DEPARTMENT OF THE ARMY
US ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
5158 BLACKHAWK ROAD
ABERDEEN PROVING GROUND MD 21010-5403

EXECUTIVE SUMMARY
QUALITATIVE RANGE ASSESSMENT
PROJECT NO. 38-EH-041E-05
CAMP BOWIE, TEXAS
DRAFT FINAL

1. PURPOSE. The purpose of this Qualitative Assessment Report is to evaluate the Camp Bowie range complex to assess whether further investigation is needed to determine if potential Munitions Constituents of Concern (MCOC) are, or could be migrating off range at levels that may impose an unacceptable risk to human health or the environment. Information for this report was gathered from various centralized data sources and the site visit.

2. CONCLUSIONS. Based on the available munitions usage data, installation interviews, and assessment of each range it is concluded that metals from small arms fire are the only potential MCOC of concern for Camp Bowie. The use of high explosive munitions are prohibited on Camp Bowie and munition usage records for FY04, FY05, and FY06 indicate that perchlorate containing munitions have not been used, and if so, not in quantities that would pose an unacceptable risk to human health or the environment. Potential MCOC source areas have been identified at small arms ranges within Training Areas I, IV, and VI. However, relatively small quantities of munitions have been used.

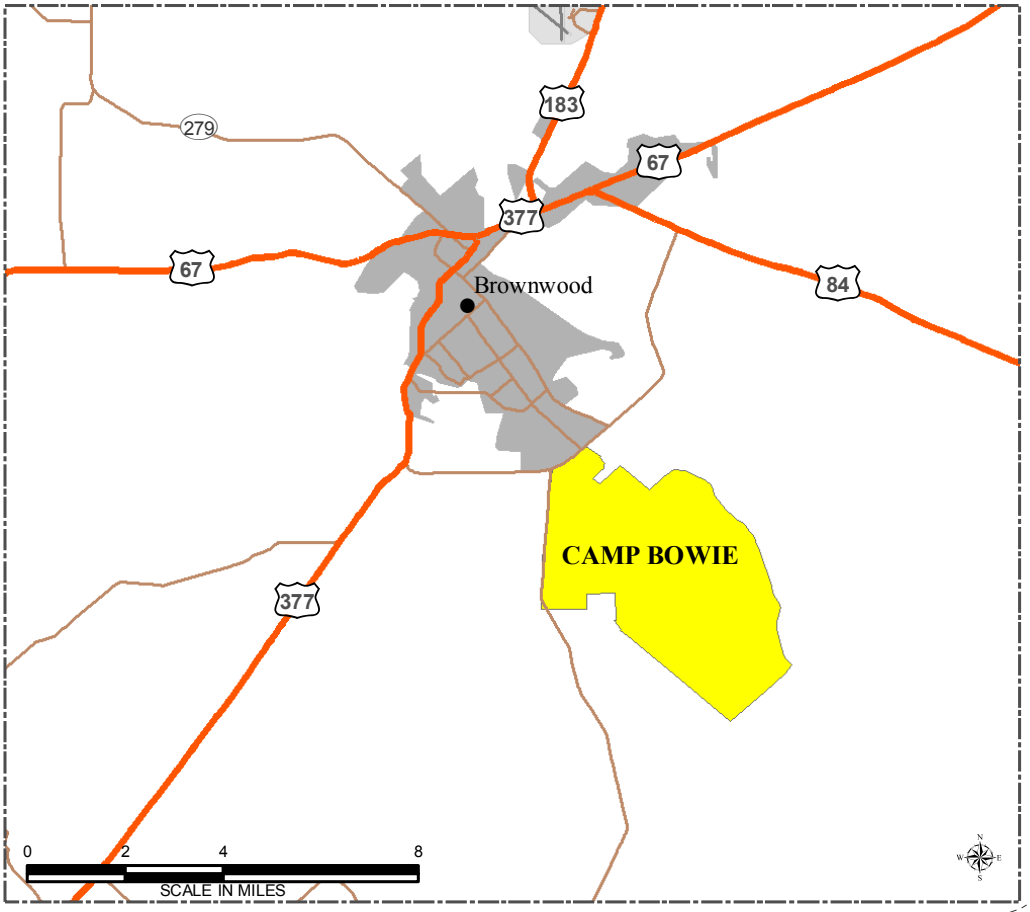
No potential surface water receptors have been identified within 15-miles downstream of any potential MCOC source area. Based on the limited number of munitions fired, surface gradient, vegetative cover, soil types, and distances between potential MCOC source areas to the surface water pathways, there appears to be no potential release mechanism for an off-range release of MCOC.

Potential ground water receptors have been identified within a 4-mile radius of Camp Bowie. However, a source receptor interaction with potential MCOC from Camp Bowie is unlikely for a number of reasons. Explosives and perchlorate bearing munitions are not known to have been used and the mobility of MCOC-related metals from small arms ranges is very limited due to the low permeability and moderate alkalinity of the native soils present in the range areas that tends to bind metals with the surrounding soils and retard the vertical migration to groundwater. These factors combined with the limited MCOC source and distance to potential off-range groundwater receptors suggests that the migration of MCOC, at levels of unacceptable risk, to be an unlikely release mechanism.

3. RECOMMENDATION. It is recommended that Camp Bowie be placed in the "unlikely" category because there is sufficient evidence to show that there are no known releases, or source-receptor interactions that present an unacceptable risk to human health or the environment based on a review of the information available.

ABBREVIATIONS/ACRONYMS

BCV	Black Capped Vero
BSL	Below Surface Level
CSM	Conceptual Site Model
DZ	Drop Zone
FY	Fiscal Year
FCC	Facility Classification Code
GIS	Geographic Information System
GKO	Guard Knowledge Online
GPM	Gallons Per Minute
ID	Identification Number
INRMP	Installation Natural Resource Management Plan
ITAM	Integrated Training Area Management
MC	Munitions Constituents
MCOC	Munitions Constituents of Concern
MM	Military Munitions
MPTR	Multi-Purpose Training Range
ORAP	Operational Range Assessment Program
RFMSS	Range Facilities Management Support System
SWPS	Surface Water Pathway Segment
TA	Training Area
TWDB	Texas Water Development Board
TXANG	Texas Army National Guard
USACE	United States Army Corps of Engineers
USACHPPM	United States Army Center for Health Promotion and Preventative Medicine
USAEC	United States Army Environmental Center
USDA	United States Department of Agriculture



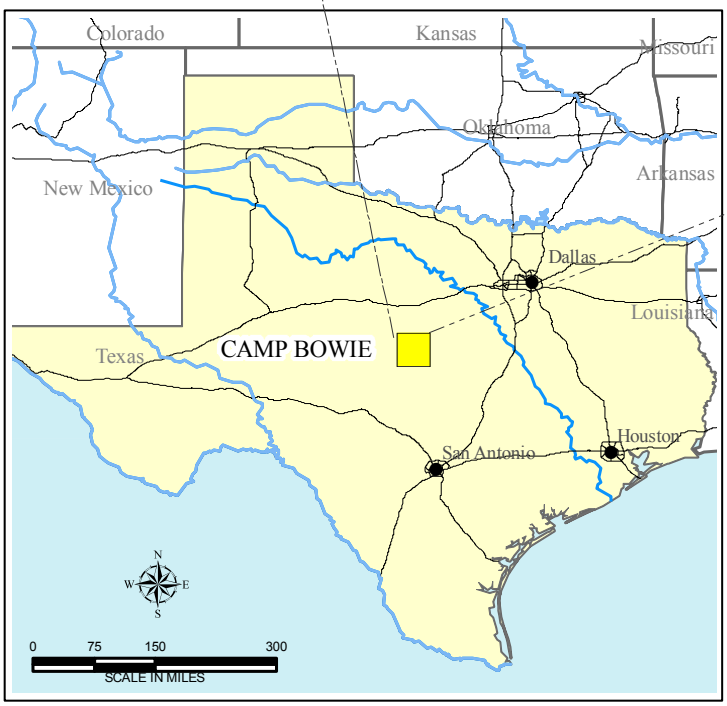


FIGURE 1
LOCATION MAP
CAMP BOWIE, TEXAS

CREATED BY:	CREATION DATE	PROJECT NO:	
P.DICKINSON	20 SEP 05	38-EH-041D-05	USACHPPM