2008	n-nitrosodimethylamine	ug/l	ND		10
L302E	423082	4/23/2008	N-nitrosodi-n-propylamine	ug/l	ND		10
L302E	423082	4/23/2008	N-nitrosodiphenylamine	ug/l	ND		10
L302E	423082	4/23/2008	n-Propylbenzene	ug/l	ND		1
L302E	423082	4/23/2008	Oil and grease	mg/l	ND		5
L302E	423082	4/23/2008	o-Xylene	ug/l		8	1
L302E	423082	4/23/2008	Parathion	ug/l	ND		2
L302E	423082	4/23/2008	Pentachlorophenol	ug/l	ND		0.5
L302E	44088	4/4/2008	pH, Aqueous	units		0	0
L302E	423082	4/23/2008	pH, Aqueous	units		7.01	0
L302E	423082	4/23/2008	Phenanthrene	ug/l	ND		10
L302E	423082	4/23/2008	Phenols, Total low range	ug/l		68	5
L302E	423082	4/23/2008	Phosphorous, Total	ug/l		4000	0.05

L302E	423082	4/23/2008	p-Isopropyltoluene	ug/l	ND		1
L302E	423082	4/23/2008	Potassium - Total	mg/l		330	0.1
L302E	423082	4/23/2008	Pyrene	ug/l	ND		10
L302E	423082	4/23/2008	sec-Butylbenzene	ug/l	ND		1
L302E	423082	4/23/2008	Selenium Total, GFAA	ug/l		30	1
L302E	423082	4/23/2008	Silver, Total	ug/l	ND		5
L302E	423082	4/23/2008	Silvex	ug/l	ND		0.5
L302E	423082	4/23/2008	Sodium, Total	mg/l		1600	1
L302E	44088	4/4/2008	Specific Conductance, Field	umhos/cm		0	0
L302E	423082	4/23/2008	Specific Conductance, Field	umhos/cm		1065	0
L302E	423082	4/23/2008	Styrene	ug/l	ND		1
L302E	423082	4/23/2008	Sulfate, Total	mg/l		190	12.5
L302E	423082	4/23/2008	tert-Butylbenzene	ug/l	ND		1
L302E	423082	4/23/2008	Tetrachloroethene	ug/l	ND		1
L302E	423082	4/23/2008	Tetrahydrofuran	ug/l		240	20
L302E	423082	4/23/2008	Thallium Total, GFAA	ug/l	ND		1
L302E	423082	4/23/2008	Tin Total, GFAA	ug/l	ND		60
L302E	423082	4/23/2008	TOC	mg/l		430	0.5
L302E	423082	4/23/2008	Toluene	ug/l		5	1
L302E	423082	4/23/2008	Total Dissolved Solids	mg/l		5600	51
L302E	423082	4/23/2008	Total Suspended Solids	mg/l		19	4
L302E	423082	4/23/2008	Toxaphene	ug/l	ND		0.5
L302E	423082	4/23/2008	trans-1,2-Dichloroethene	ug/l	ND		1
L302E	423082	4/23/2008	trans-1,3-Dichloropropene	ug/l	ND		1
L302E	423082	4/23/2008	trans-1,4-Dichloro-2-Butene	ug/l	ND		1
L302E	423082	4/23/2008	Trichloroethene	ug/l	ND		1
L302E	423082	4/23/2008	Trichlorofluoromethane	ug/l	ND		1
L302E	423082	4/23/2008	Vinyl Acetate	ug/l	ND		5
L302E	423082	4/23/2008	Vinyl Chloride	ug/l	ND		2
L302E	423082	4/23/2008	Xylenes - Total	ug/l		27	3
L302E	423082	4/23/2008	Zinc - Total	ug/l		42	6
L302W	44082	4/4/2008	Ammonia, Total	mg/l		980	10
L302W	44082	4/4/2008	Arsenic Total, GFAA	ug/l		180	1
L302W	44082	4/4/2008	Barium - Total	ug/l		2300	2
L302W	44082	4/4/2008	BOD 5	mg/l		540	4
L302W	44082	4/4/2008	Cadmium - Total	ug/l		1.6	1
L302W	44082	4/4/2008	Chromium - Total	ug/l		590	4
L302W	44082	4/4/2008	Chromium, Hexavalent	mg/l	ND		0.05
L302W	44082	4/4/2008	COD	mg/l		4800	6
L302W	44082	4/4/2008	Coliform, Fecal, A MF	ct/100		300	10
L302W	44082	4/4/2008	Copper - Total	ug/l		120	3
L302W	44082	4/4/2008	Cyanide - Total	mg/l		0.0094	0.005
L302W	44082	4/4/2008	Fluoride, Total	mg/l		0.34	0.25
L302W	44082	4/4/2008	Iron - Total	ug/l		95000	10
L302W	44082	4/4/2008	Lead Total, GFAA	ug/l		28	1
L302W	44082	4/4/2008	Manganese - Total	ug/l		310	1
L302W	44082	4/4/2008	Mercury - Total	ug/l		0.32	0.2
L302W	44082	4/4/2008	Nickel - Total	ug/l		360	5
L302W	44082	4/4/2008	Oil and grease	mg/l		190	42
L302W	44082	4/4/2008	pH, Aqueous	units		7.27	0
L302W	44082	4/4/2008	Phenols, Total low range	ug/l		440	5
L302W	44082	4/4/2008	Phosphorous, Total	ug/l		18000	0.05
L302W	44082	4/4/2008	Silver, Total	ug/l	ND		5
L302W	44082	4/4/2008	Specific Conductance, Field	umhos/cm		1585	0
L302W	44082	4/4/2008	Total Dissolved Solids	mg/l		7800	51
L302W	44082	4/4/2008	Total Suspended Solids	mg/l		1500	33.33333
L302W	44082	4/4/2008	Zinc - Total	ug/l		630	6
L304	423083	4/23/2008	1,1,1,2-Tetrachloroethane	ug/l	ND		1
L304	423083	4/23/2008	1,1,1-Trichloroethane	ug/l	ND		1
L304	423083	4/23/2008	1,1,2,2-Tetrachloroethane	ug/l	ND		1

L304	423083	4/23/2008	1,1,2-Trichloroethane	ug/l	ND		1
L304	423083	4/23/2008	1,1-Dichloroethane	ug/l	ND		1
L304	423083	4/23/2008	1,1-Dichloroethene	ug/l	ND		1
L304	423083	4/23/2008	1,1-Dichloropropene	ug/l	ND		1
L304	423083	4/23/2008	1,2,3-Trichlorobenzene	ug/l	ND		1
L304	423083	4/23/2008	1,2,3-Trichloropropane	ug/l	ND		1
L304	423083	4/23/2008	1,2,4-Trichlorobenzene	ug/l	ND		1
L304	423083	4/23/2008	1,2,4-Trimethylbenzene	ug/l		4	1
L304	423083	4/23/2008	1,2-Dibromo-3-chloropropane	ug/l	ND		0.05
L304	423083	4/23/2008	1,2-Dichlorobenzene	ug/l	ND		1
L304	423083	4/23/2008	1,2-Dichloroethane	ug/l	ND		1
L304	423083	4/23/2008	1,2-Dichloropropane	ug/l	ND		1
L304	423083	4/23/2008	1,3 Dichloropropane	ug/l	ND		1
L304	423083	4/23/2008	1,3,5-Trimethylbenzene	ug/l	ND		1
L304	423083	4/23/2008	1,3-Dichlorobenzene	ug/l	ND		1
L304	423083	4/23/2008	1,4-Dichlorobenzene	ug/l	ND		1
L304	423083	4/23/2008	2,2-Dichloropropane	ug/l	ND		1
L304	423083	4/23/2008	2,4-D	ug/l	ND		1
L304	423083	4/23/2008	2,4-Dichlorophenol	ug/l	ND		10
L304	423083	4/23/2008	2,4-Dimethylphenol	ug/l	ND		10
L304	423083	4/23/2008	2,4-Dinitrophenol	ug/l	ND		50
L304	423083	4/23/2008	2,6-Dinitrotoluene	ug/l	ND		10
L304	423083	4/23/2008	2-Butanone (MEK)	ug/l		88	5
L304	423083	4/23/2008	2-Chloroethylvinyl ether	ug/l	ND		10
L304	423083	4/23/2008	2-Chloronaphthalene	ug/l	ND		10
L304	423083	4/23/2008	2-Chlorophenol	ug/l	ND		10
L304	423083	4/23/2008	2-Chlorotoluene	ug/l	ND		1
L304	423083	4/23/2008	2-Hexanone (MBK)	ug/l	ND		5
L304	423083	4/23/2008	4,4'-DDD	ug/l	ND		0.1
L304	423083	4/23/2008	4,4'-DDE	ug/l	ND		0.1
L304	423083	4/23/2008	4,4'-DDT	ug/l	ND		0.1
L304	423083	4/23/2008	4,6-Dinitro-2-methylphenol	ug/l	ND		50
L304	423083	4/23/2008	4-Bromophenyl-phenylether	ug/l	ND		10
L304	423083	4/23/2008	4-Chlorophenyl-phenylether	ug/l	ND		10
L304	423083	4/23/2008	4-Chlorotoluene	ug/l	ND		1
L304	423083	4/23/2008	4-Methyl-2-Pentanone(MIBK)	ug/l		78	5
L304	423083	4/23/2008	4-Methylphenol(p-cresol)	ug/l	ND		10
L304	423083	4/23/2008	4-Nitrophenol	ug/l	ND		10
L304	423083	4/23/2008	Acenaphthene	ug/l	ND		10
L304	423083	4/23/2008	Acetone	ug/l		330	100
L304	423083	4/23/2008	Alachlor	ug/l	ND		4
L304	423083	4/23/2008	Aldicarb	ug/l	ND		4
L304	423083	4/23/2008	Aldrin	ug/l	ND		0.05
L304	423083	4/23/2008	Alkalinity, Bicarb Total	mg/l		2800	2
L304	423083	4/23/2008	alpha-BHC	ug/l	ND		0.05
L304	423083	4/23/2008	Aluminum - Total	ug/l		62	10
L304	44083	4/4/2008	Ammonia, Total	mg/l		440	5
L304	423083	4/23/2008	Ammonia, Total	mg/l		370	2
L304	423083	4/23/2008	Anthracene	ug/l	ND		10
L304	423083	4/23/2008	Antimony Total, GFAA	ug/l	ND		3
L304	44083	4/4/2008	Arsenic Total, GFAA	ug/l		38	1
L304	423083	4/23/2008	Arsenic Total, GFAA	ug/l		38	1
L304	423083	4/23/2008	Atrazine	ug/l	ND		2
L304	44083	4/4/2008	Barium - Total	ug/l		930	2
L304	423083	4/23/2008	Barium - Total	ug/l		860	2
L304	423083	4/23/2008	Benzene	ug/l		6	1
L304	423083	4/23/2008	Benzo(a)anthracene	ug/l	ND		10
L304	423083	4/23/2008	Benzo(a)pyrene	ug/l	ND		10
L304	423083	4/23/2008	Benzo(b)fluoranthene	ug/l	ND		10
L304	423083	4/23/2008	Benzo(g,h,i)perylene	ug/l	ND		10

L304	423083	4/23/2008	Benzo(k)fluoranthene	ug/l	ND		10
L304	423083	4/23/2008	Beryllium - Total	ug/l	ND		1
L304	423083	4/23/2008	beta-BHC	ug/l	ND		0.05
L304	423083	4/23/2008	Bis(2-chloroethoxy)methane	ug/l	ND		10
L304	423083	4/23/2008	Bis(2-chloroethyl)ether	ug/l	ND		10
L304	423083	4/23/2008	Bis(2-ethylhexyl)phthalate	ug/l	ND		10
L304	423083	4/23/2008	Bis(chloromethyl)ether	ug/l	ND		10000
L304	44083	4/4/2008	BOD 5	mg/l		85	4
L304	423083	4/23/2008	BOD 5	mg/l		53	4
L304	423083	4/23/2008	Bromobenzene	ug/l	ND		1
L304	423083	4/23/2008	Bromochloromethane	ug/l	ND		1
L304	423083	4/23/2008	Bromodichloromethane	ug/l	ND		1
L304	423083	4/23/2008	Bromoform	ug/l	ND		1
L304	423083	4/23/2008	Bromomethane	ug/l	ND		2
L304	423083	4/23/2008	Butyl benzyl phthalate	ug/l	ND		10
L304	44083	4/4/2008	Cadmium - Total	ug/l	ND		1
L304	423083	4/23/2008	Cadmium - Total	ug/l	ND		1
L304	423083	4/23/2008	Calcium - Total	mg/l		200	0.1
L304	423083	4/23/2008	Carbofuran	ug/l	ND		15
L304	423083	4/23/2008	Carbon Disulfide	ug/l	ND		1
L304	423083	4/23/2008	Carbon Tetrachloride	ug/l	ND		1
L304	423083	4/23/2008	Chlordane (Tech)	ug/l	ND		0.5
L304	423083	4/23/2008	Chloride, Total	mg/l		1900	62.5
L304	423083	4/23/2008	Chlorobenzene	ug/l	ND		1
L304	423083	4/23/2008	Chloroethane	ug/l	ND		2
L304	423083	4/23/2008	Chloroform	ug/l	ND		1
L304	423083	4/23/2008	Chloromethane	ug/l	ND		2
L304	44083	4/4/2008	Chromium - Total	ug/l		85	4
L304	423083	4/23/2008	Chromium - Total	ug/l		60	4
L304	44083	4/4/2008	Chromium, Hexavalent	mg/l	ND		0.005
L304	423083	4/23/2008	Chrysene	ug/l	ND		10
L304	423083	4/23/2008	cis-1,2-Dichloroethene	ug/l		2	1
L304	423083	4/23/2008	cis-1,3-Dichloropropene	ug/l	ND		1
L304	423083	4/23/2008	Cobalt - Total	ug/l		8.7	2
L304	44083	4/4/2008	COD	mg/l		1700	6
L304	423083	4/23/2008	COD	mg/l		890	6
L304	44083	4/4/2008	Coliform, Fecal, A MF	ct/100		160	10
L304	423083	4/23/2008	Coliform, Fecal, A MF	ct/100		10	10
L304	44083	4/4/2008	Copper - Total	ug/l		26	3
L304	423083	4/23/2008	Copper - Total	ug/l		20	3
L304	44083	4/4/2008	Cyanide - Total	mg/l	ND		0.005
L304	423083	4/23/2008	Cyanide - Total	mg/l	ND		0.005
L304	423083	4/23/2008	delta-BHC	ug/l	ND		0.05
L304	423083	4/23/2008	Dibenzo(a,h)anthracene	ug/l	ND		10
L304	423083	4/23/2008	Dibromochloromethane	ug/l	ND		1
L304	423083	4/23/2008	Dibromomethane	ug/l	ND		1
L304	423083	4/23/2008	Dichlorodifluoromethane	ug/l	ND		2
L304	423083	4/23/2008	Dieldrin	ug/l	ND		0.1
L304	423083	4/23/2008	Diethyl phthalate	ug/l	ND		10
L304	423083	4/23/2008	Dimethyl phthalate	ug/l	ND		10
L304	423083	4/23/2008	Di-n-butyl phthalate	ug/l	ND		10
L304	423083	4/23/2008	di-n-octyl phthalate	ug/l	ND		10
L304	423083	4/23/2008	Dioxin Screen	ug/l	ND		10
L304	423083	4/23/2008	Endosulfan I	ug/l	ND		0.05
L304	423083	4/23/2008	Endosulfan II	ug/l	ND		0.1
L304	423083	4/23/2008	Endosulfan Sulfate	ug/l	ND		0.1
L304	423083	4/23/2008	Endrin	ug/l	ND		0.1
L304	423083	4/23/2008	Endrin Aldehyde	ug/l	ND		0.1
L304	423083	4/23/2008	Ethyl Acetate	ug/l		120	10
L304	423083	4/23/2008	Ethylbenzene	ug/l		9	1

L304	423083	4/23/2008	Ethylene dibromide	ug/l	ND		0.05
L304	423083	4/23/2008	Fluoranthene	ug/l	ND		10
L304	423083	4/23/2008	Fluorene	ug/l	ND		10
L304	44083	4/4/2008	Fluoride, Total	mg/l		0.46	0.25
L304	423083	4/23/2008	Fluoride, Total	mg/l		0.96	0.25
L304	423083	4/23/2008	gamma-BHC (Lindane)	ug/l	ND		0.05
L304	423083	4/23/2008	Heptachlor	ug/l	ND		0.05
L304	423083	4/23/2008	Heptachlor epoxide	ug/l	ND		0.05
L304	423083	4/23/2008	Hexachlorobenzene	ug/l	ND		10
L304	423083	4/23/2008	Hexachlorobutadiene	ug/l	ND		10
L304	423083	4/23/2008	Hexachlorocyclopentadiene	ug/l	ND		10
L304	423083	4/23/2008	Hexachloroethane	ug/l	ND		10
L304	423083	4/23/2008	Indeno(1,2,3-cd)pyrene	ug/l	ND		10
L304	423083	4/23/2008	Iodomethane	ug/l	ND		1
L304	44083	4/4/2008	Iron - Total	ug/l		5000	10
L304	423083	4/23/2008	Iron - Total	ug/l		5200	10
L304	423083	4/23/2008	Isopropylbenzene	ug/l	ND		1
L304	44083	4/4/2008	Lead Total, GFAA	ug/l	ND		1
L304	423083	4/23/2008	Lead Total, GFAA	ug/l	ND		1
L304	423083	4/23/2008	m/p-Xylene	ug/l		21	1
L304	423083	4/23/2008	Magnesium - Total	mg/l		200	0.1
L304	44083	4/4/2008	Manganese - Total	ug/l		160	1
L304	423083	4/23/2008	Manganese - Total	ug/l		360	1
L304	44083	4/4/2008	Mercury - Total	ug/l	ND		0.2
L304	423083	4/23/2008	Mercury - Total	ug/l	ND		0.2
L304	423083	4/23/2008	Methoxychlor	ug/l	ND		0.5
L304	423083	4/23/2008	Methylene Chloride	ug/l		6	5
L304	423083	4/23/2008	Naphthalene	ug/l	ND		10
L304	423083	4/23/2008	N-butanol	ug/l	ND		1000
L304	423083	4/23/2008	n-Butylbenzene	ug/l	ND		1
L304	44083	4/4/2008	Nickel - Total	ug/l		190	5
L304	423083	4/23/2008	Nickel - Total	ug/l		130	5
L304	423083	4/23/2008	Nitrate/Nitrite as N, Total	mg/l		0.4	0.3
L304	423083	4/23/2008	Nitrobenzene	ug/l	ND		10
L304	423083	4/23/2008	n-nitrosodimethylamine	ug/l	ND		10
L304	423083	4/23/2008	N-nitrosodi-n-propylamine	ug/l	ND		10
L304	423083	4/23/2008	N-nitrosodiphenylamine	ug/l	ND		10
L304	423083	4/23/2008	n-Propylbenzene	ug/l	ND		1
L304	44083	4/4/2008	Oil and grease	mg/l	ND		5
L304	423083	4/23/2008	Oil and grease	mg/l	ND		6
L304	423083	4/23/2008	o-Xylene	ug/l		9	1
L304	423083	4/23/2008	Parathion	ug/l	ND		2
L304	423083	4/23/2008	Pentachlorophenol	ug/l	ND		0.5
L304	44083	4/4/2008	pH, Aqueous	units		6.89	0
L304	423083	4/23/2008	pH, Aqueous	units		6.96	0
L304	423083	4/23/2008	Phenanthrene	ug/l	ND		10
L304	44083	4/4/2008	Phenols, Total low range	ug/l		140	5
L304	423083	4/23/2008	Phenols, Total low range	ug/l		66	5
L304	44083	4/4/2008	Phosphorous, Total	ug/l		1800	0.05
L304	423083	4/23/2008	Phosphorous, Total	ug/l		1700	0.05
L304	423083	4/23/2008	p-Isopropyltoluene	ug/l	ND		1
L304	423083	4/23/2008	Potassium - Total	mg/l		190	0.1
L304	423083	4/23/2008	Pyrene	ug/l	ND		10
L304	423083	4/23/2008	sec-Butylbenzene	ug/l	ND		1
L304	423083	4/23/2008	Selenium Total, GFAA	ug/l		31	1
L304	44083	4/4/2008	Silver, Total	ug/l	ND		5
L304	423083	4/23/2008	Silver, Total	ug/l	ND		5
L304	423083	4/23/2008	Silvex	ug/l	ND		0.05
L304	423083	4/23/2008	Sodium, Total	mg/l		1500	1
L304	44083	4/4/2008	Specific Conductance, Field	umhos/cm		1221	0

L304		423083	4/23/2008	Specific Conductance, Field	umhos/cm		899	0
L304		423083	4/23/2008	Styrene	ug/l	ND		1
L304		423083	4/23/2008	Sulfate, Total	mg/l		48	2.5
L304		423083	4/23/2008	tert-Butylbenzene	ug/l	ND		1
L304		423083	4/23/2008	Tetrachloroethene	ug/l	ND		1
L304		423083	4/23/2008	Tetrahydrofuran	ug/l		730	200
L304		423083	4/23/2008	Thallium Total, GFAA	ug/l	ND		1
L304		423083	4/23/2008	Tin Total, GFAA	ug/l	ND		60
L304		423083	4/23/2008	TOC	mg/l		360	0.5
L304		423083	4/23/2008	Toluene	ug/l		35	1
L304		44083	4/4/2008	Total Dissolved Solids	mg/l		6600	51
L304		423083	4/23/2008	Total Dissolved Solids	mg/l		5700	51
L304		44083	4/4/2008	Total Suspended Solids	mg/l		26	4
L304		423083	4/23/2008	Total Suspended Solids	mg/l		14	4
L304		423083	4/23/2008	Toxaphene	ug/l	ND		0.5
L304		423083	4/23/2008	trans-1,2-Dichloroethene	ug/l	ND		1
L304		423083	4/23/2008	trans-1,3-Dichloropropene	ug/l	ND		1
L304		423083	4/23/2008	trans-1,4-Dichloro-2-Butene	ug/l	ND		1
L304		423083	4/23/2008	Trichloroethene	ug/l	ND		1
L304		423083	4/23/2008	Trichlorofluoromethane	ug/l	ND		1
L304		423083	4/23/2008	Vinyl Acetate	ug/l	ND		5
L304		423083	4/23/2008	Vinyl Chloride	ug/l	ND		2
L304		423083	4/23/2008	Xylenes - Total	ug/l		30	3
L304		44083	4/4/2008	Zinc - Total	ug/l		17	6
L304		423083	4/23/2008	Zinc - Total	ug/l		13	6
LCMP	08043949-1		4/23/2008	1,1-Dichloroethane	ug/l	ND		1
LCMP	08043949-1		4/23/2008	1,2,4-Trichlorobenzene	ug/l	ND		10
LCMP	08043949-1		4/23/2008	1,2-Dichlorobenzene	ug/l	ND		5
LCMP	08043949-1		4/23/2008	1,2-Diphenylhydrazine	ug/l	ND		10
LCMP	08043949-1		4/23/2008	1,3-Dichlorobenzene	ug/l	ND		5
LCMP	08043949-1		4/23/2008	1,4-Dichlorobenzene	ug/l	ND		5
LCMP	08043949-1		4/23/2008	2,4 Dinitrotoluene	ug/l	ND		10
LCMP	08043949-1		4/23/2008	2,4,5-T	ug/l	ND		0.5
LCMP	08043949-1		4/23/2008	2,4,5-Trichlorophenol	ug/l	ND		10
LCMP	08043949-1		4/23/2008	2,4,6-Trichlorophenol	ug/l	ND		10
LCMP	08043949-1		4/23/2008	2,4-D	ug/l	ND		1
LCMP	08043949-1		4/23/2008	2,4-Dichlorophenol	ug/l	ND		10
LCMP	08043949-1		4/23/2008	2,4-Dimethylphenol	ug/l	ND		10
LCMP	08043949-1		4/23/2008	2,4-Dinitrophenol	ug/l	ND		50
LCMP	08043949-1		4/23/2008	2,6-Dinitrotoluene	ug/l	ND		10
LCMP	08043949-1		4/23/2008	2-Chloronaphthalene	ug/l	ND		10
LCMP	08043949-1		4/23/2008	2-Chlorophenol	ug/l	ND		10
LCMP	08043949-1		4/23/2008	2-Methylphenol(o-cresol)	ug/l	ND		10
LCMP	08043949-1		4/23/2008	2-Nitrophenol	ug/l	ND		10
LCMP	08043949-1		4/23/2008	3,3'-Dichlorobenzidine	ug/l	ND		20
LCMP	08043949-1		4/23/2008	4,4'-DDD	ug/l	ND		0.1
LCMP	08043949-1		4/23/2008	4,4'-DDE	ug/l	ND		0.1
LCMP	08043949-1		4/23/2008	4,4'-DDT	ug/l	ND		0.1
LCMP	08043949-1		4/23/2008	4,6-Dinitro-2-methylphenol	ug/l	ND		50
LCMP	08043949-1		4/23/2008	4-Bromophenyl-phenylether	ug/l	ND		10
LCMP	08043949-1		4/23/2008	4-Chloro-3-methylphenol	ug/l	ND		10
LCMP	08043949-1		4/23/2008	4-Chlorophenyl-phenylether	ug/l	ND		10
LCMP	08043949-1		4/23/2008	4-Methylphenol(p-cresol)	ug/l	ND		10
LCMP	08043949-1		4/23/2008	4-Nitrophenol	ug/l	ND		10
LCMP	08043949-1		4/23/2008	Acenaphthene	ug/l	ND		10
LCMP	08043949-1		4/23/2008	Acenaphthylene	ug/l	ND		10
LCMP	08043949-1		4/23/2008	Aldrin	ug/l	ND		0.05
LCMP	08043949-1		4/23/2008	alpha-BHC	ug/l	ND		0.05
LCMP	08043949-1		4/23/2008	Anthracene	ug/l	ND		10
LCMP	08043949-1		4/23/2008	Aroclor 1016	ug/l	ND		0.5

LCMP	08043949-1	4/23/2008	Aroclor 1221	ug/l	ND		1
LCMP	08043949-1	4/23/2008	Aroclor 1232	ug/l	ND		0.5
LCMP	08043949-1	4/23/2008	Aroclor 1242	ug/l	ND		0.5
LCMP	08043949-1	4/23/2008	Aroclor 1248	ug/l	ND		0.5
LCMP	08043949-1	4/23/2008	Aroclor 1254	ug/l	ND		1
LCMP	08043949-1	4/23/2008	Aroclor 1260	ug/l	ND		1
LCMP	08043949-1	4/23/2008	Arsenic Total, GFAA	mg/l		0.033	0.001
LCMP	08043949-1	4/23/2008	Barium, Total	mg/l		0.79	0.002
LCMP	08043949-1	4/23/2008	Benzene	ug/l		6	1
LCMP	08043949-1	4/23/2008	Benzidine	ug/l	ND		50
LCMP	08043949-1	4/23/2008	Benzo(a)anthracene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Benzo(a)pyrene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Benzo(b)fluoranthene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Benzo(g,h,i)perylene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Benzo(k)fluoranthene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	beta-BHC	ug/l	ND		0.05
LCMP	08043949-1	4/23/2008	Bis(2-chloroethoxy)methane	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Bis(2-chloroethyl)ether	ug/l	ND		10
LCMP	08043949-1	4/23/2008	bis(2-Chloroisopropyl)Ether	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Bis(2-ethylhexyl)phthalate	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Butyl benzyl phthalate	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Cadmium, Total	mg/l	ND		0.001
LCMP	08043949-1	4/23/2008	Carbon Disulfide	ug/l	ND		1
LCMP	08043949-1	4/23/2008	Chlordane (Tech)	ug/l	ND		0.5
LCMP	08043949-1	4/23/2008	Chlorobenzene	ug/l	ND		1
LCMP	08043949-1	4/23/2008	Chloroethane	ug/l	ND		2
LCMP	08043949-1	4/23/2008	Chromium - Total	mg/l		0.052	0.004
LCMP	08043949-1	4/23/2008	Chromium, Hexavalent	mg/l	ND		0.005
LCMP	08043949-1	4/23/2008	Chrysene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Dalapon	ug/l	ND		15
LCMP	08043949-1	4/23/2008	delta-BHC	ug/l	ND		0.05
LCMP	08043949-1	4/23/2008	Dibenzo(a,h)anthracene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Dieldrin	ug/l	ND		0.1
LCMP	08043949-1	4/23/2008	Diethyl phthalate	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Dimethyl phthalate	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Di-n-butyl phthalate	ug/l	ND		10
LCMP	08043949-1	4/23/2008	di-n-octyl phthalate	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Dinoseb	ug/l	ND		2
LCMP	08043949-1	4/23/2008	Dioxin Screen	ug/l	ND		50
LCMP	08043949-1	4/23/2008	Endosulfan I	ug/l	ND		0.05
LCMP	08043949-1	4/23/2008	Endosulfan II	ug/l	ND		0.1
LCMP	08043949-1	4/23/2008	Endosulfan Sulfate	ug/l	ND		0.1
LCMP	08043949-1	4/23/2008	Endrin	ug/l	ND		0.1
LCMP	08043949-1	4/23/2008	Endrin Aldehyde	ug/l	ND		0.1
LCMP	08043949-1	4/23/2008	Flashpoint, Closed Cup	degrees F		200	50
LCMP	08043949-1	4/23/2008	Fluoranthene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Fluorene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	gamma-BHC (Lindane)	ug/l	ND		0.05
LCMP	08043949-1	4/23/2008	Heptachlor	ug/l	ND		0.05
LCMP	08043949-1	4/23/2008	Heptachlor epoxide	ug/l	ND		0.05
LCMP	08043949-1	4/23/2008	Hexachlorobenzene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Hexachlorobutadiene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Hexachlorocyclopentadiene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Hexachloroethane	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Indeno(1,2,3-cd)pyrene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Isophorone	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Lead Total, GFAA	mg/l		0.0018	0.001
LCMP	08043949-1	4/23/2008	Mercury, Total	mg/l	ND		0.0002
LCMP	08043949-1	4/23/2008	Methoxychlor	ug/l	ND		0.5
LCMP	08043949-1	4/23/2008	Naphthalene	ug/l	ND		10

1ppb

LCMP	08043949-1	4/23/2008	Nitrobenzene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	n-nitrosodimethylamine	ug/l	ND		10
LCMP	08043949-1	4/23/2008	N-nitrosodi-n-propylamine	ug/l	ND		10
LCMP	08043949-1	4/23/2008	N-nitrosodiphenylamine	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Pentachlorophenol	ug/l	ND		50
LCMP	08043949-1	4/23/2008	Pentachlorophenol	ug/l	ND		0.5
LCMP	08043949-1	4/23/2008	ph, Field Aqueous	units		7.36	0
LCMP	08043949-1	4/23/2008	Phenanthrene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Phenol	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Picloram	ug/l	ND		2
LCMP	08043949-1	4/23/2008	Pyrene	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Pyridine	ug/l	ND		10
LCMP	08043949-1	4/23/2008	Selenium Total, GFAA	mg/l		0.026	0.001
LCMP	08043949-1	4/23/2008	Silver, Total	mg/l	ND		0.005
LCMP	08043949-1	4/23/2008	Silvex	ug/l	ND		0.5
LCMP	08043949-1	4/23/2008	Specific Conductance, Field	umhos/cm		921	0
LCMP	08043949-1	4/23/2008	Temperature, Field Measured	degrees F		68.5	0
LCMP	08043949-1	4/23/2008	Toxaphene	ug/l	ND		0.5