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# GROUNDWATER MONITORING PROGRAM EVALUATION FOR A/M AREA, SAVANNAH RIVER SITE

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## TABLE OF CONTENTS



## LIST OF FIGURES



## LIST OF TABLES

# GROUNDWATER MONITORING PROGRAM EVALUATION FOR A/M AREA

## EXECUTIVE SUMMARY

This investigation was undertaken with the primary purpose of assessing the groundwater monitoring program within the A/M Area to identify ways in which the monitoring program could be improved. The task was difficult due to the large number of wells located within the A/M Area and the huge database of analytical data. It was recognized early in this investigation that one of the key tasks was to develop a way to gain access to the groundwater databases so that recommendations could be made. To achieve this, geographic information systems (GIS) technology was used to extract pertinent groundwater quality information from the Geochemical Information Management System (GIMS) groundwater database and display the extracted information spatially. GIS technology was also used to determine the location of well screen and annular material zones within the A/M Area hydrostratigraphy and to identify wells that may breach confining units. Recommendations developed from this study address:

- wells that may not be providing reliable data but continue to be routinely sampled.
- wells that may be inappropriately located but continue to be routinely sampled.
- further work that should be undertaken, including well development, evaluation of wells that may be breaching confining units, and development of an automated link to GIMS using GIS so that GIMS data can easily be accessed and displayed geographically.

## 1.0 INTRODUCTION

Within the A/M Area, groundwater monitoring is conducted primarily for the purpose of maintaining compliance of the Savannah River Site (SRS) with the RCRA and other associated South Carolina regulations. The types of wells that are monitored for compliance are the Point of Compliance (POC) wells, generally located close to individual disposal facilities and the background (BG) wells. Groundwater monitoring is also conducted in other wells to monitor the effectiveness of corrective actions currently being undertaken within the A/M Area. These wells include plume definition (PDW) wells and recovery wells. Other types of wells in the A/M Area include special investigation wells (SP) and production wells (PW).

The wells in the groundwater monitoring program were installed to monitor for possible environmental impacts resulting from the disposal of contaminants in various disposal facilities near the A/M Area. Each series of wells is assigned a well series name to link it with the disposal facility it was installed to monitor. The well series names are listed below and the full name of the associated disposal facility is provided for each. Only the AC wells are not specifically linked to a disposal facility.

ABP A-Area Metals Burning Pits
AC A-Area Cluster Perimeter Wells
ACB A-Area Coal Pile Runoff Containment Basin
AMB Metallurgical Laboratory Seepage Basin
AOB Motor Shop Oil Basin
ARP A-Area Burning Rubble Pits
ASB Savannah River Lab Seepage Basins
MCB Miscellaneous Chemical Basin
MSB M-Area HWMF Wells: Plume definition wells
SRW Silverton Road Waste Site

Each of the well types described above are monitored for different analyte suites and at different times of the year. The analyte suites which are conducted include the Groundwater Protection Standard (GWPS) analyses, Monitoring Constituent Standard (MCS) analyses, and Appendix IX Parameters, Polychlorinated Biphenyls (PBC's). Additionally, Field Parameters and Synchronous Water Levels are obtained. The schedule for collecting each of the sample suites, by well type is presented below in Table 1, Current Sampling Program. A list of the analytes associated with each sample analysis suite (with the exception of the Appendix IX suite, is presented below Table 1.

Table 1. Current Sampling Program Schedule

| Well Type | Synchronous Water Levels | Field Parameters | GWPS | PCB's | Appendix IX | MCS | Radiological Indicators |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| Piezometers | Quarterly | | | | | | |
| | | | | | | | |
| POC | Quarterly | 1Q,3Q | 1Q,3Q | 1Q,3Q | 20%, 3Q | 3Q | 3Q |
| BG | Quarterly | 1Q,3Q | 1Q,3Q | | | 3Q | 3Q |
| PDW | Quarterly | 1Q,3Q | 1Q,3Q | 1Q,3Q | | 3Q | 3Q |
| Recovery | Monthly | Monthly | Monthly | 1Q,3Q | | | |
| | | | (organics) | | | | |
| New Wells | Quarterly | Quarterly | Quarterly | | | Quarterly | |
| | | | | | | | |

1Q - First Quarter; 3Q - Third Quarter; PCB's - Polychlorinated Biphenyls; GWPS - Groundwater Protection Standard; MCS - Monitoring Constituents Standard; POC - Point of Compliance Well; BG - Background Well; PDW - Plume Definition Well

Field Parameters: pH, specific conductance, temperature, alkalinity, water level, turbidity

Appendix IX: EPA list, presented in many references. Included in DPST-87-667

GWPS: Ba, cyanide, Pb, Ni, Se, chlorobenzene, 1,1-dichloroethane, 1,1-dichloroethylene, 1,2-dichloroethylene, PCB's, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,1,1-trichloroethane, and trichloroethylene

MCS: Al, Cl, Cr, Co, Cu, F, Mn, Hg, $NO_3$, Na, $SO_4$, $PO_4$, U, and Zn

Radiologic Parameters: Gross Alpha, nonvolatile beta, and radium (tot. alpha emitting)

This investigation was undertaken with the primary purpose of assessing the groundwater monitoring program within the A/M Area to identify ways in which the monitoring program could be streamlined and improved. The task was difficult due to the large number of wells located within the A/M Area and a huge database of analytical data that has been collected. It was recognized early in this investigation that one of the key tasks was to develop a way to gain access to the groundwater databases so that recommendations could be made. To achieve this, GIS technology was used to extract pertinent groundwater quality information from the GIMS groundwater database and display the extracted information spatially. This technology was also used to determine the location of well screen and annular material zones within the A/M Area hydrostratigraphy and to identify wells that may breach confining units.

Two master lists of wells were utilized in the investigation, one containing all wells in the A/M Area, including special investigation wells, vadose zone wells and many other wells that are not routinely monitored. This list contains over 500 wells and is presented in Table A in the Appendix. A second list was utilized for specific recommendations relating to sample collection. This list was formulated by Rust, Inc. as a task to Environmental Restoration Department (ER) and includes those wells currently in the groundwater sampling program. This list is presented in Table B in the Appendix.

## 2.0 ANALYSIS

To identify ways in which the groundwater monitoring program might be improved, the focus of the analysis was on issues relating to whether individual wells are capable of providing groundwater samples that are representative of aquifer units within which they are finished. Factors which contribute to this ability include: the adequacy of well construction, the strategic location of the well within the groundwater flow system and the ability of the well to provide a sufficient quantity of water to provide representative groundwater samples.

While the great majority of wells installed at SRS since the early 1980's are perfectly adequate, samples collected at some wells suggests there may be a problem with the well construction that could impact their ability to provide representative groundwater samples.

Due to the number of wells in the A/M Area, this investigation relied heavily upon the use of database queries to extract pertinent information from the Environmental Monitoring Section (EMS) groundwater databases so that evaluations could be made. GIS tools were then used to evaluate the information extracted from GIMS, including well construction, field parameters and analytical data. The result was a series of tables of well information which could be used to assess the adequacy of wells for groundwater monitoring.

Well sample reliability relates to the ability of a well to provide a groundwater sample that is representative of groundwater quality in the aquifer unit within which it is screened. Factors which contribute to this ability include the adequacy of well construction and the ability of the well to produce a sufficient quantity of water to produce a sample truly reflective of the groundwater conditions in the vicinity of the well screen. Well construction factors include the position of the well screen and sand pack relative to hydrostratigrapic units, grout contamination of filter pack near the screen zone, and how effective the well development process was. The ability of a well to produce a sufficient quantity of qroundwater is related to whether the screen exists fully or partially within the saturated zone, the well development process, and the natural permeability of the formation material adjacent to the screen zone.

Some wells in the groundwater monitoring network may never experience elevated concentrations because their location within the groundwater flow system is such that they may never sample contaminated water. These wells are situated lateral to the primary horizontal flow direction or are located downgradient, at a relatively great distance from the source area, and finished in only the uppermost portion of the saturated zone. Other wells may be located sufficiently far from the source areas in the downgradient direction that they will detect only the most mobile contaminants in the foreseeable future, yet they are sampled at least annually for contaminants that are not mobile.

### 2.1 Hydrogeologic model

The hydrogeologic model utilized for comparison with well construction data is that incorporated in the A/M Area general groundwater model by Jackson, Savannah River Technology Center/Environmental Sciences Section SRTC/ESS (personal communication). The specific layers include the following seven hydrostratigraphic units, listed from deepest to shallowest: Crouch Branch Aquifer; Lower Clay-Crouch Branch Confining Unit; Middle Sand-Crouch Branch Confining Unit; Upper Clay-Crouch Branch Confining Unit, Lost Lake Aquifer, Green Clay Confining Unit and the M-Area Aquifer Unit. The hydrostratigraphic picks

embodied in this model have been deciphered from borehole cores and borehole geophysical logs. Table 2, below, lists the hydrostratigraphic units for A/M Area.

Table 2 Hydrostratigraphic Units in the A/M Area

| | HYDROSTRATIGRAPHIC UNIT |
|---|---|
| Layer 1 | M-Area Aquifer |
| Layer 2 | Green Clay Confining Unit |
| Layer 3 | Lost Lake Aquifer |
| Layer 4 | Upper Clay - Crouch Branch Confining Unit |
| Layer 6 | Middle Sand - Crouch Branch Confining Unit |
| Layer 6 | Lower Clay - Crouch Branch Confining Unit |
| Layer 7 | Crouch Branch Aquifer |

Elevations of the interfaces between hydrostratigriphic units were obtained as gridded EarthVision files. The EarthVision command EV_EXPORT was used to generate data files that could then be incorporated into ARC/INFO.

## 2.2 Geographic Information Systems Analysis

GIS analysis supporting the A/M Area well reduction study included two main objectives--determining the hydrostratigraphic units where the tops and bottoms of A/M Area well screen and annular material zones are located and accessing GIMS to obtain and display analyte information for these wells. GIMS is an Oracle database maintained by EMS that houses groundwater geochemistry, well construction, and soils data for the Savannah River Site.

The first objective involved accessing the GIMS well construction database to obtain construction data for the 570 wells included in the study (See Table A of the Appendix for a listing of these wells). The GIMS well construction database contains information such as well use, well geographic coordinates, depth to the top and bottom of screen and annular materials zones, and annular materials descriptions. This information was accessed using Oracle Structured Query Language (SQL) embedded in ArcView Avenue scripts so that the data could be imported directly into ArcView for analysis and display. The resulting annular materials table was subsequently used to generate an ARC/INFO GIS coverage. Well screen zone data was already available as a GIS coverage on the Environmental Protection Department (EPD) ArcView system. Well locations for both the annular material and screen zone coverages are in SRS coordinates.

In order to determine the hydrostratigraphic units where the screen zones and annular material zones are located for each A/M Area well, a hydrostratigraphic model was first required. This model consisted of the eight surfaces which bound the seven hydrostratigraphic layers identified above. These eight surfaces were defined as elevations at nodal points on a regularly spaced grid network. These surfaces were contoured by the SRTC/ESS using EarthVision software on a 500 ft. grid mesh and were converted to ARC/INFO grid coverages as part of this study.

The ARC/INFO LATTICESPOT command was then used to determine the vertical elevation on all eight surfaces corresponding to the x,y location of each well. This process may be visualized

by placing a vertical line at each well x,y location such that the line penetrates the surfaces directly underlying the given well. LATTICESPOT determines the vertical elevation where the vertical line intersects each surface and writes this elevation to the ARC/INFO coverage containing the well coordinates. A total of eight elevation attributes were added to the annular materials and screen zone ARC/INFO coverages (seven elevations for the seven hydrostratigraphic surfaces and one for the land surface).

The hydrostratigraphic unit containing the top and bottom of each well screen or annular material zone was determined using an ARC Macro Language (AML) routine written to compare the tops and bottoms of screen and annular material zone elevations with the corresponding elevations on all eight surfaces at each well x,y coordinate. For each well, attributes were written to the screen zone coverage indicating the hydrostratigraphic unit name corresponding to the top and bottom screen elevation. Likewise, for the annular materials coverage, attributes indicating the hydrostratigraphic unit containing the top and bottom annular materials zones were written to the annular materials coverage. Tables C and D of the Appendix provide a partial listing of the resultant ARC/INFO annular materials and screen zone coverage point attribute tables, respectively. A description of the attributes for the screen zone and annular materials ARC/INFO point attribute tables is provided in Tables E and F of the Appendix, respectively.

Well screen zones potentially breaching a confining unit were identified in the screen zone coverage by comparing the hydrostratigraphic unit containing the top and bottom screen location. A potential confining unit breach was identified if the top and bottom screen location hydrostratigraphic units were different. An additional field labeled 'breach' was written to the screen zone ARC/INFO coverage (see Table D of the Appendix) indicating the possibility of a breached confining unit.

The screen zone ARC/INFO coverage contains one record per well whereas the annular materials coverage has up to three records per well, depending on the number of distinct annular material zones. The annular materials data thus presented a complication in determining whether confining units are potentially breached. Annular materials zones which are continuous without breaks and which consist of porous materials such as sand, fine sand, or gravel may not penetrate a confining unit when considered as separate and distinct zones. The same annular materials considered as a continuous zone, however, may very well extend across a confining unit.

An additional AML was therefore written to determine whether the porous annular materials for a given well are continuous and whether the continuous zone penetrates a confining unit. This AML utilized as input the annular materials coverage described above (see Table C of the Appendix). Table C provides a partial list of records from the annular materials coverage where continuous annular materials zones have been combined, using the AML described above, to form a single record in the table.

Note that only wells with one or two annular materials zones were considered due to apparent inconsistencies in the well construction data. Out of 242 wells processed for the A/M Area, this constraint excluded only 29 wells. Finally, note that well construction data for 150 A/M Area wells in this study was not in the well construction database.

The second major objective involved accessing the groundwater geochemistry data in GIMS for the analytes listed on Table G of the Appendix. The A/M Area wells listed in Table B of the Appendix were used in conjuntion with GIMS queries so that data for only these wells was

retrieved. Queries of the GIMS Oracle database on Pleiades were made using SQL embedded in Avenue scripts so that the data could be pulled directly into ArcView tables. These tables were then processed using the ArcView query builder to include only records with flag 1 contaminant levels. Flag 1 corresponds to one half of the Environmental Protection Agency (EPA) drinking water standard. The flag 1 concentration limit is provided for the analytes of interest in Table G of the Appendix.

Note that the GIMS analyte data contains analyte sample result units in both milligrams per liter and micrograms per liter so that care had to be exercised in building the ArcView queries to use flag 1 search criteria compatible with the two different measurement units. Analyte data was pulled from GIMS for the wells listed in Table B of the Appendix for all periods of record and includes split samples, replicates, blind samples, duplicates, etc. This analyte data also included flag 1 hits below the detection limit, estimated analyte results, and rejected results. Obviously, significant care must be exercised by the user of this data to make sure inappropriate data are not used in analyses. GIMS groundwater geochemistry data on Pleiades is available from the first quarter of 1991 through the fourth quarter of 1995.

Several of the analyte tables were processed further to remove duplicate, replicate, split and other duplicate records so that the analyte information could be displayed spatially in ArcView. These tables were edited and duplicate records were removed arbitrarily. The edited tables include flag 1 hits for trichloroethylene (TCE) during the fourth quarter of 1994, mercury (first quarter of 1995), nitrate (first quarter of 1995), and tetrachloroethylene (PCE) during the third quarter of 1995 and were generated to examine the spatial distribution of the respective flag 1 contaminant hits. Data in these tables should be used only for inferring the spatial coverage of flag 1 hits and not for the determination of the specific analyte concentrations at any given well. In addition, any GIMS geochemical data included in this report and the aforementioned ArcView project must be screened by EMS personnel prior to release or use.

Wells exhibiting TCE and PCE concentrations equal to or in excess of the flag 1 criteria for the M-Area aquifer are provided in Figures 1 and 2, respectively, and for the Lost Lake aquifer in Figures 3 and 4, respectively. Data presented in these figures should be used only for inferring the spatial distribution of flag 1 hits and should not be used for any other purpose.

## 2.3 Evaluation

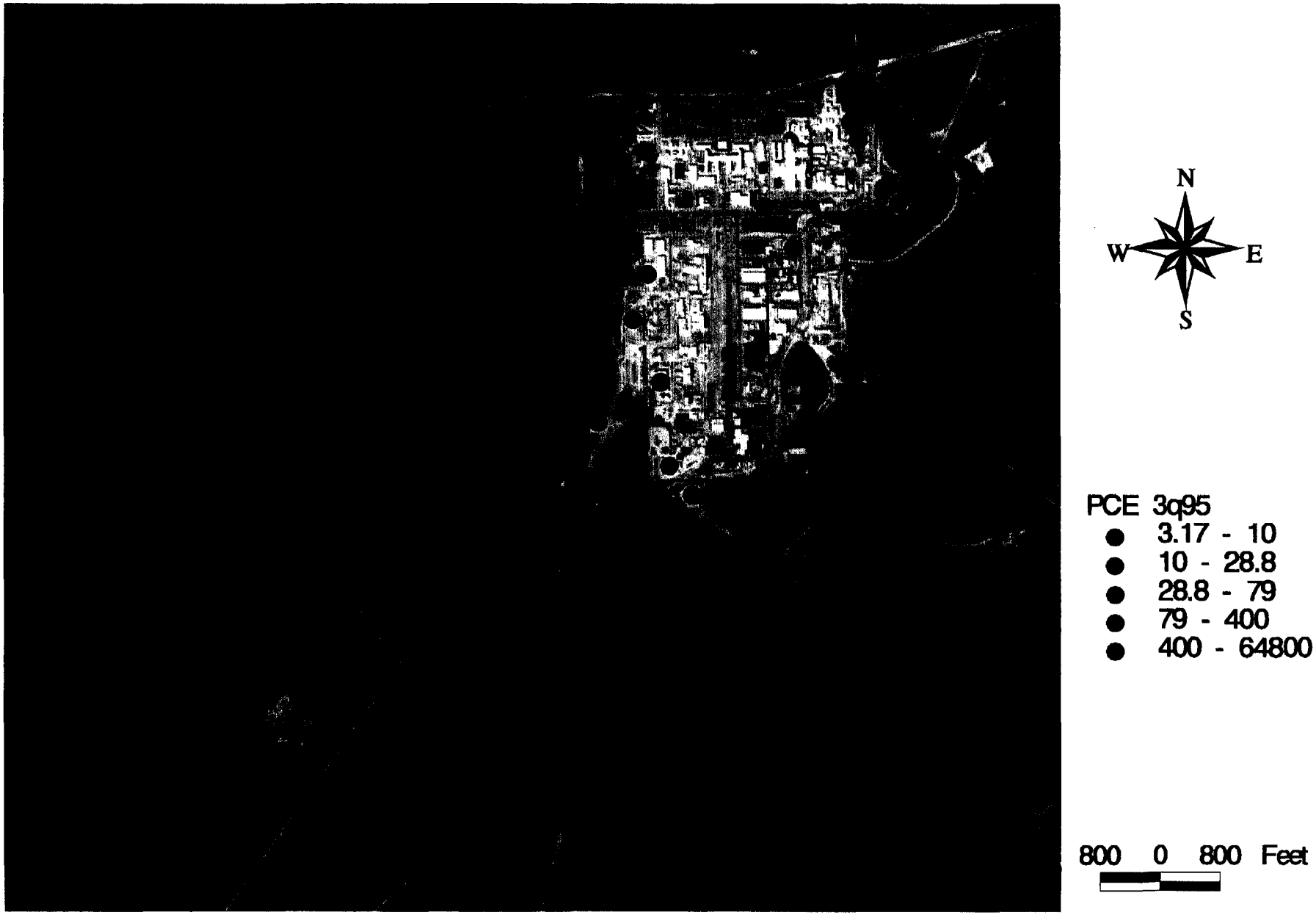
Information obtained from the database queries and GIS processing was utilized to perform evaluations and address the issue of well integrity. Factors which might be indicative of the lack of well integrity would include: sample analyses from individual wells which are chronically elevated in pH and turbidity, inability of a well to provide sufficient quantity of water to obtain a sample, and well screens and sand packs which are found to breach confining units that separate different aquifers. The evaluation also included an assessment of the strategic position of certain wells with respect to their ability to detect potential contaminants in the groundwater flow system.

Figure 1. TCE Concentration in Wells Finished in the M-Area Aquifer

Figure 2. PCE Concentration in Wells Finished in the M-Area Aquifer

Figure 3. TCE Concentration in Wells Finished in the Lost Lake Aquifer

Figure 4. PCE Concentration in Wells Finished in the Lost Lake Aquifer



### 2.3.1 Well integrity and sample reliability

An SQL query of the GIMS database was used to extract sample analyses from wells for pH, turbidity and whether the well pumped dry during the period from 1992 to present. During 1992 a new policy was implemented that required that samples collected from wells no longer be filtered prior to performing any laboratory analyses. Prior to this all samples were filtered before analysis. The query was restricted to that period when samples were no longer filtered in order to avoid comparing results from filtered samples with non-filtered samples. ArcView was used to display anomalous wells and to create tables. The criteria for determination of anomalous values were pH < 4.0 or pH > 8.5 and turbidity > 20 ntu (nominal turbidity units). Consideration was only given to elevated values of pH since the grout material used in well construction is very alkaline. Low values of pH, on the other hand, may be indicative of contaminants the well was installed to monitor. Wells with chronic pH values > 8.5 could indicate problems that relate to the grout emplacement at the time of well installation. The altered pH can have the effect of biasing the concentrations of any potential contaminants in groundwater samples from that well. Listed below in Table 3 are wells in the A/M Area which exhibit chronically elevated pH levels. Also noted is the number of quarters since the beginning of 1992 that elevated values were detected and the mean value obtained in all anomalous measurements.

Table 3 Wells having elevated pH sample analyses

| Well | No. Quarters '92-'96 | Average pH Value | Well Type |
|---|---|---|---|
| | | | |
| AMB-10A | 16 | 11.1 | PDW |
| AMB-13AR | 13 | 10.8 | PDW |
| AMB-6AA | 16 | 10.8 | PDW |
| ASB-6TA | 18 | 10.8 | PDW |
| MCB-5C | 20 | 12 | PDW |
| MCB-7C | 16 | 12.2 | PDW |
| MSB-13B | 20 | 11.9 | PDW |
| MSB-1C | 24 | 11.7 | POC |
| MSB-20C | 16 | 10.9 | PDW |
| MSB-2B | 20 | 11.9 | POC |
| MSB-2C | 22 | 11.3 | POC |
| MSB-3C | 18 | 11.9 | POC |
| MSB-46A | 16 | 9.2 | PDW |
| MSB-48D | 13 | 9 | PDW |
| MSB-4C | 15 | 10.7 | POC |
| MSB-54C | 15 | 10.6 | PDW |
| MSB-55HC | 18 | 11.5 | PDW |
| MSB-62D | 23 | 11.7 | POC |
| MSB-63D | 22 | 9.9 | POC |
| MSB-66B | 17 | 10.3 | PDW |
| MSB-6C | 15 | 10.8 | POC |
| MSB-71B | 16 | 11.9 | PDW |
| MSB-74C | 17 | 11.2 | PDW |
| MSB-79B | 17 | 12.3 | PDW |
| MSB-79C | 15 | 11.9 | PDW |
| MSB-7B | 21 | 10.9 | POC |
| MSB-82A | 23 | 11.8 | PDW |
| MSB-83C | 17 | 9.3 | PDW |
| MSB-83D | 11 | 8.9 | PDW |
| MSB-85TA | 17 | 9 | PDW |

Elevated levels of turbidity, > 20 ntu, may indicate that the well was incompletely developed or that the screen zone is finished in a low permeability formation. This is an informal threshold used by EMS personnel who maintain the GIMS database. Since well samples are no longer filtered prior to conducting the analyses, elements that comprise clay minerals may appear in elevated concentrations in analyses. Likewise, any other cations which might be adsorbed to the clay particles will also appear in elevated concentrations. Table 4 contains a list of all wells in the A/M Area which exhibited turbidity levels > 20 ntu during the period of 1992 to the present. The number times the turbidity was elevated and the average turbidity level is also reported.

Table 4 Wells having elevated turbidity in samples

| Well | Number of elevated samples 92-96 | Average NTU Value | Well Type |
|---|---|---|---|
| | | | |
| AMB-5 | 6 | 59 | PDW |
| MCB-5C | 10 | 456 | PDW |
| MCB-7C | 5 | 137 | PDW |
| MSB-15C | 8 | 210 | PDW |
| MSB-16C | 10 | 471 | PDW |
| MSB-36D | 11 | 238 | PDW |
| MSB-3D | 5 | 573 | POC |
| MSB-42D | 7 | 319 | PDW |
| MSB-46C | 10 | 240 | PDW |
| MSB-48D | 6 | 46 | PDW |
| MSB-57D | 6 | 34 | POC |
| MSB-60D | 6 | 26 | POC |
| MSB-70D | 7 | 27 | PDW |
| MSB-85TA | 9 | 50 | PDW |
| MSB-86C | 10 | 131 | PDW |
| SRW-16A | 5 | 445 | PDW |

Another indicator of whether a well is capable of providing a representative sample is its ability (or inability) to produce water at a sufficient rate to collect a sample. Such wells may be finished in low permeability formations, or could have been incompletely developed. A list of wells which are in the groundwater monitoring program and for which sample collection personnel have had difficulty obtaining water in sufficient quantity to collect a a sample are listed below in Table 5. Typically, sample collection personnel purge these wells, then return at a later time to collect the samples. Only the wells that had to be revisited at least 20% of the time are listed in Table 5.

Table 5. Wells with a history of pumping dry (1988-1996)

| Well Name | No. of Sample events from 88-96 | No. of times no sample | No. of samples - wait for recovery | % of times no sample | % of times wait for recovery | Well Type |
|---|---|---|---|---|---|---|
| AMB-10A | 34 | 0 | 11 | 0 | 32 | PDW |
| AMB-13AR | 33 | 0 | 10 | 0 | 30 | PDW |
| AMB-14D | 9 | 0 | 2 | 0 | 22 | PDW |
| AMB-15D | 10 | 0 | 4 | 0 | 40 | PDW |
| MSB-1C | 45 | 0 | 13 | 0 | 29 | POC |
| MSB-1CC | 38 | 0 | 10 | 0 | 26 | POC |
| MSB-2B | 40 | 0 | 10 | 0 | 25 | POC |
| MSB-2C | 42 | 0 | 12 | 0 | 29 | POC |
| MSB-4C | 39 | 0 | 10 | 0 | 26 | POC |
| MSB-5C | 40 | 0 | 10 | 0 | 25 | POC |
| MSB-6C | 43 | 0 | 12 | 0 | 28 | POC |
| MSB-7B | 46 | 0 | 13 | 0 | 28 | POC |
| MSB-13CC | 45 | 0 | 12 | 0 | 27 | POC |
| MSB-13D | 43 | 0 | 12 | 0 | 28 | POC |
| MSB-55HC | 44 | 0 | 11 | 0 | 25 | PDW |
| MSB-59D | 39 | 0 | 10 | 0 | 26 | POC |
| MSB-60D | 40 | 0 | 10 | 0 | 25 | POC |
| MSB-62D | 44 | 0 | 12 | 0 | 27 | POC |
| MSB-63D | 42 | 0 | 11 | 0 | 26 | POC |
| MSB-82A | 47 | 2 | 15 | 4.3 | 32 | PDW |
| MSB-83D | 38 | 0 | 10 | 0 | 26 | PDW |
| MSB-85TA | 46 | 0 | 13 | 0 | 28 | PDW |
| MSB-87C | 17 | 0 | 5 | 0 | 29 | PDW |

A few wells in the A/M Area may have screens installed in positions that straddle confining units. Since sand packs are routinely emplaced in the well annular space surrounding the well screen, the effective screen zone is actually the zone for which a permeable filter pack material has been emplaced. Normally this extends from a few feet below the screen zone to several feet above the screen zone. If filter pack zones extend across confining units, samples collected from that well will reflect groundwater chemistry in both aquifers. Furthermore, the well may act as a vertical conduit for migration of groundwater from one aquifer to another and water levels recorded in the well will not be reflective of the potentiometric level in either aquifer.

A query was formulated to extract information from the well construction and annular materials databases. An Arc/Info AML was developed to compare these elevations to the hydrostratigraphic elevations at the location for each well. Subsequent processing with GIS was initiated to create tables of wells in the A/M Areas which apparently breach confining units. It should be noted that the well annular material database is still in the developmental stage and that not all wells at SRS are included in the database at this time. Also, during the process of extracting information from the database it became apparent that there are still problems with some of the data in the database. EMS is currently working to resolve these problems. Finally, this analysis ignored well annular materials where there were three or more permeable materials in the well annulus. The great majority of wells have either one or two different permeable materials surrounding the screen zone, however it is likely that a few wells with more than two materials were not identified in this investigation.

Tables C and D in the Appendix provides well information relating to well annular material and screen zone elevations for a partial list of wells in the A/M Area. The information was used to determine if either the annular material or screen zone of each well extended entirely across (or breached) either the Green Clay Confining Unit or the Upper Clay of the Crouch Branch Confining Unit. This information is presented with the caveat that the determination of a "breach" is dependent not only upon the accuracy of the data contained in the well construction and well annular material databases, but also on the accuracy of the hydrogeologic model used in the study. Wells that apparently breach a confining unit and are in the groundwater monitoring program are listed below in Table 6.

Table 6 Wells that apparently breach a confining unit

| WELL | CONFINING UNIT APPARENTLY BREACHED | WELL TYPE |
|---|---|---|
| | | |
| ABP-8C | GC | PZ |
| ABW-1 | GC | PZ |
| AMB-12D | GC | PDW |
| AMB-4D | GC | PDW |
| ARP-2 | GC | PZ |
| ASB-8A | UCCRBRCU | PZ |
| MSB-29D | GC | BGW |
| MSB-30B | UCCRBRCU | PDW |
| MSB-35A | UCCRBRCU | PZ |
| MSB-39C | GC | PDW |
| MSB-40D | GC | PZ |
| MSB-45A | UCCRBRCU | PDW |
| MSB-5C | GC | POC |
| MSB-69D | GC | PDW |
| MSB-77B | UCCRBRCU | PDW |
| MSB-82D | GC | PDW |
| MSB-83D | GC | PDW |
| SRW-3A | GC | PZ |

Note: GC - Green Clay; UCCRBRCU - Upper Clay of the Crouch Branch Confining Unit
PZ - Piezometer, PDW - Plume Definition Well, BGW - Background Well
POC - Point of Compliance Well

### 2.3.2 Strategic location

The specific location of a well and its distance from the source area is vital to its ability to detect any contaminants that might be emanating from a disposal facility in the subsurface. Wells should be located in the down gradient direction, in both the horizontal and vertical directions in order to intercept and sample water that is moving along the groundwater flow paths that originate at the disposal facility that is being monitored. In particular, certain wells that are located at some distance may never intercept any contaminants because they only penetrate a few feet into the saturated zone and monitor relatively clean water originating as recharge.

Differences in individual contaminant solubility and ionic charges result in some contaminants being more mobile than others. Positively charged elements or molecules tend to adsorb to the

surfaces of clay minerals in the subsurface thus retarding their movement. For those wells located at a relatively great distance from the source area, there is little chance of detecting the relatively immobile contaminants. Analyses for these contaminants are often conducted routinely on samples collected from relatively distant wells, some of which penetrate only the top few feet of the water table aquifer.

To address the issue of strategic location for wells that are currently a part of the groundwater monitoring network the following approach was utilized. A map of the A/M Area having all of the monitoring wells finished in the M-Area Aquifer posted, along with TCE concentrations at each well, was examined. The approximate boundary of the TCE plume was noted with respect to the location of certain wells. A group of wells outside the plume extent was selected and a determination made if a water table well existed at that location. Next, these wells were evaluated in terms of average TCE concentration and for any flag 1 violations since 1992. The wells that were located at a relatively great distance from the source area and are finished in the shallowest part of the aquifer are listed below in Table 7.

Table 7. Wells that are not optimally located to detect possible contaminants

| WELL | WELL TYPE |
|---|---|
| | |
| MSB-87C | PDW |
| MSB-48D | PDW |
| MSB-54D | PDW |
| MSB-55D | PDW |
| MSB-49D | PDW |
| MSB-70D | PDW |
| MSB-32C | PDW |

Note: PDW- Plume Definition Well

# 3.0 RECOMMENDATIONS

The analyses undertaken in this investigation were directed toward identification of wells which might fall into the following categories: wells that may not be providing reliable data but continue to be routinely sampled and wells that may be inappropriately located but continue to be routinely sampled. Specific recommendations are provided with this in mind while other recommendations identify further work that should be undertaken, including GIS development and detailed evaluation of wells that may be breaching confining units.

## 3.1 Recommendations relating to well integrity

- Elevated pH and turbidity recommendations

Sixteen wells were identified in the analysis part of this report as repeatedly having elevated turbidity measurements. The range of average values from each well was from 26 to 573. EMS regards any value of ntu > 20 to be elevated. All of the wells are either PDW or POC wells and are actively monitored as part of the groundwater monitoring program in A/M Area according to the schedule identified in Table 1 in the text. The most likely cause for the elevated turbidity is incomplete development. All of these wells would probably benefit from additional well development but the wells with the highest turbidity would benefit the most. The use of a dispersing agent in the development process has been shown to significantly enhance the removal of clay material from the filter pack and formation material and would be of great benefit if re-development is conducted on these wells. A combination of established methods and newly available methods could be employed.

The database screening identified 30 wells in the A/M Area, all of which are actively monitored, as having chronically elevated pH values. The most likely cause is improper grout emplacement or curing. A proven methodology for remediating wells having grout contamination in the vicinity of the filter pack is not available. Since four wells having elevated pH (MSB-5C, -7C, -48C, and -85TA) also have elevated turbidity, these wells could be monitored to see if additional development work has any impact alleviating their pH problem.

- Screen zone analysis recommendations

The 18 wells listed in Table 6. have permeable annular materials that apparently breach confining units adjacent to those zones. More work is required to determine if this is actually the case. It is likely that some of these wells are finished at locations where the Green Clay confining unit and the Upper Clay of the Crouch Branch Confining Unit do not exist in the subsurface. Since the hydrogeologic model originated as layer coverage in a groundwater flow model, all layers have to be continuous across the domain. In areas where confining units pinch out hydraulic characteristics of aquifer are assigned to the layer. This may give a false hit on the screening that was done to identify wells that breach confining unit. It is recommended that careful follow up work be conducted to evaluate each well to determine if the sand pack does actually breach the confining unit. The detailed work should involve inspection of the borehole geophysical logs from each of the wells (or from the nearest cluster well neighbor having borehole geophysical logs) and examination of the well construction records.

Seven of the wells are not a part of the groundwater monitoring program for the A/M Area and therefore are not a concern in regard to acquisition of representative samples. However, these wells may be acting as conduits for vertical migration of water between aquifers and some estimate of this impact will still be needed if they are eventually found to actually breach confining units. If any of the other 11 wells are confirmed as breaching a confining unit careful consideration must be given to whether they should remain on the sample schedule.

## 3.2 Recommendations relating to well location

Table 7 identifies 7 wells as being situated at a location where they are not likely to monitor any contaminants in the subsurface, only 5 are wells that are actually monitored in the groundwater monitoring program. These wells are MSB-87C, -48D, -54D, -55D, -49D -70D, and -32C. These wells all penetrate the upper part of the saturated zone and do not have elevated TCE analyses. Locally introduced recharge at the water table is thought to cause these wells to intercept clean water, whereas natural flow paths originating at the disposal facilities are thought to carry dissolved contaminants deeper into the groundwater flow system. Deeper wells located at the same clusters, however, may intercept any dissolved contaminants. It is recommended that these wells be considered for dropping the MCS analytes that are analyzed for during the third quarter every year. These analytes are relatively immobile and are not likely to have migrated far from the source areas. It is also recommended that some consideration be given to eliminating the GPWS analyses that are done or, at a minimum, reduce them to a once per year event. Currently, GPWS analyses are conducted twice, annually. If GPWS analyses are not eliminated, the sample suite should be reduced to eliminating the non-organic analytes of that suite.

Another recently completed study, conducted under the direction of Lynn Ehrke, ER, has concluded that extensive modifications to the sample schedule of PDW wells should be made. The recommendation from that study is to analyze samples from those wells only for TCE and PCE and to eliminate the analyses for other GWPS and MCS analytes. That conclusion is supported by this investigation, although the recommendation is made for all PDW wells and not simply the remotely located PDW wells. Many PDW wells experience elevated levels of TCE/PCE but not for other contaminants. Despite this pattern, the wells are repeatedly sampled and analyzed for the MCS and GPWS analyte suites, most of which are relatively immobile species and have never been detected at locations away from the disposal sites.

## 3.3 Recommendations for further GIS development

GIS is a very powerful tool for accessing data in relational databases such as Oracle, displaying the data, and performing complex analyses. In this study, SQL was used to retrieve GIMS data and bring the data directly into ArcView for display and analysis. Constructing the SQL strings to obtain the desired GIMS data required considerable time and could be greatly simplified to allow individuals not familiar with SQL to query the GIMS geochemical database and obtain data for their own GIS analyses using ArcView.

ArcView access to GIMS could be automated to allow users to select GIMS data by well name, quarter, analyte, or geographic location using a menu driven graphical user interface. ArcView could then be used to analyze the data to geographically locate wells exceeding specified analyte concentrations, etc.

ArcView is a Windows based desktop GIS application that is quite easy to use and can be loaded onto any Macintosh or IBM compatible PC. ArcView can be used to display GIMS data on maps with user selected features such as roads, streams, buildings, soil type, aerial photos, etc. and can also be used to perform analyses of the GIMS data. This analysis capability includes making contaminant contour maps, trend plots of analyte and field data results over time, selecting wells according to user defined criteria (e.g. selecting all wells in the M-Area aquifer exceeding flag 1 concentrations for TCE and PCE for the fourth quarter of 1994), as well as many other powerful functions.

Automating an ArcView linking capability to GIMS would provide environmental scientist and engineers with a very powerful display and analysis tool. It is recommended that funding be allocated to provide this automated link in FY97.

## 4.0 REFERENCES

Gordon, D.E., Johnson, W.F., Kaback, D.S., Looney, B.B, Nichols, R.L., Shedrow, C.B., 1987, Characterization Recommendations for Waste Sites at the Savannah River Plant, DPST-87-667, E.I. du Pont de Nemours & Co. Savannah River Laboratory, Aiken, SC.

# 5.0 APPENDIX

Table A. Master list of wells in the A/M Area

# TABLE A MASTER LIST OF WELLS IN A/M AREA

| WELL | TYPE | SRS N | SRS E | UTM N | UTM E | SZ T | SZ B | GRND | TOC | TOS | EWD | C DIA | CASING | PUMP | INSTALL | ABANDON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ABP 1A | Mw,Pl | 97501.6 | 44425.6 | 3686136.21 | 431186.55 | 202.9 | 172.9 | 357.9 | 359.9 | 360 | 187 | 4 | PVC | S | 8/15/84 | |
| ABP 1DD | Pz | 97511.4 | 44433.6 | 3686139.53 | 431187.5 | 227.2 | 207.2 | 357.9 | 360.1 | | 152.9 | 2 | PVC | | 6/30/89 | |
| ABP 2A | Mw,Pl | 97764.3 | 44118.8 | 3686145.94 | 431064.67 | 211.1 | 181.1 | 370.1 | 371.9 | 372 | 190.8 | 4 | PVC | S | 8/10/84 | |
| ABP 2DD | Pz | 97753.7 | 44126.7 | 3686144.81 | 431068.38 | 222.3 | 202.2 | 368.3 | 370.6 | | 168.4 | 2 | PVC | | 6/23/89 | |
| ABP 3 | Mw,Pl | 97794.1 | 44509.3 | 3686222.91 | 431155.51 | 236.9 | 206.9 | 351.9 | 353.7 | 353.8 | 146.8 | 4 | PVC | S | 8/4/83 | |
| ABP 3C | Mw,Pl | 97778.2 | 44506.3 | 3686218.46 | 431157.34 | 165.3 | 160.3 | 352.3 | 354.5 | 354.8 | 194.2 | 4 | PVC | S | 7/10/89 | |
| ABP 4 | Mw,Pl | 97489.7 | 44096 | 3686073.57 | 431107.91 | 212.5 | 182.5 | 362.5 | 364.3 | 364.5 | 181.8 | 4 | PVC | S | 6/21/84 | |
| ABP 4DD | Pz | 97495.5 | 44101.3 | 3686075.79 | 431107.92 | 223.2 | 203.2 | 362.7 | 365 | | 161.8 | 2 | PVC | | 6/23/89 | |
| ABP 6D | Pz | 97889.7 | 44101.4 | 3686172.74 | 431037.86 | 222.4 | 202.4 | 363 | 365.3 | | 162.9 | 2 | PVC | | 7/5/89 | |
| ABP 7D | Pz | 97449.7 | 43930.1 | 3686033.9 | 431074.11 | 225.2 | 205.2 | 361.9 | 364.2 | | 159 | 2 | PVC | | 6/30/89 | |
| ABP 8C | Mw,Pl | 97855.6 | 43968.7 | 3686140.79 | 431010.63 | 190.6 | 185.5 | 369.8 | 372.1 | 372.3 | 186.6 | 4 | PVC | S | 7/20/89 | |
| ABP 8D | Mw,Pl | 97854.9 | 43984.1 | 3686144.08 | 431014.38 | 228.2 | 208.1 | 368.8 | 370.9 | 371.1 | 162.8 | 4 | PVC | S | 7/20/89 | |
| ABW 1 | Mw,Pl | 105939.9 | 55016.4 | 3690114.34 | 432283.03 | 215.1 | 185.1 | 323.1 | 324.8 | 325 | 139.7 | 4 | PVC | S | 6/2/83 | |
| AC 1A | Mw,Pl | 105865 | 42238.8 | 3687803.97 | 429148.8 | 145.7 | 140.7 | 260.7 | 262.1 | 262.4 | 121.4 | 4 | Steel | S | 8/3/81 | |
| AC 1B | Mw,Pl | 105862.8 | 42250.5 | 3687805.06 | 429151.6 | 202.1 | 197.1 | 261.1 | 262 | 262.2 | 64.9 | 4 | Steel | S | 7/28/81 | |
| AC 2A | Mw,Pl | 105636.4 | 46428.6 | 3688499.13 | 430221.4 | 146 | 141 | 342.7 | 344.7 | 344.9 | 203.7 | 4 | PVC | S | 9/9/81 | |
| AC 2B | Mw,Pl | 105648.7 | 46444.5 | 3688504.66 | 430223.3 | 236.4 | 216.4 | 342.8 | 344.8 | 345 | 128.4 | 4 | PVC | S | 8/12/81 | |
| AC 3A | Mw,Pl | 100989.1 | 42119.8 | 3686581.57 | 429993.51 | 153.6 | 148.6 | 300.4 | 302.3 | 302.5 | 153.7 | 4 | PVC | S | 9/15/81 | |
| AC 3B | Mw,Pl | 100996.5 | 42113.6 | 3686582.7 | 429990.72 | 213.4 | 193.4 | 300.1 | 302.5 | 302.8 | 109.1 | 4 | PVC | S | 8/21/81 | |
| ACB 1A | Mw,Pl | 102622.9 | 51369.9 | 3688642.97 | 431979.59 | 247.6 | 217.6 | 357.6 | 359.6 | 359.7 | 142 | 4 | PVC | S | 1/11/84 | |
| ACB 2A | Mw,Pl | 102367.4 | 51561.3 | 3688614.6 | 432072.46 | 237.8 | 207.8 | 347.8 | 349.8 | 350 | 142 | 4 | PVC | S | 1/30/84 | |
| ACB 3A | Mw,Pl | 102154.3 | 51313.3 | 3688517.2 | 432049.44 | 236.3 | 206.3 | 346.3 | 348.3 | 349.5 | 142 | 4 | PVC | S | 1/25/84 | |
| ACB 4A | Mw,Pl | 102343.9 | 51116.2 | 3688528.87 | 431966.69 | 241.7 | 211.7 | 356.7 | 359.1 | | 147.4 | 4 | PVC | S | 2/2/84 | |
| AMB 4A | Mw,Pl | 104131.6 | 51469.8 | 3689032.75 | 431733.83 | 126.3 | 121.3 | 378.3 | 380.5 | 380.7 | 259.2 | 4 | PVC | S | 8/30/91 | |
| AMB 4B | Mw,Pl | 104145.6 | 51482.7 | 3689038.29 | 431733.87 | 157.3 | 152.3 | 378.3 | 380.4 | 380.6 | 228.1 | 4 | PVC | S | 9/9/91 | |
| AMB 4D | Mw,Pl | 104154.7 | 51489 | 3689041.62 | 431733.9 | 233.4 | 213.4 | 378.4 | 380.3 | | 166.9 | 4 | PVC | S | 9/9/91 | |
| AMB 5 | Mw,Pl | 104083.4 | 51467.2 | 3689020.5 | 431741.19 | 242.1 | 222.1 | 377.6 | 379.6 | 379.8 | 157.5 | 4 | PVC | S | 9/14/88 | |
| AMB 6 | Mw,Pl | 104034.1 | 51466 | 3689007.14 | 431749.47 | 242.6 | 222.6 | 375.1 | 377.2 | 377.4 | 154.6 | 4 | PVC | S | 9/15/88 | |
| AMB 7 | Mw,Pl | 103920 | 51624.9 | 3689007.82 | 431809.97 | 242.1 | 222.1 | 368.1 | 369.9 | 370.1 | 147.8 | 4 | PVC | S | 9/6/88 | |
| AMB 7A | Mw,Pl | 103987.1 | 51591 | 3689019.05 | 431789.58 | 125.6 | 115.6 | 371.6 | 373.6 | 373.8 | 258 | 4 | PVC | S | 7/26/91 | |
| AMB 7B | Mw,Pl | 103972 | 51590.3 | 3689014.61 | 431791.41 | 162.9 | 152.9 | 370.9 | 373 | 373.1 | 220.1 | 4 | PVC | S | 7/26/91 | |
| AMB 8D | Mw,Pl | 103874.7 | 51400.5 | 3688957.16 | 431762.15 | 240.8 | 220.8 | 367.8 | 369.6 | 369.9 | 148.8 | 4 | PVC | S | 10/31/89 | |
| AMB 9D | Mw,Pl | 103585.2 | 51263 | 3688860.57 | 431780.09 | 239.7 | 219.7 | 365.7 | 367.9 | 368.1 | 148.2 | 4 | PVC | S | 10/25/89 | |
| AMB 10A | Mw,Pl | 103326.4 | 51410 | 3688823.41 | 431862.66 | 111.4 | 106.4 | 364.4 | 366.5 | 366.6 | 260.1 | 4 | PVC | S | 8/26/91 | |
| AMB 10B | Mw,Pl | 103337.3 | 51418.3 | 3688827.84 | 431862.69 | 154.3 | 149.3 | 364.3 | 366.4 | 366.6 | 217.1 | 4 | PVC | S | 9/3/91 | |
| AMB 10D | Mw,Pl | 103293.4 | 51456 | 3688823.28 | 431880.34 | 239.4 | 219.4 | 363.4 | 365.5 | 365.8 | 146.1 | 4 | PVC | S | 11/3/89 | |
| AMB 10DD | Mw,Pl | 103278.7 | 51456 | 3688819.94 | 431883.11 | 358.6 | 338.6 | 363.6 | 365.4 | 365.7 | 26.8 | 4 | PVC | S | 6/7/89 | |
| AMB 11B | Mw,Pl | 103154.2 | 51919.5 | 3688872.2 | 432019.35 | 184.5 | 174.5 | 362.5 | 364.6 | 364.7 | 190.1 | 4 | PVC | S | 8/13/91 | |
| AMB 11D | Mw,Pl | 103132.3 | 51932.6 | 3688868.82 | 432026.77 | 240.5 | 220.5 | 362 | 364 | 364.3 | 143.5 | 4 | PVC | S | 6/13/89 | |
| AMB 12D | Mw,Pl | 103602.4 | 51901.6 | 3688979.23 | 431934.48 | 239.4 | 219.4 | 367.8 | 369.8 | 370.1 | 150.4 | 4 | PVC | S | 6/16/89 | |
| AMB 13AR | Mw,Pl | 103082 | 51396 | 3688761.03 | 431903.17 | 110.9 | 100.9 | 362.9 | 365.1 | 365.2 | 264.2 | 4 | PVC | S | 8/8/91 | |
| AMH 1 | Sp | 102654.7 | 48744.2 | 3688179.69 | 431326.68 | | | 361.3 | | | | 2.38 | EUE | | 1988 | |
| AMH 2 | Sp | 102708.8 | 48807.8 | 3688204.04 | 431332.44 | | | 363 | | | | 4.5 | Steel | | 1988 | |
| AMH 3 | Sp | 102670.5 | 48779.6 | 3688190.52 | 431332.25 | | | | 362.1 | | | 10 | HDPE | | 1991 | |
| AMH 4 | Sp | 102681.1 | 48784.6 | 3688193.96 | 431331.62 | | | | 362.4 | | | 10 | HDPE | | 1991 | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMH 5 | Sp | 102209.1 | 48604 | 3688045.33 | 431371.71 | | | | | | | 3.5 | FG | | 9/24/92 | |
| AMH 6 | Sp | 102125 | 48009 | 3687917.98 | 431240.22 | | | | 351.7 | 355.7 | | 3 | PVC | | 12/9/92 | |
| AMH 7 | Sp | 102045 | 48009 | 3687898.26 | 431254.6 | | | | 350.5 | 354.5 | | 3 | PVC | | 12/9/92 | |
| AOB 1 | Mw,Pl | 101910.7 | 50485.9 | 3688308.78 | 431888.82 | 248.5 | 218.5 | 338.5 | 341.1 | 341.2 | 122.6 | 4 | PVC | S | 5/27/83 | |
| AOB 2 | Mw,Pl | 102009.8 | 50724.7 | 3688376.12 | 431930.25 | 250.2 | 220.2 | 343.2 | 345.4 | 345.6 | 125.2 | 4 | PVC | S | 5/27/83 | |
| AOB 3 | Mw,Pl | 102164.4 | 50959.4 | 3688455.73 | 431960.59 | 243.9 | 223.9 | 350.6 | 352.6 | 352.8 | 128.7 | 4 | PVC | S | 4/21/89 | |
| ARP 1A | Mw,Pl | 99102.9 | 44317.4 | 3686510.97 | 430872.7 | 223 | 193 | 353 | 355.1 | 355.2 | 162.1 | 4 | PVC | S | 2/3/84 | |
| ARP 2 | Mw,Pl | 99119.8 | 44876.1 | 3686615.34 | 431007.49 | 220.3 | 190.3 | 335.3 | 337.3 | 337.5 | 147 | 4 | PVC | S | 12/22/83 | |
| ARP 3 | Mw,Pl | 98638.2 | 44903.7 | 3686501.59 | 431100.7 | 218.2 | 188.2 | 338.2 | 339.8 | 339.9 | 151.6 | 4 | PVC | S | 12/14/83 | |
| ARP 4 | Mw,Pl | 98567.7 | 44374.8 | 3686389.33 | 430983.54 | 227.8 | 197.8 | 346.8 | 348.4 | 348.6 | 150.6 | 4 | PVC | S | 6/25/84 | |
| ASB 1A | Mw,Pl | 105535 | 52614 | 3689583.57 | 431763.77 | 247.2 | 217.2 | 347.2 | 349.1 | 349.3 | 131.9 | 4 | PVC | S | 1/5/84 | |
| ASB 2AR | Mw,Pl | 105550.5 | 52881.7 | 3689635.24 | 431826.48 | 240.1 | 220.2 | 353.1 | 355.6 | 355.8 | 135.4 | 4 | PVC | S | 2/12/93 | |
| ASB 2CR | Mw,Pl | 105540.2 | 52862.7 | 3689629.72 | 431823.65 | 183.1 | 173.1 | 353.1 | 355.6 | 355.8 | 182.5 | 4 | PVC | S | 1/4/93 | |
| ASB 3AR | Mw,Pl | 105605.1 | 53115 | 3689690.34 | 431874.33 | 243.1 | 223.1 | 339.1 | 341.6 | 341.7 | 118.5 | 4 | PVC | S | 1/22/93 | |
| ASB 3CR | Mw,Pl | 105614.5 | 53130.4 | 3689695.87 | 431876.23 | 184 | 174 | 339 | 341.5 | 341.7 | 167.5 | 4 | PVC | S | 1/22/93 | |
| ASB 4 | Mw,Pl | 105935.7 | 53177.2 | 3689782.68 | 431830.31 | 256.1 | 226.1 | 333.1 | 335.6 | 335.9 | 109.5 | 4 | PVC | S | 8/20/81 | |
| ASB 5AR | Mw,Pl | 105900.5 | 52854.4 | 3689716.67 | 431757.26 | 243.8 | 223.8 | 344.5 | 347 | 347.1 | 123.2 | 4 | PVC | S | 2/1/93 | |
| ASB 5C | Mw,Pl | 105884.8 | 52837.8 | 3689710.02 | 431756.28 | 175.1 | 165.1 | 344.8 | 347.3 | 347.5 | 182.2 | 4 | PVC | S | 1/19/93 | |
| ASB 6A | Mw,Pl | 105716 | 52675.9 | 3689639.13 | 431746.48 | 248.2 | 218.2 | 348.2 | 350.2 | 350.4 | 132 | 4 | PVC | S | 2/20/84 | |
| ASB 6AA | Mw,Pl | 105727 | 52643.9 | 3689635.88 | 431736.22 | 82.8 | 78.1 | 351.8 | 354.2 | 354.4 | 276.1 | 4 | PVC | S | 12/9/88 | |
| ASB 6C | Mw,Pl | 105736.8 | 52655.9 | 3689640.3 | 431738.11 | 178.5 | 173.8 | 351.5 | 353.6 | 353.7 | 179.8 | 4 | PVC | S | 12/21/90 | |
| ASB 6TA | Mw,Pl | 105749.5 | 52671.3 | 3689646.94 | 431739.09 | 40 | 34.5 | 351 | 352.9 | 353.1 | 318.4 | 4 | PVC | S | 1/30/91 | |
| ASB 8 | Mw,Pl | 106381.6 | 53136.6 | 3689885.31 | 431740.76 | 226.6 | 206.6 | 346.6 | 349 | 349.1 | 142.4 | 4 | PVC | S | | |
| ASB 8A | Mw,Pl | 106369.3 | 53117.5 | 3689878.68 | 431737.93 | 83.5 | 77.9 | 347.2 | 349.3 | 349.5 | 271.4 | 4 | PVC | S | 3/26/85 | |
| ASB 8B | Mw,Pl | 106362.3 | 53109.6 | 3689876.46 | 431736.98 | 128.4 | 122.8 | 347.6 | 349.8 | 345 | 227 | 4 | PVC | S | 12/14/84 | |
| ASB 8C | Mw,Pl | 106354.4 | 53101 | 3689872.03 | 431736.95 | 188.3 | 182.7 | 347.6 | 349.7 | 349.9 | 167 | 4 | PVC | S | 12/18/84 | |
| ASB 8TA | Mw,Pl | 106375.8 | 53124.7 | 3689882 | 431738.88 | 24.6 | 19.4 | 347.3 | 349.6 | 349.8 | 330.2 | 4 | CS | S | 10/17/84 | |
| ASB 9 | Mw,Pl | 104589.2 | 54226.2 | 3689639.48 | 432329.96 | 236.4 | 216.4 | 306.4 | 309 | | 92.6 | 4 | PVC | S | | |
| ASB 9B | Mw,Pl | 104564.7 | 54215.3 | 3689631.7 | 432331.77 | 164.4 | 158.8 | 306.6 | 309 | 309.2 | 150.2 | 4 | PVC | S | 7/16/87 | |
| ASB 9C | Mw,Pl | 104568.1 | 54201.1 | 3689629.51 | 432328.03 | 182.9 | 178.2 | 307.9 | 309.9 | 310.2 | 131.7 | 4 | PVC | S | 2/16/89 | |
| ASB 10CR | Mw,Pl | 105655.4 | 52969.7 | 3689676.24 | 431829.56 | 181.7 | 171.7 | 346.7 | 349.2 | 349.4 | 177.5 | 4 | PVC | S | 2/1/93 | |
| MCB 2 | Mw,Pl | 97012.6 | 45129 | 3686141.01 | 431448.18 | 225.9 | 205.9 | 326.1 | 328.4 | 328.6 | 122.5 | 4 | PVC | S | 4/13/87 | |
| MCB 4 | Mw,Pl | 97532.5 | 44705.1 | 3686193.41 | 431250.26 | 229.6 | 208.6 | 348.2 | 350.4 | 350.6 | 141.8 | 4 | PVC | S | 4/2/87 | |
| MCB 5 | Mw,Pl | 97335.6 | 44863.9 | 3686174.04 | 431324.59 | 226.3 | 206.3 | 337.7 | 339.6 | 339.8 | 133.3 | 4 | PVC | S | 4/14/87 | |
| MCB 5C | Mw,Pl | 97315.1 | 44862.8 | 3686168.47 | 431328.28 | 161.2 | 156.2 | 337.2 | 339.1 | 339.3 | 182.9 | 4 | PVC | V | 7/10/89 | |
| MCB 6 | Mw,Pl | 97425.7 | 45214 | 3686258.91 | 431395.01 | 219.7 | 199.7 | 329.9 | 332.1 | 332.3 | 132.4 | 4 | PVC | S | 8/10/87 | |
| MCB 6C | Mw,Pl | 97413.1 | 45207.7 | 3686254.47 | 431395.91 | 170 | 165 | 330 | 332.1 | 332.3 | 167.1 | 4 | PVC | S | 6/21/89 | |
| MCB 7C | Mw,Pl | 97139.9 | 44870.6 | 3686126.1 | 431361.49 | 160.7 | 155.7 | 335.7 | 337.7 | 337.9 | 182 | 4 | PVC | S | 7/17/89 | |
| MCB 8D | Pz | 97180.6 | 44769.9 | 3686118.57 | 431329.79 | 225.7 | 205.7 | 337.4 | 340.7 | | 135 | 2 | PVC | | 7/7/89 | |
| MCB 9D | Pz | 97605.8 | 44858.8 | 3686238.7 | 431274.78 | 226.2 | 206.2 | 339.1 | 342.9 | | 136.7 | 2 | PVC | | 7/7/89 | |
| MHM 1 | Sp | 102736.8 | 48878.8 | 3688223.91 | 431345.61 | | | 365.3 | 367.6 | | | 5 | Steel | | 4/26/90 | |
| MHM 2 | Sp | 102815.6 | 48922 | 3688251.65 | 431342.08 | | | 369.8 | 372.1 | | | 5 | Steel | | 5/3/90 | |
| MHM 3 | Sp | 102744.5 | 48890 | 3688228.34 | 431346.57 | | | 365.6 | 368.2 | | | 4 | PVC/CS | | 5/3/90 | |
| MHM 4 | Sp | 102778 | 48876.6 | 3688233.95 | 431337.31 | | | 368.3 | 370.3 | | | 4 | PVC | | 5/11/90 | |
| MHM 5 | Sp | 102811.3 | 48863.8 | 3688239.55 | 431328.04 | | | 366.2 | 368.5 | | | 4 | PVC/CS | | 5/11/90 | |
| MHM 6 | Sp | 102763.9 | 48861.9 | 3688227.3 | 431336.33 | | | 366.8 | | | | 1 | PVC | | 5/23/90 | |
| MHM 7 | Sp | 102766.7 | 48869.5 | 3688229.51 | 431337.27 | | | 367.6 | | | | 1 | PVC | | 5/23/90 | |
| MHM 8 | Sp | 102784.7 | 48856.1 | 3688231.77 | 431330.77 | | | 366.6 | | | | 1 | PVC | | 5/25/90 | |
| MHM 9 | Sp | 102756.7 | 48915.9 | 3688236.07 | 431350.35 | | | 366.3 | 368 | | | 1.5 | PVC | | 12/13/91 | |
| MHM 10 | Sp | 102777 | 48916.5 | 3688240.52 | 431347.59 | | | 367.3 | 368.3 | | | 1 | PVC | | 12/13/91 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MHM 11A | Sp | 102798.7 | 48916.4 | 3688246.1 | 431342.98 | | | 369 | 370.5 | | | 1 | PVC | | 12/17/91 |
| MHM 11B | Sp | 102796.4 | 48912.6 | 3688244.99 | 431342.97 | | | 368.8 | 370.8 | | | 1 | PVC | | 12/17/91 |
| MHM 12 | Sp | 102789.2 | 48868.8 | 3688235.08 | 431333.59 | | | 367.8 | 370.2 | | | 1 | PVC | | 12/13/91 |
| MHM 13 | Sp | 102797.6 | 48944.8 | 3688250.48 | 431350.45 | | | 369.7 | 372.9 | | | 2 | PVC | | 9/30/91 |
| MHM 14 | Sp | 102835 | 48916.1 | 3688255.02 | 431336.52 | | | 368.5 | 371.6 | | | 2 | PVC | | 10/1/91 |
| MHM 15 | Sp | 102828.3 | 48964.7 | 3688261.58 | 431349.6 | | | 368.8 | 372.1 | | | 2 | PVC | | 9/24/91 |
| MHM 16 | Sp | 102865.5 | 48948.5 | 3688268.3 | 431339.41 | | | 370 | 373.2 | | | 2 | PVC | | 9/24/91 |
| MHM 17 | Sp | 102909.6 | 48930.3 | 3688276.15 | 431327.37 | | | 368.2 | 371.6 | | | 2 | PVC | | 9/25/91 |
| MHM 19 | Sp | 102521.8 | 48665.9 | 3688133.1 | 431331.01 | | | 360 | 362.1 | | | 2.25 | Al | | 8/6/92 |
| MHM 20 | Sp | 102821.9 | 48942.9 | 3688256.06 | 431345.84 | | | 369.1 | 371.2 | | | 2 | Al | | 6/19/92 |
| MHM 22 | Sp | 102745.9 | 48831.9 | 3688218.46 | 431331.61 | | | 364.5 | 366.3 | | | 1.25 | PVC | | 3/29/93 |
| MHM 23 | Sp | 102728.5 | 48843.8 | 3688216.2 | 431338.11 | | | 363.6 | 364.9 | | | 1 | PVC | | 3/29/93 |
| MHM 24 | Sp | 102719.7 | 48851 | 3688215.07 | 431341.83 | | | 363.2 | 363.9 | | | 1 | PVC | | 3/29/93 |
| MHT 1C | Sp | 102706.8 | 48765.6 | 3688196.35 | 431323.08 | 209.7 | 204.7 | 362.7 | 364.9 | 365.1 | 160.2 | 4 | PVC | | 6/7/90 |
| MHT 1D | Sp | 102697.3 | 48760.2 | 3688193.02 | 431323.05 | 238 | 217.9 | 362.5 | 364.4 | | 146.5 | 4 | PVC | | 6/11/90 |
| MHT 2C | Sp | 102747.1 | 48780.3 | 3688208.57 | 431319.44 | 212.1 | 207.1 | 364.1 | 366.2 | 366.4 | 159.1 | 4 | PVC | | 4/6/90 |
| MHT 2D | Sp | 102756.6 | 48784.2 | 3688211.9 | 431318.53 | 240.7 | 220.1 | 364.5 | 366.5 | 366.6 | 146.4 | 4 | PVC | | 4/10/90 |
| MHT 3C | Sp | 102704.3 | 48861.1 | 3688212.81 | 431346.46 | 209.6 | 204.6 | 362.6 | 364.8 | 365 | 160.2 | 4 | PVC | | 4/23/90 |
| MHT 3D | Sp | 102694.6 | 48856.8 | 3688209.48 | 431347.37 | 237.1 | 217.1 | 362.1 | 364.3 | 364.6 | 147.2 | 4 | PVC | | 4/18/90 |
| MHT 4C | Sp | 102778.9 | 48863.5 | 3688231.75 | 431333.57 | 213.4 | 208.4 | 367.4 | 369.5 | 369.7 | 161.1 | 4 | PVC | | 4/12/90 |
| MHT 4D | Sp | 102772.1 | 48857.1 | 3688228.43 | 431333.54 | 241.8 | 221.8 | 366.8 | 368.9 | | 147.1 | 4 | PVC | | 5/21/90 |
| MHT 5C | Sp | 102725.1 | 48905.9 | 3688226.07 | 431354 | 210.1 | 205.1 | 364.1 | 366.2 | 366.4 | 161.1 | 4 | PVC | | 5/29/90 |
| MHT 5D | Sp | 102721.7 | 48893.5 | 3688222.76 | 431351.19 | 240.4 | 220.3 | 363.9 | 366 | 366.2 | 145.7 | 4 | PVC | | 5/29/90 |
| MHT 6C | Sp | 102810.8 | 48900 | 3688246.14 | 431337.39 | 212.6 | 207.6 | 369.6 | 371.7 | 371.9 | 164.1 | 4 | PVC | | 4/26/90 |
| MHT 6D | Sp | 102808.2 | 48891 | 3688243.94 | 431335.51 | 244.4 | 224.4 | 369.4 | 371.3 | | 146.9 | 4 | PVC | | 5/18/90 |
| MHT 7C | Sp | 102788.9 | 48977.5 | 3688254.85 | 431359.79 | 212 | 207 | 368 | 370 | 370.2 | 163 | 4 | PVC | | 6/21/90 |
| MHT 7D | Sp | 102786.8 | 48967.3 | 3688252.65 | 431357.91 | 239.9 | 219.9 | 367.9 | 370 | | 150.1 | 4 | PVC | | 6/26/90 |
| MHT 8C | Sp | 102880.7 | 48970.2 | 3688276.04 | 431342.26 | 212.3 | 207.3 | 369.3 | 371.5 | 371.7 | 164.2 | 4 | PVC | | 6/5/90 |
| MHT 8D | Sp | 102875.8 | 48960.7 | 3688272.73 | 431340.37 | 240.5 | 220.5 | 369.5 | 371.7 | | 151.2 | 4 | PVC | | 6/5/90 |
| MHT 9B | Sp | 102814.3 | 49031.8 | 3688270.31 | 431369.21 | 195.8 | 190.8 | 367.3 | 369.3 | 369.5 | 178.5 | 4 | PVC | | 6/28/91 |
| MHT 9C | Sp | 102814.4 | 49015.6 | 3688268.12 | 431364.54 | 214.7 | 209.7 | 367.7 | 369.6 | 369.8 | 159.9 | 4 | PVC | | 6/15/90 |
| MHT 9D | Sp | 102805.1 | 49018.1 | 3688265.89 | 431367.31 | 242.6 | 222.6 | 367.6 | 369.8 | 369.9 | 147.2 | 4 | PVC | | 3/29/90 |
| MHT 10B | Sp | 102894.9 | 49026 | 3688289.27 | 431353.52 | 197.7 | 192.7 | 368.7 | 370.8 | | 178.1 | 4 | PVC | | 6/25/91 |
| MHT 10C | Sp | 102892.3 | 49011.6 | 3688285.97 | 431349.77 | 211.9 | 206.9 | 368.9 | 370.7 | 370.9 | 163.8 | 4 | PVC | | 6/19/90 |
| MHT 10D | Sp | 102890.1 | 49001.2 | 3688283.76 | 431347.9 | 240 | 219.9 | 369 | 371 | | 151.1 | 4 | PVC | | 6/20/90 |
| MHT 11C | Sp | 102854 | 48846.1 | 3688247.4 | 431315.99 | 214.2 | 209.2 | 366.2 | 368.3 | 368.4 | 159.1 | 4 | PVC | | 6/4/91 |
| MHT 12C | Sp | 102844.8 | 49061.7 | 3688283.6 | 431371.16 | 214.4 | 209.4 | 367.9 | 370.2 | 370.4 | 160.8 | 4 | PVC | | 6/13/91 |
| MHT 13D | Sp | 102800.3 | 48877.1 | 3688239.52 | 431333.62 | 231.6 | 211.6 | 368.4 | 370.6 | | 159 | 4 | PVC | | 7/3/91 |
| MHT 14D | Sp | 102785.1 | 48885.7 | 3688237.26 | 431338.26 | 231.6 | 211.6 | 368.6 | 371 | | 159.4 | 4 | PVC | | 7/9/91 |
| MHT 15C | Sp | 102520.7 | 48741.9 | 3688146.26 | 431350.65 | 204.5 | 199.7 | 357.7 | 359.5 | 359.6 | 159.8 | 4 | PVC | | 5/4/92 |
| MHT 16C | Sp | 102430.9 | 48672.8 | 3688111.9 | 431349.47 | 205.5 | 200.7 | 359.5 | 361.6 | 361.8 | 160.9 | 4 | PVC | | 5/20/92 |
| MHT 17C | Sp | 102394.6 | 48706.9 | 3688108.47 | 431364.34 | 205.7 | 200.8 | 357.7 | 359.7 | 359.9 | 158.9 | 4 | PVC | | 6/18/92 |
| MHT 18C | Sp | 102486.1 | 48650.9 | 3688121.99 | 431333.72 | 205.3 | 200.5 | 360.3 | 362.2 | 362.4 | 161.7 | 4 | PVC | | 6/4/92 |
| MHT 19C | Sp | 102502.7 | 48699.1 | 3688134.12 | 431343.11 | 205.9 | 201.1 | 358.9 | 360.9 | 361.1 | 159.8 | 4 | PVC | | 5/12/92 |
| MHT 20C | Sp | 102589.3 | 48710.8 | 3688157.49 | 431330.25 | 206.5 | 201.6 | 360.3 | 362.4 | 362.6 | 160.8 | 4 | PVC | | 6/19/92 |
| MHV 1A | Sp | 102749.3 | 48842 | 3688220.67 | 431333.49 | 270.6 | 265.6 | 365.6 | 367.6 | | 102 | 1 | PVC | | 5/9/90 |
| MHV 1B | Sp | 102749.3 | 48842 | 3688220.67 | 431333.49 | 295.6 | 290.6 | 365.6 | 367.6 | | 77 | 1 | PVC | | 5/10/90 |
| MHV 1C | Sp | 102749.3 | 48842 | 3688220.67 | 431333.49 | 321.6 | 315.6 | 365.6 | 367.6 | | 52 | 1 | PVC | | 5/11/90 |
| MHV 2A | Sp | 102755.9 | 48903.2 | 3688232.76 | 431347.53 | 271.4 | 266.4 | 366.4 | 368.2 | | 101.8 | 1 | PVC | | 5/29/90 |
| MHV 2B | Sp | 102755.9 | 48903.2 | 3688232.76 | 431347.53 | 296.4 | 291.4 | 366.4 | 368.2 | | 76.8 | 1 | PVC | | 5/30/90 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MHV 2C | Sp | 102755.9 | 48903.2 | 3688232.76 | 431347.53 | 322.4 | 317.4 | 366.4 | 368.2 | | 50.8 | 1 | PVC | | 5/31/90 |
| MHV 3A | Sp | 102774.7 | 48874.1 | 3688232.84 | 431337.3 | 273.2 | 268.2 | 368.2 | 370.3 | | 102.1 | 1 | PVC | | 5/14/90 |
| MHV 3B | Sp | 102774.7 | 48874.1 | 3688232.84 | 431337.3 | 298.8 | 293.8 | 368.2 | 370.3 | | 76.5 | 1 | PVC | | 5/15/90 |
| MHV 3C | Sp | 102774.7 | 48874.1 | 3688232.84 | 431337.3 | 323.2 | 318.2 | 368.2 | 370.3 | | 52.1 | 1 | PVC | | 5/16/90 |
| MHV 4A | Sp | 102841.7 | 48842.5 | 3688242.95 | 431317.82 | 272.1 | 267.1 | 366.1 | 368.6 | | 101.5 | 1 | PVC | | 6/13/90 |
| MHV 4B | Sp | 102841.7 | 48842.5 | 3688242.95 | 431317.82 | 296.1 | 291.1 | 366.1 | 368.5 | | 77.4 | 1 | PVC | | 6/15/90 |
| MHV 4C | Sp | 102841.7 | 48842.5 | 3688242.95 | 431317.82 | 323.6 | 318.6 | 366.1 | 368.7 | | 50.1 | 1 | PVC | | 6/18/90 |
| MHV 5A | Sp | 102878.8 | 48917.5 | 3688266.16 | 431329.16 | 284.2 | 279.2 | 369.2 | 371.6 | | 92.4 | 1 | PVC | | 6/6/90 |
| MHV 5B | Sp | 102878.8 | 48917.5 | 3688266.16 | 431329.16 | 301.2 | 296.2 | 369.2 | 371.5 | | 75.3 | 1 | PVC | | 6/7/90 |
| MHV 5C | Sp | 102878.8 | 48917.5 | 3688266.16 | 431329.16 | 324.2 | 319.2 | 369.2 | 371.6 | | 52.4 | 1 | PVC | | 6/8/90 |
| MHV 6 | Sp | 102780.1 | 48891.5 | 3688237.25 | 431340.12 | 358.8 | 253.8 | 368.1 | 368.4 | | 114.6 | 4 | PVC | | 6/25/91 |
| MHV 7 | Sp | 102811.5 | 48878.1 | 3688242.85 | 431331.78 | 358.2 | 253.2 | 368.2 | 370.3 | | 117.1 | 4 | PVC | | 6/21/91 |
| MHV 8 | Sp | 102610.3 | 48846.3 | 3688187.22 | 431360.24 | 323.4 | 321.1 | 357.7 | 358.6 | | 117.4 | 4 | PVC | | 4/10/92 |
| MHV 9 | Sp | 102830.1 | 49046.7 | 3688276.95 | 431370.18 | 343.5 | 341.2 | 367.7 | 369.3 | | 123.6 | 4 | PVC | | 4/16/92 |
| MHV 10 | Sp | 102778.6 | 48825.7 | 3688225.17 | 431324.21 | | | 364 | 366.9 | | | | | | 7/31/92 |
| MHV 11 | Sp | 102761.6 | 48842.6 | 3688224.01 | 431331.65 | | | 365.5 | 368.5 | | | | | | 7/30/92 |
| MHV 12 | Sp | 102743.2 | 48860.2 | 3688222.85 | 431339.09 | | | 365.5 | 368.5 | | | | | | 7/31/92 |
| MHV 20A | Sp | 102418.4 | 48658.3 | 3688106.37 | 431347.57 | 311.6 | 306.7 | 359.6 | 361.8 | | 55.1 | 1 | PVC | | 12/4/92 |
| MHV 20B | Sp | 102418.4 | 48658.3 | 3688106.37 | 431347.57 | 321.6 | 316.7 | 359.6 | 361.7 | | 45 | 1 | PVC | | 12/4/92 |
| MHV 20C | Sp | 102418.4 | 48658.3 | 3688106.37 | 431347.57 | 331.6 | 326.7 | 359.6 | 361.7 | | 35 | 1 | PVC | | 12/4/92 |
| MHV 20T | Sp | 102420.5 | 48649.8 | 3688105.27 | 431345.7 | | | | | | | 2 | PVC | | 1/22/93 |
| MHV 21A | Sp | 102433.6 | 48661.5 | 3688110.82 | 431345.74 | 311.7 | 306.8 | 359.7 | 362 | | 55.2 | 1 | PVC | | 12/4/92 |
| MHV 21B | Sp | 102433.6 | 48661.5 | 3688110.82 | 431345.74 | 321.7 | 316.8 | 359.7 | 362 | | 45.2 | 1 | PVC | | 12/4/92 |
| MHV 21C | Sp | 102433.6 | 48661.5 | 3688110.82 | 431345.74 | 331.7 | 326.8 | 359.7 | 362 | | 35.2 | 1 | PVC | | 12/4/92 |
| MHV 21T | Sp | 102435.5 | 48653.5 | 3688109.72 | 431343.87 | | | | | | | 2 | PVC | | 1/22/93 |
| MHV 22A | Sp | 102443.5 | 48663.8 | 3688113.04 | 431344.83 | 311.7 | 306.8 | 359.7 | 362 | | 55.2 | 1 | PVC | | 12/4/92 |
| MHV 22B | Sp | 102433.5 | 48663.8 | 3688110.81 | 431346.67 | 321.7 | 316.8 | 359.7 | 362 | | 45.2 | 1 | PVC | | 12/4/92 |
| MHV 22C | Sp | 102433.5 | 48663.8 | 3688110.81 | 431346.67 | 331.7 | 326.8 | 359.7 | 362 | | 35.2 | 1 | PVC | | 12/4/92 |
| MHV 22T | Sp | 102446 | 48657.1 | 3688113.05 | 431342.96 | | | | | | | 2 | PVC | | 1/22/93 |
| MHV 23A | Sp | 102458 | 48666.9 | 3688117.49 | 431343 | 311.7 | 306.8 | 359.7 | 361.9 | | 55.1 | 1 | PVC | | 12/4/92 |
| MHV 23B | Sp | 102458 | 48666.9 | 3688117.49 | 431343 | 321.7 | 316.8 | 359.7 | 361.9 | | 45.1 | 1 | PVC | | 12/4/92 |
| MHV 23C | Sp | 102458 | 48666.9 | 3688117.49 | 431343 | 331.7 | 326.8 | 359.7 | 362 | | 35.2 | 1 | PVC | | 12/4/92 |
| MHV 23T | Sp | 102460.8 | 48661 | 3688117.5 | 431341.13 | | | | | | | 2 | PVC | | 1/22/93 |
| MHV 24A | Sp | 102439.8 | 48636.9 | 3688107.54 | 431339.2 | 312.5 | 307.6 | 360.5 | 362.7 | | 55.1 | 1 | PVC | | 12/4/92 |
| MHV 24B | Sp | 102439.8 | 48636.9 | 3688107.54 | 431339.2 | 322.5 | 317.6 | 360.5 | 362.7 | | 45.1 | 1 | PVC | | 12/4/92 |
| MHV 24C | Sp | 102439.8 | 48636.9 | 3688107.54 | 431339.2 | 332.5 | 327.6 | 360.5 | 362.8 | | 35.2 | 1 | PVC | | 12/4/92 |
| MHV 24T | Sp | 102442.6 | 48640.9 | 3688108.65 | 431339.21 | | | | | | | 2 | PVC | | 1/22/93 |
| MHV 25A | Sp | 102428.9 | 48681 | 3688113 | 431351.34 | 311.1 | 306.2 | 359.1 | 361.5 | | 55.3 | 1 | PVC | | 12/4/92 |
| MHV 25B | Sp | 102428.9 | 48681 | 3688113 | 431351.34 | 321.1 | 316.2 | 359.1 | 361.5 | | 45.3 | 1 | PVC | | 12/4/92 |
| MHV 25C | Sp | 102428.9 | 48681 | 3688113 | 431351.34 | 331.1 | 326.2 | 359.1 | 361.5 | | 35.3 | 1 | PVC | | 12/4/92 |
| MHV 25T | Sp | 102424.5 | 48679 | 3688111.88 | 431352.26 | | | | | | | 2 | PVC | | 1/22/93 |
| MHV 26A | Sp | 102404.2 | 48655.3 | 3688101.92 | 431349.4 | 311.8 | 306.9 | 359.8 | 362.1 | | 55.2 | 1 | PVC | | 12/4/92 |
| MHV 26B | Sp | 102404.2 | 48655.3 | 3688101.92 | 431349.4 | 321.8 | 316.9 | 359.8 | 362.1 | | 45.2 | 1 | PVC | | 12/4/92 |
| MHV 26C | Sp | 102404.2 | 48655.3 | 3688101.92 | 431349.4 | 331.8 | 326.9 | 359.8 | 362.1 | | 35.2 | 1 | PVC | | 12/4/92 |
| MHV 26T | Sp | 102406.1 | 48647.9 | 3688100.83 | 431347.53 | | | | | | | 2 | PVC | | 1/22/93 |
| MHV 27A | Sp | 102374.3 | 48654.5 | 3688094.12 | 431354.93 | 311.9 | 307 | 359.9 | 362.1 | | 55.1 | 1 | PVC | | 12/4/92 |
| MHV 27B | Sp | 102374.3 | 48654.5 | 3688094.12 | 431354.93 | 321.9 | 317 | 359.9 | 362 | | 45 | 1 | PVC | | 12/4/92 |
| MHV 27C | Sp | 102374.3 | 48654.5 | 3688094.12 | 431354.93 | 331.9 | 327 | 359.9 | 362.1 | | 35.1 | 1 | PVC | | 12/4/92 |
| MHV 27T | Sp | 102380.4 | 48650.3 | 3688095.24 | 431353.08 | | | | | | | 2 | PVC | | 1/22/93 |
| MHV 28A | Sp | 102366.3 | 48647.6 | 3688091.9 | 431354.91 | 311.9 | 307 | 359.9 | 362.2 | | 55.2 | 1 | PVC | | 12/4/92 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MHV 28B | Sp | 102366.3 | 48647.6 | 3688091.9 | 431354.91 | 321.9 | 317 | 359.9 | 362.2 | | 45.2 | 1 | PVC | | 12/4/92 | |
| MHV 28C | Sp | 102366.3 | 48647.6 | 3688091.9 | 431354.91 | 331.9 | 327 | 359.9 | 362.2 | | 35.2 | 1 | PVC | | 12/4/92 | |
| MHV 28T | Sp | 102367 | 48642.9 | 3688090.81 | 431353.05 | | | | | | | 2 | PVC | | 1/22/93 | |
| MHV 29A | Sp | 102362.2 | 48661.8 | 3688092.99 | 431358.65 | 311.6 | 306.7 | 359.6 | 361.8 | | 55.1 | 1 | PVC | | 12/4/92 | |
| MHV 29B | Sp | 102362.2 | 48661.8 | 3688092.99 | 431358.65 | 321.6 | 316.7 | 359.6 | 361.8 | | 45.1 | 1 | PVC | | 12/4/92 | |
| MHV 29C | Sp | 102362.2 | 48661.8 | 3688092.99 | 431358.65 | 331.6 | 326.7 | 359.6 | 361.8 | | 35.1 | 1 | PVC | | 12/4/92 | |
| MHV 29T | Sp | 102363.8 | 48656.4 | 3688091.88 | 431357.71 | | | | | | | 2 | PVC | | 12/2/92 | |
| MSB 1A | Mw | 101833.7 | 48467.3 | 3687927.45 | 431405.87 | 253.2 | 223.2 | 352.2 | 353.2 | | 130 | 4 | PVC | | 1/1/83 | |
| MSB 1B | Mw,Pc | 101833 | 48483.2 | 3687930.75 | 431409.62 | 142.6 | 137.9 | 352.6 | 354.8 | 355 | 216.9 | 4 | PVC | S | 10/18/90 | |
| MSB 1C | Mw,Pc | 101832.5 | 48512.7 | 3687936.24 | 431417.11 | 166 | 161.3 | 353 | 355.1 | 355.3 | 193.8 | 4 | PVC | S | 8/7/90 | |
| MSB 1CC | Mw,Pc | 101832.5 | 48498 | 3687932.94 | 431413.36 | 192.5 | 187.8 | 352.9 | 354.9 | 355.1 | 167.1 | 4 | PVC | S | 10/26/90 | |
| MSB 1D | Mw,Pc | 101833.4 | 48452.2 | 3687925.26 | 431402.14 | 229.8 | 210.4 | 352.8 | 354.8 | 355 | 144.4 | 4 | PVC | S | 10/10/90 | |
| MSB 2A | Mw | 102028.3 | 48746.4 | 3688025.89 | 431440.08 | 252.6 | 222.6 | 351.2 | 352.6 | | 130 | 4 | PVC | | 1/1/83 | |
| MSB 2B | Mw,Pc | 101997.9 | 48748.2 | 3688019.2 | 431445.61 | 150.3 | 145.6 | 352.3 | 354.6 | 354.8 | 209 | 4 | PVC | S | 8/30/90 | |
| MSB 2C | Mw,Pc | 101982.5 | 48749.3 | 3688014.74 | 431448.38 | 194.7 | 190 | 352.7 | 354.7 | 354.9 | 164.7 | 4 | PVC | S | 8/30/90 | |
| MSB 2D | Mw,Pc | 102014 | 48755.7 | 3688023.64 | 431444.72 | 230.1 | 210.7 | 351.7 | 353.8 | 354 | 143.1 | 4 | PVC | S | 11/16/90 | |
| MSB 3A | Mw | 102189.9 | 48553.7 | 3688030.87 | 431362.86 | 259.5 | 229.5 | 358.1 | 359.5 | | 130 | 4 | PVC | B | 1/1/83 | |
| MSB 3B | Mw,Pc | 102191.7 | 48568 | 3688034.17 | 431366.61 | 145.8 | 141.1 | 358.8 | 361 | 361.2 | 219.9 | 4 | PVC | S | 9/17/90 | |
| MSB 3C | Mw,Pc | 102189.6 | 48538.5 | 3688028.68 | 431359.12 | 193.7 | 189 | 358.7 | 360.8 | 361 | 171.8 | 4 | PVC | S | 9/20/90 | |
| MSB 3D | Mw,Pc | 102188.6 | 48524.6 | 3688025.37 | 431356.31 | 230.7 | 211.2 | 358.7 | 360.2 | | 149 | 4 | PVC | S | 9/20/90 | |
| MSB 4A | Mw | 101933.4 | 48313 | 3687924.52 | 431350.01 | 254.8 | 224.8 | 352.9 | 354.8 | | 130 | 4 | PVC | | 10/8/82 | |
| MSB 4B | Mw,Pc | 101978.3 | 48312.8 | 3687935.67 | 431341.71 | 143.1 | 138.4 | 353.1 | 355.3 | 355.5 | 216.9 | 4 | PVC | S | 10/3/90 | |
| MSB 4C | Mw,Pc | 101963.2 | 48313.6 | 3687932.32 | 431344.48 | 168.1 | 163.3 | 353.1 | 355.2 | 355.4 | 191.9 | 4 | PVC | S | 8/23/90 | |
| MSB 4D | Mw,Pc | 102007.5 | 48311.7 | 3687942.36 | 431336.17 | 228.4 | 209 | 353.4 | 355.5 | 355.8 | 146.5 | 4 | PVC | S | 9/28/90 | |
| MSB 5A | Mw,Pc | 101971.5 | 46998.7 | 3687698.47 | 431018.91 | 247.2 | 217.2 | 342.2 | 344.6 | 344.8 | 127 | 4 | PVC | S | 10/25/82 | |
| MSB 5B | Mw,Pc | 101971.1 | 46983.6 | 3687695.18 | 431015.16 | 136.1 | 131.4 | 343.1 | 345 | 345.2 | 213.6 | 4 | PVC | S | 5/25/90 | |
| MSB 5C | Mw,Pc | 101970.4 | 46968.6 | 3687692.98 | 431012.38 | 188.1 | 183.4 | 343.1 | 345.2 | 345.4 | 161.8 | 4 | PVC | S | 5/25/90 | |
| MSB 6A | Mw,Pc | 101133.8 | 46319.9 | 3687370.41 | 431002.62 | 241.9 | 211.9 | 341.9 | 343.8 | 344 | 131.9 | 4 | PVC | S | 10/1/82 | |
| MSB 6B | Mw,Pc | 101146.5 | 46321.6 | 3687373.76 | 430999.85 | 129.8 | 125.1 | 341.8 | 343.9 | 344.1 | 218.8 | 4 | PVC | S | 5/9/90 | |
| MSB 6C | Mw,Pc | 101169.1 | 46324.1 | 3687379.32 | 430997.1 | 194 | 189.3 | 342 | 343.8 | 344 | 154.5 | 4 | PVC | S | 5/10/90 | |
| MSB 7A | Mw,Pc | 100585.7 | 46726.1 | 3687308.03 | 431200.44 | 242 | 212 | 342 | 344.3 | 344.6 | 132.3 | 4 | PVC | S | 10/1/82 | |
| MSB 7B | Mw,Pc | 100597.6 | 46718.1 | 3687309.16 | 431196.72 | 147.5 | 142.7 | 342.1 | 344.1 | 344.3 | 201.4 | 4 | PVC | S | 4/18/90 | |
| MSB 7C | Mw,Pc | 100609.2 | 46709.1 | 3687311.41 | 431192.09 | 200.1 | 195.4 | 342.1 | 344.5 | 344.7 | 149.1 | 4 | PVC | S | 4/18/90 | |
| MSB 8A | Mw,Pc | 100815.1 | 47293.2 | 3687465.87 | 431299.29 | 242.4 | 212.4 | 342.4 | 344.2 | 344.4 | 131.8 | 4 | PVC | S | 10/1/82 | |
| MSB 8B | Mw,Pc | 100805.8 | 47281.9 | 3687462.55 | 431298.34 | 150.8 | 146.1 | 341.8 | 343.9 | 344.1 | 197.8 | 4 | PVC | S | 4/5/90 | |
| MSB 8C | Mw,Pc | 100793.2 | 47264.6 | 3687455.91 | 431296.43 | 195.9 | 191.2 | 341.9 | 344 | 344.2 | 152.8 | 4 | PVC | S | 4/18/90 | |
| MSB 9A | Mw,Pl | 102236.7 | 48242.5 | 3687987.12 | 431277.85 | 144.2 | 139.2 | 357.2 | 359.1 | 359.4 | 219.9 | 4 | PVC | S | 7/28/81 | |
| MSB 9B | Mw,Pl | 102239.4 | 48251.7 | 3687989.33 | 431279.73 | 209.3 | 204.3 | 357.3 | 359.3 | 359.6 | 155 | 4 | PVC | S | | |
| MSB 9C | Mw,Pl | 102245.6 | 48273 | 3687994.84 | 431284.42 | 241.6 | 221.6 | 357.6 | 359.6 | 359.9 | 138 | 4 | PVC | S | 12/18/81 | |
| MSB 10A | Mw,Pl | 102451.8 | 47954.4 | 3687987.89 | 431168.96 | 125.2 | 120.2 | 355.2 | 357.2 | 357.4 | 237 | 4 | PVC | S | 9/3/81 | |
| MSB 10B | Mw,Pl | 102488.2 | 47943.1 | 3687994.61 | 431159.7 | 157.4 | 152.4 | 355.6 | 357.6 | 357.8 | 205.2 | 4 | PVC | S | 9/11/81 | |
| MSB 10C | Mw | 102465.6 | 47951.1 | 3687991.25 | 431165.26 | 211 | 206.2 | 355.1 | 357.1 | 357.3 | 150.9 | 4 | PVC | S | 9/1/81 | |
| MSB 10D | Mw | 102476.9 | 47947.4 | 3687993.48 | 431162.48 | 251.1 | 231.1 | 354.9 | 356.6 | | 125.5 | 4 | PVC | | 9/9/81 | |
| MSB 11A | Mw,Pl | 102638.9 | 48577.6 | 3688145.59 | 431288.28 | 135.8 | 130.8 | 363.4 | 365.4 | 365.7 | 234.6 | 4 | PVC | S | 10/14/81 | |
| MSB 11B | Mw,Pl | 102648.9 | 48578.5 | 3688148.93 | 431287.37 | 165.7 | 160.7 | 363.4 | 365.4 | 365.6 | 204.7 | 4 | PVC | S | 10/9/81 | |
| MSB 11C | Mw,Pl | 102658.6 | 48579.4 | 3688151.16 | 431285.53 | 182.9 | 177.9 | 363.5 | 365.5 | 365.7 | 187.6 | 4 | PVC | S | 10/13/81 | |
| MSB 11D | Mw,Pl | 102669.5 | 48579.7 | 3688153.39 | 431283.68 | 208.9 | 203.9 | 363.9 | 365.8 | 366.1 | 161.9 | 4 | PVC | S | 10/15/81 | |
| MSB 11E | Mw,Pl | 102678.5 | 48579.6 | 3688155.62 | 431281.84 | 251 | 231 | 363.5 | 365.2 | 365.2 | 134.2 | 4 | PVC | B | 10/16/81 | |
| MSB 11F | Mw,Pl | 102629.3 | 48577 | 3688143.36 | 431290.13 | 243.1 | 223.1 | 363.6 | 365.6 | 365.8 | 142.5 | 4 | PVC | S | 12/1/81 | |
| MSB 12A | Mw,Pl | 102283.2 | 47138.2 | 3687800.63 | 430997.3 | 121.5 | 116.5 | 346.5 | 348.9 | 349.1 | 232.4 | 4 | PVC | S | 10/29/81 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MSB 12B | Mw,Pl | 102251.8 | 47139.6 | 3687792.82 | 431003.76 | 162.2 | 157.2 | 347.5 | 349.5 | 349.8 | 192.3 | 4 | PVC | S | 10/14/81 |
| MSB 12C | Mw,Pl | 102274.4 | 47138.4 | 3687798.4 | 430999.14 | 183.9 | 178.9 | 347 | 349 | 349.2 | 170.1 | 4 | PVC | S | 10/19/81 |
| MSB 12D | Mw,Pl | 102262.2 | 47139.7 | 3687795.05 | 431001.91 | 245.3 | 225.3 | 347.3 | 349.4 | 349.6 | 124.1 | 4 | PVC | S | 10/5/81 |
| MSB 12TA | Mw,Pl | 102266.7 | 47127.3 | 3687793.97 | 430998.18 | -102.8 | -112.8 | 347.2 | 348.9 | 349.1 | 461.7 | 4 | Steel | S | 12/1/81 |
| MSB 12TB | Mw,Pl | 102260.1 | 47133 | 3687793.95 | 431000.97 | 14.5 | -5.5 | 347.5 | 349.3 | 349.5 | 354.8 | 4 | Steel | S | 12/1/81 |
| MSB 13A | Mw,Pc | 101725.7 | 47525.4 | 3687732.72 | 431193.21 | 136.4 | 131.4 | 344.8 | 346.7 | 347 | 215.3 | 4 | PVC | S | 10/22/81 |
| MSB 13B | Mw,Pc | 101735.7 | 47523.5 | 3687734.95 | 431190.43 | 177.5 | 172.5 | 345 | 347.1 | 347.3 | 174.6 | 4 | PVC | S | 10/28/81 |
| MSB 13C | Mw | 101745.7 | 47521.9 | 3687737.18 | 431188.59 | 244.1 | 224.1 | 345.1 | 347.3 | | 123.2 | 4 | PVC | | 10/7/81 |
| MSB 13CC | Mw,Pc | 101728.8 | 47525.7 | 3687732.72 | 431192.28 | 196.8 | 192 | 344.8 | 346.9 | 347.1 | 154.9 | 4 | PVC | S | 11/13/90 |
| MSB 13D | Mw,Pc | 101778.1 | 47517.5 | 3687743.88 | 431182.12 | 231.5 | 211.5 | 345.5 | 347.6 | 347.8 | 136.1 | 4 | PVC | S | 8/23/90 |
| MSB 14A | Mw,Pl | 101629.5 | 48521.9 | 3687887.19 | 431455.85 | 164.6 | 144.6 | 346.6 | 348.7 | 349 | 204.1 | 4 | PVC | S | 10/19/81 |
| MSB 14B | Mw,Pl | 101639 | 48519.1 | 3687889.42 | 431453.07 | 193.9 | 188.9 | 346.9 | 348.9 | 349.2 | 160 | 4 | PVC | S | 10/20/81 |
| MSB 14C | Mw,Pl | 101648.6 | 48517.3 | 3687891.65 | 431451.23 | 243.9 | 223.9 | 347.2 | 349.2 | 349.4 | 125.3 | 4 | PVC | S | 10/9/81 |
| MSB 15A | Mw,Pl | 102983.5 | 48827 | 3688275.32 | 431288.27 | 167.8 | 162.8 | 365.8 | 367.7 | 368 | 204.9 | 3.75 | PVC | S | 11/9/81 |
| MSB 15AA | Mw,Pl | 102953.2 | 48818.5 | 3688266.42 | 431291.93 | 147.1 | 142.4 | 367.1 | 369.2 | 369.4 | 226.8 | 4 | PVC | S | 2/20/89 |
| MSB 15C | Mw,Pl | 103002.1 | 48834 | 3688281.98 | 431286.45 | 260.6 | 240.6 | 364.8 | 366.7 | 366.7 | 126.1 | 3.75 | PVC | B | 11/10/81 |
| MSB 15D | Mw,Pl | 102971.2 | 48827.5 | 3688273.08 | 431290.11 | 241.4 | 221.9 | 366.4 | 368.5 | 368.8 | 146.6 | 4 | PVC | S | 9/6/88 |
| MSB 16A | Mw,Pl | 103693.9 | 48965.1 | 3688475.55 | 431194.75 | 166.8 | 161.8 | 365.5 | 367.5 | 367.7 | 205.7 | 3.75 | PVC | S | 11/16/81 |
| MSB 16C | Mw,Pl | 103714.1 | 48970.5 | 3688481.1 | 431192.93 | 244.8 | 224.8 | 365.8 | 367.6 | 367.6 | 142.8 | 3.75 | PVC | B | 12/9/81 |
| MSB 17A | Mw,Pl | 101976.6 | 46245.7 | 3687564.54 | 430832.73 | 160.6 | 155.6 | 357.3 | 359.3 | 359.5 | 203.7 | 3.75 | PVC | S | 11/2/81 |
| MSB 17B | Mw,Pl | 101994.6 | 46237.7 | 3687567.9 | 430828.1 | 190.8 | 185.8 | 357.2 | 359.2 | 359.5 | 173.4 | 3.75 | PVC | S | 12/16/81 |
| MSB 17BB | Mw,Pl | 102009.5 | 46220.8 | 3687567.95 | 430820.65 | 137.3 | 132.6 | 357.3 | 359 | 359.3 | 226.4 | 4 | PVC | S | 1/9/88 |
| MSB 17C | Mw,Pl | 102004.6 | 46234.3 | 3687569.02 | 430825.32 | 253.9 | 233.9 | 356.9 | 358.2 | 358.2 | 124.3 | 3.75 | PVC | B | 11/3/81 |
| MSB 17D | Mw,Pl | 102056.9 | 46226.2 | 3687581.31 | 430813.3 | 232.8 | 213.3 | 357.8 | 359.9 | 360.2 | 146.6 | 4 | PVC | S | 9/16/88 |
| MSB 18A | Mw,Pl | 100416.1 | 46110.4 | 3687155.88 | 431079.28 | 163.9 | 158.9 | 339.9 | 341.9 | 342.1 | 183 | 3.75 | PVC | S | 12/9/81 |
| MSB 18B | Mw,Pl | 100424.1 | 46115.7 | 3687159.21 | 431079.31 | 198.5 | 193.5 | 340 | 342.1 | 342.3 | 148.6 | 3.75 | PVC | S | 12/1/81 |
| MSB 18C | Mw,Pl | 100430.9 | 46121.4 | 3687161.43 | 431079.32 | 229.2 | 209.2 | 340.4 | 342.5 | 342.7 | 133.3 | 4 | PVC | S | 12/1/81 |
| MSB 19A | Mw,Pl | 100983 | 50934.4 | 3688160.48 | 432166.07 | 119.7 | 114.7 | 298.2 | 300.3 | 300.6 | 185.6 | 3.75 | PVC | S | 12/8/81 |
| MSB 19B | Mw,Pl | 100999.3 | 50934.8 | 3688164.94 | 432163.31 | 147.7 | 142.7 | 298.5 | 300.4 | 300.6 | 157.7 | 3.75 | PVC | S | 12/11/81 |
| MSB 19C | Mw,Pl | 100992.1 | 50942.4 | 3688164.92 | 432166.1 | 218.7 | 198.7 | 298.7 | 300.8 | 301 | 102.1 | 3.75 | PVC | S | 12/9/81 |
| MSB 20A | Mw,Pl | 103545.1 | 46060.5 | 3687918.34 | 430505.76 | 162.6 | 157.6 | 353.3 | 355.3 | 355.5 | 197.7 | 3.75 | PVC | S | 11/20/81 |
| MSB 20C | Mw,Pl | 103556.3 | 46088.8 | 3687926.06 | 430510.47 | 232.7 | 212.7 | 352.7 | 354.7 | 354.9 | 142 | 3.75 | PVC | S | 11/23/81 |
| MSB 21A | Mw,Pl | 103967 | 47217.2 | 3688229.5 | 430715.54 | 159.5 | 154.5 | 352.9 | 354.8 | 355 | 200.3 | 3.75 | PVC | S | 11/19/81 |
| MSB 21B | Mw,Pl | 104000.1 | 47271.8 | 3688247.18 | 430723.11 | 147.2 | 142.5 | 353.2 | 355 | 355.2 | 212.5 | 4 | PVC | S | 2/20/89 |
| MSB 21C | Mw,Pl | 103973 | 47234.6 | 3688233.91 | 430718.37 | 233.2 | 213.2 | 353 | 354.8 | 355.1 | 141.6 | 3.75 | PVC | S | 11/23/81 |
| MSB 21TA | Mw,Pl | 103980.9 | 47218.2 | 3688232.84 | 430712.77 | 22.6 | 17.3 | 352.6 | 354.6 | 354.8 | 337.3 | 4 | CS | S | 12/1/81 |
| MSB 22 | Mw,Pl | 102186.5 | 48508.8 | 3688022.07 | 431352.56 | 243.2 | 223.2 | 358.2 | 360.1 | 360.4 | 136.9 | 4 | PVC | S | 6/1/82 |
| MSB 23 | Mw,Pl | 104312 | 49294 | 3688686.42 | 431164.61 | 250.4 | 230.4 | 370.4 | 371.8 | | 141.4 | 4 | PVC | S | 8/1/82 |
| MSB 23B | Mw,Pl | 104336.6 | 49286.4 | 3688690.89 | 431159.05 | 176.1 | 171.1 | 370.1 | 371.6 | | 200.5 | 4 | PVC | S | 2/16/83 |
| MSB 23TA | Mw,Pl | 104298.8 | 49225.8 | 3688671 | 431150.54 | 65.4 | 60.4 | 370.4 | 372.9 | | 312.5 | 4 | Steel | S | |
| MSB 23TR | Mw,Pl | 104278.5 | 49036 | 3688632.5 | 431107.45 | 40.8 | 35.9 | 370.8 | 372.7 | | 336.8 | 4 | PVC | S | 6/25/93 |
| MSB 24 | Mw,Pl | 104614.4 | 49842.9 | 3688859.91 | 431245.88 | 243.9 | 223.9 | 378.9 | 380.2 | 380.5 | 156.3 | 4 | PVC | S | 9/22/82 |
| MSB 24A | Mw,Pl | 104625.3 | 49845.3 | 3688862.13 | 431244.96 | 178.8 | 168.8 | 379.9 | 381.6 | 381.8 | 212.8 | 4 | PVC | S | 2/7/83 |
| MSB 25 | Mw,Pl | 103498.8 | 49668.9 | 3688553.9 | 431402.86 | 244.7 | 224.7 | 364.7 | 366.9 | 367.2 | 142.2 | 4 | PVC | S | 8/1/82 |
| MSB 25A | Mw,Pl | 103504.8 | 49657.9 | 3688552.82 | 431399.13 | 169.7 | 159.7 | 364.7 | 366.4 | 366.6 | 206.7 | 4 | PVC | S | 2/2/83 |
| MSB 26 | Mw,Pl | 104612.8 | 48941.7 | 3688697.39 | 431024.15 | 240.7 | 220.7 | 359.7 | 361.7 | 362 | 141 | 4 | PVC | S | 8/1/82 |
| MSB 26A | Mw,Pl | 104602.3 | 48440.7 | 3688605.13 | 430902.5 | 179.8 | 169.8 | 359.8 | 361.8 | 362 | 192 | 4 | PVC | S | 1/12/83 |
| MSB 26B | Mw,Pl | 104646.7 | 48944.6 | 3688706.3 | 431018.63 | 136.9 | 132.1 | 360.7 | 362.8 | 363.3 | 230.7 | 4 | PVC | S | 2/13/89 |
| MSB 27 | Mw,Pl | 104972.8 | 49487.7 | 3688884.27 | 431094.35 | 244 | 234 | 374 | 375.5 | 375.7 | 141.5 | 4 | PVC | S | 8/1/82 |
| MSB 27A | Mw,Pl | 104962.8 | 49487.8 | 3688882.04 | 431096.19 | 203.8 | 193.8 | 373.8 | 375.2 | 375.4 | 181.4 | 4 | PVC | S | 1/11/83 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MSB 27B | Mw,Pl | 104940.3 | 49486.4 | 3688876.47 | 431099.88 | 169.9 | 164.4 | 374.7 | 376.8 | 377 | 212.4 | 4 | PVC | S | 12/12/84 | |
| MSB 27TA | Mw,Pl | 104951.4 | 49486.5 | 3688878.7 | 431098.03 | 55.9 | 50.6 | 374.5 | 376.6 | 376.8 | 326 | 4 | CS | S | 10/10/84 | |
| MSB 28 | Mw,Pl | 104941.8 | 48517.3 | 3688702.99 | 430860.39 | 230.6 | 210.6 | 352.6 | 354.8 | 355 | 144.2 | 4 | PVC | S | 8/1/82 | |
| MSB 28A | Mw,Pl | 104947.7 | 48521.9 | 3688705.21 | 430860.4 | 157.8 | 152.8 | 352.8 | 355 | 355.2 | 202.2 | 4 | PVC | S | 1/14/83 | |
| MSB 29A | Mw,Bk | 107326.8 | 51236.4 | 3689777.84 | 431102.56 | 122.9 | 117.3 | 362.9 | 365.2 | 365.3 | 247.9 | 4 | PVC | S | 3/22/85 | |
| MSB 29B | Mw,Bk | 107319.3 | 51217.5 | 3689772.32 | 431099.73 | 151.7 | 145.1 | 362.7 | 365 | 365.1 | 219.9 | 4 | PVC | S | 12/7/84 | |
| MSB 29C | Mw,Bk | 107315 | 51206.6 | 3689769 | 431097.84 | 179.7 | 174.1 | 362.7 | 365 | 365.1 | 190.9 | 4 | PVC | S | 12/12/84 | |
| MSB 29D | Mw,Bk | 107323.3 | 51226.9 | 3689775.63 | 431101.61 | 227.6 | 207 | 362.6 | 364.9 | 365.1 | 157.9 | 4 | PVC | S | 12/18/84 | |
| MSB 29DD | Pz | 107311.4 | 51191.3 | 3689765.7 | 431094.1 | 250.4 | 230.4 | 362.4 | 364.4 | | 134 | 2 | PVC | | 8/23/88 | |
| MSB 29TA | Mw,Bk | 107330.4 | 51245.7 | 3689780.04 | 431104.43 | 63.9 | 58.6 | 362.9 | 365 | 365.2 | 306.4 | 4 | CS | S | 9/27/84 | |
| MSB 30A | Mw,Pl | 105727.4 | 48004.1 | 3688803.58 | 430593.07 | 36.9 | 26.9 | 352.9 | 355 | 355.1 | 328.1 | 4 | PVC | S | 3/29/83 | |
| MSB 30AA | Mw,Pl | 105715.7 | 47970.5 | 3688794.75 | 430587.42 | 96.4 | 90.8 | 351.4 | 353 | 353.2 | 262.2 | 4 | PVC | S | 1/25/85 | |
| MSB 30B | Mw,Pl | 105719.9 | 47981.8 | 3688798.06 | 430589.31 | 128.7 | 123.1 | 351.7 | 353.5 | 353.6 | 230.4 | 4 | PVC | S | 4/4/85 | |
| MSB 30C | Mw,Pl | 105731.1 | 48013.7 | 3688808.89 | 430594.95 | 237.6 | 217.6 | 352.6 | 354.6 | 354.8 | 137 | 4 | PVC | S | 3/31/83 | |
| MSB 30CC | Mw,Pl | 105724.2 | 47993.3 | 3688801.38 | 430591.19 | 164 | 158.4 | 352 | 354 | 354.2 | 195.6 | 4 | PVC | S | 1/16/84 | |
| MSB 31A | Mw,Pl | 101979.3 | 50100.2 | 3688256.31 | 431782.35 | 22 | 12 | 346 | 348.1 | 348.3 | 336.1 | 4 | PVC | S | | |
| MSB 31B | Mw,Pl | 101981.3 | 50078.7 | 3688253.02 | 431776.75 | 157.3 | 152.3 | 346.3 | 348.3 | 348.6 | 196 | 4 | PVC | S | 5/3/83 | |
| MSB 31C | Mw,Pl | 101979.6 | 50089.9 | 3688255.22 | 431779.55 | 236.1 | 216.1 | 346.1 | 348.1 | 348.3 | 132 | 4 | PVC | S | 5/5/83 | |
| MSB 31CC | Mw,Pl | 101983.1 | 50067.9 | 3688251.94 | 431773.01 | 181.4 | 176.7 | 346.4 | 348.6 | 348.9 | 171.9 | 4 | PVC | S | 2/27/89 | |
| MSB 32 | Mw,Pl | 99655.6 | 52733.9 | 3688156.85 | 432847.35 | 218.1 | 198.1 | 253.1 | 255.1 | 255.3 | 57 | 4 | PVC | S | 4/14/83 | |
| MSB 32B | Mw,Pl | 99676 | 52742.5 | 3688162.41 | 432845.53 | 132.5 | 127.5 | 253.5 | 255.4 | 255.9 | 127.9 | 2 | PVC | V | 5/25/93 | |
| MSB 32C | Mw,Pl | 99684.9 | 52746.9 | 3688165.74 | 432845.55 | 188.6 | 183.7 | 253.6 | 255.7 | 256.1 | 72 | 2 | PVC | V | 6/2/93 | |
| MSB 33 | Mw,Pl | 98031 | 51736.3 | 3687577.79 | 432892.67 | 228.7 | 208.7 | 253.7 | 255.9 | 256.1 | 47.2 | 4 | PVC | S | 4/28/83 | |
| MSB 33A | Mw,Pl | 98006.7 | 51738 | 3687571.1 | 432898.21 | 88.4 | 82.8 | 253.4 | 255.4 | 255.5 | 172.6 | 4 | PVC | S | 2/7/85 | |
| MSB 33B | Mw,Pl | 97995.9 | 51741.9 | 3687569.97 | 432901 | 126.3 | 120.7 | 253.3 | 255 | 255.2 | 134.3 | 4 | PVC | S | 1/29/85 | |
| MSB 33C | Mw,Pl | 97984.8 | 51746.7 | 3687567.74 | 432903.77 | 171 | 165.4 | 253 | 255.3 | 255.5 | 89.9 | 4 | PVC | S | 2/8/85 | |
| MSB 33TA | Mw,Pl | 98018.2 | 51734 | 3687573.34 | 432894.5 | 23.4 | 18.1 | 253.4 | 255.5 | 255.7 | 237.4 | 4 | CS | S | 1/17/85 | |
| MSB 34A | Mw,Pl | 104954.9 | 50534.9 | 3689067.58 | 431355.3 | 118.6 | 113.6 | 382.1 | 384 | 384.2 | 270.4 | 4 | PVC | S | | |
| MSB 34B | Mw,Pl | 104944.7 | 50534.9 | 3689065.34 | 431357.15 | 187 | 182 | 382 | 384 | 384.3 | 202 | 4 | PVC | S | | |
| MSB 34C | Mw,Pl | 104934.1 | 50535.5 | 3689062.01 | 431358.99 | 240.9 | 220.9 | 381.9 | 383.9 | 384.1 | 163 | 4 | PVC | S | | |
| MSB 34TA | Mw,Pl | 104905.8 | 50536.6 | 3689055.31 | 431364.52 | -91.9 | -101.9 | 381.8 | 383.4 | 383.6 | 485.3 | 4 | Steel | S | | |
| MSB 34TB | Mw,Pl | 104891.6 | 50537.9 | 3689051.97 | 431367.29 | 75.8 | 65.8 | 381.8 | 383.6 | 383.8 | 317.8 | 4 | Steel | S | | |
| MSB 35A | Mw,Pl | 102098 | 50945.2 | 3688436.83 | 431968.83 | 128.8 | 123.2 | 348.8 | 350.9 | 351.1 | 227.7 | 4 | PVC | S | 3/5/85 | |
| MSB 35B | Mw,Pl | 102110.8 | 50947.9 | 3688441.28 | 431967 | 169.3 | 163.7 | 349.3 | 351.6 | 351.7 | 187.9 | 4 | PVC | S | 2/4/85 | |
| MSB 35D | Mw,Pl | 102122.4 | 50949.7 | 3688444.61 | 431965.17 | 254.5 | 233.8 | 349.5 | 351.9 | 352 | 118.1 | 4 | PVC | S | 2/7/85 | |
| MSB 35TA | Mw,Pl | 102101.6 | 50919.6 | 3688433.55 | 431962.3 | 38.2 | 32.9 | 348.2 | 350.3 | 350.4 | 317.4 | 4 | CS | S | 11/2/84 | |
| MSB 36A | Mw,Pl | 100511.3 | 49514.9 | 3687789.81 | 431901 | 100.5 | 94.9 | 338.5 | 340.6 | 340.8 | 245.7 | 4 | PVC | S | 2/20/85 | |
| MSB 36B | Mw,Pl | 100514.9 | 49526.3 | 3687793.13 | 431902.89 | 163.7 | 158.1 | 338.7 | 340.8 | 340.9 | 182.7 | 4 | PVC | S | 1/25/85 | |
| MSB 36C | Mw,Pl | 100518.3 | 49537.2 | 3687795.32 | 431905.7 | 194.2 | 188.6 | 339.2 | 340.9 | 341 | 152.3 | 4 | PVC | S | 1/29/85 | |
| MSB 36D | Mw,Pl | 100521.7 | 49548.3 | 3687798.64 | 431907.58 | 249.5 | 228.8 | 339.5 | 341.6 | 341.7 | 112.8 | 4 | PVC | S | 1/31/85 | |
| MSB 36TA | Mw,Pl | 100507.7 | 49503 | 3687786.5 | 431899.12 | 53.4 | 48.4 | 338.4 | 340.6 | 340.8 | 292.2 | 4 | CS | S | 11/21/84 | |
| MSB 37A | Mw,Pl | 105295 | 51439.8 | 3689313.68 | 431517.11 | 73.7 | 68.1 | 380.7 | 383 | 383.1 | 314.9 | 4 | PVC | S | 3/12/85 | |
| MSB 37B | Mw,Pl | 105289.5 | 51450 | 3689313.65 | 431520.84 | 142.3 | 136.7 | 380.3 | 382.7 | 382.8 | 246 | 4 | PVC | S | 1/3/85 | |
| MSB 37C | Mw,Pl | 105283.2 | 51439.8 | 3689310.33 | 431519.88 | 180.8 | 175.2 | 380.8 | 383 | 383.2 | 207.8 | 4 | PVC | S | 2/7/85 | |
| MSB 37D | Mw,Pl | 105271 | 51440.3 | 3689308.1 | 431521.73 | 245.7 | 225.1 | 380.7 | 382.7 | | 157.6 | 4 | PVC | B | 2/1/85 | |
| MSB 37TA | Mw,Pl | 105301.3 | 51449.8 | 3689316.99 | 431519 | 35.1 | 29.8 | 380.1 | 382.3 | 382.5 | 352.5 | 4 | CS | S | 11/7/84 | |
| MSB 38B | Mw,Pl | 102360.8 | 49746.1 | 3688287.34 | 431626.21 | 146.5 | 141.8 | 357 | 359 | 359.3 | 217.2 | 4 | PVC | S | 10/19/88 | |
| MSB 38C | Mw,Pl | 102373.1 | 49762 | 3688292.87 | 431628.11 | 169 | 164.3 | 356.8 | 358.8 | 359 | 194.5 | 4 | PVC | S | 10/20/88 | |
| MSB 38D | Mw,Pl | 102385.6 | 49777.8 | 3688298.4 | 431630.01 | 240.4 | 220.9 | 356.4 | 358.5 | 358.9 | 137.6 | 4 | PVC | S | 9/16/88 | |
| MSB 38TA | Mw,Pl | 102434.9 | 49810.4 | 3688317.26 | 431629.21 | 32 | 26.7 | 357 | 359.1 | 359.3 | 332.4 | 4 | CS | S | 10/25/84 | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MSB 39A | Mw,Pl | 100837.6 | 48367.3 | 3687664.71 | 431559.46 | 111.7 | 106.1 | 339.7 | 341.6 | 341.7 | 235.5 | 4 | PVC | S | 3/8/85 |
| MSB 39B | Mw,Pl | 100844.6 | 48376.9 | 3687668.03 | 431561.34 | 149.6 | 144 | 339.6 | 341.8 | 342 | 197.8 | 4 | PVC | S | 1/7/85 |
| MSB 39C | Mw,Pl | 100852.1 | 48386.7 | 3687671.34 | 431562.3 | 199.6 | 194 | 339.7 | 341.5 | 341.7 | 147.5 | 4 | PVC | S | 1/1/85 |
| MSB 39D | Mw,Pl | 100858.7 | 48396 | 3687674.66 | 431563.25 | 239.7 | 219 | 339.7 | 341.8 | 341.9 | 122.8 | 4 | PVC | S | 1/14/85 |
| MSB 39TA | Mw,Pl | 100830.6 | 48357.7 | 3687661.39 | 431558.5 | 49.7 | 44.4 | 339.7 | 341.8 | 342 | 297.4 | 4 | CS | S | 10/4/84 |
| MSB 40A | Mw,Pl | 97672.8 | 48279.4 | 3686869.25 | 432105.85 | 116.2 | 110.6 | 319.2 | 321.2 | 321.4 | 210.6 | 4 | PVC | S | 3/1/85 |
| MSB 40B | Mw,Pl | 97685 | 48281.6 | 3686872.59 | 432104.01 | 154.7 | 149.1 | 319.7 | 321.7 | 321.8 | 172.6 | 4 | PVC | S | 1/31/85 |
| MSB 40C | Mw,Pl | 97697.8 | 48283.5 | 3686875.93 | 432102.17 | 192.4 | 186.8 | 320.4 | 322 | 322.2 | 135.2 | 4 | PVC | S | 2/4/85 |
| MSB 40D | Mw,Pl | 97709.3 | 48285.1 | 3686879.27 | 432100.34 | 236.8 | 216.2 | 320.8 | 322.9 | 323.1 | 106.7 | 4 | PVC | B | 2/7/85 |
| MSB 40TA | Mw,Pl | 97660.4 | 48277.2 | 3686865.91 | 432107.69 | 29 | 23.7 | 319 | 320.9 | 321.1 | 297.2 | 4 | CS | S | 11/30/84 |
| MSB 41A | Mw,Pl | 102184.4 | 53424.1 | 3688902.77 | 432564 | 87.9 | 82.3 | 321.9 | 323.8 | 324 | 241.5 | 4 | PVC | S | 12/13/84 |
| MSB 41B | Mw,Pl | 102194.5 | 53417.8 | 3688905.01 | 432560.3 | 114.2 | 108.6 | 322.2 | 324 | 324.2 | 215.4 | 4 | PVC | S | 2/25/85 |
| MSB 41C | Mw,Pl | 102203.9 | 53410.6 | 3688905.03 | 432557.51 | 152.5 | 146.9 | 322.5 | 324.6 | 324.8 | 177.7 | 4 | PVC | S | 2/11/85 |
| MSB 41D | Mw,Pl | 102213.4 | 53403.7 | 3688906.17 | 432553.79 | 247.8 | 227.1 | 322.8 | 325 | 325.1 | 97.9 | 4 | PVC | S | 2/13/85 |
| MSB 41TA | Mw,Pl | 102176.5 | 53429.7 | 3688902.75 | 432566.8 | 26.7 | 21.4 | 321.7 | 323.7 | 323.9 | 302.3 | 4 | CS | S | 1/11/85 |
| MSB 42A | Mw,Pl | 104557.9 | 51582.3 | 3689157.28 | 431684.46 | 129.4 | 123.8 | 374.4 | 376.5 | 376.7 | 252.7 | 4 | PVC | S | 3/19/85 |
| MSB 42B | Mw,Pl | 104569.8 | 51582.8 | 3689160.61 | 431682.62 | 166.3 | 160.7 | 374.3 | 376.4 | 376.6 | 215.7 | 4 | PVC | S | 1/16/85 |
| MSB 42C | Mw,Pl | 104581.9 | 51582.8 | 3689163.95 | 431680.78 | 204.3 | 198.7 | 374.3 | 376.4 | 376.5 | 177.7 | 4 | PVC | S | 1/24/85 |
| MSB 42D | Mw,Pl | 104595.2 | 51582.5 | 3689167.3 | 431678.01 | 247.2 | 226.6 | 374.2 | 376.4 | 376.5 | 149.8 | 4 | PVC | B | 1/30/85 |
| MSB 42TA | Mw,Pl | 104545.6 | 51581.7 | 3689153.94 | 431686.29 | 45.8 | 40.5 | 374.5 | 376.6 | 376.8 | 336.1 | 4 | CS | S | 10/31/84 |
| MSB 43A | Mw,Bk | 107275.3 | 49293.7 | 3689416.41 | 430633.75 | 140.5 | 134.9 | 355.5 | 357.7 | 357.9 | 222.8 | 4 | PVC | S | 4/1/85 |
| MSB 43B | Mw,Bk | 107274.6 | 49311.8 | 3689419.7 | 430638.43 | 175.5 | 169.9 | 355.5 | 357.8 | 358 | 187.9 | 4 | PVC | S | 12/12/84 |
| MSB 43D | Mw,Bk | 107274.2 | 49322 | 3689421.91 | 430640.3 | 220.8 | 200.2 | 355.8 | 358 | 358.1 | 157.8 | 4 | PVC | S | 1/3/85 |
| MSB 43DD | Pz | 107273 | 49341.2 | 3689424.09 | 430645.9 | 243.2 | 223.1 | 356.2 | 357.9 | | 134.8 | 2 | PVC | | 8/23/88 |
| MSB 43TA | Mw,Bk | 107275.8 | 49281.8 | 3689414.21 | 430630.94 | 40.3 | 35 | 355.3 | 357.5 | 357.6 | 322.5 | 4 | CS | S | 9/25/84 |
| MSB 44A | Mw,Pl | 103296.5 | 51106.9 | 3688761.81 | 431793.35 | 134.6 | 124.6 | 374.4 | 376.9 | 377.1 | 252.3 | 4 | PVC | S | |
| MSB 44B | Mw,Pl | 103296.2 | 51096.4 | 3688759.6 | 431791.48 | 184.6 | 174.6 | 374.6 | 377 | 377.1 | 202.4 | 4 | PVC | S | |
| MSB 44C | Mw,Pl | 103296.3 | 51106.6 | 3688761.81 | 431793.35 | 239.4 | 229.4 | 374.4 | 376.8 | 376.8 | 147.4 | 2 | PVC | B | |
| MSB 45A | Mw,Pl | 103998.1 | 50554.7 | 3688835.71 | 431532.35 | 139.2 | 129.2 | 378.4 | 380.8 | 381.1 | 251.6 | 4 | PVC | S | |
| MSB 45B | Mw,Pl | 103987.9 | 50555.3 | 3688833.48 | 431534.2 | 190 | 180 | 378.3 | 380.9 | 381.1 | 200.9 | 4 | PVC | S | |
| MSB 45C | Mw,Pl | 103997.7 | 50554.7 | 3688835.71 | 431532.35 | 243.7 | 233.4 | 378.4 | 380.8 | 380.8 | 147.4 | 2 | PVC | B | |
| MSB 46A | Mw,Pl | 103098.6 | 50548.3 | 3688612.84 | 431691.79 | 130 | 120 | 370 | 372.6 | 372.8 | 252.6 | 4 | PVC | S | |
| MSB 46B | Mw,Pl | 103102.4 | 50557.5 | 3688615.05 | 431693.67 | 189.8 | 179.8 | 370.8 | 373.6 | 373.7 | 193.8 | 4 | PVC | S | |
| MSB 46C | Mw,Pl | 103098.5 | 50548.7 | 3688612.84 | 431691.79 | 247 | 237 | 370 | 372.6 | 372.6 | 135.6 | 2 | PVC | B | |
| MSB 47B | Mw,Pl | 106978.5 | 52207.2 | 3689865.5 | 431404.69 | 171.5 | 165.9 | 366.7 | 368.7 | 368.9 | 202.8 | 4 | PVC | S | 7/10/87 |
| MSB 47BB | Mw,Pl | 106999.7 | 52234.4 | 3689876.57 | 431407.56 | 120.3 | 115.6 | 366.3 | 368.8 | 369 | 253.2 | 4 | PVC | S | 10/16/89 |
| MSB 47C | Mw,Pl | 106969.2 | 52195.5 | 3689861.08 | 431403.73 | 202.6 | 197 | 366.8 | 369 | 369.1 | 172 | 4 | PVC | S | 7/14/87 |
| MSB 47D | Mw,Pl | 106960.1 | 52184 | 3689857.76 | 431401.84 | 246.1 | 226.5 | 366.6 | 368.8 | 369 | 142.3 | 4 | PVC | S | 8/7/87 |
| MSB 47TA | Mw,Pl | 106987.7 | 52219 | 3689869.93 | 431405.65 | 55.1 | 50.1 | 366.2 | 368.7 | 368.8 | 318.6 | 4 | CS | S | 6/22/87 |
| MSB 48A | Mw,Pl | 107936.6 | 54099.8 | 3690441.07 | 431699.08 | 129.4 | 124.7 | 359.4 | 361.6 | 361.8 | 236.9 | 4 | PVC | S | 1/12/90 |
| MSB 48B | Mw,Pl | 107945 | 54112.2 | 3690445.49 | 431700.97 | 158.3 | 153.6 | 359.3 | 361.4 | 361.6 | 207.8 | 4 | PVC | S | 1/16/90 |
| MSB 48C | Mw,Pl | 107917.5 | 54077 | 3690432.21 | 431697.16 | 180.2 | 175.4 | 360.2 | 362.3 | 362.5 | 186.9 | 4 | PVC | S | 5/25/89 |
| MSB 48D | Mw,Pl | 107914.4 | 54056.3 | 3690427.81 | 431692.47 | 243.5 | 222 | 360.5 | 362.6 | 362.8 | 140.6 | 4 | PVC | S | |
| MSB 48TA | Mw,Pl | 107925.8 | 54089.2 | 3690436.64 | 431698.12 | 107.8 | 102.5 | 359.8 | 361.9 | 362.1 | 259.4 | 4 | CS | S | 1/15/90 |
| MSB 49A | Mw,Pl | 99759 | 45864.6 | 3686950.36 | 431136.47 | 76.7 | 72 | 332.7 | 334.7 | 334.9 | 262.7 | 4 | PVC | S | 1/20/89 |
| MSB 49B | Mw,Pl | 99737.8 | 45868.2 | 3686945.9 | 431141.09 | 116.3 | 110.7 | 331.8 | 334.1 | 334.8 | 223.4 | 4 | PVC | S | 7/31/87 |
| MSB 49D | Mw,Pl | 99724.9 | 45856.4 | 3686940.35 | 431141.05 | 236.4 | 216.7 | 331.8 | 334.3 | 334.4 | 117.6 | 4 | PVC | S | 8/10/87 |
| MSB 50B | Mw,Pl | 96433 | 51053.5 | 3687061.42 | 433011.04 | 155.2 | 149.6 | 221.3 | 223.7 | 223.9 | 74.1 | 4 | PVC | S | 5/20/87 |
| MSB 50D | Mw,Pl | 96416.7 | 51044.1 | 3687055.87 | 433011.94 | 210.9 | 190.8 | 220.7 | 223.2 | 223.4 | 32.4 | 4 | PVC | S | 8/4/87 |
| MSB 51B | Mw,Pl | 96992.7 | 52818 | 3687515.91 | 433345.54 | 160 | 154.4 | 261.1 | 263.2 | 263.3 | 108.8 | 4 | PVC | S | 5/26/87 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MSB 51D | Mw,Pl | 97015.7 | 52816.2 | 3687520.38 | 433340.92 | 218.5 | 198.8 | 260 | 262.2 | 262.4 | 63.4 | 4 | PVC | S | 8/31/87 | |
| MSB 51DD | Pz | 97006.2 | 52830.3 | 3687521.45 | 433346.51 | 235.4 | 215.8 | 261 | 263.2 | | 47.4 | 4 | PVC | | 8/4/87 | |
| MSB 52B | Mw,Pl | 103077.7 | 53418.4 | 3689122.31 | 432402.67 | 171.4 | 165.8 | 319.5 | 321.7 | 321.9 | 155.9 | 4 | PVC | S | 7/21/87 | |
| MSB 52D | Mw,Pl | 103062.7 | 53416.8 | 3689117.86 | 432404.5 | 250.8 | 231.1 | 319.4 | 321.6 | 321.8 | 90.5 | 4 | PVC | S | 8/6/87 | |
| MSB 53B | Mw,Pl | 106443.6 | 54574.3 | 3690158.97 | 432083.27 | 152.3 | 147.6 | 342.3 | 344.3 | 344.6 | 196.7 | 4 | PVC | S | 2/7/89 | |
| MSB 53C | Mw,Pl | 106456.2 | 54540.5 | 3690155.72 | 432073.01 | 192.6 | 187.8 | 343.2 | 345.2 | 345.3 | 157.4 | 4 | PVC | S | 3/12/87 | |
| MSB 53D | Mw,Pl | 106448.2 | 54553.1 | 3690155.69 | 432077.66 | 244.9 | 223.6 | 342.9 | 344.8 | 344.9 | 121.2 | 4 | PVC | S | | |
| MSB 54B | Mw,Pl | 108446.8 | 52970.5 | 3690364.96 | 431329.13 | 136.4 | 130.8 | 371.1 | 373.4 | 373.5 | 242.6 | 4 | PVC | S | 7/24/87 | |
| MSB 54C | Mw,Pl | 108447.4 | 52955.7 | 3690361.67 | 431325.38 | 175.6 | 170 | 371.2 | 373.4 | 373.5 | 203.4 | 4 | PVC | S | 7/28/87 | |
| MSB 54D | Mw,Pl | 108461.5 | 52984.5 | 3690370.5 | 431330.09 | 244.8 | 223.8 | 371.4 | 373.6 | 373.8 | 149.8 | 4 | PVC | S | | |
| MSB 54TA | Mw,Pl | 108446.3 | 52985.8 | 3690367.16 | 431332.86 | 80.9 | 75.3 | 371.1 | 373.5 | 373.6 | 298.2 | 4 | CS | S | 7/22/87 | |
| MSB 55B | Mw,Pl | 108342.4 | 52006.2 | 3690165.84 | 431109.97 | 152.7 | 148 | 366.7 | 368.7 | 368.9 | 220.7 | 4 | PVC | S | 1/3/90 | |
| MSB 55C | Mw,Pl | 108324.6 | 52029.7 | 3690165.77 | 431119.27 | 189.3 | 184.6 | 367.3 | 369.4 | 369.6 | 184.8 | 4 | PVC | S | 4/28/89 | |
| MSB 55D | Mw,Pl | 108391.4 | 52032.5 | 3690182.48 | 431108.22 | 245.9 | 224.7 | 365.9 | 367.7 | 367.9 | 143 | 4 | PVC | S | | |
| MSB 55HC | Mw,Pl | 108338.7 | 52020.1 | 3690168.02 | 431114.63 | 218.8 | 214.1 | 366.8 | 368.7 | 368.9 | 154.6 | 4 | PVC | S | 10/6/90 | |
| MSB 55TA | Mw,Pl | 108322.8 | 52014.7 | 3690162.47 | 431116.46 | 91.6 | 86.2 | 366.6 | 368.7 | 368.9 | 282.5 | 4 | CS | S | 12/6/89 | |
| MSB 56D | Mw,Pl | 108463.5 | 44207.9 | 3688797.25 | 429167.22 | 232.4 | 211.1 | 277.4 | 279.5 | 279.7 | 68.4 | 4 | PVC | S | | |
| MSB 57D | Mw,Pc | 101829.5 | 48701.5 | 3687969.18 | 431463.88 | 229.6 | 210.1 | 354.1 | 356.2 | 356.4 | 146.1 | 4 | PVC | S | 10/26/90 | |
| MSB 58D | Mw,Pc | 102200.6 | 48693.5 | 3688058.36 | 431395.63 | 230.5 | 211.1 | 355.8 | 357.9 | 358.1 | 146.8 | 4 | PVC | S | 10/26/90 | |
| MSB 59D | Mw,Pc | 102182.2 | 48314.8 | 3687985.82 | 431305.77 | 229.3 | 209.9 | 357.3 | 359.3 | 359.5 | 149.4 | 4 | PVC | S | 9/25/90 | |
| MSB 60D | Mw,Pc | 101835.5 | 48326.8 | 3687903.31 | 431371.27 | 228.3 | 208.9 | 352.3 | 354.5 | 354.7 | 145.6 | 4 | PVC | S | 10/5/90 | |
| MSB 61C | Mw,Pl | 106091.1 | 55406.6 | 3690221.4 | 432351.7 | 179.7 | 174.1 | 315.1 | 317.3 | 317.4 | 143.2 | 4 | PVC | S | 4/14/87 | |
| MSB 61D | Mw,Pl | 106094.6 | 55390.6 | 3690219.22 | 432347.04 | 234.2 | 214.3 | 315.7 | 317.8 | 318 | 103.5 | 4 | PVC | S | 8/6/87 | |
| MSB 62B | Mw,Pc | 101865.3 | 47906.8 | 3687835.34 | 431261.88 | 141 | 136.3 | 347 | 349.1 | 349.3 | 212.8 | 4 | PVC | S | 11/15/90 | |
| MSB 62C | Mw,Pc | 101857.2 | 47895 | 3687830.91 | 431260.92 | 190 | 185.2 | 347 | 349.1 | 349.3 | 163.9 | 4 | PVC | S | 11/26/90 | |
| MSB 62D | Mw,Pc | 101849 | 47882.9 | 3687826.49 | 431259.03 | 231.9 | 212.4 | 347.4 | 349.5 | 349.7 | 137.1 | 4 | PVC | S | 11/26/90 | |
| MSB 63B | Mw,Pc | 101184.4 | 47861 | 3687659.37 | 431373.26 | 140.9 | 136.2 | 344.9 | 346.9 | 347.2 | 210.7 | 4 | PVC | S | 3/21/90 | |
| MSB 63C | Mw,Pc | 101174.6 | 47849.2 | 3687654.95 | 431371.37 | 195.8 | 191.1 | 344.8 | 347 | 347.4 | 155.9 | 4 | PVC | S | 3/23/90 | |
| MSB 63D | Mw,Pc | 101165.2 | 47837.4 | 3687650.53 | 431370.41 | 232.8 | 212.8 | 344.8 | 346.8 | 347 | 134 | 4 | PVC | S | 7/23/90 | |
| MSB 64B | Mw,Pc | 101831 | 46579.7 | 3687588.16 | 430940.87 | 124.3 | 119.6 | 346.3 | 348.3 | 348.5 | 228.7 | 4 | PVC | S | 2/28/90 | |
| MSB 64C | Mw,Pc | 101842.9 | 46589.2 | 3687593.69 | 430941.84 | 181.2 | 176.5 | 346.2 | 348.4 | 348.6 | 171.9 | 4 | PVC | S | 3/12/90 | |
| MSB 64D | Mw,Pc | 101854.8 | 46598.5 | 3687598.13 | 430941.87 | 230.1 | 210.1 | 346.6 | 348.6 | 348.8 | 138.5 | 4 | PVC | S | 7/23/90 | |
| MSB 65D | Mw,Pl | 101915.5 | 49413.7 | 3688117.72 | 431624.08 | 243.9 | 224.4 | 347.1 | 349.2 | 349.5 | 124.8 | 4 | PVC | S | 10/12/88 | |
| MSB 66B | Mw,Pl | 105842 | 51064.6 | 3689381.54 | 431326.81 | 143.9 | 139.2 | 381.4 | 383.4 | 383.7 | 244.2 | 4 | PVC | S | 11/17/88 | |
| MSB 66C | Mw,Pl | 105842.1 | 51053.5 | 3689379.35 | 431324.01 | 170.9 | 166.2 | 381.4 | 383.4 | 383.7 | 217.2 | 4 | PVC | S | 11/28/88 | |
| MSB 66D | Mw,Pl | 105841.8 | 51044 | 3689377.14 | 431322.13 | 239.5 | 220 | 381.5 | 383.2 | 384.1 | 163.2 | 4 | PVC | | 12/21/88 | |
| MSB 66TA | Mw,Pl | 105842.6 | 51096.7 | 3689387.04 | 431334.3 | 35.5 | 30.8 | 380.5 | 382.7 | 383 | 351.9 | 4 | PVC | S | 12/21/88 | |
| MSB 67B | Mw,Pl | 106842 | 51989.6 | 3689793.65 | 431375.33 | 134.9 | 130.1 | 362.7 | 365.1 | 365.6 | 235 | 4 | PVC | S | 11/9/88 | |
| MSB 67C | Mw,Pl | 106819.8 | 51988.6 | 3689788.08 | 431379.01 | 174.9 | 170.1 | 362.7 | 364.8 | 365.1 | 194.7 | 4 | PVC | S | 11/11/88 | |
| MSB 67D | Mw,Pl | 106830.7 | 51971.5 | 3689787.01 | 431373.42 | 241 | 221.5 | 363.1 | 365 | 365.6 | 143.5 | 4 | PVC | S | 11/11/88 | |
| MSB 68B | Mw,Pl | 106744.9 | 52308.5 | 3689826.23 | 431471.41 | 133 | 128.3 | 355 | 356.9 | 357.2 | 228.6 | 4 | PVC | S | 12/1/88 | |
| MSB 68C | Mw,Pl | 106730.5 | 52304.9 | 3689822.89 | 431473.25 | 171.7 | 167 | 354.7 | 356.7 | 357.2 | 189.7 | 4 | PVC | S | 12/14/88 | |
| MSB 68D | Mw,Pl | 106741.4 | 52293.6 | 3689822.92 | 431468.6 | 239.9 | 220.4 | 354.9 | 357 | 357.5 | 136.6 | 4 | PVC | S | 12/6/88 | |
| MSB 69B | Mw,Pl | 107776.1 | 52432.9 | 3690103.39 | 431317.04 | 144.5 | 139.8 | 379.5 | 381.5 | 381.7 | 241.7 | 4 | PVC | S | 1/26/89 | |
| MSB 69C | Mw,Pl | 107780.1 | 52447.5 | 3690106.7 | 431319.85 | 175.7 | 171 | 379.7 | 381.6 | 381.9 | 210.6 | 4 | PVC | S | 1/31/89 | |
| MSB 69D | Mw,Pl | 107784.3 | 52462 | 3690110 | 431322.67 | 239.8 | 220.3 | 379.8 | 382 | 382.2 | 161.7 | 4 | PVC | S | 2/1/89 | |
| MSB 69TA | Mw,Pl | 107772.5 | 52418.4 | 3690098.98 | 431314.21 | 80.3 | 74.6 | 379.3 | 381.4 | 381.7 | 306.8 | 4 | PVC | S | 1/26/89 | |
| MSB 70C | Mw,Pl | 101785.2 | 45012 | 3687295.93 | 430563.67 | 178.8 | 174.1 | 359.8 | 361.8 | 362.1 | 187.7 | 4 | PVC | S | 8/29/88 | |
| MSB 70D | Mw,Pl | 101781.8 | 44997.3 | 3687292.63 | 430559.92 | 228.3 | 208.2 | 360.3 | 362.2 | 362.4 | 154 | 4 | PVC | S | 7/23/90 | |
| MSB 71B | Mw,Pl | 103801.6 | 44054.7 | 3687621.76 | 429965.64 | 135.9 | 131.1 | 342.9 | 344.7 | 344.9 | 213.6 | 4 | PVC | S | 10/28/88 | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MSB 72B | Mw,Pl | 96387.6 | 48350.3 | 3686564.85 | 432353.2 | 156.7 | 152 | 326.7 | 328.2 | 328.5 | 176.2 | 4 | PVC | S | 1/31/89 |
| MSB 73B | Mw,Pl | 99270.3 | 45694 | 3686799.26 | 431181.94 | 135.5 | 130.8 | 337.5 | 339.6 | 339.8 | 208.8 | 4 | PVC | S | 2/3/89 |
| MSB 74B | Mw,Pl | 99197.4 | 50443.2 | 3687632.45 | 432365.29 | 147.5 | 142.8 | 312.5 | 314.5 | 314.8 | 171.7 | 4 | PVC | S | 11/1/89 |
| MSB 74C | Mw,Pl | 99191.1 | 50457.1 | 3687633.53 | 432369.96 | 177.8 | 173.1 | 312.8 | 315 | 315.2 | 141.9 | 4 | PVC | S | 11/9/89 |
| MSB 74D | Mw,Pl | 99185.3 | 50469.7 | 3687634.61 | 432373.69 | 237.1 | 217.1 | 313.1 | 315.1 | 315.3 | 98 | 4 | PVC | S | 11/9/89 |
| MSB 75B | Mw,Pl | 98937.4 | 48875.5 | 3687287.8 | 432025.94 | 161.7 | 156.9 | 324.7 | 326.7 | 326.9 | 169.8 | 4 | PVC | S | 11/17/89 |
| MSB 75C | Mw,Pl | 98942.3 | 48859.7 | 3687285.61 | 432021.27 | 193.5 | 188.8 | 325.5 | 327.5 | 327.9 | 138.7 | 4 | PVC | S | 11/21/89 |
| MSB 76C | Mw,Pl | 103061.6 | 45344 | 3687670.62 | 430416.49 | 186 | 181.3 | 350 | 352.4 | 352.6 | 171.1 | 4 | PVC | S | 2/6/90 |
| MSB 77B | Mw,Pl | 107065.8 | 54217.4 | 3690247.96 | 431883.83 | 145.1 | 140.4 | 355.1 | 357.2 | 357.5 | 216.8 | 4 | PVC | S | 7/10/90 |
| MSB 77C | Mw,Pl | 107078.3 | 54225.9 | 3690252.4 | 431883.86 | 173.2 | 168.5 | 355.2 | 357.2 | 357.3 | 188.7 | 4 | PVC | S | 7/10/90 |
| MSB 77D | Mw,Pl | 107090.7 | 54233.4 | 3690256.83 | 431883.89 | 236.2 | 216.2 | 355.2 | 357.4 | 357.6 | 141.2 | 4 | PVC | S | 7/12/90 |
| MSB 77TA | Mw,Pl | 107053.8 | 54208.9 | 3690243.53 | 431883.8 | 82.9 | 77.6 | 354.9 | 356.9 | 357.1 | 279.3 | 4 | CS | S | 7/5/90 |
| MSB 78D | Mw,Pl | 103643.8 | 45482.2 | 3687838.54 | 430346.03 | 225.5 | 206.1 | 361.1 | 363.6 | 363.8 | 157.5 | 4 | PVC | S | 10/23/90 |
| MSB 79B | Mw,Pl | 99296.9 | 47300.2 | 3687093.63 | 431573.12 | 140.8 | 136.1 | 345.8 | 347.9 | 348.1 | 211.8 | 4 | PVC | S | 12/4/89 |
| MSB 79C | Mw,Pl | 99290.2 | 47286.8 | 3687089.21 | 431571.23 | 199.6 | 194.9 | 345.6 | 347.8 | 348 | 152.9 | 4 | PVC | S | 1/3/90 |
| MSB 81B | Mw,Pl | 103762.7 | 55230.4 | 3689615.66 | 432726.23 | 146.1 | 141.4 | 265.1 | 267 | 267.2 | 125.6 | 4 | PVC | S | 6/4/90 |
| MSB 82A | Mw,Pl | 107529.5 | 51978.4 | 3689960.85 | 431249.03 | 126.1 | 121.4 | 372.1 | 374.3 | 374.5 | 252.9 | 4 | PVC | S | 8/14/90 |
| MSB 82B | Mw,Pl | 107533.4 | 51993.3 | 3689964.15 | 431252.77 | 148.2 | 143.5 | 372.2 | 374.2 | 374.4 | 230.7 | 4 | PVC | S | 8/14/90 |
| MSB 82C | Mw,Pl | 107521.9 | 51949.4 | 3689953.13 | 431243.39 | 177.7 | 173 | 371.7 | 373.9 | 374.1 | 200.9 | 4 | PVC | S | 5/15/89 |
| MSB 82D | Mw,Pl | 107518.1 | 51934.6 | 3689949.82 | 431240.57 | 236.9 | 216.8 | 371.4 | 373.6 | 373.8 | 156.8 | 4 | PVC | S | 8/6/90 |
| MSB 82TA | Mw,Pl | 107525.7 | 51964.2 | 3689957.54 | 431246.21 | 93.8 | 88.4 | 371.8 | 373.7 | 373.9 | 285.3 | 4 | CS | S | 8/6/90 |
| MSB 83B | Mw,Pl | 108426.7 | 52421.4 | 3690261.68 | 431197.19 | 146.3 | 141.6 | 369.8 | 371.8 | 372 | 230.2 | 4 | PVC | S | 12/17/90 |
| MSB 83C | Mw,Pl | 108405.3 | 52384.7 | 3690249.52 | 431192.45 | 182.8 | 178 | 369.8 | 372 | 372.2 | 194 | 4 | PVC | S | 5/10/89 |
| MSB 83D | Mw,Pl | 108418.4 | 52391.2 | 3690253.96 | 431191.55 | 236.1 | 216.7 | 369.3 | 371.6 | 371.7 | 154.9 | 4 | PVC | S | 11/16/90 |
| MSB 83TA | Mw,Pl | 108416.3 | 52410.9 | 3690257.25 | 431197.16 | 75.7 | 70.2 | 369.7 | 371.7 | 371.8 | 301.5 | 4 | PVC | S | 12/14/90 |
| MSB 84A | Mw,Pl | 108982.1 | 51971.2 | 3690317.5 | 430987.28 | 129.4 | 124.5 | 359.4 | 361.5 | 361.6 | 237 | 4 | PVC | S | 9/22/93 |
| MSB 84C | Mw,Pl | 108967.9 | 51973.7 | 3690314.15 | 430990.05 | 194.9 | 190.2 | 359.9 | 361.9 | 362.3 | 171.7 | 4 | PVC | S | 5/4/89 |
| MSB 85B | Mw,Pl | 107827 | 53122.7 | 3690238.63 | 431478.05 | 137.3 | 132.6 | 378.3 | 380.3 | 380.5 | 247.7 | 4 | PVC | S | 1/24/90 |
| MSB 85C | Mw,Pl | 107835.2 | 53151.4 | 3690246.35 | 431483.69 | 173.6 | 168.8 | 378.6 | 380.9 | 381.1 | 212.1 | 4 | PVC | S | 5/19/89 |
| MSB 85D | Mw,Pl | 107822.8 | 53108.8 | 3690235.32 | 431475.23 | 236.3 | 216.2 | 378.8 | 380.8 | 381 | 164.6 | 4 | PVC | S | 8/23/90 |
| MSB 85TA | Mw,Pl | 107831.2 | 53137.2 | 3690243.04 | 431480.87 | 88.2 | 82.8 | 378.4 | 380.4 | 380.6 | 297.6 | 4 | Steel | S | 1/2/90 |
| MSB 86C | Mw,Pl | 108500.4 | 54560.5 | 3690580.07 | 431798.69 | 164.8 | 160.1 | 354.8 | 357 | 357.2 | 196.9 | 4 | PVC | S | 10/13/89 |
| MSB 87B | Mw,Pl | 101276 | 51607 | 3688353.72 | 432279.11 | 174.1 | 169.1 | 334 | 336 | 336.5 | 166.9 | 2 | PVC | V | 6/2/93 |
| MSB 87C | Mw,Pl | 101277 | 51596.3 | 3688351.52 | 432276.3 | 246.6 | 241.6 | 334.6 | 336.6 | 337.1 | 95 | 2 | PVC | V | 6/2/93 |
| MSB 88B | Mw,Pl | 97013 | 50774.2 | 3687153.53 | 432838.54 | 75.8 | 70.8 | 235.8 | 238.1 | 238.5 | 167.3 | 2 | PVC | V | 5/26/93 |
| MSB 88C | Mw,Pl | 97012.7 | 50784 | 3687155.73 | 432841.35 | 127.2 | 122.2 | 235.2 | 237.2 | 237.6 | 115 | 2 | PVC | V | 5/26/93 |
| MSB 88D | Mw,Pl | 97012.3 | 50793.5 | 3687156.82 | 432843.22 | 212.2 | 192.1 | 234.9 | 236.9 | 237.3 | 44.8 | 2 | PVC | V | 5/26/93 |
| MSB 89B | Mw,Pl | 98374.1 | 47889.9 | 3686920.17 | 431959.13 | 162 | 157 | 337.3 | 339.4 | 339.8 | 182.4 | 2 | PVC | V | 6/8/93 |
| MSB 89C | Mw,Pl | 98379.4 | 47881.6 | 3686971.72 | 431881.3 | 222.6 | 217.6 | 337.6 | 339.8 | 340.1 | 122.2 | 2 | PVC | V | 6/8/93 |
| MVC 1A | Sp | 104275.2 | 49331.5 | 3688684.09 | 431180.41 | 245.9 | 240.9 | 371 | 373 | | 132.1 | 1 | PVC | | 10/4/90 |
| MVC 1B | Sp | 104275.2 | 49331.5 | 3688684.09 | 431180.41 | 301 | 296 | 371 | 373 | | 77 | 1 | PVC | | 10/5/90 |
| MVC 1C | Sp | 104275.2 | 49331.5 | 3688684.09 | 431180.41 | 321 | 316 | 371 | 373 | | 57 | 1 | PVC | | 10/5/90 |
| MVC 2A | Sp | 101970 | 50060.2 | 3688247.5 | 431773.91 | 244.5 | 239.5 | 346.5 | 348.6 | | 109.1 | 1 | PVC | | 9/13/90 |
| MVC 2B | Sp | 101970 | 50060.2 | 3688247.5 | 431773.91 | 278.7 | 273.7 | 346.5 | 348.6 | | 74.9 | 1 | PVC | | 9/13/90 |
| MVC 2C | Sp | 101970 | 50060.2 | 3688247.5 | 431773.91 | 302 | 297 | 346.5 | 348.6 | | 51.6 | 1 | PVC | | 9/17/90 |
| MVC 3A | Sp | 101833.9 | 50120.4 | 3688223.94 | 431812.84 | 240.7 | 235.7 | 342.7 | 344.7 | | 109 | 1 | PVC | | 9/21/90 |
| MVC 3B | Sp | 101833.9 | 50120.4 | 3688223.94 | 431812.84 | 277.7 | 272.7 | 342.7 | 344.7 | | 72 | 1 | PVC | | 9/24/90 |
| MVC 3C | Sp | 101833.9 | 50120.4 | 3688223.94 | 431812.84 | 294.7 | 289.7 | 342.7 | 344.7 | | 55 | 1 | PVC | | 9/24/90 |
| MVE 1 | Sp | 104319.1 | 49357.2 | 3688699.62 | 431179.59 | 336.2 | 235.7 | 370.7 | 372.8 | | 137.1 | 4 | Steel | | 10/31/90 |
| MVE 2 | Sp | 104318.5 | 49307.2 | 3688690.83 | 431167.43 | 341.8 | 237.8 | 370.6 | 372.9 | | 135.1 | 4 | Steel | | 10/18/90 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MVE 3 | Sp | 104407 | 49332.2 | 3688716.4 | 431157.37 | 303 | 202.5 | 336.4 | 371.9 | | 169.4 | 4 | Steel | | 11/2/90 | |
| MVE 4 | Sp | 102009.1 | 49964.6 | 3688239.95 | 431743.15 | 293.9 | 232.5 | 347.5 | 350 | | 117.5 | 4 | CS | | 9/19/90 | |
| MVE 5 | Sp | 103680.2 | 49030 | 3688483.18 | 431213.42 | 323.1 | 257.6 | 367 | 368.8 | | 111.2 | 4 | Steel | | 9/3/93 | |
| MVE 6 | Sp | 103340.1 | 49029.6 | 3688399.59 | 431274.26 | 319.3 | 253.8 | 362.9 | 364.7 | | 110.9 | 4 | Steel | | 9/8/93 | |
| MVE 7 | Sp | 103200.3 | 48975.3 | 3688355.16 | 431286.04 | 321.6 | 256 | 362.2 | 364.2 | | 108.2 | 4 | Steel | | 9/9/93 | |
| MVE 8 | Sp | 103509.5 | 49030 | 3688441.94 | 431243.84 | 320 | 254.6 | 365.6 | 367.5 | | 112.9 | 4 | Steel | | 9/3/93 | |
| P 30A | Mw | 98997.7 | 57108.5 | 3688778.4 | 434042.91 | 85.1 | 75.1 | 354.6 | 356.9 | 357.4 | 281.8 | 4 | PVC | | 9/18/86 | |
| P 30B | Mw | 98983.3 | 57103.8 | 3688773.96 | 434044.75 | 135.1 | 125.1 | 354.6 | 356.8 | 357.3 | 231.7 | 4 | PVC | | 9/19/86 | |
| P 30C | Mw | 98969.2 | 57099.6 | 3688770.62 | 434045.65 | 205.2 | 195.1 | 354.6 | 356.9 | 357.1 | 161.8 | 4 | PVC | | 9/22/86 | |
| P 30D | Mw | 98954.2 | 57094.6 | 3688765.07 | 434047.48 | 275.3 | 255.2 | 354.8 | 357 | | 101.8 | 4 | PVC | | 9/19/86 | |
| P 30TA | Mw | 98933.3 | 57104.5 | 3688761.7 | 434053.97 | -328.2 | -349.8 | 355.1 | 357.3 | 357.7 | 707.1 | 4 | CS | | 6/18/86 | |
| P 30TB | Mw | 98962.1 | 57113.2 | 3688770.59 | 434050.31 | -213.6 | -235.2 | 354.8 | 357 | 357.5 | 592.2 | 4 | CS | | 9/26/86 | |
| P 30TC | Mw | 98976.3 | 57117.5 | 3688775.03 | 434049.41 | -94.4 | -105.2 | 354.8 | 357 | 357.5 | 462.2 | 4 | CS | | 9/22/86 | |
| P 30TD | Mw | 98991.2 | 57121.6 | 3688779.48 | 434047.57 | 15.3 | 4.5 | 354.5 | 356.7 | 357.2 | 352.2 | 4 | CS | | 9/22/86 | |
| PW 11G | Ab | 104805 | 56040 | 3690018.04 | 432738.33 | 170.5 | 163.5 | 272.5 | 275 | | 111.5 | 6 | Steel | | 8/27/54 | |
| PW 20A | Pw | 104000 | 50615 | 3688846.7 | 431546.39 | -2 | -7 | 385 | | | | 8 | Steel | | 8/9/51 | |
| PW 31A | Pw | 103150 | 50615 | 3688637.19 | 431698.48 | -38 | -43 | 374 | 374.6 | | 682.6 | 8 | Steel | | 12/4/51 | |
| PW 53A | Pw | 105011 | 50757 | 3689121.58 | 431400.36 | -4 | -9 | 381 | | | | 10 | Steel | | 5/17/57 | |
| PW 68A | Pw | 106265.6 | 50265.5 | 3689342.46 | 431053.86 | 38 | 28 | 385 | | | | 6 | Steel | | 7/29/65 | |
| PW 81A | Pw | 105378.3 | 51761.4 | 3689391.94 | 431581.88 | 202 | 192 | 370 | | | | 4 | Steel | | 5/5/78 | |
| PW 82A | Pw | 103330 | 51100 | 3688768.51 | 431785.95 | -80 | -85 | 365 | | | | 10 | Steel | | 7/11/77 | |
| PW 98A | Pw | 105290 | 51989 | 3689411.39 | 431653.67 | 190 | 180 | 350 | | | | 6 | Steel | | 1/1/80 | |
| PW 99A | Pw | 105290 | 51989 | 3689411.39 | 431653.67 | 160 | 140 | 350 | | | | 6 | Steel | | 7/31/80 | |
| PW 112G | Pw | 99388 | 58023 | 3689039 | 434198.24 | | | | | | | 12 | Steel | | 4/24/85 | |
| PW 113G | Pw | 99961 | 57203 | 3689033.31 | 433893.88 | -67 | -128 | 330 | | | | 12 | Steel | | 6/17/85 | |
| PW 118G | Pw | 104951 | 56141 | 3690072.37 | 432736.84 | | | | | | | 6 | Steel | | 4/13/88 | |
| RWM 1 | Sp,Pl | 102599.1 | 48575.1 | 3688135.57 | 431294.73 | 232.3 | 172.3 | 362.8 | 364.7 | 365.8 | 192.4 | 8 | CS | S | 5/7/85 | |
| RWM 2 | Sp | 104434.1 | 49205.5 | 3688701.14 | 431120.97 | 208.3 | 198.3 | 368.3 | 371.3 | | 233 | | | S | 5/3/85 | |
| RWM 3 | Sp | 104730.2 | 49680 | 3688859.23 | 431185.38 | 214 | 204 | 374 | 377 | 378.1 | 233 | 8 | CS | S | 6/6/85 | |
| RWM 4 | Sp | 103719.3 | 48948.2 | 3688478.93 | 431186.4 | 211.9 | 201.6 | 363.5 | 366.5 | 367.6 | 237 | 8 | CS | S | 2/22/85 | |
| RWM 5 | Sp | 103502.2 | 49628 | 3688547.32 | 431392.57 | 216.8 | 206.4 | 363.9 | 366.9 | 368.1 | 233 | 8 | CS | S | 2/27/85 | |
| RWM 6 | Sp | 102001.5 | 50107.4 | 3688262.98 | 431779.61 | 218.7 | 208.4 | 346.1 | 349.1 | 350.2 | 208 | 8 | CS | S | 5/3/85 | |
| RWM 7 | Sp | 101904.6 | 49449.5 | 3688120.97 | 431635.27 | 216.3 | 206 | 346 | 349 | 350.1 | 205 | 8 | CS | S | 2/25/85 | |
| RWM 8 | Sp | 101948.2 | 47353.3 | 3687756.59 | 431110.54 | 197.2 | 186.9 | 345.3 | 348.3 | 349.5 | 239 | 8 | CS | S | 2/21/85 | |
| RWM 9 | Sp | 104099.8 | 50400 | 3688832.79 | 431475.56 | 220.6 | 210.2 | 377.6 | 380.6 | 381.8 | 248 | 8 | CS | S | 2/26/85 | |
| RWM 10 | Sp | 102000.9 | 48244.1 | 3687929.16 | 431321.19 | 215.5 | 205.1 | 352.5 | 355.5 | 356.9 | 228 | 8 | CS | S | 2/21/85 | |
| RWM 11 | Sp | 104875 | 50400.2 | 3689023.36 | 431336.38 | 214.6 | 204.2 | 380.3 | 383.3 | 384.4 | 241.4 | 8 | CS | S | 2/26/85 | |
| RWM 12 | Sp | 106879.2 | 52500.1 | 3689893.7 | 431494.22 | 210.4 | 189.9 | 359 | 359.4 | | 200.2 | 6 | CS/SS | S | 1/16/90 | |
| RWM 13B | Sp | 105803.3 | 53516.3 | 3689810.75 | 431937.52 | 138.2 | 113 | 333.2 | 336.2 | | 223.2 | 6 | CS | | 8/19/93 | |
| RWM 13C | Sp | 105809.7 | 53502.2 | 3689810.78 | 431932.87 | 173.4 | 153.3 | 333.4 | 336.4 | | 183.1 | 6 | CS | | 8/26/93 | |
| RWM 14B | Sp | 106362.1 | 53044.7 | 3689864.38 | 431721.08 | 148.5 | 123.2 | 348.5 | 351.2 | | 228 | 6 | CS | | 8/3/93 | |
| RWM 14C | Sp | 106380.8 | 53051.5 | 3689869.94 | 431719.25 | 193.5 | 173.4 | 348.5 | 351.4 | | 178 | 6 | CS | | 8/6/93 | |
| RWM 15B | Sp | 107444.7 | 53849 | 3690275.69 | 431724.99 | 150.9 | 125.8 | 365.9 | 369.5 | | 243.7 | 6 | CS | | 12/3/93 | |
| RWM 16 | Sp | 97647.2 | 48244.8 | 3686857.08 | 432102.04 | 188.4 | 168 | 318.4 | 319.4 | 322.6 | 172.2 | 6 | CS/SS | S | 5/1/90 | |
| RWM 16PA | Pz | 97783.9 | 48364.9 | 3686911.37 | 432107.08 | 188.9 | 148.8 | 327.9 | 328.7 | | 179.9 | 2 | PVC | | 7/26/90 | |
| RWM 16PB | Pz | 97672.1 | 48212.5 | 3686857.17 | 432089.01 | 189.3 | 149.2 | 317.8 | 319.5 | | 170.3 | 2 | PVC | | 7/26/90 | |
| SRW 1 | Mw,Pl | 103776.7 | 41407 | 3687140.83 | 429316.02 | 230.2 | 200.2 | 313.2 | 315.2 | 315.3 | 115 | 4 | PVC | V | 10/21/81 | |
| SRW 1BB | Mw,Pl | 103772.2 | 41415.2 | 3687140.81 | 429320.82 | 129.3 | 119.3 | 314.3 | 316.3 | 316.5 | 197 | 4 | PVC | S | 9/28/93 | |
| SRW 2 | Mw,Pl | 103721.8 | 41627.2 | 3687165.86 | 429382.43 | 228.6 | 198.6 | 318.6 | 320.6 | 320.7 | 122 | 4 | PVC | S | 10/22/81 | |
| SRW 2A | Mw,Pl | 103720.8 | 41634.6 | 3687166.96 | 429384.3 | 98.4 | 88.6 | 319.1 | 320.6 | 320.7 | 232 | 4 | PVC | S | 8/8/83 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SRW 2B | Mw,PI | 103729.7 | 41631.7 | 3687169.19 | 429381.53 | 162.6 | 152.8 | 319.2 | 320.6 | 320.7 | 167.8 | 4 | PVC | S | 12/20/83 | |
| SRW 3A | Mw,PI | 103516.4 | 41851.2 | 3687156.32 | 429474.52 | 193.1 | 163.1 | 330.1 | 332.1 | 332.2 | 169 | 4 | PVC | S | 8/20/84 | |
| SRW 3BB | Mw,PI | 103526.6 | 41845.6 | 3687157.46 | 429470.8 | 130.3 | 120.2 | 330.3 | 332.3 | 332.5 | 212.1 | 4 | PVC | S | 9/23/93 | |
| SRW 4 | Mw,PI | 103359.9 | 41612.4 | 3687074.5 | 429443.21 | 230.1 | 200.1 | 318.1 | 320.1 | 320.3 | 120 | 4 | PVC | S | 9/28/81 | |
| SRW 4BB | Mw,PI | 103347.9 | 41609.2 | 3687071.16 | 429445.04 | 134.1 | 124 | 318.6 | 320.6 | 320.8 | 196.6 | 4 | PVC | S | 8/20/93 | |
| SRW 5 | Mw,PI | 103418.2 | 41240 | 3687022.03 | 429341.36 | 224.6 | 194.6 | 307.6 | 309.4 | 309.5 | 114.8 | 4 | PVC | S | 10/29/81 | |
| SRW 6 | Mw,PI | 103602.7 | 41243.9 | 3687068.83 | 429309.12 | 222.6 | 192.6 | 305.6 | 307.7 | 307.8 | 115.1 | 4 | PVC | S | 11/3/81 | |
| SRW 7 | Mw,PI | 103541.5 | 40926.2 | 3686996.14 | 429241.57 | 217.5 | 197.5 | 296.7 | 299.1 | 299.2 | 101.6 | 4 | PVC | S | 5/3/82 | |
| SRW 10 | Mw,PI | 103387.9 | 40944.3 | 3686961.54 | 429273.9 | 223 | 193 | 301 | 303.4 | 303.5 | 110.4 | 4 | PVC | S | 9/16/82 | |
| SRW 10BB | Mw,PI | 103399.1 | 40940.5 | 3686963.78 | 429271.12 | 126.7 | 116.6 | 300.7 | 302.8 | 302.9 | 186.2 | 4 | PVC | S | 9/16/93 | |
| SRW 11 | Mw,PI | 103693.2 | 40874.2 | 3687024.15 | 429201.75 | 220.6 | 190.6 | 293.6 | 295.8 | 296 | 105.2 | 4 | PVC | S | 9/20/82 | |
| SRW 11BB | Mw,PI | 103703.4 | 40871.2 | 3687026.39 | 429198.97 | 129.5 | 119.5 | 294.5 | 296.5 | 296.7 | 177 | 4 | PVC | S | 9/30/93 | |
| SRW 14A | Mw,PI | 102831.3 | 41538.6 | 3686930.92 | 429520.35 | 123.7 | 113.9 | 324.9 | 327 | 327.1 | 213.1 | 4 | PVC | S | 9/3/83 | |
| SRW 14B | Mw,PI | 102836.1 | 41548.1 | 3686934.24 | 429521.31 | 162.9 | 153.1 | 324.9 | 326.9 | 327 | 173.8 | 4 | PVC | S | 12/16/83 | |
| SRW 14C | Mw,PI | 102824.2 | 41546.4 | 3686930.9 | 429523.15 | 228.3 | 198.6 | 325.3 | 326.9 | 327.1 | 128.3 | 4 | PVC | S | 11/15/83 | |
| SRW 15A | Mw,PI | 104778 | 41234.7 | 3687356.43 | 429096.2 | 107.6 | 97.8 | 317.4 | 319.1 | 319.3 | 221.3 | 4 | PVC | S | 10/2/83 | |
| SRW 15B | Mw,PI | 104772.9 | 41252.5 | 3687358.61 | 429100.87 | 161.6 | 151.8 | 317.1 | 319.1 | 319.3 | 167.3 | 4 | PVC | S | 11/12/83 | |
| SRW 15C | Mw,PI | 104774.9 | 41245.1 | 3687357.52 | 429099 | 217.3 | 187.7 | 317.3 | 319.1 | 319.2 | 131.4 | 4 | PVC | S | 10/18/83 | |
| SRW 16A | Mw,PI | 103763.4 | 42830.9 | 3687392.16 | 429670.77 | 144.1 | 119.4 | 344.5 | 346.8 | 346.9 | 227.4 | 4 | PVC | S | 10/28/83 | |
| SRW 16B | Mw,PI | 103772 | 42825.8 | 3687393.29 | 429667.99 | 169.9 | 160.1 | 344.4 | 346.8 | 346.9 | 186.7 | 4 | PVC | S | 11/13/83 | |
| SRW 16C | Mw,PI | 103772.4 | 42841.8 | 3687396.59 | 429672.67 | 235.7 | 205.7 | 345.3 | 346.6 | 346.8 | 140.9 | 4 | PVC | S | 7/4/84 | |
| SRW 17BB | Mw,PI | 103956.1 | 42463.8 | 3687374.22 | 429545.91 | 132.3 | 122.2 | 331.3 | 333.4 | 333.6 | 211.2 | 4 | PVC | S | 9/2/93 | |
| SRW 17C | Mw,PI | 103965.9 | 42465.5 | 3687376.45 | 429545 | 161.3 | 151.2 | 331.3 | 333.6 | 334 | 182.4 | 2 | PVC | V | 9/13/93 | |
| SRW 17D | Mw,PI | 103975.9 | 42468.7 | 3687379.78 | 429544.09 | 220.4 | 200.4 | 331.4 | 333.7 | 334 | 133.3 | 2 | PVC | V | 9/3/93 | |
| UNK 7 | | 101987 | 46250 | 3687567.87 | 430831.82 | | | | | | | | Steel | | | |
| | | | | | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| WELL TYPES: Mw - monitor well; Sp - special Well; PI - plume definition well; Pz - piezometer; Pc - point of compliance well; Bk - background well. | | | | | | | | | | | | | | | | |
| SRS N and SRS E - Well coordinates in the SRS surveying system | | | | | | | | | | | | | | | | |
| UTM N and UTM E - Well coordinates in the Universal Transverse Mercator system | | | | | | | | | | | | | | | | |
| SZ T - Elevation of the top of the screen zone; SZ B - Elevation of the bottom of the screen zone | | | | | | | | | | | | | | | | |
| GRND - Land surface elevation, in ft. above msl. | | | | | | | | | | | | | | | | |
| TOC - Top of casing elevation, in ft. above msl. | | | | | | | | | | | | | | | | |
| TOS - Top of standpipe elevation, in ftl above msl. | | | | | | | | | | | | | | | | |
| EWD - efective well delpth (ft) | | | | | | | | | | | | | | | | |
| C DIA - casing diameter | | | | | | | | | | | | | | | | |
| CASING - material, PVC=polyvinyl chloride, SS=stainless steel, CS=carbon steel | | | | | | | | | | | | | | | | |
| PUMP - pump type, S=single speed, B - bailer, P - bladder pump, V - variable speed | | | | | | | | | | | | | | | | |
| | INSTALL - date of installation | | | | | | | | | | | | | | | |
| | ABANDON - date abandoned (if abandoned) | | | | | | | | | | | | | | | |

Table B. List of wells in the monitoring program

# TABLE B List of Wells in the Groundwater Monitoring Program

(Compiled by Rust, Inc.)

| Well Numbers | Date Completed | Northing | Easting | Screen Zones | | Ground | Top of Casing | Monitoring Designation | Sample for PCBs | Map Unit SRS 1996 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ABP 001A | 08-15-84 | 97,501.60 | 44,425.60 | 202.9 | 172.9 | 357.9 | 359.9 | PZ | | M | In "UL" of the permit list |
| ABP 001DD | 06-30-89 | 97,511.40 | 44,433.60 | 227.2 | 207.2 | 357.9 | 360.1 | PZ | | M | |
| ABP 002A | 08-10-84 | 97,764.30 | 44,118.80 | 211.1 | 181.1 | 370.1 | 371.9 | PDW | | M | In "UL" of the permit list |
| ABP 002DD | 06-23-89 | 97,753.70 | 44,126.70 | 222.3 | 202.2 | 368.3 | 370.6 | PZ | | M | |
| ABP 003 | 08-04-83 | 97,794.10 | 44,509.30 | 236.9 | 206.9 | 351.9 | 353.7 | PZ | | M | |
| ABP 003C | 07-10-89 | 97,778.20 | 44,506.30 | 165.3 | 160.3 | 352.3 | 354.5 | PDW | | LL | In "UL" of the permit list |
| ABP 004 | 06-21-84 | 97,489.70 | 44,096.00 | 212.5 | 182.5 | 362.5 | 364.3 | PZ | | M | |
| ABP 004DD | 06-23-89 | 97,495.50 | 44,101.30 | 223.2 | 203.2 | 362.7 | 365.0 | PZ | | M | |
| ABP 006D | 07-05-89 | 97,889.70 | 44,101.40 | 222.4 | 202.4 | 363.0 | 365.3 | PZ | | M | |
| ABP 007D | 06-30-89 | 97,449.70 | 43,930.10 | 225.2 | 205.2 | 361.9 | 364.2 | PZ | | M | |
| ABP 008C | 07-20-89 | 97,855.60 | 43,968.70 | 190.6 | 185.5 | 369.8 | 372.1 | PZ | | LL | |
| ABP 008D | 07-20-89 | 97,854.90 | 43,984.10 | 228.2 | 208.1 | 368.8 | 370.9 | PZ | | M | |
| ABW 001 | 06-02-83 | 105,939.90 | 55,016.40 | 215.1 | 185.1 | 323.1 | 324.8 | PZ | | UL | |
| AC 001A | 08-03-81 | 105,865.00 | 42,238.80 | 145.7 | 140.7 | 260.7 | 262.1 | PDW | | UL | |
| AC 001B | 07-28-81 | 105,862.80 | 42,250.50 | 202.1 | 197.1 | 261.1 | 262.0 | PDW | | UL | |
| AC 002A | 09-09-81 | 105,636.40 | 46,428.60 | 146.0 | 141.0 | 342.7 | 344.7 | PZ | | LL | In "UL" of the permit list |
| AC 002B | 08-12-81 | 105,648.70 | 46,444.50 | 236.4 | 216.4 | 342.8 | 344.8 | PZ | | M | |
| AC 003A | 09-15-81 | 100,989.10 | 42,119.80 | 153.6 | 148.6 | 300.4 | 302.3 | PDW | | UL | |
| AC 003B | 08-21-81 | 100,996.50 | 42,113.60 | 213.4 | 193.4 | 300.1 | 302.5 | PZ | | M | |
| ACB 001A | 01-11-84 | 102,622.90 | 51,369.90 | 247.6 | 217.6 | 357.6 | 359.6 | PZ | | M | |
| ACB 002A | 01-30-84 | 102,367.40 | 51,561.30 | 237.8 | 207.8 | 347.8 | 349.8 | PZ | | M | |
| ACB 003A | 01-25-84 | 102,154.30 | 51,313.30 | 236.3 | 206.3 | 346.3 | 348.3 | PZ | | M | |
| ACB 004A | 02-02-84 | 102,343.90 | 51,116.20 | 241.7 | 211.7 | 356.7 | 359.1 | PZ | | M | |
| AMB 004A | 08-30-91 | 104,131.60 | 51,469.80 | 126.3 | 121.3 | 378.3 | 380.5 | PDW | | MCBC | |
| AMB 004B | 09-09-91 | 104,145.60 | 51,482.70 | 157.3 | 152.3 | 378.3 | 380.4 | PDW | | LL | |
| AMB 004D | 09-09-91 | 104,154.70 | 51,489.00 | 233.4 | 213.4 | 378.4 | 380.3 | PDW | | M | Annular material breechs green clay |
| AMB 005 | 09-14-88 | 104,083.40 | 51,467.20 | 242.1 | 222.1 | 377.6 | 379.6 | PDW | | M | Annular material breechs green clay |
| AMB 006 | 09-15-88 | 104,034.10 | 51,466.00 | 242.6 | 222.6 | 375.1 | 377.2 | PDW | | M | In "UL" - Annular material breechs green clay |
| AMB 007 | 09-06-88 | 103,920.00 | 51,624.90 | 242.1 | 222.1 | 368.1 | 369.9 | PDW | | M | Annular material breechs green clay |
| AMB 007A | 07-26-91 | 103,987.10 | 51,591.00 | 125.6 | 115.6 | 371.6 | 373.6 | PDW | | MCBC | |
| AMB 007B | 07-26-91 | 103,972.00 | 51,590.30 | 162.9 | 152.9 | 370.9 | 373.0 | PDW | | LL | |
| AMB 008D | 10-31-89 | 103,874.70 | 51,400.50 | 240.8 | 220.8 | 367.8 | 369.6 | PDW | | M | |
| AMB 009D | 10-25-89 | 103,585.20 | 51,263.00 | 239.7 | 219.7 | 365.7 | 367.9 | PDW | | M | |
| AMB 010A | 08-26-91 | 103,326.40 | 51,410.00 | 111.4 | 106.4 | 364.4 | 366.5 | PDW | | MCBC | |
| AMB 010B | 09-03-91 | 103,337.30 | 51,418.30 | 154.3 | 149.3 | 364.3 | 366.4 | PDW | | LL | |
| AMB 010D | 11-03-89 | 103,293.40 | 51,456.00 | 239.4 | 219.4 | 363.4 | 365.5 | PDW | | M | |
| AMB 010DD | 06-07-89 | 103,278.70 | 51,456.00 | 358.6 | 338.6 | 363.6 | 365.4 | PZ | | M | |
| AMB 011B | 08-13-91 | 103,154.20 | 51,919.50 | 184.5 | 174.5 | 362.5 | 364.6 | PDW | | UL | |
| AMB 011D | 06-13-89 | 103,132.30 | 51,932.60 | 240.5 | 220.5 | 362.0 | 364.0 | PDW | | M | |
| AMB 012D | 06-16-89 | 103,602.40 | 51,901.60 | 239.4 | 219.4 | 367.8 | 369.8 | PDW | | M | |
| AMB 013AR | 08-08-91 | 103,082.00 | 51,396.00 | 110.9 | 100.9 | 362.9 | 365.1 | PDW | | MCBC | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AMB 014D | 09-07-90 | 104,278.73 | 51,360.78 | 235.1 | 215.1 | 380.1 | 382.4 | PDW | | M | |
| AMB 015D | 09-05-90 | 104,500.55 | 51,383.81 | 236.2 | 216.2 | 381.2 | 383.4 | PDW | | M | |
| AMB 016D | 08-08-90 | 104,268.77 | 51,557.53 | 233.4 | 213.4 | 378.4 | 380.4 | PDW | | M | |
| AMB 017A | 08-29-90 | 104,056.74 | 51,465.37 | 125.0 | 120.0 | 377.0 | 379.1 | PDW | | MCBC | |
| AMB 018A | 07-27-90 | 103,988.75 | 51,418.79 | 136.4 | 131.4 | 375.4 | 377.3 | PDW | | MCBC | |
| AMB 018C | 08-02-90 | 103,983.38 | 51,432.77 | 214.2 | 209.2 | 374.2 | 376.0 | PDW | | UL | |
| AMB 019C | 07-17-90 | 102,941.12 | 51,503.74 | 196.7 | 191.7 | 361.7 | 363.7 | PDW | | UL | |
| AOB 001 | 05-27-83 | 101,910.70 | 50,485.90 | 248.5 | 218.5 | 338.5 | 341.1 | PDW | | M | |
| AOB 002 | 05-27-83 | 102,009.80 | 50,724.70 | 250.2 | 220.2 | 343.2 | 345.4 | PDW | | M | |
| AOB 003 | 04-21-89 | 102,164.40 | 50,959.40 | 243.9 | 223.9 | 350.6 | 352.6 | PZ | | M | |
| ARP 001A | 02-03-84 | 99,102.90 | 44,317.40 | 223.0 | 193.0 | 353.0 | 355.1 | PZ | | UL | |
| ARP 002 | 12-22-83 | 99,119.80 | 44,876.10 | 220.3 | 190.3 | 335.3 | 337.3 | PZ | | M | |
| ARP 003 | 12-14-83 | 98,638.20 | 44,903.70 | 218.2 | 188.2 | 338.2 | 339.8 | PZ | | UL | |
| ARP 004 | 06-25-84 | 98,567.70 | 44,374.80 | 227.8 | 197.8 | 346.8 | 348.4 | PZ | | UL | |
| ARP 005D | 03-02-91 | 98,967.70 | 44,530.00 | -- | -- | 347.3 | 350.5 | CRC | | M | |
| ARP 008D | 08-07-90 | 98,786.60 | 44,132.60 | 224.3 | 204.3 | 352.3 | 355.7 | PZ | | M | No measurements 1-4Q95 |
| ARP 009D | 08-08-90 | 99,295.50 | 44,686.60 | 232.3 | 212.3 | 344.3 | 347.4 | PZ | | M | No measurements 1-4Q95 |
| ARP 010D | 08-11-90 | 98,536.50 | 45,016.40 | 239.3 | 219.3 | 333.5 | 336.2 | PZ | | M | No measurements 1-4Q95 |
| ARP 011D | 08-16-90 | 98,788.35 | 45,081.10 | 223.3 | 303.9 | 334.1 | 336.6 | PZ | | M | No measurements 1-4Q95 |
| ASB 001A | 01-05-84 | 105,535.00 | 52,614.00 | 247.2 | 217.2 | 347.2 | 349.1 | PDW | | M | |
| ASB 002A | | | | | | | | PZ | | M | No measurements 1-4Q95 |
| ASB 002AR | 02-12-93 | 105,550.50 | 52,881.70 | 240.1 | 220.2 | 353.1 | 355.6 | PDW | | M | |
| ASB 002C | | | | | | | | PZ | | UL | No measurements 1-4Q95 |
| ASB 002CR | 01-04-93 | 105,540.20 | 52,862.70 | 183.1 | 173.1 | 353.1 | 355.6 | PDW | | LL | |
| ASB 003A | | | | | | | | PZ | | M | No measurements 1-4Q95 |
| ASB 003AR | 01-22-93 | 105,605.10 | 53,115.00 | 243.1 | 223.1 | 339.1 | 341.6 | PDW | | M | |
| ASB 003C | | | | | | | | PZ | | UL | No measurements 1-4Q95 |
| ASB 003CR | 01-22.93 | 105,614.50 | 53,130.40 | 184.0 | 174.0 | 339.0 | 341.5 | PDW | | LL | |
| ASB 004 | 08-20-81 | 105,935.70 | 53,177.20 | 256.1 | 226.1 | 333.1 | 335.6 | PDW | | M | |
| ASB 005A | | | | | | | | PZ | | M | No measurements 1-4Q95 |
| ASB 005AR | 02-01-93 | 105,900.50 | 52,854.40 | 243.8 | 223.8 | 344.5 | 347.0 | PDW | | M | |
| ASB 005C | 01-19-93 | 105,884.80 | 52,837.80 | 175.1 | 165.1 | 344.8 | 347.3 | PDW | | LL | |
| ASB 006A | 02-20-84 | 105,716.00 | 52,675.90 | 248.2 | 218.2 | 348.2 | 350.2 | PDW | | M | |
| ASB 006AA | 12-09-88 | 105,727.00 | 52,643.90 | 82.8 | 78.1 | 351.8 | 354.2 | PDW | | MCBC | |
| ASB 006C | 12-21-90 | 105,736.80 | 52,655.90 | 178.5 | 173.8 | 351.5 | 353.6 | PDW | | LL | In "UL" of the permit list |
| ASB 006TA | 01-30-91 | 105,749.50 | 52,671.30 | 40.0 | 34.5 | 351.0 | 352.9 | PDW | | CBA | |
| ASB 007 | | | | | | | | PZ | | M | No measurements 1-4Q95 |
| ASB 008 | | 106,381.60 | 53,136.60 | 226.6 | 206.6 | | 349.0 | PDW | | UL | Sampled 3Q95. Not on well list 3/13/95. |
| ASB 008A | 03-26-85 | 106,369.30 | 53,117.50 | 83.5 | 77.9 | 347.2 | 349.3 | PZ | | MCBC | |
| ASB 008B | 12-14-84 | 106,362.30 | 53,109.60 | 128.4 | 122.8 | 347.6 | 349.8 | PDW | | MCBC | In "LL" of the permit list |
| ASB 008C | 12-18-84 | 106,354.40 | 53,101.00 | 188.3 | 182.7 | 347.6 | 349.7 | PDW | | UL | |
| ASB 008D | -- | 106,381.60 | 53,136.60 | 226.6 | 206.6 | 346.6 | 349.0 | PZ | | M | No measurements 1-4Q95 |
| ASB 008TA | 10-17-84 | 106,375.80 | 53,124.70 | 24.6 | 19.4 | 347.3 | 349.6 | PDW | | CBA | |
| ASB 009 | -- | 104,589.20 | 54,226.20 | 236.4 | 216.4 | 306.4 | 309.0 | PZ | | M | Remote and isolated flags (suspect) |
| ASB 009B | 07-16-87 | 104,564.70 | 54,215.30 | 164.4 | 158.8 | 306.6 | 309.0 | PDW | | LL | |
| ASB 009C | 02-16-89 | 104,568.10 | 54,201.10 | 182.9 | 178.2 | 307.9 | 309.9 | PDW | | UL | |
| ASB 010C | | | | | | | | PZ | | UL | No measurements 1-4Q95 |
| ASB 010CR | 02-01-93 | 105,655.40 | 52,969.70 | 181.7 | 171.7 | 346.7 | 349.2 | PDW | | LL | |
| MCB 002 | 04-13-87 | 97,012.60 | 45,129.00 | 225.9 | 205.9 | 326.1 | 328.4 | PZ | | M | |
| MCB 004 | 04-02-87 | 97,532.50 | 44,705.10 | 229.6 | 208.6 | 348.2 | 350.4 | PZ | | M | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MCB 005 | 04-14-87 | 97,335.60 | 44,863.90 | 226.3 | 206.3 | 337.7 | 339.6 | PZ | | M | |
| MCB 005C | 07-10-89 | 97,315.10 | 44,862.80 | 161.2 | 156.2 | 337.2 | 339.1 | PDW | | UL | |
| MCB 006 | 08-10-87 | 97,425.70 | 45,214.00 | 219.7 | 199.7 | 329.9 | 332.1 | PZ | | M | |
| MCB 006C | 06-21-89 | 97,413.10 | 45,207.70 | 170.0 | 165.0 | 330.0 | 332.1 | PDW | | UL | |
| MCB 007C | 07-17-89 | 97,139.90 | 44,870.60 | 160.7 | 155.7 | 335.7 | 337.7 | PDW | | UL | |
| MCB 008D | 07-07-89 | 97,180.60 | 44,769.90 | 225.7 | 205.7 | 337.4 | 340.7 | PZ | | M | |
| MCB 009D | 07-07-89 | 97,605.80 | 44,858.80 | 226.2 | 206.2 | 339.1 | 342.9 | PZ | | M | |
| MCB 010DR | 04-24-92 | | | | | | | PDW | | | |
| MCB 011B | 02-11-92 | 96361.60 | 45392.10 | 110.1 | 105.1 | 300.1 | 302.2 | CRC | | | |
| MCB 011C | 02-12-92 | 96373.70 | 45383.60 | 146.1 | 141.1 | 300.1 | 302.3 | CRC | | | |
| MCB 011D | 02-12-92 | 96385.70 | 45374.90 | 230.3 | 210.3 | 300.3 | 302.4 | CRC | | | |
| MCB 012B | 02-21-92 | 98326.20 | 45246.10 | 137.7 | 132.7 | 325.7 | 327.7 | CRC | | | |
| MCB 012C | 02-26-92 | 98337.70 | 45236.60 | 162.0 | 157.0 | 326.0 | 328.2 | CRC | | | |
| MCB 013C | 03-11-92 | 96353.40 | 43950.40 | 166.8 | 161.8 | 354.8 | 356.9 | CRC | | | |
| MCB 013D | 03-11-92 | 96366.20 | 43958.90 | 235.0 | 214.9 | 355.0 | 357.1 | CRC | | | |
| MCB 014B | 05-09-92 | 93929.40 | 41744.60 | 131.8 | 126.8 | 304.8 | 307.2 | CRC | | | |
| MCB 014C | 05-13-92 | 93930.50 | 41759.70 | 148.2 | 143.2 | 305.2 | 307.5 | CRC | | | |
| MSB 001A | 01-01-83 | 101,833.70 | 48,467.30 | 253.2 | 223.2 | 352.2 | 353.2 | PZ | | M | Not on '96 permit. |
| MSB 001B | 10-18-90 | 101,833.00 | 48,483.20 | 142.6 | 137.9 | 352.6 | 354.8 | POC | | LL | |
| MSB 001C | 08-07-90 | 101,832.50 | 48,512.70 | 166.0 | 161.3 | 353.0 | 355.1 | POC | | UL | POC well |
| MSB 001CC | 10-26-90 | 101,832.50 | 48,498.00 | 192.5 | 187.8 | 352.9 | 354.9 | POC | | UL | Duplicates 1C (1C is POC well) |
| MSB 001D | 10-10-90 | 101,833.40 | 48,452.20 | 229.8 | 210.4 | 352.8 | 354.8 | POC | X | M | |
| MSB 002A | 01-01-83 | 102,028.30 | 48,746.40 | 252.6 | 222.6 | 351.2 | 352.6 | PZ | | M | Not on '96 permit. |
| MSB 002B | 08-30-90 | 101,997.90 | 48,748.20 | 150.3 | 145.6 | 352.3 | 354.6 | POC | | LL | |
| MSB 002C | 08-30-90 | 101,982.50 | 48,749.30 | 194.7 | 190.0 | 352.7 | 354.7 | POC | | UL | |
| MSB 002D | 11-16-90 | 102,014.00 | 48,755.70 | 230.1 | 210.7 | 351.7 | 353.8 | POC | X | M | |
| MSB 003A | 01-01-83 | 102,189.90 | 48,553.70 | 259.5 | 229.5 | 358.1 | 359.5 | PZ | | M | Not on '96 permit. |
| MSB 003B | 09-17-90 | 102,191.70 | 48,568.00 | 145.8 | 141.1 | 358.8 | 361.0 | POC | | LL | |
| MSB 003C | 09-20-90 | 102,189.60 | 48,538.50 | 193.7 | 189.0 | 358.7 | 360.8 | POC | | UL | |
| MSB 003D | 09-20-90 | 102,188.60 | 48,524.60 | 230.7 | 211.2 | 358.7 | 360.2 | POC | X | M | POC well, replaces 3A |
| MSB 004A | 10-08-82 | 101,933.40 | 48,313.00 | 254.8 | 224.8 | 352.9 | 354.8 | PZ | | M | Not on '96 permit. |
| MSB 004B | 10-03-90 | 101,978.30 | 48,312.80 | 143.1 | 138.4 | 353.1 | 355.3 | POC | | LL | |
| MSB 004C | 08-23-90 | 101,963.20 | 48,313.60 | 168.1 | 163.3 | 353.1 | 355.2 | POC | | UL | |
| MSB 004D | 09-28-90 | 102,007.50 | 48,311.70 | 228.4 | 209.0 | 353.4 | 355.5 | POC | X | M | POC well, replaces 4A |
| MSB 005A | 10-25-82 | 101,971.50 | 46,998.70 | 247.2 | 217.2 | 342.2 | 344.6 | POC | | M | TLDIS (see Jack Gray) |
| MSB 005B | 05-25-90 | 101,971.10 | 46,983.60 | 136.1 | 131.4 | 343.1 | 345.0 | POC | | LL | |
| MSB 005C | 05-25-90 | 101,970.40 | 46,968.60 | 188.1 | 183.4 | 343.1 | 345.2 | POC | | UL | |
| MSB 006A | 10-01-82 | 101,133.80 | 46,319.90 | 241.9 | 211.9 | 341.9 | 343.8 | POC | | M | Remote and no flags |
| MSB 006B | 05-09-90 | 101,148.50 | 46,321.60 | 129.8 | 125.1 | 341.8 | 343.9 | POC | | LL | |
| MSB 006C | 05-10-90 | 101,169.10 | 46,324.10 | 194.0 | 189.3 | 342.0 | 343.8 | POC | | UL | |
| MSB 007A | 10-01-82 | 100,585.70 | 46,726.10 | 242.0 | 212.0 | 342.0 | 344.3 | POC | | M | Remote and isolated flags (suspect) |
| MSB 007B | 04-18-90 | 100,597.60 | 46,718.10 | 147.5 | 142.7 | 342.1 | 344.1 | POC | | LL | |
| MSB 007C | 04-18-90 | 100,609.20 | 46,709.10 | 200.1 | 195.4 | 342.1 | 344.5 | POC | | UL | |
| MSB 008A | 10-01-82 | 100,815.10 | 47,293.20 | 242.4 | 212.4 | 342.4 | 344.2 | POC | | M | Fine Sand in well water |
| MSB 008B | 04-05-90 | 100,805.80 | 47,281.90 | 150.8 | 146.1 | 341.8 | 343.9 | POC | | LL | |
| MSB 008C | 04-18-90 | 100,793.20 | 47,264.60 | 195.9 | 191.2 | 341.9 | 344.0 | POC | | UL | |
| MSB 009A | 07-28-81 | 102,236.70 | 48,242.50 | 144.2 | 139.2 | 357.2 | 359.1 | PDW | | LL | In "UL" of the permit list |
| MSB 009B | -- | 102,239.40 | 48,251.70 | 209.3 | 204.3 | 357.3 | 359.3 | PZ | | UL | |
| MSB 009C | 12-18-81 | 102,245.60 | 48,273.00 | 241.6 | 221.6 | 357.6 | 359.6 | PDW | X | M | |
| MSB 010A | 09-03-81 | 102,451.80 | 47,954.40 | 125.2 | 120.2 | 355.2 | 357.2 | PDW | | MCBC | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MSB 010B | 09-11-81 | 102,488.20 | 47,943.10 | 157.4 | 152.4 | 355.6 | 357.6 | PDW | | LL | |
| MSB 010C | 09-01-81 | 102,465.60 | 47,951.10 | 211.0 | 206.2 | 355.1 | 357.1 | PZ | | UL | |
| MSB 010D | 09-09-81 | 102,476.90 | 47,947.40 | 251.1 | 231.1 | 354.9 | 356.6 | PZ | | M | Probably a perched water table |
| MSB 011A | 10-14-81 | 102,638.90 | 48,577.60 | 135.8 | 130.8 | 363.4 | 365.4 | PZ | | LL | |
| MSB 011B | 10-09-81 | 102,648.90 | 48,578.50 | 165.7 | 160.7 | 363.4 | 365.4 | PZ | | UL | |
| MSB 011C | 10-13-81 | 102,658.60 | 48,579.40 | 182.9 | 177.9 | 363.5 | 365.5 | PDW | | UL | |
| MSB 011D | 10-15-81 | 102,669.50 | 48,579.70 | 208.9 | 203.9 | 363.9 | 365.8 | PZ | | M | |
| MSB 011E | 10-16-81 | 102,678.50 | 48,579.60 | 251.0 | 231.0 | 363.5 | 365.2 | PZ | | M | |
| MSB 011F | 12-01-81 | 102,629.30 | 48,577.00 | 243.1 | 223.1 | 363.6 | 365.6 | PDW | | M | |
| MSB 012A | 10-29-81 | 102,283.20 | 47,138.20 | 121.5 | 116.5 | 346.5 | 348.9 | PDW | | LL | |
| MSB 012B | 10-14-81 | 102,251.80 | 47,139.60 | 162.2 | 157.2 | 347.5 | 349.5 | PDW | | UL | Called out in Permit Rev. 6 |
| MSB 012C | 10-19-81 | 102,274.40 | 47,138.40 | 183.9 | 178.9 | 347.0 | 349.0 | PZ | | UL | |
| MSB 012D | 10-05-81 | 102,262.20 | 47,139.70 | 245.3 | 225.3 | 347.3 | 349.4 | PZ | | M | |
| MSB 012TA | 12-01-81 | 102,266.70 | 47,127.30 | -102.8 | -112.8 | 347.2 | 348.9 | PDW | | CBA | In "MCBC" of the permit list |
| MSB 012TB | 12-01-81 | 102,260.10 | 47,133.00 | 14.5 | -5.5 | 347.5 | 349.3 | PZ | | CBA | |
| MSB 013A | 10-22-81 | 101,725.70 | 47,525.40 | 136.5 | 131.4 | 344.8 | 346.7 | POC | | LL | |
| MSB 013B | 10-28-81 | 101,735.70 | 47,523.50 | 177.5 | 172.5 | 345.0 | 347.1 | PDW | | UL | (Pb and U?) Not POC as of 1994 |
| MSB 013C | 10-07-81 | 101,745.70 | 47,521.90 | 244.1 | 224.1 | 345.1 | 347.3 | PZ | | M | |
| MSB 013CC | 11-13-90 | 101,728.80 | 47,525.70 | 196.8 | 192.0 | 344.8 | 346.9 | POC | | UL | Annular material breechs green clay |
| MSB 013D | 08-23-90 | 101,778.10 | 47,517.50 | 231.5 | 211.5 | 345.5 | 347.6 | POC | | M | POC well |
| MSB 014A | 10-19-81 | 101,629.50 | 48,521.90 | 164.6 | 144.6 | 346.6 | 348.7 | PDW | | LL | |
| MSB 014B | 10-20-81 | 101,639.00 | 48,519.10 | 193.9 | 188.9 | 346.9 | 348.9 | PZ | | UL | |
| MSB 014C | 10-09-81 | 101,648.60 | 48,517.30 | 243.9 | 223.9 | 347.2 | 349.2 | PZ | | M | |
| MSB 015A | 11-09-81 | 102,983.50 | 48,827.00 | 167.8 | 162.8 | 365.8 | 367.7 | PDW | | UL | |
| MSB 015AA | 02-20-89 | 102,953.20 | 48,818.50 | 147.1 | 142.4 | 367.1 | 369.2 | PDW | | LL | |
| MSB 015C | 11-10-81 | 103,002.10 | 48,834.00 | 260.6 | 240.6 | 364.8 | 366.7 | PDW | | M | Probably a perched water table |
| MSB 015D | 09-06-88 | 102,971.20 | 48,827.50 | 241.4 | 221.9 | 366.4 | 368.5 | PDW | | M | |
| MSB 016A | 11-16-81 | 103,693.90 | 48,965.10 | 166.8 | 161.8 | 365.5 | 367.5 | PDW | | UL | |
| MSB 016C | 12-09-81 | 103,714.10 | 48,970.50 | 244.8 | 224.8 | 365.8 | 367.6 | PDW | | M | |
| MSB 017A | 11-02-81 | 101,976.60 | 46,245.70 | 160.6 | 155.6 | 357.3 | 359.3 | PZ | | UL | |
| MSB 017B | 12-16-81 | 101,994.60 | 46,237.70 | 190.8 | 185.8 | 357.2 | 359.2 | PDW | | M | In "UL" of the permit list |
| MSB 017BB | 01-09-88 | 102,009.50 | 46,220.80 | 137.3 | 132.6 | 357.3 | 359.0 | PDW | | LL | |
| MSB 017C | 11-03-81 | 102,004.60 | 46,234.30 | 253.9 | 233.9 | 356.9 | 358.2 | PZ | | M | |
| MSB 017D | 09-16-88 | 102,056.90 | 46,226.20 | 232.8 | 213.3 | 357.8 | 359.9 | PZ | | M | |
| MSB 018A | 12-09-81 | 100,416.10 | 46,110.40 | 163.9 | 158.9 | 339.9 | 341.9 | PDW | | UL | |
| MSB 018B | 12-01-81 | 100,424.10 | 46,115.70 | 198.5 | 193.5 | 340.0 | 342.1 | PDW | | UL | In "LL" of the permit list |
| MSB 018C | 12-01-81 | 100,430.90 | 46,121.40 | 229.2 | 209.2 | 340.4 | 342.5 | PZ | | M | Fe, Al, sl., Low pH, Pumps dry |
| MSB 019A | 12-08-81 | 100,983.00 | 50,934.40 | 119.7 | 114.7 | 298.2 | 300.3 | PDW | | MCBC | |
| MSB 019B | 12-11-81 | 100,999.30 | 50,934.80 | 147.7 | 142.7 | 298.5 | 300.4 | PDW | | LL | In "UL" of the permit list |
| MSB 019C | 12-09-81 | 100,992.10 | 50,942.40 | 218.7 | 198.7 | 298.7 | 300.8 | PDW | | M | |
| MSB 020A | 11-20-81 | 103,545.10 | 46,060.50 | 162.6 | 157.6 | 353.3 | 355.3 | PDW | | LL | In "UL" of the permit list |
| MSB 020C | 11-23-81 | 103,556.30 | 46,088.80 | 232.7 | 212.7 | 352.7 | 354.7 | PDW | | M | |
| MSB 021A | 11-19-81 | 103,967.00 | 47,217.20 | 159.5 | 154.5 | 352.9 | 354.8 | PDW | | LL | |
| MSB 021B | 02-20-89 | 104,000.10 | 47,271.80 | 147.2 | 142.5 | 353.2 | 355.0 | PDW | | LL | |
| MSB 021C | 11-23-81 | 103,973.00 | 47,234.60 | 233.2 | 213.2 | 353.0 | 354.8 | PDW | | M | Remote and isolated flags (suspect) |
| MSB 021TA | 12-01-81 | 103,980.90 | 47,218.20 | 22.6 | 17.3 | 352.6 | 354.6 | PZ | | CBA | |
| MSB 022 | 06-01-82 | 102,186.50 | 48,508.80 | 243.2 | 223.2 | 358.2 | 360.1 | PZ | | M | |
| MSB 023 | 08-01-82 | 104,312.00 | 49,294.00 | 250.4 | 230.4 | 370.4 | 371.8 | PZ | | M | |
| MSB 023B | 02-16-83 | 104,336.60 | 49,286.40 | 176.1 | 171.1 | 370.1 | 371.6 | PDW | | UL | |
| MSB 023TA | -- | 104,298.80 | 49,225.80 | 65.4 | 60.4 | 370.4 | 372.9 | PDW | | CBA | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MSB 023TR | 06-24-89 | 104,278.50 | 49,036.00 | 40.8 | 35.9 | 370.8 | 372.7 | PZ | | CBA | |
| MSB 024 | 09-22-82 | 104,614.40 | 49,842.90 | 243.9 | 223.9 | 378.9 | 380.2 | PDW | | M | |
| MSB 024A | 02-07-83 | 104,625.30 | 49,845.30 | 178.8 | 168.8 | 379.9 | 381.6 | PZ | | UL | |
| MSB 025 | 08-01-82 | 103,498.80 | 49,668.90 | 244.7 | 224.7 | 364.7 | 366.9 | PZ | | M | |
| MSB 025A | 02-02-83 | 103,504.80 | 49,657.90 | 169.7 | 159.7 | 364.7 | 366.4 | PDW | | LL | |
| MSB 026 | 08-01-82 | 104,612.80 | 48,941.70 | 240.7 | 220.7 | 359.7 | 361.7 | PDW | | M | Dry 87-'92, no water in stand pipe |
| MSB 026A | 01-12-83 | 104,602.30 | 48,440.70 | 179.8 | 169.8 | 359.8 | 361.8 | PZ | | UL | |
| MSB 026B | 2-13-89 | 104,646.70 | 48,944.60 | 136.9 | 132.1 | 360.7 | 362.8 | PDW | | LL | |
| MSB 027 | 08-01-82 | 104,972.80 | 49,487.70 | 244.0 | 234.0 | 374.0 | 375.5 | PDW | | M | |
| MSB 027A | 01-11-83 | 104,962.80 | 49,487.80 | 203.8 | 193.8 | 373.8 | 375.2 | PZ | | M | |
| MSB 027B | 12-12-84 | 104,940.30 | 49,486.40 | 169.9 | 164.4 | 374.7 | 376.8 | PDW | | UL | |
| MSB 027TA | 10-10-84 | 104,951.40 | 49,486.50 | 55.9 | 50.6 | 374.5 | 376.6 | PDW | | CBA | |
| MSB 028 | 08-01-82 | 104,941.80 | 48,517.30 | 230.6 | 210.6 | 352.6 | 354.8 | PDW | | M | |
| MSB 028A | 01-14-83 | 104,947.70 | 48,521.90 | 157.8 | 152.8 | 352.8 | 355.0 | PDW | | UL | |
| MSB 029A | 03-22-85 | 107,326.80 | 51,236.40 | 122.9 | 117.3 | 362.9 | 365.2 | PDW | | MCBC | ($SO_4$) hits |
| MSB 029B | 12-07-84 | 107,319.30 | 51,217.50 | 151.7 | 145.1 | 362.7 | 365.0 | BGW | | LL | |
| MSB 029C | 12-12-84 | 107,315.00 | 51,206.60 | 179.7 | 174.1 | 362.7 | 365.0 | BGW | | UL | |
| MSB 029D | 12-18-84 | 107,323.30 | 51,226.90 | 227.6 | 207.0 | 362.6 | 364.9 | BGW | | M | |
| MSB 029DD | 08-23-88 | 107,311.40 | 51,191.30 | 250.4 | 230.4 | 362.4 | 364.4 | PZ | | M | |
| MSB 029TA | 09-27-84 | 107,330.40 | 51,245.70 | 63.9 | 58.6 | 362.9 | 365.0 | PDW | | CBA | |
| MSB 030A | 03-29-83 | 105,727.40 | 48,004.10 | 36.9 | 26.9 | 352.9 | 355.0 | PZ | | CBA | |
| MSB 030AA | 01-25-85 | 105,715.70 | 47,970.50 | 96.4 | 90.8 | 351.4 | 353.0 | PDW | | MCBC | |
| MSB 030B | 04-04-85 | 105,719.90 | 47,981.80 | 128.7 | 123.1 | 351.7 | 353.5 | PDW | | LL | |
| MSB 030C | 03-31-83 | 105,731.10 | 48,013.70 | 237.6 | 217.6 | 352.6 | 354.6 | PDW | | M | |
| MSB 030CC | 01-16-84 | 105,724.20 | 47,993.30 | 164.0 | 158.4 | 352.0 | 354.0 | PDW | | UL | |
| MSB 031A | -- | 101,979.30 | 50,100.20 | 22.0 | 12.0 | 346.0 | 348.1 | PZ | | CBA | |
| MSB 031B | 05-03-83 | 101,981.30 | 50,078.70 | 157.3 | 152.3 | 346.3 | 348.3 | PDW | | LL | |
| MSB 031C | 05-05-83 | 101,979.60 | 50,089.90 | 236.1 | 216.1 | 346.1 | 348.1 | PDW | X | M | |
| MSB 031CC | 02-27-89 | 101,983.10 | 50,067.90 | 181.4 | 176.7 | 346.4 | 348.6 | PDW | | UL | |
| MSB 032 | 04-14-83 | 99,655.60 | 52,733.90 | 218.1 | 198.1 | 253.1 | 255.1 | PDW | | M | Remote and isolated flags (suspect) |
| MSB 032B | 05-24-89 | 99,676.00 | 52,742.50 | 132.5 | 127.5 | 253.5 | 255.4 | PDW | | LL | |
| MSB 032C | 06-01-89 | 99,684.90 | 52,746.90 | 188.6 | 183.7 | 253.6 | 255.7 | PDW | | UL | |
| MSB 033 | 04-28-83 | 98,031.00 | 51,736.30 | 228.7 | 208.7 | 253.7 | 255.9 | PDW | | M | |
| MSB 033A | 02-07-85 | 98,006.70 | 51,738.00 | 88.4 | 82.8 | 253.4 | 255.4 | PDW | | MCBC | |
| MSB 033B | 01-29-85 | 97,995.90 | 51,741.90 | 126.3 | 120.7 | 253.3 | 255.0 | PDW | | LL | |
| MSB 033C | 02-08-85 | 97,984.80 | 51,746.70 | 171.0 | 165.4 | 253.0 | 255.3 | PDW | | UL | |
| MSB 033TA | 01-17-85 | 98,018.20 | 51,734.00 | 23.4 | 18.1 | 253.4 | 255.5 | PZ | | CBA | |
| MSB 034A | -- | 104,954.90 | 50,534.90 | 118.6 | 113.6 | 382.1 | 384.0 | PDW | | MCBC | In "CBC" of the permit list |
| MSB 034B | -- | 104,944.70 | 50,534.90 | 187.0 | 182.0 | 382.0 | 384.0 | PDW | | UL | |
| MSB 034C | -- | 104,934.10 | 50,535.50 | 240.9 | 220.9 | 381.9 | 383.9 | PDW | | M | |
| MSB 034TA | -- | 104,905.80 | 50,536.60 | -91.9 | -101.9 | 381.8 | 383.4 | PDW | | CBA | In "MCBC" of the permit list |
| MSB 034TB | -- | 104,891.60 | 50,537.90 | 75.8 | 65.8 | 381.8 | 383.6 | PZ | | CBA | |
| MSB 035A | 03-05-85 | 102,098.00 | 50,945.20 | 128.8 | 123.2 | 348.8 | 350.9 | PZ | | MCBC | |
| MSB 035B | 02-04-85 | 102,110.80 | 50,947.90 | 169.3 | 163.7 | 349.3 | 351.6 | PDW | | UL | |
| MSB 035D | 02-07-85 | 102,122.40 | 50,949.70 | 254.5 | 233.8 | 349.5 | 351.9 | PZ | | M | |
| MSB 035TA | 11-02-84 | 102,101.60 | 50,919.60 | 38.2 | 32.9 | 348.2 | 350.3 | PDW | | CBA | |
| MSB 036A | 02-20-85 | 100,511.30 | 49,514.90 | 100.5 | 94.9 | 338.5 | 340.6 | PDW | | MCBC | |
| MSB 036B | 01-25-85 | 100,514.90 | 49,526.30 | 163.7 | 158.1 | 338.7 | 340.8 | PDW | | LL | |
| MSB 036C | 01-29-85 | 100,518.30 | 49,537.20 | 194.2 | 188.6 | 339.2 | 340.9 | PDW | | UL | |
| MSB 036D | 01-31-85 | 100,521.70 | 49,548.30 | 249.5 | 228.8 | 339.5 | 341.6 | PDW | | M | Well Dry 4Q93 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MSB 036TA | 11-21-84 | 100,507.70 | 49,503.00 | 53.4 | 48.4 | 338.4 | 340.6 | PDW | | CBA | |
| MSB 037A | 03-12-85 | 105,295.00 | 51,439.80 | 73.7 | 68.1 | 380.7 | 383.0 | PZ | | CBA | |
| MSB 037B | 01-03-85 | 105,289.50 | 51,450.00 | 142.3 | 136.7 | 380.3 | 382.7 | PDW | | MCBC | |
| MSB 037C | 02-07-85 | 105,283.20 | 51,439.80 | 180.8 | 175.2 | 380.8 | 383.0 | PDW | | LL | In "UL" of the permit list |
| MSB 037D | 02-01-85 | 105,271.00 | 51,440.30 | 245.7 | 225.1 | 380.7 | 382.7 | PZ | | M | |
| MSB 037TA | 11-7-84 | 105,301.30 | 51,449.80 | 35.1 | 29.8 | 380.1 | 382.3 | PDW | | CBA | Sampled 3Q95. |
| MSB 038C | 10-20-88 | 102,373.10 | 49,762.00 | 169.0 | 164.3 | 356.8 | 358.8 | PDW | | LL | |
| MSB 038D | 09-16-88 | 102,385.60 | 49,777.80 | 240.4 | 220.9 | 356.4 | 358.5 | PZ | | M | |
| MSB 038TA | 10-25-84 | 102,434.90 | 49,810.40 | 32.0 | 26.7 | 357.0 | 359.1 | PZ | | CBA | |
| MSB 039A | 03-05-85 | 100,837.60 | 48,367.30 | 111.7 | 106.1 | 339.7 | 341.6 | POC | | MCBC | Now a POC well (1995) |
| MSB 039B | 01-06-81 | 100,844.60 | 48,376.90 | 149.6 | 144.0 | 339.6 | 341.8 | PDW | | LL | |
| MSB 039C | 01-01-85 | 100,852.10 | 48,386.70 | 199.6 | 194.0 | 339.7 | 341.5 | PDW | | UL | |
| MSB 039D | 01-14-85 | 100,858.70 | 48,396.00 | 239.7 | 219.0 | 339.7 | 341.8 | PDW | | M | |
| MSB 039TA | 10-04-84 | 100,830.60 | 48,357.70 | 49.7 | 44.4 | 339.7 | 341.8 | PDW | | CBA | |
| MSB 040A | 03-01-85 | 97,672.80 | 48,279.40 | 116.2 | 110.6 | 319.2 | 321.2 | PDW | | MCBC | |
| MSB 040B | 01-31-85 | 97,685.00 | 48,281.60 | 154.7 | 149.1 | 319.7 | 321.7 | PDW | | LL | |
| MSB 040C | 02-04-85 | 97,697.80 | 48,283.50 | 192.4 | 186.8 | 320.4 | 322.0 | PDW | | UL | |
| MSB 040D | 02-07-85 | 97,709.30 | 48,285.10 | 236.8 | 216.2 | 320.8 | 322.9 | PZ | | M | |
| MSB 040TA | 11-30-84 | 97,660.40 | 48,277.20 | 29.0 | 23.7 | 319.0 | 320.9 | PZ | | CBA | |
| MSB 041A | 12-13-84 | 102,184.40 | 53,424.10 | 87.9 | 82.3 | 321.9 | 323.8 | PZ | | MCBC | |
| MSB 041B | 02-25-85 | 102,194.50 | 53,417.80 | 114.2 | 108.6 | 322.2 | 324.0 | PDW | | MCBC | |
| MSB 041C | 02-11-85 | 102,203.90 | 53,410.60 | 152.5 | 146.9 | 322.5 | 324.6 | PZ | | LL | |
| MSB 041D | 02-13-85 | 102,213.40 | 53,403.70 | 247.8 | 227.1 | 322.8 | 325.0 | PZ | | M | Pb, Fe, Mn, Turbidity, Pumps dry |
| MSB 041TA | 01-11-85 | 102,176.50 | 53,429.70 | 26.7 | 21.4 | 321.7 | 323.7 | PDW | | CBA | |
| MSB 042A | 03-19-85 | 104,557.90 | 51,582.30 | 129.4 | 123.8 | 374.4 | 376.5 | PZ | | MCBC | |
| MSB 042B | 01-16-85 | 104,569.80 | 51,582.80 | 166.3 | 160.7 | 374.3 | 376.4 | PDW | | LL | |
| MSB 042C | 01-24-85 | 104,581.90 | 51,582.80 | 204.3 | 198.7 | 374.3 | 376.4 | PDW | | UL | |
| MSB 042D | 01-30-85 | 104,595.20 | 51,582.50 | 247.2 | 226.6 | 374.2 | 376.4 | PDW | | M | |
| MSB 042TA | 10-31-84 | 104,545.60 | 51,581.70 | 45.8 | 40.5 | 374.5 | 376.6 | PDW | | CBA | |
| MSB 043A | 04-01-85 | 107,275.30 | 49,293.70 | 140.5 | 134.9 | 355.5 | 357.7 | BGW | | LL | |
| MSB 043B | 12-12-84 | 107,274.60 | 49,311.80 | 175.5 | 169.9 | 355.5 | 357.8 | BGW | | UL | |
| MSB 043D | 01-03-85 | 107,274.20 | 49,322.00 | 220.8 | 200.2 | 355.8 | 358.0 | BGW | | M | Remote and isolated flags (suspect) |
| MSB 043DD | 08-23-88 | 107,273.00 | 49,341.20 | 243.2 | 223.1 | 356.2 | 357.9 | PZ | | M | |
| MSB 043TA | 09-25-84 | 107,275.80 | 49,281.80 | 40.3 | 35.0 | 355.3 | 357.5 | PDW | | CBA | |
| MSB 044A | -- | 103,296.50 | 51,106.90 | 134.6 | 124.6 | 374.4 | 376.9 | PZ | | MCBC | |
| MSB 044B | -- | 103,296.20 | 51,096.40 | 184.6 | 174.6 | 374.6 | 377.0 | PZ | | UL | |
| MSB 044C | -- | 103,296.30 | 51,106.60 | 239.4 | 229.4 | 374.4 | 376.8 | PZ | | M | |
| MSB 045A | -- | 103,998.10 | 50,554.70 | 139.2 | 129.2 | 378.4 | 380.8 | PDW | | LL | |
| MSB 045B | -- | 103,987.90 | 50,555.30 | 190.0 | 180.0 | 378.3 | 380.9 | PDW | | UL | |
| MSB 045C | -- | 103,997.70 | 50,554.70 | 243.7 | 233.4 | 378.4 | 380.8 | PZ | | M | |
| MSB 046A | -- | 103,098.60 | 50,548.30 | 130.0 | 120.0 | 370.0 | 372.6 | PDW | | MCBC | |
| MSB 046B | -- | 103,102.40 | 50,557.50 | 189.8 | 179.8 | 370.8 | 373.6 | PZ | | LL | In "UL" of the permit list |
| MSB 046C | -- | 103,098.50 | 50,548.70 | 247.0 | 237.0 | 370.0 | 372.6 | PDW | | M | |
| MSB 047B | 07-10-87 | 106,978.50 | 52,207.20 | 171.5 | 165.9 | 366.7 | 368.7 | PDW | | LL | |
| MSB 047BB | 10-16-89 | 106,999.70 | 52,234.40 | 120.3 | 115.6 | 366.3 | 368.8 | PZ | | MCBC | |
| MSB 047C | 07-14-87 | 106,969.20 | 52,195.50 | 202.6 | 197.0 | 366.8 | 369.0 | PDW | | UL | |
| MSB 047D | 08-07-87 | 106,960.10 | 52,184.00 | 246.1 | 226.5 | 366.6 | 368.8 | PDW | | M | |
| MSB 047TA | 06-22-87 | 106,987.70 | 52,219.00 | 55.1 | 50.1 | 366.2 | 368.7 | PDW | | CBA | |
| MSB 048A | 01-12-90 | 107,936.60 | 54,099.80 | 129.4 | 124.7 | 359.4 | 361.6 | PDW | | MCBC | |
| MSB 048B | 01-16-90 | 107,945.00 | 54,112.20 | 158.3 | 153.6 | 359.3 | 361.4 | PDW | | LL | In "MCBC" of the permit list |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| MSB 048C | 05-25-89 | 107,917.50 | 54,077.00 | 180.2 | 175.4 | 360.2 | 362.3 | PDW | | UL | In "LL" of the permit list |
| MSB 048D | -- | 107,914.40 | 54,056.30 | 243.5 | 222.0 | 360.5 | 362.6 | PDW | | M | In "UL" - Turb., High pH, Al, Li, Fe, GrAlpha, dry |
| MSB 048TA | 01-15-90 | 107,925.80 | 54,089.20 | 107.8 | 102.5 | 359.8 | 361.9 | PDW | | CBA | |
| MSB 049A | 01-20-89 | 99,759.00 | 45,864.60 | 76.7 | 72.0 | 332.7 | 334.7 | PDW | | MCBC | |
| MSB 049B | 07-31-87 | 99,737.80 | 45,868.20 | 116.3 | 110.7 | 331.8 | 334.1 | PDW | | LL | |
| MSB 049D | 08-10-87 | 99,724.90 | 45,856.40 | 236.4 | 216.7 | 331.8 | 334.3 | PDW | | M | Al, TOH, TotRadAlpha, pumps dry |
| MSB 050B | 05-20-87 | 96,433.00 | 51,053.50 | 155.2 | 149.6 | 221.3 | 223.7 | PZ | | LL | In "UL" of the permit list |
| MSB 050D | 08-04-87 | 96,416.70 | 51,044.10 | 210.9 | 190.8 | 220.7 | 223.2 | PZ | | UL | In "M" of the permit list |
| MSB 051B | 05-26-87 | 96,992.70 | 52,818.00 | 160.0 | 154.4 | 261.1 | 263.2 | PDW | | LL | |
| MSB 051D | 08-31-87 | 97,015.70 | 52,816.20 | 218.5 | 198.8 | 260.0 | 262.2 | PZ | | UL | In "M" - Turbidity, Al, Fe, Pumps dry |
| MSB 051DD | 08-04-87 | 97,006.20 | 52,830.30 | 235.4 | 215.8 | 261.0 | 263.2 | PZ | | M | |
| MSB 052B | 07-21-87 | 103,077.70 | 53,418.40 | 171.4 | 165.8 | 319.5 | 321.7 | PDW | | LL | |
| MSB 052D | 08-06-87 | 103,062.70 | 53,416.80 | 250.8 | 231.1 | 319.4 | 321.6 | PZ | | M | Pb, Al, Turbidity, Pumps dry |
| MSB 053B | 02-07-89 | 106,443.60 | 54,574.30 | 152.3 | 147.6 | 342.3 | 344.3 | PDW | | LL | |
| MSB 053C | 03-12-87 | 106,456.20 | 54,540.50 | 192.6 | 187.8 | 343.2 | 345.2 | PDW | | UL | |
| MSB 053D | -- | 106,448.20 | 54,553.10 | 244.9 | 223.6 | 342.9 | 344.8 | PZ | | M | |
| MSB 054B | 07-24-87 | 108,446.80 | 52,970.50 | 136.4 | 130.8 | 371.1 | 373.4 | PDW | | MCBC | |
| MSB 054C | 07-28-87 | 108,447.40 | 52,955.70 | 175.6 | 170.0 | 371.2 | 373.4 | PDW | | LL | In "UL" of the permit list |
| MSB 054D | -- | 108,461.50 | 52,984.50 | 244.8 | 223.8 | 371.4 | 373.6 | PDW | | UL | In "M" - Remote and no flags |
| MSB 054TA | 07-22-87 | 108,446.30 | 52,985.80 | 80.9 | 75.3 | 371.1 | 373.5 | PDW | | CBA | |
| MSB 055B | 01-03-90 | 108,342.40 | 52,006.20 | 152.7 | 148.0 | 366.7 | 368.7 | PDW | | MCBC | |
| MSB 055C | 04-28-89 | 108,324.60 | 52,029.70 | 189.3 | 184.6 | 367.3 | 369.4 | PDW | | LL | |
| MSB 055D | -- | 108,391.40 | 52,032.50 | 245.9 | 224.7 | 365.9 | 367.7 | PDW | | UL | In "M" - Remote and isolated flags (suspect) |
| MSB 055HC | 10-06-90 | 108,338.70 | 52,020.10 | 218.8 | 214.1 | 366.8 | 368.7 | PDW | | UL | |
| MSB 055TA | 12-06-89 | 108,322.80 | 52,014.70 | 91.6 | 86.2 | 366.6 | 368.7 | PDW | | CBA | |
| MSB 056D | -- | 108,463.50 | 44,207.90 | 232.4 | 211.1 | 277.4 | 279.5 | PDW | | M | |
| MSB 057D | 10-26-90 | 101,829.50 | 48,701.50 | 229.6 | 210.1 | 354.1 | 356.2 | POC | X | M | |
| MSB 058D | 10-26-90 | 102,200.60 | 48,693.50 | 230.5 | 211.1 | 355.8 | 357.9 | POC | X | M | |
| MSB 059D | 09-25-90 | 102,182.20 | 48,314.80 | 229.3 | 209.9 | 357.3 | 359.3 | POC | X | M | |
| MSB 060D | 10-05-90 | 101,835.50 | 48,326.80 | 228.3 | 208.9 | 352.3 | 354.5 | POC | X | M | |
| MSB 061C | 04-14-87 | 106,091.10 | 55,406.60 | 179.7 | 174.1 | 315.1 | 317.3 | PZ | | UL | |
| MSB 061D | 08-06-87 | 106,094.60 | 55,390.60 | 234.2 | 214.3 | 315.7 | 317.8 | PZ | | UL | In "M" - Turbidity, Al, Fe, Pb, Pumps dry |
| MSB 062B | 11-15-90 | 101,865.30 | 47,906.80 | 141.0 | 136.3 | 347.0 | 349.1 | POC | | LL | |
| MSB 062C | 11-26-90 | 101,857.20 | 47,895.00 | 190.0 | 185.2 | 347.0 | 349.1 | POC | | UL | |
| MSB 062D | 11-26-90 | 101,849.00 | 47,882.90 | 231.9 | 212.4 | 347.4 | 349.5 | POC | | M | |
| MSB 063B | 03-21-90 | 101,184.40 | 47,861.00 | 140.9 | 136.2 | 344.9 | 346.9 | POC | | LL | |
| MSB 063C | 03-23-90 | 101,174.60 | 47,849.20 | 195.8 | 191.1 | 344.8 | 347.0 | POC | | UL | |
| MSB 063D | 07-23-90 | 101,165.20 | 47,837.40 | 232.8 | 212.8 | 344.8 | 346.8 | POC | | M | |
| MSB 064B | 02-28-90 | 101,831.00 | 46,579.70 | 124.3 | 119.6 | 346.3 | 348.3 | PZ | | LL | In 3/4Q95 water levels - Nowhere else. |
| MSB 064C | 03-12-90 | 101,842.90 | 46,589.20 | 181.2 | 176.5 | 346.2 | 348.4 | POC | | UL | |
| MSB 064D | 07-23-90 | 101,854.80 | 46,598.50 | 230.1 | 210.1 | 346.6 | 348.6 | POC | | M | |
| MSB 065D | 10-12-88 | 101,915.50 | 49,413.70 | 243.9 | 224.4 | 347.1 | 349.2 | PDW | | M | |
| MSB 066B | 11-17-88 | 105,842.00 | 51,064.60 | 143.9 | 139.2 | 381.4 | 383.4 | PDW | | LL | In "MCBC" of the permit list |
| MSB 066C | 11-28-88 | 105,842.10 | 51,053.50 | 170.9 | 166.2 | 381.4 | 383.4 | PDW | | UL | In "LL" of the permit list |
| MSB 066D | 12-21-88 | 105,841.80 | 51,044.00 | 239.5 | 220.0 | 381.5 | 383.2 | PDW | | M | Not listed in the 3/4Q95 report. |
| MSB 066TA | 12-21-88 | 105,842.60 | 51,096.70 | 35.5 | 30.8 | 380.5 | 382.7 | PDW | | CBA | |
| MSB 067B | 11-09-88 | 106,842.00 | 51,989.60 | 134.9 | 130.1 | 362.7 | 365.1 | PZ | | MCBC | |
| MSB 067C | 11-11-88 | 106,819.80 | 51,988.60 | 174.9 | 170.1 | 362.7 | 364.8 | PZ | | LL | |
| MSB 067D | 11-11-88 | 106,830.70 | 51,971.50 | 241.0 | 221.5 | 363.1 | 365.0 | PDW | | M | Not in DHEC deletion list. |
| MSB 068B | 12-01-88 | 106,744.90 | 52,308.50 | 133.0 | 128.3 | 355.0 | 356.9 | PDW | | MCBC | |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| MSB 068C | 12-14-88 | 106,730.50 | 52,304.90 | 171.7 | 167.0 | 354.7 | 356.7 | PDW | | LL | |
| MSB 068D | 12-06-88 | 106,741.40 | 52,293.60 | 239.9 | 220.4 | 354.9 | 357.0 | PZ | | M | |
| MSB 069B | 01-26-89 | 107,776.10 | 52,432.90 | 144.5 | 139.8 | 379.5 | 381.5 | PDW | | MCBC | |
| MSB 069C | 01-31-89 | 107,780.10 | 52,447.50 | 175.7 | 171.0 | 379.7 | 381.6 | PDW | | LL | |
| MSB 069D | 02-01-89 | 107,784.30 | 52,462.00 | 239.8 | 220.3 | 379.8 | 382.0 | PDW | | M | |
| MSB 069TA | 01-26-89 | 107,772.50 | 52,418.40 | 80.3 | 74.6 | 379.3 | 381.4 | PDW | | CBA | |
| MSB 070C | 08-29-88 | 101,785.20 | 45,012.00 | 178.8 | 174.1 | 359.8 | 361.8 | PDW | | UL | |
| MSB 070D | 07-23-90 | 101,781.80 | 44,997.30 | 228.3 | 208.2 | 360.3 | 362.2 | PDW | | M | |
| MSB 071B | 10-28-88 | 103,801.60 | 44,054.70 | 135.9 | 131.1 | 342.9 | 344.7 | PDW | | LL | |
| MSB 072B | 01-31-89 | 96,387.60 | 48,350.30 | 156.7 | 152.0 | 326.7 | 328.2 | PDW | | LL | |
| MSB 073B | 02-03-89 | 99,270.30 | 45,694.00 | 135.5 | 130.8 | 337.5 | 339.6 | PDW | | LL | |
| MSB 074B | 11-01-89 | 99,197.40 | 50,443.20 | 147.5 | 142.8 | 312.5 | 314.5 | PDW | | LL | |
| MSB 074C | 11-09-89 | 99,191.10 | 50,457.10 | 177.8 | 173.1 | 312.8 | 315.0 | PDW | | UL | |
| MSB 074D | 11-09-89 | 99,185.30 | 50,469.70 | 237.1 | 217.1 | 313.1 | 315.1 | PDW | | M | |
| MSB 075B | 11-17-89 | 98,937.40 | 48,875.50 | 161.7 | 156.9 | 324.7 | 326.7 | PDW | | LL | |
| MSB 075C | 11-21-89 | 98,942.30 | 48,859.70 | 193.5 | 188.8 | 325.5 | 327.5 | PDW | | UL | |
| MSB 076C | 02-06-90 | 103,061.60 | 45,344.00 | 186.0 | 181.3 | 350.0 | 352.4 | PDW | | UL | |
| MSB 077B | 07-10-90 | 107,065.80 | 54,217.40 | 145.1 | 140.4 | 355.1 | 357.2 | PDW | | MCBC | In "LL" of the permit list |
| MSB 077C | 07-10-90 | 107,078.30 | 54,225.90 | 173.2 | 168.5 | 355.2 | 357.2 | PDW | | LL | |
| MSB 077D | 07-12-90 | 107,090.70 | 54,233.40 | 236.2 | 216.2 | 355.2 | 357.4 | PZ | | M | Turbidity, High pH, Al, Si, TOH(1), Pumps dry |
| MSB 077TA | 07-05-90 | 107,053.80 | 54,208.90 | 82.9 | 77.6 | 354.9 | 356.9 | PZ | | CBA | |
| MSB 078BC | 12-17-91 | 103,649.30 | 45,491.70 | | | | | PDW | | | |
| MSB 078D | 10-23-90 | 103,643.80 | 45,482.20 | 225.5 | 206.1 | 361.1 | 363.6 | PDW | | M | Abandoned in 11/28/95 - Not in 3Q95 report. |
| MSB 078DR | 12-17-91 | 103,652.00 | 45,470.60 | | | | | PDW | | | |
| MSB 079B | 12-04-90 | 99,296.90 | 47,300.20 | 140.8 | 136.1 | 345.8 | 347.9 | PDW | | LL | |
| MSB 079C | 01-03-90 | 99,290.20 | 47,286.80 | 199.6 | 194.9 | 345.6 | 347.8 | PDW | | UL | |
| MSB 081B | 06-04-90 | 103,762.70 | 55,230.40 | 146.1 | 141.4 | 265.1 | 267.0 | PDW | | LL | |
| MSB 082A | 08-14-90 | 107,529.50 | 51,978.40 | 126.1 | 121.4 | 372.1 | 374.3 | PDW | | MCBC | |
| MSB 082B | 08-14-90 | 107,533.40 | 51,993.30 | 148.2 | 143.5 | 372.2 | 374.2 | PDW | | MCBC | In "LL" of the permit list |
| MSB 082C | 05-15-89 | 107,521.90 | 51,949.40 | 177.7 | 173.0 | 371.7 | 373.9 | PDW | | LL | |
| MSB 082D | 08-06-90 | 107,518.10 | 51,934.60 | 236.9 | 216.8 | 371.4 | 373.6 | PDW | | M | Remote and isolated flags (suspect), GC breach |
| MSB 082TA | 08-06-90 | 107,525.70 | 51,964.20 | 93.8 | 88.4 | 371.8 | 373.7 | PDW | | CBA | |
| MSB 083B | 12-17-90 | 108,426.70 | 52,421.40 | 146.3 | 141.6 | 369.8 | 371.8 | PDW | | MCBC | |
| MSB 083C | 05-10-89 | 108,405.30 | 52,384.70 | 182.8 | 178.0 | 369.8 | 372.0 | PDW | | LL | |
| MSB 083D | 11-16-90 | 108,418.40 | 52,391.20 | 236.1 | 216.7 | 369.3 | 371.6 | PDW | | M | Annular material breechs green clay |
| MSB 083TA | 12-14-90 | 108,416.30 | 52,410.90 | 75.7 | 70.2 | 369.7 | 371.7 | PDW | | CBA | |
| MSB 084A | 09-21-89 | 108,982.10 | 51,971.20 | 129.4 | 124.5 | 359.4 | 361.5 | PDW | | MCBC | |
| MSB 084C | 05-04-89 | 108,967.90 | 51,973.70 | 194.9 | 190.2 | 359.9 | 361.9 | PDW | | LL | |
| MSB 085B | 01-24-90 | 107,827.00 | 53,122.70 | 137.3 | 132.6 | 378.3 | 380.3 | PDW | | CBA | |
| MSB 085C | 05-19-89 | 107,835.20 | 53,151.40 | 173.6 | 168.8 | 378.6 | 380.9 | PDW | | LL | |
| MSB 085D | 08-23-90 | 107,822.80 | 53,108.80 | 236.3 | 216.2 | 378.8 | 380.8 | PDW | | M | |
| MSB 085TA | 01-02-90 | 107,831.20 | 53,137.20 | 88.2 | 82.8 | 378.4 | 380.4 | PDW | | CBA | Data from deeper in the aquifer |
| MSB 086C | 10-13-89 | 108,500.40 | 53,560.50 | 164.8 | 160.1 | 354.8 | 357.0 | PDW | | LL | |
| MSB 087B | 06-01-89 | 101,276.00 | 51,607.00 | 174.1 | 169.1 | 334.0 | 336.0 | PDW | | LL | |
| MSB 087C | 06-01-89 | 101,277.00 | 51,596.30 | 246.6 | 241.6 | 334.6 | 336.6 | PDW | | M | In "UL" - Remote and no flags |
| MSB 088B | 05-25-89 | 97,013.00 | 50,774.20 | 75.8 | 70.8 | 235.8 | 238.1 | PDW | | MCBC | |
| MSB 088C | 05-25-89 | 97,012.70 | 50,784.00 | 127.2 | 122.2 | 235.2 | 237.2 | PDW | | LL | In "UL" of the permit list |
| MSB 088D | 05-25-89 | 97,012.30 | 50,793.50 | 212.2 | 192.1 | 234.9 | 236.9 | PZ | | UL | In "M" of the permit list |
| MSB 089B | 06-07-89 | 98,874.10 | 47,889.90 | 162.0 | 157.0 | 337.3 | 339.4 | PDW | | LL | |
| MSB 089C | 06-07-89 | 98,379.40 | 47,881.60 | 222.6 | 217.6 | 337.6 | 339.8 | PZ | | M | In "UL" of the permit list |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| RWM 001 | 05-07-85 | 102,599.10 | 48,575.10 | 232.3 | 172.3 | 362.8 | 364.7 | RW | | M/GC/UL | |
| RWM 002 | 05-03-85 | 104,434.10 | 49,205.50 | 208.3 | 138.3 | 368.3 | 371.3 | RW | | UL/LL | |
| RWM 003 | 06-06-85 | 104,730.20 | 49,680.00 | 214.0 | 144.0 | 374.0 | 377.0 | RW | | GC/UL | |
| RWM 004 | 02-22-85 | 103,719.30 | 48,948.20 | 211.9 | 129.5 | 363.5 | 366.5 | RW | | M/GC | |
| RWM 005 | 02-27-85 | 103,502.20 | 49,628.00 | 216.8 | 133.9 | 363.9 | 366.9 | RW | | GC/UL | |
| RWM 006 | 05-03-85 | 102,001.50 | 50,107.40 | 218.7 | 141.1 | 346.1 | 349.1 | RW | | GC/UL | |
| RWM 007 | 02-25-85 | 101,904.60 | 49,449.50 | 216.3 | 144.0 | 346.0 | 349.0 | RW | | GC/UL | |
| RWM 008 | 02-21-85 | 101,948.20 | 47,353.30 | 197.2 | 109.3 | 345.3 | 348.3 | RW | | LL/MCBC | |
| RWM 009 | 02-26-85 | 104,099.80 | 50,400.00 | 220.6 | 132.6 | 377.6 | 380.6 | RW | | GCL | |
| RWM 010 | 02-21-85 | 102,000.90 | 48,244.10 | 215.5 | 127.5 | 352.5 | 355.5 | RW | | GCL | |
| RWM 011 | 02-26-85 | 104,875.00 | 50,400.20 | 214.6 | 141.9 | 380.3 | 383.3 | RW | | UL/LL | |
| RWM 012 | 01-16-90 | 106,879.20 | 52,500.10 | 210.4 | 159.2 | 359.0 | 359.4 | RW | | UL/LL | |
| SRW 001 | 10-20-77 | 103,776.70 | 41,407.00 | 230.2 | 200.2 | 313.2 | 315.2 | PZ | | M | |
| SRW 001BB | 09-27-89 | 103,772.20 | 41,415.20 | 129.3 | 119.3 | 314.3 | 316.3 | PZ | | LL | |
| SRW 002 | 10-21-77 | 103,721.80 | 41,627.20 | 228.6 | 198.6 | 318.6 | 320.6 | PZ | | M | |
| SRW 002A | 08-07-79 | 103,720.80 | 41,634.60 | 98.4 | 88.6 | 319.1 | 320.6 | PDW | | MCBC | |
| SRW 002B | 12-19-79 | 103,729.70 | 41,631.70 | 162.6 | 152.8 | 319.2 | 320.6 | PDW | | UL | |
| SRW 003A | 08-19-80 | 103,516.40 | 41,851.20 | 193.1 | 163.1 | 330.1 | 332.1 | PZ | | M | |
| SRW 003BB | 09-22-89 | 103,526.60 | 41,845.60 | 130.3 | 120.2 | 330.3 | 332.3 | PZ | | LL | |
| SRW 004 | 09-27-77 | 103,359.90 | 41,612.40 | 230.1 | 200.1 | 318.1 | 320.1 | PZ | | M | |
| SRW 004BB | 08-19-89 | 103,347.90 | 41,609.20 | 134.1 | 124.0 | 318.6 | 320.6 | PZ | | LL | |
| SRW 005 | 10-28-77 | 103,418.20 | 41,240.00 | 224.6 | 194.6 | 307.6 | 309.4 | PZ | | M | |
| SRW 006 | 11-02-77 | 103,602.70 | 41,243.90 | 222.6 | 192.6 | 305.6 | 307.7 | PZ | | M | |
| SRW 007 | 05-02-78 | 103,541.50 | 40,926.20 | 217.5 | 197.5 | 296.7 | 299.1 | PZ | | M | |
| SRW 008 | 05-09-78 | 103,470.00 | 40,455.90 | 215.7 | 195.7 | 286.7 | 288.1 | PZ | | M | |
| SRW 008BB | 09-14-89 | 103,468.00 | 40,464.90 | 130.3 | 120.2 | 287.3 | 289.5 | PZ | | LL | |
| SRW 009 | 07-19-78 | 103,259.80 | 39,688.40 | 196.3 | 166.3 | 251.3 | 253.4 | PZ | | M | |
| SRW 009A | 08-20-79 | 103,251.10 | 39,692.90 | 124.3 | 114.4 | 251.4 | 253.3 | PZ | | UL | In "M" of the permit list |
| SRW 009B | 12-18-79 | 103,241.60 | 39,697.60 | 162.4 | 152.6 | 251.7 | 253.4 | PZ | | M | |
| SRW 010 | 09-15-78 | 103,387.90 | 40,944.30 | 223.0 | 193.0 | 301.0 | 303.4 | PZ | | M | |
| SRW 010BB | 09-15-89 | 103,399.10 | 40,940.50 | 126.7 | 116.6 | 300.7 | 302.8 | PZ | | LL | |
| SRW 011 | 09-19-78 | 103,693.20 | 40,874.20 | 220.6 | 190.6 | 293.6 | 295.8 | PZ | | M | |
| SRW 011BB | 09-29-89 | 103,703.40 | 40,871.20 | 129.5 | 19.5 | 294.5 | 296.5 | PZ | | LL | |
| SRW 012A | 09-19-79 | 103,710.30 | 39,013.30 | 113.7 | 103.9 | 234.1 | 236.3 | PZ | | UL | In "M" of the permit list |
| SRW 012B | 12-16-79 | 103,702.70 | 39,020.30 | 156.1 | 146.3 | 234.1 | 236.3 | PZ | | M | |
| SRW 012C | 09-29-79 | 103,712.50 | 39,023.10 | 198.9 | 179.1 | 234.3 | 236.3 | PZ | | M | |
| SRW 013A | 12-04-79 | 103,001.00 | 40,668.20 | 103.6 | 93.8 | 295.7 | 297.7 | PZ | | LL | |
| SRW 013B | 12-15-79 | 102,993.60 | 40,675.80 | 163.2 | 153.3 | 295.7 | 297.7 | PZ | | UL | In "MCBC" of the permit list |
| SRW 013C | 12-12-79 | 102,986.50 | 40,682.70 | 225.4 | 195.8 | 295.9 | 297.7 | PZ | | M | |
| SRW 014A | 09-02-79 | 102,831.30 | 41,538.60 | 123.7 | 107.9 | 324.9 | 327.0 | PDW | | MCBC | |
| SRW 014B | 12-15-79 | 102,836.10 | 41,548.10 | 162.9 | 153.1 | 324.9 | 326.9 | PDW | | UL | |
| SRW 014C | 11-14-79 | 102,824.20 | 41,546.40 | 228.3 | 198.6 | 325.3 | 326.9 | PZ | | M | |
| SRW 015A | 10-01-79 | 104,778.00 | 41,234.70 | 107.6 | 97.8 | 317.4 | 319.1 | PZ | | MCBC | |
| SRW 015B | 11-11-79 | 104,772.90 | 41,252.50 | 161.6 | 151.8 | 317.1 | 319.1 | PZ | | UL | |
| SRW 015C | 10-17-79 | 104,774.90 | 41,245.10 | 217.3 | 187.7 | 317.3 | 319.1 | PZ | | M | |
| SRW 016A | 10-27-79 | 103,763.40 | 42,830.90 | 144.1 | 119.4 | 344.5 | 346.8 | PDW | | LL | |
| SRW 016B | 11-12-79 | 103,772.00 | 42,825.80 | 169.9 | 160.1 | 344.4 | 346.8 | PDW | | LL | In "UL" of the permit list |
| SRW 016C | 07-03-80 | 103,772.40 | 42,841.80 | 235.7 | 205.7 | 345.3 | 346.6 | PZ | | M | |
| SRW 017BB | 09-01-89 | 103,956.10 | 42,463.80 | 132.3 | 122.2 | 331.3 | 333.4 | PZ | | LL | |
| SRW 017C | 09-02-89 | 103,965.90 | 42,465.50 | 161.3 | 151.2 | 331.3 | 333.6 | PZ | | LL | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SRW 017D | 09-02-89 | 103,975.90 | 42,468.70 | 220.4 | 200.4 | 331.4 | 333.7 | PZ | | M | In "LL" of the permit list |
| | | | | | | | | | | | |
| This table is compiled from the 3Q95 report. | | | | | | | | | | | |
| | | | | | | | | | | | |
| Underline indicates conflict with permit list and 3Q95 quarterly report. | | | | | | | | | | | |
| | | | | | | | | | | | |
| Map Unit/Aquifer Units: | | M - | "M-Area" aquifer zone | | | | | | | | |
| | | UL - | Upper "Lost Lake" aquifer zone | | | | | | | | |
| | | LL - | Lower "Lost Lake" aquifer zone | | | | | | | | |
| | | MCBC - | "Middle Sand" aquifer zone of the Crouch Branch Confining Unit | | | | | | | | |
| | | CBA - | Crouch Branch Aquifer | | | | | | | | |
| | | GC - | "Green Clay" confining zone | | | | | | | | |
| | | | | | | | | | | | |
| Monitoring Designations: | | BGW - | Background well | | | | | | | | |
| | | CRC - | Newly installed CERCLA well | | | | | | | | |
| | | PDW - | Plume deliniation well | | | | | | | | |
| | | POC - | Point of Compliance well | | | | | | | | |
| | | PZ - | Piezometer | | | | | | | | |
| | | | | | | | | | | | |
| Analyses Trend: | | B - | Below detection limit (BDL) | | | | | | | | |
| | | R - | Rising | | | | | | | | |
| | | S - | Stable | | | | | | | | |
| | | D - | Declining | | | | | | | | |

Table C Partial List of Annular Material ARC/INFO coverage point attribute table (PAT)

TABLE C Partial list of Annular Materials ARC/INFO coverage point attribute table (PAT)

| WELL_ID | X_COORD | Y_COORD | WELLUSE | AN_TOP_MSL | AN_BOT_MSL | AN_CODE | AN_DESC | PLANE1 | PLANE2 | PLANE3 | PLANE4 | PLANE5 | PLANE6 | PLANE7 | PLANE8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMB13AR | 51396 | 103082 | MONITORING | 116.9 | 88.9 | FP | FILTERSAND | -131 | 74.7 | 96.7 | 139.2 | 144.7 | 212.6 | 221.9 | 365.9 |
| AOB1 | 50485.898 | 101910.703 | MONITORING | 263.5 | 218.5 | FP | NODATA | -137.8 | 65.1 | 101.4 | 129 | 139.8 | 198.8 | 205.4 | 337.1 |
| AOB3 | 50959.398 | 102164.398 | MONITORING | 350.6 | 215.6 | BF | HOLEPLUG | -135.8 | 65.2 | 112.2 | 132.6 | 137.9 | 198.6 | 204.3 | 351.5 |
| AOB3 | 50959.398 | 102164.398 | MONITORING | 253.9 | 248.4 | FS | NODATA | -135.8 | 65.2 | 112.2 | 132.6 | 137.9 | 198.6 | 204.3 | 351.5 |
| AOB3 | 50959.398 | 102164.398 | MONITORING | 248.4 | 217.4 | FP | NODATA | -135.8 | 65.2 | 112.2 | 132.6 | 137.9 | 198.6 | 204.3 | 351.5 |
| ARP1A | 44317.398 | 99102.898 | MONITORING | 234 | 230 | FS | NODATA | -160.2 | 42.2 | 55.1 | 79.6 | 117.2 | 183.9 | 187.2 | 348.1 |
| ARP1A | 44317.398 | 99102.898 | MONITORING | 230 | 193 | FP | NODATA | -160.2 | 42.2 | 55.1 | 79.6 | 117.2 | 183.9 | 187.2 | 348.1 |
| ARP2 | 44876.102 | 99119.797 | MONITORING | 235.3 | 232.3 | FS | NODATA | -159.4 | 43.1 | 54.3 | 79.7 | 119.8 | 191.3 | 197.6 | 336.7 |
| ARP2 | 44876.102 | 99119.797 | MONITORING | 232.3 | 190.3 | FP | NODATA | -159.4 | 43.1 | 54.3 | 79.7 | 119.8 | 191.3 | 197.6 | 336.7 |
| ARP3 | 44903.699 | 98638.203 | MONITORING | 226.2 | 223.2 | FS | NODATA | -161.7 | 46.3 | 57.5 | 81.6 | 120.2 | 187.1 | 193.1 | 333.2 |
| ARP3 | 44903.699 | 98638.203 | MONITORING | 223.2 | 188.2 | FP | NODATA | -161.7 | 46.3 | 57.5 | 81.6 | 120.2 | 187.1 | 193.1 | 333.2 |
| ARP4 | 44374.801 | 98567.703 | MONITORING | 236.8 | 231.8 | FS | NODATA | -162.8 | 43.9 | 56.5 | 80.2 | 117.3 | 179.5 | 182.8 | 344.8 |
| ARP4 | 44374.801 | 98567.703 | MONITORING | 231.8 | 197.8 | FP | NODATA | -162.8 | 43.9 | 56.5 | 80.2 | 117.3 | 179.5 | 182.8 | 344.8 |
| ASB1A | 52614 | 105535 | MONITORING | 256.2 | 252.2 | FS | NODATA | -118.4 | 60.4 | 67.4 | 127.3 | 143.7 | 189.4 | 201.4 | 348 |
| ASB1A | 52614 | 105535 | MONITORING | 252.2 | 217.2 | FP | NODATA | -118.4 | 60.4 | 67.4 | 127.3 | 143.7 | 189.4 | 201.4 | 348 |
| ASB4 | 53177.199 | 105935.703 | MONITORING | 261.1 | 259.1 | FS | NODATA | -115.8 | 54.8 | 68.6 | 129.6 | 136.2 | 192.4 | 205.1 | 338.5 |
| ASB4 | 53177.199 | 105935.703 | MONITORING | 259.1 | 226.1 | FP | NODATA | -115.8 | 54.8 | 68.6 | 129.6 | 136.2 | 192.4 | 205.1 | 338.5 |
| ASB6A | 52675.898 | 105716 | MONITORING | 263.2 | 258.2 | FS | NODATA | -117.5 | 58.6 | 66.5 | 127.4 | 142.2 | 189.6 | 201.7 | 349 |
| ASB6A | 52675.898 | 105716 | MONITORING | 258.2 | 218.2 | FP | NODATA | -117.5 | 58.6 | 66.5 | 127.4 | 142.2 | 189.6 | 201.7 | 349 |
| ASB6AA | 52643.898 | 105727 | MONITORING | 88.6 | 86 | FS | NODATA | -117.5 | 59 | 66.6 | 127.4 | 142.6 | 189.5 | 201.5 | 349.7 |
| ASB6AA | 52643.898 | 105727 | MONITORING | 86 | 69.8 | FP | SAND | -117.5 | 59 | 66.6 | 127.4 | 142.6 | 189.5 | 201.5 | 349.7 |
| ASB6C | 52655.898 | 105736.797 | MONITORING | 183.9 | 182.3 | FS | FINESAND | -117.5 | 58.8 | 66.5 | 127.4 | 142.4 | 189.5 | 201.6 | 349.6 |
| ASB6C | 52655.898 | 105736.797 | MONITORING | 182.3 | 166.5 | FP | SAND | -117.5 | 58.8 | 66.5 | 127.4 | 142.4 | 189.5 | 201.6 | 349.6 |
| ASB6TA | 52671.301 | 105749.5 | MONITORING | 47.8 | 42.8 | FS | FINESAND | -117.4 | 58.5 | 66.4 | 127.4 | 142.1 | 189.5 | 201.6 | 349.4 |
| ASB6TA | 52671.301 | 105749.5 | MONITORING | 42.8 | 31 | FP | SAND | -117.4 | 58.5 | 66.4 | 127.4 | 142.1 | 189.5 | 201.6 | 349.4 |
| ASB8A | 53117.5 | 106369.297 | MONITORING | 90.2 | 86.2 | FS | NODATA | -114.1 | 57.9 | 73.9 | 131.6 | 135.3 | 196.5 | 207.9 | 348.3 |
| ASB8A | 53117.5 | 106369.297 | MONITORING | 86.2 | 69.2 | FP | NODATA | -114.1 | 57.9 | 73.9 | 131.6 | 135.3 | 196.5 | 207.9 | 348.3 |
| ASB8B | 53109.602 | 106362.297 | MONITORING | 136.6 | 130.6 | FS | NODATA | -114.1 | 57.7 | 73.6 | 131.5 | 135.3 | 196.4 | 207.9 | 348.3 |
| ASB8B | 53109.602 | 106362.297 | MONITORING | 130.6 | 112.6 | FP | NODATA | -114.1 | 57.7 | 73.6 | 131.5 | 135.3 | 196.4 | 207.9 | 348.3 |
| ASB8C | 53101 | 106354.398 | MONITORING | 196.6 | 190.6 | FS | NODATA | -114.2 | 57.4 | 73.3 | 131.5 | 135.4 | 196.3 | 207.8 | 348.3 |
| ASB8C | 53101 | 106354.398 | MONITORING | 190.6 | 172.6 | FP | NODATA | -114.2 | 57.4 | 73.3 | 131.5 | 135.4 | 196.3 | 207.8 | 348.3 |
| ASB8TA | 53124.699 | 106375.797 | MONITORING | 32.3 | 26.3 | FS | NODATA | -114 | 58.2 | 74.1 | 131.7 | 135.2 | 196.6 | 208 | 348.4 |

| TABLE C Partial list of Annular Materials ARC/INFO coverage point attribute table (ctd.) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ANTOP_AQFR | ANBOT_AQFR | BREACH | | | | | | |
| MSCBCU | CBCU | YES | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | LL | YES | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | GCCU | YES | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| M-AREA | M-AREA | NO | | | | | | |
| MSCBCU | MSCBCU | NO | | | | | | |
| MSCBCU | MSCBCU | NO | | | | | | |
| LL | LL | NO | | | | | | |
| LL | LL | NO | | | | | | |
| CB | CB | NO | | | | | | |
| CB | CB | NO | | | | | | |
| MSCBCU | MSCBCU | NO | | | | | | |
| MSCBCU | CBCU | YES | | | | | | |
| LL | MSCBCU | YES | | | | | | |
| MSCBCU | MSCBCU | NO | | | | | | |
| GCCU | LL | YES | | | | | | |
| LL | LL | NO | | | | | | |
| CB | CB | NO | | | | | | |

TABLE D Partial listing of Screen Zone ARC/INFO coverage point attribute table (PAT)

TABLE D Partial listing of Screen Zone ARC/INFO coverage point attribute table (PAT)

| WELLNAME | TYPE1 | TYPE2 | SRS_N | SRS_E | SZ_TOP | SZ_BOT | GROUND | TOC | TOS | DEPTH | CASEDIA | CASEMATL | PUMP | INSTALL | ABANDON |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ABP1A | Mw | PI | 97501.6 | 44425.6 | 202.9 | 172.9 | 357.9 | 359.9 | 360 | 187 | 4 | PVC | S | 8/15/84 | |
| ABP1DD | Pz | | 97511.4 | 44433.6 | 227.2 | 207.2 | 357.9 | 360.1 | 0 | 152.9 | 2 | PVC | | 6/30/89 | |
| ABP2A | Mw | PI | 97764.3 | 44118.8 | 211.1 | 181.1 | 370.1 | 371.9 | 372 | 190.8 | 4 | PVC | S | 8/10/84 | |
| ABP2DD | Pz | | 97753.7 | 44126.7 | 222.3 | 202.2 | 368.3 | 370.6 | 0 | 168.4 | 2 | PVC | | 6/23/89 | |
| ABP3 | Mw | PI | 97794.1 | 44509.3 | 236.9 | 206.9 | 351.9 | 353.7 | 353.8 | 146.8 | 4 | PVC | S | 8/4/83 | |
| ABP3C | Mw | PI | 97778.2 | 44506.3 | 165.3 | 160.3 | 352.3 | 354.5 | 354.8 | 194.2 | 4 | PVC | S | 7/10/89 | |
| ABP4 | Mw | PI | 97489.7 | 44096 | 212.5 | 182.5 | 362.5 | 364.3 | 364.5 | 181.8 | 4 | PVC | S | 6/21/84 | |
| ABP4DD | Pz | | 97495.5 | 44101.3 | 223.2 | 203.2 | 362.7 | 365 | 0 | 161.8 | 2 | PVC | | 6/23/89 | |
| ABP6D | Pz | | 97889.7 | 44101.4 | 222.4 | 202.4 | 363 | 365.3 | 0 | 162.9 | 2 | PVC | | 7/5/89 | |
| ABP7D | Pz | | 97449.7 | 43930.1 | 225.2 | 205.2 | 361.9 | 364.2 | 0 | 159 | 2 | PVC | | 6/30/89 | |
| ABP8C | Mw | PI | 97855.6 | 43968.7 | 190.6 | 185.5 | 369.8 | 372.1 | 372.3 | 186.6 | 4 | PVC | S | 7/20/89 | |
| ABP8D | Mw | PI | 97854.9 | 43984.1 | 228.2 | 208.1 | 368.8 | 370.9 | 371.1 | 162.8 | 4 | PVC | S | 7/20/89 | |
| ABW1 | Mw | PI | 105939.9 | 55016.4 | 215.1 | 185.1 | 323.1 | 324.8 | 325 | 139.7 | 4 | PVC | S | 6/2/83 | |
| AC1A | Mw | PI | 105865 | 42238.8 | 145.7 | 140.7 | 260.7 | 262.1 | 262.4 | 121.4 | 4 | Steel | S | 8/3/81 | |
| AC1B | Mw | PI | 105862.8 | 42250.5 | 202.1 | 197.1 | 261.1 | 262 | 262.2 | 64.9 | 4 | Steel | S | 7/28/81 | |
| AC2A | Mw | PI | 105636.4 | 46428.6 | 146 | 141 | 342.7 | 344.7 | 344.9 | 203.7 | 4 | PVC | S | 9/9/81 | |
| AC2B | Mw | PI | 105648.7 | 46444.5 | 236.4 | 216.4 | 342.8 | 344.8 | 345 | 128.4 | 4 | PVC | S | 8/12/81 | |
| AC3A | Mw | PI | 100989.1 | 42119.8 | 153.6 | 148.6 | 300.4 | 302.3 | 302.5 | 153.7 | 4 | PVC | S | 9/15/81 | |
| AC3B | Mw | PI | 100996.5 | 42113.6 | 213.4 | 193.4 | 300.1 | 302.5 | 302.8 | 109.1 | 4 | PVC | S | 8/21/81 | |
| ACB1A | Mw | PI | 102622.9 | 51369.9 | 247.6 | 217.6 | 357.6 | 359.6 | 359.7 | 142 | 4 | PVC | S | 1/11/84 | |
| ACB2A | Mw | PI | 102367.4 | 51561.3 | 237.8 | 207.8 | 347.8 | 349.8 | 350 | 142 | 4 | PVC | S | 1/30/84 | |
| ACB3A | Mw | PI | 102154.3 | 51313.3 | 236.3 | 206.3 | 346.3 | 348.3 | 349.5 | 142 | 4 | PVC | S | 1/25/84 | |
| ACB4A | Mw | PI | 102343.9 | 51116.2 | 241.7 | 211.7 | 356.7 | 359.1 | 0 | 147.4 | 4 | PVC | S | 2/2/84 | |
| AMB4A | Mw | PI | 104131.6 | 51469.8 | 126.3 | 121.3 | 378.3 | 380.5 | 380.7 | 259.2 | 4 | PVC | S | 8/30/91 | |
| AMB4B | Mw | PI | 104145.6 | 51482.7 | 157.3 | 152.3 | 378.3 | 380.4 | 380.6 | 228.1 | 4 | PVC | S | 9/9/91 | |
| AMB4D | Mw | PI | 104154.7 | 51489 | 233.4 | 213.4 | 378.4 | 380.3 | 0 | 166.9 | 4 | PVC | S | 9/9/91 | |
| AMB5 | Mw | PI | 104083.4 | 51467.2 | 242.1 | 222.1 | 377.6 | 379.6 | 379.8 | 157.5 | 4 | PVC | S | 9/14/88 | |
| AMB6 | Mw | PI | 104034.1 | 51466 | 242.6 | 222.6 | 375.1 | 377.2 | 377.4 | 154.6 | 4 | PVC | S | 9/15/88 | |
| AMB7 | Mw | PI | 103920 | 51624.9 | 242.1 | 222.1 | 368.1 | 369.9 | 370.1 | 147.8 | 4 | PVC | S | 9/6/88 | |
| AMB7A | Mw | PI | 103987.1 | 51591 | 125.6 | 115.6 | 371.6 | 373.6 | 373.8 | 258 | 4 | PVC | S | 7/26/91 | |
| AMB7B | Mw | PI | 103972 | 51590.3 | 162.9 | 152.9 | 370.9 | 373 | 373.1 | 220.1 | 4 | PVC | S | 7/26/91 | |
| AMB8D | Mw | PI | 103874.7 | 51400.5 | 240.8 | 220.8 | 367.8 | 369.6 | 369.9 | 148.8 | 4 | PVC | S | 10/31/89 | |
| AMB9D | Mw | PI | 103585.2 | 51263 | 239.7 | 219.7 | 365.7 | 367.9 | 368.1 | 148.2 | 4 | PVC | S | 10/25/89 | |
| AMB10A | Mw | PI | 103326.4 | 51410 | 111.4 | 106.4 | 364.4 | 366.5 | 366.6 | 260.1 | 4 | PVC | S | 8/26/91 | |
| AMB10B | Mw | PI | 103337.3 | 51418.3 | 154.3 | 149.3 | 364.3 | 366.4 | 366.6 | 217.1 | 4 | PVC | S | 9/3/91 | |

TABLE D Partial listing of Screen Zone ARC/INFO coverage point attribute table (ctd.)

| PLANE1 | PLANE2 | PLANE3 | PLANE4 | PLANE5 | PLANE6 | PLANE7 | PLANE8 | SZTOP_AQFR | SZBOT_AQFR | BREACH |
|---|---|---|---|---|---|---|---|---|---|---|
| -168 | 43.4 | 60.5 | 82.3 | 116.7 | 169.3 | 170.4 | 356.3 | M-AREA | M-AREA | NO |
| -168 | 43.4 | 60.5 | 82.3 | 116.7 | 169.4 | 170.6 | 356.1 | M-AREA | M-AREA | NO |
| -167.1 | 43.1 | 58.3 | 80.6 | 115.3 | 168.7 | 169.9 | 360 | M-AREA | M-AREA | NO |
| -167.2 | 43.1 | 58.4 | 80.7 | 115.3 | 168.7 | 169.9 | 359.9 | M-AREA | M-AREA | NO |
| -166.5 | 44.3 | 59.9 | 82.2 | 117.5 | 172.7 | 174.7 | 350.5 | M-AREA | M-AREA | NO |
| -166.5 | 44.2 | 59.9 | 82.2 | 117.5 | 172.5 | 174.5 | 350.9 | LL | LL | NO |
| -168.5 | 42.3 | 58.7 | 80.7 | 114.8 | 166.2 | 166.9 | 361.7 | M-AREA | M-AREA | NO |
| -168.5 | 42.3 | 58.8 | 80.7 | 114.8 | 166.3 | 167 | 361.7 | M-AREA | M-AREA | NO |
| -166.5 | 43.4 | 58 | 80.5 | 115.4 | 169.6 | 170.9 | 359.9 | M-AREA | M-AREA | NO |
| -169 | 41.6 | 58 | 80 | 113.8 | 164.6 | 165.3 | 363.8 | M-AREA | M-AREA | NO |
| -166.9 | 43 | 57.6 | 80 | 114.6 | 168.2 | 169.1 | 363.6 | M-AREA | M-AREA | NO |
| -166.8 | 43 | 57.6 | 80.1 | 114.7 | 168.3 | 169.2 | 363.1 | M-AREA | M-AREA | NO |
| -112.4 | 90.6 | 97.9 | 133.2 | 138.3 | 195.9 | 212.2 | 325.9 | M-AREA | LL | YES |
| -130.5 | 73.2 | 86.6 | 107.2 | 118.2 | 189.7 | 194.5 | 277.1 | LL | LL | NO |
| -130.5 | 73.1 | 86.5 | 107.2 | 118.2 | 189.7 | 194.5 | 277.4 | M-AREA | M-AREA | NO |
| -126.8 | 38.2 | 65.3 | 107.6 | 127.8 | 185.4 | 191.6 | 345.5 | LL | LL | NO |
| -126.7 | 38.3 | 65.4 | 107.8 | 127.8 | 185.3 | 191.5 | 345.2 | M-AREA | M-AREA | NO |
| -153.7 | 65 | 75 | 93.2 | 113.6 | 170.9 | 171.9 | 298.9 | LL | LL | NO |
| -153.6 | 65.1 | 75.1 | 93.3 | 113.6 | 170.9 | 171.9 | 298.9 | M-AREA | M-AREA | NO |
| -133.1 | 69.7 | 105.6 | 136.5 | 140.6 | 205.7 | 212.8 | 357.3 | M-AREA | M-AREA | NO |
| -133.9 | 67.2 | 107.7 | 134 | 138.7 | 201.8 | 208.1 | 348.6 | M-AREA | GCCU | YES |
| -135.3 | 65.5 | 111.5 | 132.5 | 137.6 | 198.4 | 204.3 | 348 | M-AREA | M-AREA | NO |
| -134.8 | 66.8 | 110.9 | 134.3 | 138.5 | 201.2 | 207.3 | 354.9 | M-AREA | M-AREA | NO |
| -126.3 | 73.9 | 94.4 | 131.4 | 149.3 | 213.6 | 220.5 | 382 | MSCBCU | MSCBCU | NO |
| -126.2 | 73.8 | 94.4 | 131.3 | 149.4 | 213.4 | 220.3 | 382 | LL | LL | NO |
| -126.2 | 73.7 | 94.4 | 131.2 | 149.5 | 213.3 | 220.1 | 381.9 | M-AREA | GCCU | YES |
| -126.5 | 74.1 | 94.2 | 131.7 | 149.1 | 213.8 | 221 | 382 | M-AREA | M-AREA | NO |
| -126.7 | 74.4 | 94 | 132.1 | 149 | 214.1 | 221.5 | 381.8 | M-AREA | M-AREA | NO |
| -127 | 73.4 | 92.5 | 132.9 | 149 | 213.1 | 221 | 377.4 | M-AREA | M-AREA | NO |
| -126.7 | 73.5 | 92.8 | 132.3 | 149.2 | 213.2 | 220.9 | 379.1 | MSCBCU | MSCBCU | NO |
| -126.8 | 73.6 | 92.8 | 132.5 | 149.1 | 213.3 | 221 | 379 | LL | LL | NO |
| -127.5 | 75.5 | 93.9 | 133.8 | 148.2 | 214.8 | 223 | 380.1 | M-AREA | GCCU | YES |
| -129 | 77.4 | 93.5 | 137.1 | 147 | 216 | 225.5 | 376.5 | M-AREA | GCCU | YES |
| -129.9 | 75.9 | 94.4 | 138.5 | 146.3 | 214.3 | 223.9 | 370 | MSCBCU | MSCBCU | NO |
| -129.8 | 75.9 | 94.2 | 138.4 | 146.4 | 214.4 | 223.9 | 370.1 | LL | LL | NO |

TABLE E Description of attributes of Screen Zones coverage PAT

**Table E. Description of Attributes for the Screen Zone Coverage Point Attribute Table (PAT)**

| | |
|---|---|
| WELLNAME | Name of well |
| TYPE1 | Primary well designation<br>Ab = abandoned well<br>Dm = domestic well or county production well<br>Dr = dry monitoring well<br>Mw = monitoring well<br>Pz = piezometer<br>Pw = production well<br>Sp = special well |
| TYPE2 | Secondary well designation (for SRS Hazardous Waste Permit)<br>Bk = background well<br>Pl = plume definition well<br>Pc = point-of-compliance well |
| SRS-N | SRS coordinates North in feet |
| SRS-E | SRS coordinates East in feet |
| UTM-N | UTM coordinates North in meters |
| UTM-E | UTM coordinates East in meters |
| SZ-TOP | Elevation of top of screen zone in feet above MSL |
| SZ-BOT | Elevation of bottom of screen zone in feet above MSL |
| GROUND | Elevation of top of screen zone in feet above MSL |
| TOC | Elevation of top of casing in feet above MSL |
| TOS | Elevation of top of standpipe in feet above MSL |
| DEPTH | Effective depth = (SZ-BOT - TOC) |
| CASEDIA | Casing diameter (inches) |
| CASEMATL | Casing material<br>Al = aluminum<br>CS = carbon steel<br>EUE = external upset end<br>FG = fiberglass<br>HDPE = high density polyethylene<br>Iron = iron<br>PVC = polyvinyl chloride<br>SS = stainless steel<br>Steel = galvanized steel |
| PUMP | Pump type<br>B = sample collected using open bucket bailer<br>P = sample collected using bladder pump<br>S = sample collected using single-speed centrifugal downhole pump<br>V = sample collected using variable-speed downhole pump |
| INSTALL | Install date |
| ABANDON | Abandon date |
| PLANE1 | Elevation in feet msl of well x,y coordinate projected onto the interface between the McQueen Branch Confining Unit and Crouch Branch Aquifer |
| PLANE2 | Elevation in feet msl of well x,y coordinate projected onto the interface between the Crouch Branch Aquifer and Lower Confining Zone - Crouch Branch Confining Unit |
| PLANE3 | Elevation in feet msl of well x,y coordinate projected onto the interface between the Lower Confining Zone - Crouch Branch Confining Unit and Middle Sand - Crouch Branch Confining Unit |
| PLANE4 | Elevation in feet msl of well x,y coordinate projected onto the interface between the Middle Sand - Crouch Branch Confining Unit and Upper Confining Unit - Crouch Branch Confining Unit |

**Table E Continued. Description of Attributes for the Screen Zone Coverage**

| | |
|---|---|
| PLANE5 | Elevation in feet msl of well x,y coordinate projected onto the interface between the Upper Confining Zone - Crouch Branch Confining Unit and Lost Lake Aquifer |
| PLANE6 | Elevation in feet msl of well x,y coordinate projected onto the interface between the Lost Lake Aquifer and Green Clay ConfiningUnit |
| PLANE7 | Elevation in feet msl of well x,y coordinate projected onto the interface between the Green Clay Confining Unit and M-Area Aquifer |
| PLANE8 | Elevation in feet msl of well x,y coordinate projected onto the Land Surface |
| SZTOP-AQFR | Hydrostratigraphic unit containing the top of the screen:<br>CB - Lower Confining Zone - Crouch Branch Aquifer<br>CBCU - Crouch Branch Confining Unit<br>GCCU - Green Clay Confining Unit<br>LL - Lost Lake<br>M-Area - M-Area Aquifer<br>MCQUEEN - Below the Crouch Branch Aquifer<br>MSCBCU - Middle Sand - Crouch Branch Confining Unit<br>UCCBCU - Upper Confining Zone - Crouch Branch Confining Unit |
| SZBOT-AQFR | Hydrostratigraphic unit containing the bottom of the screen:<br>CB - Lower Confining Zone - Crouch Branch Aquifer<br>CBCU - Crouch Branch Confining Unit<br>GCCU - Green Clay Confining Unit<br>LL - Lost Lake<br>M-Area - M-Area Aquifer<br>MCQUEEN - Below the Crouch Branch Aquifer<br>MSCBCU - Middle Sand - Crouch Branch Confining Unit<br>UCCBCU - Upper Confining Zone - Crouch Branch Confining Unit |
| BREACH | Indicates potential breach of confining unit:<br>YES - potential breach<br>NO - potential breach not present |

TABLE F Description of attributes for the annular material coverage PAT

**Table F. Description of Attributes for the Annular Materials Coverage Point Attribute Table (PAT)**

| | |
|---|---|
| X-COORD: | SRS coordinates East in feet |
| Y-COORD: | SRS coordinates North in feet |
| WELL-ID: | Name of well |
| WELLUSE: | Use of well |
| AN_TOP_MSL | Elevation of top of annular materials in feet above mean sea level |
| AN_BOT_MSL | Elevation of bottom of annular materials in feet above mean sea level |
| AN_CODE | Primary description of well annular materials:<br>BF - Back Fill<br>FP - Filter Pack<br>FS - Fine Sand Seal |
| AN_DESC | Specific description of AN_CODE material:<br>Cuttings<br>Filtersand<br>Finesand<br>Holeplug - Material placed at the bottom of the well hole<br>Nodata - annular materials data not in GIMS<br>Sand<br>Sand/Bentonite |
| PLANE1 | Elevation in feet msl of well x,y coordinate projected onto the interface between the McQueen Branch Confining Unit and Crouch Branch Aquifer |
| PLANE2 | Elevation in feet msl of well x,y coordinate projected onto the interface between the Crouch Branch Aquifer and Lower Confining Zone - Crouch Branch Confining Unit |
| PLANE3 | Elevation in feet msl of well x,y coordinate projected onto the interface between the Lower Confining Zone - Crouch Branch Confining Unit and Middle Sand - Crouch Branch Confining Unit |
| PLANE4 | Elevation in feet msl of well x,y coordinate projected onto the interface between the Middle Sand - Crouch Branch Confining Unit and Upper Confining Unit - Crouch Branch Confining Unit |
| PLANE5 | Elevation in feet msl of well x,y coordinate projected onto the interface between the Upper Confining Zone - Crouch Branch Confining Unit and Lost Lake Aquifer |
| PLANE6 | Elevation in feet msl of well x,y coordinate projected onto the interface between the Lost Lake Aquifer and Green Clay Confining Unit |
| PLANE7 | Elevation in feet msl of well x,y coordinate projected onto the interface between the Green Clay Confining Unit and M-Area Aquifer |
| PLANE8 | Elevation in feet msl of well x,y coordinate projected onto the Land Surface |
| ANTOP-AQFR | Hydrostratigraphic unit containing the top of the annular materials zone:<br>CB - Lower Confining Zone - Crouch Branch Aquifer<br>CBCU - Crouch Branch Confining Unit<br>GCCU - Green Clay Confining Unit<br>LL - Lost Lake<br>M-Area - M-Area Aquifer<br>MCQUEEN - Below the Crouch Branch Aquifer<br>MSCBCU - Middle Sand - Crouch Branch Confining Unit<br>UCCBCU - Upper Confining Zone - Crouch Branch Confining Unit |

**Table F Continued. Description of Attributes for the Annular Materials Coverage**

| | |
|---|---|
| ANBOT-AQFR | Hydrostratigraphic unit containing the bottom of the annular materials zone:<br>CB - Lower Confining Zone - Crouch Branch Aquifer<br>CBCU - Crouch Branch Confining Unit<br>GCCU - Green Clay Confining Unit<br>LL - Lost Lake<br>M-Area - M-Area Aquifer<br>MCQUEEN - Below the Crouch Branch Aquifer<br>MSCBCU - Middle Sand - Crouch Branch Confining Unit<br>UCCBCU - Upper Confining Zone - Crouch Branch Confining Unit |
| BREACH | Indicates potential breach of confining unit<br>YES - potential breach<br>NO - potential breach not present |

Table G Partial listing of records for combined annular materials

TABLE G Partial listing of records for combined annular materials

| Well-id | Welluse | An_top_msl1 | An_bot_msl1 | An_code1 | An_desc1 | Antop_aqfr1 | Anbot_aqfr1 | An_top_msl2 | An_bot_msl2 | An_code2 | An_desc2 | Antop_aqfr2 | Anbot_aqfr2 | Breach |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ABP3C | MONITORING | 172.7 | 170.3 | FS | FINESAND | GCCU | LL | 170.3 | 144.3 | FP | SAND | LL | LL | YES |
| ABP8C | MONITORING | 196.9 | 194.9 | FS | FINESAND | M-AREA | M-AREA | 194.9 | 149.8 | FP | SAND | M-AREA | LL | YES |
| ABW1 | MONITORING | 229.1 | 185.1 | FP | NODATA | M-AREA | LL | -999 | -999 | | | | | YES |
| ACB2A | MONITORING | 242.8 | 207.8 | FP | NODATA | M-AREA | GCCU | -999 | -999 | | | | | YES |
| AMB10B | MONITORING | 162.7 | 159.7 | FS | FINESAND | LL | LL | 159.7 | 141.3 | FP | FILTERSAND | LL | UCCBCU | YES |
| AMB12D | MONITORING | 249.2 | 245.3 | FS | NODATA | M-AREA | M-AREA | 245.3 | 208.7 | FP | SAND | M-AREA | LL | YES |
| AMB4A | MONITORING | 132.8 | 130.3 | FS | FINESAND | UCCBCU | MSCBCU | 130.3 | 114.3 | FP | FILTERSAND | MSCBCU | MSCBCU | YES |
| AMB4B | MONITORING | 163.8 | 161.3 | FS | FINESAND | LL | LL | 161.3 | 145.3 | FP | FILTERSAND | LL | UCCBCU | YES |
| AMB4D | MONITORING | 240.4 | 212.4 | FP | FILTERSAND | M-AREA | LL | -999 | -999 | | | | | YES |
| AMB7A | MONITORING | 132.6 | 110.6 | FP | FILTERSAND | UCCBCU | MSCBCU | -999 | -999 | | | | | YES |
| AMB7B | MONITORING | 170.3 | 145.9 | FP | FILTERSAND | LL | UCCBCU | -999 | -999 | | | | | YES |
| ARP2 | MONITORING | 235.3 | 232.3 | FS | NODATA | M-AREA | M-AREA | 232.3 | 190.3 | FP | NODATA | M-AREA | LL | YES |
| ARP3 | MONITORING | 226.2 | 223.2 | FS | NODATA | M-AREA | M-AREA | 223.2 | 188.2 | FP | NODATA | M-AREA | GCCU | YES |
| ASB8A | MONITORING | 90.2 | 86.2 | FS | NODATA | MSCBCU | MSCBCU | 86.2 | 69.2 | FP | NODATA | MSCBCU | CBCU | YES |
| ASB8B | MONITORING | 136.6 | 130.6 | FS | NODATA | LL | MSCBCU | 130.6 | 112.6 | FP | NODATA | MSCBCU | MSCBCU | YES |
| ASB8C | MONITORING | 196.6 | 190.6 | FS | NODATA | GCCU | LL | 190.6 | 172.6 | FP | NODATA | LL | LL | YES |
| MHT10B | MONITORING | 203.9 | 201.8 | FS | FINESAND | GCCU | GCCU | 201.8 | 186.7 | FP | SAND | GCCU | LL | YES |
| MHT10C | MONITORING | 215.1 | 213.9 | FS | FINESAND | M-AREA | M-AREA | 213.9 | 203.9 | FP | SAND | M-AREA | GCCU | YES |
| MHT11C | MONITORING | 222.3 | 219.6 | FS | FINESAND | M-AREA | M-AREA | 219.6 | 200.2 | FP | SAND | M-AREA | GCCU | YES |
| MHT12C | MONITORING | 220.8 | 218.4 | FS | FINESAND | M-AREA | M-AREA | 218.4 | 202.9 | FP | SAND | M-AREA | GCCU | YES |
| MHT13D | MONITORING | 237.6 | 235.7 | FS | FINESAND | M-AREA | M-AREA | 235.7 | 206.4 | FP | SAND | M-AREA | GCCU | YES |
| MHT14D | MONITORING | 238.4 | 236.1 | FS | FINESAND | M-AREA | M-AREA | 236.1 | 206.6 | FP | SAND | M-AREA | GCCU | YES |
| MHT17C | MONITORING | 209.6 | 199.4 | FP | SAND | M-AREA | GCCU | -999 | -999 | | | | | YES |
| MHT1C | MONITORING | 214.4 | 211.6 | FS | FINESAND | M-AREA | M-AREA | 211.6 | 200.7 | FP | SAND | M-AREA | GCCU | YES |
| MHT20C | MONITORING | 208.3 | 207.9 | FS | FINESAND | M-AREA | M-AREA | 207.9 | 201.4 | FP | SAND | M-AREA | GCCU | YES |
| MHT2C | MONITORING | 217.7 | 215.5 | FS | FINESAND | M-AREA | M-AREA | 215.5 | 202.1 | FP | SAND | M-AREA | GCCU | YES |
| MHT3C | MONITORING | 213.9 | 212.9 | FS | FINESAND | M-AREA | M-AREA | 212.9 | 200.6 | FP | SAND | M-AREA | GCCU | YES |
| MHT4C | MONITORING | 217.8 | 216.5 | FS | FINESAND | M-AREA | M-AREA | 216.5 | 203.4 | FP | SAND | M-AREA | GCCU | YES |
| MHT5C | MONITORING | 217.5 | 215.4 | FS | FINESAND | M-AREA | M-AREA | 215.4 | 202.1 | FP | SAND | M-AREA | GCCU | YES |
| MHT6C | MONITORING | 216.8 | 215.6 | FS | FINESAND | M-AREA | M-AREA | 215.6 | 201.6 | FP | SAND | M-AREA | GCCU | YES |
| MHT7C | MONITORING | 217.6 | 216.9 | FS | FINESAND | M-AREA | M-AREA | 216.9 | 201 | FP | SAND | M-AREA | GCCU | YES |
| MHT8C | MONITORING | 216.6 | 215 | FS | FINESAND | M-AREA | M-AREA | 215 | 202.3 | FP | SAND | M-AREA | GCCU | YES |
| MHT9B | MONITORING | 203 | 201 | FS | FINESAND | GCCU | LL | 201 | 185.3 | FP | SAND | LL | LL | YES |
| MHT9C | MONITORING | 217.7 | 216.1 | FS | FINESAND | M-AREA | M-AREA | 216.1 | 206.2 | FP | SAND | M-AREA | GCCU | YES |
| MSB1B | MONITORING | 147.8 | 146 | FS | FINESAND | LL | LL | 146 | 131.9 | FP | SAND | LL | UCCBCU | YES |
| MSB21B | MONITORING | 154.4 | 151.5 | FS | NODATA | LL | LL | 151.5 | 133.4 | FP | SAND | LL | UCCBCU | YES |
| MSB29A | MONITORING | 134.9 | 128.9 | FS | NODATA | UCCBCU | UCCBCU | 128.9 | 112.9 | FP | NODATA | UCCBCU | MSCBCU | YES |
| MSB29D | MONITORING | 236.6 | 233.6 | FS | NODATA | M-AREA | M-AREA | 233.6 | 197.6 | FP | NODATA | M-AREA | LL | YES |

Table H List of analytes used in screening

| TABLE H. SCREENING PARAMETERS, WITH FLAG LEVELS | | | | |
|---|---|---|---|---|
| Constituent | Units | Flag 1 | Flag 2 | Stds |
| **FIELD PARAMETERS** | | | | |
| Alkalinity | mg/l as CaCO3 | None | None | |
| pH | pH | 8.0 | 10.0 | |
| pH | pH | 4.0 | 3.0 | |
| Spec. Cond | uS/cm | 250.0 | 500.0 | |
| Turbidity | NTUs | None | None | |
| **GROUNDWATER PROTECTION STANDARD** | | | | |
| Barium | ug/l | 1,000.0 | 2,000.0 | 2,000.0 |
| Cyanide | ug/l | 100.0 | 200.0 | 20.0 |
| Lead | ug/l | 25.0 | 50.0 | 15.0 |
| Nickel | ug/l | 50.0 | 100.0 | 100.0 |
| Selenium | ug/l | 25.0 | 50.0 | 50.0 |
| Clorobenzene | ug/l | 50.0 | 100.0 | 5.0 |
| Dichloroethane, 1,1- | ug/l | 2.5 | 5.0 | 5.0 |
| Dichloroethylene, 1,1- | ug/l | 125.0 | 250.0 | 7.0 |
| Dichloroethylene, trans-1,2- | ug/l | 50.0 | 100.0 | 100.0 |
| PCBs | ug/l | 0.25 | 0.50 | 0.5 |
| Tetrachloroethane, 1,1,2,2- | ug/l | 5.0 | 10.0 | 5.0 |
| Tetrachloroethylene | ug/l | 2.5 | 5.0 | 5.0 |
| Trichloroethane, 1,1,1- | ug/l | 100.0 | 200.0 | 200.0 |
| Trichloroethylene | ug/l | 2.5 | 5.0 | 5.0 |
| **MONITORING CONSTITUENTS STANDARD** | | | | |
| Aluminum | ug/l | 25.0 | 50.0 | 100.0 |
| Chloride | ug/l | 125,000.0 | 250,000.0 | 4,200.0 |
| Chromium | ug/l | 50.0 | 100.0 | 100.0 |
| Cobalt | ug/l | 20.0 | 40.0 | 4.0 |
| Copper | ug/l | 500.0 | 1,000.0 | 1,300.0 |
| Fluoride | ug/l | 2,000.0 | 4,000.0 | 4,000.0 |
| Manganese | ug/l | 25.0 | 50.0 | 50.0 |
| Mercury | ug/l | 1.0 | 2.0 | 2.0 |
| Nitrate-nitrite | ug/l | 5,000.0 | 10,000.0 | 2,400.0 |
| Sodium | ug/l | None | None | 4,600.0 |
| Sulfate | ug/l | 200,000.0 | 400,000.0 | 3,000.0 |
| Total Phosphates | ug/l | None | None | 300.0 |
| Uranium | ug/l | 10.0 | 20.0 | 100.0 |
| Zinc | ug/l | 2,500.0 | 5,000.0 | 5,000.0 |
| Gross Alpha | pCi/l | 7.5 | 15.0 | 15.0 |
| Nonvolatile Beta | pCi/l | 25.0 | 50.0 | 50.0 |
| Radium (total alpha emitting) | pCi/l | 10.0 | 20.0 | 5.0 |