

Response to DEQ's October 30, 2006 Comments
Well Identification Plan ReportBackground Discussion

On June 17, 2005, PLS proposed its Work Plan for Identification, Abandonment, and Replacement of Certain Private Water Supply Wells (‘Work Plan’), as required by paragraph six of Judge Shelton’s May 17, 2005 Order Prohibiting Groundwater Contamination (‘May 17, 2005 Order’). DEQ conditionally approved the Work Plan in a letter dated August 12, 2005. After additional exchange of correspondence, primarily on the issue of whether PLS would pay for abandonment of unplugged wells identified in Tasks 1 and 2, DEQ directed PLS to go forward with the Work Plan (with clarifications) on January 10, 2006.

The Work Plan provided for three tasks in connection with the identification of existing private drinking water wells within the prohibition zone; Task 1—a door to door survey of vulnerable neighborhoods; Task 2—Research and preparation of chronology regarding the availability of municipal water within the prohibition zone; and Task 3—preparation of a memorandum regarding ordinances regulating connection to municipal water. The purpose of Task 3 was to prepare a framework, which would provide reasonable support for the proposition that homes constructed within the Ann Arbor city limits, were likely to, or required to, connect to municipal water. The purpose of Task 2 was to identify additional areas to survey based on the chronology, using the survey method proposed in Task 1. In its conditional approval, DEQ added some additional requirements regarding Tasks 1, 2 and 3: (1) written materials to be used in the survey should be provided to DEQ in advance for review and approval; (2) Tasks 1 and 2 should be implemented in phases, starting with the Western PZ (and including some specific properties identified by DEQ); and (3) that Tasks 2 and 3 should be coordinated in two phases, focused first on the Western PZ and then on the Eastern PZ. DEQ requested that vulnerable properties identified in the Western PZ be surveyed (as described in Task 1) within one month. DEQ also stated that there should be no need to supplement the Work Plan as described in Task 2 unless the survey methods described in Task 1 have been determined to be inadequate.

PLS submitted its initial report on February 28, 2006. DEQ provided comments on this report in a letter dated April 18, 2006, including comments on the proposed survey tools, which PLS subsequently incorporated. A second report was submitted by PLS on May 19, 2006. Since that date, there have been a series of communications between DEQ and PLS on the subjects covered in the initial two reports, culminating with the latest letter from DEQ dated October 30, 2006. Much of the discussion (but not all) has focused on Task 2. It should be emphasized that sixty-one surveys have now been performed, and no active water supply wells have been identified by those surveys. Only a few suspected in-place wells and inactive wells have been noted, with the majority of the survey

responses coming back with no or inconclusive information on the potential existence of old, unused 'potential' wells.

The following discussion responds to the latest questions or comments received from DEQ in the context in which this work was originally proposed and accepted by DEQ.

Wagner Road Wells

603 S. Wagner Road: You have asked for a copy of the well abandonment log for 603 South Wagner. The owner had the well plugged by Cribley prior to involvement by PLS in replacement of the water supply. PLS did not have the well abandonment log nor did the owner of the property. PLS requested a copy of the log from Cribley and received the attached document. This should conclude the inquiry.

685 and 697 S. Wagner Road: PLS has, through legal counsel, written the owners of 685 and 697 S. Wagner Road in an attempt to gain cooperation with PLS's repeated request to replace their water supply wells. A copy of those letters is attached. As noted in the July 31, 2006 correspondences to these residents, which we attached to our last report, PLS already notified both residents that the supply wells were not going to be used for monitoring and the wells had to be abandoned. If one or more of these residents is worried about the need for PLS to have continuing access to their property, that concern should have been resolved by the July letter. In any event, the letter from legal counsel clearly stated access beyond that needed for the connection and abandonment of the old well would not be necessary.

DEQ asserts that PLS has the authority, under paragraph 11 of the May 17, 2005 Order ('Order') to enforce the requirements of that Order, and further demands that PLS seek court ordered access to enforce the Order if access is not obtained by November 30, 2006. We do not agree that paragraph 11 of the Order is relevant to the standing that PLS or DEQ may have with respect to third parties to enforce DEQ's interpretation. As you know from our September 15, 2006 response, PLS is not going to use court process to force residents to abandon their wells.

Comments On Task 2

DEQ has prepared several spreadsheets based on information provided by PLS as part of the Well Identification Work Plan. The October 30, 2006 correspondence identifies several additional tasks that DEQ is now demanding to resolve open issues DEQ has identified with respect to certain locations as identified in DEQ's spreadsheet.

Some of DEQ's requests (some phrased as demands) go beyond the scope of the conditionally approved Work Plan. Task 1 required a survey of locations determined to be vulnerable, using an approved survey tool. This task has been accomplished. PLS

has, and will continue to survey locations that it determines are “vulnerable” under the survey using the approved survey tool.

DEQ Demand for additional available information about wells: The surveys were undertaken at locations precisely because there is some uncertainty as to whether or not a water supply well may have been installed and/or still exists on the property. No previously unknown active water supply wells have been identified as the result of the survey. As could be expected based on the possible age of former well locations, some owners had information about the location of abandoned/unused wells, but most did not. PLS has already requested (and submitted to DEQ) public records regarding well logs and abandonments to the extent such records are publicly available. PLS does not believe that there is any ability to get any further useful information by making additional requests about locations where the owner/operator has been surveyed. PLS will re-survey any locations where surveys have not been returned. Such re-surveys will occur on or before December 15, 2006. However, where surveys have been returned, and no further information is available regarding the existence of a well, PLS will rely on the survey response and will not take any further action at that location.

DEQ requests that PLS obtain information about “connection dates” with respect to surveyed locations where the respondent does not believe there are wells on the property. This is inconsistent with the procedure followed so far. PLS has requested connection dates from the City of Ann Arbor only as a predicate to determining whether or not to survey certain properties when there is some question due to the age of construction as to whether or not to survey the property. Where connection dates have indicated a well might be present, PLS has conducted the survey. For locations that have already been identified as vulnerable and has been surveyed, the connection date will provide no further useful information. At most, the connection date might show that it is possible for there to have been installed at the location. Therefore, PLS does not agree that obtaining connection dates will resolve whatever uncertainty DEQ believes is created by the survey results.

With respect to locations PLS has previously proposed to obtain connection dates, Table 4 has been updated with the information received from the City of Ann Arbor. Based on that table, five additional properties were identified as vulnerable and have now been surveyed. Copies of the survey results obtained so far are attached. To date, no additional wells have been located.

DEQ Demand Of Notice To Surveyed Properties. PLS does not agree to provide additional notices to surveyed property owners as demanded DEQ’s October 30, 2006 correspondence. As DEQ knows, the entire PZ is already maintained in such a way as to provide record notice to all property owners in the PZ, and the local units of government cannot issue any permits for wells within the PZ. Persons who have received the survey have additional notice that their property may have historically contained a well. This comports with the requirements in Part 201 for notice to persons within the PZ, and should be sufficient in this situation.

Apparently, DEQ is of the opinion that there is some additional risk of exposure at locations where PLS has not been able to definitively verify the existence (or absence) of historical wells or their ultimate fate, even when these locations have been verified to be served by municipal water and have been surveyed for information. The additional notices demanded by DEQ does not materially alter this risk, since the current homeowners are already aware of restrictions, responded to the survey, and could not provide any additional information about old wells. Moreover, this is not part of the Work Plan as proposed or as conditionally approved by DEQ.

Survey Locations within Expanded PZ. DEQ has some questions about the rationale followed by PLS to identify some, but not all, of the locations in the proposed PZ expansion for surveys. PLS had thought this was evident from the May 19, 2006 report it submitted. Table 2 of that report included a table of all of the addresses that were proposed for addition to the PZ, along with the rationale regarding a decision to survey. Locations were surveyed if PLS had information about a well and/or the location was not in a platted Ann Arbor subdivision or in the City of Ann Arbor via annexation at the time the home was constructed. As DEQ knows, some subdivisions west of Maple Road (notably the Evergreen subdivision) were annexed into the City of Ann Arbor after they were platted in Scio Township because of the need to connect to municipal water due to the contamination. Homes that were built after the plume was identified in that area and municipal water was available and the subdivision had been annexed, were not surveyed.

DEQ Demand the PLS plug certain identified abandoned wells: As you know, PLS does not agree with DEQ's position that the Order requires PLS to plug private wells that PLS discovers that are not in active use. Without waiving its position on this issue, PLS will request consent from the owners/occupants of the following homes for plugging and abandonment of wells: 3401 Ferry; 3459 Ferry, 2320 Dexter; and 2915 Valley. PLS will also request permission from the owner of 960 Newport to plug and abandon the wells identified on that property. Once permission has been obtained, PLS will inspect the property, determine whether the wells have in fact been plugged or not, and then accomplish plugging and abandonment as provided in the Work Plan.

Comments on Task 3

1935 Map and Former City of Ann Arbor Public Water Supply Wells. DEQ referenced some comments made in our first report regarding a 1935 Map showing the locations of some water supply wells in western Ann Arbor and former public water supply wells. Attached (in electronic format only) is a copy of the map.¹ In our opinion the map did not indicate any new potential locations to look for wells. However, we are providing you with this graphic for your files. PLS has visually inspected current West Washington Street for signs of the old municipal wells, but there are none. This is consistent with the notation on the 1935 map that the wells were abandoned. The wells near the old courthouse are long gone and were noted as "abandoned" in the source

¹ Shoecraft, Drury and McNamee – Engineers, Atlas of Geologic Maps and Sections To Accompany Report on Groundwater Resources For Public Water Supply (December 1935). This is a copyrighted document.

material. There are no suspect locations of old municipal supply wells that have not already been investigated through literature search, document requests, and visual inspection (if the location could be reasonably determined).

The first WID report provided the information that PLS was able to assemble regarding locations of old public water supplies. These were mostly descriptions from historical accounts, which were presented in the report. There is no additional information in the source material (if there had been, PLS would have presented it). We do not have any additional information to add regarding old municipal supply wells. For your information, some excerpts (from copyrighted material) are provided for your files. PLS does not believe any additional investigation into these well locations is warranted.

DEQ Request for A Master Map and Compiled Report. Although PLS is nearing completion of the tasks outlined in the Work Plan, the process is still underway with respect to a few properties. Specifically, among other things, PLS will be attempting to hook up some residents on South Wagner, and a business on Jackson, and the issue of the Varsity Ford and cemetery irrigation wells need to be resolved. PLS is going to (voluntarily) re-survey properties from which it has not obtained a response to the initial survey, and will be attempting to secure permission to plug and abandon some currently unused wells. A final report can and will be prepared upon completion of these tasks.

We appreciate DEQ's desire to have everything wrapped up in one package. It was also DEQ's request that this project be phased. PLS will provide another update to the WID report on February 15, 2007, that we hope will include the final disposition of the issues. After that, we are prepared to discuss what, if anything, is needed to create a final document.

List of Tables

Table 4	List of Properties Reviewed via FOIA (revised)
Table 4a	List of Addresses for Second FOIA request

List of Attachments

- Well Abandonment Log for 603 S. Wagner Road
- Correspondence related to South Wagner Road
- July 18, 2006 Response of City of Ann Arbor to FOIA Request
- Additional Survey Results
- Selected copies of pages from source materials on municipal wells
- 1935 Map Showing Well Locations

Table 4 (revised)
 Combined List of Addresses
 For FOIA Request and Subsequent Survey

Address	Street	Year Built	Tap Date
2101	Arborview	1952	3/6/52
2020	Dexter	1946	4/8/47
2106	Dexter	1937	1926
2200	Dexter	1950	1926
402	Glendale	1953	3/22/52
404	Glendale	1950	7/21/51
1645	Miller	1950	10/10/79
871	N. Maple	1950	2/21/02

Shaded dates indicate that house may have had private water supply before hookup to city water. These addresses have been surveyed.

Table 4a
 List of Addresses
 Second FOIA Request

Address	Street	Year Built	Tap Date
1921	Jackson	1914	5/16/1979
1706	Dexter	1926	7/24/1926
211	Pine Ridge	1911	4/26/1984
215	Pine Ridge	1919	4/26/1984
301	Pine Ridge	1922	4/10/1925
305	Pine Ridge	1925	7/26/1926
311	Pine Ridge	1924	10/7/1927
312	Pine Ridge	1928	1/9/1929
304	Pine Ridge	1920	6/20/1927
300	Pine Ridge	1926	8/8/1928
218	Pine Ridge	1925	11/2/1926
216	Pine Ridge	1929	8/30/1927
1616	Dexter	1929	6/29/1922
1005	Newport	1932	5/29/1935
1015	Newport	1936	5/29/1935

Shaded dates indicate that house may have had private water supply before hookup to city water. These addresses have been surveyed.