7/23/14

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 49TH WING (ACC)
HOLLOMAN AIR FORCE BASE, NEW MEXICO

ENTERED

DeAnna M. Rothhaupt
Chief, HAFB Environmental
550 Tabosa Avenue
Holloman AFB NM 88330-8458

RECEIVED
JUL 25 2014
NMED
Hazardous Waste Bureau

New Mexico Environment Department
Attn: Mr. John Kieling, Chief
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe NM 87505-6303

Dear Mr. Kieling

This letter is being submitted to report sampling exceedances to comply with table 2-1 of the Expanded Closure and Post-Closure Plan for the 20,000-pound Open Detonation Unit (New Mexico Environmental Department permit number: NM6572124422-OD). Several closure standard exceedances were noted during the last sampling event in August of 2012. Four soil samples with elevated levels of perchlorate and one groundwater sample with elevated perchlorate and nitrates were identified. Attachments 1-5 detail the levels and locations of these exceedances.

The current contractor assigned to this project is in the process of drafting a revised expanded closure and post-closure plan for your review. They are proposing to collect additional soil samples, install five more monitoring wells (5 ea) and perform groundwater sampling to fill known data gaps and better deliniate the extent of the contamination. After the data is better defined they are proposing to submit a revised plan to remediate the contaminated areas based on their findings.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly 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.

If you have any questions, please contact DeAnna Rothhaupt, Chief HAFB Environmental, at 575-572-3931 or by e-mail at deanna.rothhaupt@holloman.af.mil.

Sincerely

DeAnna M. Rothhaupt, GS-12, DAFC

Attachments:
1- GW Tables, 2 - Soil Tables, 3- Soil Map, 4- GW Map, 5- Samples Map

cc:

(w/ Atch)
Mr. Dave Cobrain
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg 1
Santa Fe NM 87505-6303

(w/ Atch)
Mr. Cornelius Amindyas
Hazardous Waste Bureau
5500 San Antonio Dr, NE
Albuquerque NM 87109-4127

(w/o Atch)
Mr. Chuck Hendrickson
USEPA, Region 6 (6PD-F)
1445 Ross Ave, Ste 1200
Dallas TX 75202-2750

Table X-XX
August 2012 Groundwater Analytical Data
20K Open Detonation Unit
Holloman Air Force Base, New Mexico

Client Sample Identification:	Groundwater Screening Levels		Basewide Background			HAFB-EOD-MW01			HAFB-EOD-MW02			HAFB-EOD-MW03			HAFB-EOD-MW04		
Lab Sample Identification:						280-31846-1			280-31846-2			280-31846-3			280-31846-4		
Date Sampled:						8/6/2012			8/6/2012			8/6/2012			8/6/2012		
Analyte	NMWQCC[1]	USEPA MCL [2]	NMED Approved Background Levels [3]	Dissolved Metals in Groundwater UTL [4]	Total Metals in Groundwater UTL [4]	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1	Result [5]	Q	Q1
Chromium	50	NV	2.5	2.50	NV	3.1	J		3	J		2.6	J		2.5	J	
Perchlorate	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			µg/L			µg/L			µg/L		
Perchlorate	NV	15 [6]	NV	NV	NV	0.31			1,600			0.48			0.15		
Nitrate / Phosphorus	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L		
Nitrate as N	10	10	NV	NV	NV	0.82	J		30			0.81	J		0.74	J	
Total Phosphorus	NV	NV	NV	NV	NV	0.019	J		0.0079	J		0.007	J		0.005	U	
General Chemistry	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			mg/L			mg/L			mg/L		
Total Dissolved Solids	1,000	500 [7]	NV	NV	65,956.58	5,400		J	6,600			5,100		J	5,000		J

Notes:
NMWQCC = New Mexico Water Quality Control Commission
USEPA = United States Environmetal Protection Agency
NMED = New Mexico Environmental Department
MCL = Maximum Contaminant Level
UTL = Upper Tolerance Limit
LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
%RPD = Percent Relative Percent Difference
µg/L = micrograms per liter
mg/L = milligrams per liter
ng/L = nanograms per liter
NV = No Value
Q = Laboratory Qualifier
Q1 = Validating Chemist Qualifier

Qualifiers

U = Not detected
* = LCS or LCSD exceeded the control limits
J = Indicates an estimated value
p = %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
B = Indicates the analyte was detected in the associated Method Blank

[1] Standards for Groundwater, if 10,000 mg/l TDS Concentration or Less, New Mexico Administrative Code 20.6.2.3103
[2] USEPA National Primary Drinking Water Regulations MCLs (816-F-09-004, May 2009)
[3] Tables 2 and 3, Conditional Approval Letter, Basewide Background Study Report, Holloman Air Force Base, New Mexico (NMED, December 2011)
[4] Table 5-18, *Basewide Background Study Report, Holloman Air Force Base, New Mexico* (NationView/Bhate JV III, July 2011)
[5] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
[6] USEPA, Interim Drinking Water Health Advisory, for exposure to Perchlorate in water (December 2008)
[7] USEPA Secondary Drinking Water Standard (816-F-09-004, May 2009)

Bold value indicates analytes above the New Mexico Groundwater Quality Standards or the USEPA MCLs
Indicates analytical results above the New Mexico Groundwater Quality Standard, or USEPA MCL, but below the NMED Approved Background Level
Indicates analytical results above the NMED Approved Background Level, but below the New Mexico Groundwater Quality Standard and USEPA MCL

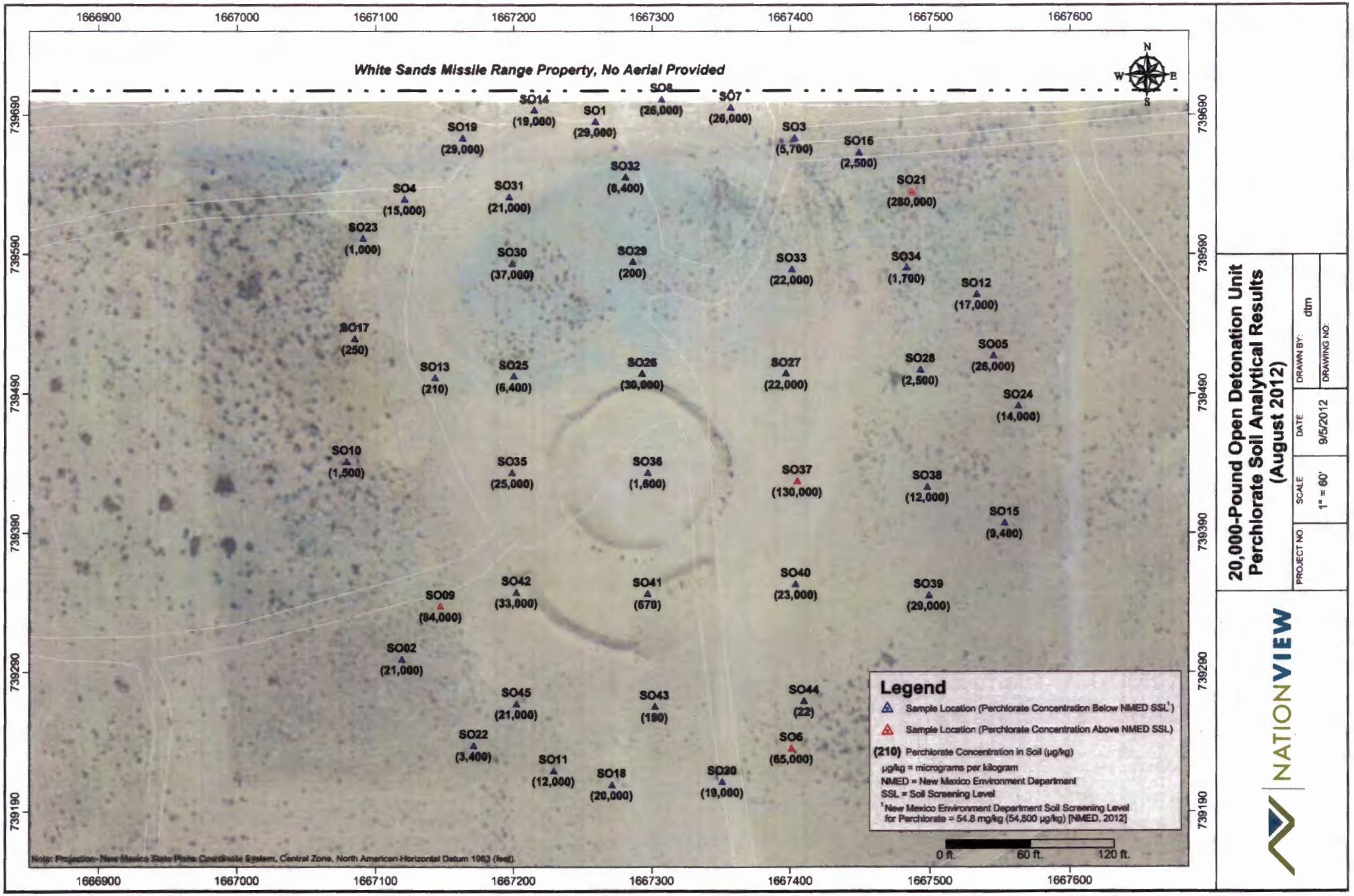
Table X-XX
August 2012 Soil Analytical Data
20K Open Detonation Unit
Holloman Air Force Base, New Mexico

Client Sample Identification:	[redacted]	20KOD-SO8	20KOD-SO09	20KOD-SO21	20KOD-SO37
Lab Sample Identification:		280-32106-1	280-32055-3	280-31980-9	280-32055-15
Date Sampled:		8/13/2012	8/10/2012	8/8/2012	8/10/2012
		µg/kg	µg/kg	µg/kg	µg/kg
Perchlorate	54.8	**65,000**	**84,000**	**280,000**	**130,000**

Notes:
NMED = New Mexico Environment Department
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
ng/kg = nanograms per kilogram
% = percent
NV = No Value
NS = Not Sampled
Q = Qualifier

Qualifiers
U = Not detected
J = Indicates an estimated value
B = Indicates the analyte was detected in the associated Method Blank

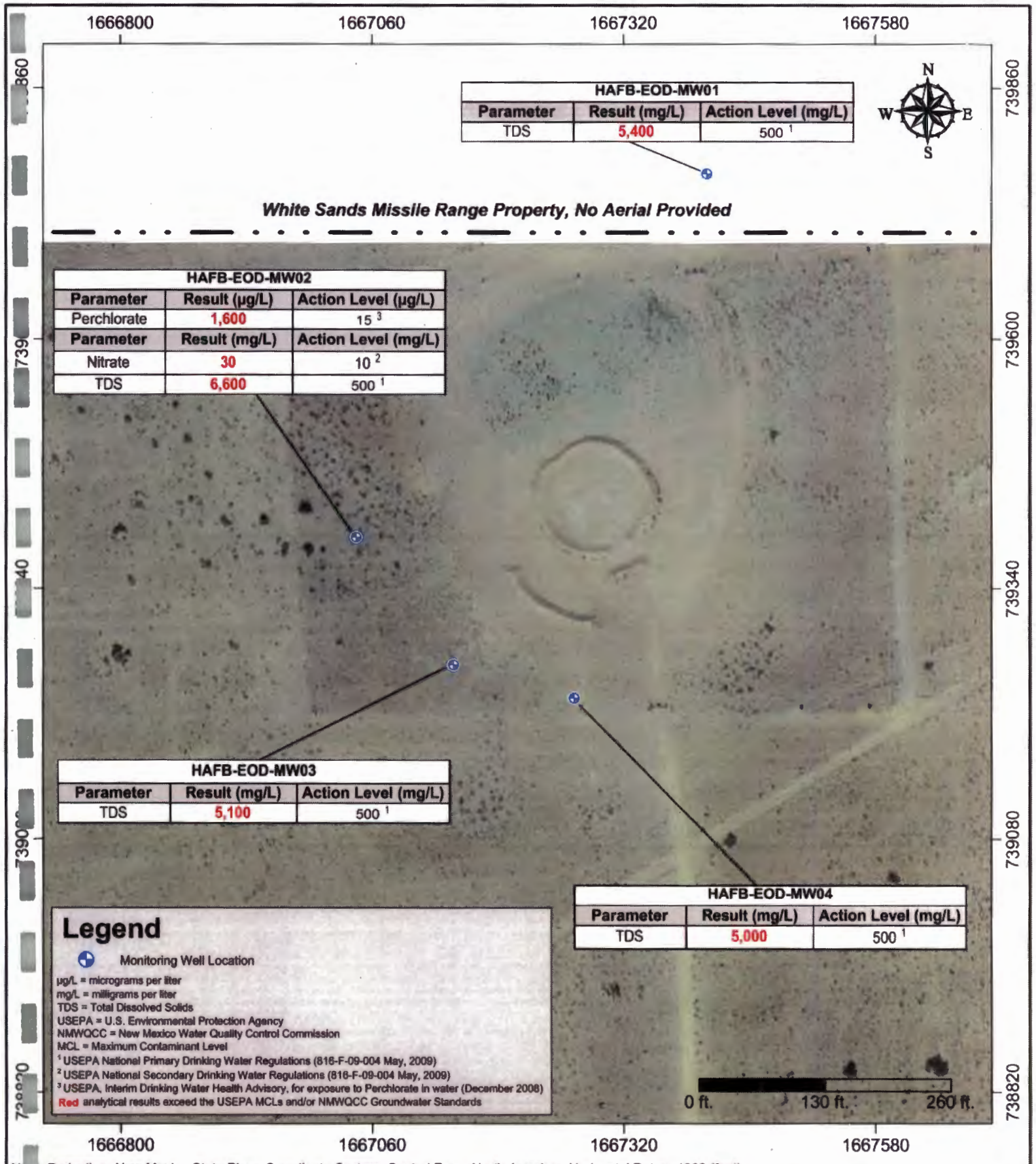
[1] Table A-1, NMED Soil Screening Levels (SSLs), Risk Assessment Guidance for Site Investigations and Remediation (February, 2012)
[2] If results are not detected (U) then the value is set at the Method Detection Limit (MDL)
[3] USEPA Region 3, 6, and 9 Regional Screening Levels (RSLs) (May, 2012)
[4] No Value established for NMED Residential SSL (February, 2012) and USEPA RSL (May, 2012)
Bold value indicates analytes above NMED SSLs (February, 2012)



20,000-Pound Open Detonation Unit Perchlorate Soil Analytical Results (August 2012)

PROJECT NO	SCALE	DATE	DRAWN BY:	DRAWING NO:
	1" = 60'	9/5/2012	dtm	

NATIONVIEW

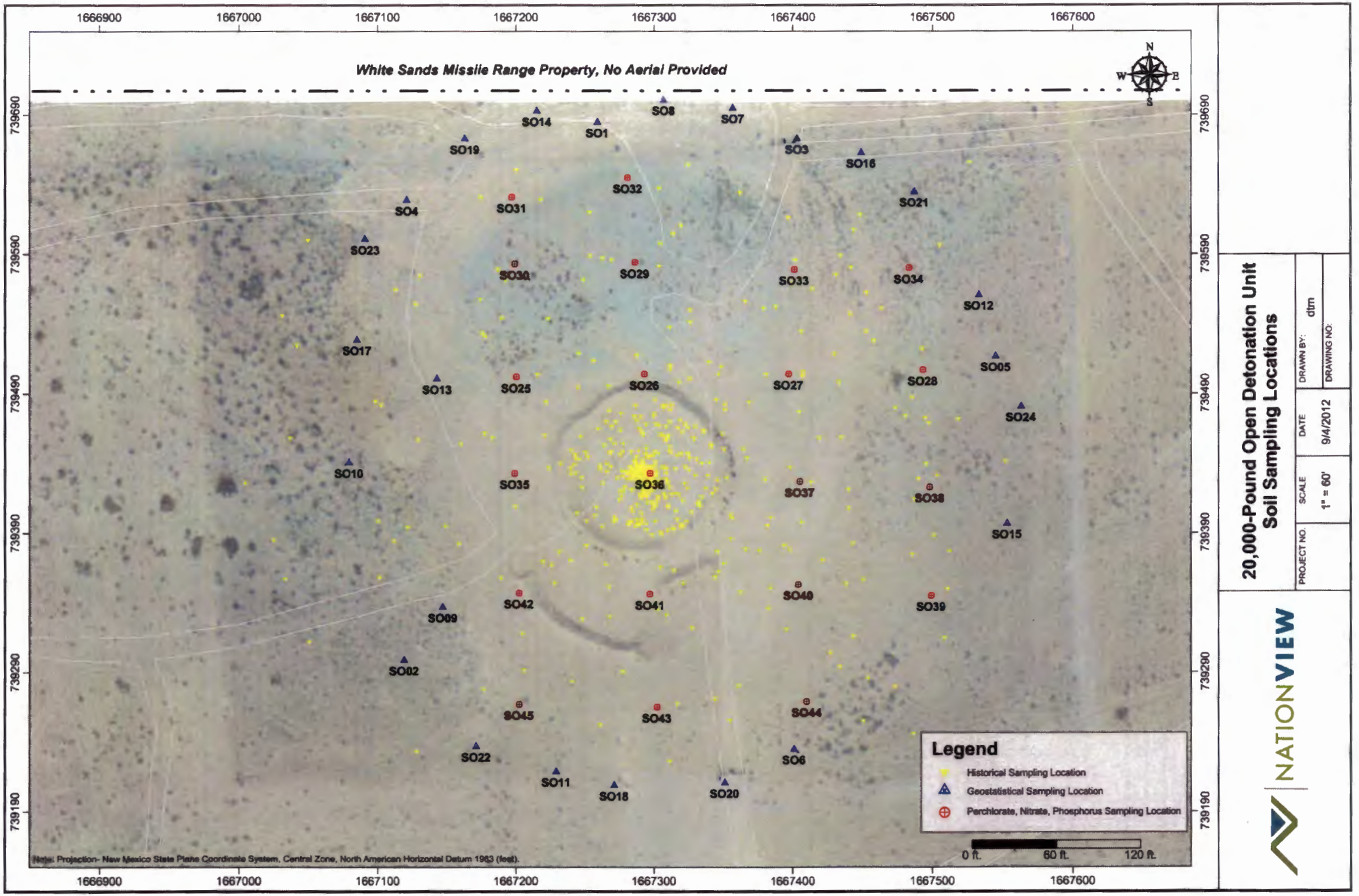


Note: Projection- New Mexico State Plane Coordinate System, Central Zone, North American Horizontal Datum 1983 (feet).

NATIONVIEW

20,000-Pound Open Detonation Unit Groundwater Analytical Results Above Action Levels (August 2012)

PROJECT NO.	SCALE	DATE	DRAWN BY:
	1" = 130'	9/5/2012	dtm
			DRAWING NO.



20,000-Pound Open Detonation Unit Soil Sampling Locations

PROJECT NO.	SCALE	DATE	DRAWN BY:	dtm
	1" = 60'	9/4/2012	DRAWING NO:	

NATIONVIEW