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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 CHESTNUT BUILDING
PHILADELPHIA, PENNSYLVANIA 19107

Re: 3d

SUBJECT: Salford Quarry NPL Site

DATE: August 22, 1991

FROM: Cesar Lee, Remedial Project Manager
SE Pennsylvania Remedial Section (3HW21)
Telephone: 215-597-8257

TO: Don Garofalo
EMSL-EPIC, Warrenton, VA

THRU: Robert Kramer, Chief (3ES10)
Environmental Monitoring and Surveillance Branch

Attached is an Aerial Services Request Form for both an historical aerial photograph analysis and fracture trace analysis for the Salford Quarry NPL site located in Montgomery County, Pennsylvania.

The fracture trace analysis is requested as a potential aid to oversight of upcoming hydrogeologic investigations. The fracture trace analysis is requested to be performed first.

SUMMARY

What is Requested?

* 1. Fracture Trace Analysis.
2. Ascertain vertical declination of fractures.
* 3. Verify location of field installed monitoring wells in relation to fractures via GPS (Global Positioning System).
4. Locate fracture traces in the field.
5. Provide Stereo Pairs of following years (6/50, 9/58, 5/64, 6/71, 5/73) for in-house future reference.
6. What are depths of quarry floor from date of purchase in 1963? How much volume could quarry contain?

* Priorities

1. Fracture Trace Analysis.
2. Verify location of field installed monitoring wells in relation to fractures.

Justification

1. Oversight PRP's placement of monitoring wells on fractures designed to yield water from quarry.
2. For possible R.O.D. remediation alternative, identify & grout

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fractures in order to contain site contaminants.

Requested Deadlines

Oct. 7, 1991 Interim Report
Nov. 15, 1991 Final Report

Attachments

1. "Aerial Services Requested Form" dated 8/22/91.
2. Memo from Fran Andracchio, not dated.
3. "Site Location Map / Figure II-1" by Environ, not dated.
4. Letter from Environ dated 6/20/90 w/ map.

Please call if you have any questions.

cc: P. Anderson (3HW21)
J. Newbaker (3HW15)

CL:cl/CL082291.A

ENVIRONMENTAL PHOTOGRAPHIC INTERPRETATION CENTER (EPIC)

AERIAL SERVICES REQUEST FORM

Request Data: 8/22/91

I. SITE DATA

Site Name: SALFORD QUARRY Region: 3

Program: (circle) Superfund RCRA RCRA Enf. Other _____

If Superfund: Site/Spill ID# PTGB036P43

Purpose (circle): Remedial Removal Enf. Other_____

Geographic Coordinates: 75°22'56"W Long. 40°15'07"N Lat.

State: PA County: MONTEGOMERY Municipality: LOWER SALFORD TWP

USGS Quad Name (IMPORTANT: ATTACH PHOTOCOPY OF MAP SHOWING SITE BOUNDARIES AND/OR STUDY AREA): _____

Regional Project Manager: CESAR LEE Phone# FTS 597-8257 COMM (215) 597-8257
Site HydroGeologist: JAY NEWBAKER ext 1268 ext 1268

Brief discussion of site history, specific problems at site, what you hope to accomplish through this request. Elaborate on known or suspected aspects of site operation (e.g. barrels believed dumped between 1967 and 1972 adjacent to north lagoon). Please attach background information about the site such as site descriptions, action memos, etc.

Between 1963 to 1980, quarry was used as landfill for industrial wastes resulting from floor tile production. Prior to 1963 purchase, site was quarried for stone...photos prior to 1963 will also help in identifying fractures.

PRP negotiated not to bore through closure cap to verify contents of disposed waste in return for relocating monitoring wells that would yield water from quarry.

II. STANDARD REQUEST OPTIONS - Check and complete the appropriate section for the type of service you are requesting.

_____ 1. CURRENT PHOTOGRAPHY ONLY (new overflight)

a. Scale: _____ (e.g., 1:24,000)

Average turnaround = 6 wks.

b. Special conditions (e.g., do not fly if snow cover, leaves time on, etc.) _____

c. Photo size: 9"x9" ___ 20"x20" ___ Other_____

d. Are stereo pairs needed? ___Y ___N

e. Number of copies: _____

f. Desired delivery date: _____

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____ 2. HISTORICAL PHOTOGRAPHY ONLY

a. Study period (e.g., 1936-1955): _____

Average turnaround time = 6-10 wks.

b. Specific years desired: _____

c. Photo size: 9"x9" ___ 20"x20" ___ Other_____

d. Number of copies: _____

e. Desired delivery date: _____

____ 3. ANALYSIS OF CURRENT (single coverage) PHOTOGRAPHY

a. Scale: _____(e.g., 1:24,000)

Average turnaround time = 8 wks.

b. Special conditions (e.g., do not fly if snow cover, leaves on, etc.) _____

c. Photo size: 9"x9" ___ 20"x20"___ Other_____

d. Number of copies: _____

e. Desired delivery date: _____

✓ 4. ANALYSIS OF HISTORICAL PHOTOGRAPHY (standard site analysis package - see attachment)

a. Study period (e.g., 1936-1955): 1950 To 1982 *

***Average turnaround time = 12-24 wks.

b. Specific years of interest: See "4a"

c. Are copies of historical photos (before analysis) needed? ✓Y ___N
If yes, photo size: 9"x9"___ 20"X20"___ Other 12x12 *

d. Is an interim report (unbound format, handwritten photo overlays with typed body of report) needed? ✓Y ___N

e. Number of copies of final bound report: TWO

f. Desired delivery date: 11/15/91

____ 5. SURVEYING AND MAPPING - Complete and attach request form

* Provide Stereo Pair For 6/50, 9/52, 5/64, 6/71, 5/73

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III. SPECIAL REQUEST OPTIONS - The following remote sensing services are also available for sites with conditions that warrant their use. Check off items of interest and contact your remote sensing coordinator for more information.

_____ a. Land use analysis (within specified distance from site)

__✓__ b. Fracture trace analysis

_____ c. Wetland mapping/assessment

_____ d. Multi-spectral scanner overflights

_____ e. Thermal infrared scanner overflights

__✓__ f. Mensuration (measurements) of features (e.g., barrel/drum count, terrain transects, building dimensions, lagoon dimensions, etc.). (Quarry Depth & Volume)

Fracture trace analysis is requested as aide to oversight of site hydrogeologic investigation during Remedial Investigation (RI). Since site topography may not reflect groundwater flow direction due to site geology, fracture trace analysis is request to:

1. Confirm or deny PRP's placement of monitoring wells designed to yield water from quarry.

2. As possible R.O.D. remediation alternative, identify & grout fractures in order to contain site contaminants.

We are presently in "post field work phase" of RI. We are anticipating to receive the PRP's field data in October 1991. For this reason, a quick turnaround is requested.

Area to be covered is indicated on the attached topographic map. Also a list of available aerial photos from previous search is attached.

Priority: Fracture trace analysis takes precedence over historical aerial photo reports.

TO: DON GAROFALO

FROM: FRAN ANDRACCHIO
REGION III (597-8330)

ATTACHED IS A TOPO MAP
ON THE SALFORD QUARRY SITE.
THE REQUESTOR IS INTERESTED
IN ALL PHOTOS FROM 1963-84 AND
AT LEAST ONE PHOTO PRIOR TO 1963.
PLEASE LET ME KNOW WHAT
YOU HAVE.

THANKS,
FRAN

2 ATTACHMENTS

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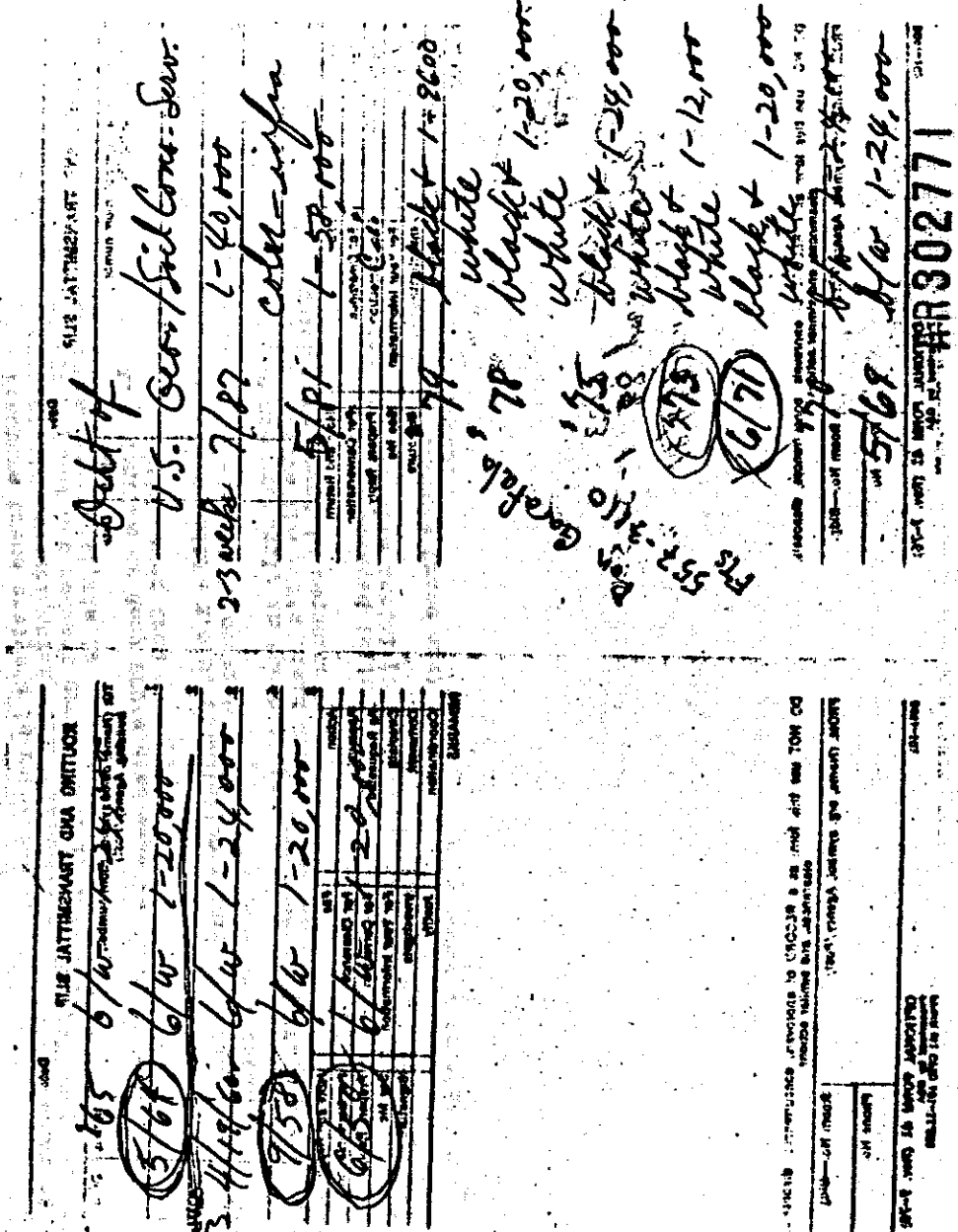
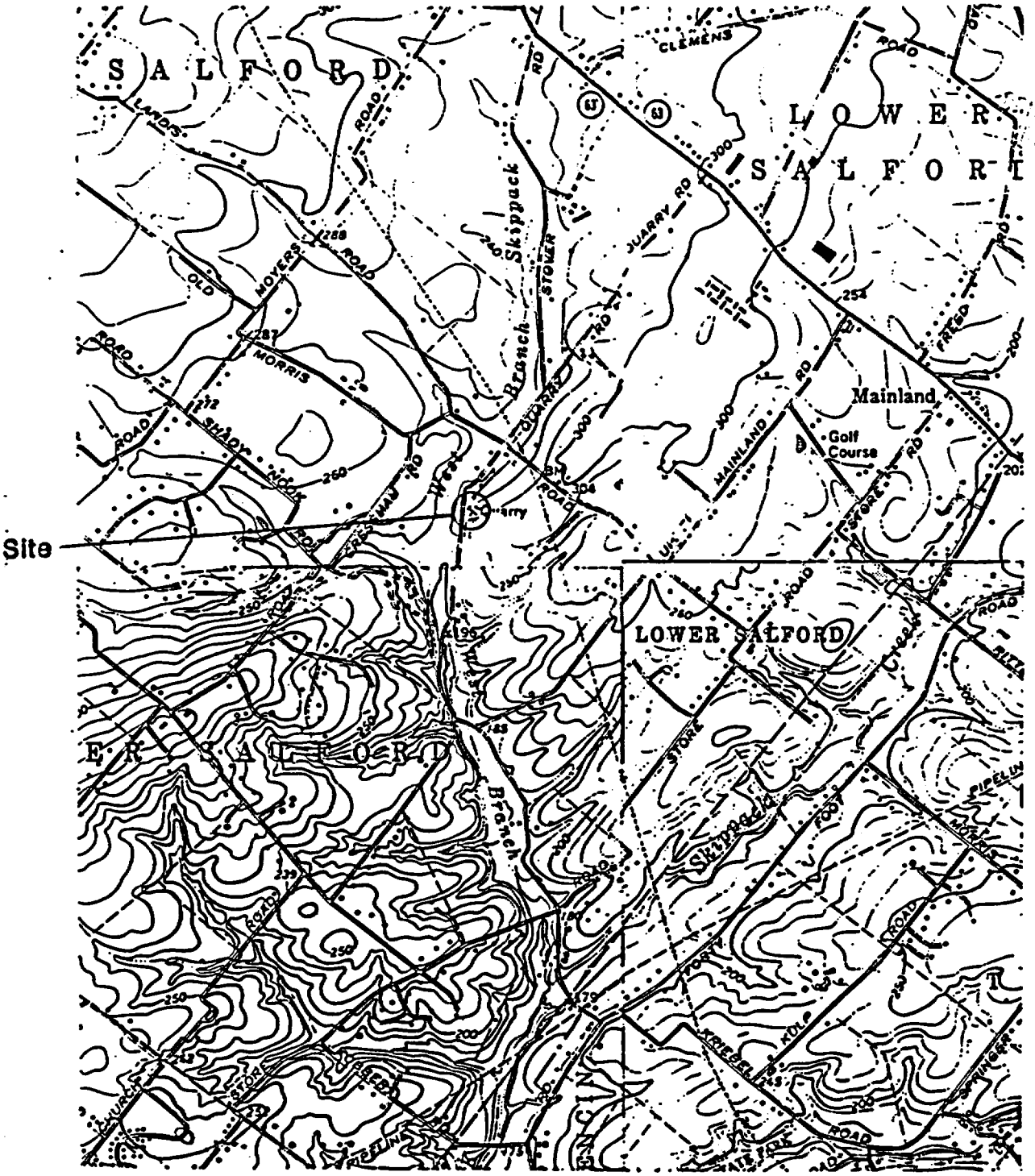
Jim Owecke will call on Monday w/ results of search





Source: USGS Topographic Series, Collegeville, Lansdale, Perkiomenville, and Telford PA Quadrangles, Photorevised 1960 – 1966.

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ENVIRON Counsel in Health and Environmental Science	SITE LOCATION MAP Salford Quarry Lower Salford Twp., PA	Figu II-1

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ENVIRON

June 20, 1990

JUN 21 1990

MEMORANDUM

To: Cesar Lee, RPM (3HW21)

From: Bill Stone
Bob North BNR

Re: Phone Call Discussion on June 20, 1990 Concerning Well Locations

This memo is to summarize our discussions today with you and C.K. Lee concerning the placement of wells at Salford Quarry. As you and C.K Lee expressed, EPA's primary concerns are that the water in the wells comes from the fractures and that the wells be located as close to the quarry as possible so that the ground water in the wells is representative of water from the quarry and that any constituents from the quarry are detected by the wells. Additionally, the wells (other than thos intended for background purposes) should be downgradient of the quarry.

You agreed that the well locations on the west side of quarry road are acceptable because of the access limitations immediately west of the quarry and along quarry road prevent the installation of monitoring wells in that area. The proposed well locations are illustrated on the attached figure. As we discussed, ENVIRON believes that these locations will intercept flow along fractures from the quarry, will be representative of any potential release, are downgradient of the quarry, and are as close as possible to the quarry given the physical constraints of the site. It is our judgement that these locations meet all of the requirements of the investigation.

Therefore, it is our understanding that the issue concerning well locations has been resolved and ENVIRON intends to proceed with implementing the RISOP beginning tomorrow, June 21, 1990. We will begin with the installation of MW4 and we look forward to seeing you on-site.

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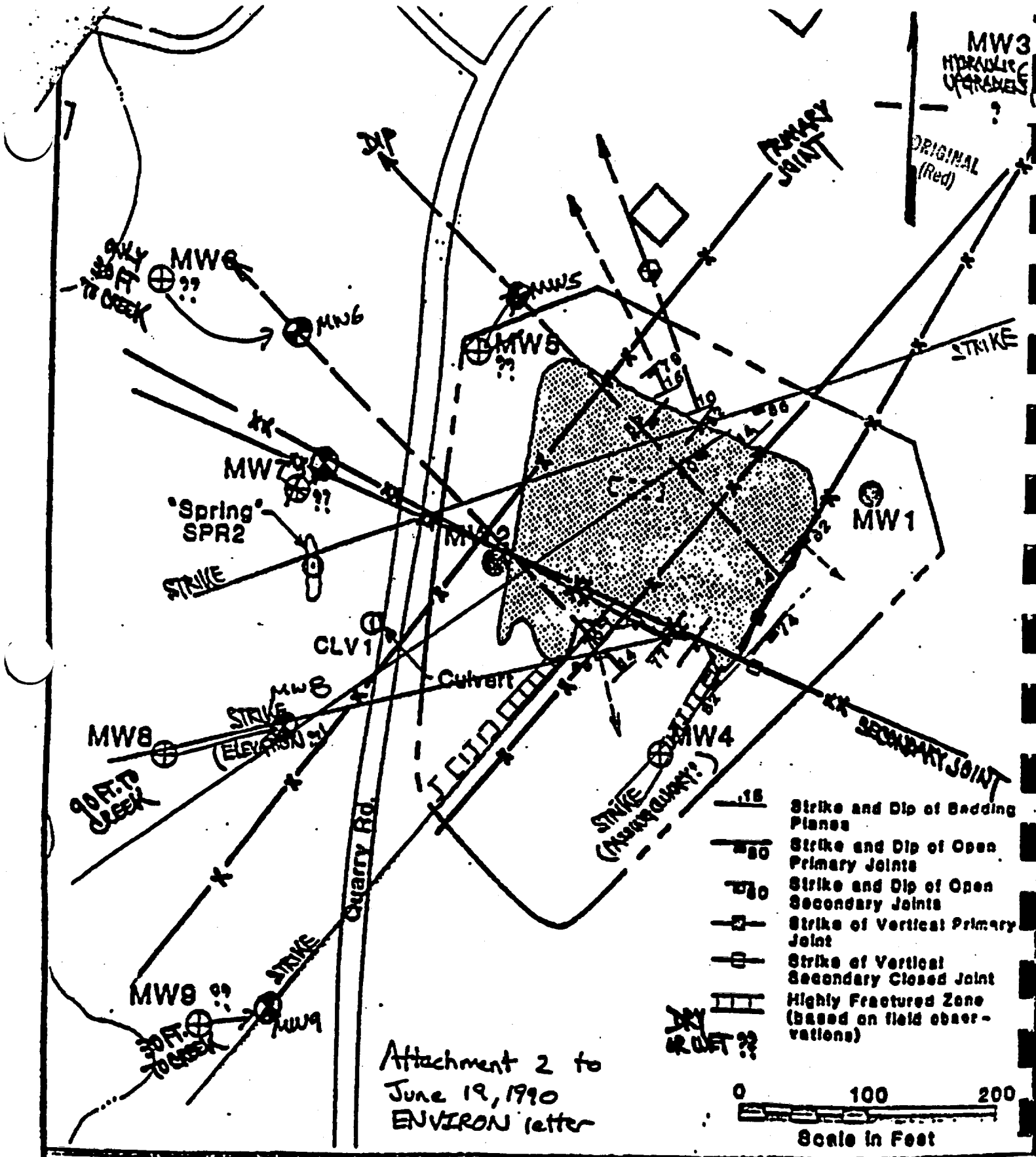
ENVIRON Corporation · Counsel in Health and Environmental Science
210 Carnegie Center, Suite 201, Princeton, New Jersey 08540 · (609) 452-9000 · FAX (609) 452-0284



Attachment 2 to June 19, 1990 ENVIRON letter

ENVIRON
Counsel in Health and Environmental Science

ORIENTATION OF BEDDING AND JOINT FEATURES IN QUARRY

Figure IV-2

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