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CLEAN II TRANSMITTAL/DELIVERABLE RECEIPT

Contract No. N-68711-92-D-4670

Document Control No.: CTO-0142/0138

File Code: 0208

TO: Contracting Officer
Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 57CS1.RS
Building 127, Room 112
1220 Pacific Highway
San Diego, CA 92132-5190

DATE: December 12, 1997

CTO #: 142

LOCATION: MCAS El Toro

FROM: D. J. Tedaldi, Ph.D., P.E., Project Manager

DESCRIPTION: Meeting Minutes, Site 24 Pilot Test Update - DTD November 19, 1997

TYPE: Contract Deliverable (Cost) CTO Deliverable (Technical) X Other

VERSION: NA REVISION #:

ADMIN RECORD: Yes X No Category Confidential

SCHEDULED DELIVERY DATE: 12/12/97 ACTUAL DELIVERY DATE: 12/12/97

NUMBER OF COPIES SUBMITTED: 0/3C/3E

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MEETING MINUTES

Meeting Subject: Site 24 Pilot Test Update	Meeting Date: November 19, 1997 Meeting Time: 10:00 AM Meeting Place: Conference Call Meeting Notes Prepared By: Patrick Brooks
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Attendees: (*Part Time)

Navy
Bernie Lindsey, RPM

Bechtel
Pat Brooks, CTOL
Tim Latas, Field Manager
Dante Tedaldi, PM

Other
Glenn Kistner, U.S. EPA
Herb Levine, U.S. EPA
Tayseer Mahmoud, DTSC
Theodore Johnson, DTSC
Larry Vitale, RWQCB
John Broderick, RWQCB

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Pat Brooks reviewed the field work that had been accomplished since the last Site 24 Update meeting. The vacuum-enhanced groundwater extraction test at well 24EX3 was restarted on November 12 after power fluctuations at the Station had stabilized. Pat reminded the group that power fluctuations at the Station caused excessive loading of the vacuum motor, and the SVE system was shut down on November 10 to protect the motor. At that time, the groundwater extraction rate was reduced from 20 gallons per minute (gpm) to 15 gpm. The well is now pumping at 20 gallons per minute and about 40-inches of vacuum is being applied at the wellhead. The drawdown curve for 24EX3 (step No. 5) shows that total drawdown is about 23.5 feet. The drawdown at 20 gpm with an applied vacuum of 40 inches is about 23.5 feet compared to 27 feet of drawdown when pumping at 15 gpm with no applied vacuum. These data demonstrate that well capacity and radius of influence can be increased by applying a vacuum at the wellhead. No significant increase in TCE vapor concentration has been seen. TCE vapor results have generally varied between 50 and 150 micrograms per liter (µg/L). These data are consistent with the Phase II Remedial Investigation results; the data suggest the absence of DNAPL droplets within the radius of influence of 24EX3. The plan for the vacuum-enhanced test is to run it through November 26 and shut it down over the Thanksgiving holiday so water levels have equilibrated prior to starting the constant-rate test at well 24EX4.

The step-drawdown test at well 24EX4 is planned for November 21. Based on field observations during development and groundwater sampling, this well does not appear capable of producing as much water as well 24EX3. Based on those observations, Pat Brooks recommended that the pumping steps be 5, 10, and 15 gpm. Representatives from U.S. EPA, DTSC, and the RWQCB concurred with the proposed pumping steps for the step-drawdown test at well 24EX4.

MEETING MINUTES (continued)

The group had previously agreed (meeting of November 5) that a confirmation HydroPunch sample should be collected adjacent to the CPT 101 location where TCE was reported at 533 µg/L at 197 feet below ground surface (bgs). The confirmation sample was collected at 199 feet bgs on November 10 and the analytical result reported was 199 µg/L TCE. The HydroPunch samples were collected near the depth limit of the CPT rig. Pat Brooks referred to the cross-section diagrams that had been faxed for group review on November 12. The cross-sections are included with these minutes also, and show a proposed piezometer to evaluate the vertical extent of TCE contamination. Herb Levine asked why it was being called a piezometer when its purpose was to measure groundwater quality. Pat agreed that it should be denoted "monitoring well," as its purpose is not solely to measure the piezometric surface. Representatives from the U.S. EPA, DTSC, and RWQCB agreed to the proposed monitoring well location. The screen will be located based on lithology, but is tentatively slated for 220 to 225 feet bgs and it will be drilled adjacent to the CPT101 location. John Broderick of the RWQCB recommended that the well be constructed of 4-inch-diameter material. Pat said he knew they were at the limit for a 2-inch well installation and would check with the driller for concurrence. A phone call was later placed to the driller and it was decided that a 4-inch-diameter well would be installed, per the RWQCB recommendation.

The group agreed to the location of extraction well 24EX6, which will be drilled between sample locations 24HCPT101 and 24HCPT102. This location keeps the extraction well away from the northern and southern hangar doors, and is in an area of high TCE concentrations. Pat agreed to keep Herb Levine updated with the progress of drilling at extraction well 24EX6 so the screen location could be chosen. High TCE concentrations near the water table are of concern if the well is screened too deep. On that subject, Herb asked about the partial grouting of wells 24EX1 and 24EX1OB. Pat responded that it was being scheduled for mid-December or early January and that grouting of abandoned well 24AW-4 would follow.

A site map, geologic cross-sections, and drawdown curves for the 24EX3 well group are attached to these minutes.

The Plan of Action for Site 24 field work for the next two weeks included the following:

1. Continue long-term vacuum-enhanced test at extraction well 24EX3.
2. Present vacuum-enhanced test results.
3. Conduct step-drawdown test at extraction well 24EX4 (19 November), present results and select a constant pumping rate for long-term test.
4. Begin constant-rate test at extraction well 24EX4 (1 December).
5. Complete groundwater sampling at 24EX5 monitoring wells.
6. Install piezometer at extraction well 24EX6 location and collect groundwater sample.
7. Install extraction well 24EX6 and monitoring wells.
8. Develop and sample 24EX6 well group.
9. Construct injection well 24IN2; develop and sample 24IN2 well group.
10. Schedule partial grouting of extraction well 24EX1 and 24EX1OB.
11. Prepare technical specification for grouting of abandoned water supply well 24AW-4.

Job/Client Name:

Job Number:

Subject:

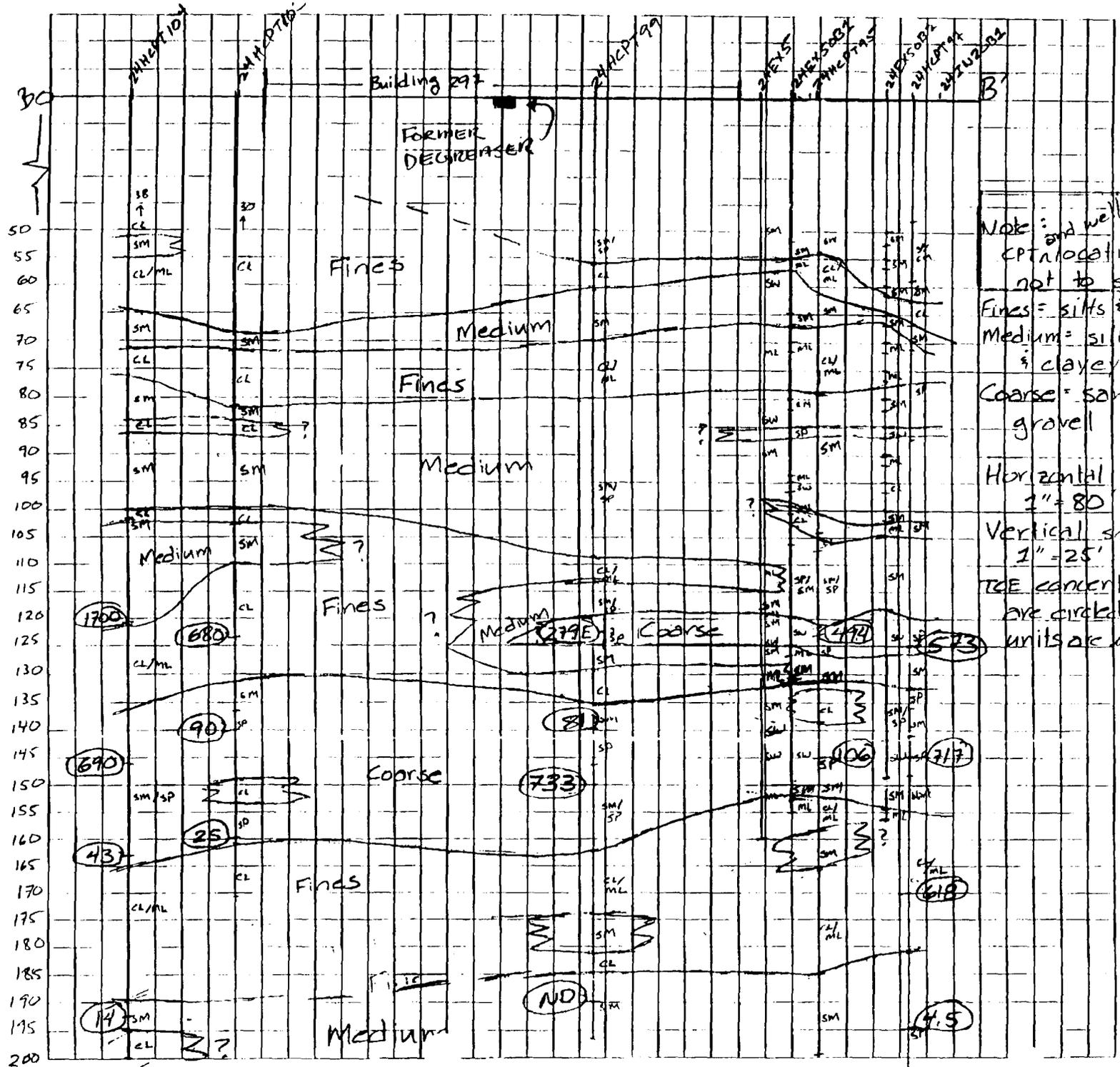
By:

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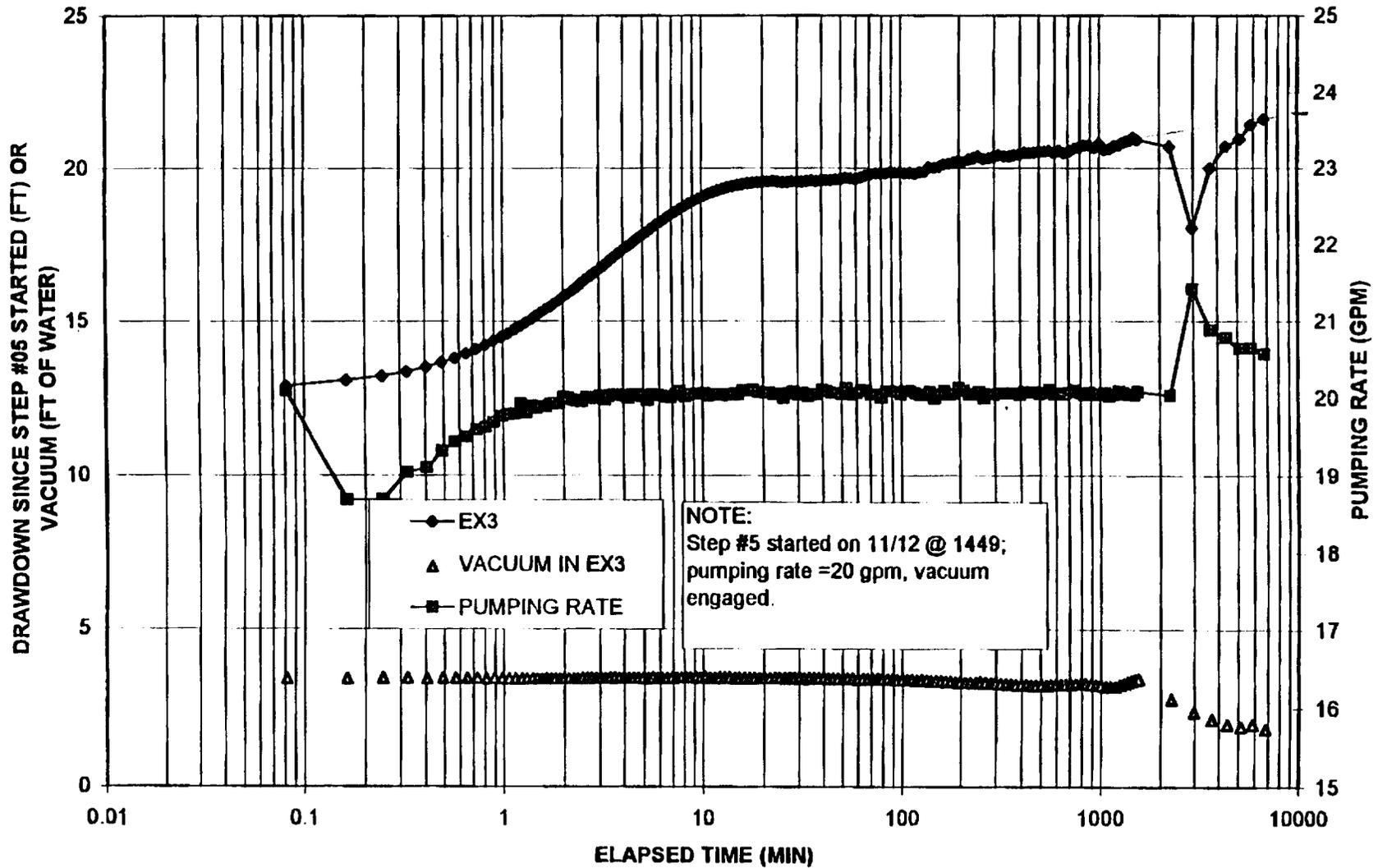
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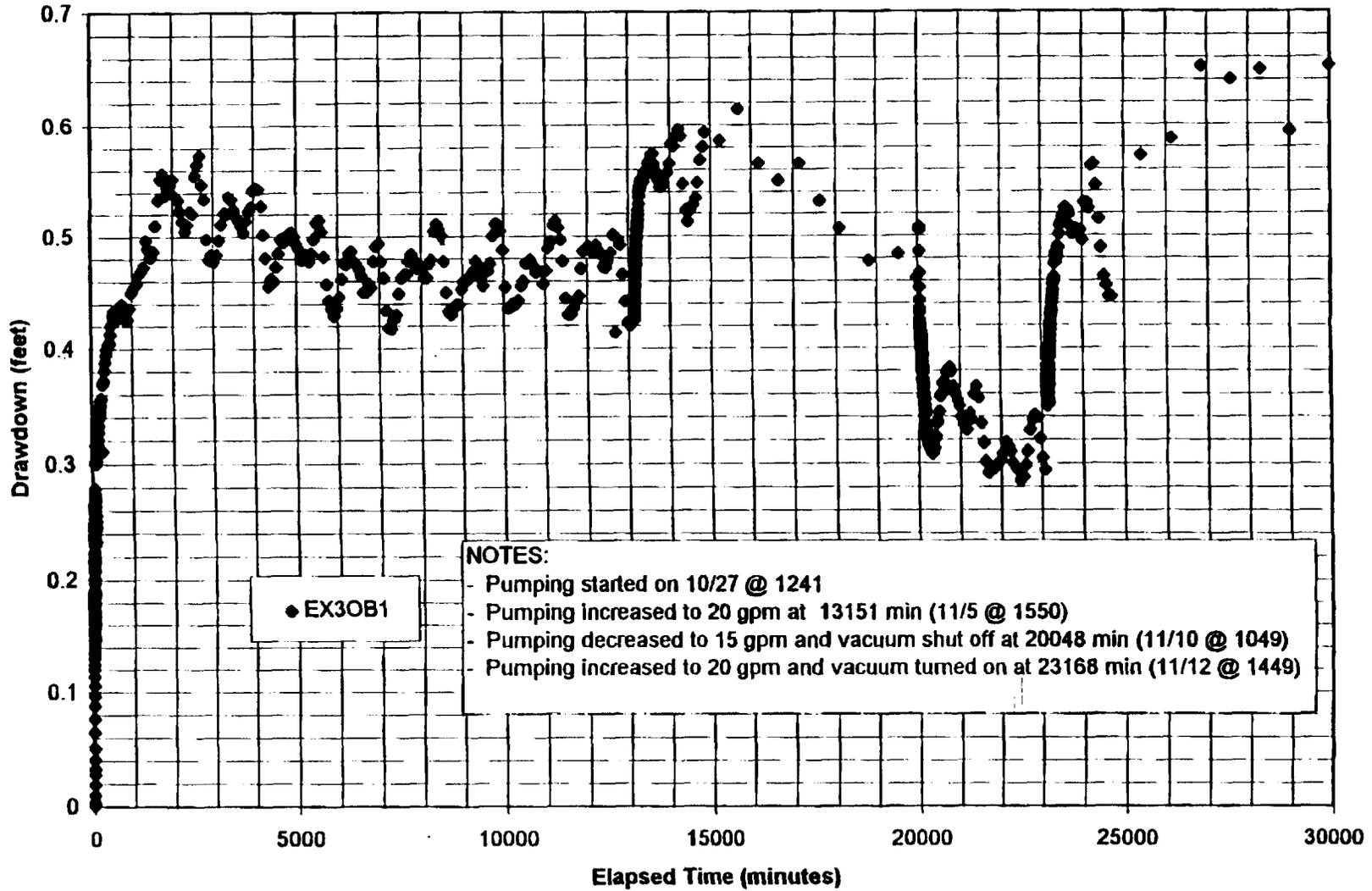
Note: and well
 CPT locations
 not to scale
 Fines = silts & clays
 Medium = silty sand
 & clayey sand
 Coarse = sand and
 gravel
 Horizontal scale:
 1" = 80'
 Vertical scale:
 1" = 25'
 TCE concentrations
 are circled -
 units are ug/L

(Car 105)
 John
 Manning
 461-1612

EX3 VACUUM-ENHANCED TEST (#9) STEP #5

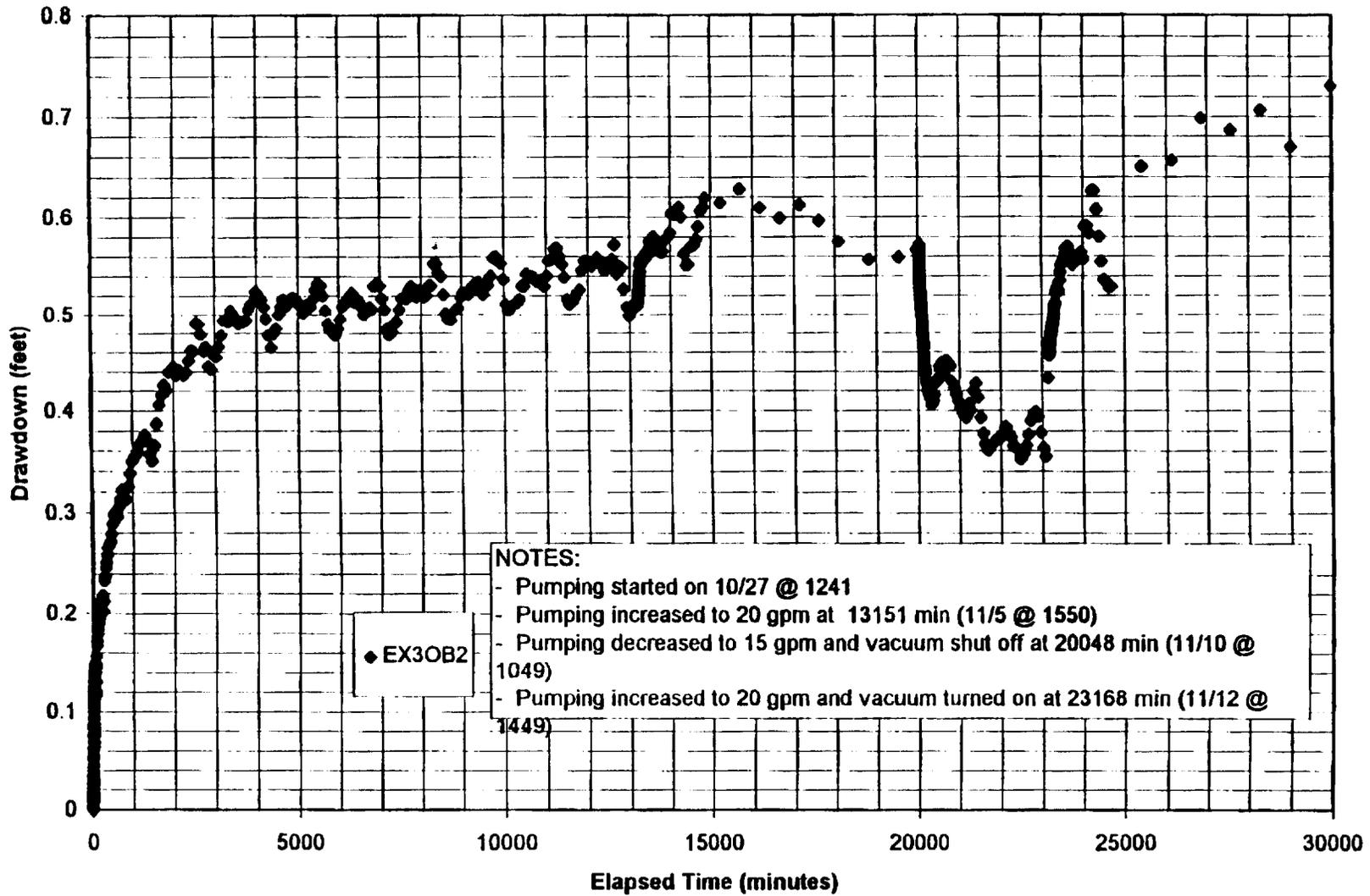


EX3 Constant Rate Vacuum-Enhanced Pumping Test



16/11/TT
NO. 107
TEMP. 400 FT. 10
PRESSURE

EX3 Constant Rate Vacuum-Enhanced Pumping Test



EX3 Constant Rate Vacuum-Enhanced Pumping Test

