



Stewart, Patricia, NMENV

From: Stewart, Patricia, NMENV
Sent: Monday, May 24, 2010 3:49 PM
To: Hugh Hanson (Hugh.Hanson.Ctr@cannon.af.mil)
Subject: FW: Scanned image from HWB.SCANNER

Attachments: SHARP_COPIER_20100524_155743.pdf



SHARP_COPIER_20100524_155743.p..

Hi Hugh:

Please see the attached scanned image of Figure 7-2 from the Corrective Measures Study at SWMUs 31, 48a, 77, and 127, Cannon AFB. The figure identifies the wash pad, original leach field as well as an OWS and new leach field that were installed in 1991.
Hi Hugh:

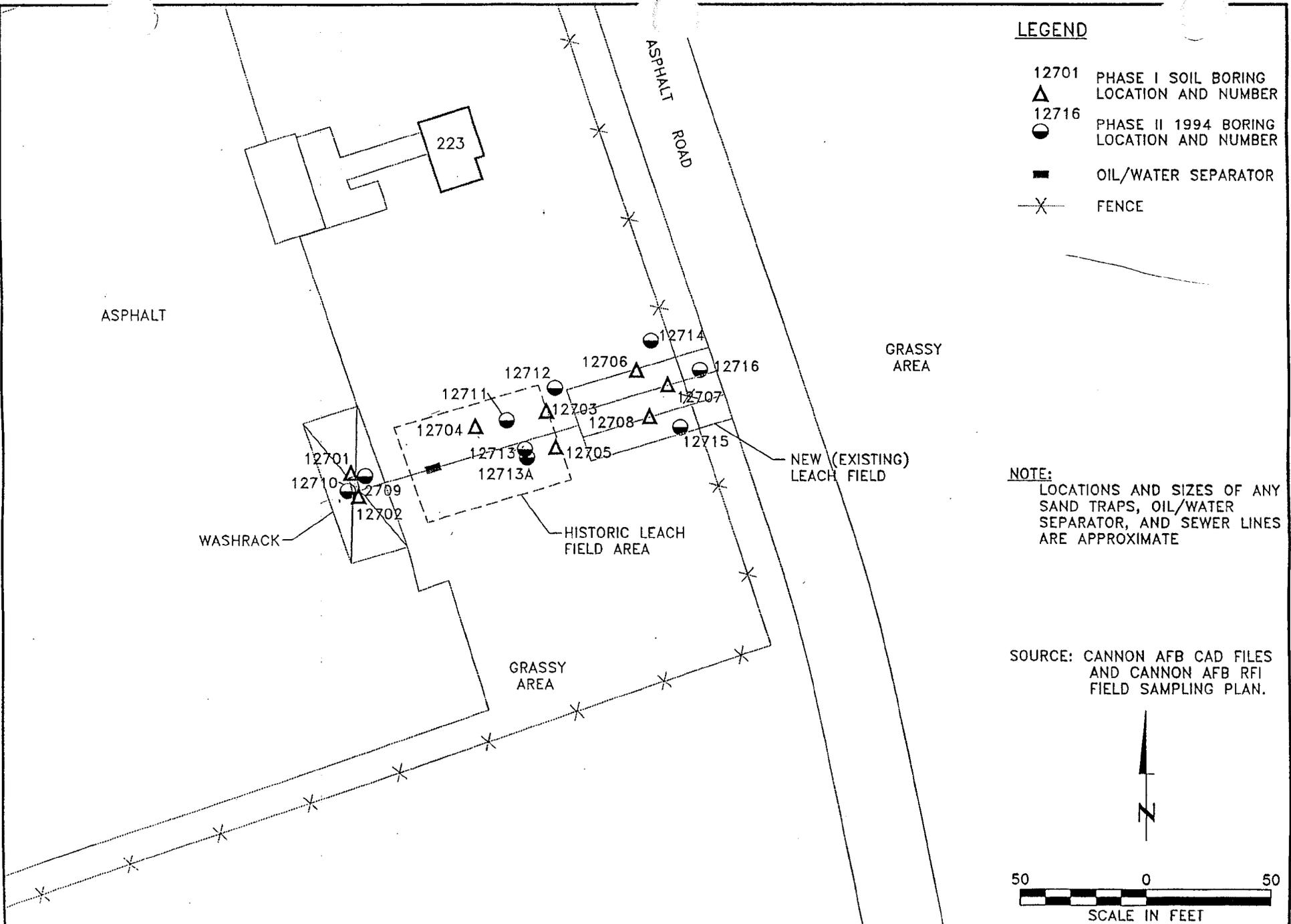
Please see the attached scanned image of Figure 7-2 from the Corrective Measures Study at SWMUs 31, 48a, 77, and 127, Cannon AFB. The figure identifies the wash pad and original leach field as well as an OWS and new leach field that were installed in 1991.

Please see the paragraph in Section 1.2.2 SWMU 127 (page 2) in the Final Letter Report dated July 2008. The last sentence states, "During a visit to the site on August 6, 2007, the wash pad was inspected and an interview with Base personnel indicated that the wash pad had recently been in use."

Can you confirm when the wash pad was last used? What are the current and planned future uses of the site?

Regards,
Pat

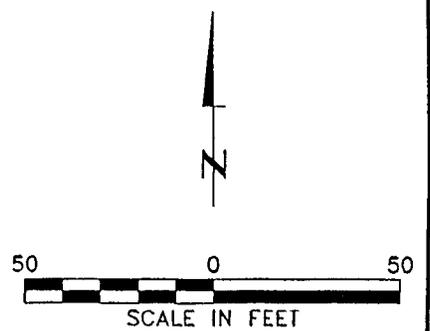
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Pat Stewart  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Bldg. 1  
Santa Fe, NM 87505-6303  
(505) 476-6059  
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- LEGEND**
- 12701 ▲ PHASE I SOIL BORING LOCATION AND NUMBER
 - 12716 ● PHASE II 1994 BORING LOCATION AND NUMBER
 - OIL/WATER SEPARATOR
 - X FENCE

NOTE:
 LOCATIONS AND SIZES OF ANY SAND TRAPS, OIL/WATER SEPARATOR, AND SEWER LINES ARE APPROXIMATE

SOURCE: CANNON AFB CAD FILES AND CANNON AFB RFI FIELD SAMPLING PLAN.



April 07, 1999 1:01:06 p.m.
 Drawing: T:\CANNON\M9602CC\T5500\FIG7-2.DWG (TSM)
 Xrefs: CAN-BASE.DWG

DRN BY: TSSM	DATE: 04/07/99	SAND TRAP AT POL WASHRACK - SWMU 127 SITE PLAN WITH BORING LOCATIONS CANNON AIR FORCE BASE NEW MEXICO	PROJECT NO.	FIG. NO.
CHK'D BY: .	REVISION: 0		45FM9602CC.00	7-2

CAFB SWMU 127 Dilemma

SWMU 127 is a 135 gallon concrete and trap and leach field that receives wash water from a refueling truck wash rack. Potential contaminants are JP-4 fuel, grease, and motor oil.

A new Oil-Water Separator was installed in May 1991 and the leach field was bypassed to a new leach field approximately 20 ft northeast of the original. The SWMU does not include the new OWS. The OWS was inspected in 1993 and no evidence of leakage or spillage was detected.

An RFI was conducted in September '93 with 8 soil borings; 2 through the concrete wash pad to 10' bgs, 3 in the original leach field to 60' bgs and 3 in the new leach field to 60' bgs. Some VOCs were detected in various borings and at various depths, but all were well below 2009 Residential SSLs. SVOCs were also detected in various borings and at various depths. Only 3 were slightly above 2009 Residential SSLs; benzo(a)anthracene, benzo(a)pyrene and benzo(b)fluoranthene. Several metals were above background, but none were above Residential SSLs. TPH was above Residential Exposure to Unknown Oil (200 mg/kg). All TPH detections were above 20' bgs.

A Baseline Risk Assessment, conducted in February '94 for both human health and eco receptors, indicated no unacceptable risk. However, the RA did not consider future residential receptors.

The site was sampled again in December '94; 2 soil borings to 10' bgs drilled through the concrete wash pad, 3 in the original leach field to 60' bgs and 3 in the new leach field to 60' bgs. A few VOCs were detected in various borings and at various depths, but all were well below 2009 Residential SSLs. SVOCs were also detected in various borings and at various depths. Only one was slightly above 2009 Residential SSLs; benzo(a)pyrene. Several metals were above background, but none were above Residential SSLs. TPH was detected in 30 of 134 samples. 5 detects were above Residential Exposure to Unknown Oil (200 mg/kg). Only 2 of them were above diesel/crankcase and kerosene/jet fuel residential exposure via ingesting soil or via vapors from soil. (I question the validity of some of the TPH analyses. There were detections at 30', 40' and 50' in the old and new leach field borings with no trends of TPH in shallower samples of the same borings.)

Swarna's NOD was responded to satisfactorily except for here challenges regarding VOCs and vapor intrusion. Swarna wrote a second NOD. NMED ran the SL-Screen-Feb04.xls J&E model in back-calculation mode with some assumptions and determined that maximum concentrations of ethylbenzene, benzene, toluene and xylenes exceed target concentrations protective from indoor air exposures. CAFB responded as follows.

“Only the BTEX concentrations associated with [one sample from one boring] exceed the target concentrations based on the J&E model. This sample was collected from surface soil (collected at 0 to 0.5 feet immediately beneath concrete). BTEX compounds were not detected in the 5' or 10' samples, indicating there is not a significant source of BTEX in the subsurface.

The maximum detected VOC concentrations were located immediately beneath the wash rack and as such, existing conditions are not relevant to the enclosed building parameters or to the residential exposure assumptions presently used in the J&E vapor intrusion model.

It should also be noted that a project which includes additional characterization of SWMU 127, potentially followed by a removal action, is currently in the planning phase.”

Paige reviewed the Response to Comments, but I don't think that Paige saw the data.

Swarna responded with an Approval with Modifications with the statements;

“...SWMU 127 has detections of several VOCs and while most of the concentrations are low, it can not be determined if overall risk would be impacted by including an analysis of exposure to indoor air.

The Permittee in the Response proposed additional characterization and potential removal of soil at SWMU 127. NMED will reevaluate SWMU 127 once confirmation sampling and, if necessary, risk analysis (accounting for vapor intrusion pathway) is performed to determine overall risk after excavation.

CAFB sampled the site again in February 2008; 3 borings to 2.5' or 3' drilled through the wash pad, 7 borings to 2.5' or 3' near the wash pad, 7 borings to 3' in and near the old leach field, and one boring to 3' in the new leach field. They analyzed the samples for PAHs and TPH. None were above Residential SSLs. A Tier 1 Risk Screening analysis indicated no hazard. CAFB concluded that SWMU 127 should be considered for clean closure and proposed for NFA. Cheryl approved the report. They did not analyze the samples for VOCs or remove any soil or address potential risk associated with VOCs via vapor intrusion.