SE
TECHNOLOGIES

September 17, 1999

Mr. Robert A. O'Meara
Office of Site Remediation and Restoration
United States Environmental Protection Agency
Region I
John F. Kennedy Federal Building (HBT)
One Congress Street
Boston, MA 02203-2211

Subject: **William Prym, Inc.**
EPA ID No. CTD001140920
Environmental Indicator Determination Worksheets
for RCRIS Code CA 750
Revised Submittal

SE Technologies, Inc.
98 Vanadium Road
Bridgeville, PA 15017
412.221.1100

Dear Mr. O'Meara:

On behalf of our client, William Prym Inc., we are pleased to provide you the enclosed revised Environmental Indicator Determination worksheets for Prym's Dayville site for RCRIS Code 750. These worksheets and associated documentation provide a basis for listing the Dayville site as being under control for Groundwater Contamination (CA 750). The worksheets remain the same as originally submitted, but the back up documentation has been expanded to allow this submittal to be more of a stand-alone document. Please review these worksheets at your earliest convenience and contact me with any questions or additional information needs you may have.

As always, should you have any questions or require further information, please feel free to contact Mr. Johan Starrenburg of Prym or me at your convenience.

Sincerely,

Roger A. Dhonau, PE, QEP
Chief Environmental Engineer

RAD/mam

cc: Johan Starrenburg - William Prym, Inc.
Al Smith - Murtha, Cullina, Richter and Pinney

DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA750)
Migration of Contaminated Groundwater Under Control

Facility Name: William Prym Inc.
Facility Address: Dayville, CT
Facility EPA ID #: CTD001140920

1. Has all available relevant/significant information on known and reasonably suspected releases to the groundwater media, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been considered in this EI determination?

   X If yes - check here and continue with #2 below.

   _____ If no - re-evaluate existing data, or

   _____ if data are not available, skip to #8 and enter "IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Migration of Contaminated Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

2. Is **groundwater** known or reasonably suspected to be **"contaminated"**[1] above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

X If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.

____ If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."

____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s): See notes under Section 750-2 in attached text.

Footnotes:

[1]"Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

3. Has the **migration** of contaminated groundwater **stabilized** (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater"[2] as defined by the monitoring locations designated at the time of this determination)?

__X__ If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the "existing area of groundwater contamination"[2]).

_____ If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination"[2]) - skip to #8 and enter "NO" status code, after providing an explanation.

_____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s): See notes under Section 750-3 in attached text.

[2] "existing area of contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

4. Does "contaminated" groundwater **discharge into surface water bodies?**

X If yes - continue after identifying potentially affected surface water bodies.

_____ If no - skip to #7 (and enter a "YE" status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater "contamination" does not enter surface water bodies.

_____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s): See notes under Section 750-4 in attached text.

5. Is the **discharge** of "contaminated" groundwater into surface water likely to be **"insignificant"** (i.e., the maximum concentration[3] of each contaminant discharging into surface water is less than 10 times their appropriate groundwater "level," and there are no other conditions (e.g., the nature, and number, of discharging contaminants, or environmental setting), which significantly increase the potential for unacceptable impacts to surface water, sediments, or eco-systems at these concentrations)?

X If yes - skip to #7 (and enter "YE" status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration[3] of key contaminants discharged above their groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgement/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments, or eco-system.

____ If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration[3] of each contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations[3] greater than 100 times their appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.

____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s): See notes under 750-5 in attached text.

[3] As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

6. Can the **discharge** of "contaminated" groundwater into surface water be shown to be "**currently acceptable**" (i.e., not cause impacts to surface water, sediments or eco-systems that should not be allowed to continue until a final remedy decision can be made and implemented[4])?

_____ If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site's surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR 2) providing or referencing an interim-assessment,[5] appropriate to the potential for impact, that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialists, including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment "levels," as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk Assessments), that the overseeing regulatory agency would deem appropriate for making the EI determination.

_____ If no - (the discharge of "contaminated" groundwater can not be shown to be "**currently acceptable**") - skip to #8 and enter "NO" status code, after documenting the currently unacceptable impacts to the surface water body, sediments, and/or eco-systems.

_____ If unknown - skip to 8 and enter "IN" status code.

Rationale and Reference(s): In accordance with instructions for Section 5, this section is not applicable for "insignificant" discharges.

[4] Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refugia) for many species, appropriate specialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by significantly altering or reversing groundwater flow pathways near surface water bodies.

[5] The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems.

7. Will groundwater **monitoring** / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"

X If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "existing area of groundwater contamination."

_____ If no - enter "NO" status code in #8.

_____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s): See notes under Section 750-7 in attached text.

8. Check the appropriate RCRIS status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

_____ YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the _____ _____ facility , EPA ID # _____ , located at _____. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater" This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

_____ NO - Unacceptable migration of contaminated groundwater is observed or expected.

_____ IN - More information is needed to make a determination.

(Documentation Provided by Facility)

Completed by (signature) _____ Date 7/23/99
(print) _____
(title) _____

Supervisor (signature) _____ Date 9/29/99
(print) Matthew R. Haagland
(title) Section Chief
(EPA Region or State) Region I

BO EV Email

Locations where References may be found:

_____
_____
_____
_____
_____

Contact telephone and e-mail numbers

(name) _____
(phone #) _____
(e-mail) _____

Rationale and References
For
Documentation of Environmental Indicator Determination
RCRA Corrective Action Environmental Indicator Code CA 750

WILLIAM PRYM, INC.
Dayville, CT

Groundwater monitoring was initiated at Prym's Dayville facility (the site) in 1982 to comply with RCRA requirements for storage of hazardous wastes in earthen lagoons. Over the years, the monitoring program has evolved, including changes in the monitoring parameters, number of network wells and monitoring frequency. Initially, monitoring consisted of quarterly measurements of RCRA indicator parameters at four wells surrounding two active hazardous waste sludge lagoons. This program soon detected a significant difference between upgradient and downgradient for these indicator parameters and, subsequently, a groundwater assessment was performed in 1984. Four additional wells were installed during this assessment and the monitoring parameters were expanded to include cyanide, various heavy metals and volatile organics. The assessment found the hazardous waste lagoons to be releasing electroplating sludge constituents to shallow groundwater and called for its closure. The lagoons were closed and quarterly monitoring of these eight wells continued as part of Prym's post-closure care program. In 1994, the monitoring was reduced to semi-annual events and several parameters that routinely were below detection or concentrations of concern were deleted from the program.

Routine monitoring of these eight wells continued until the fall of 1997. At that time, seven additional shallow wells (MW-9 through MW-15) were installed under an EPA approved Phase I RFI Work Plan. The purpose of these new wells was to better define the horizontal extent of historic releases from the Former Sludge Lagoons, to determine if releases had taken place from certain other Areas of Concern (AOCs) and to better define general site hydrogeology. This expanded network met its objectives and determined that release had also occurred from AOC 10 (Plating Room) and from AOC 1 (Mill Pond). In addition to investigating groundwater, the Phase I RFI also evaluated surface water expressions for key site constituents and evaluated the interaction between groundwater and surface water. As a supplement to the Phase I RFI, home wells in close proximity to the site were sampled and analyzed for site constituents. All site constituents were below their respective federal drinking water criteria and, in most cases, below detection limits for all home well and surface water samples.

A Phase II RFI program, implemented in 1998, included the installation of five additional shallow wells, three deep wells and two piezometers. The Phase II RFI groundwater program evaluated the vertical extent of site constituents of concern, further defined groundwater flow regimes and interactions with surface water expressions and better defined the extent of site constituents in shallow groundwater.

Data gathered during the Phase II RFI has been selected as the primary data source to evaluate the site against the CA 750 indicator code. Data generated from this investigation represents the most accurate and current understanding of both groundwater flow and quality.

The following notes provide a basis for the conclusions reached in each step of the Environmental Indicator Determination for RCRIS Codes CA 750. Headings used for these notes correspond to the item numbers in the determination worksheet.

In this evaluation, the EPA Risk Based Criteria – April 1998 for Tap Water (RBCs) were used as the primary benchmark for determining the presence/absence of site constituents at a concentration of significance as well as determining the degree of significance of their presence from a human health perspective. Federal drinking water criteria (MCLs) were used in conjunction with RBCs to determine the significance of detected site constituents.

750-2 Groundwater Contamination Determination

Arsenic, nickel, trichloroethylene and tetrachloroethylene were detected in site groundwater at concentrations in excess of their respective RBCs. In the October 1998 monitoring event, the arsenic RBC (0.045 ug/L) was exceeded in 12 of 23 monitoring wells across the site with no obvious pattern associated to one or more Areas of Concern (AOCs). [Note: Future monitoring will be investigating this matter.] During this same event, the nickel RBC (730 ug/L) was exceeded in two wells down gradient of AOC 10 (Nickel Plating Room). Trichloroethylene exceeded its RBC (1.3 ug/L) in one well and tetrachloroethylene exceeded its RBC (1.1 ug/L) in two wells. Only one exceedance of the arsenic federal drinking water criteria (50 ug/L) and one exceedance of the tetrachloroethylene federal drinking water criteria (5 ug/L) took place during this event. No federal drinking water criterion is in effect for nickel. Attachment A includes a map of the well locations, well construction data, boring logs, a discussion of site hydrology from the RFI Phase II report, and a summary table of analytical results for the October 1998 event.

It is important to note that the CTDEP classification of groundwater at the site is "GB", not suitable for drinking. It should also be noted that municipal water is available at site and throughout the surrounding area.

750-3 Migration Stabilization Evaluation

Over the past 15 years, Prym has put forth considerable effort to remove known and potential groundwater contamination sources from the site. This includes:

- Closure of the electroplating sludge lagoons (AOC 2). With the exception of a small area that encroached on building footings, all sludge and soils that exceeded health based standards in effect at that time (1987) were removed. Attachment B provides excerpts from the closure certification report, documenting the criteria met during closure. The closure was approved by EPA.

- Remediation of the Mill Pond (AOC 1). Three separate voluntary removal programs took place to remove spilled electroplating sludge and affected underlying soils/sediment from the Mill Pond. Remaining metal concentrations are well below their respective RBC for direct exposure. Attachment B also includes results of the verification testing upon completion of the final corrective measures action, documenting concentrations of key constituents in the underlying soils.

- Removal of all drummed wastes and raw materials in AOC 6 and AOC 8.

- Removal of residues and steam cleaning of AOC 10 (Former Plating Room), AOC 4 (Wastewater Treatment Room) and AOC 8 (Chemical Storage Room). All equipment was also removed from the plating room and the wastewater treatment room.

- Remediation of the AOC 3 (Tail Race). An extensive remediation program removed sediments containing various heavy metals associated with past site operations. Remaining metal concentrations are well below their respective RBC for direct exposure. Again, Attachment B provides results of the verification testing upon completion of this corrective action, documenting the concentration of key constituents in the underlying sediments.

- Removal of the Hypochlorite storage tank (AOC 9).

- Removal of the pressed sludge roll-off box (AOC 7)

As a result of these efforts, groundwater quality has improved throughout the eight well monitoring network that has been in place since 1984. The monitoring period for the more recently installed wells has been too short to establish trends. Attachment C includes a partial summary of nickel and perchloroethylene concentrations over time for the eight wells that have been in place since 1986.

Sampling of home drinking water wells down gradient of the site was performed as a coordinated effort with CTDEP. This program did not detected any site constituents in concentrations above their respective drinking water criteria and, with the possible exception of arsenic, their respective RBCs. As discussed under 750-2, the revised arsenic RBC (0.045 ug/L) is below detection limits of approved analytical methods, thereby preventing conclusive determination of the presence or absence of arsenic above this criterion. However, it should be emphasized that the analytical detection limit for arsenic (2 ug/L) is more than one order of magnitude below the drinking water criteria (50 ug/L). In addition, arsenic was not detected in either the on-site down gradient deep wells or home wells down gradient of the site. Therefore, the uncertainty of attainment of the arsenic RBC is not considered a significant matter for this evaluation. Attachment C contains the results of this home well sampling event, and a map depicting the location of these wells.

All AOC have been present for more than 20 years and, as discussed above, no site constituents have been detected in deep down gradient wells or home drinking water wells down gradient of the site at or above federal drinking water criteria. Given this preponderance of evidence, it can be concluded that future off-site migration of site constituents will not occur at concentrations above federal drinking water criteria.

750-4 Contaminated Groundwater Discharge to Surface Water Evaluation

Hydrogeologic studies performed during the Phase I and Phase II RFI determined that much of the groundwater discharges to two surface water expressions that cross the site. These are the Five Mile River and man-made diversion channel known as the Tail Race (AOC3). Data generated from monitoring wells down gradient of the AOCs and up gradient of the surface water expressions are representative of groundwater discharging to surface water. Monitoring wells that fit this category are MW 11, MW 12, MW 13, MW 15, MW 16 and MW 19.

Review of recent monitoring data for these wells indicated that arsenic in wells MW 11 and MW 13 and nickel in MW 13 exceeded their respective RBC. However, none of the parameters in this group of wells exceeded their respective federal drinking water criteria. In addition, no other site constituents were found to be present in this group of wells at concentrations in excess of their respective RBCs. Despite these low concentrations, for the purposes of this evaluation it must be concluded that impacted site groundwater is discharging to surface water.

750-5 Evaluation of Significance of Contaminated Groundwater Discharge to Surface Water

As noted under 750-4, groundwater impacted by nickel and arsenic is discharging to surface water expressions. As the concentrations of these constituents in the groundwater are below federal drinking water criteria before discharge, it is not considered significant for the current protection of human health.

The monitoring period for these wells has been short. Thus, there is no direct documentation to demonstrate that the noted concentrations of arsenic and nickel are not increasing. However, as discussed under 750-3, there have been significant remedial actions taken on the site. As a result of these actions, monitoring wells with a more extensive history have noted improvements in groundwater quality. As groundwater is flowing from these older wells toward the wells representative of discharge to surface water, there is no reasonable expectation that the concentration of site constituents discharging to surface water expressions will increase over time. With current discharge concentrations of site constituents below drinking water criteria and no reasonable potential for increases over time, future discharge of site groundwater to surface water is not considered significant for protection of human health.

During the Phase I RFI, an ecological survey of the Five Mile River was conducted. This survey was conducted using EPA's Rapid Bioassessment Protocol II. Habitat quality at the upstream (reference) station was considered excellent and is comprised of run and pool habitat. Habitat quality at the downstream location was also considered excellent, but was exclusively run habitat. Data from the survey did not clearly show whether the downstream station was or was not impaired. Although the data tend to indicate some minor impairment had occurred, the difference may be due to degraded substrate, changes in water quality due to road run-off (Route 101 and the adjacent health club parking lot) or impact from residential properties at the down stream location. There is no conclusive evidence of any current impact and the quality of groundwater discharging to the river is anticipated to improve over time. Thus, it can be concluded that neither current nor future groundwater discharge is reasonably anticipated to have an unacceptable impact to the ecology of this river.

A copy of the ecological assessment report is provided in Attachment D.

750-7 Future Groundwater Monitoring

As discussed under Section 750-4, several wells in the groundwater monitoring network measure shallow groundwater that is representative of what is discharging to the Five Mile River and the Tail Race. Prym will continue to monitor these wells (MW11, MW12, MW13, MW15, MW16 and MW19) for arsenic and nickel as long as is necessary to verify the future expectations stated under 750-3.

750-8 Migration of Contaminated Groundwater Status

Through the previous worksheets, associated notes and supporting data, it was determined that the Prym Dayville site has groundwater that is contaminated with arsenic, nickel trichloroethylene and tetrachloroethylene. Through extensive groundwater investigation, it has been determined that none of these constituents or their degradation products have migrated off-site in concentrations at or above their respective drinking water criteria, either through movement of groundwater or through discharge to surface water. In addition, with the possible exception of arsenic, none of these constituents have been detected in home wells immediately down gradient of the site above their respective tap water RBCs.

As noted above, it is uncertain if arsenic is present at on-site or off-site down gradient locations and the down gradient property boundary at concentrations above its tap water RBC. The available analytical detection limit for arsenic (2 ug/L) is well above its 0.045 ug/L tap water RBC, but well below the MCL of 50 ug/L. As this detection limit is more than one order of magnitude less than the MCL and the MCL is deemed protective of human health, this uncertainty is not considered a significant issue.

It has also been demonstrated that it is highly unlikely that down gradient concentrations will increase as there has been extensive remedial actions at those AOCs determined to be contributing to groundwater contamination. In addition, all AOCs have been present for more than 20 years, with some having been in existence for more than 70 years. It is extremely unlikely that any contamination would migrate off-site after this extensive time period, especially considering the remedial actions that have taken place, the highly permeable sand and gravel aquifer beneath the site and the relatively short distances between the AOCs and down gradient groundwater users.

It should also be noted that arsenic is a common in groundwater constituent throughout this part of Connecticut (Barosh, 1992). It is not certain if the noted arsenic in site groundwater is in part or fully associated with release from one or more of the AOCs or is associated with natural conditions.

Given this evidence, it is concluded that the migration of contaminated groundwater is under control at the Prym Dayville Site.

References:

P.J.Barosh, 1992, Arsenic in Ground Water in Southeastern New England and Sources of Metals Found in Ground Water at the Linemaster Switch Corporation Site, Woodstock, Connecticut.

SE Technologies, 1998, Phase II RFI Report.

SE Technologies, 1997, Phase I Report.

ATTACHMENT CA750-A

Site Layout Map
Well Construction Data
Boring Logs
November 1998 Monitoring Data
Site Geology/Hydrogeology Summary

US EPA New England
RCRA Document Management System (RDMS)
Image Target Sheet

RDMS Document ID# 995

Facility Name: Prym William Inc

Phase Classification: R-13

Document Title: Environmental Indicator (EI) Determination, Migration of Groundwater Under Control (CA750YE) - Prym William Inc

Date of Document: 09-29-1999

Document Type: EI Determination

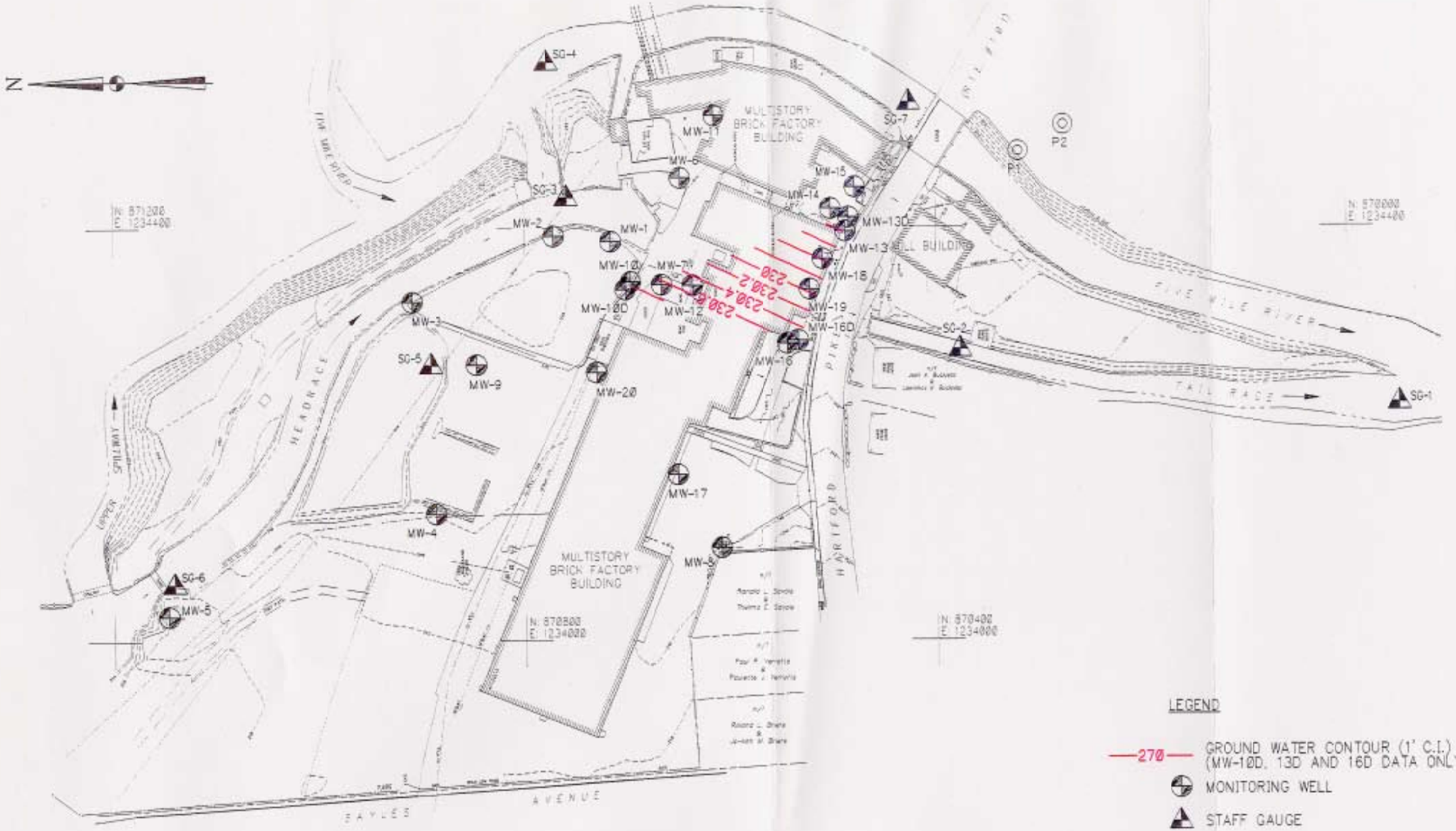
Purpose of Target Sheet:

[x] **Oversized** [ ] **Privileged**

[ ] **Page(s) Missing** [ ] **Other (Please Provide Purpose Below)**

Comments: Figure 2-1: Phase II RFI Investigation Area Base Map

*** Please Contact the EPA New England RCRA Records Center to View This Document ***



LEGEND

—270— GROUND WATER CONTOUR (1' C.I.) (MW-10D, 13D AND 16D DATA ONLY)

MONITORING WELL

STAFF GAUGE

PIEZOMETER

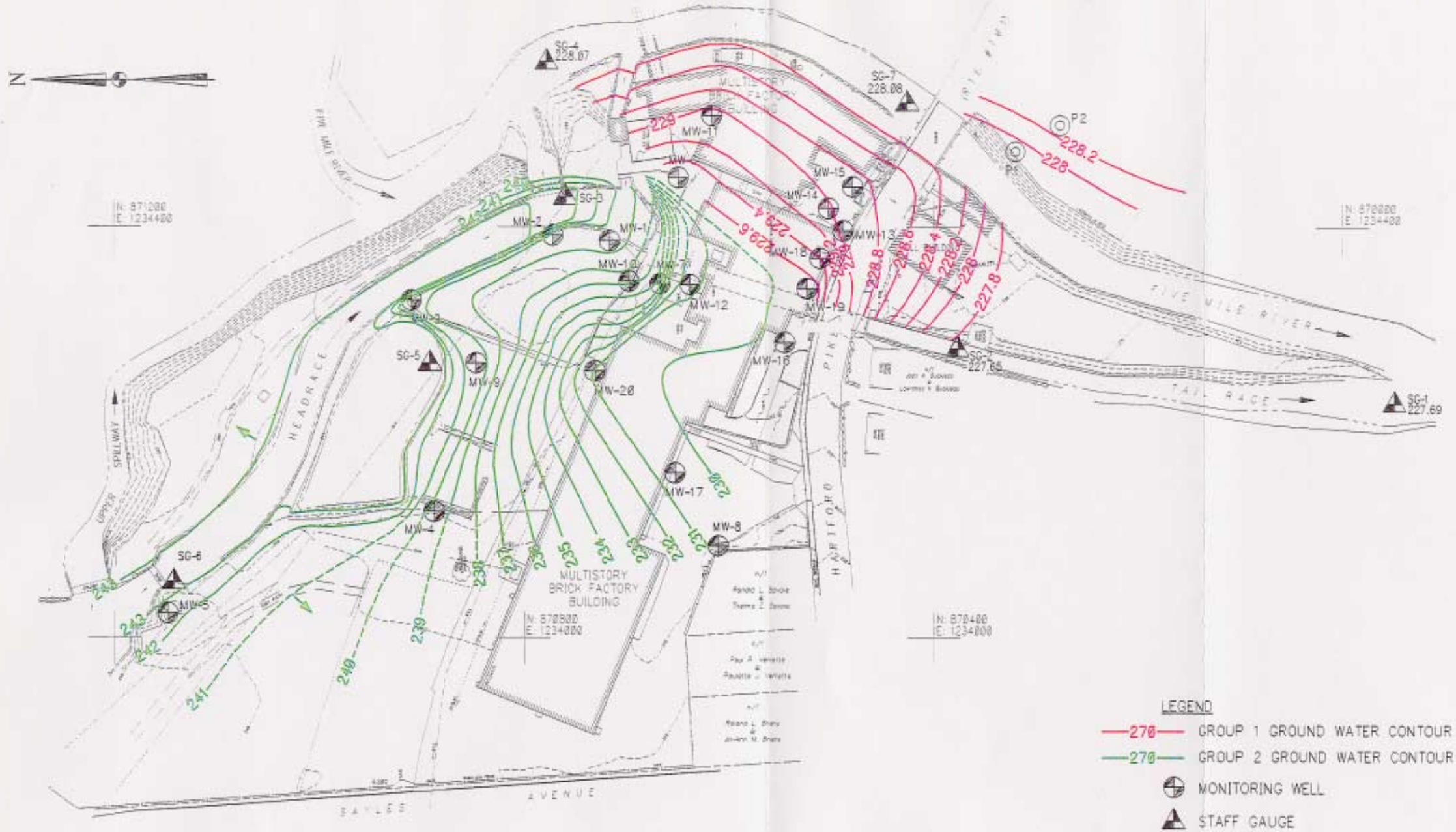
FERENCE: "TOPOGRAPHIC SURVEY PREPARED FOR PRYM MILL" BY KWP ASSOCIATES, PROMFRET CENTER, CONNECTICUT DATED 6/10/97 (REV. 11/5/97, 2/12/98, 11/2/98)
ELEVATIONS BASED ON NAD29; HORIZONTAL COORDINATES BASED ON CONNECTICUT GRID SYSTEM

DRAWN BY	LPS
DATE	-
CHECKED BY	-
SET JOB NO.	980322
SET DWG FILE	98322B03.dwg
DRAWING SCALE	1"=100'

SE TECHNOLOGIES
88 Vanadium Road Bridgeville, PA 15017 (412) 221-1100

WILLIAM PRYM, INC
DAYVILLE, CONNECTICUT
DEEP GROUNDWATER CONTOUR MAP
OCTOBER 10, 1998

DRAWING NAME: FIGURE 3-8
REV: A



LEGEND

270 GROUP 1 GROUND WATER CONTOUR (0.2' C.I.)

270 GROUP 2 GROUND WATER CONTOUR (1' C.I.)

MONITORING WELL

STAFF GAUGE

PIEZOMETER

HORIZONTAL COMPONENT OF GROUNDWATER FLOW

EFERENCE: "TOPOGRAPHIC SURVEY PREPARED FOR PRYM MILL" BY KWP ASSOCIATES, PROMFRET CENTER, CONNECTICUT DATED 6/10/97 (REV. 11/5/97, 2/12/98, 11/2/98)

ELEVATIONS BASED ON NAD29; HORIZONTAL COORDINATES BASED ON CONNECTICUT GRID SYSTEM

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CHECKED BY	-
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DRAWING SCALE	1"=100'

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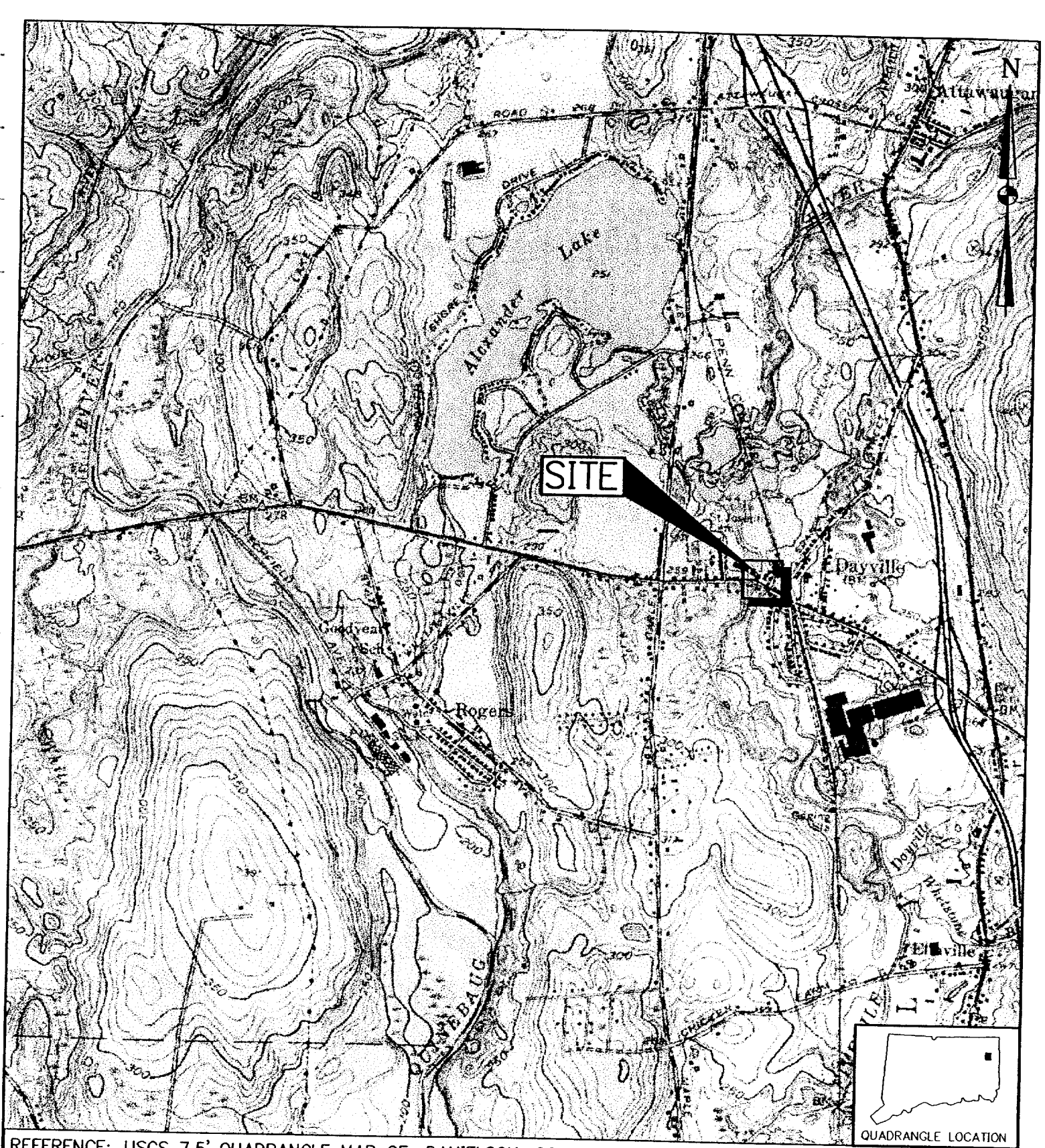
WILLIAM PRYM, INC

DAYVILLE, CONNECTICUT

SHALLOW GROUNDWATER CONTOUR MAP
DECEMBER 17, 1998

DRAWING NAME: FIGURE 3-10

REV: A



REFERENCE: USGS 7.5' QUADRANGLE MAP OF: DANIELSON, CONNECTICUT; DATED 1955, PHOTOREVISED 1970

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CHECKED BY	RAD
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SET DWG FILE	990177m01.dwg
DRAWING SCALE	1"=2000'

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WILLIAM PRYM, INC.

DAYVILLE, CONNECTICUT
PHASE III RFI

SITE LOCATION MAP

DRAWING NO. FIGURE 1-1

REV. 0

Plot: env024 09/09/1999 05:49 G:\Prym\990177\990177m01.dwg

SOIL SAMPLING LOG

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists

P.O. BOX 69
SEYMOUR, CONNECTICUT
(203) 888-3857

DATE START 5-13-85
DATE FINISH 5-13-85
WEIGHT OF HAMMER 140 x300
HAMMER FALL .....30" x24" .....

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
5-13-85	0 hrs.	8'4"
.....	.....	.....
.....	.....	.....

SAMPLER O.D. 2" I.D. 1 3/8"
TYPE OF RIG Hydraulic Rotary

ESPECIALLY COMPILED FOR
Lancy International, Inc.
525 West New Castle Street
P.O.Box 490
Zelienople, PA 16063

SHEET 1 OF 1
PROJ. NO. .....
LOCATION Prym Company
[redacted]. Dayville, CT
OFFSET
GROUND ELEVATION
HOLE. NO. B-5

	CASING	SAMPLER	CORE BA
TYPE	HSA	SS	.....
SIZE I.D.	3¼"	1 3/8"	.....

DEPTH BELOW SURFACE	SAMPLE NO. DEPTHS ELEV. FT	Type of Sample	BLOWS PER 6" ON SAMPLER From / TO 0-6	6-12	12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH ELEV.	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO.	PEN	RE
								Br. m-sand, some m-c gravel, lit. medium sized cobbles.			
	5'to	SS	3	2	2	Loose	5'		1	18	2
	6'6"					Damp		Br. m-sand, tr. brick fill.			
							9'				
10								Br. f-sand, some silt.			
	15'to	SS	5	5	6	M.Comp		Same	2	18	1
	16'6"					wet					
							18'	Augered to 18'.			
20								Bottom of boring 18'.			
30								NOTE: Installed 2" PVC water observation pipe w/10' screen 18' below grade, 2' above grade.			
40											

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

NOT RESPONSIBLE FOR SAMPLE STORAGE AFTER 30 DAYS

DRILLER: D.P.
HELPER: D.C.
SOILS ENGINEER
DRILLING INSPECTOR

SAMPLE TYPE
C = CORED W = WASHED
SS = SPLIT SPOON
UP = UNDISTURBED PISTON
TP = TEST PIT
UT = UNDISTURBED THINWALL

COHESIONLESS DENSITY
0-10 LOOSE
10-30 MED. COMP.
30-50 DENSE
50+ VERY DENSE

TOTAL FOOTAGE:
Earth Boring Ft.
Rock Coring Ft.
HOLE NO.

SOIL SAMPLING LOG

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists

P.O. BOX 69
SEYMOUR, CONNECTICUT
(203) 888-3857

SHEET 1 OF 1

DATE START 5-13-85
DATE FINISH 5-13-85
WEIGHT OF HAMMER 140 300
HAMMER FALL 30" 24"

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
5-13-85	5 hrs.	7'

SAMPLER O.D. 2" I.D. 1 3/8"
TYPE OF RIG Hydraulic rotary

ESPECIALLY COMPILED FOR
Lancy International, Inc.
525 West New Castle Street
P.O.Box 490
Zelienople, PA 16063

PROJ. NO.
LOCATION Prym Company
Dayville, CT
OFFSET
GROUND ELEVATION
HOLE. NO. B-6

	CASING	SAMPLER	CORE B
TYPE	HSA	SS	
SIZE I.D.	3¼"	1 3/8"	

DEPTH BELOW SURFACE	SAMPLE NO. DEPTHS ELEV. FT	Type of Sample	BLOWS PER 6" ON SAMPLER From TO 0-6	6-12	12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH ELEV.	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO.	SAMPLE PEN
							1'	Topsoil and roots.		
							3'6"	Br. silty sand.		
	5'to 6'6"	SS	5	12	14	M.Comp Moist	5'6"	Orange br. m-c sand, some f-c gravel.	1	18
							7'	Br. m-c sand, some m-c gravel.		
10	10'to 11'6"	SS	4	8	5	M.Comp wet		Gry br. v.f-sand, some silt, tr. clay.	2	18
	15'to 16'6"	SS	3	3	6	M.Comp wet	15'	Gry silt, tr. v.f-sand, tr. clay.	3	18
							18'			
20	20'to 21'6"	SS	13	8	13	M.Comp wet	21'	Orange br. c-v.c sand, some m-c gravel.	4	18
							21'6"	Br. silt, some f-sand.		
								Bottom of boring 21'6".		
30								NOTE: Installed 2" PVC water observation pipe w/10' screen 17' below grade, 2' above grade.		
40										

NOT RESPONSIBLE FOR SAMPLE STORAGE AFTER 30 DAYS

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

DRILLER: E.P.
HELPER: D.C.
SOILS ENGINEER

SAMPLE TYPE
C = CORED W = WASHED
SS = SPLIT SPOON
UP = UNDISTURBED PISTON
TP = TEST PIT

COHESIONLESS DENSITY
0-10 LOOSE
10-30 MED. COMP.
30-50 DENSE
50+ VERY DENSE

TOTAL FOOTAGE:
Earth Boring
Rock Coring

SOIL SAMPLING LOG

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists

P.O. BOX 69
SEYMOUR, CONNECTICUT
(203) 888-3857

DATE START 6-14-85
DATE FINISH 6-14-85
WEIGHT OF HAMMER 140 ~~300~~
HAMMER FALL 30" ~~24"~~

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
6-14-85	0 hrs.	16'

SAMPLER O.D. 2" I.D. 1 3/8"
TYPE OF RIG Hydraulic Rotary

ESPECIALLY COMPILED FOR
Lancy International, Inc.
525 Neat New Castle Street
P.O.Box 490
Zelienople, PA 16063

SHEET 1 OF 1
PROJ. NO.
LOCATION Prym Company
~~Brooklyn~~ Danville, CT
OFFSET
GROUND ELEVATION
HOLE. NO. B-7B

	CASING	SAMPLER	CORE
TYPE	HSA	SS	
SIZE I.D.	3¼"	1 3/8"	

DEPTH BELOW SURFACE	SAMPLE NO DEPTHS ELEV FT	Type of Sample	BLOWS PER 6" ON SAMPLER From TO 0-6	6-12	12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH ELEV.	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO.	SAMPLE PEN
								Drk br. c-f sand, some c-f gravel, lit. cobbles (fill).		
							7'			
								Gry br. f-sand, lit. silt.		
10							14'			
	15' to 16'	SS	16	18		Dense wet		Br. f-m sand, some weathered cobbles and gravel.	1	12
	20' to 20'9"	SS	22	78/3		V.Dense wet		Same	2	9
20							22'			
								Refusal on HSA.		
30								Bottom of boring 22'.		
								NOTE: Installed 2" PVC water observation pipe w/10' screen 22' below grade, 2' above grade.		
40										

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

NOT RESPONSIBLE FOR SAMPLE STORAGE AFTER 30 DAYS

DRILLER: E.P.
HELPER: D.C.
SOILS ENGINEER
DRILLING INSPECTOR

SAMPLE TYPE
C = CORED W = WASHED
SS = SPLIT SPOON
UP = UNDISTURBED PISTON
TP = TEST PIT
UT = UNDISTURBED THINWALL

COHESIONLESS DENSITY
0-10 LOOSE
10-30 MED. COMP.
30-50 DENSE
50+ VERY DENSE

TOTAL FOOTAGE:
Earth Boring
Rock Coring
HOLE NO.

SOIL SAMPLING LOG

SHEET 1 OF 1

DATE START 5-14-85

DATE FINISH 5-14-85

WEIGHT OF HAMMER 140 ~~300~~

HAMMER FALL .....30" ~~24"~~ .....

GROUND WATER OBSERVATIONS

DATE	TIME	DEPTH
-14-85	0 hrs.	18'

SAMPLER O.D. 2" I.D. 1 3/8"

TYPE OF RIG Hydraulic Rotary

CONNECTICUT TEST BORINGS, INC.

Sub-Surface Specialists

P.O. BOX 69

SEYMOUR, CONNECTICUT

(203) 888-3857

ESPECIALLY COMPILED FOR

Lancy International, Inc.

525 West New Castle Street

P.O.Box 490

Zelienople, PA 16063

PROJ. NO. .....

LOCATION Prym Company

~~UNESCO~~ Dayville, CT

OFFSET

GROUND ELEVATION

HOLE. NO. B-8A

	CASING	SAMPLER	CORE
TYPE	HSA	SS	
SIZE I.D.	2½"	1 3/8"	

DEPTH BELOW SURFACE	SAMPLE NO DEPTHS ELEV. FT	Type of Sample	BLOWS PER 6" ON SAMPLER From-TO 0-6	6-12	12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH ELEV.	FIELD IDENTIFICATION OF SOILS REMARKS	SAMPLE NO.	SAMPLE PEN
							1'	Drk Br. f-sand, lit. silt.		
								Br. f-c sand, some c-m gravel, some cobbles.		
							6'6"			
							8'6"	Br. m-f sand, cr. f-m gravel.		
10	10'to 10'6"	SS	42			V.Dense dry		Br. m-sand, some c-m gravel, some cobbles, lit. small boulders.	1	6
	15'to 16'	SS	45	60		V.Dense dry	17'	Same	2	12
20	20'to 21'6"	SS	22	23	25	Dense wet		Gry br. m-c sand, some c-f gravel.	3	18
	25'to 26'6"	SS	32	35	45	Very Dense wet		Br. m-c sand, some c-f gravel.	4	18
30	29'to 30'6"	SS	11	34	40	V.Dense wet	30'6"	Same	5	18
								Bottom of boring 30'6".		
40								NOTE: Installed 2" PVC water observation pipe w/10' screen 23' below grade, 2' above grade.		

NOT RESPONSIBLE FOR SAMPLE STORAGE AFTER 30 DAYS

Proportions used: trace = 0-10%, little = 10-20%, some = 20-35%, and = 35-50%

DRILLER: E.B. K.K.

HELPER: _____

SOILS ENGINEER _____

DRILLING INSPECTOR _____

SAMPLE TYPE

C = CORED W = WASHED

SS = SPLIT SPOON

UP = UNDISTURBED PISTON

TP = TEST PIT

UT = UNDISTURBED THINWALL

COHESIONLESS DENSITY

0-10 LOOSE

10-30 MED. COMP.

30-50 DENSE

50+ VERY DENSE

TOTAL FOOTAGE:

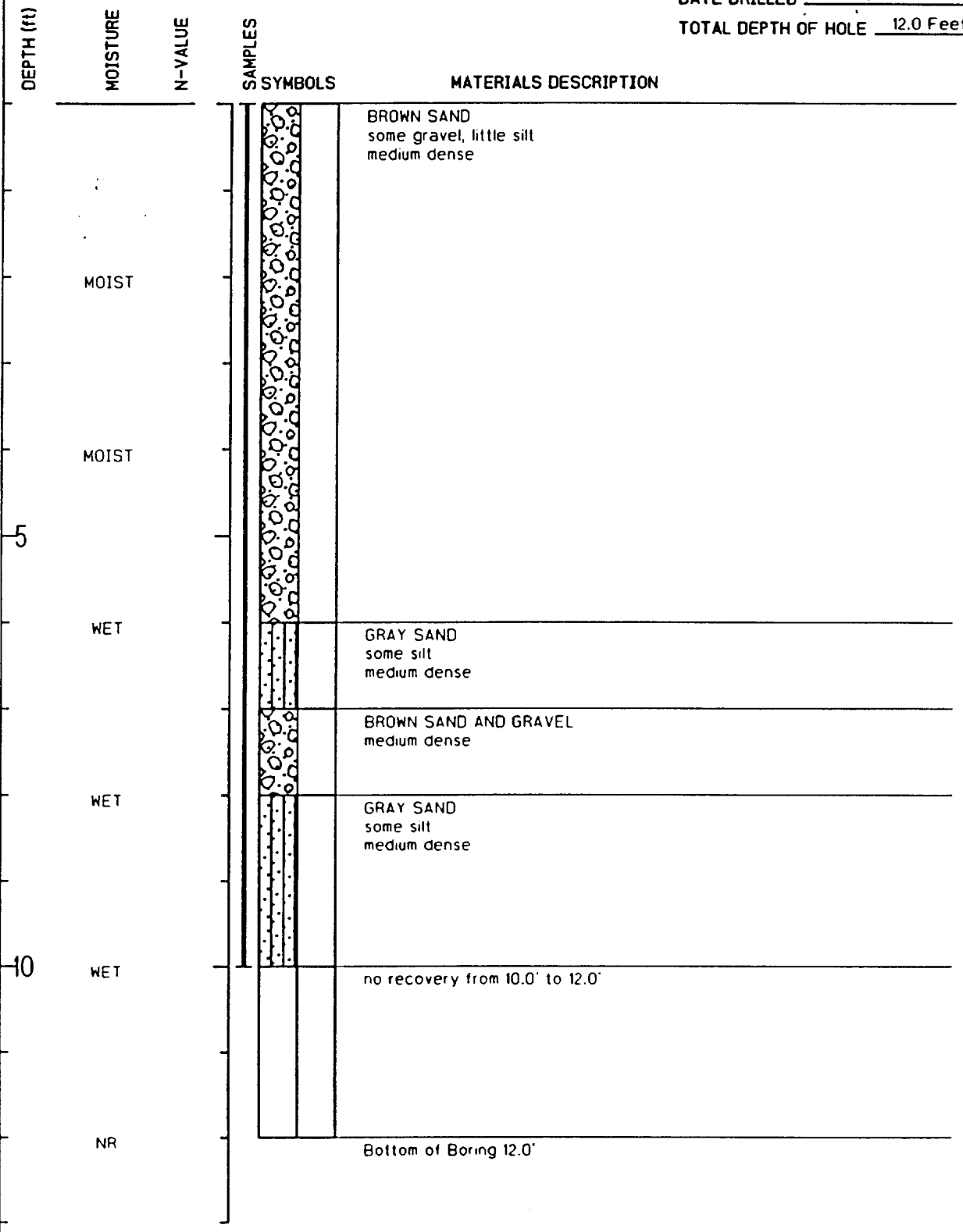
Earth Boring

Rock Coring

HOLE NO.

BORING MW-09 *(Page 1 of 1)*

CLIENT NAME William Prym, Inc.
LOCATION AOC 1 (Mill Pond)
DATE DRILLED 10/08/97
TOTAL DEPTH OF HOLE 12.0 Feet



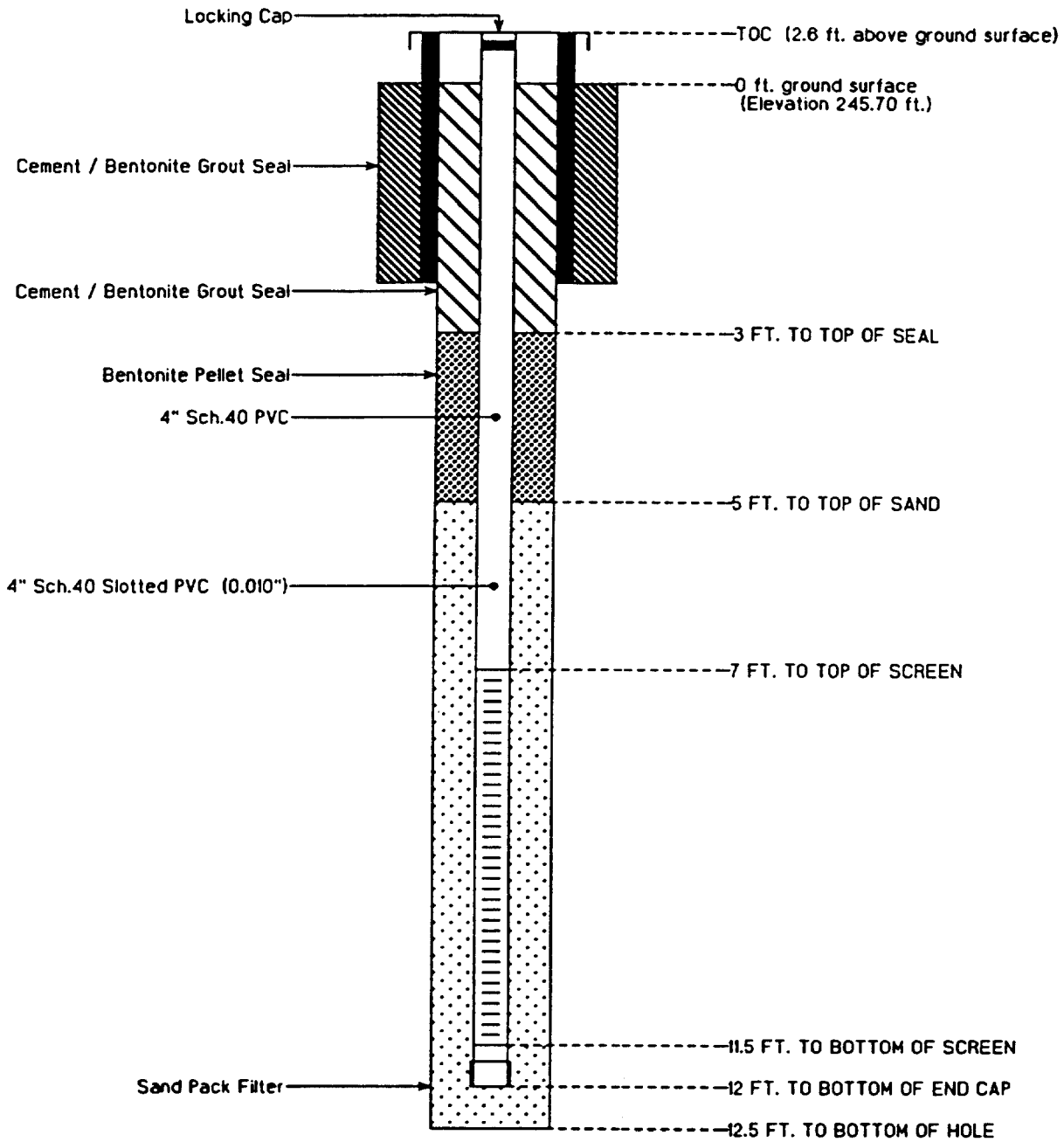
JOB NUMBER: 970330
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

Well Construction Log of MW-09

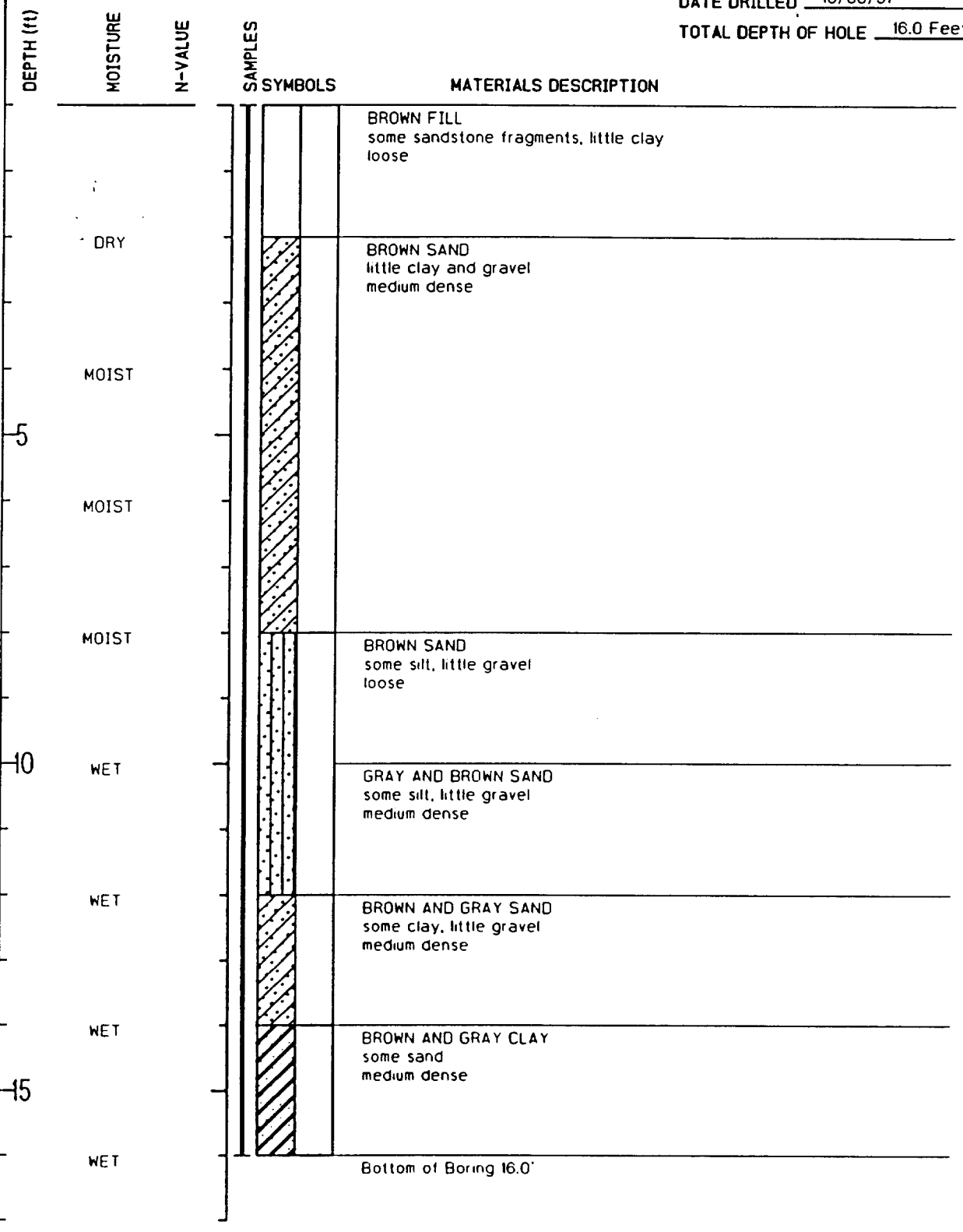
SE TECHNOLOGIES INC.,
98 VANADIUM RD
BRIDGEVILLE, PA

Project Name: William Prym Inc.,	Date: 10/08/97
Boring Location: AOC 9 (OLD MILL POND)	Well Install Date: 10/08/97



BORING MW-10 *(Page 1 of 1)*

CLIENT NAME William Prym, Inc.
LOCATION AOC 6
DATE DRILLED 10/08/97
TOTAL DEPTH OF HOLE 16.0 Feet



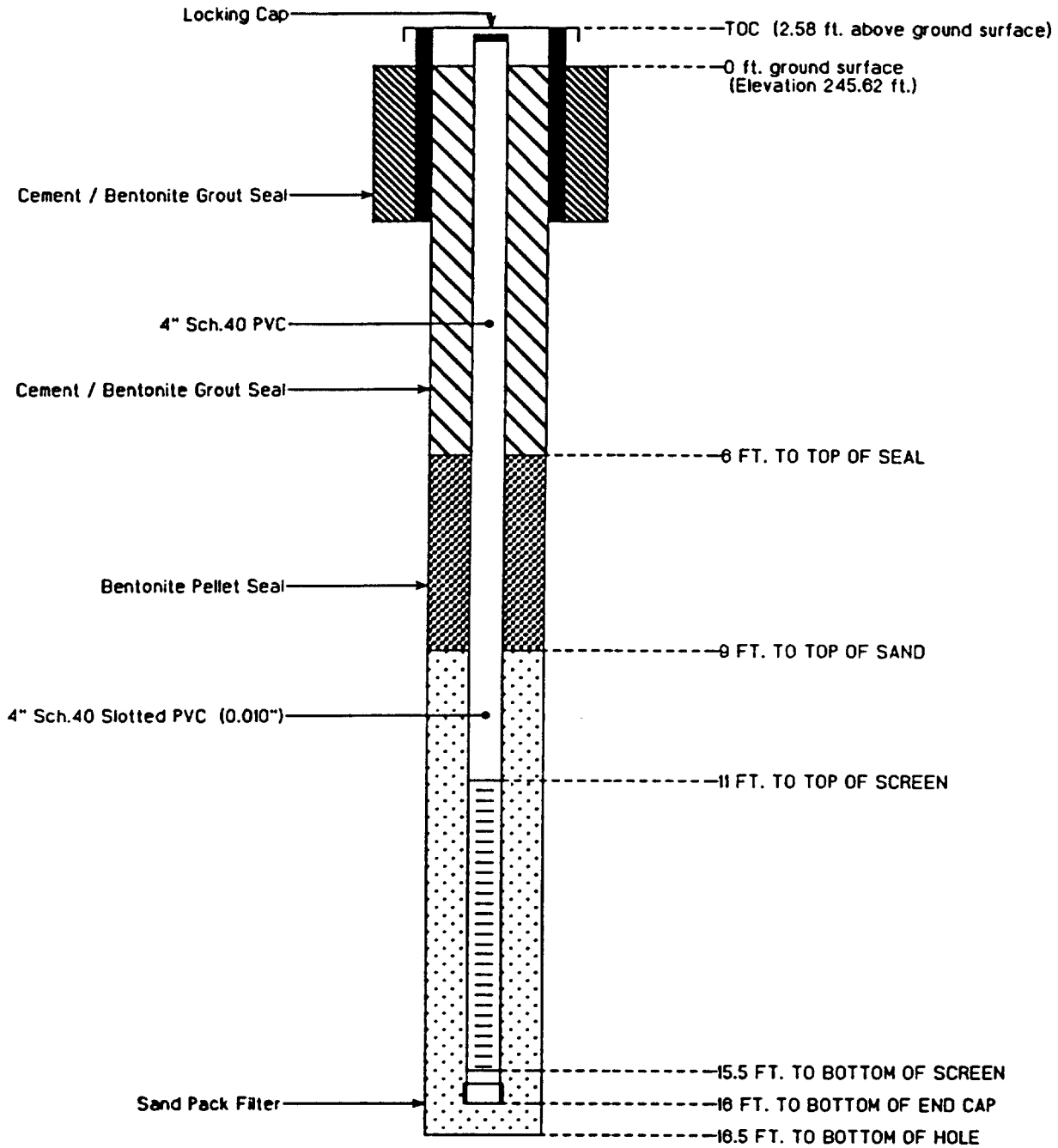
JOB NUMBER: 970330
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

Well Construction Log of MW-10

SE TECHNOLOGIES INC.,
98 VANADIUM RD
BRIDGEVILLE, PA

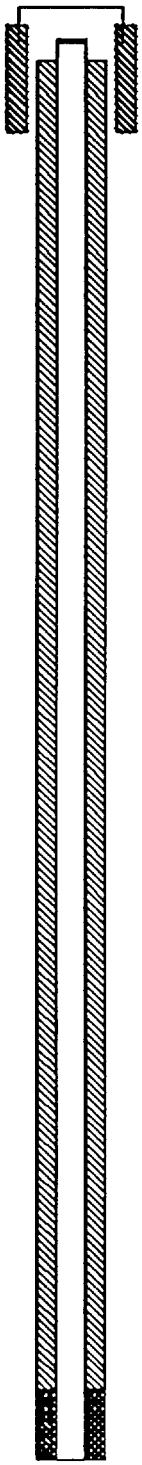
Project Name: William Prym Inc.,	Date: 10/08/97
Boring Location: AOC 6	Well Install Date: 10/08/97



WELL MW-10d *(Page 1 of 2)*

CLIENT NAME William Prym, Inc.
LOCATION Dayville, CT
DATE DRILLED 9/10/98-9/11/98
TOTAL DEPTH OF HOLE 55.0 Feet

DEPTH (ft)	MOISTURE	N-VALUE	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
	MOIST	2.2			BROWN SAND little clay and little gravel loose
	MOIST	1.2			BROWN SAND little gravel loose
5	MOIST	2.6			BROWN SAND little gravel and silt loose
	WET	1.4			GRAY AND BROWN SAND very loose
					GRAY SAND loose
10	WET				BROWN SAND little silt loose
	WET				
	WET				
15					BROWN AND GRAY SILT AND SAND loose to medium dense
	WET				
	WET				
					BROWN AND ORANGE SAND loose
20	WET				
	WET				
	WET				
25					BROWN GRAVEL loose
	WET				BROWN SAND loose
	WET				
					BROWN SAND some gravel medium dense
30	WET				BROWN SAND AND GRAVEL medium dense
	WET				
	WET				
35					
	WET				BROWN AND GRAY SAND AND GRAVEL medium dense to dense
	WET				
40	WET				



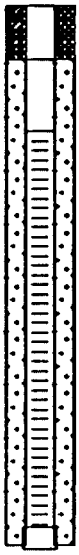
JOB NUMBER: 980322
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

WELL MW-10d *(Page 2 of 2)*

CLIENT NAME William Prym, Inc.
LOCATION Dayville, CT
DATE DRILLED 9/10/98-9/11/98
TOTAL DEPTH OF HOLE 55.0 Feet

DEPTH (ft)	MOISTURE	N-VALUE	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
45	WET				GRAY SAND AND GRAVEL very dense
	WET				
	WET				
50	WET				
	WET				
	WET				
55	WET				Bottom of Boring 55.0'
60					
65					
70					
75					
80					

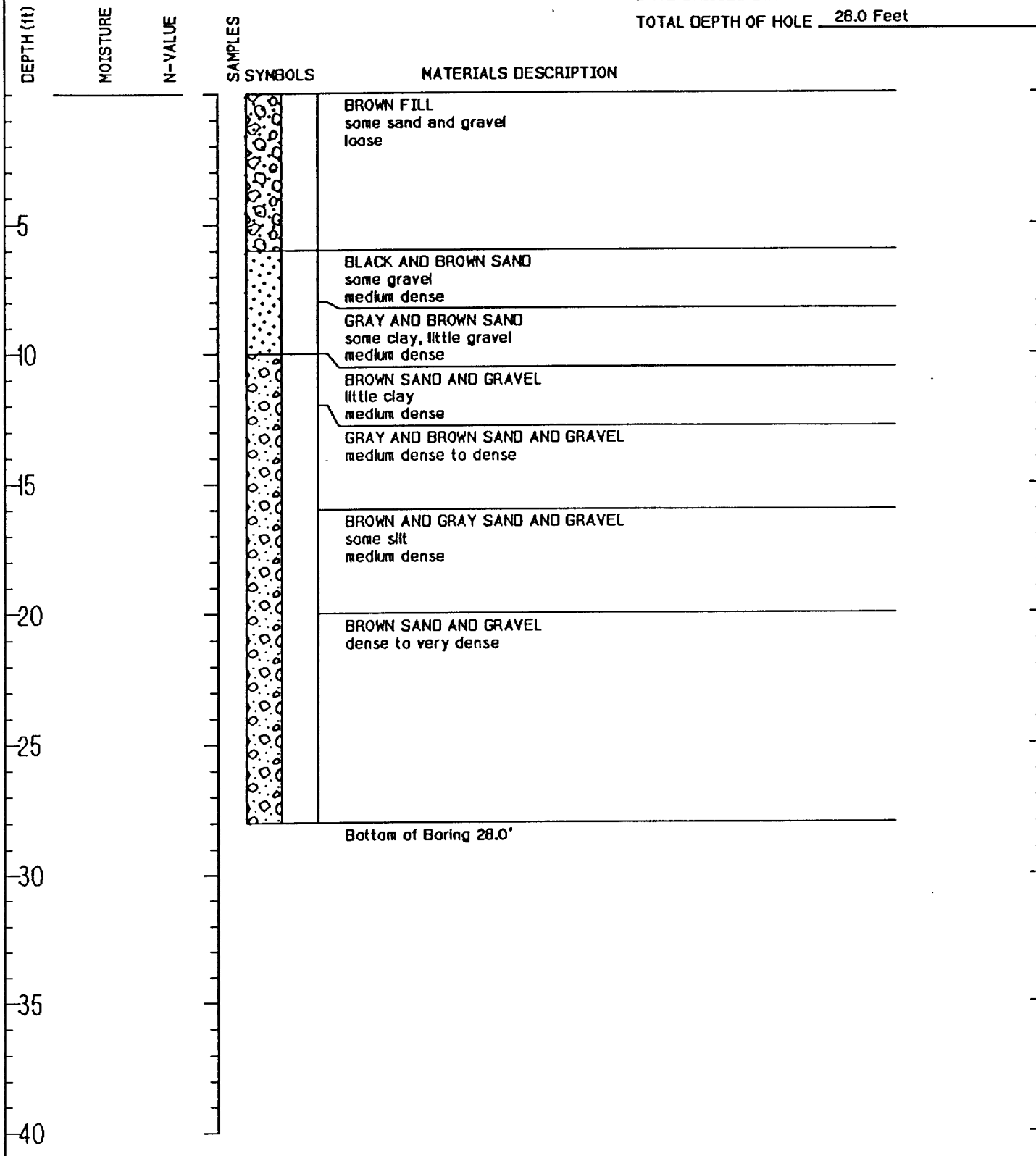


JOB NUMBER: 980322
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

BORING MW-11 *(Page 1 of 1)*

CLIENT NAME William Prym, Inc.
LOCATION Dayville CT
DATE DRILLED 9/9/98
TOTAL DEPTH OF HOLE 28.0 Feet

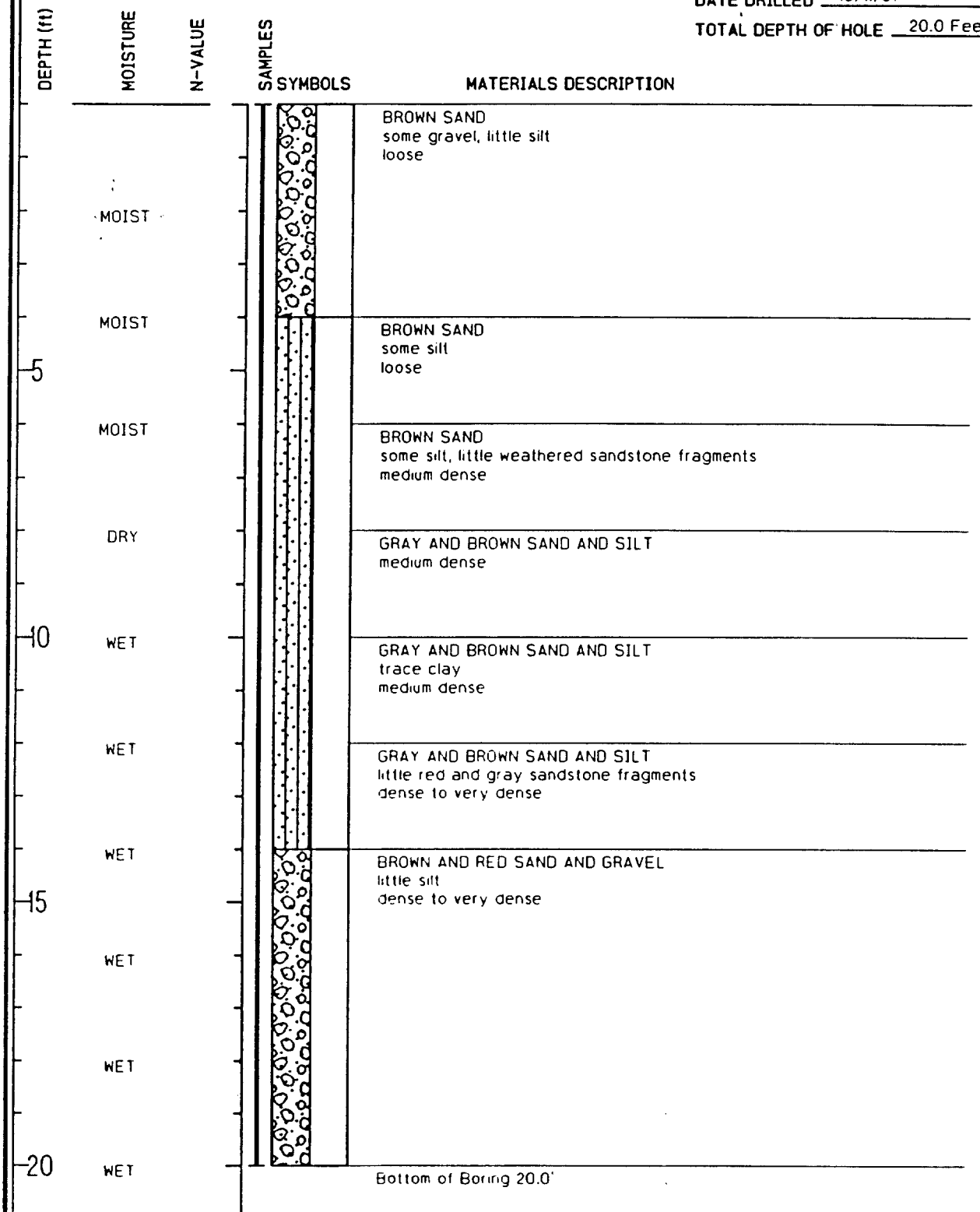


JOB NUMBER: 980322
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

BORING MW-12 *(Page 1 of 1)*

CLIENT NAME William Prym, Inc.
LOCATION AOC 6
DATE DRILLED 10/11/97
TOTAL DEPTH OF HOLE 20.0 Feet



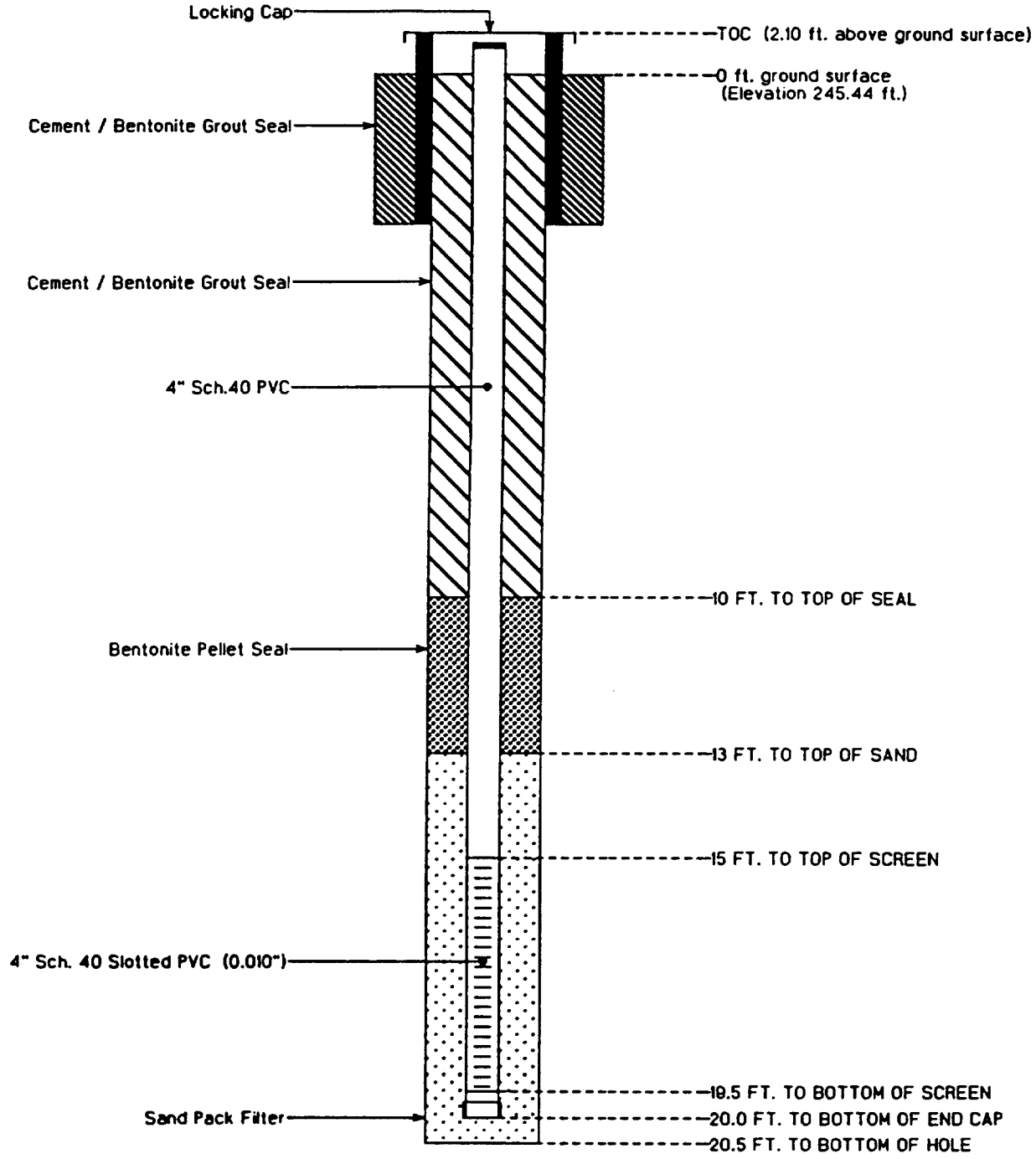
JOB NUMBER: 970330
LOGGED BY: Brian MacQuarrie

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

Well Construction Log of MW-12

SE TECHNOLOGIES INC.,
98 VANADIUM RD
BRIDGEVILLE, PA

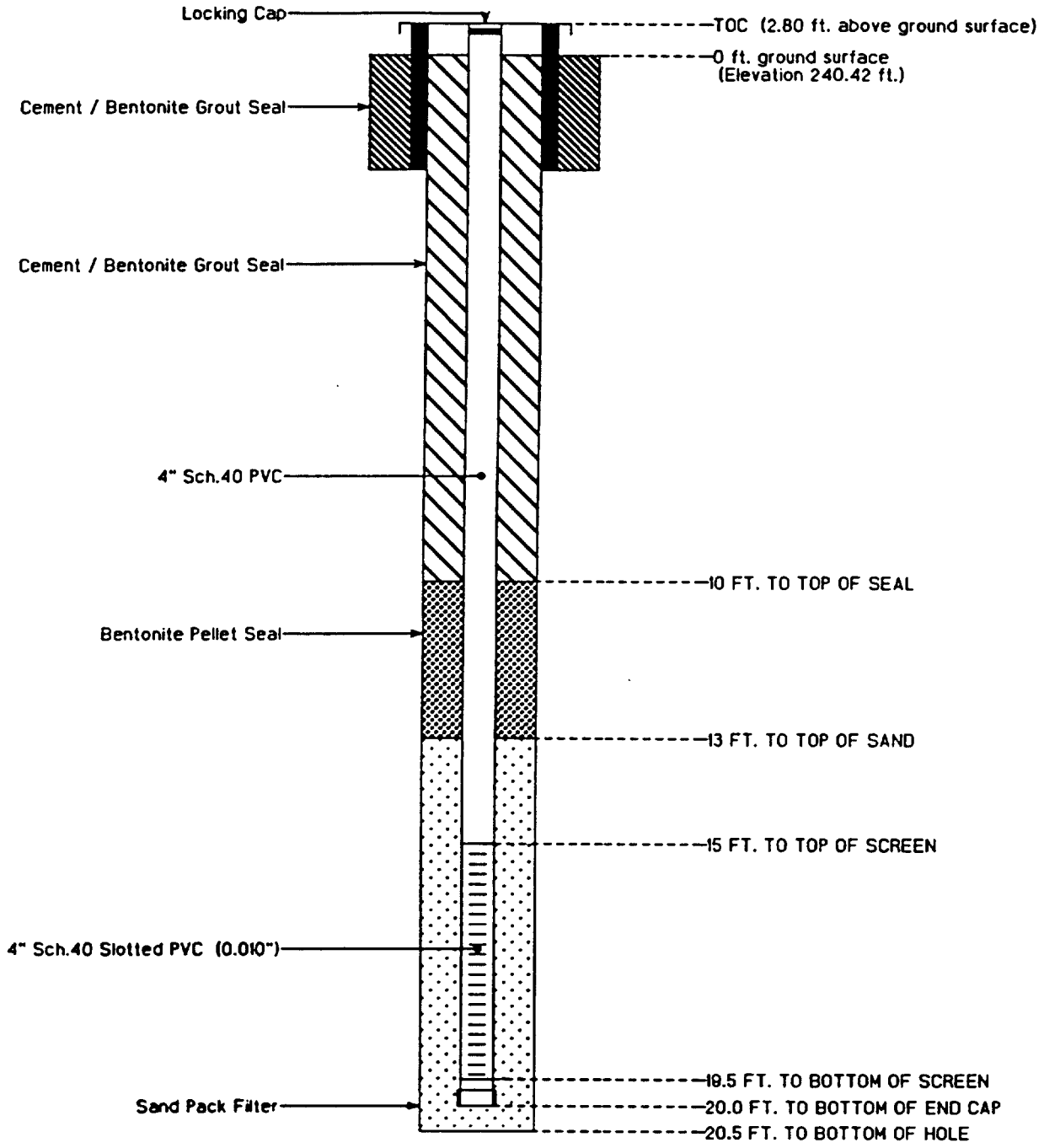
Project Name: William Prym Inc..	Date: 10/12/97
Boring Location: AOC 6	Well Install Date: 10/12/97



Well Construction Log of MW-13

SE TECHNOLOGIES INC.,
98 VANADIUM RD
BRIDGEVILLE, PA

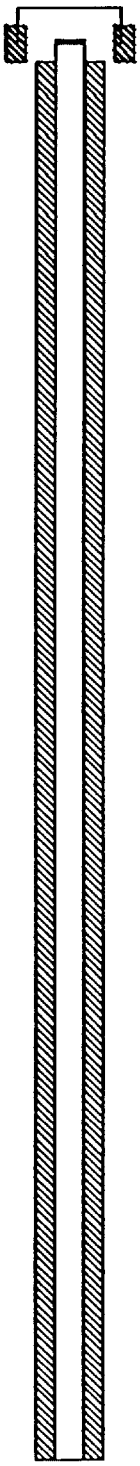
Project Name: William Prym Inc..	Date: 10/13/97
Boring Location: AOC 10	Well Install Date: 10/13/97



WELL MW-13d *(Page 1 of 2)*

CLIENT NAME William Prym, Inc.
LOCATION Dayville, CT
DATE DRILLED 9/14/98-9/15/98
TOTAL DEPTH OF HOLE 60.0 Feet

DEPTH (ft)	MOISTURE	N-VALUE	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
					CONCRETE
	DRY	1.0			BROWN SAND some gravel, little silt loose to medium dense
	DRY	10.8			BROWN SILT some clay, little gravel loose to medium dense
5	MOIST	3.0			BROWN SAND some silt and clay little gravel dense
	MOIST	2			GRAY AND BROWN SAND AND GRAVEL some silt, little clay dense
	MOIST	5.5			GRAY GRAVEL some sand dense
10	WET				
	WET				
15	WET				GRAY SAND AND GRAVEL loose to medium dense
	WET				BROWN AND GRAY CLAY little gravel stiff
20	WET				
	WET				BROWN CLAY firm to stiff
25	WET				GRAY SAND AND GRAVEL loose to medium dense
	WET				BROWN GRAVEL some sand medium dense to dense
30	WET				
	WET				
35	WET				
	WET				
40	WET				



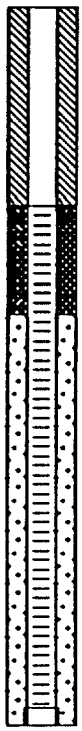
JOB NUMBER: 980322
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

WELL MW-13d *(Page 2 of 2)*

CLIENT NAME William Prym, Inc.
LOCATION Dayville, CT
DATE DRILLED 9/14/98-9/15/98
TOTAL DEPTH OF HOLE 60.0 Feet

DEPTH (ft)	MOISTURE	N-VALUE	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
45	WET				GRAY GRAVEL some sand, little clay medium dense
	WET				
	WET				GRAY AND BROWN GRAVEL some sand, little clay
50	WET				
	WET				
55	WET				
	WET				
60	WET				Bottom of Boring 60.0'
65					
70					
75					
80					



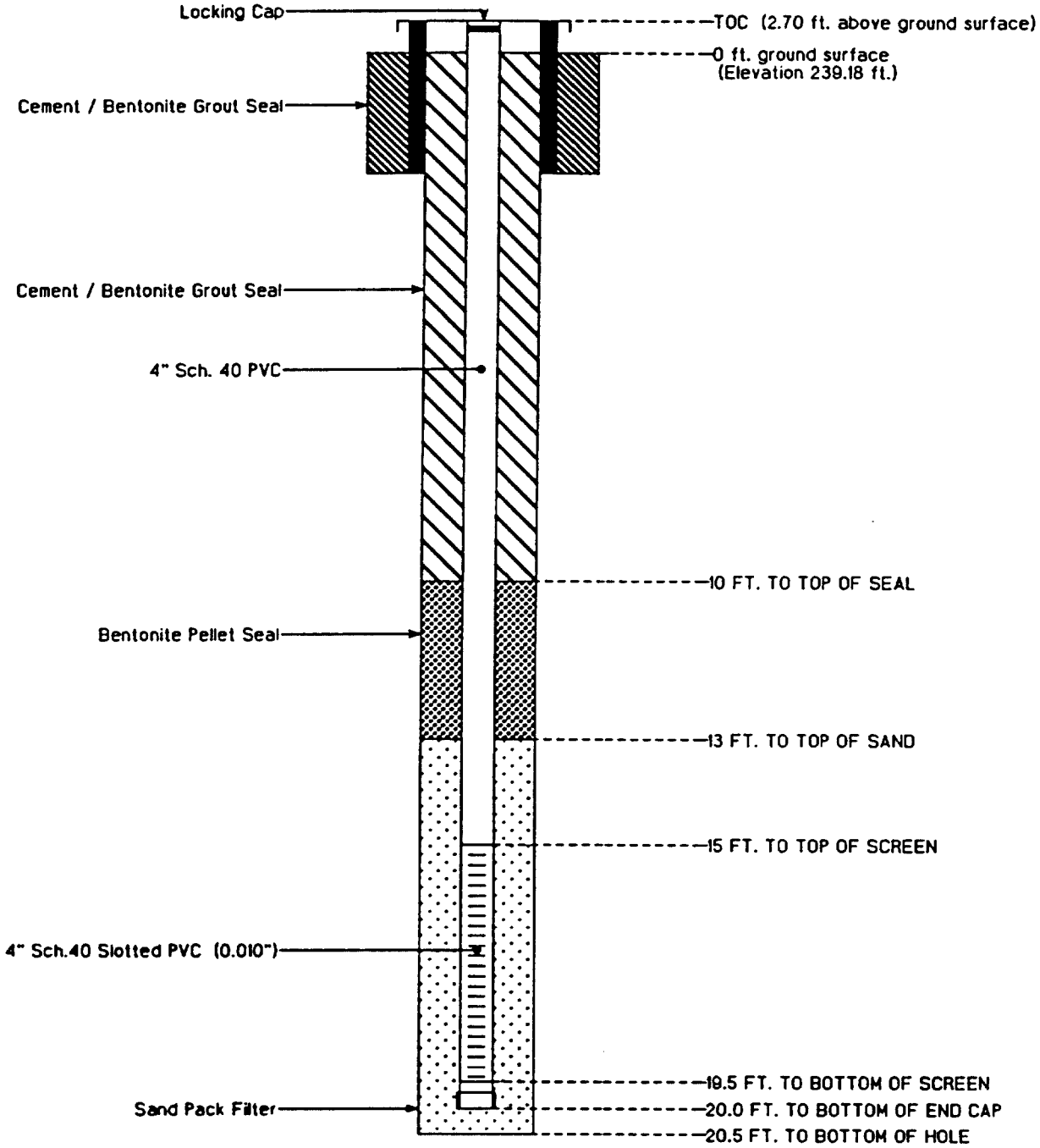
JOB NUMBER: 980322
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

Well Construction Log of MW-14

SE TECHNOLOGIES INC.,
98 VANADIUM RD
BRIDGEVILLE, PA

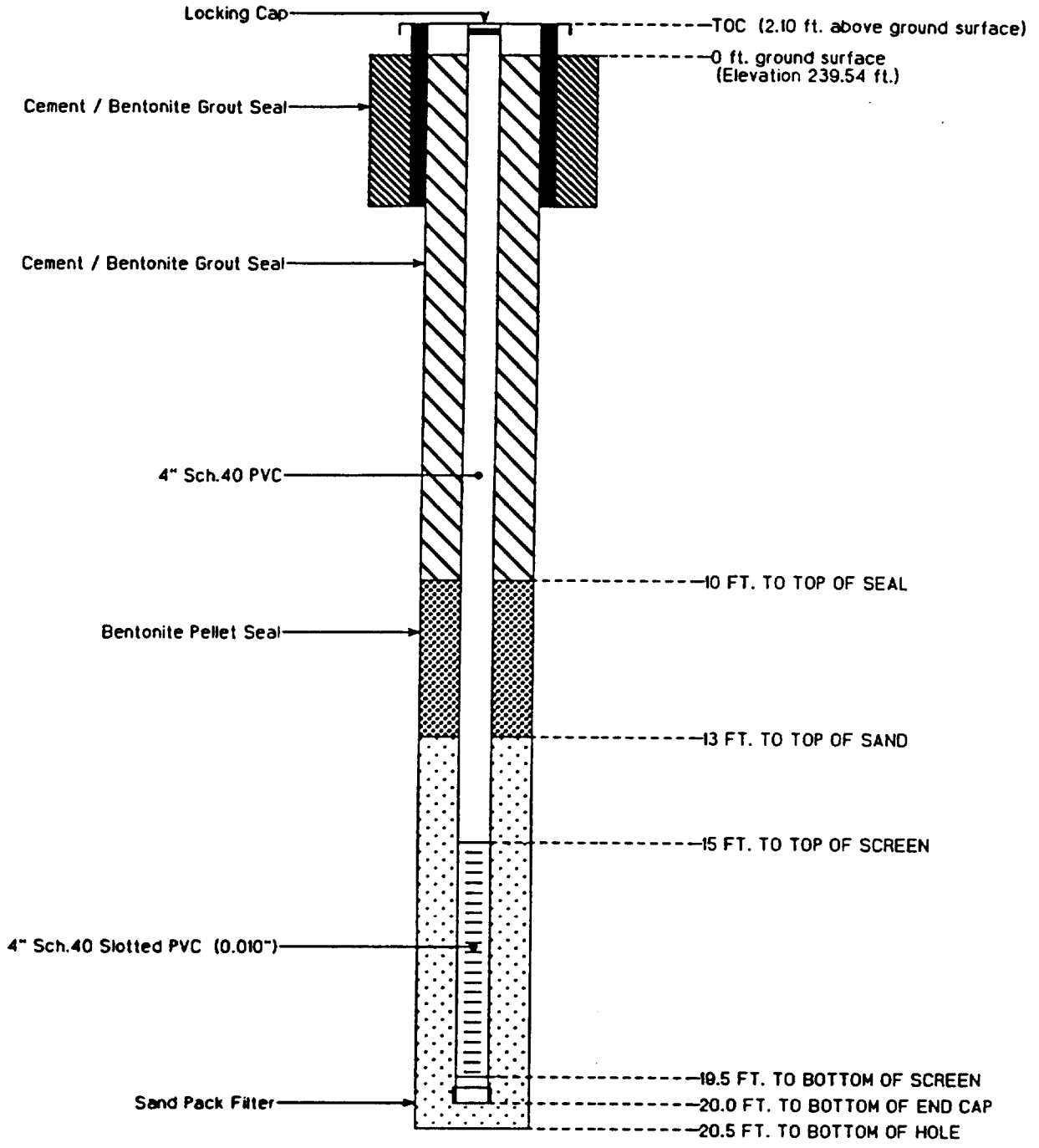
Project Name: William Prym Inc.,	Date: 10/13/97
Boring Location: AOC 10	Well Install Date: 10/13/97



Well Construction Log of MW-15

SE TECHNOLOGIES INC.,
98 VANADIUM RD
BRIDGEVILLE, PA

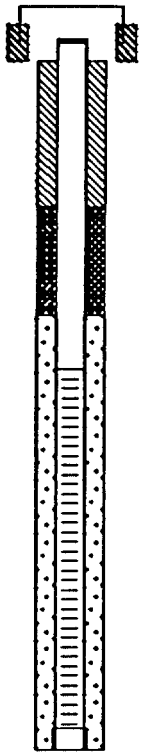
Project Name: William Prym Inc.,	Date: 10/15/97
Boring Location: AOC 10	Well Install Date: 10/15/97



WELL MW-16 *(Page 1 of 1)*

CLIENT NAME William Prym, Inc.
LOCATION Dayville CT
DATE DRILLED 9/9/98
TOTAL DEPTH OF HOLE 20.0 Feet

DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
			CONCRETE AND BOULDERS
0	DRY 6.0		GRAY AND BROWN SAND some silt, little clay and gravel loose to medium dense
5	MOIST 1.0		GRAY GRAVEL some sand medium dense
	MOIST 1.0		BROWN SAND some gravel medium dense
	MOIST 1.2		BROWN AND GRAY SAND some gravel loose to medium dense
10	WET		GRAY GRAVEL some sand medium dense
	WET		
15	WET		GRAY SAND some gravel medium dense
	WET		
	WET		
20			Bottom of Boring 20.0'
25			
30			
35			
40			



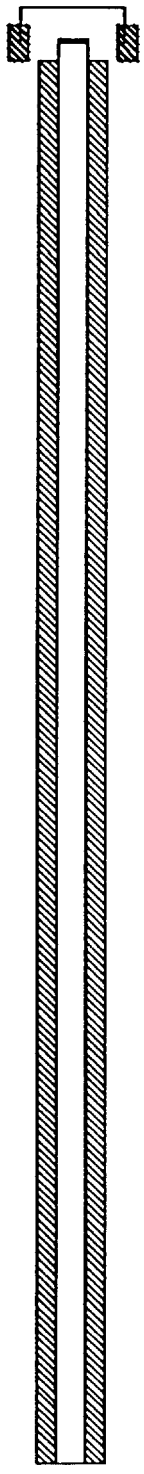
JOB NUMBER: 980322
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

WELL MW-16d *(Page 1 of 2)*

CLIENT NAME William Prym, Inc.
LOCATION Dayville, CT
DATE DRILLED 9/16/98-9/17/98
TOTAL DEPTH OF HOLE 59.0 Feet

DEPTH (ft)	MOISTURE	N-VALUE	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
					CONCRETE AND BOULDERS
	MOIST	0.0			BROWN SAND some silt, little gravel loose
5	MOIST	0.0			
	MOIST	NR			no recovery from split spoon 7 to 9 feet
	MOIST	7.2			BROWN GRAVEL some sand loose to medium dense
10	WET				
	WET				no recovery from split spoon 11 to 13 feet
15	WET				GRAY SAND some gravel, little silt loose to medium dense
20	WET				
25	WET				
30	WET				
35	WET				
40	WET				

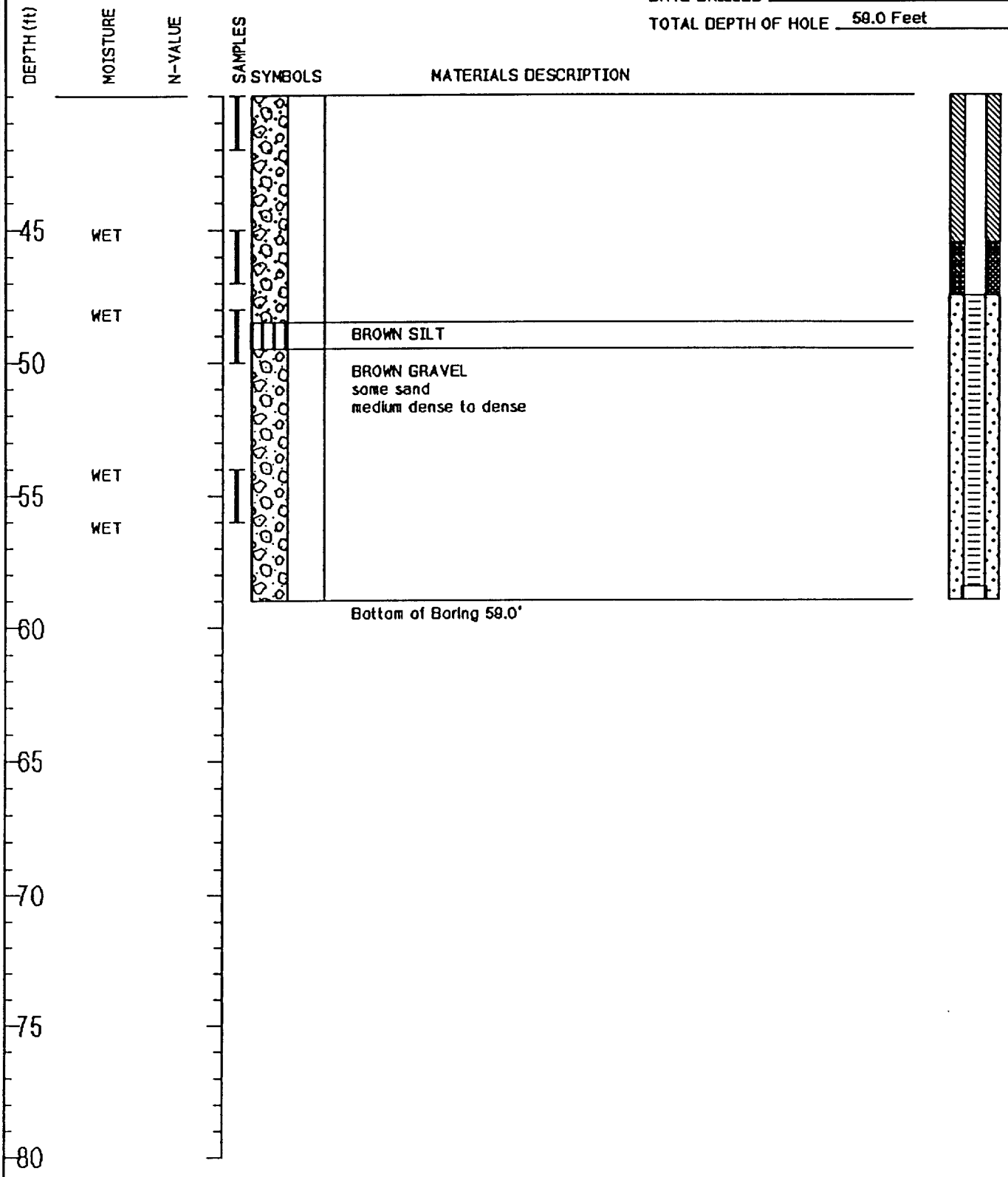


JOB NUMBER: 980322
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

WELL MW-16d *(Page 2 of 2)*

CLIENT NAME William Prym, Inc.
LOCATION Dayville, CT
DATE DRILLED 9/16/98-9/17/98
TOTAL DEPTH OF HOLE 59.0 Feet



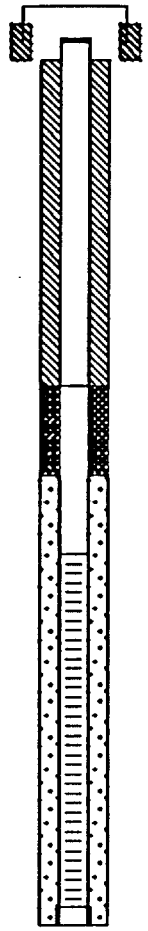
JOB NUMBER: 980322
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

WELL MW-17 *(Page 1 of 1)*

CLIENT NAME William Prym, Inc.
LOCATION Dayville, CT
DATE DRILLED 9/18/98
TOTAL DEPTH OF HOLE 25.0 Feet

DEPTH (ft)	MOISTURE	N-VALUE	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
					CONCRETE
	MOIST	2.2			BROWN SAND some gravel, little silt loose to medium dense
	MOIST	0.0			
5	MOIST	NR			no recovery from split spoon 5 to 7 feet
	MOIST	0.0			GRAY AND BROWN GRAVEL some sand medium dense
	MOIST	0.5			BROWN AND GRAY SAND AND GRAVEL loose to medium dense
10	MOIST	0.8			BROWN SAND some gravel medium dense
	MOIST	0.5			
15	MOIST	1.2			BROWN GRAVEL some sand medium dense
	WET				
	WET				
20	WET				BROWN CLAY some silt soft to firm
	WET				BROWN GRAVEL some sand medium dense
	WET				
25	WET				no split spoon samples from 21 to 25' due to heaving sands
					Bottom of Boring 25.0'
30					
35					
40					



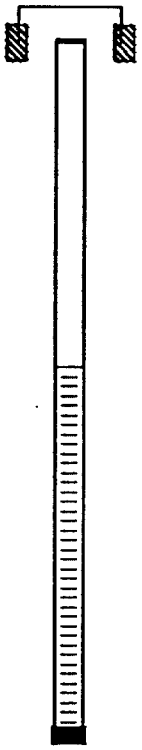
JOB NUMBER: 980322
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

WELL MW-18 *(Page 1 of 1)*

CLIENT NAME William Prym, Inc.
LOCATION Dayville, CT
DATE DRILLED 9/10/98
TOTAL DEPTH OF HOLE 20.0 Feet

DEPTH (ft)	MOISTURE	N-VALUE	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
	DRY	0.5			BROWN SAND little gravel loose
	DRY	0.8			some brick fragments from 4 to 6'
5	MOIST	0.0			BROWN SAND some gravel medium dense
	MOIST	0.0			
10	MOIST	1.0			
	MOIST				BROWN AND GREEN SAND some gravel, very little clay dense to very dense
	WET				GREEN AND BROWN CLAY some sand, very little gravel very stiff to hard
15	WET				
	WET				
20					Bottom of Boring 20.0'
25					
30					
35					
40					



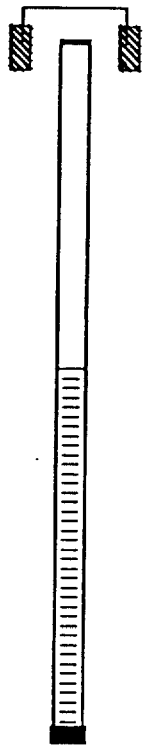
JOB NUMBER: 980322
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

WELL MW-19 *(Page 1 of 1)*

CLIENT NAME William Prym, Inc.
LOCATION Dayville, CT
DATE DRILLED 8/10/98
TOTAL DEPTH OF HOLE 20.0 Feet

DEPTH (ft)	MOISTURE	N-VALUE	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
	DRY	0.0			BROWN SAND AND GRAVEL loose to medium dense
	DRY	0.0			some bricks from 2 to 4'
5	MOIST	0.0			BROWN SAND little gravel medium dense to dense
	MOIST	1.0			BROWN AND GRAY SAND some gravel dense
10	MOIST	1.5			GRAY AND BROWN GRAVEL some sand very dense
	MOIST	0.0			GREEN BROWN AND GRAY GRAVEL some sand very dense
	WET	2.0			
15	WET				
	WET				
20	WET				Bottom of Boring 20.0'
25					
30					
35					
40					



JOB NUMBER: 980322
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

WELL MW-20 *(Page 1 of 1)*

CLIENT NAME William Prym, Inc.
LOCATION Dayville, CT
DATE DRILLED 9/9/98
TOTAL DEPTH OF HOLE 22.0 Feet

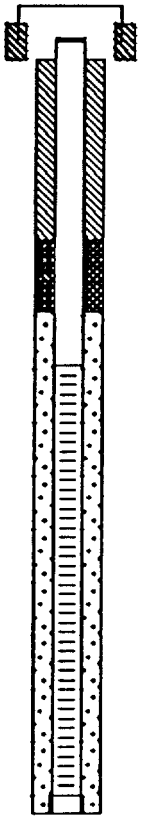
DEPTH (ft) | MOISTURE | H-Nu VALUE | SAMPLES | SYMBOLS | MATERIALS DESCRIPTION

0–10 ft: BROWN SAND
little gravel
loose

10–15 ft: BROWN SAND
little gravel
some lenses of gray and green sand

15–20 ft: BROWN SAND AND GRAVEL
dense

Bottom of Boring 22.0'



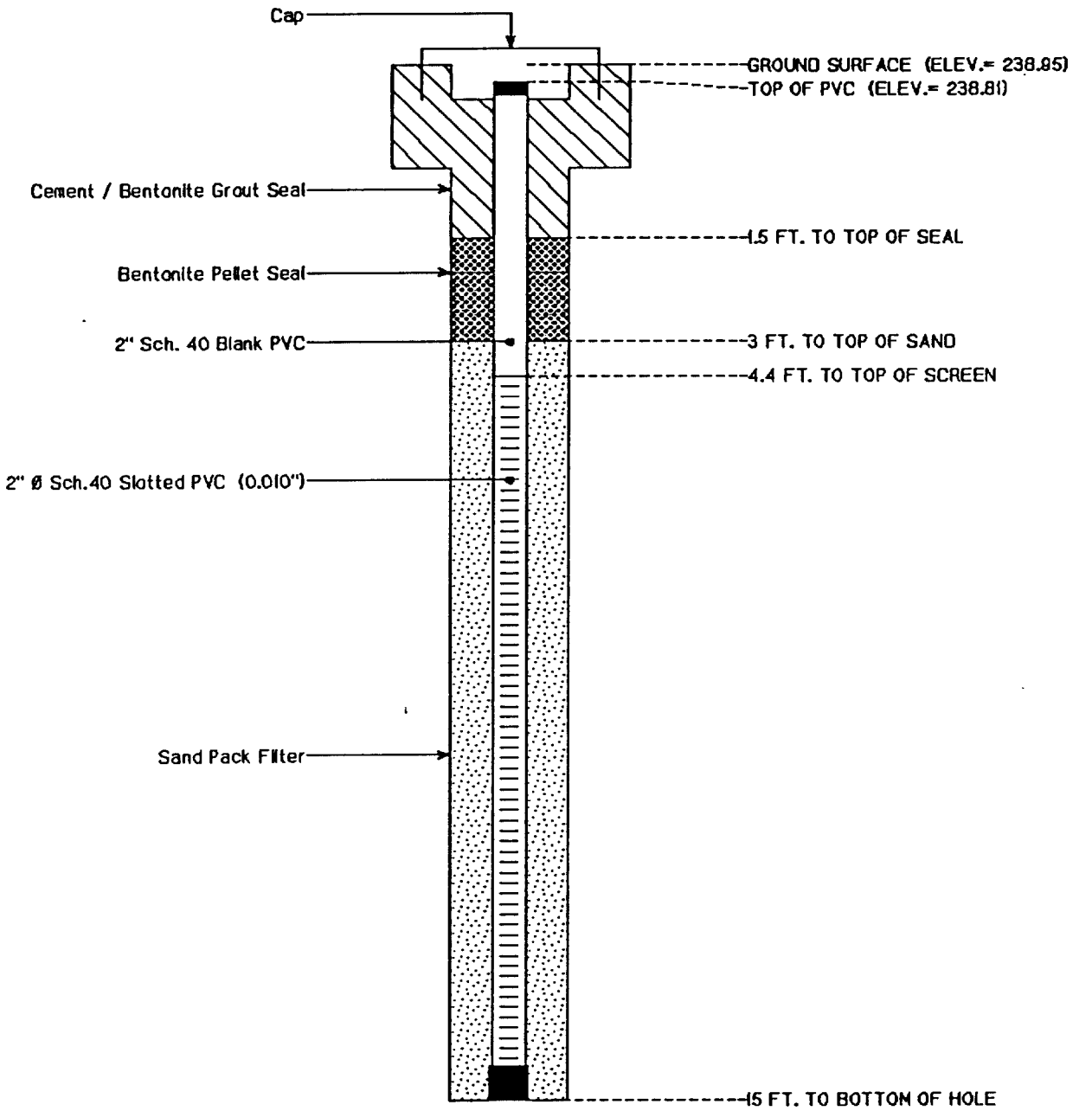
JOB NUMBER: 980322
LOGGED BY: Susan Seger

SE TECHNOLOGIES, INC.
98 VANADIUM RD. BRIDGEVILLE PA (412) 221-1100

Well Construction Log of P-1

SE Technologies, Inc.
98 Vanadium Road
Bridgeville, PA

Project Name: William Prym, Inc.	**Date:** 9/16/98
Boring Location: Dayville, CT	**Well Install Date:** 9/16/98



Well Construction Log of P-2

SE Technologies, Inc.
98 Vanadium Road
Bridgeville, PA

Project Name: William Prym, Inc.	**Date:** 9/18/98
Boring Location: Dayville, CT	**Well Install Date:** 9/18/98

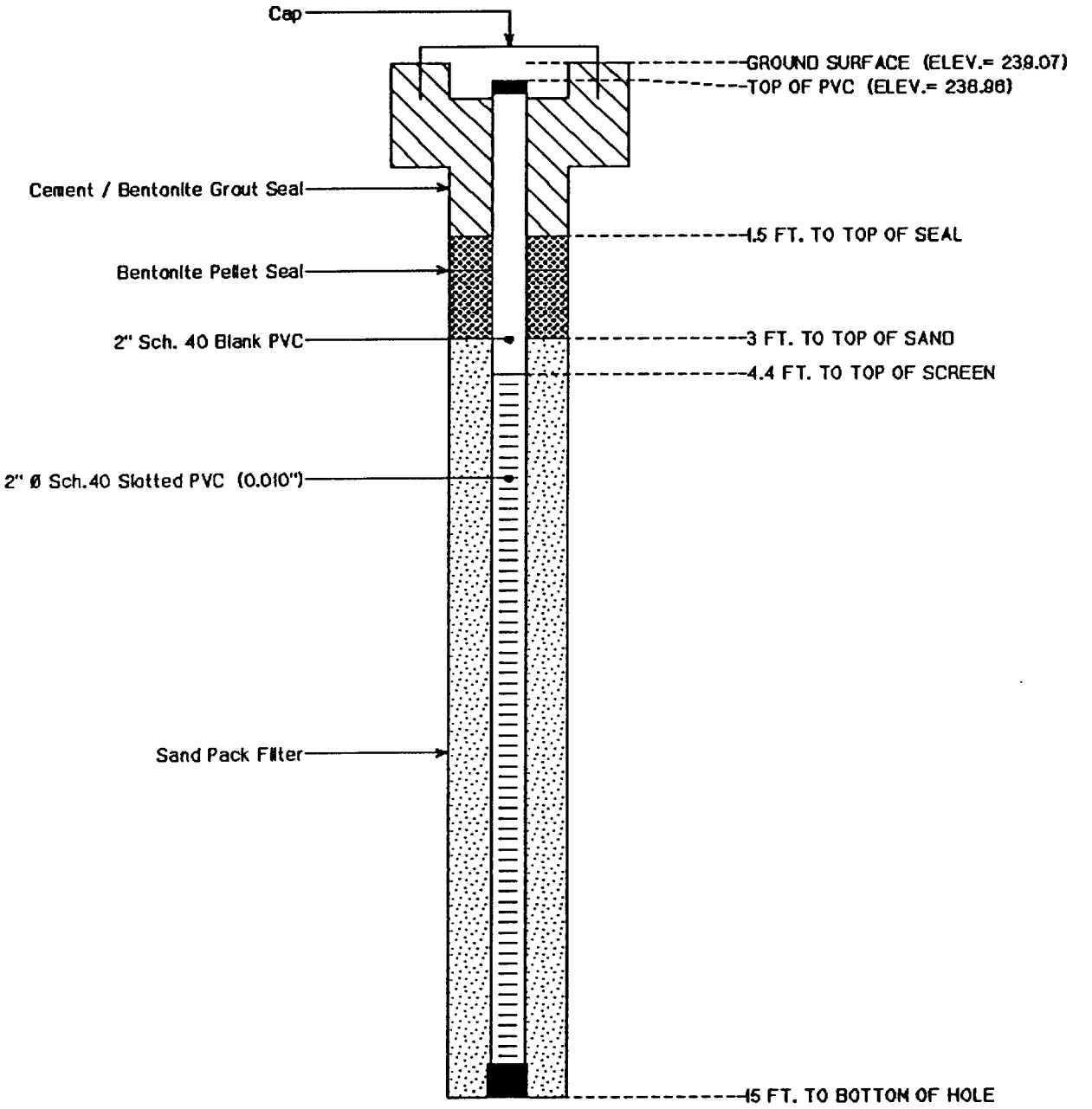


TABLE 3-9
SUMMARY OF MONITORING WELL CONSTRUCTION
PHASE II RFI
WILLIAM PRYM, INC.
DAYVILLE SITE

Monitoring Well	Top of Casing[1]	Top of Screen[2]	Screen Length[3]	Bottom of Well[2]	Depth to Bottom[3]
MW-1	245.91	240.91	5	230.93	14.98
MW-2	245.59	240.59	5	229.53	16.06
MW-3	245.98	240.98	5	230.32	15.66
MW-4	247.71	242.71	5	232.75	14.96
MW-5	252.37	242.37	10	232.87	19.50
MW-6	247.62	237.62	10	223.38	24.24
MW-7	246.73	236.73	10	227.61	19.12
MW-8	249.80	239.80	10	220.00	29.8
MW-9	248.20	243.20	5	233.60	14.6
MW-10	248.08	243.08	5	229.50	18.58
MW-10D	247.51	237.51	10	192.51	55.0
MW-11	249.77	244.77	5	219.54	30.23
MW-12	247.48	242.48	5	225.38	22.1
MW-13	240.05	235.05	5	217.25	22.8
MW-13D	239.20	224.20	15	179.20	60.0
MW-14	238.86	233.86	5	216.76	22.1
MW-15	238.44	233.44	5	215.74	22.7
MW-16	241.68	231.68	10	221.68	20.0
MW-16D	241.75	231.75	10	182.75	59.0
MW-17	246.90	236.90	10	221.90	25.0
MW-18	242.81	232.81	10	222.81	20.0
MW-19	242.81	232.81	10	222.81	20.0
MW-20	244.98	234.98	10	222.98	22.0
P-1	238.81	228.81	10	223.81	15.0
P-2	238.96	228.96	10	223.96	15.0

Notes:

1 - Feet MSL (Mean Sea Level), based on Survey conducted November 2, 1998.

2 - Measurements approximate based on well construction.

3 - Feet.

TABLE 3-10
GROUNDWATER AND SURFACE WATER ELEVATION READINGS
PHASE II RFI
WILLIAM PRYM, INC.
DAYVILLE SITE

Monitoring Well	Top of Casing[1]	GW Elevation 10/10/98	GW Elevation 12/17/98
MW-1	245.91	239.99	239.44
MW-2	245.59	240.57	239.85
MW-3	245.98	239.93	239.03
MW-4	247.71	242.22	239.95
MW-5	252.37	243.82	242.78
MW-6	247.62	230.44	229.57
MW-7	246.73	238.07	236.85
MW-8	249.80	232.38	230.33
MW-9	248.20	242.12	240.71
MW-10	248.08	238.61	237.59
MW-10D	247.51	230.87	230.15
MW-11	249.77	229.96	229.07
MW-12	247.48	232.56	231.10
MW-13	240.05	229.69	228.95
MW-13D	239.20	229.02	229.34
MW-14	238.86	229.78	229.02
MW-15	238.44	229.68	228.93
MW-16	241.68	230.62	229.94
MW-16D	241.75	230.55	229.89
MW-17	246.90	230.98	230.26
MW-18	242.81	230.03	229.41
MW-19	242.81	229.87	229.71
MW-20	244.98	231.68	230.44
P-1	238.81	228.86	227.95
P-2	238.96	228.99	228.27
SG-1	225.29	228.50	227.69
SG-2	225.85	228.50	227.65
SG-3	245.09	243.09	242.77
SG-4	225.57	229.15	228.07
SG-5	240.95	243.20	242.69
SG-6	246.06	243.21	242.87
SG-7	226.08	229.00	228.08

Notes:

1 - Feet MSL (Mean Sea Level), based on Survey conducted November 2, 1998.

TABLE 3-7
SUMMARY OF ANALYTICAL RESULTS - GROUNDWATER INORGANICS
PHASE II RFI
WILLIAM PRYM, INC.
DAYVILLE SITE

Field Sample ID	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	EPA RISK-BASED CONCENTRATIONS
Date Collected	10/13/98	10/13/98	10/13/98	10/12/98	10/12/98	10/13/98	10/14/98	10/12/98	TAP WATER
Cyanide (MG/L)	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	
Metals, Dissolved (MG/L)									
BARIUM	<0.010	<0.010	<0.010	0.012	0.026	<0.010	<0.010	0.014	2.6
CADMIUM	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.018
COPPER	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	1.5
LEAD	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
ARSENIC	0.0041	<0.0020	<0.0020	0.009	<0.0020	<0.0020	0.0033	<0.0020	0.000045
NICKEL	0.0057	0.032	0.16	<0.0030	<0.0030	<0.0030	0.024	<0.0030	0.73
Metals, Total (MG/L)									
BARIUM	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	2.6
CADMIUM	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.018
COPPER	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	1.5
LEAD	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
ARSENIC	0.0062	0.0026	<0.0020	0.012	<0.0020	<0.0020	0.006	<0.0020	0.000045
NICKEL	0.0076	0.029	0.20	<0.0030	<0.0030	<0.0030	0.051	<0.0030	0.73

Field Sample ID	MW-9	MW-10	MW-10D	MW-11	MW-12	MW-13	MW-13D	MW-14	EPA RISK-BASED CONCENTRATIONS
Date Collected	10/13/98	10/13/98	10/14/98	10/14/98	10/14/98	10/14/98	10/15/98	10/15/98	TAP WATER
Cyanide (MG/L)	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	
Metals, Dissolved (MG/L)									
BARIUM	<0.010	0.047	<0.010	<0.010	0.015	0.014	<0.010	<0.010	2.6
CADMIUM	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.018
COPPER	<0.024	0.029	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	1.5
LEAD	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
ARSENIC	0.0082	0.011	0.042	0.0074	<0.0020	<0.0020	<0.0020	0.0038	0.000045
NICKEL	0.065	0.34	0.0044	0.0092	<0.0030	0.84	0.0072	<0.0030	0.73
Metals, Total (MG/L)									
BARIUM	<0.010	0.059	0.012	<0.010	<0.010	<0.010	<0.010	0.024	2.6
CADMIUM	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.018
COPPER	<0.024	0.10	0.028	<0.024	<0.024	<0.024	<0.024	0.030	1.5
LEAD	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
ARSENIC	0.0078	0.017	0.051	0.011	<0.0020	0.0023	<0.0020	0.0063	0.000045
NICKEL	0.066	0.45	0.0055	0.0067	<0.0030	0.76	0.009	<0.0030	0.73

Field Sample ID	MW-15	MW-16	MW-16D	MW-17	MW-18	MW-19	MW-20		EPA RISK-BASED CONCENTRATIONS
Date Collected	10/15/98	10/16/98	10/15/98	10/14/98	10/15/98	10/15/98	10/14/98		TAP WATER
Cyanide (MG/L)	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020		
Metals, Dissolved (MG/L)									
BARIUM	<0.010	<0.010	<0.010	0.017	<0.010	<0.010	0.017		2.6
CADMIUM	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		0.018
COPPER	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024		1.5
LEAD	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050		
ARSENIC	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020		0.000045
NICKEL	<0.0030	<0.0030	<0.0030	<0.0030	0.94	<0.0030	0.20		0.73
Metals, Total (MG/L)									
BARIUM	<0.010	<0.010	<0.010	0.014	<0.010	<0.010	0.023		2.6
CADMIUM	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		0.018
COPPER	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024		1.5
LEAD	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050		
ARSENIC	<0.0020	<0.0020	<0.0020	<0.0020	0.0024	<0.0020	0.0061		0.000045
NICKEL	<0.0030	<0.0030	<0.0030	<0.0030	0.84	<0.0030	0.30		0.73

The samples for total metals were collected from 11/17 through 11/19/98.

TABLE 3-8
SUMMARY OF ANALYTICAL RESULTS -GROUNDWATER ORGANICS
PHASE II RFI
WILLIAM PRYM, INC.
DAYVILLE SITE

Field Sample ID	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	EPA RISK-BASED CONCENTRATIONS
Date Collected	10/13/98	10/13/98	10/13/98	10/12/98	10/12/98	10/13/98	10/14/98	10/12/98	TAP WATER
Volatiles (ug/l)									
BROMOBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
BROMODICHLOROMETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.17
BROMOFORM	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.33
BROMOMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8.52
CARBON TETRACHLORIDE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.16
CHLOROBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	35
CHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.6
2-CHLOROETHYL VINYL ETHER	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
CHLOROFORM	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.15
CHLOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5
DIBROMOCHLOROMETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.13
DIBROMOMETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1,2-DICHLOROBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	64
1,3-DICHLOROBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	14
1,4-DICHLOROBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.47
DICHLORODIFLUOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	350
1,1-DICHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	800
1,2-DICHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.12
1,1-DICHLOROETHENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.044
CIS-1,2-DICHLOROETHENE	<0.50	<0.50	<0.50	1.1	<0.50	<0.50	<0.50	<0.50	61
TRANS-1,2-DICHLOROETHENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	120
1,2-DICHLOROPROPANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.16
CIS-1,3-DICHLOROPROPENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
TRANS-1,3-DICHLOROPROPENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
METHYLENE CHLORIDE	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	4.10
1,2,3-TRICHLOROPROPANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.0015
1,1,1,2-TETRACHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.41
1,1,2,2-TETRACHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.053
TETRACHLOROETHENE	<0.50	<0.50	<0.50	3.5	<0.50	<0.50	<0.50	<0.50	1.1
1,1,1-TRICHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	540
1,1,2-TRICHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.19
TRICHLOROETHENE (TCE)	<0.50	<0.50	<0.50	0.90	<0.50	<0.50	<0.50	<0.50	1.6
TRICHLOROFLUOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1,300.00
VINYL CHLORIDE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.019

1 = CTDEP Remediation Criteria
EPA Region III Risk Based Concentrations for Tap Water, April 1998

TABLE 3-8
SUMMARY OF ANALYTICAL RESULTS -GROUNDWATER ORGANICS
PHASE II RFI
WILLIAM PRYM, INC.
DAYVILLE SITE

Field Sample ID	MW-9	MW-10	MW-10D	MW-11	MW-12	MW-13	MW-13D	MW-14	EPA RISK-BASED CONCENTRATIONS
Date Collected	10/13/98	10/13/98	10/14/98	10/14/98	10/14/98	10/14/98	10/15/98	10/15/98	TAP WATER
Volatiles (ug/l)									
BROMOBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
BROMODICHLOROMETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.17
BROMOFORM	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.33
BROMOMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8.52
CARBON TETRACHLORIDE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.16
CHLOROBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	35
CHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.6
2-CHLOROETHYL VINYL ETHER	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
CHLOROFORM	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.15
CHLOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5
DIBROMOCHLOROMETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.13
DIBROMOMETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1,2-DICHLOROBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	64
1,3-DICHLOROBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	14
1,4-DICHLOROBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.47
DICHLORODIFLUOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	350
1,1-DICHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	800
1,2-DICHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.12
1,1-DICHLOROETHENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.044
CIS-1,2-DICHLOROETHENE	3.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	61
TRANS-1,2-DICHLOROETHENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	120
1,2-DICHLOROPROPANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.16
CIS-1,3-DICHLOROPROPENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
TRANS-1,3-DICHLOROPROPENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
METHYLENE CHLORIDE	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	4.10
1,2,3-TRICHLOROPROPANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.0015
1,1,1,2-TETRACHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.41
1,1,2,2-TETRACHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.053
TETRACHLOROETHENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.75	1.1
1,1,1-TRICHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	0.68	<0.50	3.5	540
1,1,2-TRICHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.19
TRICHLOROETHENE (TCE)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.6
TRICHLOROFLUOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1,300.00
VINYL CHLORIDE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.019

1 = CTDEP Remediation Criteria
EPA Region III Risk Based Concentrations for Tap Water, April 1998

TABLE 3-8
SUMMARY OF ANALYTICAL RESULTS -GROUNDWATER ORGANICS
PHASE II RFI
WILLIAM PRYM, INC.
DAYVILLE SITE

Field Sample ID	MW-15	MW-16	MW-16D	MW-17	MW-18	MW-19	MW-20	EPA RISK-BASED CONCENTRATIONS TAP WATER
Date Collected	10/15/98	10/16/98	10/15/98	10/16/98	10/15/98	10/15/98	10/14/98	
Volatiles (ug/l)								
BROMOBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
BROMODICHLOROMETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.17
BROMOFORM	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.33
BROMOMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8.52
CARBON TETRACHLORIDE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.16
CHLOROBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	35
CHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.6
2-CHLOROETHYL VINYL ETHER	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
CHLOROFORM	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.15
CHLOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5
DIBROMOCHLOROMETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.13
DIBROMOMETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1,2-DICHLOROBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	64
1,3-DICHLOROBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	14
1,4-DICHLOROBENZENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.47
DICHLORODIFLUOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	350
1,1-DICHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	800
1,2-DICHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.12
1,1-DICHLOROETHENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.044
CIS-1,2-DICHLOROETHENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.71	61
TRANS-1,2-DICHLOROETHENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	120
1,2-DICHLOROPROPANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.16
CIS-1,3-DICHLOROPROPENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
TRANS-1,3-DICHLOROPROPENE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
METHYLENE CHLORIDE	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	4.10
1,2,3-TRICHLOROPROPANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.0015
1,1,1,2-TETRACHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.41
1,1,2,2-TETRACHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.053
TETRACHLOROETHENE	<0.50	<0.50	<0.50	0.93	<0.50	<0.50	30	1.1
1,1,1-TRICHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	540
1,1,2-TRICHLOROETHANE	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.19
TRICHLOROETHENE (TCE)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.2	1.6
TRICHLOROFLUOROMETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1,300.00
VINYL CHLORIDE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.019

1 = CTDEP Remediation Criteria
EPA Region III Risk Based Concentrations for Tap Water, April 1998

2.6 General Groundwater

The Site is located in the Five Mile river valley, a north-south trending valley. The underlying strata is comprised of 80 to 100 feet of glacial sediments underlain by crystalline bedrock. The bedrock and surficial geology information of the general area is well documented by the U.S. Geological Survey and summarized in the Groundwater Assessment Report (Lancy, 1986). The glacial sediments consist primarily of coarse sand and gravel, with occasional lenses of finer materials, including silts and clays. This thick, unconsolidated aquifer is highly productive and used by residents and industry in the area. It should be noted that CTDEP has classified groundwater in the immediate vicinity of the site as GB, a classification not suitable for drinking water without treatment.

A total of fifteen shallow groundwater monitoring wells (MW-1 to MW-15) were present on the Site at completion of the Phase I RFI. Eight of these wells (MW-1 to MW-8) were installed in association with the former hydroxide sludge lagoons (AOC No. 2) and the other seven wells were installed as part of the Phase I RFI requirements. The locations of these monitoring wells are depicted in Figure 2-1. Two water supply wells for the facility, one screened within the shallow aquifer and one screened within the deeper bedrock aquifer, are also present on the Site. More detailed information on these supply wells is available within the Description of Current Conditions (DOCC), the RFA, and various other reports.

2.6.1 Previous Investigations of Groundwater

Groundwater monitoring data has been collected at the Prym facility for more than ten years. In addition, a groundwater assessment was performed in 1985. As a result of these efforts, the

general groundwater flow pattern for the shallow aquifer had been established in the immediate vicinity of AOC No. 2.

Groundwater flow patterns in developed portions of the Site are controlled by local topography and permeability of the soils and fill as well as the diversion of surface water flow from the Five Mile River into the pond and raceway network. By diverting a portion of the river's flow into Dayville Pond and into the raceway, a localized perched groundwater table was established in the vicinity of the existing Mill Pond (AOC No. 1) and the former sludge lagoons (AOC No. 2). An apparent aquitard beneath this portion of the property slows the rate of downward movement of this perched groundwater as it seeks the level of the local groundwater table. Both the headrace and pond appear to act as local groundwater recharge zones.

It is believed the woolen mill was originally built at the edge of a swamp located at the site of present day AOCs No. 1 and No. 2 (the original mill pond). The probable reason for selecting this site was that the original mill pond existed as a swamp, maintaining a higher water level than the adjacent river. This differential was used to power the mill. For the original mill pond area swamp to maintain a higher water level, it had to have an underlying soil layer of low permeability to create a perched water table. This natural phenomenon was exploited by diversion of river water into the swampy area, creating the original mill pond.

Historic groundwater monitoring data plus additional data gathered during the Phase I RFI determined that minor shallow groundwater contamination has resulted from the former sludge lagoons (AOC No. 2). In addition, the Phase I RFI indicated that some shallow groundwater contamination may have resulted from past activities within the former plating room (AOC No. 10) and the Mill Pond (AOC No. 1). The groundwater investigation contained within the Phase II RFI was designed to further define the shallow groundwater contamination in each of these areas, better define the interaction between the Five Mile River and shallow groundwater and determine the interaction between the shallow and deeper zones of the overburden aquifer.

2.6.2 Phase II RFI Investigation of Groundwater

The groundwater monitoring network in place at completion of the Phase I RFI did not adequately monitor shallow groundwater at locations downgradient of the AOCs that had been found to be potential sources of groundwater contamination. Accordingly, installation of additional wells was necessary.

Four additional shallow wells and two deep wells were installed to further define groundwater flow and quality in the vicinity of AOC No. 10. One shallow well (MW-16) was installed along the exterior of the manual plating room. A second well MW-17 was to also be installed in this area, but was erroneously installed approximately 130 feet further west along the main building wall and is actually west of the manual plating room. The intent of these wells was to help determine if the manual plating operations have had an impact on the shallow groundwater and help define the interaction of shallow groundwater in this area with the Tail Race. Impact of the improper placement of well MW-17 is discussed in Section 3.6.

The other two shallow wells (MW-18 and MW-19) were installed through the automatic plating room floor to give information on shallow groundwater quality beneath the plating room and determine whether groundwater in this area is flowing towards the Tail Race or the Five Mile River. Due to difficulties encountered during installation (see Section 3.2.1), the diameter of these

two wells were not in accordance with the Phase II RFI Work Plan, being 0.75 inch rather than 2 inch.

One deep well, MW-13D, was installed adjacent to MW-13 southeast of AOC No. 10. This well was installed to better define the vertical extent of nickel detected in MW-13 and provide data on the vertical groundwater gradient and stratigraphy in this area.

A second deep well, MW-16D was installed adjacent to MW-16 at AOC No. 10. This well was installed provide insight as to the horizontal and vertical extent of shallow contamination detected in the vicinity of the Mill Pond (AOC No.1), to provide further information on the general Site stratigraphy and hydrology and to determine the impact, if any, the manual plating line has had on the deeper aquifer.

Groundwater adjacent to AOC No. 2 was further defined with installation of an additional shallow monitoring well (MW-20) and a deep well (MW-10D) as depicted in Figure 2-1. Data from the existing wells in this area combined with these new wells provides more detail on the extent of nickel detected in groundwater in this portion of the Site, Site stratigraphy and vertical gradient. In addition, MW-10D also provides a third point in the deeper zone of the overburden aquifer, thereby allowing a determination of general flow direction at this depth.

In addition to the wells mentioned above, two piezometers (P1 and P2) were installed in the parking lot west of the river. These piezometers were installed to determine the interaction between shallow groundwater and the Five Mile River east of the Site.

All well installations (with the exception of MW-17 as noted above) and groundwater sampling took place in accordance with the Phase II RFI Work Plan. VOCs were analyzed by Method 8021 rather than Method 524 as specified in the Work Plan. The impact of these variations is discussed in Section 3.6.