163868

MEISER & EARL, INC.

Hydrogeologists

1512 WEST COLLEGE AVENUE
STATE COLLEGE, PENNSYLVANIA 16801

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September 2, 1998

Mr. Daniel McGoldrick
3HS32
USEPA Region III
1650 Arch Street
Philadelphia, PA 19107-2029

AR000115

Re: Progress Report - August 26 through September 2, 1998
Route 522 Bridge Site
East Walnut Street
Lewistown, Mifflin County, PA

Dear Dan:

This letter serves as the fifth progress report regarding implementation of the Remedial Action Plan (RAP) for the Route 522 Bridge Site, located on East Walnut Street, Lewistown, Mifflin County, Pennsylvania for the period August 26 through September 2, 1998. This interim progress report highlights the results of the recently completed step test conducted on Well MW-8.

Conduct a Pumping Test on Well MW-8

On August 26, 1998, *Meiser & Earl, Inc.* conducted a step-drawdown pumping test on Well MW-8 to determine: 1) the hydraulic characteristics of the aquifer at this location, 2) a long-term pumping rate, and 3) the area that could be influenced by this pumping. Static water levels were measured in Minit Mart Wells MW-2, MW-4, and MW-6 prior to beginning the test. Downhole pressure transducers and a Hermit data logger were used to measure water levels in pumping Well MW-8 and observation Well MW-6; water-level meters were used to measure water levels in observation Wells MW-2 and MW-4. Based on information gleaned from developing Well MW-8 on August 21, 1998, we had determined that Well MW-8 has a likely long-term yield of less than 0.5 gallon per minute (gpm). Refer to the graphs of pumping data collected during well development (Figures 1 and 2). Our experience indicates that this low yield is not unusual at this site. The step tests were therefore conducted at 0.2 gpm for 60 minutes and 0.4 gpm for 150 minutes. Following the first step, the well was allowed to recover for 88 minutes to near its pre-pumping level. During the pumping test, water-level measurements were plotted versus time on logarithmic graph paper to track the progress of the test.

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The results of the step-drawdown test are presented on Figures 3, 4, 5, and 6. The results of the step tests are as follow: 1) Wells MW-2 and MW-4 showed no response at either pumping rate; and 2) Wells MW-6 and MW-8 showed a response to pumping at both rates. After 60 minutes of pumping at 0.2 gpm, the water levels in Wells MW-8 and MW-6 dropped 2.27 feet and 1.42 feet, respectively. After 150 minutes of pumping Well MW-8 at 0.4 gpm, the water levels in Wells MW-8 and MW-6 dropped 9.01 feet and 5.8 feet, respectively.

Based on the results of the step-drawdown pumping test, we have estimated a long-term pumping rate for Well MW-8 of 0.25 gpm. As of August 28, 1998, Well MW-8 was connected into the existing pumping and treatment (P&T) system at a rate of 0.25 gpm. As of today, September 2, 1998, the treated discharge from the P&T system will be entering the Tributary to the Kishacoquillas Creek, per the NPDES temporary permit.

Because we do not have access to the nearby PennDOT wells to use as observation wells, and as we discussed in our telephone call Monday, August 31, 1998, we have decided to postpone a constant-rate pumping test on Well MW-8 until access to the PennDOT wells is granted. Once access is granted, it may be more beneficial to initially conduct a step drawdown pumping test on PennDOT Well MW05, since we have no data regarding its yield, and then decide, based on the predicted yield, whether the constant-rate pumping test should be conducted on Well MW-8 or on PennDOT Well MW05.

Access Agreements

PennDOT has provided no response, either verbal or written, concerning the access agreement revised by Nittany Oil Company and sent to PennDOT on August 4, 1998. This revised access agreement contained simple, straightforward revisions.

To summarize our phone discussion, on Monday, August 31, 1998: 1) we do not have a finalized access agreement with PennDOT; 2) PennDOT has not responded to our revisions to the access agreement submitted to them four weeks ago; and 3) PennDOT has not responded to our requests for additional data (dated June 25 and August 6, 1998), including a site map. In light of the fact that we recently installed a monitoring well in lieu of gaining access to PennDOT Well MW05, you acknowledged that our options to further remediate the site are limited until PennDOT provides access to their property. As you stated yesterday, the USEPA attorney stated that USEPA can issue an order to gain access from PennDOT only if access to the property has been denied. Access has not yet been denied, but response to the revised access agreement has not been forthcoming.

Survey Wells

On September 1, 1998, Knapka Surveying, Inc. surveyed the Minit Mart wells, the bridge survey points, and other site features to U.S. Geological Survey (U.S.G.S) datum using a nearby

U.S.G.S. benchmark. Because we do not have permission to access the PennDOT wells, we could only survey the top of the manhole covers, so we cannot yet confirm the well elevations at the top of casing. We should, however, be able to tie into their well elevations once we have access. The attached Site Location Map shows the approximate location of Well MW-8. The surveyed locations will be placed on a new site map which will include the entire Minit Mart and Route 522 site areas.

Drilling of PennDOT Replacement Well

Because the access agreement with PennDOT has not been finalized, the drilling date for installation of Well MW08 on the U.S. Route 522 right-of-way has not been scheduled. As stated in the previous progress report, Nittany Oil Company has previously met with the Lewistown Borough Engineer to outline the location of utilities and to locate proposed Well MW08. Hetager's Well Drilling has been alerted regarding our situation such that once the agreement with PennDOT is finalized, we will expedite drilling and other field activities. We continue to actively pursue finalization of this access agreement.

If you have any questions, please call me.

Sincerely,

Heidi R. Battista

Heidi R. Battista, M.E.P.C., P.G.
Project Hydrogeologist

cc: Samuel Sleek, Nittany Oil Company
Steven Faeth, Esquire

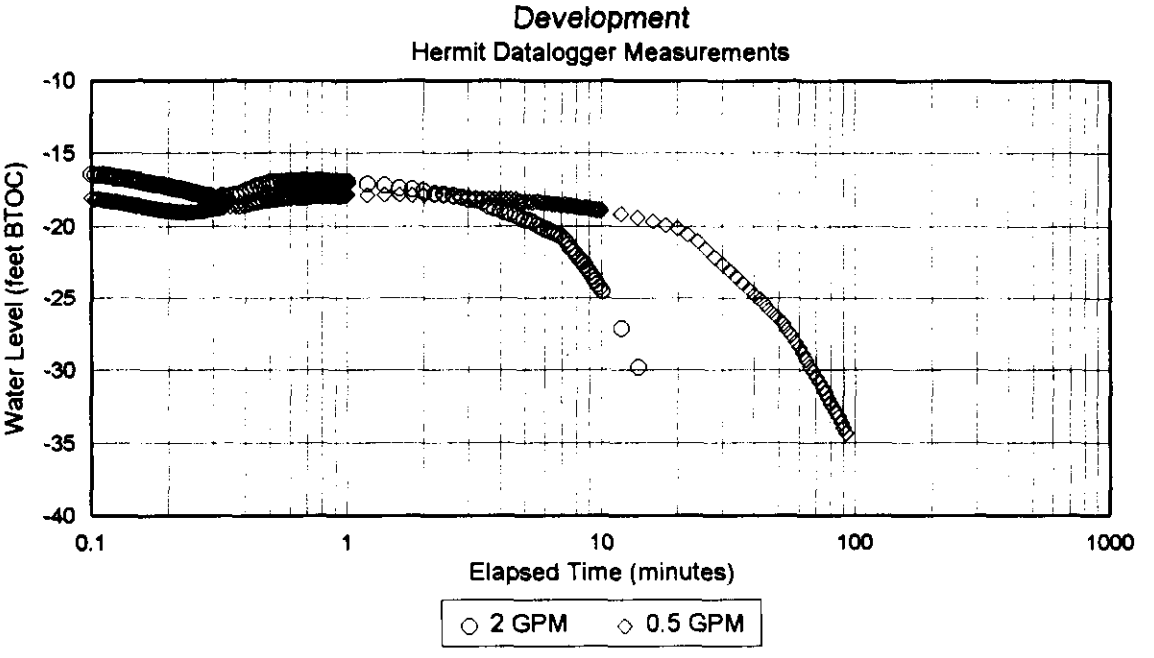
PNPS 522

FIGURE 1
Minit Mart 232

MW-8
Well Development by Pumping
August 21, 1998

Present at Site: Andrew G. McKinnon, P.G. (Meiser & Earl, Inc.)

Time Test Began: 12:05 PM
Pump Setting: 41 feet Below Top of Casing (BTOC) (6" steel)
Static Water Level: 15.17 feet Below Top of Casing (BTOC) (6" steel)



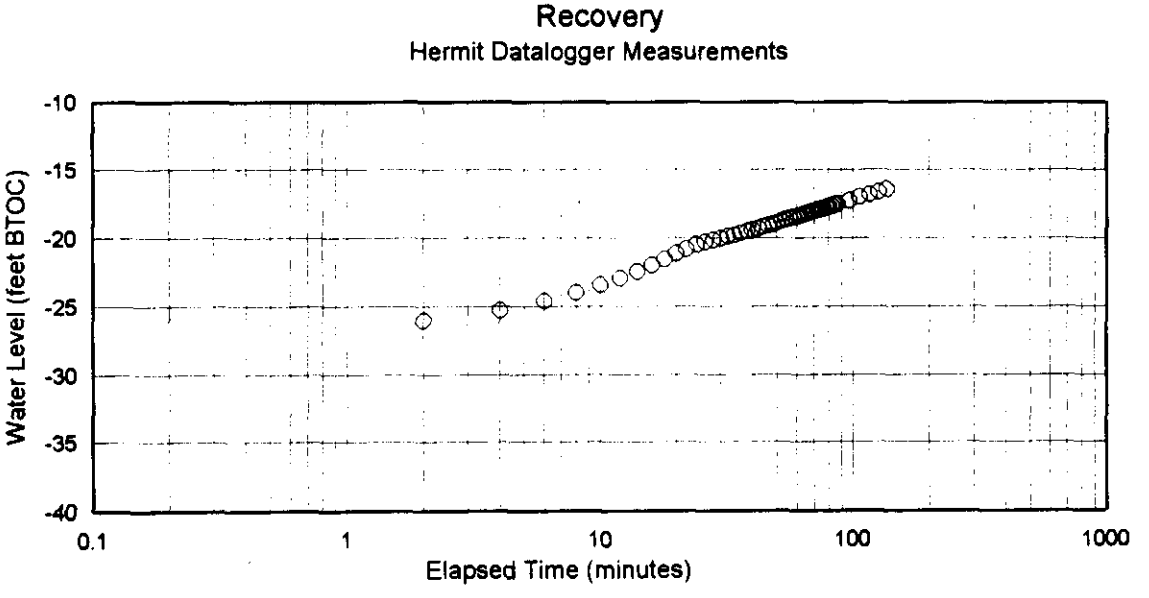


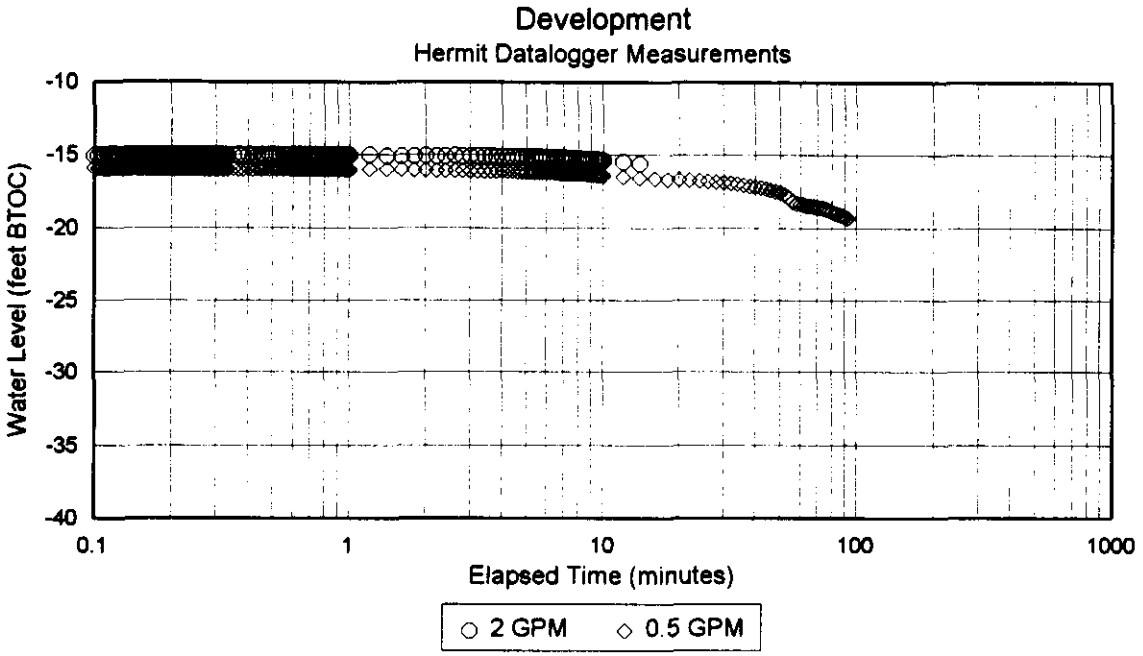
FIGURE 2
Minit Mart 232

Observation Well MW-6
Well Development by Pumping
August 21, 1998

Present at Site: Andrew G. McKinnon, P.G. (Meiser & Earl, Inc.)

Time Test Began: 12:05 PM

Static Water Level: 15.09 feet Below Top of Casing (BTOC) (6" steel)



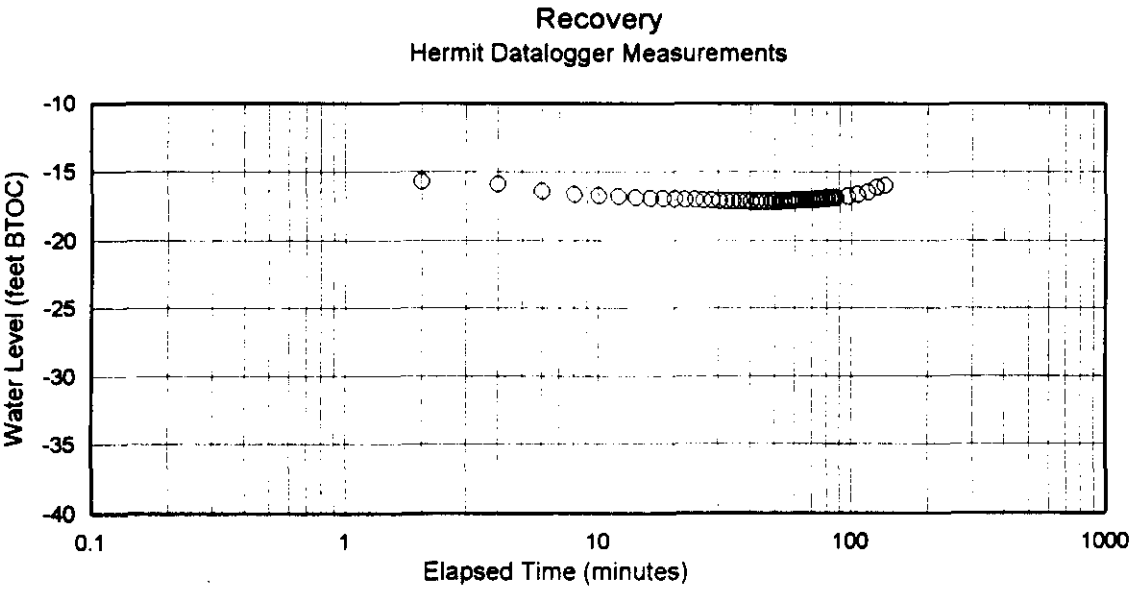


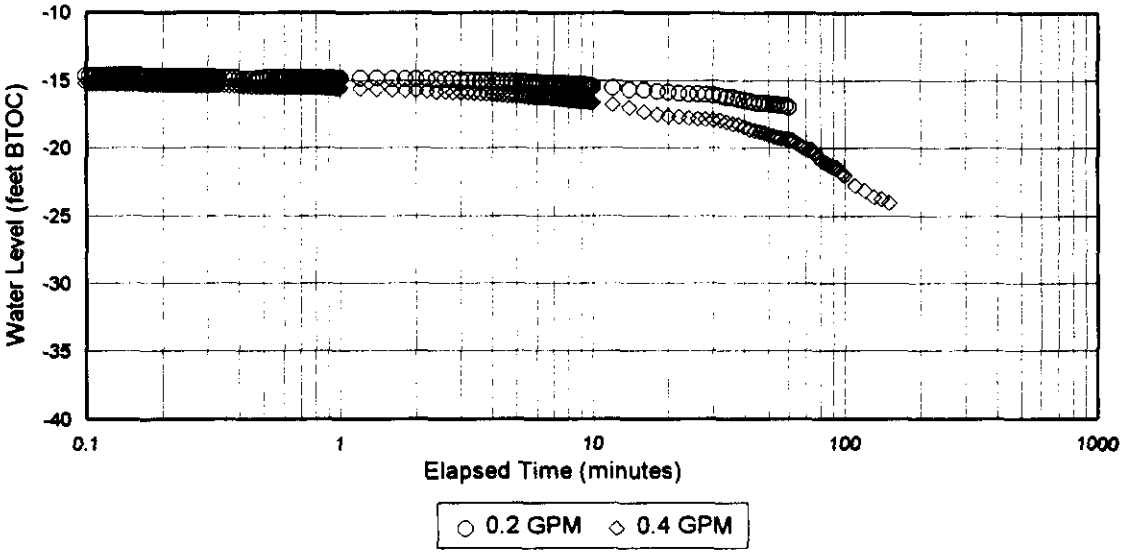
FIGURE 3
Minit Mart 232

MW-8
Step Test @ 0.2 gpm and 0.4 gpm
August 26, 1998

Present at Site: Andrew G. McKinnon, P.G. (Meiser & Earl, Inc.)

Time Test Began: 1:00 PM
Pump Setting: 40 feet Below Top of Casing (BTOC) (6" steel)
Static Water Level: 14.70 feet Below Top of Casing (BTOC) (6" steel)

Step Test
Hermit Datalogger Measurements



Pre-Pumping & Recovery Periods
Hermit Datalogger Measurements

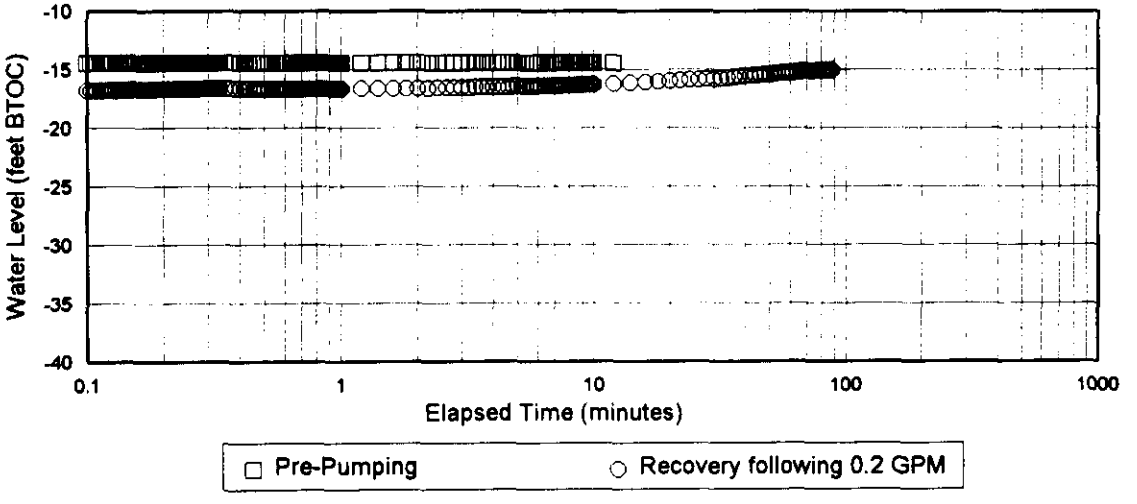


FIGURE 4
Minit Mart 232

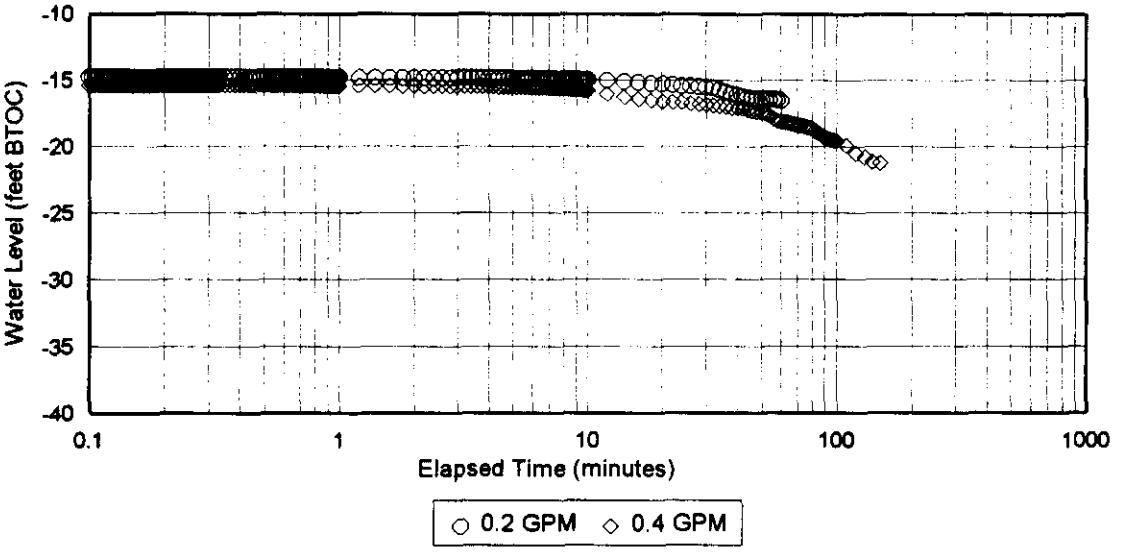
Observation Well MW-6
During Step Test of MW-8
August 26, 1998

Present at Site: Andrew G. McKinnon, P.G. (Meiser & Earl, Inc.)

Time Test Began: 1:00 PM

Static Water Level: 15.11 feet Below Top of Casing (BTOC)

Step Test
Hermit Datalogger Measurements



Pre-Pumping & Recovery Levels
Hermit Datalogger Measurements

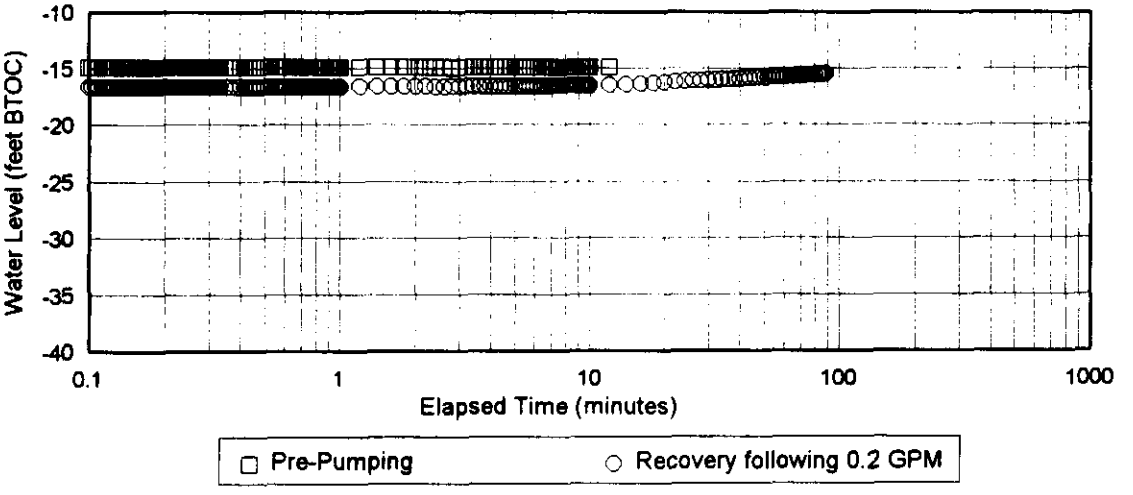


FIGURE 5
Minit Mart 232

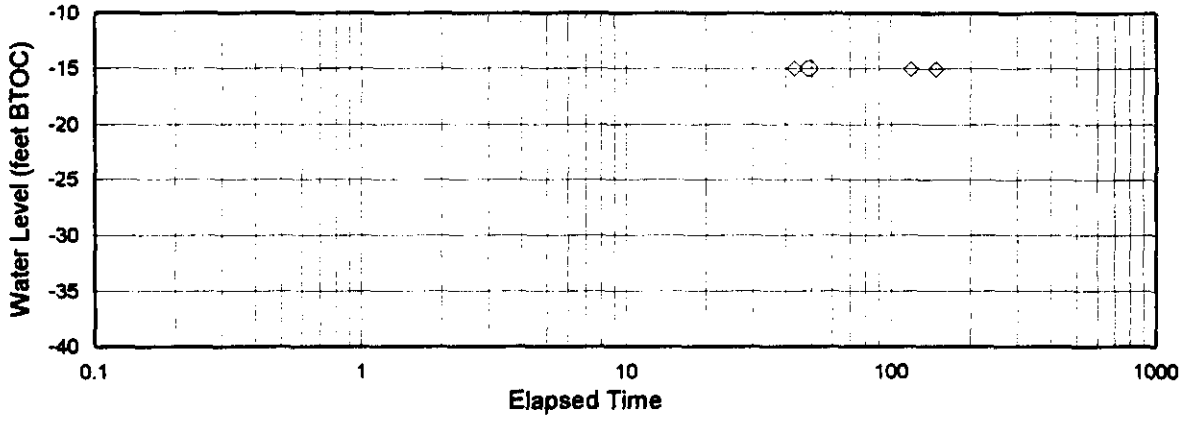
Observation Well MW-2
During Step Test of MW-8
August 26, 1998

Present at Site: Andrew G. McKinnon, P.G. (Meiser & Earl, Inc.)

Time Test Began: 1:00 PM

Static Water Level: 15.00 feet Below Top of Casing (BTOC)

Step Test
Manual Measurements



Recovery Levels
Manual Measurements

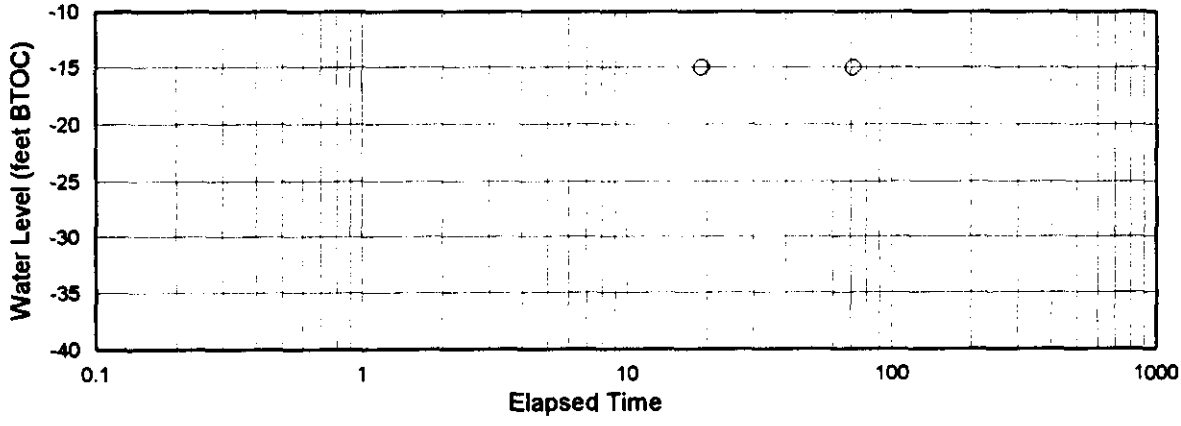


FIGURE 6
Minit Mart 232

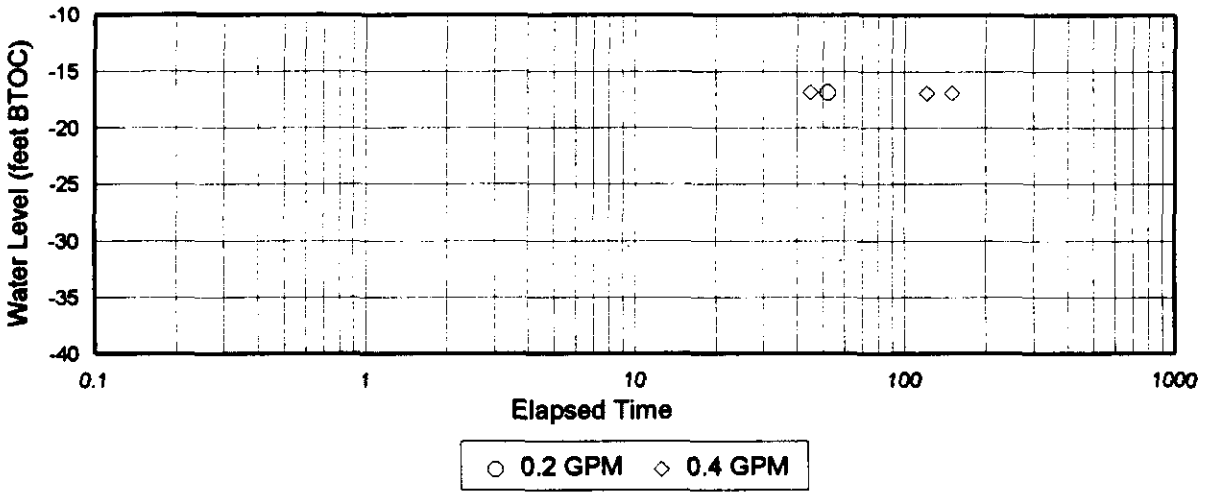
Observation Well MW-4
During Step Test of MW-8
August 26, 1998

Present at Site: Andrew G. McKinnon, P.G. (Meiser & Earl, Inc.)

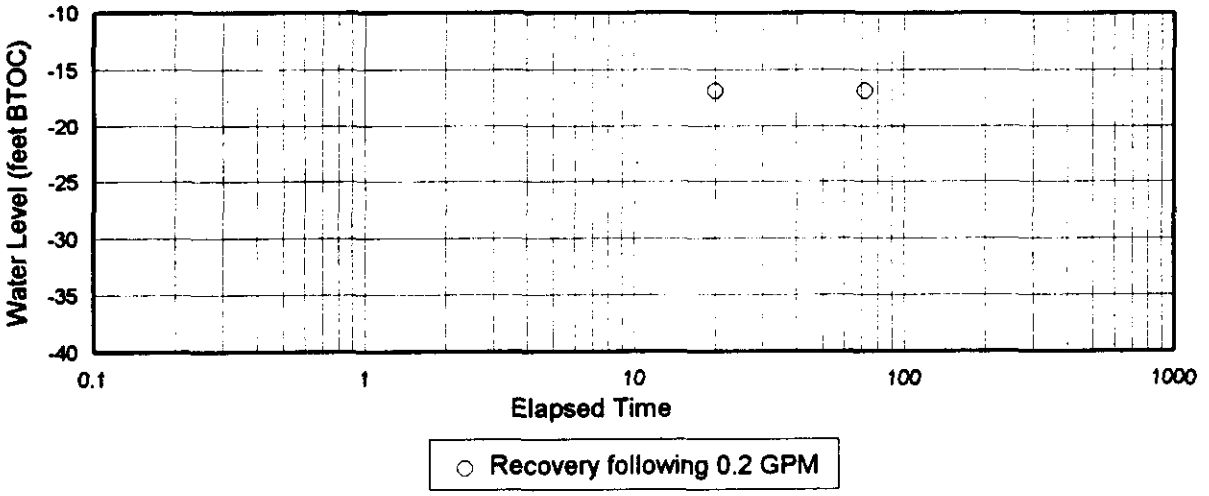
Time Test Began: 1:00 PM

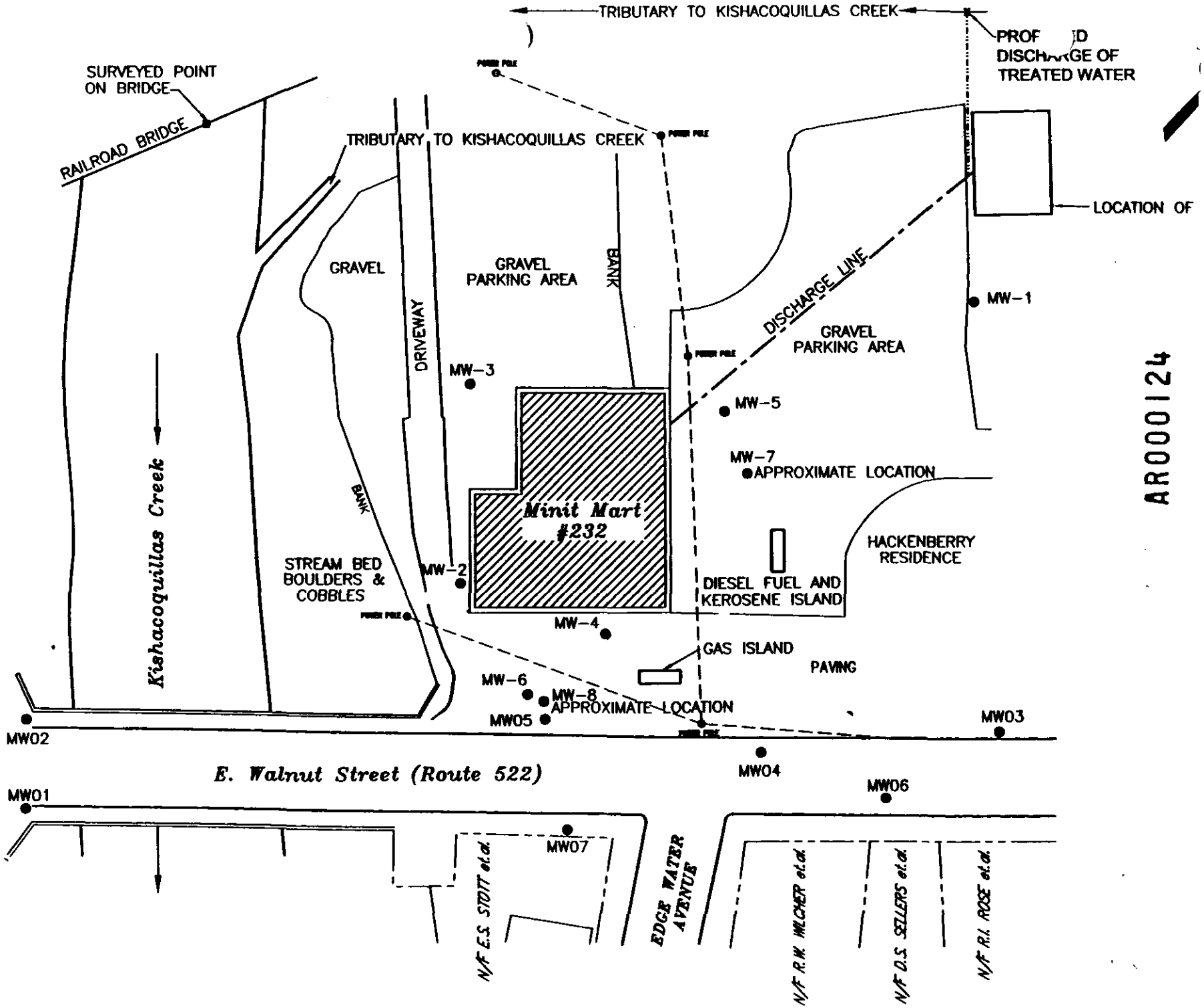
Static Water Level: 16.88 feet Below Top of Casing (BTOC)

Step Test
Manual Measurements



Recovery Levels
Manual Measurements




TRIBUTARY TO KISHACOQUILLAS CREEK
PROF D
DISCH GE OF
TREATED WATER
SURVEYED POINT
ON BRIDGE
RAILROAD BRIDGE
TRIBUTARY TO KISHACOQUILLAS CREEK
LOCATION OF
GRAVEL
GRAVEL
PARKING AREA
BANK
DISCHARGE LINE
MW-1
DRIVEWAY
MW-3
GRAVEL
PARKING AREA
MW-5
MW-7
APPROXIMATE LOCATION
Kishacoquillas Creek
BANK
Minit Mart
#232
HACKENBERRY
RESIDENCE
STREAM BED
BOULDERS &
COBBLES
MW-2
DIESEL FUEL AND
KEROSENE ISLAND
MW-4
GAS ISLAND
PAVING
MW-6
MW-8
APPROXIMATE LOCATION
MW05
MW03
MW02
MW04
E. Walnut Street (Route 522)
MW01
MW06
MW07
N/F E.S. STOTT et.al.
EDGE WATER
AVENUE
N/F R.W. WILCHER et.al.
N/F D.S. SELLERS et.al.
N/F R.I. ROSE et.al.

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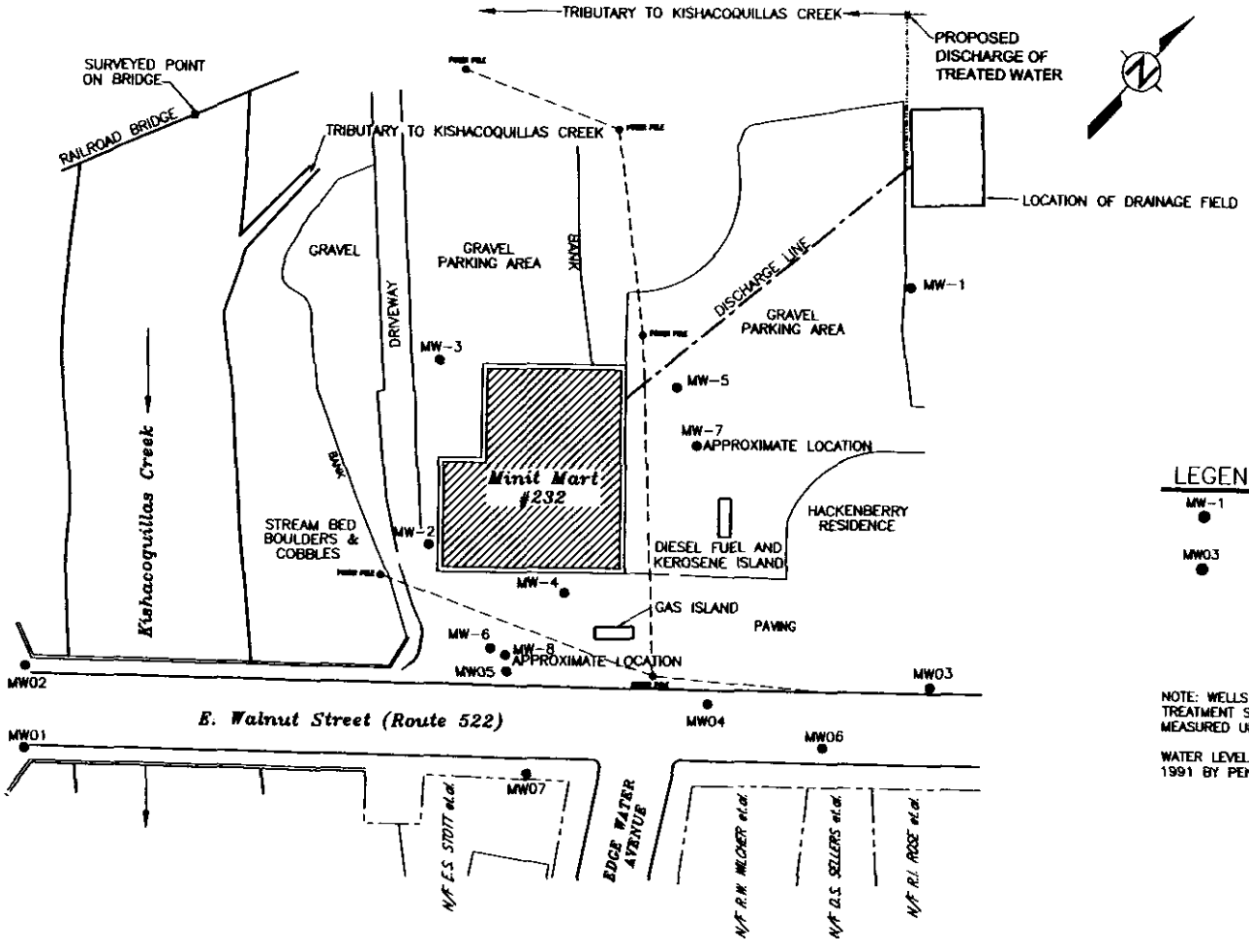

LEGEND

MW-1 ● MINIT MART MONITORING WELL

MW03 ● PennDOT MONITORING WELL

NOTE: WELLS MW-2 AND MW-7 ARE PUMPING WELLS IN MINIT MART PUMPING AND TREATMENT SYSTEM. WELL MW07 IS NO LONGER ACCESSIBLE. WATER LEVELS MEASURED UNDER NON-PUMPING CONDITIONS.

WATER LEVELS FOR WELLS MW03, MW04, MW06 AND MW07 MEASURED AUGUST 22, 1991 BY PENNDOT

SURVEYED BY PennTerra Engineering, Inc., State College, PA and Stotty & Lay.

REVISIONS	DWN BY	CHK'D BY

SCALE: 1" = 50'

9/2/98

FIGURE 1

SITE LOCATION MAP
ROUTE 522 BRIDGE SITE
LEWISTOWN, PA

MEISER & EARL, INC. / Hydrogeologists
1512 W. COLLEGE AVE., STATE COLLEGE, PA 16801

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