GIANT
REFINING CO.

Route 3, Box 7
Gallup, New Mexico
87301

505
722-3833

January 31, 1992

EPA REGION VI
HAZARDOUS WASTE
RCRA PERMITS BRANCH
1992 FEB -5 AM 10: 1C

Rich Mayer
U. S. Environmental Protection Agency
Region VI
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: Quarterly Progress Report

Dear Mr. Mayer:

Giant Refining Company is submitting this quarterly progress report as required by the May 31, 1990 RFE Workplan approval letter and HSWA Permit condition C.4., page 11.

Specific locations for sampling during Phase III of the RCRA Facility Investigation have been identified and numbered individually, using the following system:

1	2	3	4	5
RFI	03	02	V	0.0

#1 = Sampling event
#2 = SWMU number
#3 = Specific sample location in SWMU
#4 = Type of sample
V = Vertical
D = Duplicate
E = Equipment rinse
#5 = Beginning depth of sample interval

These numbers correspond to the SWMU maps (attached) for a positive identification.

Several contract analytical laboratories have been asked to submit cost proposals for the analytical work involved in Phase III, RFI. Their submittals are due by February 29, 1992. At that time, cost and qualifications will be compared.

A tentative schedule of the Phase III, RFI sampling and investigation event is May 4, 1992 through May 22, 1992. Details

of the schedule will be forwarded to you when they are available.

Identification of Contact Wastewater Collection System individual lines for inspection has begun and will be submitted to you when available.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Sincerely,

John Stokes
Refinery Manager
Giant Refining Company - Ciniza

JJS/TLS:sp

cc w/enclosures: Lynn Shelton, Environmental Assistant
Ciniza Refinery

Kim Bullerdick, Corporate Counsel
Giant Industries Arizona, Inc.

2975 N

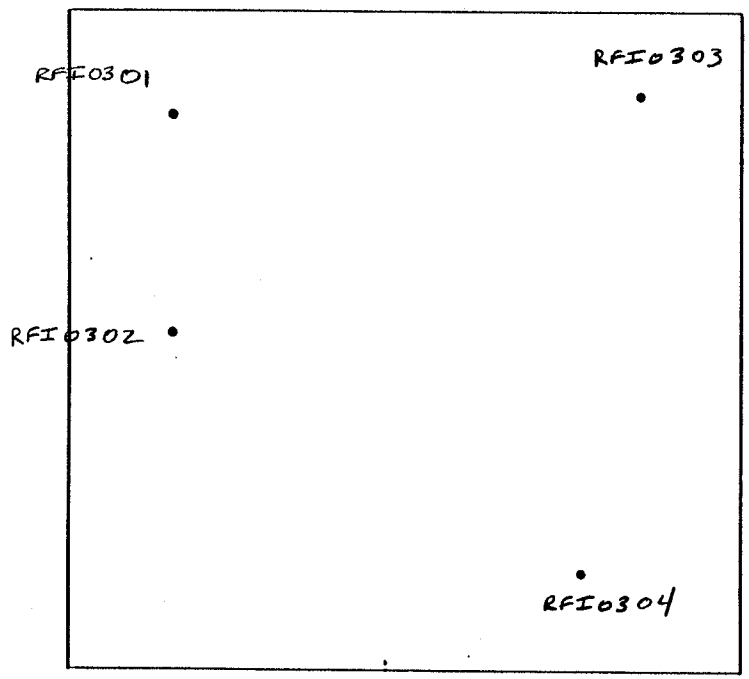
RFI0301 V0.0
RFI 0301 V3.0
RFI 0301 V4.5

RFI0302 V0.0
RFI 03 02 V3,0
RFI 0302 V4.5

RFI 0303 V0.0
RFI 0303 V 3.0
RFI 0303 V 4.5

1525 W

RFI 0304 V0.0
RFI 0304 V3.0
RFI 0304 V4.5



LEGEND

• Proposed Soil Boring Locations

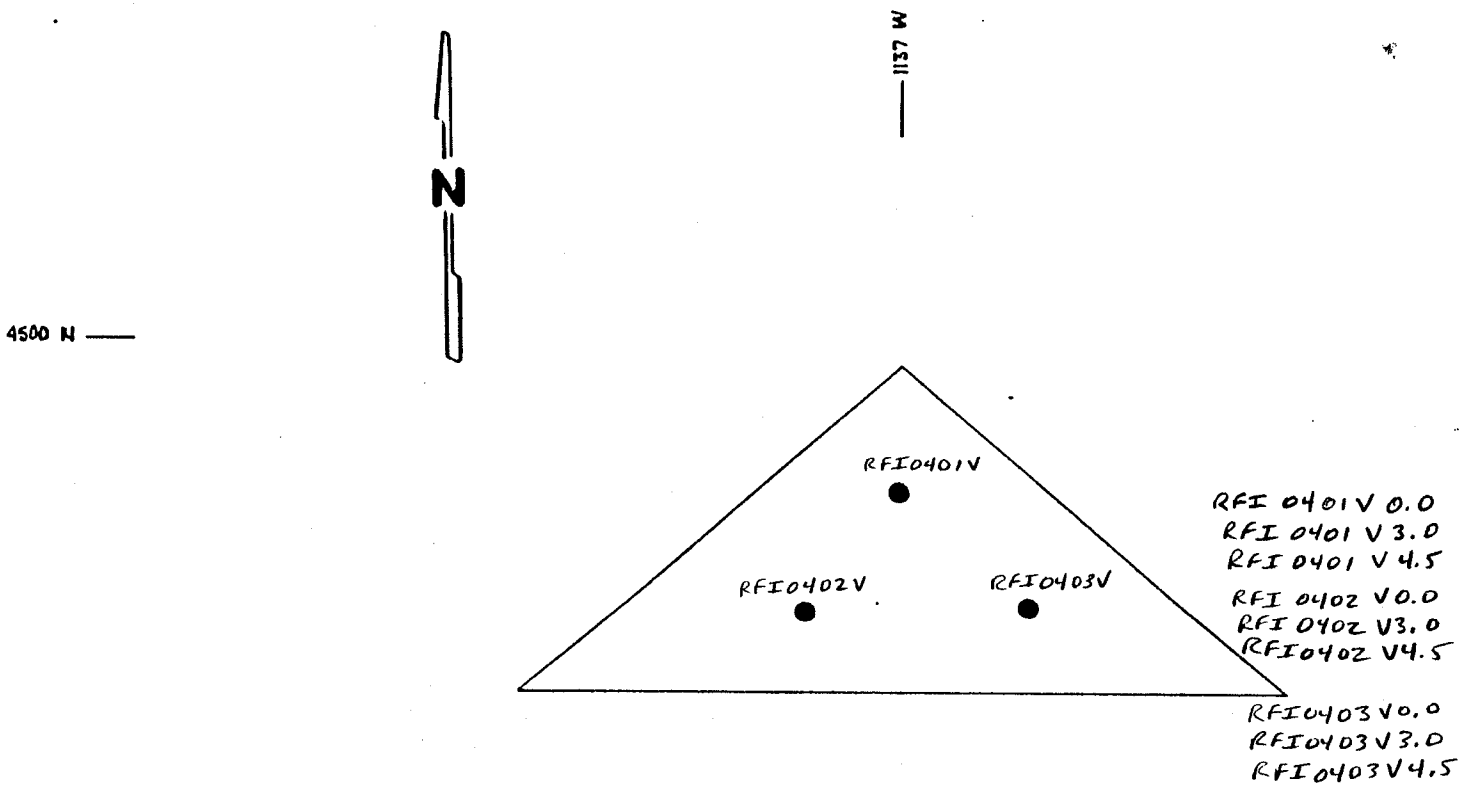
N

10 5 0 10

Scale In Feet

Applied Earth Sciences	NAME		FIGURE
FILE No. 5202 — MADE BY: R.G. DATE: 12-5-89 — CHECKED BY: DATE:	GIANT REFINERY Gallup, New Mexico	Empty Container Storage	

3(h) 3



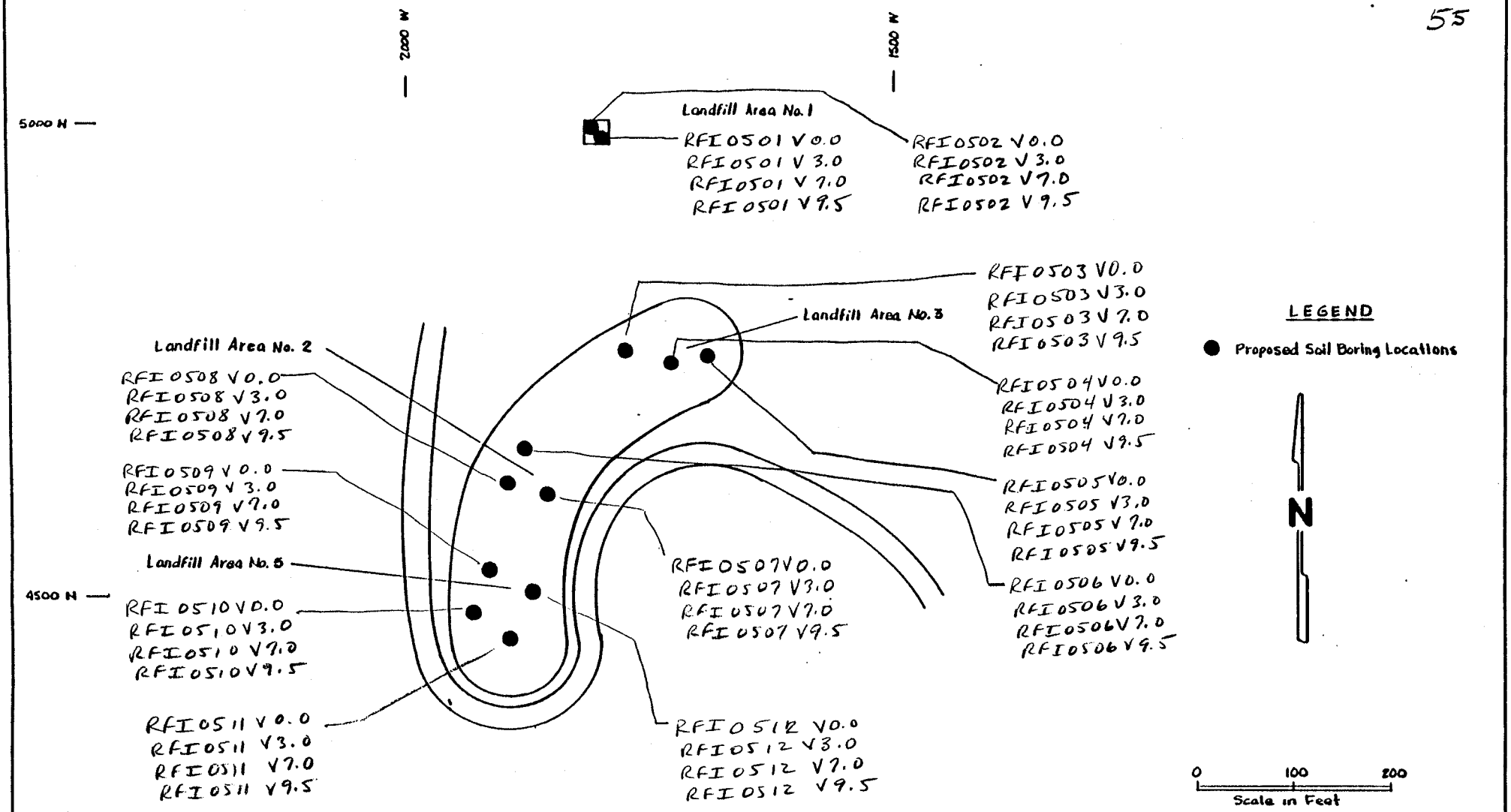
LEGEND

● Proposed Soil Boring Locations

0 5 10
SCALE IN FEET

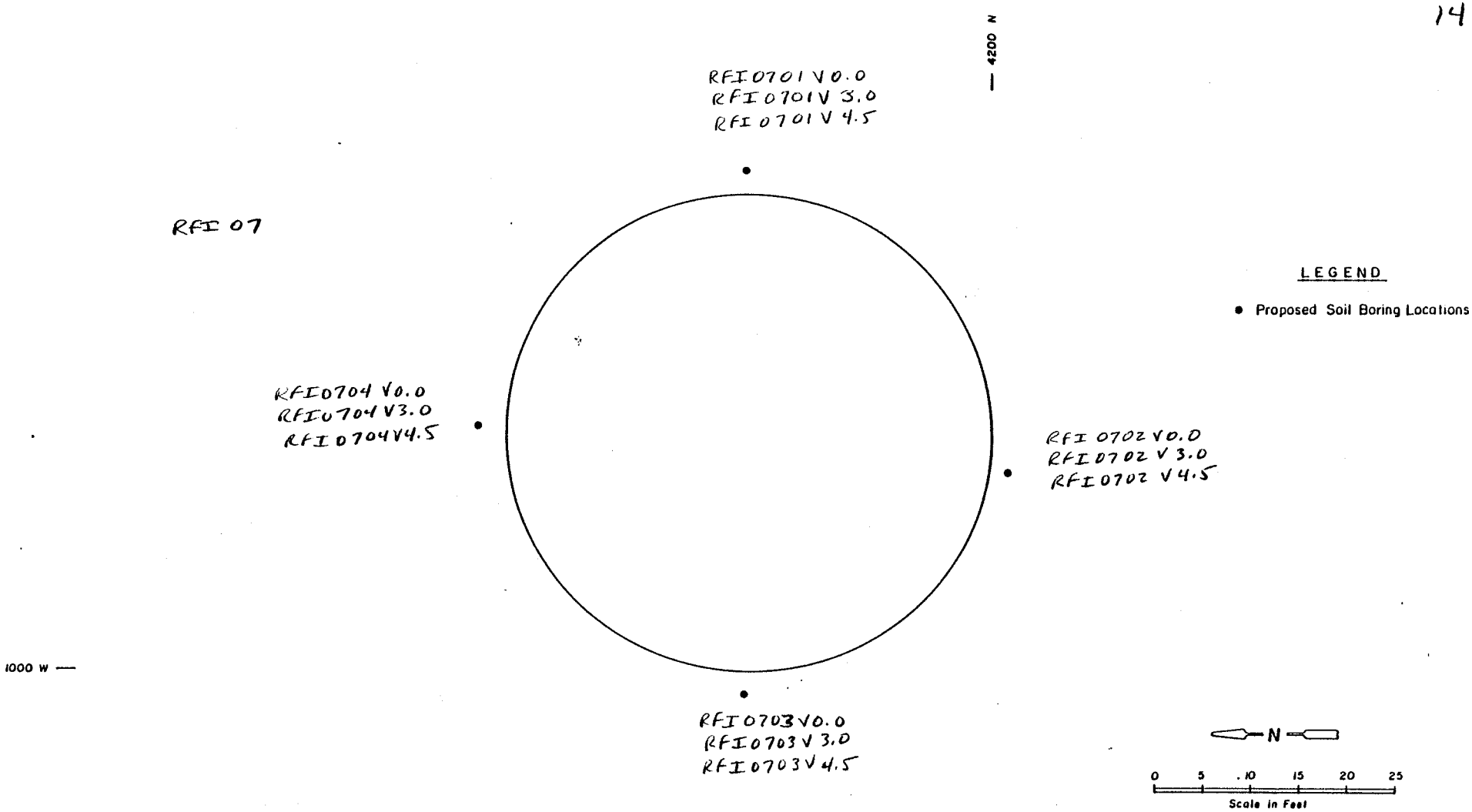
GIANT REFINERY Gallup, New Mexico	Burn Pit	FIG.

4(h) 7



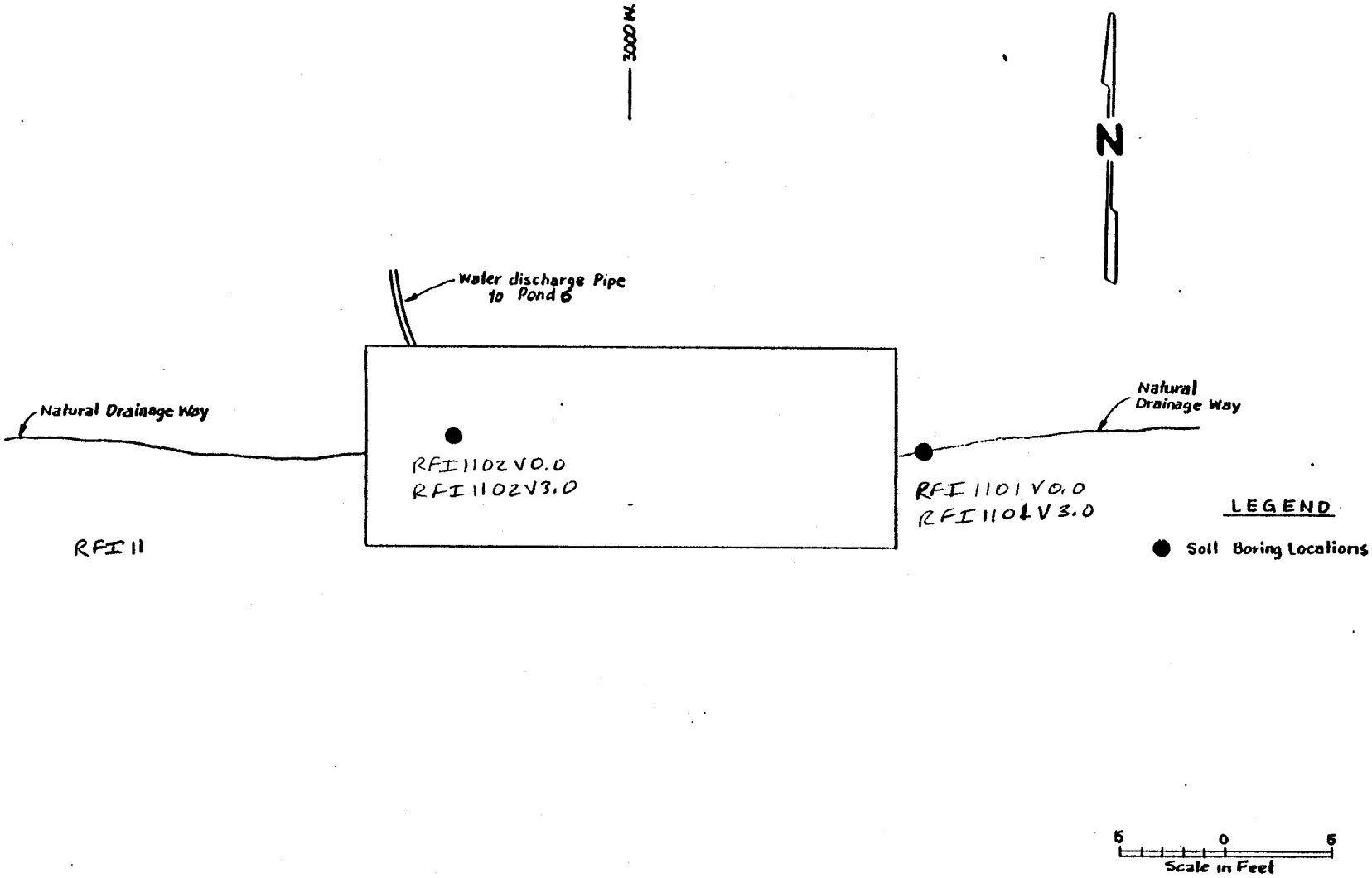
GIANT REFINERY Gallup, New Mexico	Landfill Areas	FIG.

14



Applied Earth Sciences	NAME		FIGURE
FILE No. 5202 — MADE BY: R.G. DATE: 12-5-89 — CHECKED BY: DATE:	GIANT REFINERY Gallup, New Mexico	Fire Training Area	

7h



3000 N

GIANT REFINERY Gallup, New Mexico	Secondary Oil Skimmer	FIG.

GIANT
INDUSTRIES, INC.

Route 3, Box 7
Gallup, New Mexico
87301

EPA REGION VI
HAZARDOUS WASTE
RCRA PERMITS SECTION
1993 MAR 22 PM 12: 17

March 8, 1993

Mr. Roger Anderson
Environmental Bureau Chief
State of New Mexico Oil Conservation Division
P.O. Box 2088
Land Office Building
Santa Fe, NM 87501-2088

RE: Evaporation Pond Water Release,
Discharge Permit No. 32

Dear Mr. Anderson:

Giant Refining Company is submitting the following report concerning the accidental release of pond water at our Ciniza Refinery. The report summarizes the events surrounding the release including actions taken to respond to the release, the pond water and Rio Puerco analytical data, and the measures that Ciniza intends to undertake to minimize the possibility of such happening again.

This submittal is also a preliminary notification of a groundwater discharge permit modification. Giant Refining company desires to modify certain conditions of its discharge permit to alleviate the potential for accidental releases of evaporation pond water. The specific modifications to the permit are summarized later on in this submittal.

During the weekend of February 20th and 21st, approximately eight feet of the berm between evaporation pond #7 and #8 (see figure #1) failed, apparently by wave erosion. This failure resulted in pond #7 flowing into pond #8, with pond #8 subsequently overflowing. The water leaving pond #8 was conveyed from the property by natural drainage (See figure 2). This natural drainage conveyance forms a tributary to the South Fork of the Puerco River.

The pond water release was discovered Monday morning, 22 February and work to stop the loss of water began immediately. The work was hampered by the extremely muddy conditions at and around the point where the berms of pond #8 were overtopped. The release of water ceased by approximately 15:30 hours on 22 February after pond #7 had equalized with pond #8. Sometime during the night of 22 February, a small stream of water began to overflow pond #8's berm at the same point as previously. After the stream was sampled the next day, several shovels of dirt were placed to permanently stop the flow.

The appropriate State, Federal, and Tribal agencies were notified of the release Monday, 22 February. The following is a list of the agencies contacted and the date, approximate time, and person contacted with the release information:

	Agency	Date	Time	Contact
1.	NMOCD	2/22/93	3:00 p.m.	Roger Anderson
2.	Surface Water Division	2/22/93	3:30 p.m.	Bill Bartel
3.	EPA Hotline	2/22/93	4:00 p.m.	Petty Officer Lyod
4.	EPA Region VI	2/22/93	3:45 p.m.	David Neleigh
5.	NM Game & Fish	2/22/93	4:30 p.m.	Jill Castillo-Silvey
6.	Navajo EPA	2/23/93	9:30 a.m.	Bonnie Cook
7.	Region VI, Water Management Division	2/22/93	3:55 p.m.	Ruth Gibson
8.	Region VI, Water Management Division	2/23/93	10:30 a.m.	Cecillia Kevmodle
9.	Arizona Department of Env. Quality	2/23/93	2:00 p.m.	Peter Hyde
10.	OCD, Aztec Field Office	2/24/93	8:00 a.m.	Denny Foust

By Tuesday, 23 February, conditions had improved enough that heavy equipment could be used to begin a more substantial repair of the breech point on pond #7 berm and the eroded point on the berm of pond #8. Additionally, since another weather front was expected to move through the area within 48 hours, the berms of pond #8 and the berm separating pond #7 from #8 were raised from one to two feet above the existing elevations. Also, over 1,000 bags of sand were shipped to the site for use to protect and reinforce the pond berms.

On Wednesday, 24 February, a high capacity pump was placed in service to transfer water from pond #8 to an adjacent pond. This served to further reduce the effective level in the pond and increase the freeboard of pond #8 dikes. At this time, the company believes that the situation has been corrected and that the potential for any further releases from ponds #7 and #8 have been alleviated.

Sampling Activities

On Tuesday, 23 February, samples of pond water overflowing from pond #8 and samples of the Puerco river water were obtained. Analysis performed on the samples included: SW-846 methods 8010 for Halogenated Aromatics, 8020 for Volatile Aromatics; EPA 200.7 ICP scan for priority pollutant metals and major cations/anions for

general chemistry (See Appendix A). The water samples were retrieved from the overflow point on pond #8 and from the points on the Puerco River just upstream and just downstream from where the natural drainage carrying the water from the release entered. There were no detections of organic constituents. The metal scan results have been summarized for comparison purposes in Table #1. Specific conductance readings were also made at the sampling sites and are shown below.

Pond #8	- 3820 umhos
Puerco River	- 360 umhos

Additional samples were taken from four points within pond #8 on Thursday, 25 February. Those samples were analyzed using SW-846 methods 8020 Volatile Aromatics and 8270 - Semivolatiles, ICP scan and general chemistry. Those results are shown in Appendix B. There were no detections of organic constituents - except for one laboratory contaminant. The metal scan results have been summarized for comparison purposes in Table #2.

Release Response Actions

To minimize the future potential for accidental releases from our evaporation ponds, Giant is proposing the following actions:

I. A permit modification to change the frequency of pond inspection to daily from weekly. The proposed inspection program will require visual inspection of all pond berms on a daily basis. Included in the inspection will be the requirements to record pond levels in regards to their freeboards and to document the inspection including responses to deficiencies observed during the inspection. The proposal will include requirements to maintain records for 3 years and a requirement to notify the OCD when certain problems are discovered such as maximum freeboards exceeded or moderate to severe berm erosion.

II. A permit modification to adopt a revised contingency plan. The proposed revised contingency plan would provide greater detail concerning the response efforts to releases. The plan would also clearly identify the person(s) responsible for initiating the plan and will also provide the authority for that person to expend whatever resources are necessary to respond to a release.

III. A permit modification to adopt a waste water reduction program. The proposed waste water reduction program would characterize existing conditions as a baseline for annual flow rate reductions and set reasonable goals for the refinery to achieve.

IV. Giant will conduct a structural integrity inspection of all the evaporation pond berms. Those not meeting certain standards based on the State Engineer's code for impoundments will be upgraded during this year's summer season.

V. Giant will develop a plan to lower the existing pond levels to the required freeboards as soon as possible. Giant may seek permission to construct a temporary impoundment to which water from existing ponds may be pumped.

Giant is aware of the seriousness of this situation and intends to completely cooperate with the Oil Conservation Division and all other agencies in their review of these circumstances. Further, Giant is committed to taking all the necessary steps to prevent an accidental pond water release from occurring again.

We encourage the Division and any other agency who may have questions concerning the accident to contact us at (505) 722-3833.

Respectfully yours,

Zeke Sherman
Environmental Manager
Ciniza Refinery
Giant Industries Arizona, Inc.

cc w/o: Carl Shook, Vice President of Refining
John Stokes, Refinery Manager
Lynn Shelton, Environmental Supervisor

cc w/: Kim Bullerdick, Corporate Counsel
Roger Anderson, NMOCD, Santa Fe
Denny Foust, NMOCD, Aztec
Bill Bartel, NM Surface Water Division
Bonnie Cook, Navajo Tribe EPA
Jill Castillo-Silvey, NM Game & Fish
Cecillia Kevmodle, EPA Region VI Water Mgmt. Div.
Peter Hyde, Arizona Dept. of Env. Quality
Barbara Driscol, EPA Region VI, HSWA

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

BRUCE KING
GOVERNOR

JUDITH M. ESPINOSA
SECRETARY
RON CURRY
DEPUTY SECRETARY

EPA REGION VI
HAZARDOUS WASTE
RCRA PERMITS BRANCH
FEB 12 PM 2:07

February 9, 1993

Mr. John J. Stokes, Manager
Giant Industries, Inc.
Ciniza Refinery
Route 3 Box 7
Gallup, New Mexico 87301

RE: Notice of Noncompliance and Permit Modification Application NMD000333211

Dear Mr. Stokes:

On January 22, 1993, the Hazardous and Radioactive Materials Bureau (HRMB) received a notification from Giant Refining, Inc. (Giant) regarding potential noncompliance with the groundwater monitoring reporting conditions in Giant's RCRA permit. Notification requirements are found in Attachment G, Part 2 of the permit. The permit noncompliance is that Giant failed to notify the Director within specified time frames regarding statistically significant changes for 1992 monitoring events.

We understand that Giant proposes that past monitoring results, based on the statistical test required in the permit, may have given false-positive indications of groundwater contamination. However, under currently effective permit conditions Giant must continue to report all such statistically significant changes in indicator parameters under the permit condition time frames. The HRMB will review each instance on a case-by-case basis to determine if false-positives are in fact the reasons for the changes. Please forward a copy of the statistics to Edward Horst of the HRMB Compliance Program Manager when they are completed.

As required by our letter to you dated January 25, 1993, and as we discussed in the meeting held in Santa Fe on January 29, 1993, Giant must submit a permit modification application by April 28, 1993, to address the contamination recently discovered under the treatment zone. Giant may also wish to officially request modification of the statistical test in the permit, and other modifications needed. All modifications should be submitted by the April 28, 1993 due date. The modifications application must give reasons for each modification requested and the specific wording changes requested in the permit conditions and permit attachments. Also Giant should propose whether each modification requested is a Class I, II, or III modification as described in HWMR-7, Part IX, Section 40 CFR 270.42. Enclosed is a copy of the fee regulations for your information.

Lastly, during the Santa Fe meeting we discussed the permitting schedule for the benzene air-stripper recently installed at Giant to treat characteristic hazardous waste. Enclosed are our comments on the Part A application which was submitted by Giant to the HRMB on September 25, 1990. We will notify you if the addition of the air-stripper qualifies as an approved change under Interim Status when the enclosed comments are addressed. Please submit your response to Barbara Hoditschek, Permit Program Manager of the HRMB within 5 days.

Please contact Marc Sides at (505) 827-4308 if you have any questions.

Sincerely,

Barbara Hoditschek

Barbara Hoditschek, Permit Program Manager
Hazardous and Radioactive Materials Bureau

Enclosure

cc: David Neleigh, U.S. EPA Region 6 (6H-PN)
Barbara Hoditschek, HRMB
Steve Alexander, HRMB
Marc Sides, HRMB

DEFICIENCY COMMENTS

Giant Refining, Inc. Part A Application
for the
Ciniza Refinery
dated September 25, 1990

1. Form 3, Section III.C.: The units of measurement for the air-stripper is listed in gallons per minute. The unit of measure needs to be converted into gallons per day or liters per day.

2. Form 3, Section IV.: The T04 process code and the S01 process codes and estimated annual quantities need to be converted from gallons (G) to pounds (P) or to tons (T). This conversion should be based on the density or specific gravity of the waste stream.

3. Form 3, Section V.: The facility drawing needs to include the air-stripper location.

4. Form 3, Section VI.: The facility photograph needs to clearly delineate the air-stripper area.

INTEROFFICE MEMORANDUM

GIANT

1993 MAR -5 PM 1:17

March 3, 1993

Ms. Barbara Driscoll (GH-PC)
U.S. Environmental Protection Agency
Region VI, RCRA Permits Branch
New Mexico Section
1445 Ross Avenue,
Dallas, TX 75202-2733

RE: Phase III Corrective Action Plans
NM000333211

Dear Ms. Driscoll:

With this letter, Giant Refining Company is transmitting the proposed corrective action plans for the Landfill Area and Fire Training Area solid waste management units. A final document summarizing the investigation at the remaining solid waste management units requiring no further action is under preparation. This summary will be forwarded to your office in the very near future.

Giant Refining Company hopes to initiate all the corrective action plans in May of this year. Should you have any questions, please contact me at (505) 722-3833.

Respectfully yours,

Z. Sherman

Zeke Sherman
Environmental Manager
Ciniza Refinery
Giant Industries Arizona, Inc.

ZRS:smb

cc: J. Stokes, Refinery Manager
K. Bullerdick, Corporate Counsel
L. Shelton, Environmental Supervisor

State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous & Radioactive Materials Bureau
2044 Galisteo
P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-1557
Fax (505) 827-1544

GARY E. JOHNSON
GOVERNOR

MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

95 JUL 25 PM 12:02
RCRA PERMITS PROGRAM

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

July 19, 1996

Mr. Edward L. Horst, Environmental Manager
Giant Refining Company-Ciniza
Route 3, Box 7
Gallup, New Mexico 87301

Dear Mr. Horst:

RE: Timeline and Contaminant Levels for Clean Closure of RCRA Land Treatment Area

Giant Refining Company-Ciniza (Giant) has requested that the New Mexico Environment Department (NMED) Hazardous and Radioactive Materials Bureau (HRMB) provide a clarification of the necessary timeline and the required contaminant levels to demonstrate clean closure of Giant's RCRA Land Treatment Area.

As discussed in the May 24, 1996 meeting between Giant and HRMB, RCRA Permits Management Program would accept two (2) consecutive years, i.e. four consecutive events of clean sample results as a demonstration of clean closure. Consecutive sampling events were agreed to be Giant's annual and semi-annual ground water sampling as required by Permit Attachment G, and soil sampling as required by Permit Module III.

As to contaminant levels to demonstrate clean closure, NMED policy dictates the use of either New Mexico Water Quality Control Commission (WQCC) Standards, or National Drinking Water Maximum Contaminant Levels (MCLs), whichever is more conservative. For those parameters in Giant's Permit for which there is neither an MCL or WQCC Standard, the most conservative EPA guidance will be used, such as the proposed 40 CFR 264 Subpart S levels.

HRMB further understands that Giant is aware of and appreciates the need to complete the Closure Plan approval process by the end of Fiscal Year 1996, which would be September 30, 1996. Giant has proposed and HRMB approves the following schedule:

1) Giant receives the revised closure plan from their contractor: approximately July 3, 1996.

2) Giant submits the plan to HRMB: approximately July 15, 1996.

3) HRMB reviews the plan; the 45-day public comment period runs from approximately August 1, 1996 to September 15, 1996.

4) The Closure Plan is approved by the Secretary of NMED by September 30, 1996.

If there are any questions, please call Mr. Michael Chacón of my staff at (505) 827-1561.

Sincerely,

Barbara Hoditschek

Barbara Hoditschek, Manager, RCRA Permits Management Program

cc: Benito J. Garcia, Chief, HRMB
David Neleigh, EPA (6PD-N)
Bob Sweeney, RCRA Permits Management Program
File - GRC Red 96 & Reading