

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233-7010



Michael D. Zagata  
Commissioner

April 27, 1995

Mr. Arthur Gibson  
Northrop-Grumman Corporation  
Bethpage, NY 11714-3580

RE: Grumman Aerospace-Bethpage Facility  
Site Number: 130003A

Dear Mr. Gibson:

This is in response to the April 3, 1995 meeting held at Geraghty & Miller, Inc.'s offices and a meeting I had with H2M, Inc. on April 19, 1995.

It is my understanding that at the April 3, 1995 meeting, which was attended by representatives of the Bethpage Water District (H2M, Inc.) and the Occidental Chemical Corporation (LBG, Inc.), concerns were raised on behalf of the District regarding assumptions incorporated into the groundwater model. These were relayed to me during the April 19, 1995 meeting.

The key assumption involved is the use of the chemistry data from the GM-38 cluster. This cluster is the southern-most outpost station installed during the Remedial Investigation. Through two sampling rounds, conducted 18 months apart, the GM-38 wells have been the most severely impacted of the outpost wells. This can be explained via one of the following scenarios:

- A. a large slug of contaminants is still migrating through the aquifer in the area of GM-38, or
- B. the GM-38 wells just happened to be screened in the main body of an extensive plume, while the other outpost wells were not screened in the main body of the plume.

If Scenario A is correct, then the off-site modelling efforts to date are probably reasonably accurate. However, if Scenario B is correct, then the potential mass loadings at the Bethpage Water District's well fields which are located to the south of the Grumman site could very well be significantly higher than predicted by your consultant (understanding that the modelling effort undertaken was not designed to develop such estimates).

The Department is aware that it is not feasible to collect all of the data we would like to have during the Remedial Investigation/Feasibility Study process, and that professional judgement must be exercised in order to maximize the use of the data collected and the funds available for these projects. However, considering the risks to the public water supply, a modelling run needs to be conducted in which the area surrounding the GM-38 cluster is not modelled as a hot spot (see Figure 2-7, attached), but as part of a larger plume, possibly connected to the site. This can be done in one of two ways:

1. Using the data set that exists today, and using the professional judgement of those working on this project, develop assumptions from which the contamination at the GM-38

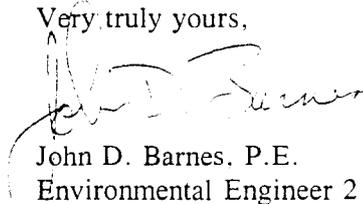
cluster can be tied to the site. As a result, the estimated contaminant mass in the off-site portion of the aquifer will be significantly greater than the current estimate.

2. Collect additional data via a hydropunch or analogous technology, and incorporate this data into the model. One way to do this would be to drill three pilot holes in the area between the site and the well fields collecting groundwater samples at periodic intervals.

This modelling is required in order to properly evaluate Scenario 4 (see letter prepared by Geraghty & Miller, Inc. dated November 9, 1994). This is not to say that the Department has selected that alternative as the alternative which will be proposed to the public. The Department will not settle on a proposed remedy until after the Feasibility Study Report is submitted and reviewed. The Department, however, anticipates significant public pressure in favor of Alternative 4 if that alternative is not the one proposed. Therefore, the Department strongly recommends that one of the two courses of action outlined above be followed as part of the ongoing groundwater Feasibility Study in order to adequately evaluate the need for off-site extraction wells as called for in Scenario 4.

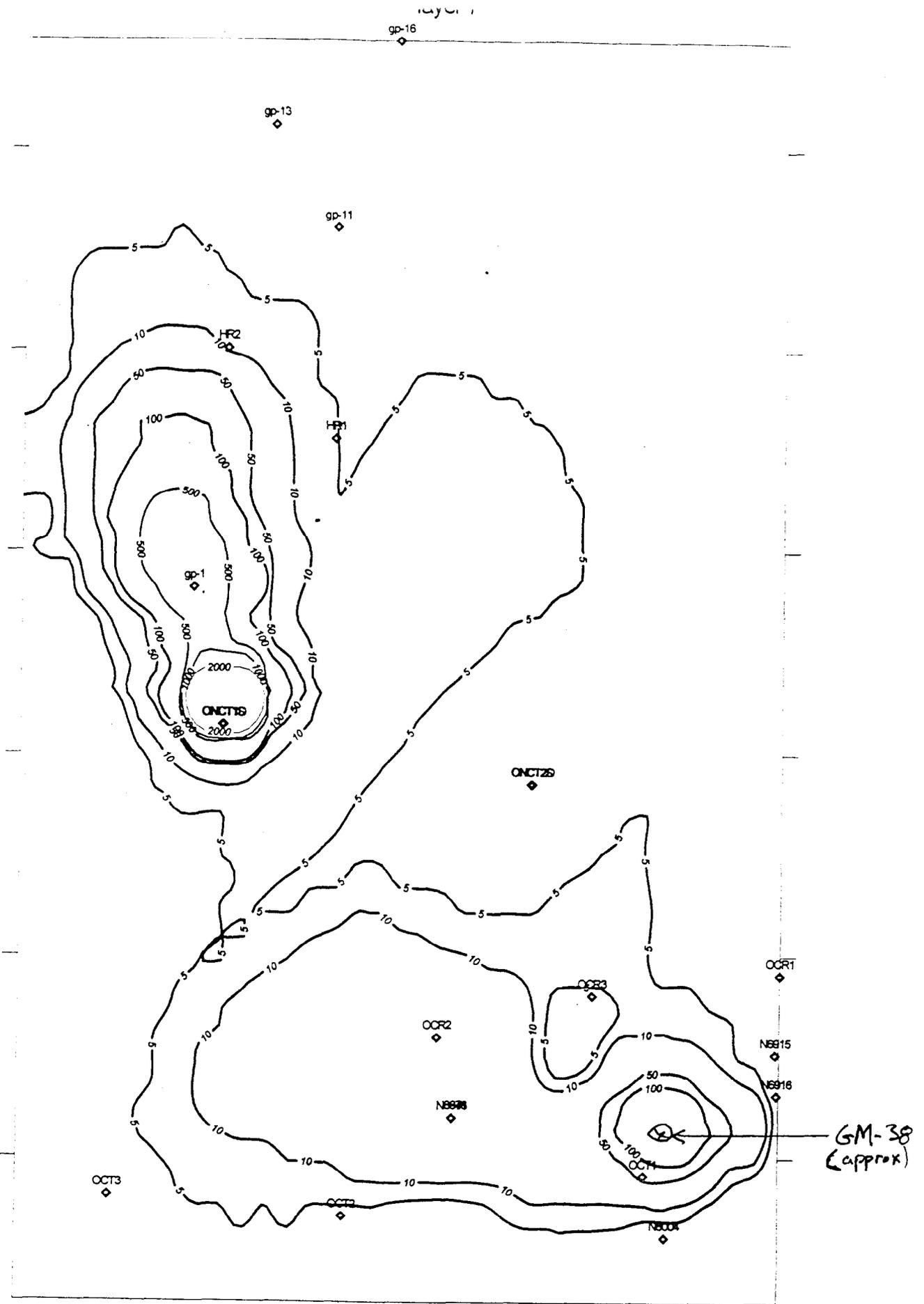
If you want to discuss this matter further, please feel free to contact me at (518) 457-3395.

Very truly yours,



John D. Barnes, P.E.  
Environmental Engineer 2  
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Div. of Hazardous Waste Remediation

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SOURCE: GERAGHTY & MILLER, INC.  
 CORRESPONDENCE DATED 3/7/95

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