

**HAZARDOUS WASTE SECTION - COMPLIANCE BRANCH
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AMENDED POST-CLOSURE PLAN - II

WYSONG & MILES COMPANY

GREENSBORO, NORTH CAROLINA

DELTA PROJECT NO. 50-88-173

RECEIVED
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HAZARDOUS WASTE SECTION

AMENDED POST-CLOSURE PLAN - II

**WYSONG & MILES COMPANY
GREENSBORO, NORTH CAROLINA
DELTA PROJECT NO. 50-88-173**

This report was prepared by:

**Delta Environmental Consultants, Inc.
6701 Carmel Road, Suite 200
Charlotte, North Carolina 28226**

August 1992

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AMENDED POST-CLOSURE PLAN-II

**WYSONG & MILES COMPANY
GREENSBORO, NORTH CAROLINA
DELTA NO. 50-88-173**

1.0 INTRODUCTION

The Amended Post-Closure Plan-II is intended to present post-closure care activities and documentation following closure of the former disposal basin in accordance with the Amended Closure Plan-II. A Closure and Post-Closure Plan was submitted to the Hazardous Waste Section (HWS) in May 1991. An Amended Post-Closure Plan was submitted in response to a notice of deficiencies issued to Wysong & Miles Company by the HWS dated October 31, 1991. An additional notice of deficiencies was issued to Wysong by the HWS dated June 10, 1992. This Amended Post-Closure Plan - II addresses the June 10, 1992 notice of deficiencies.

[REF: 265.118]

1.1 Cap Inspection

Throughout the post-closure care period, the condition of the cap will be inspected to insure cap integrity. Inspection will consist of routine checks by facility personnel. An inspection checklist will be constructed to document the following:

- Signs of surface cracks in the concrete cap.
- Signs of subsidence.
- Ponding water indicating insufficient surface water drainage or subsidence.
- Signs of concrete expansion or contraction.

Concrete cap repair will be performed if routine inspections show that any of the above conditions could potentially affect the cap integrity as determined by a registered professional engineer.

1.1.1 Cap Inspection Schedule

The cap will be inspected a minimum of once per month by facility personnel.

1.2 Cap Maintenance

The cap will be routinely cleaned to prevent a buildup of debris that could limit the effectiveness of routine inspections to identify potential problems.

Cap maintenance will be performed on an as needed basis based on routine inspections by facility personnel.

1.3 Inspection and Maintenance Log Book

A log book will be maintained to document all inspection and maintenance activities. The log book will remain on the facility property for inspection by HWS personnel.

1.4 Post-Closure Cap Repair

Any necessary repairs and repair specifications will be managed and supervised by a registered professional engineer. Repairs will be performed to restore the cap integrity in compliance with the original cap design specifications included in the Closure Plan.

1.5 Notification of Amendment

[REF: 265.118(d)]

The HWS will be notified within 60 days prior to any modifications to the Post-Closure Plan.

1.6 Post-Closure Care and Property Use

[REF: 265.117]

The length of the post-closure care period will be thirty (30) years from the date of completing closure, unless a demonstration is made by Wysong and approval is granted by the HWS that certain or all post-closure activities are no longer necessary to provide protection to human health and the environment. The HWS will notify Wysong in the event that it is determined that an extension of the post-closure care period is necessary to protect human health and the environment.

Post-closure use of the property that contains the former hazardous waste unit will not be permitted to disturb the integrity of the concrete cap. Property use during the post-closure care period is restricted to parking or other appropriate purposes as specified in the agreement between the HWS and Wysong. The existing storage structure may remain over the cap so long as it will not jeopardize the cap integrity. A copy of the agreement between the HWS and Wysong specifying property use restrictions is included as Appendix A.

1.6.1 Site Security

The former disposal basin area is enclosed by a eight foot high chain link fence. A security guard is employed by Wysong to monitor nighttime and weekend activities. These security measures will prevent unauthorized non-Wysong personnel from entry into the former disposal basin area.

Routine inspection will be performed on the fence during inspection of the cap. The inspection will be performed by facility personnel.

1.7 Ground Water Monitoring

[REF: 265.117(a), 265.93(d)]

A ground water monitoring program is proposed to monitor hydrogeologic conditions coupled with concentrations of indicator parameters in the area of the former disposal basin. The program is designed to comply with applicable requirements specified in 40 CFR 265.90, 265.91, 265.93, 265.94, and the agreement between the HWS and Wysong. The ground water monitoring program for the former disposal basin will be initiated while completing the ground water assessment of the Wysong facility in accordance with the Ground Water Assessment Plan submitted to the HWS dated January 17, 1992.

[REF: 265.94]

The Wysong facility will maintain permanent copies of all ground water monitoring records for HWS inspection in accordance with the Sampling and Analysis Plan.

1.7.1 Site Ground Water Hydraulic Conditions

A site map illustrating the location of all on-site monitoring wells is shown in Figure 1. Quarterly reports have been submitted to the HWS detailing ongoing remedial efforts including hydraulic and analytical data obtained from the on-site monitoring wells and recovery wells. A ground water potentiometric surface map illustrating static hydraulic conditions prior to activation of the ground water recovery system on August 1, 1990 is shown on Figure 2. A ground water potentiometric surface map illustrating steady-state hydraulic conditions during ground water recovery from water level data collected on May 12, 1992 is shown on Figure 3. Both maps illustrate that the ground water flow direction across the site and below the former disposal basin is in a northeastward direction.

1.7.2 Former Disposal Basin Monitoring Program

Three monitoring wells are installed around the former disposal basin that are included in the post-closure monitoring program. The monitoring wells include MW-2, MW-15, MW-16D. A detailed map of the former disposal basin area is illustrated in Figure 4.

Monitoring well MW-2 is located thirty (30) feet southwest and up hydraulic gradient of the former basin. MW-2 is screened across the ground water table within the surficial saprolite unit. MW-2 was installed in January 1988 and has been used since for continued site monitoring. A monitoring well construction schematic for MW-2 is included in Appendix B.

A monitoring well nest was installed northeast and down gradient of the former disposal basin in July/August 1992. The monitoring wells are a paired shallow (MW-15) and deep well (MW-16D) for monitoring the horizontal and vertical extent of ground water contamination originating from the immediate disposal basin area. MW-15 is screened across the water table in the surficial saprolite unit while MW-16D is screened within the underlying fractured bedrock unit. The location of the monitoring wells is illustrated in Figure 1. Monitoring well construction schematics are included as Appendix B. To date, no water level measurements or ground water samples have been collected from MW-15 and MW-16D.

1.7.2.1 Ground Water Sampling

A ground water Sampling and Analysis Plan for the facility was submitted to the HWS dated June 19, 1992 and is included as Appendix C. The sampling procedures specified in the plan are adopted for the former disposal basin monitoring plan. Ground water samples collected from the monitoring wells included in the monitoring program will be sampled for the analytical parameters in EPA Method 8010 on a quarterly basis. As specified in the Sampling and Analysis Plan, the pH, specific conductance, and temperature are collected during each sampling event. After final closure of the former disposal basin, Wysong reserves the right to request, in writing, a reduction of the sample collection frequency from quarterly to semi-annual.

1.7.2.2 Monitoring Well Inspection

The monitoring wells will be inspected on a monthly basis while measuring water levels as specified in the Sampling and Analysis Plan included as Appendix B. Record of inspections will be formatted as ground water depth measurements recorded in the log book maintained at the facility. Any modifications or repairs

performed to the monitoring wells that may have potentially impacted the ground water sample integrity will be detailed in a report to be submitted to the HWS within thirty (30) days after discovery.

1.7.4 Surveyed Benchmark

A site survey was conducted in August 1991 by a licensed surveyor. The loading platform at the shipping and receiving area to the Wysong facility was surveyed in at an elevation of 779.02 feet above mean sea level. This surveyed point is considered permanent and is designated as the site surveyed benchmark.

1.8 Post-Closure Notices

[REF: 265.119]

No later than 60 days after certification of closure of the former disposal basin, Wysong will submit to the local zoning authority and to the HWS, a record of the type, location, and quantity of hazardous wastes disposed of within the hazardous waste unit.

Within 60 days of certification of closure of the disposal basin, Wysong will:

- a. Record, in accordance with State law, a notation on the deed to the facility property or on some other instrument which is normally examined during title search that will be perpetuity notify a potential purchaser of the property that:
 - The land has been used to manage hazardous wastes;
 - Its use is restricted under 40 CFR Subpart G regulations; and
 - The survey plat and record of the type, location, and quantity of hazardous waste management area of the facility required by Section 265.116 and Section 265.119(a) have been filed with the local zoning authority and with the Hazardous Waste Section.
- b. Wysong will also include in the notation the following information:
 - The amount of soil removed; and
 - A statement that the source management area has been removed and that the site is no longer used to manage hazardous waste.
- c. Submit a certification signed by the owner or operator that he has recorded the notation in the deed and a copy of the document in which the notation has been placed to the Hazardous Waste Section.

1.9 Certification of Post-Closure

[REF: 265.120]

A certification of post-closure will be submitted to the HWS within 60 days upon final completion of the established post-closure activities. The certification will be signed by a facility owner or operator and a registered professional engineer stating that post-closure activities were performed in accordance with the Post-Closure Plan.

2.0 FINANCIAL REQUIREMENTS

2.1 Post-Closure Care Cost Estimate

[REF: 265.144(a)]

A cost estimate has been prepared pertaining to the specific activities outlined in the Post-Closure Plan. A summary of the cost breakdown is presented in Table 1. Routine activities will be performed by Wysong personnel as discussed in the Post-Closure Plan. However, the cost estimate is based on a third party performing the routine activities as specified in Section 265.144(a)(1).

[REF: 265.144(b)]

The post-closure care cost estimate will be adjusted to compensate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument used to comply with Section 265.145. Adjustments will be continued annually for the duration of the post-closure care period in accordance with Section 265.144(b)(1)(2).

[REF: 265.144(c)]

The post-closure care cost estimate will be updated within 30 days after a revision has been made to the Post-Closure Plan or within 30 days of a modification to the approved Post-Closure Plan.

[REF: 265.144(d)]

A copy of the latest post-closure care cost estimate including all adjustments, revisions, and modifications, will be maintained at Wysong for inspection by the HWS.

2.2 Post-Closure Liability Requirements

[REF: 265.147]

In accordance with paragraph 5 of the agreement between the HWS and Wysong included as Appendix A Wysong will not be required to submit evidence of financial insurance.

2.3 Financial Insecurities

[REF: 265.148]

The HWS will be notified by certified mail in the event of the commencement of a voluntary or involuntary proceeding under Title 11, U.S. Code by Wysong which names Wysong as the debtor. Alternative financial assurance will be attained by Wysong within 60 days in the event of the commencement of a proceeding under Title 11, U.S. Code by the financial institution or loss of authority to act as the designated financial institution.

2.4 Financial Assurance

[REF: 265.146]

The mechanism for financing the post-closure cost estimate is a trust fund, to be funded over a period of 10 years in accordance with the agreement between Wysong and the HWS. Proper trust fund documentation will be submitted to the HWS upon approval of the Post-Closure Plan.

3.0 DESIGNATED PERSONNEL

[REF: 265.118(c)(3)]

The facility contact regarding post-closure activities is:

Mr. Hugh T. Hicks
Wysong & Miles Company
U.S. Hwy 29 North
Greensboro, North Carolina 27420
(919) 621-3960

4.0 REMARKS

The recommendations contained in this report represent our professional opinions. These opinions are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

Amended Post-Closure Plan-II

Wysong & Miles Company
Greensboro, North Carolina
Delta No. 50-88-173
August 13, 1992
Page 8

This report was prepared by:

DELTA ENVIRONMENTAL CONSULTANTS, INC.



Steven S. Gerritsen, M.S.
Project Geologist
North Carolina Licensed Geologist #1055

8-13-92
Date

This report was reviewed by:

fa 

Gary M. Wisniewski, P.E.
Senior Environmental Engineer
North Carolina Professional Registered Engineer #15499

8/13/92
Date

/khd

TABLE 1

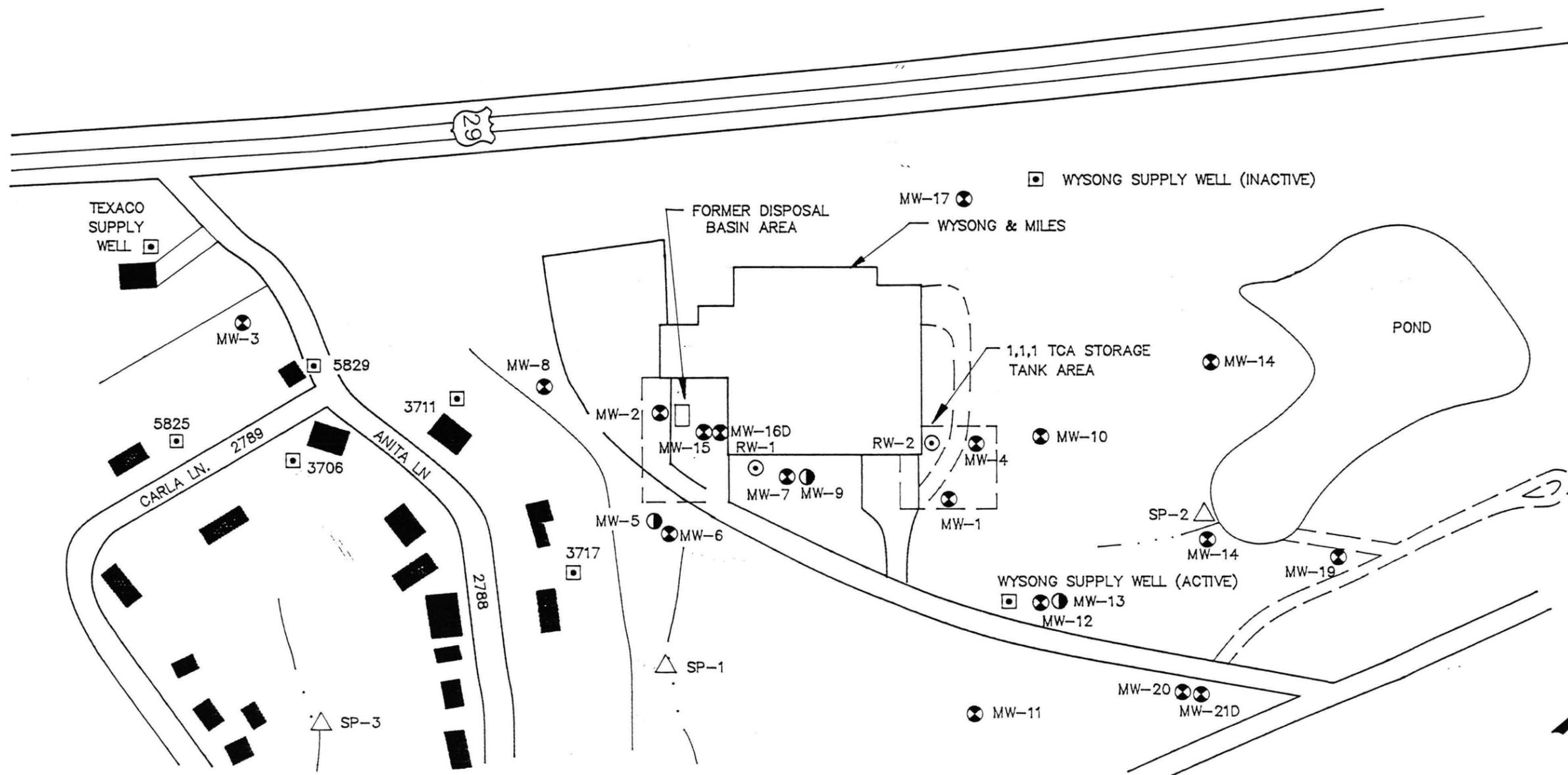
SUMMARY OF THE COST BREAKDOWN

Wysong & Miles Company
Greensboro, North Carolina
Delta Project No. 50-88-173

POST-CLOSURE CARE ACTIVITIES

Monthly Inspection/Maintenance (30 years)	\$9,000.00
Contingency \$200 per 5 years	\$1,000.00
Monitoring Well Sample Analysis Quarterly EPA Method 8010 3 monitoring wells	\$820.00/year \$24,600/30 years
Well Sampling	\$400.00/year <u>\$12,000.00/30 years</u>
TOTAL	\$46,600.00

FIGURES



☐ WYSONG SUPPLY WELL (INACTIVE)

LEGEND:

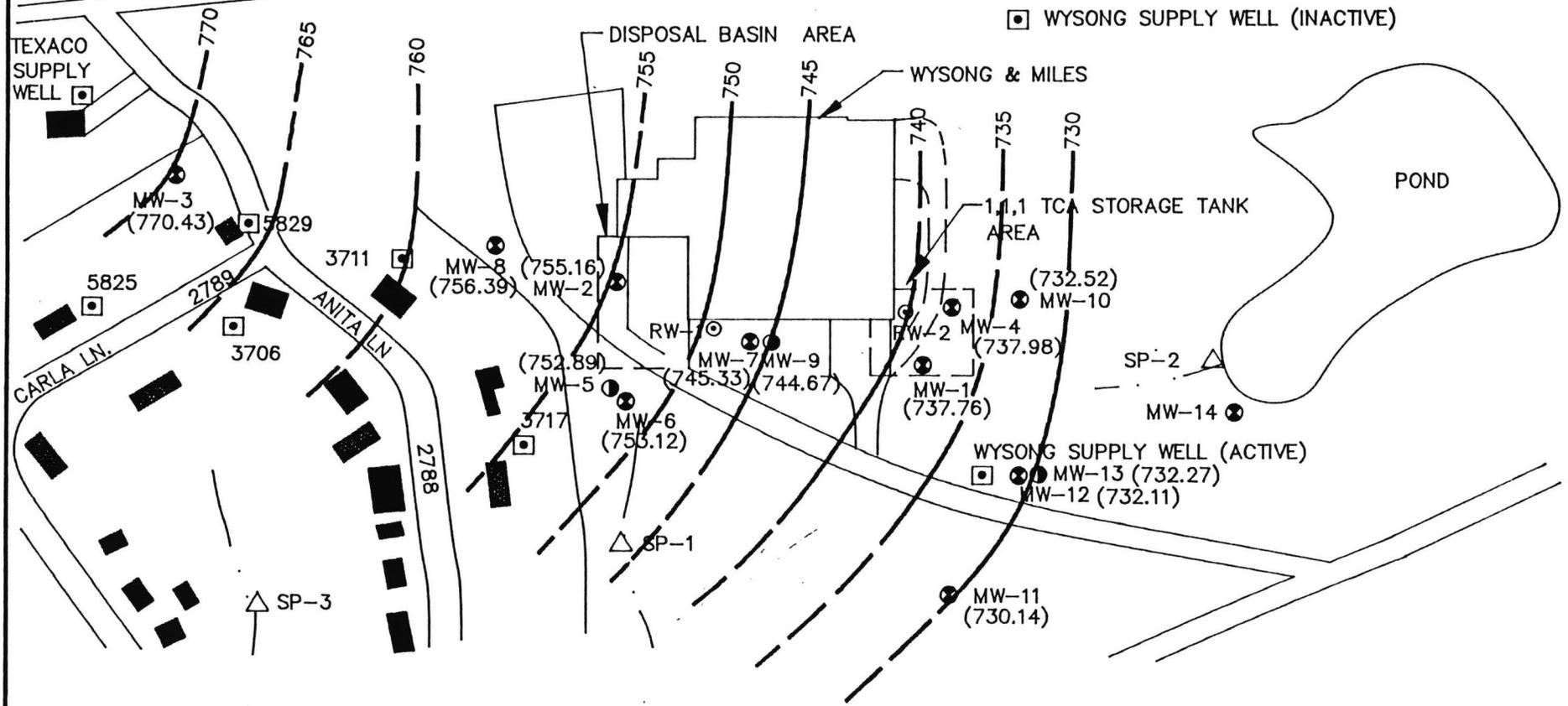
- △ SEEP LOCATION
- ☐ PRIVATE WELL LOCATION
- ⊗ SHALLOW MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- ⊙ RECOVERY WELL LOCATION



FIGURE 1
SITE MAP
WYSONG & MILES COMPANY
GREENSBORO, NC

PROJECT NO	DRAWN BY
50-88-173	C.W.H.
DATE	REVIEW BY
8-11-92	<i>[Signature]</i>
CAD NO.	
173-3	





□ WYSONG SUPPLY WELL (INACTIVE)

LEGEND:

- △ SEEP LOCATION
- PRIVATE WELL LOCATION
- ⊙ SHALLOW MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- ⊙ RECOVERY WELL LOCATION

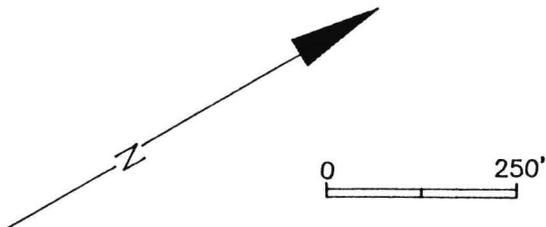
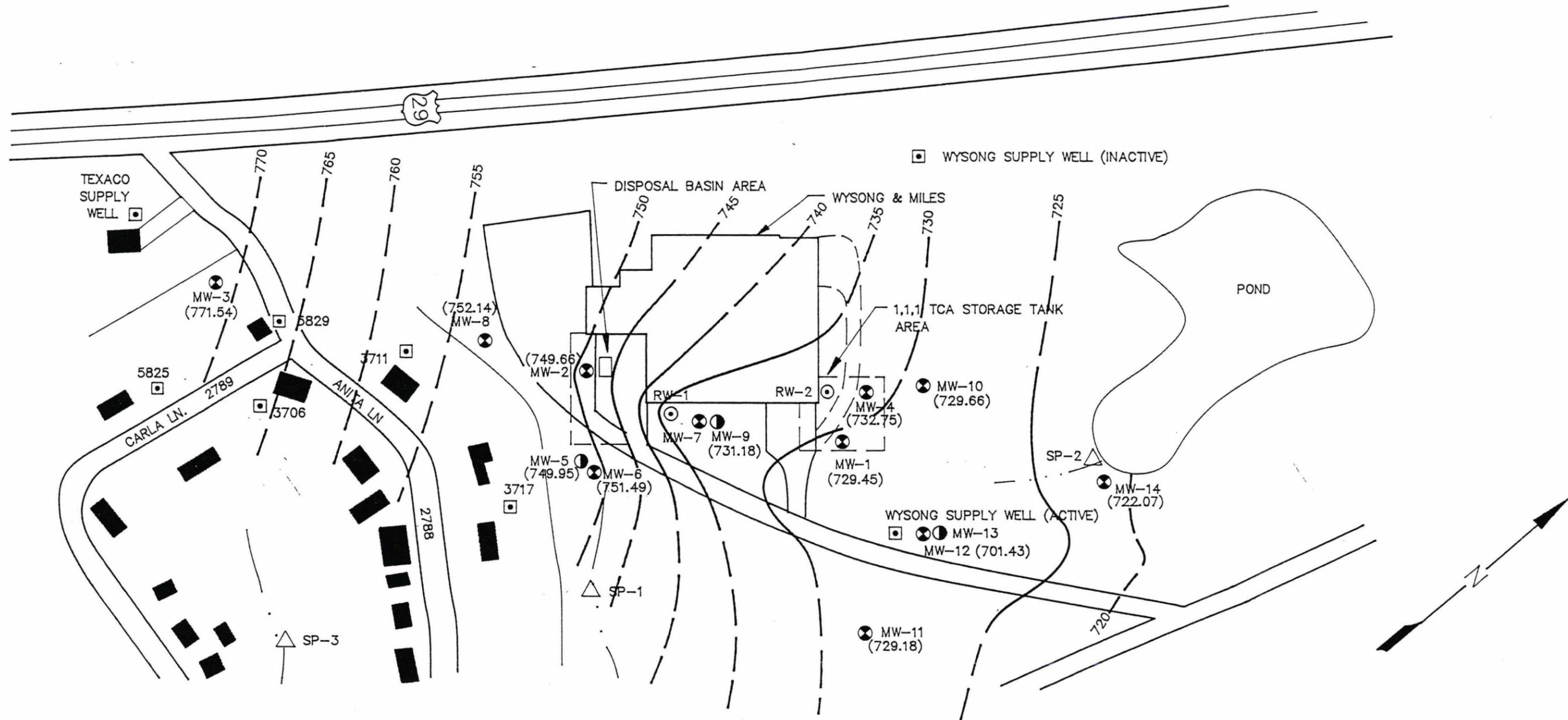


FIGURE 2
GROUND WATER TABLE ELEVATION
CONTOUR MAP (7/30/90)
WYSONG & MILES COMPANY
GREENSBORO, NC

PROJECT NO. 50-88-173	PREPARED BY C.W.H.
DATE 12-13-90	REVIEWED BY

Delta
Environmental
Consultants, Inc.



LEGEND:

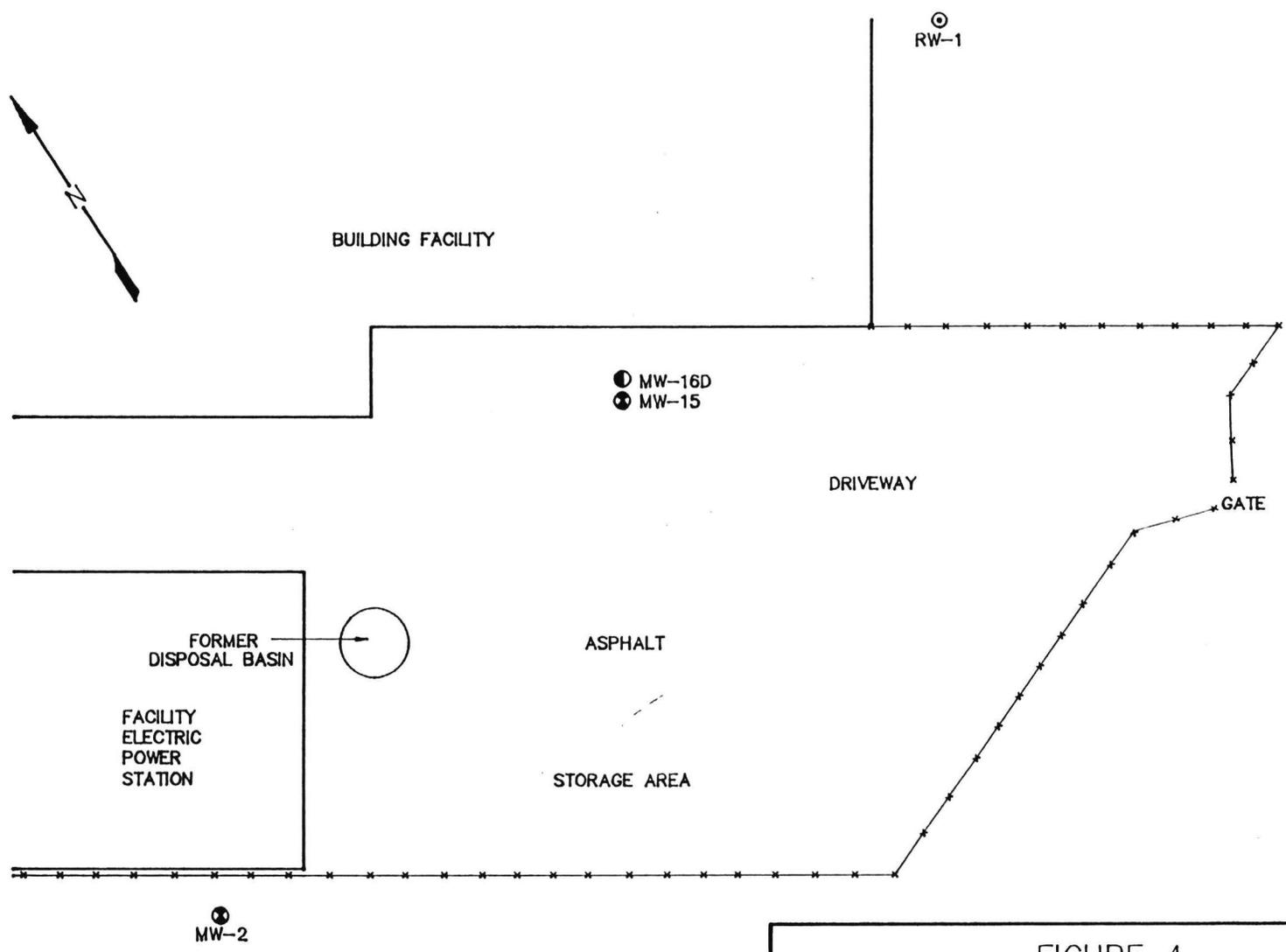
- △ SEEP LOCATION
- PRIVATE WELL LOCATION
- ⊗ SHALLOW MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- ⊙ RECOVERY WELL LOCATION

FIGURE 3
GROUND WATER ELEVATION CONTOUR
MAP (5/12/92)
WYSONG & MILES COMPANY
GREENSBORO, NC

PROJECT NO 50-88-173		DRAWN BY C.W.H.	
DATE 6-10-92	CAD NO. 173-3	REVIEW BY	



Delta
Environmental
Consultants, Inc.



LEGEND:

- ⊕ MONITORING WELL
- DEEP MONITORING WELL
- ⊙ RECOVERY WELL
- x-x- FENCE



FIGURE 4
 DETAILED FORMER DISPOSAL
 BASIN AREA MAP
 WYSONG & MILES COMPANY
 GREENSBORO, NC

PROJECT NO	50-88-173
DATE	8-10-92
CAD NO.	175-DFDB

DRAWN BY	C.B.G.
REVIEW BY	<i>[Signature]</i>



Delta
 Environmental
 Consultants, Inc.

APPENDICES

APPENDIX A:

AGREEMENT BETWEEN WYSONG AND THE HWS

STATE OF NORTH CAROLINA
COUNTY OF GUILFORD

IN THE OFFICE OF
ADMINISTRATIVE HEARINGS
88 DHR 0573

WYSONG AND MILES COMPANY,)
)
Petitioner,)
)
v.)
)
N.C. DEPARTMENT OF HUMAN)
RESOURCES, DIVISION OF HEALTH)
SERVICES, SOLID WASTE MANAGEMENT)
BRANCH,)
)
Respondent.)

CONSENT AGREEMENT
AND SETTLEMENT

The North Carolina Division of Solid Waste Management, Hazardous Waste Section, formerly the Solid and Hazardous Waste Management Branch, (hereinafter SECTION) of the Department of Environment, Health, and Natural Resources (hereinafter DEPARTMENT) and Wysong and Miles Company (hereinafter WYSONG) hereby enter into this Consent Agreement and Settlement (hereinafter the final Agreement) in order to amicably resolve matters in controversy between them pursuant to N.C.G.S. 150B-31(b). This matter arose out of the issuance of a compliance order with administrative penalty in the amount of \$105,000.00 to WYSONG by the SECTION. This compliance order with administrative penalty was issued to WYSONG for violations of the North Carolina Solid Waste Management Act and the North Carolina Hazardous Waste Management Rules as more fully described in the compliance order with administrative penalty. On May 23, 1988, WYSONG timely requested an administrative hearing in this matter.

Without any trial of fact or law in the above-styled matter, the SECTION and WYSONG have reached the following agreement:

1. WYSONG will withdraw its petition.
2. The penalty included in the Compliance Order will be reduced to Eighty-Five Thousand Dollars (\$85,000.00), and will be payable in the following installments:
 - a. The sum of Five Thousand Dollars (\$5,000.00) within thirty (30) days after the date of the final Agreement;
 - b. The sum of Twenty Thousand Dollars (\$20,000.00) each year for four (4) consecutive years, with the first payment being due one (1) year after the date of the final Agreement.

3. The parties agree that the basin is a regulated unit under the Resource Conservation and Recovery Act (RCRA). The regulated unit is no longer active. WYSONG will submit to the SECTION closure and post-closure plans for the basin within 45 days after the date of the final Agreement.

4. All closure activities for the basin will be specified in the closure plan approved by the SECTION. The SECTION will consider eighteen (18) months of soil venting after the date of the final Agreement as part of the closure activities for the basin.

5. If WYSONG complies with Paragraph 4 of this Agreement, the SECTION will not require WYSONG to submit evidence of liability insurance in accordance with federal and state regulations.

6. The SECTION agrees to cooperate with WYSONG and the Division of Environmental Management (DEM) in the preparation and approval of a Special Order by Consent (SOC) and to work with WYSONG and DEM in any joint efforts anticipated by the approved SOC.

6a. The groundwater assessment that has been conducted by WYSONG to date is acceptable to the SECTION except that WYSONG will be required to completely identify the plume of contamination at the WYSONG facility.

7. The SECTION considers the existing groundwater remediation system to be a voluntary corrective action. Formal correction action will be subject to conditions established in the post-closure permit. The SECTION considers that the January 1990 Remedial Action Work Plan groundwater remediation system demonstrates appropriate technology as an interim measure.

8. Upon presentation of technical confirmation satisfactory to the SECTION that contamination in the unsaturated zone in the area of the tank has been remediated, the SECTION agrees to recommend that the area be considered a solid waste management unit that requires no further action.

9. The SECTION agrees that the basin area can be closed in such a manner that the surface area may be used for parking or other appropriate purposes. WYSONG agrees not to build on the area of the basin excepting the currently existing storage structure. In the event that the closure plan requires the currently existing structure to be moved, the SECTION will allow the structure to be replaced by WYSONG if such replacement is consistent with maintaining the integrity of the cap.

10. WYSONG will submit Part A of the permit application within thirty (30) days of the signing of the final Agreement. WYSONG will submit a Part B application for a post-closure care permit within six (6) months from the completion and approval of

the groundwater assessment at the WYSONG facility and upon request by the SECTION and EPA. It is estimated that such assessment and delineation will take at least six (6) months from the date of the final Agreement.

11. Prior to the issuance of a post-closure care permit, WYSONG will be required to provide financial assurance for the estimated costs of closure of the basin area and post-closure care as specified in 40 C.F.R. § 265.118(c). The SECTION agrees that the estimated costs of post-closure care may be funded by WYSONG over a ten (10) year period, subject to EPA approval and at WYSONG's option. Financial assurance for corrective action will not be required until a post-closure permit is issued. WYSONG may combine approved financial assurance mechanisms to meet the financial assurance requirements.

12. The SECTION agrees that WYSONG will be required to submit annual Appendix IX analysis reports for at least one well nest with two wells at the point of compliance downgradient from the regulated unit for the first annual reporting. After receipt of the first annual report, the SECTION will consider reducing the number of wells to be monitored for Appendix IX analysis to only one well, subject to EPA approval.

13. The SECTION agrees that after the SECTION is satisfied with the operation of the permitted groundwater remediation system, WYSONG may reduce its monitoring program from quarterly monitoring to semi-annual monitoring.

14. WYSONG agrees to comply with the general operating requirements which apply to the regulated unit. However, the SECTION agrees that these requirements apply only with respect to the regulated unit, and that such requirements are separate from the generator requirements applicable to the remainder of the WYSONG facility.

15. In the event that it is established, to the satisfaction of the SECTION, that there is an off-site source of contamination upgradient from the WYSONG facility, WYSONG may propose and the SECTION will consider a reduction in the number of wells at the WYSONG facility that must be monitored pursuant to whatever monitoring program is in place at the time.

16. The breach of any condition of Paragraphs 1-15 above by WYSONG will render due and immediately payable any unpaid remaining balance of the \$85,000.00 in civil penalties.

17. WYSONG expressly stipulates and acknowledges that, by entering this Consent Agreement and Settlement, WYSONG waives any and all defenses to the underlying assessment of administrative penalties; and that the issue in any action to collect said penalties will be limited to the payment or non-payment thereof in accordance with the terms of this Consent Agreement and Settlement.

18. The SECTION agrees to accept the payment of \$85,000.00 in complete satisfaction subject to the terms of this agreement.

19. Nothing in this Consent Agreement and Settlement shall restrict any right of the SECTION to take enforcement action against WYSONG for any new violations of the North Carolina Solid Waste Management Act and the North Carolina Hazardous Waste Management Rules or restrict WYSONG's right to contest any such enforcement action by the SECTION.

20. This Consent Agreement and Settlement is entered into in compromise of a disputed claim and is not to be construed as an admission of liability beyond those admissions set forth above.

FOR THE DIVISION OF SOLID WASTE
MANAGEMENT

William L. Meyer
William L. Meyer,
Director

Date: 4/11/91

FOR WYSONG AND MILES COMPANY

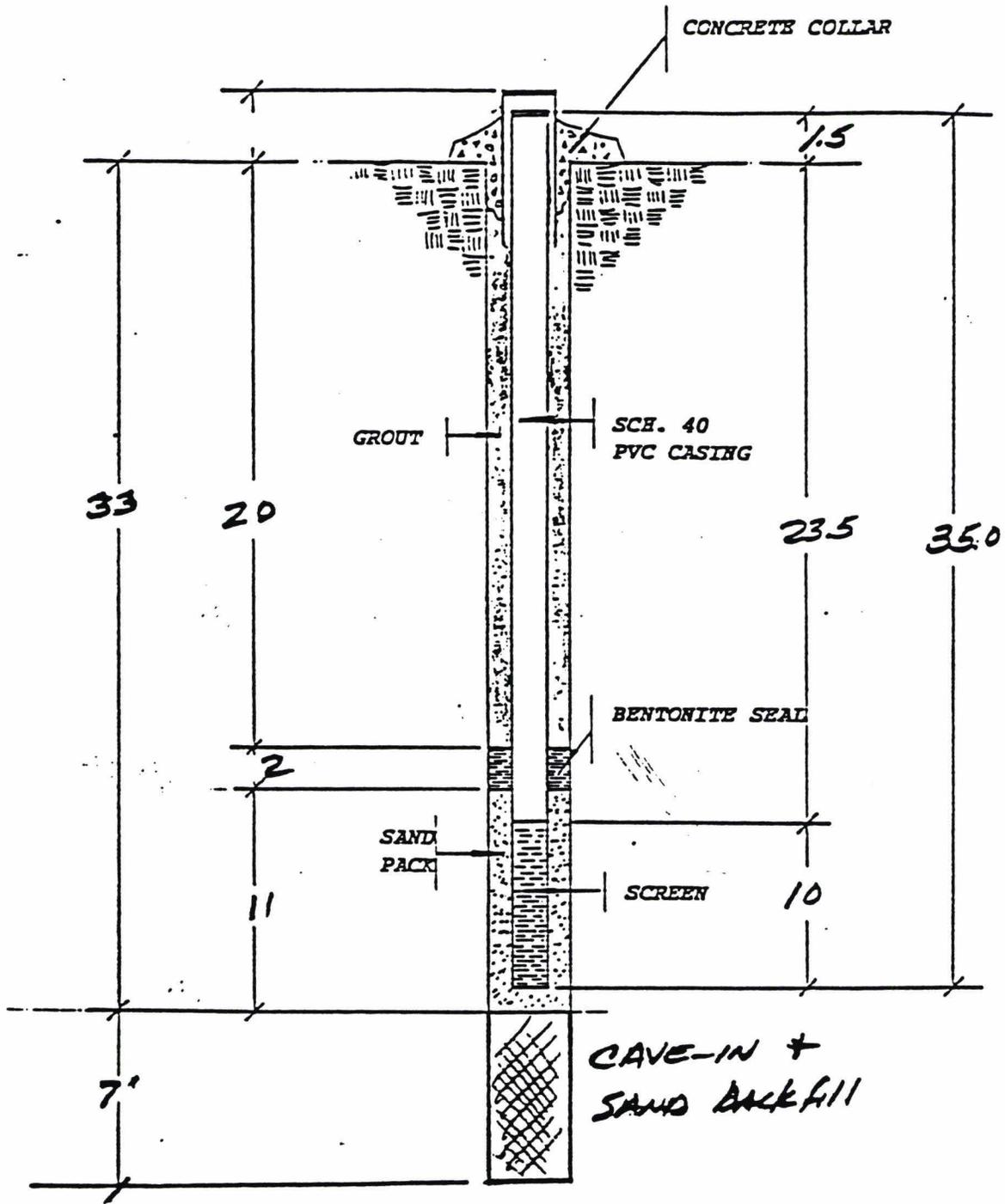
L. C. Lackey
L. C. Lackey,
President

Date: 4/5/91

APPENDIX B:

MONITORING WELL CONSTRUCTION DETAILS

WELL NO. MW.2



FROEHLING & ROBERTSON, INC.
MATERIALS TESTING & INSPECTION - ENGINEERS & CHEMISTS
CABLE ADDRESS - "FROEHLING"

DATE: JAN 22 1988

SCALE:

DRWN:

SCHMATIC OF WELL CONSTRUCTION
Wysonq & Miles
GREENSBORO N.C.

DWG. NO.

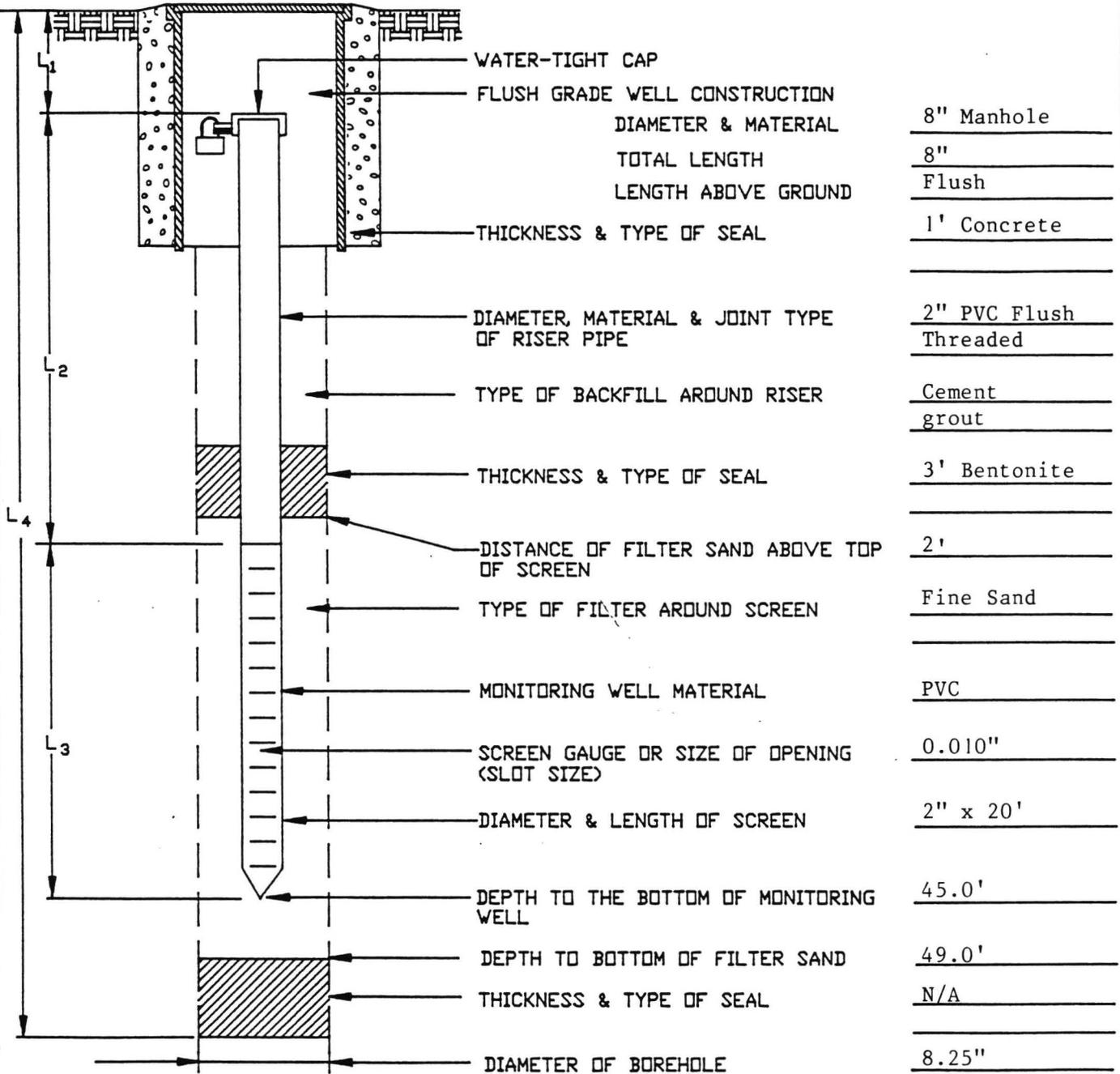
INSTALLATION OF FLUSH GRADE MONITORING WELL

PROJECT: Wysong & Miles Co.

MONITORING WELL NO. MW-15

JOB NO. 50-88-173.05

TOP OF RISER ELEVATION: _____



$L_1 =$ _____ FT
 $L_2 =$ 25.0 FT
 $L_3 =$ 20.0 FT
 $L_4 =$ 45.0 FT

MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL *

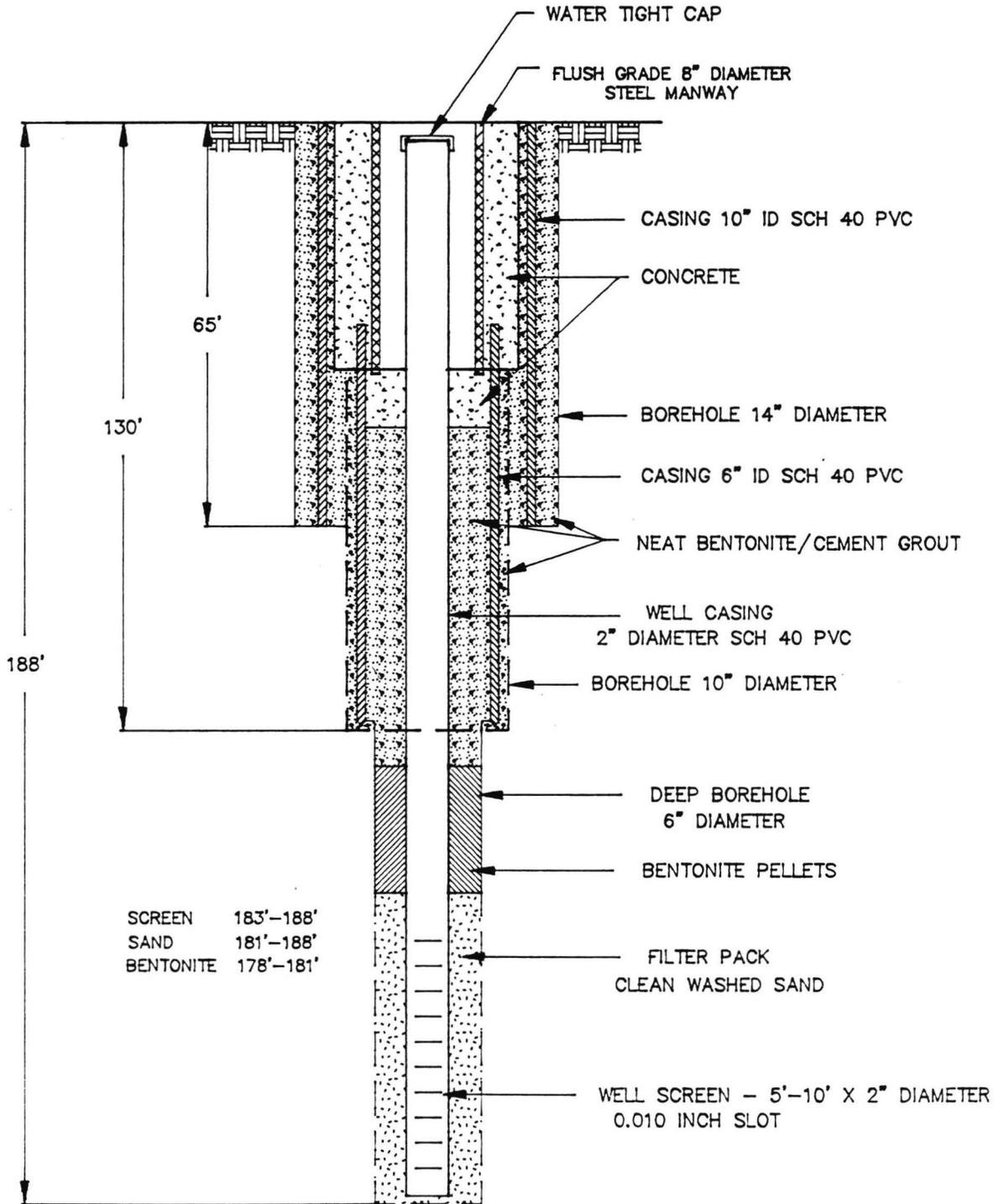
INSTALLATION COMPLETED:
 DATE: 6-25-92
 TIME: 1900

(*) DEPTH BELOW TOP OF RISER BOX _____



DEEP MONITORING WELL CONSTRUCTION DETAILS

PROJECT: WYSONG & MILES COMPANY
 JOB NO. 50-88-173



NOTE: DRAWING NOT TO SCALE

DEEP MONITORING WELL
 CONSTRUCTION
 MW-16D

CAD NO. 173-IDMW



Delta
 Environmental
 Consultants, Inc.

APPENDIX C:
SAMPLING AND ANALYSIS PLAN

GROUND WATER SAMPLING AND ANALYSIS PLAN

WYSONG & MILES COMPANY

GREENSBORO, NORTH CAROLINA

DELTA PROJECT NO. 50-88-173

GROUND WATER SAMPLING AND ANALYSIS PLAN

WYSONG & MILES COMPANY

GREENSBORO, NORTH CAROLINA

DELTA PROJECT NO. 50-88-173

This report was prepared by:

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January 1992

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Figure 3:	Ground Water Elevation Contour Map (7/30/90)
Figure 4:	Potentiometric Head Differences, Monitoring Well Nests
Figure 5:	Ground Water Elevation Contour Map (11/6/91)

TABLES

Table 1:	Monitoring Well Elevations
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APPENDICES

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Appendix B:	Ground Water Sample Collection Log Book

GROUND WATER SAMPLING AND ANALYSIS PLAN
WYSONG & MILES COMPANY
GREENSBORO, NORTH CAROLINA
DELTA PROJECT NO. 50-88-173

1.0 INTRODUCTION

This Ground Water Sampling and Analysis Plan was prepared by Delta Environmental Consultants, Inc. (Delta) on behalf of Wysong & Miles Company. The plan is required by the North Carolina Department of Environment, Health and Natural Resources (NCDEHNR), Hazardous Waste Section (HWS) for facilities regulated under the Resource Conservation and Recovery Act (RCRA). The plan presents details related to data collection including ground water elevation measurements, ground water sampling procedures, sampling equipment, analytical methodology, and quality assurance/quality control (QA/QC) measures. Sampling points addressed in the plan include fourteen monitoring wells, three recovery wells, and treatment system influent/effluent. A site map illustrating the location of the sampling points is presented as Figure 1.

2.0 GROUND WATER MONITORING SYSTEM

2.1 Geologic Conditions

A detailed description of the regional, local, and site hydrogeologic conditions is discussed in the following reports that were previously submitted to the NCDEHNR.

<u>REPORT</u>	<u>DATE</u>
Soil/Ground Water Contamination Assessment Phase I	February 1988
Hydrogeologic and Contamination Assessment Phase II	April 1989
Hydrogeologic and Contamination Assessment Phase II Supplemental Report	September 1989
Remedial Action Work Plan	January 1990
Quarterly Project Status Reports	

In general, the site is underlain by a surficial layer of saprolite to a depth of approximately fifty to sixty feet. The saprolite grades into a zone of partially weathered rock (PWR) ranging from twenty to forty feet thick, which grades into competent bedrock.

Ground water migration within the saprolite is predominantly through interstitial openings (primary porosity) whereas migration within the competent bedrock occurs primarily along discrete fractures (secondary porosity). The heterogenous structure of the PWR zone allows a combination of primary and secondary porosity ground water migration.

2.2 Well Completion Records

Copies of well completion records for monitoring wells MW-1 through MW-14 and recovery wells RW-1, RW-2, and the Wysong Supply Well (WSW) are included as Appendix A. A site map and topographic map of the site area are illustrated in Figures 1 and 2, respectively.

Monitoring well elevations including the top of screen, bottom of screen, measuring point (top of casing), and land surface are presented in Table 1.

2.3 Ground Water Hydrology

A ground water table elevation contour map constructed from measurements collected from the monitoring wells on July 30, 1990 is illustrated on Figure 3. The July 30, 1990 measurements were collected prior to activation of the ground water recovery system and represent static water table conditions at the site. Ground water flow is toward the northeast. The hydraulic gradient across the site is approximately 0.03 feet per foot.

Three well nests consisting of a shallow and deep monitoring well exist at the site. The well nests consist of MW-6 (shallow)/MW-5 (deep), MW-7 (shallow)/MW-9 (deep), and MW-12 (shallow)/MW-13 (deep). The potentiometric surface difference between the shallow and deep wells (shallow minus deep) during static ground water conditions prior to recovery system activation is graphed through time and illustrated in Figure 4. The calculated differences represent hydraulic conditions between the screened portions of the monitoring wells within the well nest. A positive difference represents a vertical downward hydraulic gradient whereas a negative difference represents a vertical upward hydraulic gradient. A downward hydraulic gradient exists in the areas of monitoring well nests MW-5/MW-6 and MW-7/MW-9. The vertical gradient in the area of monitoring wells MW-12/MS-13 has fluctuated from downward to upward.

Vertical gradient values, calculated by dividing the water level elevation difference in the well nest by the elevation difference between the midpoint of the screened portion of the deep well and the water table elevation in the shallow well are:

<u>Well Nest</u>	<u>Vertical Hydraulic Gradient</u>
MW-5/MW-6	0.0042 downward
MW-7/MW-9	0.0148 downward
MW-12/MW-13	-0.0032 upward

The gradients are calculated from water level measurements collected on July 30, 1990 prior to activating the ground water recovery system.

A ground water elevation contour map constructed from water level measurements collected on November 6, 1991 is illustrated in Figure 5. Analysis of hydrographs of the water level elevation changes through time indicate that steady state hydraulic conditions have been achieved under ground water recovery pumping conditions. The map represents the elevation of the water level within the surficial saprolite aquifer. Water level elevation contours are not constructed around the recovery wells (RW-1, RW-2 and the WSW) due to the large amount of drawdown measured in the wells. Additional information is included in Quarterly Project Status Reports submitted to the HWS.

3.0 GROUND WATER ELEVATION MEASUREMENT

A stationary permanent datum of 774 feet was established on the Wysong facility floor. The top of casing (TOC) of all monitoring wells and recovery wells was surveyed by direct leveling relative to the established datum.

Ground water level measurements are scheduled to be collected on a monthly basis by Delta or Wysong personnel using an electronic water level indicator. The water level indicator used is calibrated and all measurements are accurate to 0.01 feet. All measurements are recorded in an on-site record book and a Ground Water Sample Collection Log Book in addition to submittal to Delta for data entry. A summary of the ground water depths and elevations are included in the Quarterly and Annual Project Status Reports submitted to the HWS.

Collection of ground water level measurements is performed in a sequence from the monitoring wells containing the least detectable levels of targeted parameters to wells with the highest detectable levels. Targeted parameter levels are documented from chemical analysis of ground water samples collected on a quarterly basis. Water level measurements will be collected from all of the on-site monitoring wells prior to purging the wells in preparation for sampling. Disposable latex gloves will be worn throughout the water level monitoring procedure.

Ground Water Sampling and Analysis Plan

Wysong & Miles Company
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The electronic water level indicator probe is decontaminated between wells using an isopropyl alcohol wash and a deionized water rinse to prevent cross contamination between wells.

4.0 MONITORING WELL AND RECOVERY WELL SAMPLING

The following summary lists the components of the Ground Water Sampling and Analysis Program at the Wysong & Miles Facility.

- Sampling Schedule:** The monitoring wells and recovery wells will be sampled on a quarterly basis during the months of February, May, August, and November. Pursuant to paragraph 13 of the Agreement between Wysong and the HWS, Wysong reserves the right to request a reduction in the sampling schedule from quarterly to semiannual.
- Monitoring Wells Sampled:** All of the monitoring wells (14) and recovery wells (3) are included in the existing quarterly monitoring program. Two monitoring wells are dry due to drawdown from the active ground water recovery system.
- Sampling Equipment:** Ground water samples are collected from the monitoring wells using nylon bailer rope, latex gloves, and laboratory supplied dedicated teflon bailers. Clean nylon bailer rope and latex gloves are used for sample collection from each monitoring well.
- Sampling Supplies:** All sampling supplies are prepared and furnished by a North Carolina certified laboratory in accordance with EPA methodology.
- Monitoring Well Purging:** A minimum of three to five well volumes will be purged from each monitoring well prior to sampling. If a monitoring well is bailed dry before three to five well volumes are removed, sufficient time will be allowed for ground water recovery so that a sample can be collected. The recovery wells operate on a continuous basis so ground water samples are collected from sampling ports on the primary transfer tank. The ground water pH, temperature, and conductivity will be measured after purging with electronic instruments. The ground water sample will be collected with the purging bailer by slowly lowering the bailer into the upper portion of the water column in the well. The ground water will be slowly poured from the bailer into laboratory supplied sampling containers.
- Purged Ground Water:** All ground water evacuated from the monitoring wells prior to sampling will be contained within a mobile 35 gallon drum. The drum will be capped and transported to the ground water treatment system and the water pumped into the primary transfer tank for treatment. Discharge is under the existing permit with the Greensboro Sewer Authority. Future discharge is planned to be under an NPDES Permit No. 0027553.

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Quality Assurance/
Quality Control (QA/QC):

A QA/QC program will be implemented during quarterly sampling events. The program includes the collection of one sample duplicate of a contaminated well for comparison of the analytical results. The duplicate sample will be anonymously labeled for verification of laboratory accuracy. One equipment blank will be collected per quarterly sampling event by pouring laboratory grade water through a clean bailer and sampling the water. A trip blank will be included in the cooler containing all of the samples to ensure that contamination was not introduced during transport.

Sample Transport:

All samples will be placed in a cooler with ice upon collection and cooled to approximately 4 degrees centigrade for transportation. The cooler will be shipped to arrive to the designated laboratory within 48 hours of sample collection.

Sample Documentation:

Each sample container will be labeled to include sample date, sample time, analytical methodology, sampling point, and client designation. A Chain of Custody Record will be completed prior to shipment to include: client designation, samples collected by, samples shipped by, samples shipped to, suspected hazard, sampling point, field identification number, data and time of sample collection, number of containers, analysis requested, sample media, and sampler signature. The sample package will be checked and signed in by laboratory personnel upon arrival to the laboratory. A copy of the signed Chain of Custody Record is included in the laboratory report.

EPA Methodology:

Each sample is analyzed for purgeable halocarbons by EPA Method 8010. This method includes the primary targeted parameters that are identified at the site.

Ground Water Sample
Collection Log Book:

All applicable sampling data will be entered into the log book and maintained on-site for inspection by the HWS. A copy of the log book is included as Appendix B.

5.0 TREATMENT SYSTEM INFLUENT/EFFLUENT SAMPLING

Treatment system influent samples are collected from the primary transfer tank on a quarterly basis following the applicable procedures presented in Section 4.0. The sample represents composite influent concentrations from a mixture of water pumped from the recovery wells operating at the site.

Treatment system effluent samples are collected on a monthly basis in accordance with conditions specified in the Greensboro Sewer Authority discharge permit No. 52021. The effluent samples are collected from

the discharge port from the air stripper to the secondary transfer tank. Each sample is analyzed for EPA Method 8010 parameters and pH. Analytical results are submitted monthly to the Greensboro Sewer Authority.

6.0 REPORTING

Quarterly Project Status Reports are scheduled to be submitted by the end of the month following the months in which the samples are collected (March, June, September and December). The reports will include a cumulative summary of recent and historical ground water depth and elevation measurements, hydrographs, summaries of analytical results, and graphs of targeted parameter concentrations through time. Copies of the laboratory reports will be included as an appendix to the report.

Upon approval by the HWS, the sampling and reporting schedule will be reduced from quarterly to semiannual.

7.0 NOTIFICATION OF MODIFICATION

Any modification to the Ground Water Sampling and Analysis Plan will be submitted in writing to the HWS within 60 days prior to implementing the modification. Modifications to the Plan resulting from an unexpected event will be documented and submitted to the HWS within 30 days after the event had occurred.

8.0 REMARKS

The discussions contained in this report represent our professional opinions. These opinions are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

This report was prepared by:

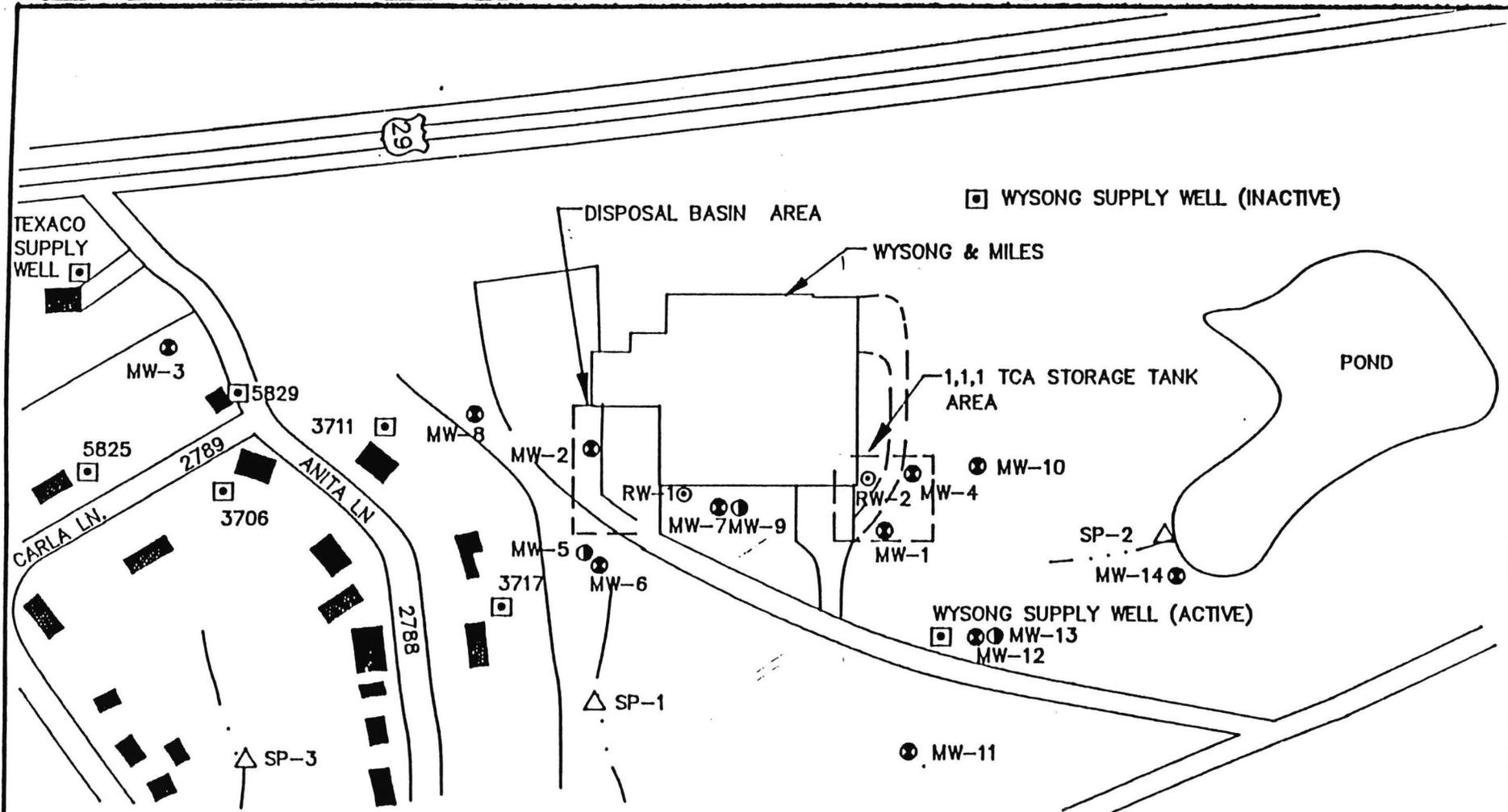
DELTA ENVIRONMENTAL CONSULTANTS, INC.



Steven S. Gerritsen
Project Manager
North Carolina Licensed Geologist #1055

1-17-92
Date

FIGURES



□ WYSONG SUPPLY WELL (INACTIVE)

□ WYSONG SUPPLY WELL (ACTIVE)

LEGEND:

- △ SEEP LOCATION
- PRIVATE WELL LOCATION
- SHALLOW MONITORING WELL LOCATION
- ⊙ DEEP MONITORING WELL LOCATION
- ⊙ RECOVERY WELL LOCATION

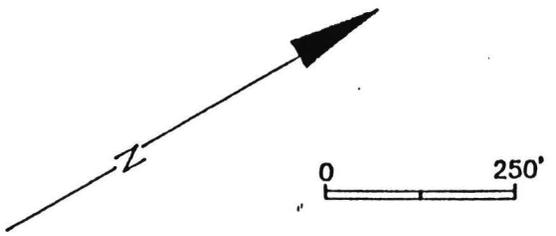


FIGURE 1
MONITORING WELL LOCATION
WYSONG & MILES COMPANY
GREENSBORO, NC

PROJECT NO. 50-88-173	PREPARED BY C.W.H.
DATE 11-19-90	REVIEWED BY <i>[Signature]</i>



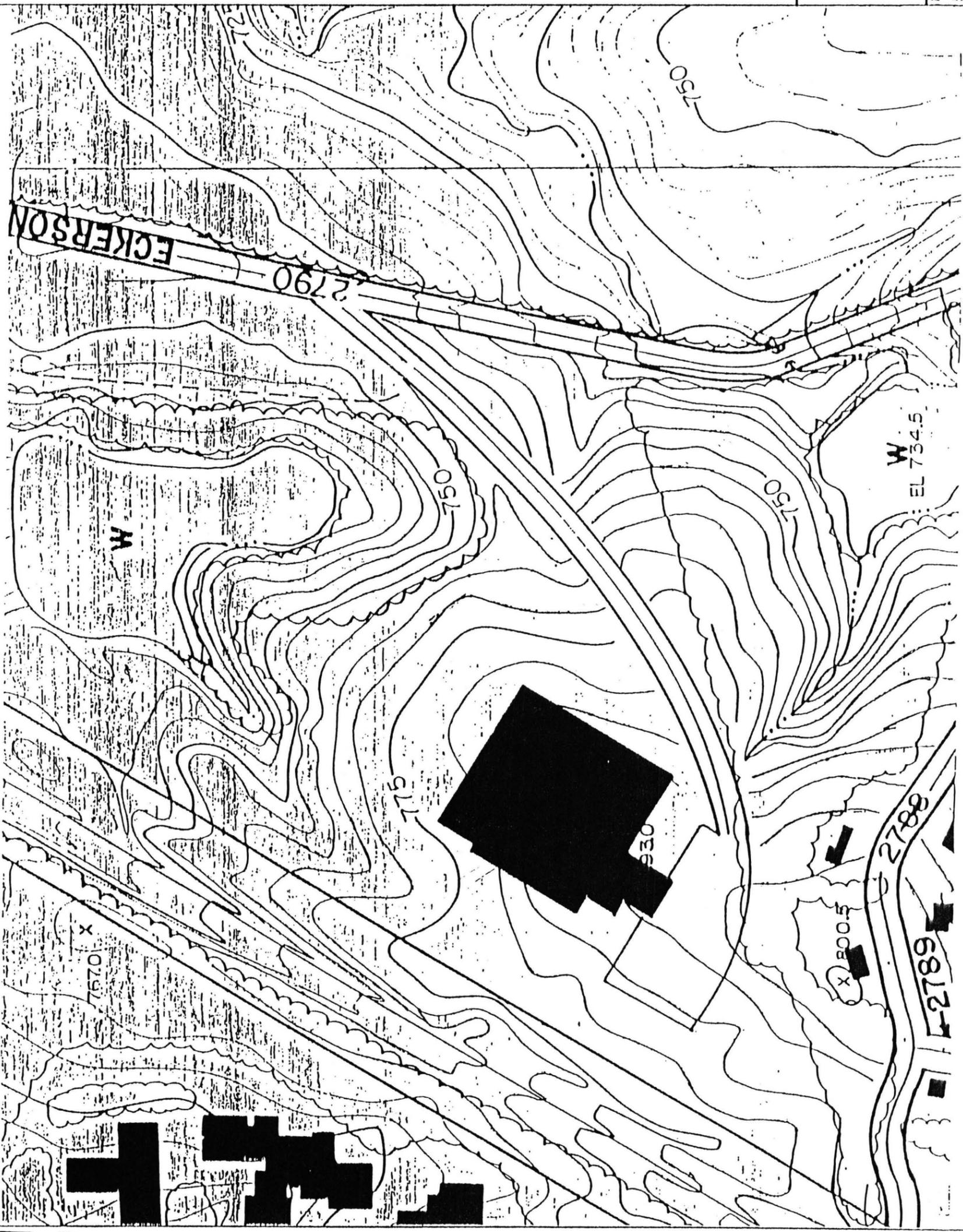
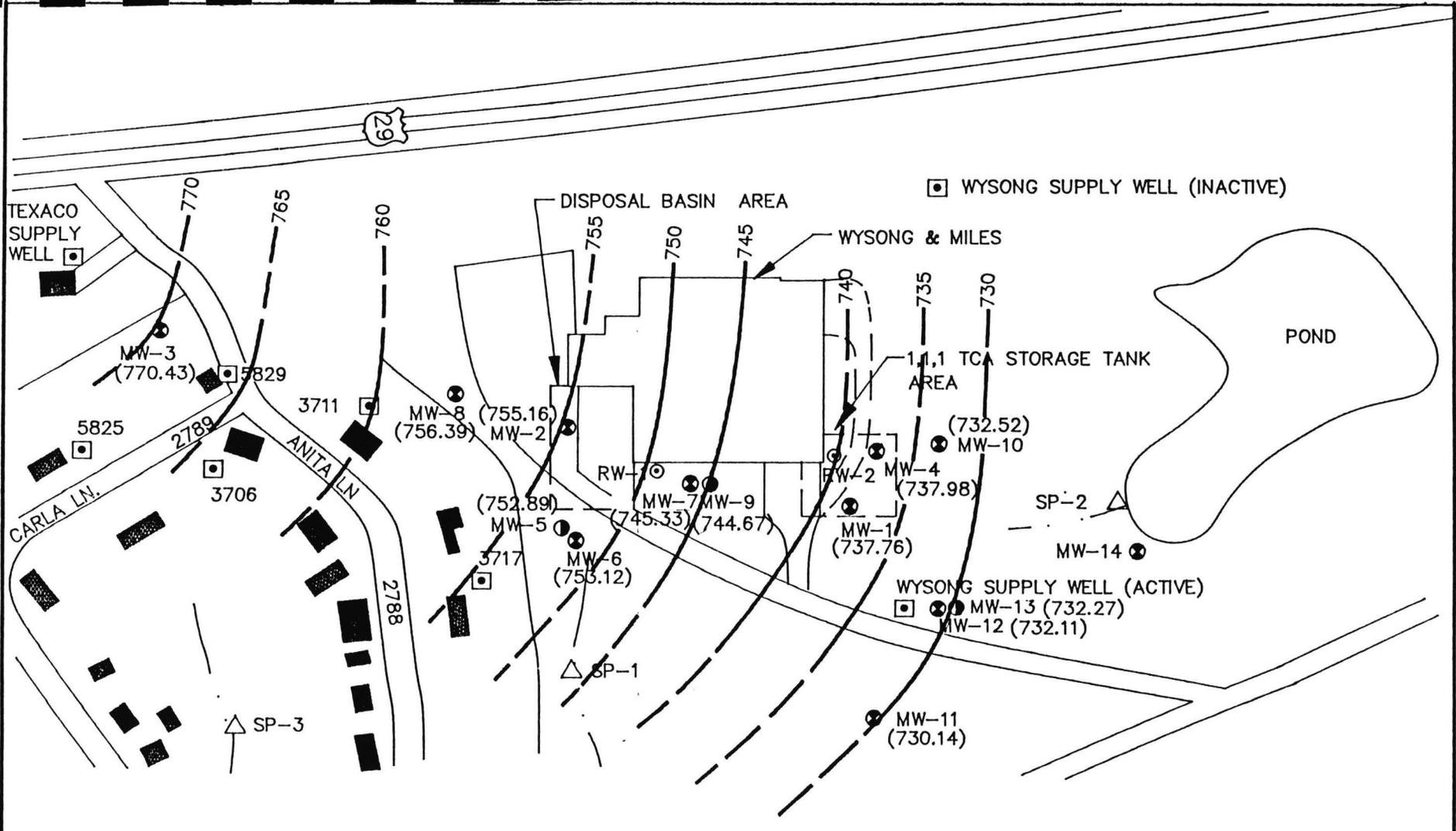


FIGURE 2
 SITE TOPOGRAPHIC MAP
 WYSONG & MILES COMPANY
 GREENSBORO, NC

PROJECT NO	DRAWN BY	
50-88-173	C.W.H.	
DATE	CAD NO.	REVIEW BY
12-11-91	173-STM	



□ WYSONG SUPPLY WELL (INACTIVE)

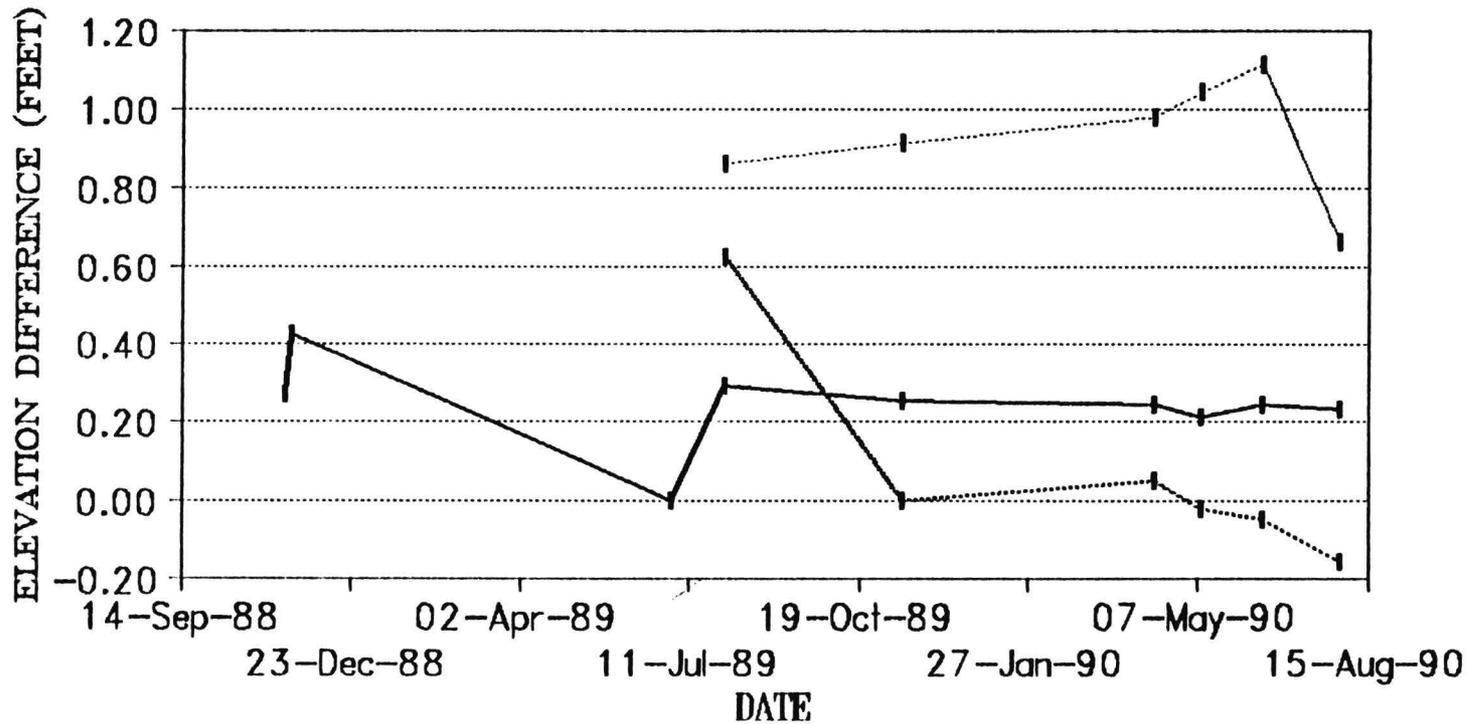
LEGEND:

- △ SEEP LOCATION
- PRIVATE WELL LOCATION
- ⊙ SHALLOW MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- ⊙ RECOVERY WELL LOCATION

FIGURE 3
GROUND WATER TABLE ELEVATION
CONTOUR MAP (7/30/90)
WYSONG & MILES COMPANY
GREENSBORO, NC

PROJECT NO. 50-88-173	PREPARED BY C.W.H.
DATE 12-13-90	REVIEWED BY <i>[Signature]</i>



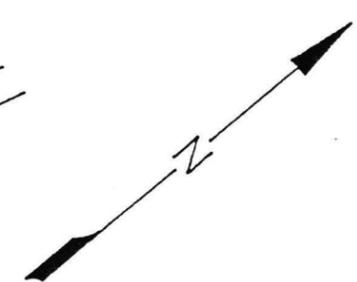
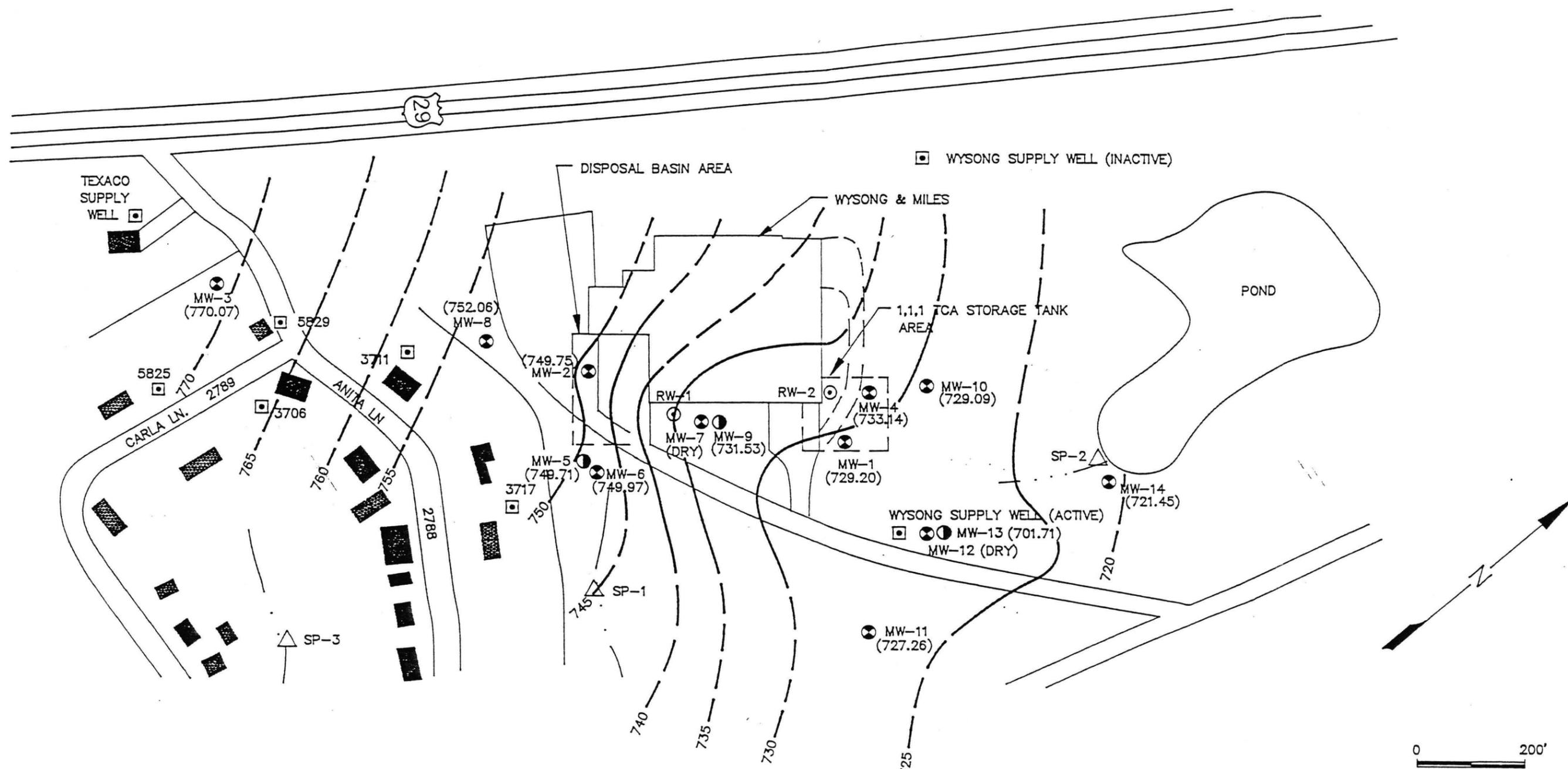


—+— MW-5/6 -·-·- MW-7/9 ···-· MW-12/13

FIGURE 4
 POTENTIOMETRIC HEAD DIFFERENCES
 MONITORING WELL NESTS
 WYSONG & MILES COMPANY
 GREENSBORO, NC

PROJECT NO 50-88-173		DRAWN BY C.W.H.	
DATE 12-11-91	CAD NO. 173-VHG	REVIEW BY <i>[Signature]</i>	





LEGEND:

- △ SEEP LOCATION
- ▣ PRIVATE WELL LOCATION
- ⊙ SHALLOW MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- RECOVERY WELL LOCATION

FIGURE 5
GROUND WATER ELEVATION CONTOUR
MAP (11-6-91)
WYSONG & MILES COMPANY
GREENSBORO, NC

PROJECT NO	50-88-173	DRAWN BY	C.W.H.
DATE	1-13-92	REVIEW BY	<i>[Signature]</i>
CAD NO.	173-3	Delta Environmental Consultants, Inc.	

TABLES

TABLE 1
MONITORING WELL ELEVATIONS

Wysong & Miles Company
Greensboro, North Carolina
Delta Project No. 50-88-173

<u>Monitoring Well</u>	<u>Elevations</u>			
	<u>Top of Screen</u>	<u>Bottom of Screen</u>	<u>Measuring Point</u>	<u>Land Surface</u>
MW-1	733.07	723.07	766.98	766.98
MW-2	749.74	739.74	773.86	773.86
MW-3	761.90	751.90	791.88	791.88
MW-4	731.74	721.74	773.05	
MW-5	701.02	696.02	774.02	772.02
MW-6	753.42	743.42	774.04	772.04
MW-7	744.95	734.95	775.98	773.48
MW-8	758.39	748.39	774.06	772.06
MW-9	703.38	698.38	776.08	772.58
MW-10	732.19	722.19	771.01	768.09
MW-11	730.43	720.43	750.46	748.06
MW-12	729.43	719.43	756.67	754.67
MW-13	684.54	679.54	756.54	754.54
MW-14	722.28	717.28	726.28	723.68
RW-1	751.88	676.88	777.88	773.88
RW-2	758.84	713.84	775.84	773.34
WSW	N/A	N/A	757.10	756.10

* Permanent Benchmark - Wysong Facility Floor - 774 feet above mean sea level (MSL)

WSW cased to 50 feet and open borehole below.

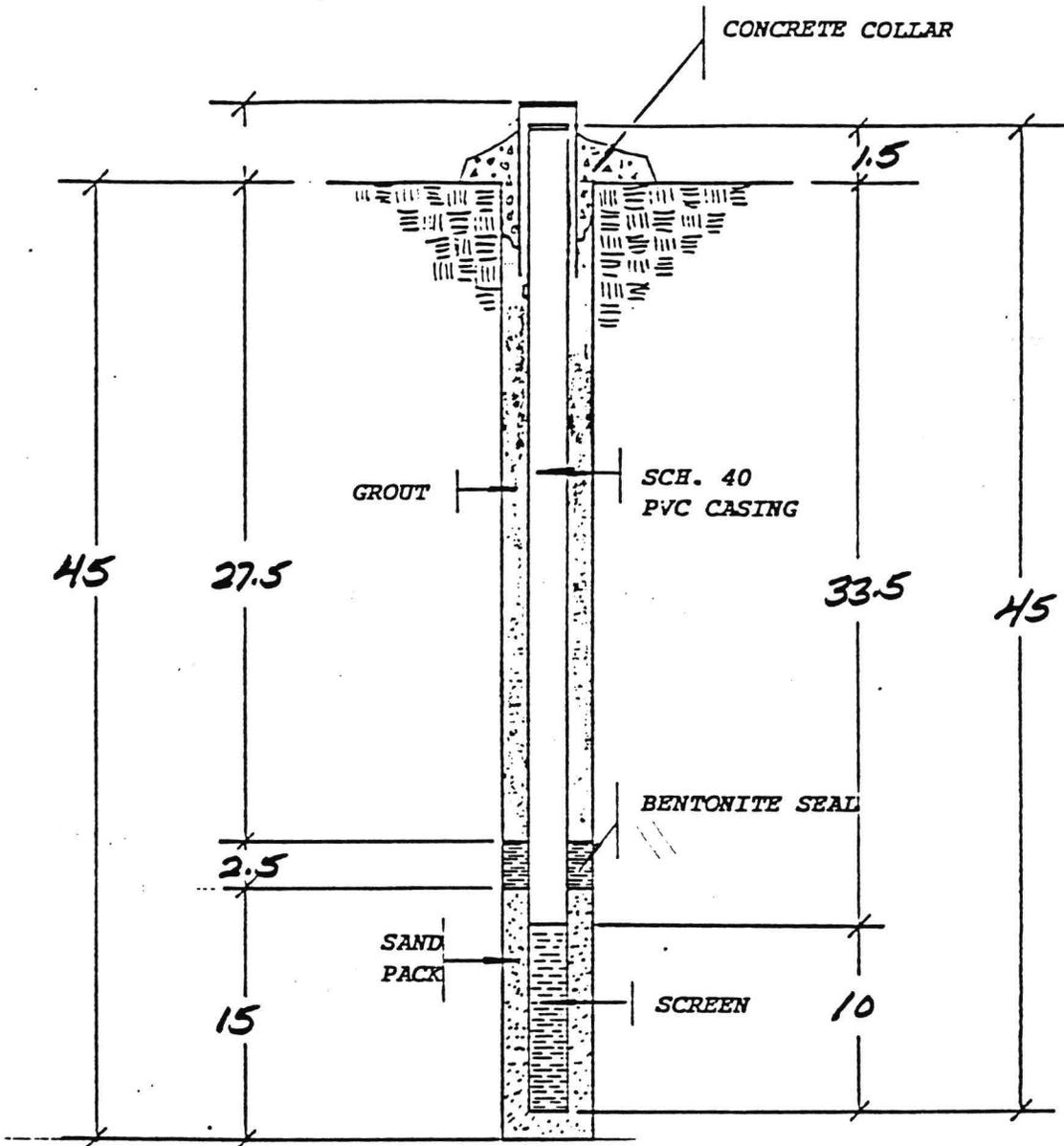
Note: Measuring point is the top of casing (TOC).

APPENDICES

APPENDIX A:

MONITORING WELL COMPLETION RECORDS

WELL NO. MW-1



FROEHLING & ROBERTSON, INC.
MATERIALS TESTING & INSPECTION - ENGINEERS & CHEMISTS
CABLE ADDRESS - "FROEHLING"

DATE: JAN 20 1988

SCALE:

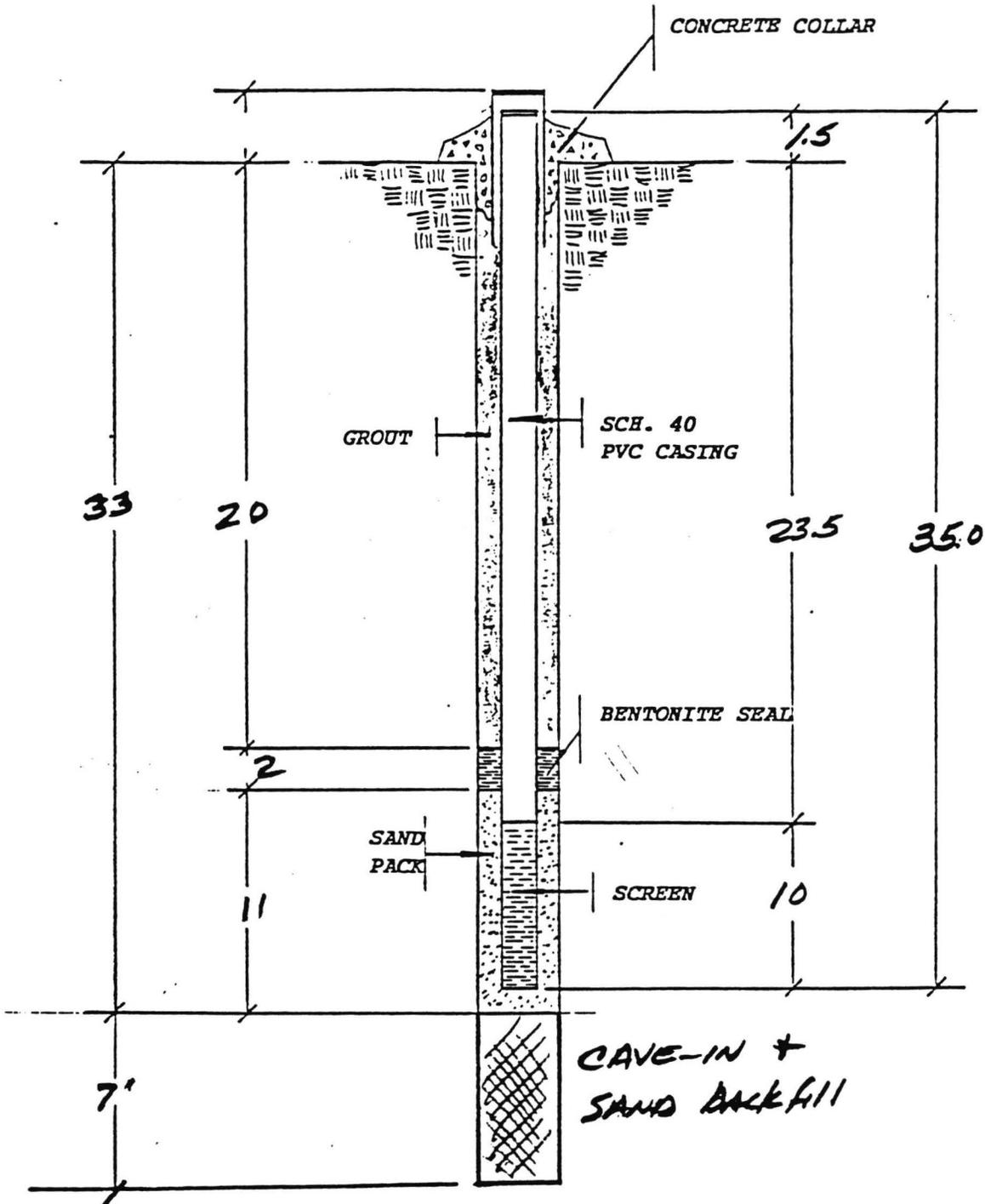
DRWN:

SCHEMATIC OF WELL CONSTRUCTION

WYSONG 4 MILES
GREENSBORO, N.C.

DWG. NO.

WELL NO. MW.2



SINCE **F&R** 1881 FROEHLING & ROBERTSON, INC.
 MATERIALS TESTING & INSPECTION - ENGINEERS & CHEMISTS
 CABLE ADDRESS - "FROEHLING"

DATE: **JAN 22 1988**

SCALE:

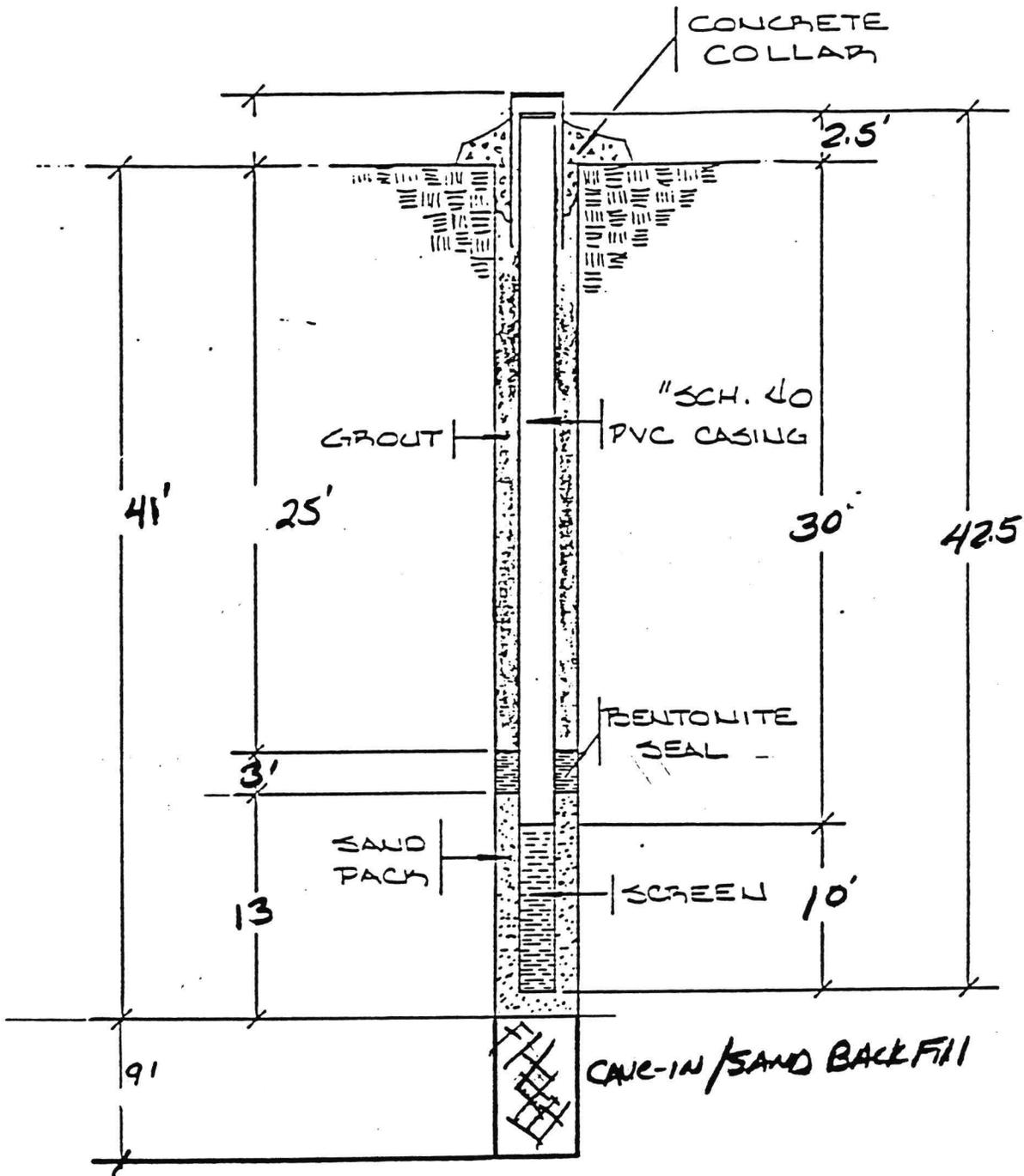
DRWN:

DWG. NO.

SCHMATIC OF WELL CONSTRUCTION

Wysong & Miles
GREENSBORO N.C.

WELL No. MW-3



FROEHLING & ROBERTSON, INC.
 MATERIALS TESTING & INSPECTION - ENGINEERS & CHEMISTS
 CABLE ADDRESS - "FROEHLING"

DATE: JAN 27 1988

SCALE: AS SHOWN

DRWN: MJO

SCHMATIC OF WELL CONSTRUCTION

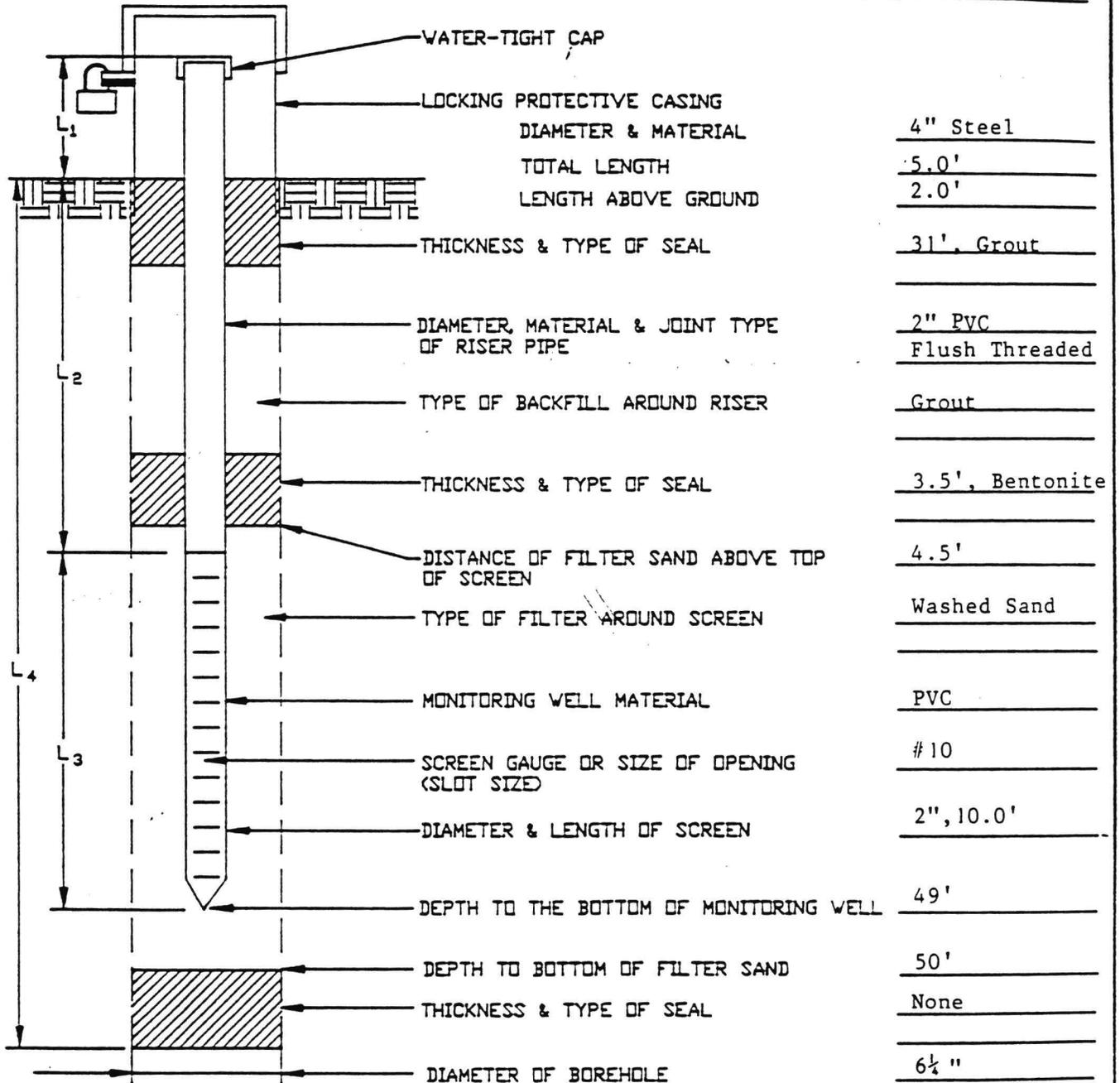
DRG. NO.

WYSONG + MILES, TEXACO STATION
 GREENSBORO NC

A-

INSTALLATION OF ABOVE GROUND MONITORING WELL

PROJECT: Wysong & Miles Company MONITORING WELL NO. MW-4
 JOB NO. 50-88-160 TOP OF RISER ELEVATION: _____



L₁ = 2.0 FT
 L₂ = 39 FT
 L₃ = 10 FT
 L₄ = 50 FT

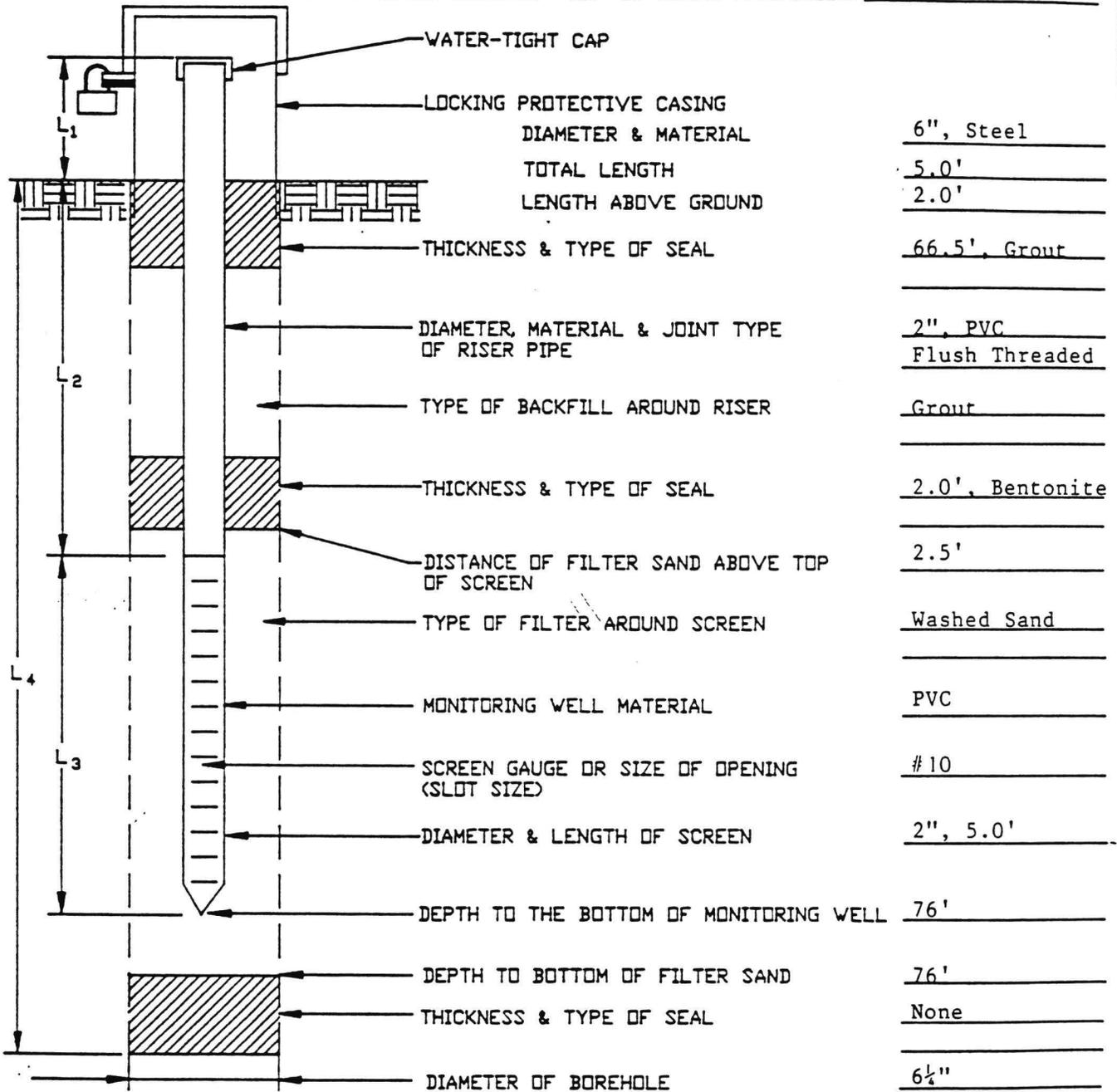
INSTALLATION COMPLETED:
 DATE: 9-8-88
 TIME: 3:00 PM

MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL *

(*) DEPTH BELOW TOP OF RISER BOX _____

INSTALLATION OF ABOVE GROUND MONITORING WELL

PROJECT: Wysong & Miles Company MONITORING WELL NO. MW-5 (Deep)
 JOB NO. 50-88-160 TOP OF RISER ELEVATION: _____



6", Steel
 5.0'
 2.0'
 66.5', Grout
 2", PVC
 Flush Threaded
 Grout
 2.0', Bentonite
 2.5'
 Washed Sand
 PVC
 #10
 2", 5.0'
 76'
 76'
 None
 6 1/2"

L₁ = 2.0 FT
 L₂ = 71.0 FT
 L₃ = 5.0 FT
 L₄ = 76.0 FT

MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL *

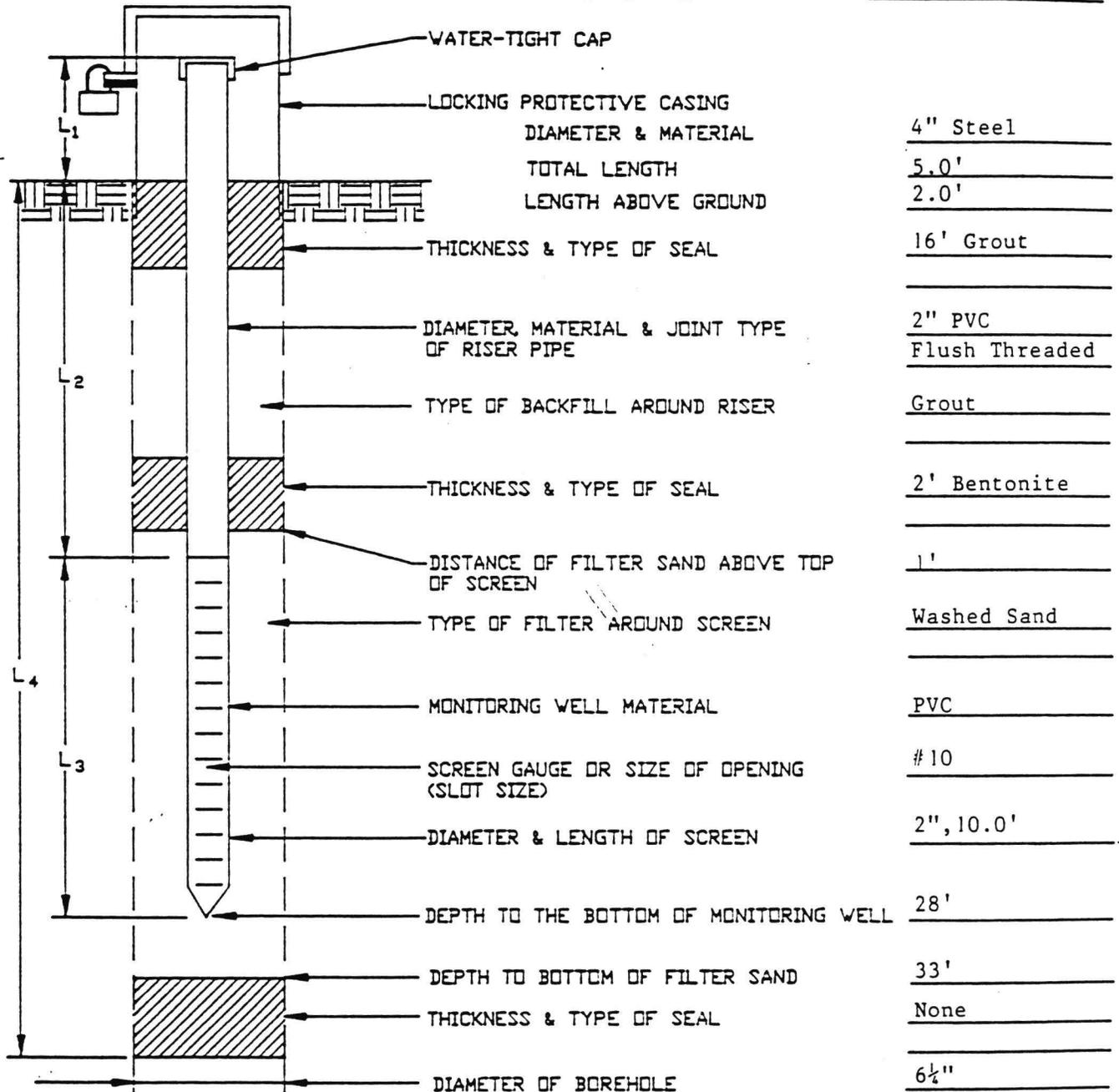
INSTALLATION COMPLETED:
 DATE: 9-13-88
 TIME: 5:00 pm

(*) DEPTH BELOW TOP OF RISER BOX _____



INSTALLATION OF ABOVE GROUND MONITORING WELL

PROJECT: Wysong & Miles Company MONITORING WELL NO. MW-6
 JOB NO. 50-88-160 TOP OF RISER ELEVATION: _____



L₁ = 2 FT
 L₂ = 18 FT
 L₃ = 10 FT
 L₄ = 33 FT

INSTALLATION COMPLETED:
 DATE: 9-14-88
 TIME: _____

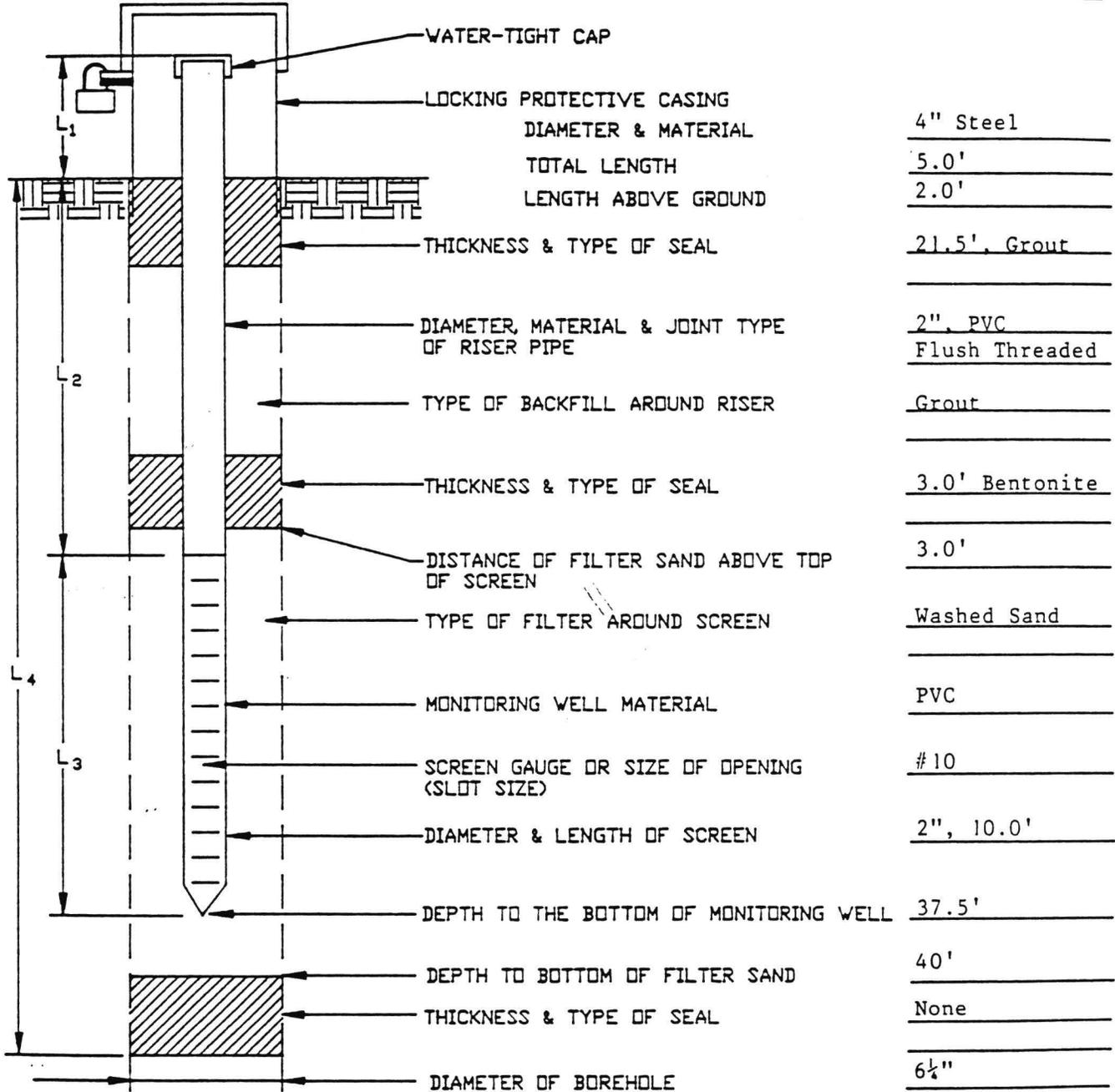
MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL *

(*) DEPTH BELOW TOP OF RISER BOX _____



INSTALLATION OF ABOVE GROUND MONITORING WELL

PROJECT: Wysong & Miles Company MONITORING WELL NO. MW-7
 JOB NO. 50-88-160 TOP OF RISER ELEVATION: _____



L₁ = 2.5 FT
 L₂ = 27.5 FT
 L₃ = 10 FT
 L₄ = 40 FT

INSTALLATION COMPLETED:
 DATE: 9-15-88
 TIME: 12:00

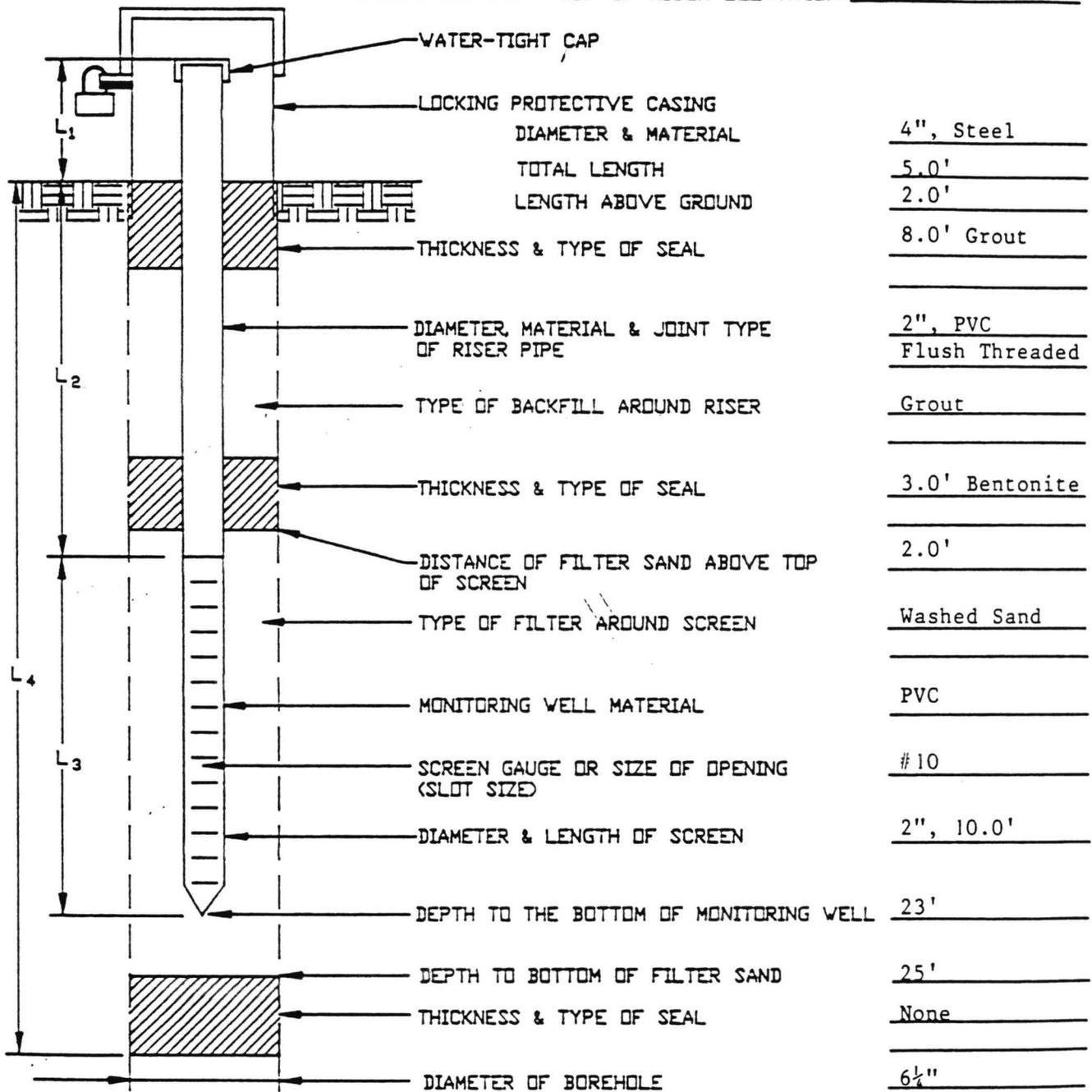
MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL *

(*) DEPTH BELOW TOP OF RISER BOX _____



INSTALLATION OF ABOVE GROUND MONITORING WELL

PROJECT: Wysong & Miles Company MONITORING WELL NO. MW-8
 JOB NO. 50-88-160 TOP OF RISER ELEVATION: _____



$L_1 =$ 2.0 FT
 $L_2 =$ 13 FT
 $L_3 =$ 10 FT
 $L_4 =$ 25 FT

MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL *

INSTALLATION COMPLETED:
 DATE: 9-15-88
 TIME: 10:15 am

(*) DEPTH BELOW TOP OF RISER BOX _____

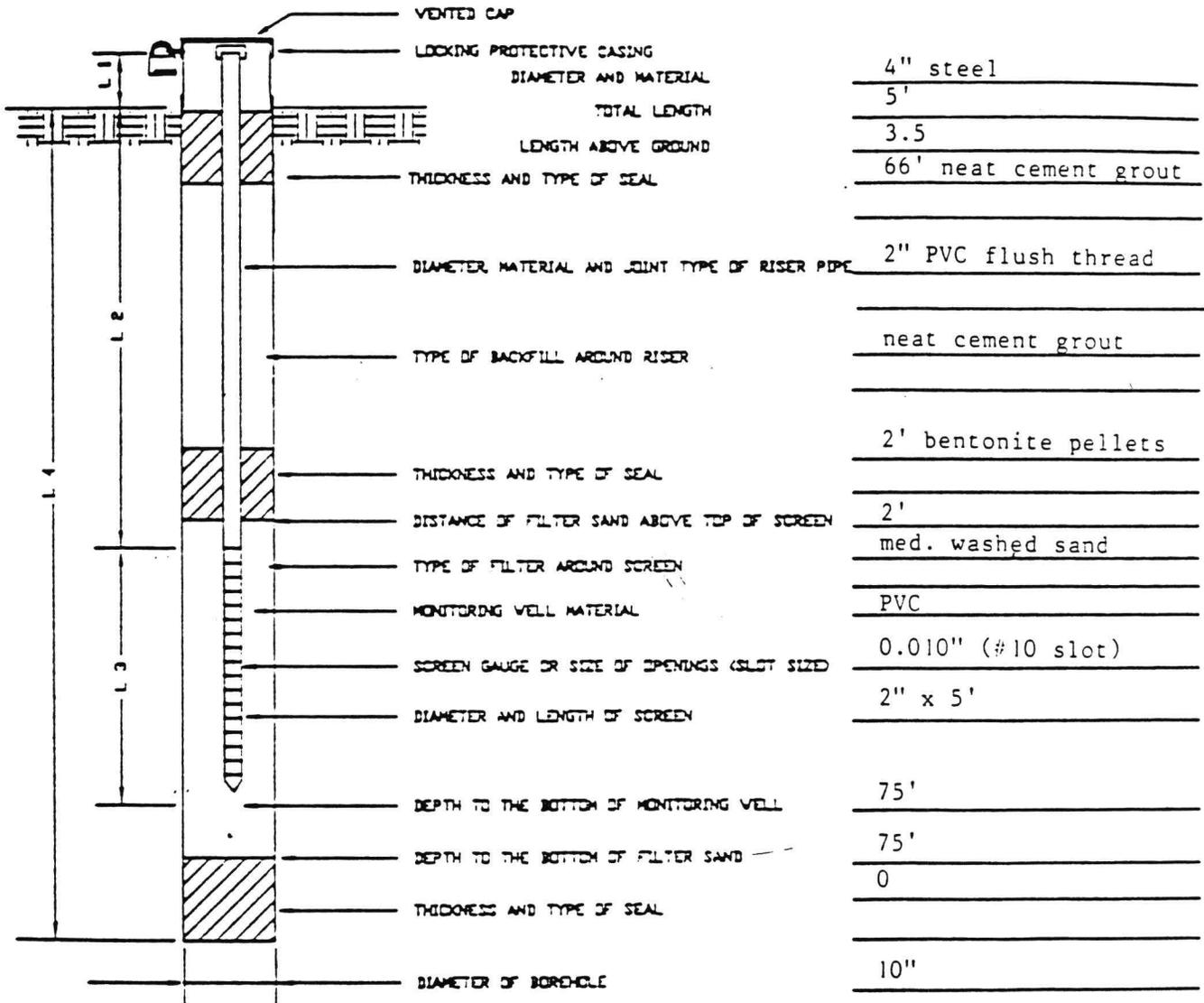
INSTALLATION OF ABOVE GROUND MONITORING WELL

PROJECT Wysong & Miles Company
Greensboro, North Carolina

MONITORING WELL NO. MW-9 (Deep)

DELTA NO. 50-88-160

ELEVATIONS: TOP OF RISER 742.72
GROUND LEVEL 739.24



- L 1 = 3.5 FT.
- L 2 = 70 FT.
- L 3 = 5 FT.
- L 4 = 75 FT.

INSTALLATION COMPLETED

DATE: 7/19/89
TIME: 11:00

MONITORING WELL WATER LEVEL MEASUREMENTS

DATE	TIME	WATER LEVEL ■

■ MEASURE POINT: Top of Riser



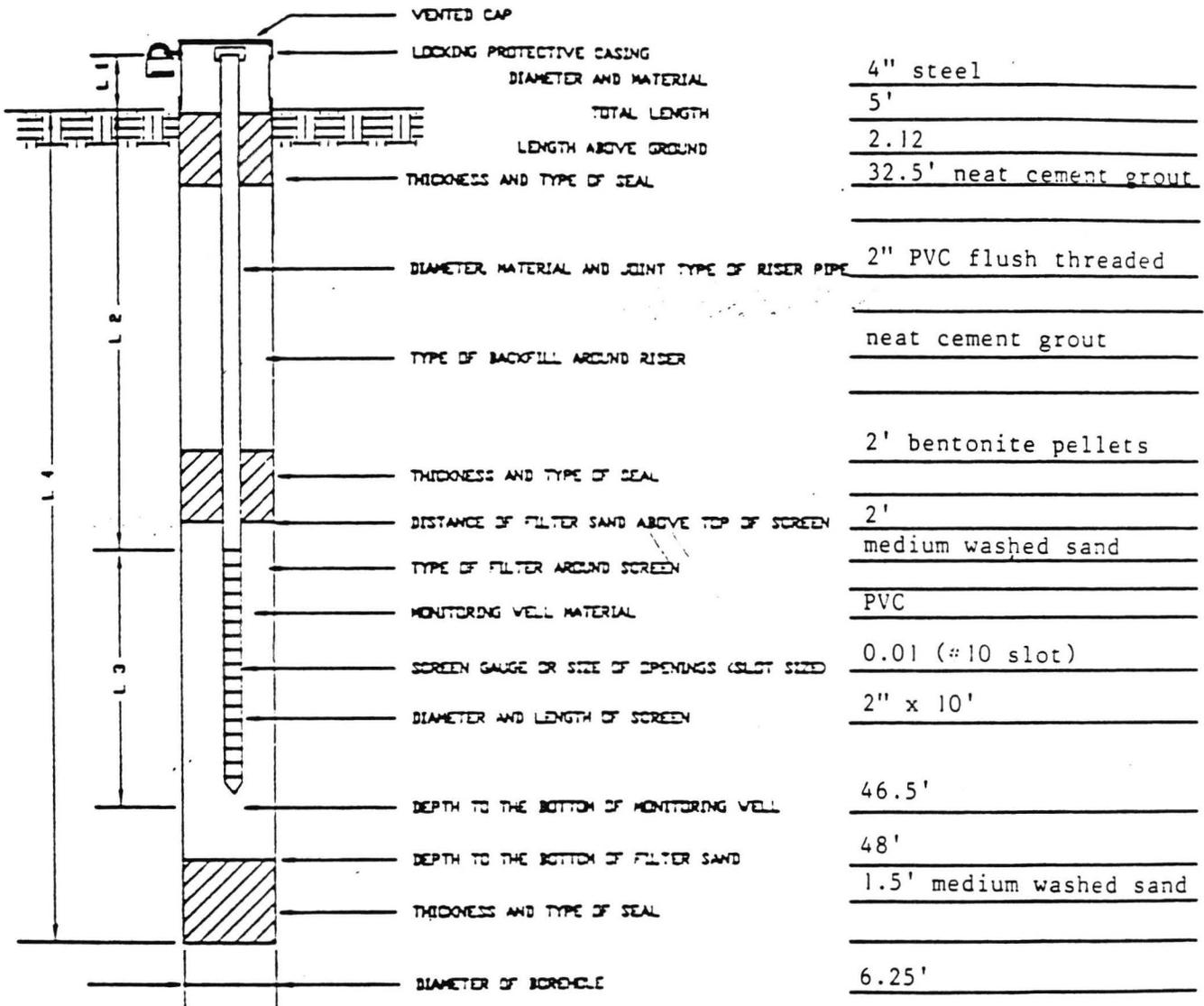
INSTALLATION OF ABOVE GROUND MONITORING WELL

PROJECT Wysong & Miles Company
Greensboro, North Carolina

DELTA NO. 50-88-160

MONITORING WELL NO. MW-10

ELEVATIONS: TOP OF RISER 732.66
 GROUND LEVEL 730.14



- L 1 = 2.92 FT.
- L 2 = 36.5 FT.
- L 3 = 10 FT.
- L 4 = 48 FT.

INSTALLATION COMPLETED
 DATE: 6/28/89
 TIME: 11:30

MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL *

* MEASURE POINT: Top of Riser

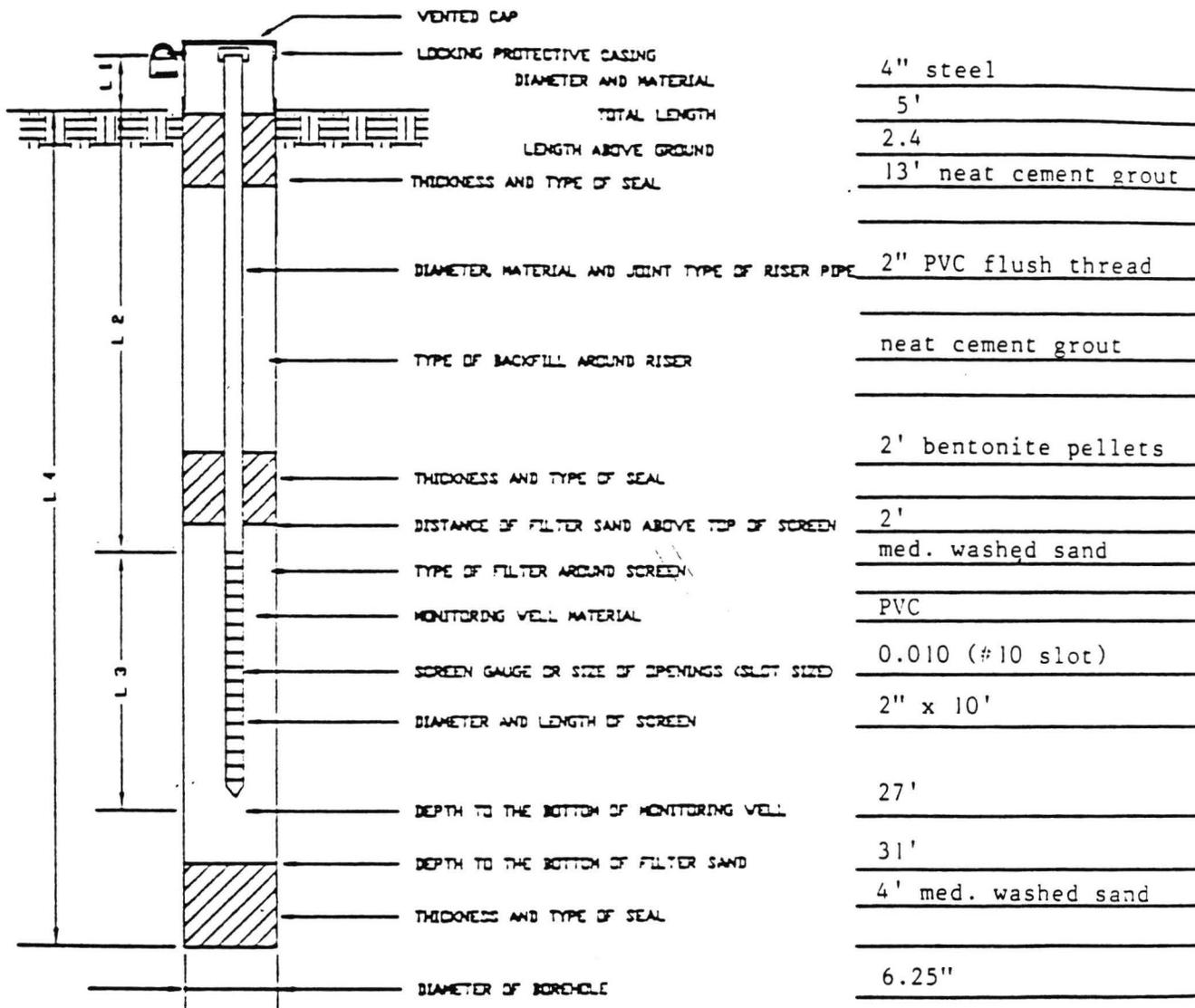
INSTALLATION OF ABOVE GROUND MONITORING WELL

PROJECT Wysong & Miles Company
Greensboro, North Carolina

DELTA NO. 50-88-160

MONITORING WELL NO. MW-11

ELEVATIONS: TOP OF RISER 729.50
 GROUND LEVEL 727.10



L 1 = 2.4 FT.
 L 2 = 17 FT.
 L 3 = 10 FT.
 L 4 = 31 FT.

INSTALLATION COMPLETED

DATE: 6/28/89
 TIME: 16:30

MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL *
6/30/89	12:23	20.86

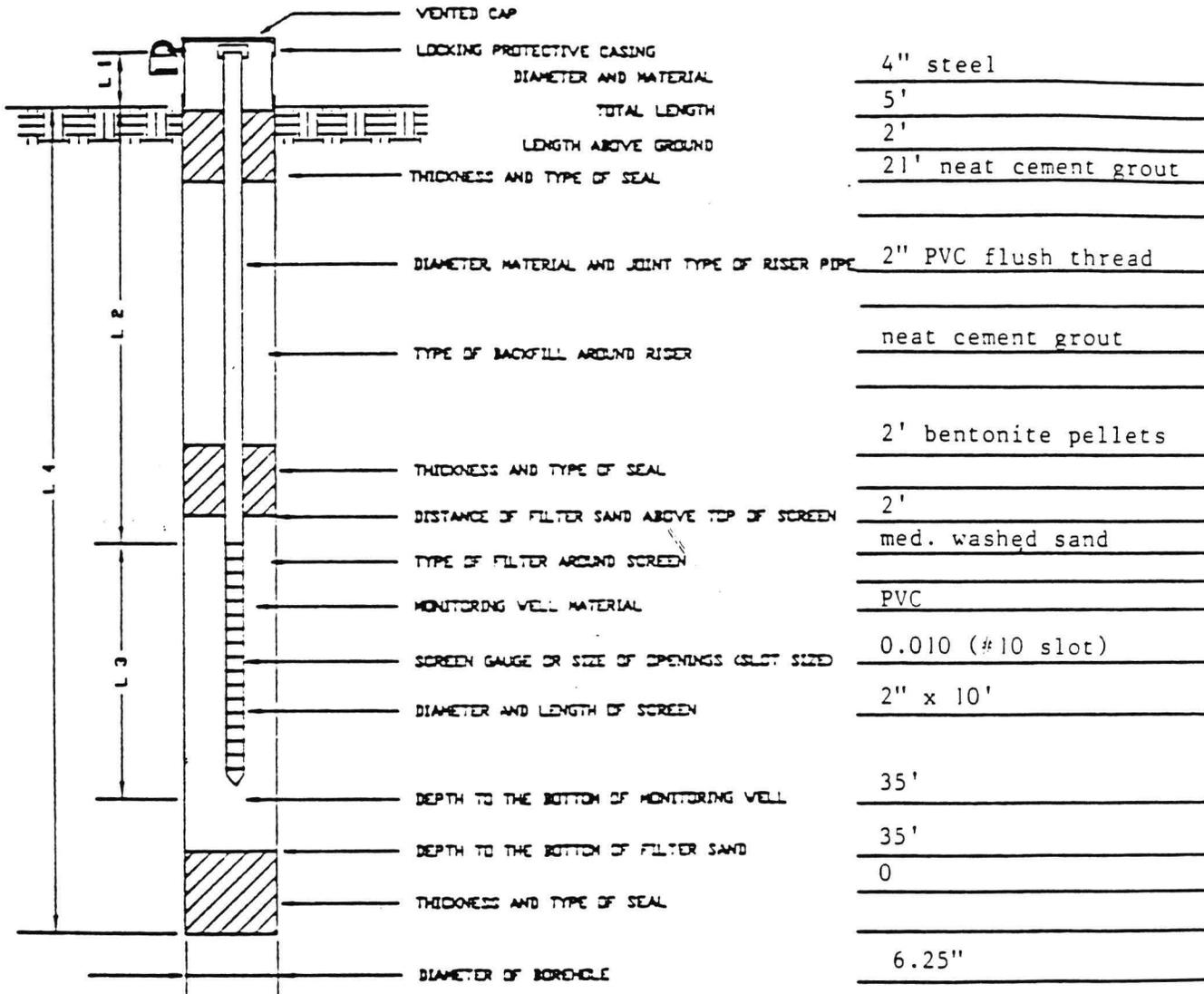
* MEASURE POINT: Top of Riser



INSTALLATION OF ABOVE GROUND MONITORING WELL

PROJECT Wysong & Miles Company
Greensboro, North Carolina
 DELTA NO. 50-88-160

MONITORING WELL NO. MW-12
 ELEVATIONS: TOP OF RISER 728.05
 GROUND LEVEL 726.05



L 1 = 2 FT.
 L 2 = 25 FT.
 L 3 = 10 FT.
 L 4 = 35 FT.

INSTALLATION COMPLETED
 DATE: 6/27/89
 TIME: 10:15

MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL *
6/30/89	12:27	28.18

* Top of Riser

* MEASURE POINT:



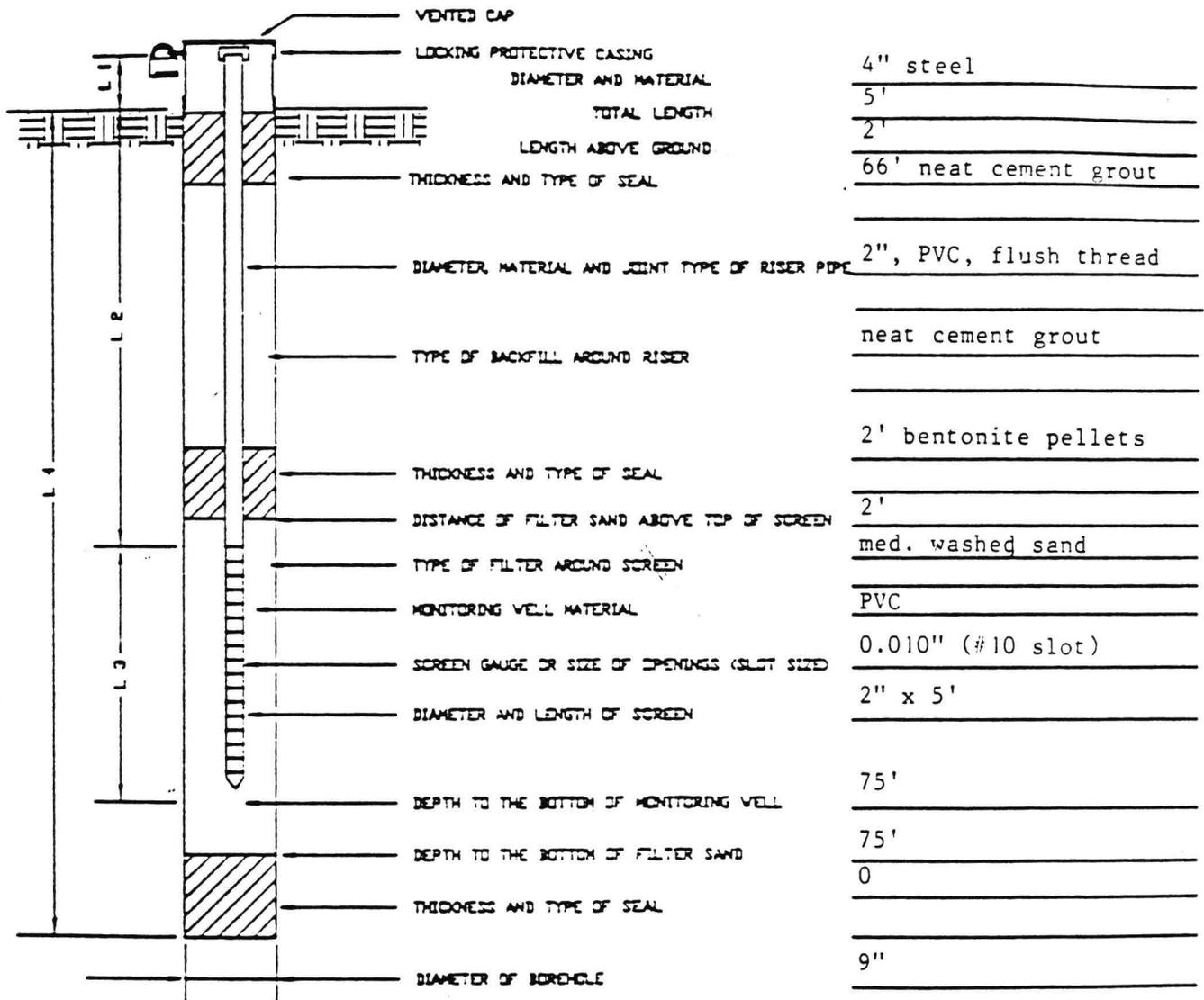
INSTALLATION OF ABOVE GROUND MONITORING WELL

PROJECT Wysong & Miles Company
Greensboro, North Carolina

DELTA NO. 50-88-160

MONITORING WELL NO. MW-13 (Deep)

ELEVATIONS: TOP OF RISER 727.88
 GROUND LEVEL 725.88



L 1 = 2 FT.
 L 2 = 70 FT.
 L 3 = 5 FT.
 L 4 = 75 FT.

INSTALLATION COMPLETED
 DATE: 7/21/89
 TIME: 18:30

MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL *

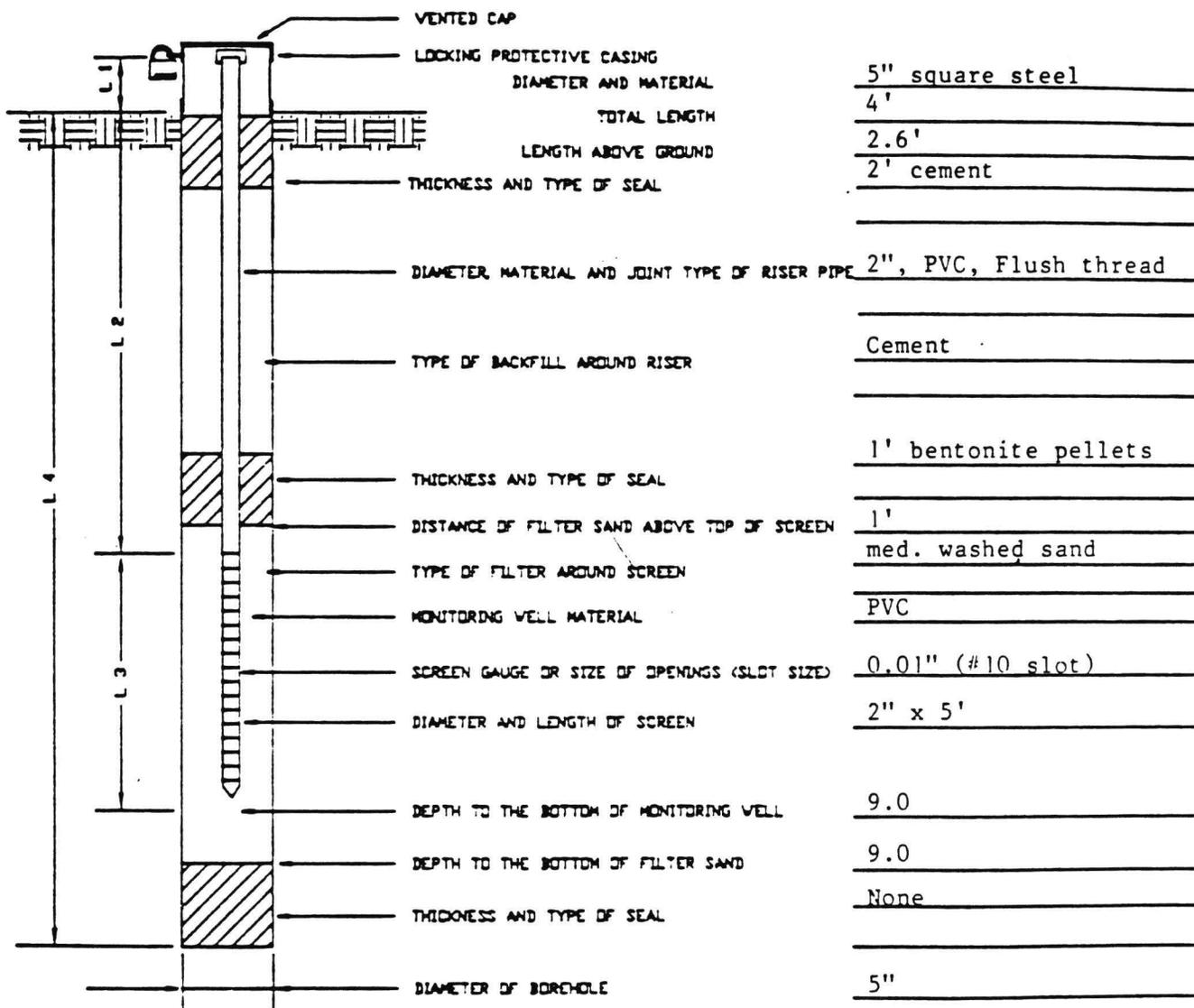
* MEASURE POINT: Top of Riser



INSTALLATION OF ABOVE GROUND MONITORING WELL

PROJECT Wysong & Miles Company
Greensboro, North Carolina
 DELTA NO. 50-88-173

MONITORING WELL NO. MW-14
 ELEVATIONS: TOP OF RISER 726.28
 GROUND LEVEL 723.68



5" square steel
 4'
 2.6'
 2' cement
 2", PVC, Flush thread
 Cement
 1' bentonite pellets
 1'
 med. washed sand
 PVC
 0.01" (#10 slot)
 2" x 5'
 9.0
 9.0
 None
 5"

L 1 = 2.6 FT.
 L 2 = 4.0 FT.
 L 3 = 5.0 FT.
 L 4 = 9.0 FT.

INSTALLATION COMPLETED
 DATE: 11-15-90
 TIME: 12:00

MONITORING WELL WATER LEVEL MEASUREMENTS		
DATE	TIME	WATER LEVEL ■
11-15-90	16:00	3.85

■ MEASURE POINT: TOC

RECOVERY WELL CONSTRUCTION

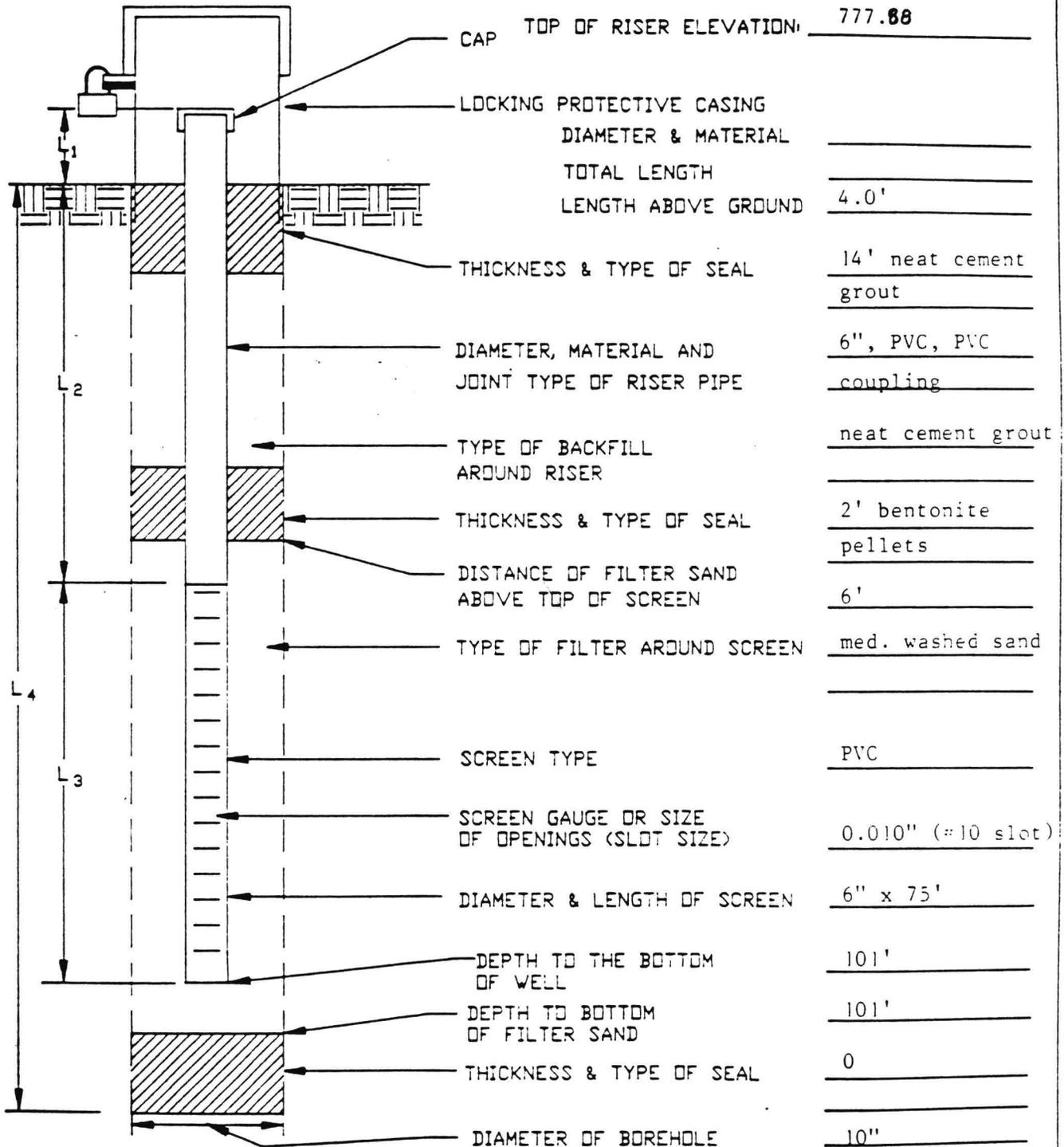
PROJECT: Wysong & Miles Company

LOCATION: Greensboro, North Carolina

JOB NO. 50-88-160

RECOVERY WELL NO. RW-1

TOP OF RISER ELEVATION: 777.88



INSTALLATION COMPLETED:

DATE: 7/24/89 TIME: 19:00

(*) DEPTH BELOW TOP OF RISER PIPE

$L_1 =$ 4 FT

$L_2 =$ 26 FT

$L_3 =$ 75 FT

$L_4 =$ 101 FT



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RECOVERY WELL CONSTRUCTION

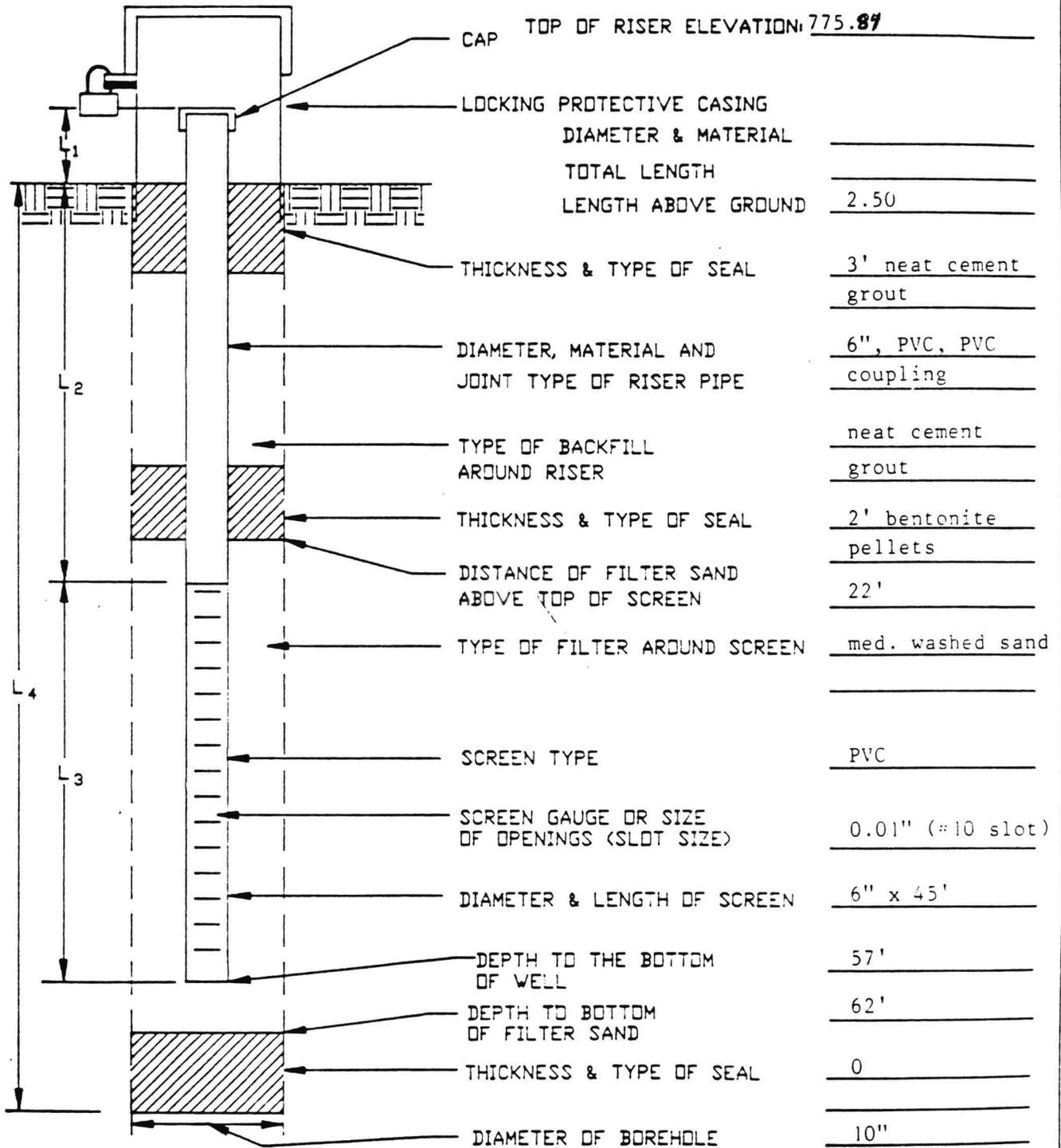
PROJECT: Wysong & Miles Company

LOCATION: Greensboro, North Carolina

JOB NO. 50-88-160

RECOVERY WELL NO. RW-2

TOP OF RISER ELEVATION: 775.87



INSTALLATION COMPLETED:

DATE: 7/20/89 TIME: 10:00

(*) DEPTH BELOW TOP OF RISER PIPE

$L_1 =$ 2.5 FT

$L_2 =$ 12 FT

$L_3 =$ 45 FT

$L_4 =$ 62 FT

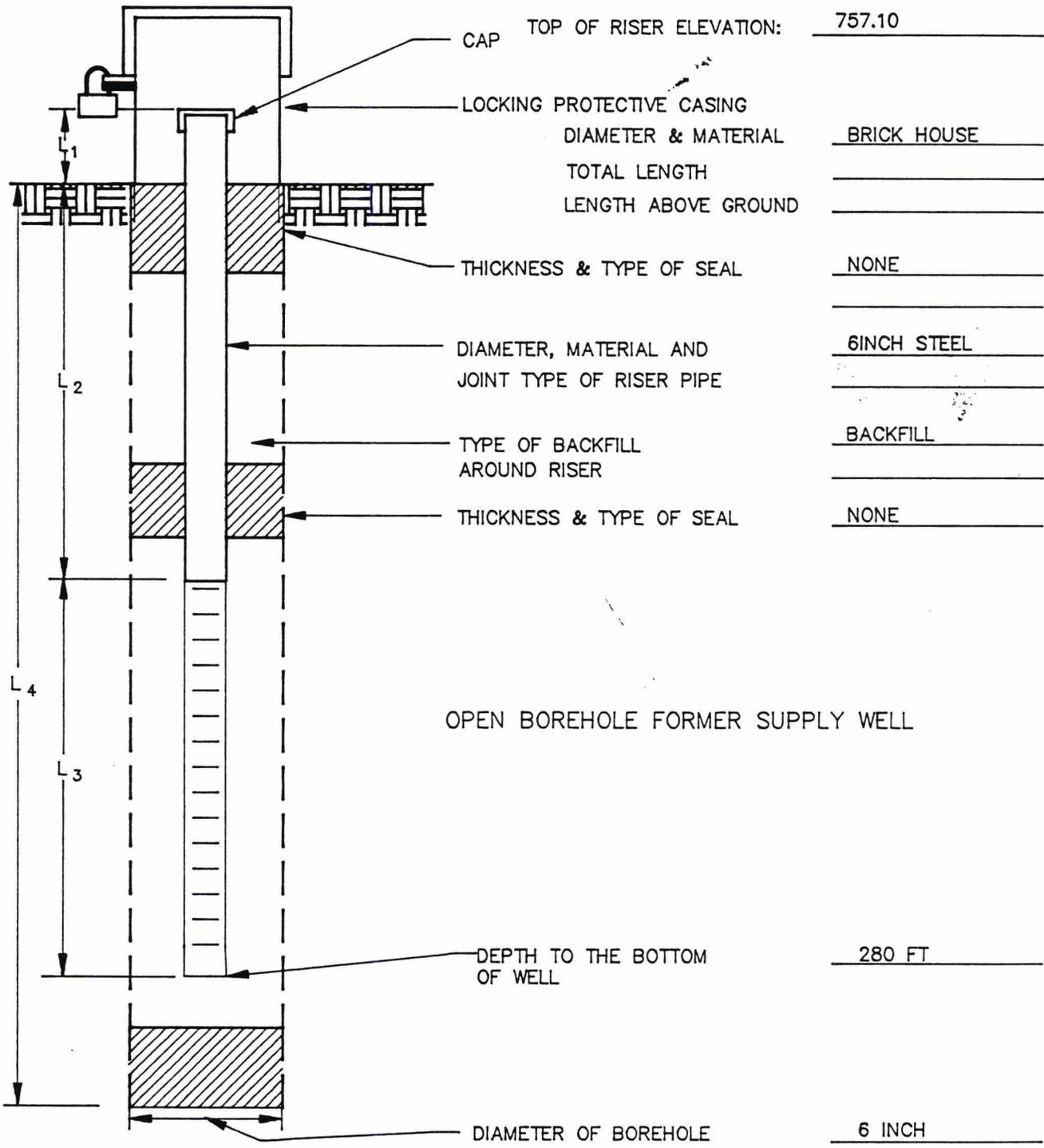


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ABOVE GROUND RECOVERY WELL CONSTRUCTION

PROJECT: WYSONG & MILES COMPANY LOCATION: GREENSBORO, NC
 JOB NO. 50-88-173 RECOVERY WELL NO. WSW

TOP OF RISER ELEVATION: 757.10



BRICK HOUSE

NONE

6 INCH STEEL

BACKFILL

NONE

280 FT

6 INCH

INSTALLATION COMPLETED:

DATE: _____ TIME: _____

$L_1 = 1.0$ FT
 $L_2 = 50$ FT
 $L_3 =$ _____ FT OPEN BOREHOLE
 $L_4 = 280$ FT

(*)DEPTH BELOW TOP OF RISER PIPE



APPENDIX B:

GROUND WATER SAMPLE COLLECTION LOG BOOK

