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22 December 1998

Mr. Rick Smith, CESWT-EC-DR
Tulsa District , Corps of Engineers
1645 South 101ST East Avenue
Tulsa, OK 74128

RE: Submittal of Final RFA Report for
Hueco Range Camp
Contract DACA 56-96-D-0011
Delivery Order 21

Dear Mr. Smith:

Roy F. Weston, Inc. (WESTON®) is pleased to submit three copies of the above-referenced report to the U.S. Army Corps of Engineers (USACE). Note that one complete copy and two sets of replacement pages for the two previously submitted draft reports have been provided. Three complete copies and two sets of replacement pages have been forwarded to Mr. Kelly Blough at the Fort Bliss Directorate of Environment. The report has been revised according to comments received by you and Mr. Blough, and a comment response summary table is included following the title page of the report. In addition, the USACE comparability report has been included as Appendix D.

We have begun work on the HTML deliverable now that the report is final and will submit an electronic version to you and Mr. Blough upon completion. The anticipated submittal date for this submittal is early January 1999. As always, please do not hesitate to contact me if you have any questions regarding this report or if you need additional copies.

Very truly yours,

ROY F. WESTON, INC.

Greg S. Braddy, P.G.
Project Manager

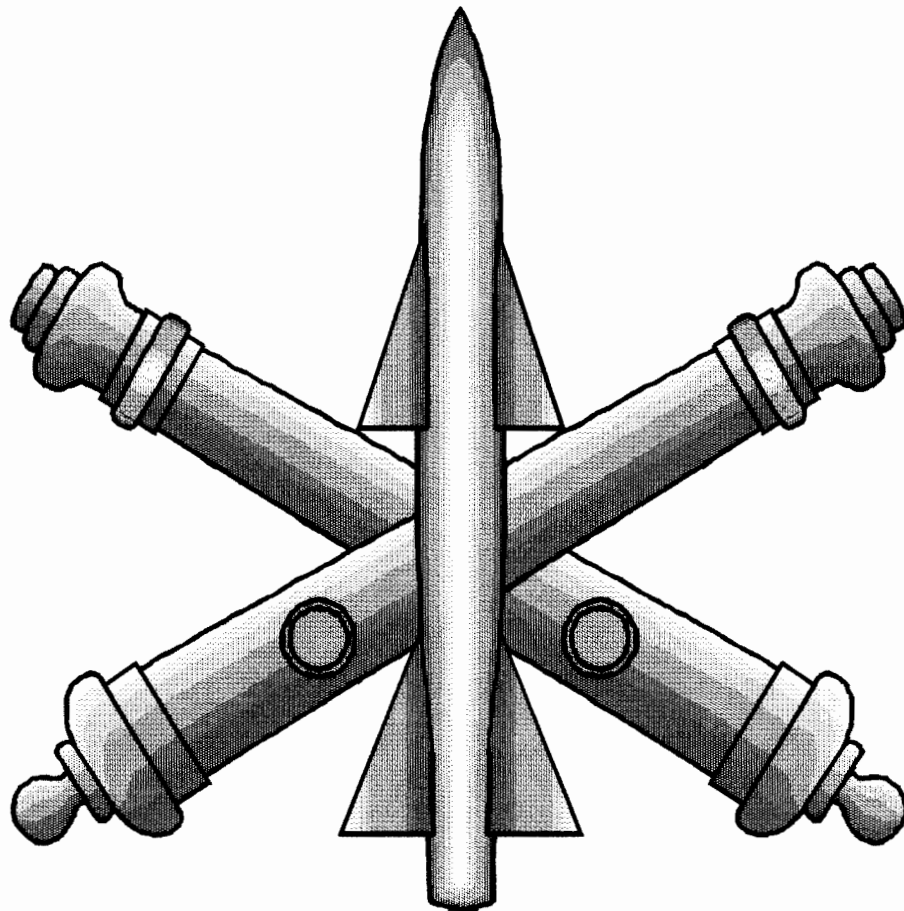
cc: Kelly Blough - Fort Bliss DOE



FB 99-004

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**RCRA FACILITY ASSESSMENT
HUECO RANGE CAMP
FORT BLISS, TEXAS**



DECEMBER 1998

**HUECO RANGE CAMP
RCRA FACILITY ASSESSMENT REPORT
FORT BLISS, NEW MEXICO**

Prepared for

United States Army Corps of Engineers
Tulsa District
Tulsa, OK

Contract No. DACA 56-96-D-0011
Delivery Order 21

Submitted by

Roy F. Weston, Inc.
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Houston, TX 77056
(713) 621-1620

December 1998

**Comments On Draft Hueco Range Camp RCRA Facility Assessment Report
Fort Bliss, New Mexico**

**Reviewer: Kelly Blough, (ERC) Fort Bliss Installation Restoration Program Manager
Richard P. Smith, SFO/FUDS Section, CESWT-EC-EF, Tulsa District, U.S. Army Corps of Engineers**

Respondent: Greg Braddy, Roy F. Weston, Inc.

Page: 1

1. Respondent concurs (C), Does not Concur (D), or takes Exception (E).
2. Commentor Agrees (A) with response, or Does not Agree (D) with response.

REVIEWER COMMENT NO.	SECTION/PAGE(S)	PARAGRAPH/LINE	REVIEWER COMMENT	C,D,E ¹	RESPONSE	A OR D ²
1.	1.1 / 1-1	2 nd Bullet	Change 'Cultural & Natural Resources Office' to 'Directorate of Environment, Conservation Division' throughout document	C	Changes will be made as requested.	
2.	1.2 / 1-2	Paragraph 1	Recent OE Archive Search Report research in support of Castner Range turned up a document referencing launches of the Pershing missile from Hueco Range Camp. Please incorporate.	C	The reference information will be incorporated as requested.	
3.	3.4.1 / 3-3	Heading	Change '3.41' to '3.4.1'.	C	Change will be made as requested.	
4.	Table 3-3	Cadmium x 027	Value in excess of MCL is not shaded as indicated in notes.	C	Shading will be applied as requested.	
5.	4.1 / 4-1	Bullet 1	Change 'form' to 'from'.	C	Change will be made as requested	
1.	1.2 / 1-2	Paragraph 1	Although it is not a result of your Record Search, it may be proper to include the information Kelly discovered about the camp's past use. Also, in the last paragraph, the "Fort Bliss representative" should be "Fort bliss employee". If that is correct.	C	Reference information will be incorporated as requested, and the change from representative to employee will be made	
2.	Table 2-1		Revise Table 2-1 to reflect that only 5 Dioxin/Furan samples were taken.	C	Table will be revised accordingly	

**HUECO RANGE CAMP
RCRA FACILITY ASSESSMENT REPORT
FORT BLISS, NM**

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**HUECO RANGE CAMP
RCRA FACILITY ASSESSMENT REPORT
FORT BLISS, NM**

LIST OF APPENDICES

APPENDIX TITLE

- A Chain-of-Custody Forms and Federal Express Airbill Receipts
- B Data Validation Narrative and Exception Reports
- C Analytical Data Summary Tables
- D. USACE Comparability Report

**DRAFT
HUECO RANGE CAMP
RCRA FACILITY ASSESSMENT REPORT
FORT BLISS, NM**

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| 1-2 | RCRA Facility Assessment |
| 1-3 | Location Map |
| 1-4 | Facility Plan |
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TABLE	TITLE
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The referenced figures and tables have been placed at the end of each respective section.

SECTION 1 INTRODUCTION

Roy F. Weston, Inc. (WESTON®) was contracted by the United States Army Corps of Engineers (USACE) (Contract No. DACA56-96-D-0011, Delivery Order No. 21) to perform a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) at the Hueco Range Camp (Hueco), Fort Bliss, New Mexico. A facility location map is presented as Figure 1-1. The RFA was intended to evaluate the presence and nature of potential contamination generated through historic training operations conducted by the U.S. Army Air Defense Artillery Center, at Fort Bliss. This draft RFA Report provides available background information, describes the sampling procedures, and presents the results of the May 1998 sampling activities.

1.1 RESULTS OF RECORD SEARCH

As stated in the U.S. Army Corps of Engineers (USACE) Scope of Work (SOW) dated 21 August 1997, WESTON performed a record search to identify the history and nature of operations associated with Hueco Range Camp. The results of this record search were used to identify areas of concern potentially related to releases of hazardous materials to the environment for which sampling would be considered. Information regarding the Hueco site was gathered from the following:

- Fort Bliss Historian Office
- Fort Bliss Directorate of Environment (DOE), Conservation Division
- Fort Bliss Engineering Department at the Directorate of Public Works and Logistics (DPWL)
- White Sands Missile Range (WSMR) Archeology Department
- Range Control at McGregor Range Camp
- United States Geological Survey (USGS)
- Fairchild Aerial Photography Collection
- Interviews with long-time Fort Bliss employees

As a result of this search, WESTON was able to compile a brief description of historic and current operations for the Hueco site. In addition, historic aerial photography and site drawings were obtained and used to create a historic plan map representative of the site as it was during its inception. The Hueco Range Camp Facility Plan is presented as Figure 1-2. WESTON also conducted three reconnaissance visits to the site in efforts to identify features discovered during

the record search, and other visible features not identified in the available literature. It should be noted that even utilizing the resources list above, limited information regarding Hueco Range Camp and historic operations was obtained. Therefore, only generalized and interpreted activities were defined.

1.2 SITE BACKGROUND AND DESCRIPTION

The Hueco site is located in the northern portion of the Fort Bliss Military Reservation, approximately 10 miles west of the McGregor Range Camp, and 10 miles southeast of the Dona Ana Range Camp. The area was reportedly used as a V2 rocket launch site during the development of the United States missile program in the late 1940s. Further investigation into the historic operations revealed that Hueco was not used as a V2 test area, but was used primarily as a Radio Control Aerial Target (RCAT) launch site. In a recent archive search associated with other Fort Bliss activities, information referencing launches of the Pershing Missile from Hueco Range Camp was discovered. According to historic aerial photography, it is believed that a majority of the RCAT operations and associated logistical support took place north of the paved road (East-West) which bisects the Hueco site, and that the area south of the paved road was used mainly for housing and training support activities.

The housing area consisted of water storage tanks, several latrines, wooden classroom buildings, other unknown structures, and at least 10 concrete slabs believed to be used as foundations for temporary tent housing. The literature refers to this area as the tent city. Adjacent to the concrete slabs are what appear to be sewer access points, possibly for routing wastewater from showers and latrines. It is believed that these structures are all connected and eventually join a sewer line which is located east of the housing area. Based on field reconnaissance, this sewer line trends eastward away from the tent city and then turns south toward a topographic depression that may have been used as an evaporation pond (See Figure 1-2).

There is a second group of building foundations north of the tent area and paralleling the paved road. Their use is unknown, however, some were most likely classrooms, some were associated with water supply operations, and a line of approximately nine other buildings (approximately 10 feet wide by 30 feet long) may have been used in some production or maintenance process. A large rectangular hole in the floor of each of the nine buildings may have been used to collect waste fluids or other materials from the associated activities. A second line of sewer access points can be traced from this line of former structures to a large structure that resembles an oil/water separator. This concrete structure measures approximately 15 feet wide, 50 feet long, and at least 10 feet deep. Access points are present east of the perceived oil/water separator and this sewer line appears to merge with the southern sewer line that originates in the tent city. As stated, the access points trend south toward a topographic depression, but can not be traced all the way to the depression. All of the sewer access points have been filled with blown sand so that the depth, integrity, and direction of pipe routing can not be determined. The building foundations and sewer access points are illustrated on Figure 1-2.

It is believed that diesel fuel and fuel oil were used throughout the training site to supply groundwater pumps, food preparation facilities, and other activities. A railroad spur located in

the northeast corner of the site was reportedly used until the 1960s to transport training vehicles and supplies to the Hueco Range Camp. It is not known whether any hazardous materials were used or transported via rail during the approximate 30 years of operation. This information regarding the railroad spur and its use was obtained through an interview with a long time Fort Bliss employee. Evidence of a rail line can not, however, be identified on aerial photographs or the site plan. The RCAT activities at Hueco were terminated in the mid 1960s, and at that time it is believed that nearly all structures were demolished and operations ceased at the Camp. The area is currently used as a remote training area mainly during the annual "Roving Sands" operation.

1.3 PREVIOUS INVESTIGATIONS AND STUDIES

The USACE and Fort Bliss conducted a preliminary screening assessment at the Hueco site in early 1997 (USACE, 1997). Several test borings were completed near the active water well pump house and within the topographic depression believed to have once served as an evaporation pond (Southeast of the Hueco Camp). Subsurface soil samples were collected and analyzed for site-related constituents. No site-related constituents were reported in the collected samples.

1.4 OBJECTIVES OF THE ASSESSMENT

The primary objectives of the Hueco RFA are as follows:

- To evaluate the presence and nature of potential site-related contaminants in the sediments, soils, and groundwater at the Hueco site.
- Collect sufficient information to determine whether the site requires further investigation or is eligible for a "no further action" closure petition.

These objectives were achieved by evaluating data obtained through collection and analysis of soil, sediment, and groundwater samples from areas of potential concern identified during the record search and site reconnaissance.

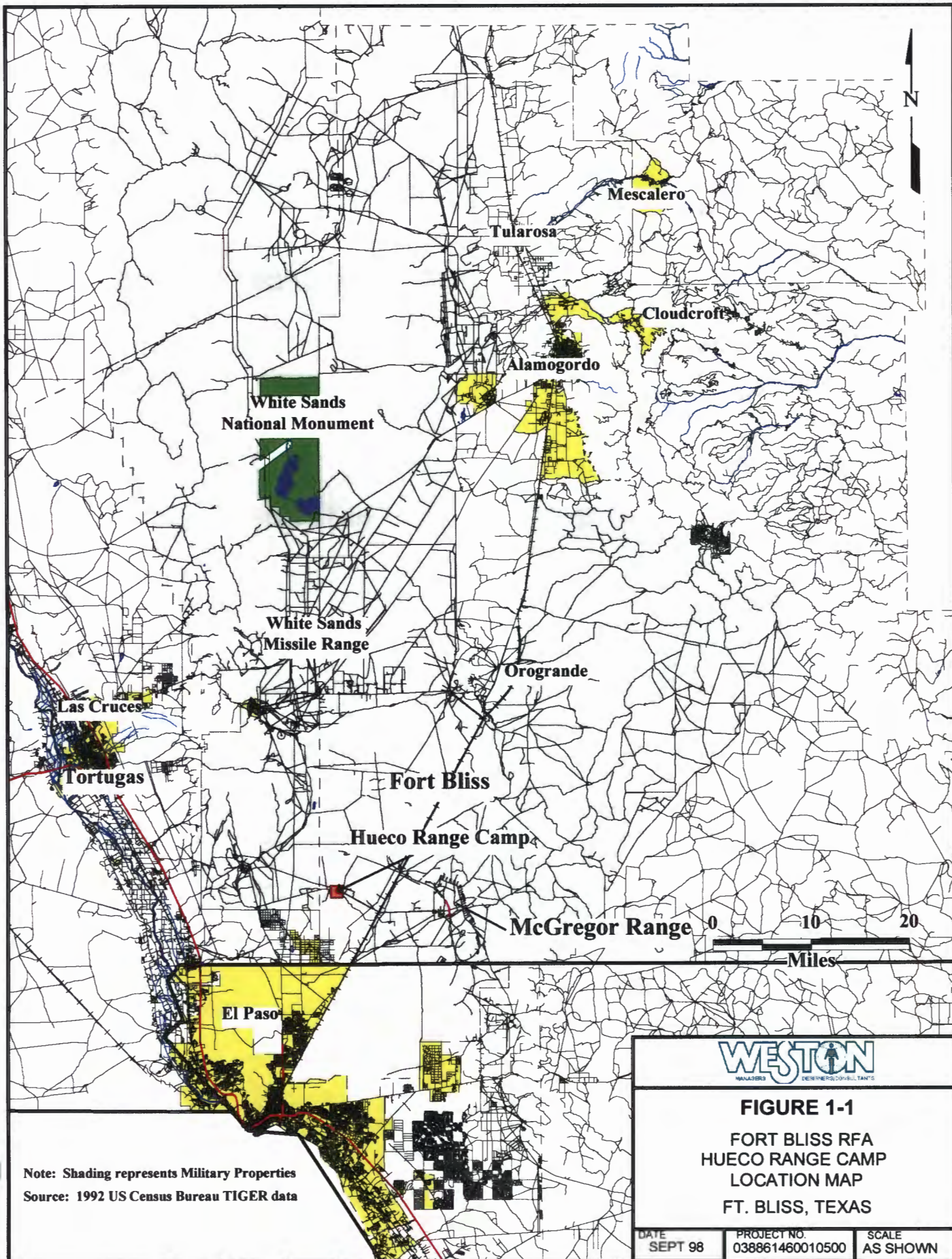
1.5 REPORT FORMAT

This RFA Report has been organized in the following format:

- Section 1—Introduction
- Section 2—Investigation Activities
- Section 3—Summary of Results
- Section 4—Conclusions and Recommendations

Appendices to this RFA Report include the following:

- **Appendix A—Chain-of-Custody Forms and Federal Express Airbill Receipts**
- **Appendix B—Data Validation Narrative and Exception Reports**
- **Appendix C—Analytical Data Summary Tables**
- **Appendix D—USACE Comparability Report**



Note: Shading represents Military Properties
 Source: 1992 US Census Bureau TIGER data

WESTON
MANAGERS DESIGNERS CONSULTANTS

FIGURE 1-1
 FORT BLISS RFA
 HUECO RANGE CAMP
 LOCATION MAP
 FT. BLISS, TEXAS

DATE SEPT 98	PROJECT NO. 038861460010500	SCALE AS SHOWN
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