APPENDIX B-44

Asbestos Survey Summary
for
Building 13140B
Vandenberg AFB, California

Bureau Veritas Project # 25009-009558.00

Surveyed by: Mr. Richard McKenna, CAC (Certification No. 92-0683)

Dates of Survey: January 25, 2011

Number of Samples collected: Sixty-three (63)

Number of Samples Analyzed by PLM: Fifty-seven (57)

Number of Samples Analyzed by TEM: Four (4)

Number of Samples Analyzed by PLM Point Count: Ten (10)

Photos of Sample Locations: Refer to Appendix C (separated per building), for Photos of Sample Locations on Compact Disc (CD).

Building Description:

Building 13140B at Vandenberg AFB, California is a three-story, concrete structure constructed in 1976 that comprises approximately 25,904 square feet of floor space.

The interior spaces of Building 13140B included living quarters, restrooms, lounges and laundry rooms. The interior walls were finished with painted gypsum board, ceramic tile. The interior ceilings were finished with spray applied acoustical material, or ceiling tiles. Interior floor finishes included glued on carpet, ceramic tile, and vinyl floor tile. Additional interior finishes included vinyl cove base. The heating, ventilating, and air conditioning (HVAC) system supplied air to each room via insulated ductwork. The piping was also insulated. The building's roof was flat and consisted of built-up black tar and paper. Note that due to the non-destructive nature of this assessment, the aforementioned ceiling tiles with associated mastic and cementitous panels were not sampled.

Survey Results

One (1) of the building materials sampled was found to contain asbestos greater than one percent and two (2) materials were assumed to contain asbestos greater than one percent. The following table presents a summary of our findings by homogenous sampling area (HA). Sample and asbestos location drawings are attached at the end of Appendix B-44. The laboratory results and the field chain of custodies are also attached at the end of Appendix B-44.

APPENDIX B-44
Building 13140B (continued)

Table 2: Asbestos Assessment Results Building 13140B Vandenberg AFB, California					
Material (Classification)	**Location of Material**	**Condition**	**Friable Yes/No**	**Quantity (NESHAP Category)**	**Asbestos Content**
HA-1: Gypsum board and associated joint compound (M)	Throughout building	Good	Yes	50,000 s.f. (NA)	Gypsum board: ND Joint compound: 0.50% $chrysotile_2$
HA-2: Texture coat (S)	Throughout building	Good	Yes	50,000 s.f. (NA)	Texture coat: 0.50% $chrysotile_2$
HA-3: Yellow, green and brown mastics accosted with red carpet (M)	Throughout building	Good	No	20,000 s.f. (NA)	Yellow mastic: ND Green mastic: ND Brown mastic: ND
HA-4: 4" brown cove base and associated brown mastic(M)	Throughout building	Good	No	4,000 l.f. (NA)	Cove base: ND Mastic: ND
HA-5: 4" brown cove base and brown mastic (M)	Restrooms throughout building	Good	No	500 l.f. (NA)	Cove base: ND Mastic: ND Mineral mixture: 0.30% $chrysotile_2$
HA-6: White/silver paper wrap on fiberglass pipe run insulation and associated tan and clear mastics (TSI)	Throughout building	Good	Yes	1,500 l.f. (NA)	Wrap: ND Tan mastic: ND Clear mastic: ND
HA-7: White grout associated with 4" ceramic wall tile grout (M)	Restrooms throughout building	Good	No	6,000 s.f. (NA)	ND
HA-8: Gray and white grouts associated with 1" beige ceramic floor tile (M)	Restrooms throughout building	Good	No	2,500 s.f. (NA)	Gray grout: ND White grout: ND
HA-9: Spray applied acoustic ceiling material (S)	Rooms throughout building	Good	Yes	12,000 s.f. (NA)	ND
HA-10: 12" x 12" gray vinyl floor tile with associated tan mastic (M)	Closets throughout building	Good	No	400 s.f. (NA)	Floor tile: ND_1 Mastic: ND
HA-11: 12" x 12" gray vinyl floor tile with associated black, cream, and tan mastics and white mineral mixture underneath carpet (M)	**Hallways, closets and lounges throughout building**	**Good**	**No**	**4,000 s.f. (Cat. I)**	**Floor tile: 3% chrysotile** **Black mastic: 3% chrysotile** Cream mastic: ND Tan mastic: ND Mineral mixture: ND
HA-12: Beige grout associated with 6" beige ceramic tile (M)	Laundry room	Good	No	250 s.f. (NA)	ND
HA-13: Black/white roofing penetration mastic (M)	Roof	Good	No	50 s.f. (NA)	ND_1
HA-14: Silver/gray duct sealant (M)	Roof HVAC units	Good	No	80 l.f. (NA)	Silver paint: ND Gray sealant: ND
HA-15: Texture coat (S)	Exterior CMU walls	Good	Yes	15,000 s.f. (NA)	ND

APPENDIX B-44
Building 13140B (continued)

Table 2: Asbestos Assessment Results Building 13140B Vandenberg AFB, California					
Material (Classification)	**Location of Material**	**Condition**	**Friable Yes/No**	**Quantity (NESHAP Category)**	**Asbestos Content**
HA-16: Mineralized black/gray cap sheet and associated black tar, beige insulation and yellow foam (M)	Roof	Good	No	8,000 s.f. (NA)	All layers: ND_1
HA-16: Black/gray roof penetration mastic(M)	Roof penetrations	Good	Yes	50 s.f. (NA)	ND_1
HA-17: Cementitious paneling (M)	**Exterior under windows**	**Good**	**No**	**NQ (Cat. II)**	**Assumed to contain asbestos greater than one (1) percent**
HA-18: 1'x 1' ceiling tiles and mastic (M)	**Lounge**	**Good**	**No**	**NQ (RACM and Cat. II)**	**Assumed to contain asbestos greater than one (1) percent**
s.f. = Square Feet, l.f. = Linear Feet, ND = Non Detect, M = Miscellaneous, S = Surfacing Material, Cat. I = Category I Non-Friable Asbestos Containing Material, Cat. II = Category II Non-Friable Asbestos Containing Material, $_1$ = Verified by TEM Analysis, $_2$ = Verified by PLM Point Count Analysis, NQ = Not Quantified, and NA = Not Applicable					

Prepared by:

Timothy J. Coe, CAC
Certified Asbestos Consultant (05-3838)
Health, Safety and Environmental Services

Reviewed by:

Michael-Ray Boyden, CAC
Certified Asbestos Consultant (93-0985)
Health, Safety and Environmental Services

Attachments:

- Laboratory Report and Field Chain of Custody Forms
- Figure 1 – Sample Location Drawing
- Figure 2 – Asbestos Location Drawing

APPENDIX B-44
Building 13140B (continued)

LABORATORY REPORT AND FIELD CHAIN OF CUSTODY FORMS

February 14, 2011

Michael-Ray Boyden
BUREAU VERITAS - PLEASANTON
2430 Camino Ramon
Suite 122
San Ramon, CA 94583-

Bureau Veritas Work Order No.: A1102024

Reference: 25009-009558.00/300-VANDENBERG AFB (BLDG 13140)

Dear Michael-Ray Boyden:

Bureau Veritas North America, Inc. received 57 samples on 1/31/2011 and reported on 2/14/2011 1:46:07 PM for the analyses presented in the following report.

The results apply only to the samples analyzed in this project. Please note that any unused portion of the samples will be discarded after a thirty-day holding period, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning the report, please contact the analyst whose name appears on the report or myself at (770) 499-7701.

Sincerely,

Alan M. Segrave, P.G.
Director, Laboratory Services

Bureau Veritas North America, Inc.

Health, Safety, and Environmental Services
3380 Chastain Meadows Parkway, Suite 300
Kennesaw, GA 30144

Main: (770) 499-7701
Fax: (770) 499-7511
www.us.bureauveritas.com

CASE NARRATIVE

Date: *14-Feb-11*

CLIENT: BUREAU VERITAS - PLEASANTON

Project: 25009-009558.00/300-VANDENBERG AFB (BLDG 13140)

Work Order No A1102024 **Report Date:** 14-Feb-11

ANALYTICAL METHOD FOR ASBESTOS IN BULK SAMPLES USING POLARIZED LIGHT MICROSCOPY (PLM)

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected unless otherwise noted.

Use of EPA/600/R-93/116 satisfies applicable requirements of the USEPA's "Interim Method for the Determination of Asbestos in Bulk Insulation Sample", EPA-600/M4-82-020, December 1982, published as Appendix E to Subpart E of 40CFR763. Bulk samples analyzed by New York State methods follow stratified point counting methods (198.1) or Method 198.6 for PLM non-friable organically bound materials (NYSDOH Lab Code –11645). Percentages are visual estimations of asbestos >10:1 aspect ratio. The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed. NESHAP requires point counting of a bulk sample when the result is <10% by a method other than point counting. EPA, however states that if 3 mounts of the sample are analyzed and the asbestos percentage is <10% by visual estimation, the client may elect to assume the amount to be greater than 1% or require verification by point counting. If the result by point counting is different than the result obtained by visual estimation, the point count result will be used. Sample friability or non-friability noted on the report is a requirement for the State of California and refers only to the condition of the sample under macroscopic examination. It does not imply friability or non-friability for the sample as collected or observed in the field as determined by the person collecting the sample. The Kennesaw, Georgia lab is accredited by NVLAP –Lab Code 101125-0.

(a)Polarized- light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing. When analysis of such materials by PLM yields results negative for the presence of asbestos, Bureau Veritas recommends utilizing quantitative transmission electron microscopy (TEM). For more information, contact the laboratory.

References

McCrone, Walter C. 1980. The Asbestos Particle Atlas. Ann Arbor, MI: Ann Arbor Science

Publishers, Inc.

United States Environmental Protection Agency. Environmental Monitoring Systems Laboratory. 1982. Interim Method for the Determination of Asbestos in Bulk Insulation Samples. EPA-600/M4-82-020. Washington: GPO, December.

United States Environmental Protection Agency. Method for the Determination of Asbestos in Bulk Building Materials. EPA-600/R-93/116, July 1993 (PLM)

Fed. Reg. Vol. 55, No.224, 11/20/90, p.48415 (NESHAP)
EPA Memorandum 5/8/1991 –NESHAP Clarifications

NYSDOH Methods 198.1/198.6

ANALYTICAL METHOD FOR ASBESTOS IN BULK SAMPLES USING POLARIZED LIGHT MICROSCOPY (PLM) USING POINT COUNTING

A representative portion of the bulk sample is transferred to a small dish. The sample is examined under a stereomicroscope at 10x to 40x magnification to note the physical characteristics of the sample.

A small subsample is extracted and mounted on a microscope slide using a refractive index liquid (Cargille Series E: HD [high dispersion]). The subsample is analyzed by polarized light microscopy supplemented by dispersion staining. Percentage of asbestos is determined using point counting on fibers >10:1 aspect ratio. For point counting, a minimum of four slides are prepared, with 100 non-empty points counted on each of the slides. Bulk samples analyzed by New York State methods follow stratified point counting methods or Method 198.1 for PLM non-organically bound materials (NYDOH Lab Code -11645). Bulk samples analyzed to meet the requirements of the State of California utilize current EPA methods except 1000 points are counted instead of 400 points. All points counted use the center cross-hair reticle procedure. The percentage of asbestos points (identified by central stop dispersion staining) divided by the total points counted yields the percent asbestos. Final results are reported as type of asbestos and percent asbestos.

The Kennesaw, Georgia lab is accredited by NVLAP –Lab Code 101125-0.

References

McCrone, Walter C. 1980. The Asbestos Particle Atlas. Ann Arbor, MI: Ann Arbor Science Publishers, Inc.

United States Environmental Protection Agency. Environmental Monitoring Systems Laboratory. 1982. "Interim Method for the Determination of Asbestos in Bulk Insulation Samples." EPA-600/M4-82-020. Washington: GPO, December.

Method for the Determination of Asbestos in Bulk Building Materials. EPA-600/R-93/116, July 1993 (PLM)

New York ELAP Method 198.1

QUANTITATIVE ANALYSIS OF BULK SAMPLES FOR ASBESTOS USING TRANSMISSION ELECTRON MICROSCOPY (TEM)

Upon receipt in the laboratory, samples are ground until homogeneous. Each sample is weighed in a tared silica crucible. The sample is placed in a muffle furnace at a temperature of 480C for at least 3 hours or until the weight has stabilized. The sample is allowed to cool to room temperature and immediately weighed to calculate percent organic loss.

Approximately 1 ml of nondiluted HCL acid is slowly added to remove calcite and dolomite from the ashed sample. After evolution of CO2 gas has ceased, the sample is immediately diluted with ultra-pure water. The sample is then dispersed in 50 ml of ultra-pure water and filtered onto a pre-weighed 47 mm, 0.45 um pore size, MCE filter. The filter is dried on a slide warmer and weighed once again.

A 1 cm2 portion of the filter is cut and placed in a clean silica crucible. Approximately 250 ul of both 20 ppm methyl cellulose solution and isopropyl alcohol are added and ultra-sonicated for 1 minute to remove the deposited sample into suspension. Approximately 3 ul of the suspension is pipetted onto a carbon-coated copper TEM grid and allowed to dry.

Grids are examined in the TEM at 15,000X magnification. Asbestos is identified using morphology, selected area electron diffraction, and energy-dispersive x-ray spectroscopy. From TEM examination, a visual area estimation is made of asbestos in the final residue. Percent asbestos in the final residue is then extrapolated using gravimetric records to percent asbestos in the total sample.

The Kennesaw, Georgia lab is accredited by NVLAP –Lab Code 101125-0.

References

Chatfield Method for Quantitative Analysis of Bulk Samples for Asbestos Using Transmission Electron

Microscopy (unpublished).

United States Environmental Protection Agency. Method for the Determination of Asbestos in Bulk Building Materials. EPA-600/R-93/116, July 1993 (PLM)

NOTE: Some of the samples may have contained inseparable layers which were combined during preparation.

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1102024	**Date Received:**	1/31/2011
Client Reference:	25009-009558.00/300-VANDENBERG AFB (BLDG 13140)	**Report Date:**	14-Feb-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
001A	***13140-1A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	10	Homogeneous White Paint/Joint Compound	Chrysotile	< 1%	Non-Detected		Binder/Filler
(2)	90	Homogeneous White/Brown Drywall	None Detected		Cellulose fiber	1%	Binder/Filler Tape
			Total	<1%			

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
002A	***13140-1B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	20	Homogeneous White Paint/Joint Compound	Chrysotile	< 1%	Non-Detected		Binder/Filler
(2)	10	Homogeneous White Joint Compound/Tape	Chrysotile	< 1%	Non-Detected		Binder/Filler
(3)	70	Homogeneous White/Brown Drywall	None Detected		Cellulose fiber	1%	Binder/Filler Tape
			Total	<1%			

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
003A	***13140-1C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	10	Homogeneous White Joint Compound	Chrysotile	< 1%	Non-Detected		Binder/Filler
(2)	20	Homogeneous White Joint Compound/Tape	Chrysotile	< 1%	Non-Detected		Binder/Filler
(3)	70	Homogeneous White/Brown Drywall	None Detected		Cellulose fiber	1%	Binder/Filler Tape
			Total	<1%			

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
004A	***13140-2A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	50	Homogeneous Green/Cream Textured Coating	Chrysotile	< 1%	Non-Detected		Binder/Filler Paint
(2)	50	Homogeneous White/Brown Drywall	None Detected		Cellulose fiber	1%	Binder/Filler Tape
			Total	<1%			

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: _____ 2/14/2011

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1102024	**Date Received:**	1/31/2011
Client Reference:	25009-009558.00/300-VANDENBERG AFB (BLDG 13140)	**Report Date:**	14-Feb-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
005A	***13140-2B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	White Textured Coating	Chrysotile	< 1%	Non-Detected		Binder/Filler Paint

Layer Comment: No other material found in the sample.

Total <1%

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
006A	***13140-2C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	50	Homogeneous	White Textured Coating	Chrysotile	< 1%	Non-Detected		Binder/Filler Paint
(2)	50	Homogeneous	White/Brown Drywall	None Detected		Cellulose fiber	1%	Binder/Filler Tape

Total <1%

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
007A	***13140-2D***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous Coating	Beige/White Textured	Chrysotile	< 1%	Non-Detected		Binder/Filler Paint

Layer Comment: No other material found in the sample.

Total <1%

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
008A	***13140-2E***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	White Textured Coating	None Detected		Non-Detected		Binder/Filler Paint

Layer Comment: No other material found in the sample.

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
009A	***13140-2F***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	White Textured Coating	None Detected		Non-Detected		Binder/Filler Paint

Layer Comment: No other material found in the sample.

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: _____ 2/14/2011

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1102024	**Date Received:**	1/31/2011
Client Reference:	25009-009558.00/300-VANDENBERG AFB (BLDG 13140)	**Report Date:**	14-Feb-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
010A	***13140-2G***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate	
(1)	100	Homogeneous	White Textured Coating	None Detected		Non-Detected		Binder/Filler Paint	

Layer Comment: No other material found in the sample.

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
011A	***13140-3A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	Yellow Carpet Mastic	None Detected		Synthetic fiber	1%	Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
012A	***13140-3B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	30	Homogeneous	Yellow Carpet Mastic	None Detected		Synthetic fiber	1%	Binder/Filler
(2)	30	Homogeneous	Green Carpet Mastic	None Detected		Synthetic fiber	1%	Binder/Filler
(3)	10	Homogeneous	Brown Carpet Mastic	None Detected		Non-Detected		Binder/Filler
(4)	30	Homogeneous	Multi-Colored Fibers	None Detected		Synthetic fiber	95%	Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
013A	***13140-3C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	90	Homogeneous	Yellow Carpet Mastic	None Detected		Non-Detected		Binder/Filler
(2)	5	Homogeneous	Off-White Mineral Mixture	None Detected		Non-Detected		Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
014A	***13140-4A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate	
(1)	67	Homogeneous	Beige Cove Base	None Detected		Non-Detected		Binder/Filler Rubber	
(2)	3	Homogeneous	Gray Mastic	None Detected		Non-Detected		Binder/Filler	
(3)	20	Homogeneous	Brown Mastic	None Detected		Cellulose fiber	1%	Binder/Filler Paint	
(4)	10	Homogeneous	White Mineral Mixture	None Detected		Non-Detected		Binder/Filler	67%

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: _____ 2/14/2011

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1102024	**Date Received:**	1/31/2011
Client Reference:	25009-009558.00/300-VANDENBERG AFB (BLDG 13140)	**Report Date:**	14-Feb-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
015A	***13140-4B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	75	Homogeneous	Beige Cove Base	None Detected		Non-Detected		Binder/Filler Rubber
(2)	20	Homogeneous	Brown Mastic	None Detected		Cellulose fiber	1%	Binder/Filler
(3)	5	Homogeneous	White Mineral Mixture	None Detected		Non-Detected		Binder/Filler Paint Tape

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
016A	***13140-4C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	50	Homogeneous	Beige Cove Base	None Detected		Non-Detected		Binder/Filler Rubber
(2)	20	Homogeneous	Brown Mastic	None Detected		Cellulose fiber	1%	Binder/Filler Paint
(3)	30	Homogeneous	White Mineral Mixture	None Detected		Non-Detected		Binder/Filler Tape

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
017A	***13140-5A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	75	Homogeneous	Brown Cove Base	None Detected		Non-Detected		Binder/Filler Rubber
(2)	20	Homogeneous	Brown Mastic	None Detected		Non-Detected		Binder/Filler Paint
(3)	5	Homogeneous	White Mineral Mixture	None Detected		Non-Detected		Binder/Filler Tape Paint

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: _____ 2/14/2011

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1102024	**Date Received:**	1/31/2011
Client Reference:	25009-009558.00/300-VANDENBERG AFB (BLDG 13140)	**Report Date:**	14-Feb-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
018A	***13140-5B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate	
(1)	80	Homogeneous	Brown Cove Base	None Detected		Non-Detected		Binder/Filler Rubber	
(2)	20	Homogeneous	Brown Mastic	None Detected		Non-Detected		Binder/Filler Paint Tape	

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
019A	***13140-5C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate	
(1)	70	Homogeneous	Brown Cove Base	None Detected		Non-Detected		Binder/Filler Rubber	
(2)	5	Homogeneous	White Mastic	None Detected		Non-Detected		Binder/Filler	
(3)	20	Homogeneous	Brown Mastic	None Detected		Cellulose fiber	1%	Binder/Filler Paint	
(4)	5	Homogeneous	White Mineral Mixture	Chrysotile	< 1%	Non-Detected		Binder/Filler Tape Paint	67%
				Total	<1%				

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
020A	***13140-6A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	97	Homogeneous	White/Silver Paper Pipe Wrap	None Detected		Cellulose fiber Fibrous glass	80% 10%	Binder/Filler Foil
		Layer Comment:	Foil not tested.					
(2)	1	Homogeneous	Tan Mastic	None Detected		Non-Detected		Binder/Filler
(3)	2	Homogeneous	Clear Mastic	None Detected		Cellulose fiber	1%	Binder/Filler

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: _____ 2/14/2011

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1102024	**Date Received:**	1/31/2011
Client Reference:	25009-009558.00/300-VANDENBERG AFB (BLDG 13140)	**Report Date:**	14-Feb-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
021A	***13140-6B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	99	Homogeneous	White/Silver Paper Pipe Wrap	None Detected		Cellulose fiber Fibrous glass Mineral wool Synthetic fiber	80% 10% 3% 1%	Binder/Filler Foil
		Layer Comment:	Foil not tested.					
(2)	1	Homogeneous	Cream Mastic	None Detected		Non-Detected		Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
022A	***13140-6C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	99	Homogeneous	White/Silver Paper Pipe Wrap	None Detected		Cellulose fiber Fibrous glass Mineral wool	80% 2% 10%	Binder/Filler Foil
		Layer Comment:	Foil not tested.					
(2)	1	Homogeneous	Cream Mastic	None Detected		Non-Detected		Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
023A	***13140-7A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	White Grout	None Detected		Non-Detected		Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
024A	***13140-7B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	White Grout	None Detected		Non-Detected		Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
025A	***13140-7C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	White Grout	None Detected		Non-Detected		Binder/Filler Rust

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: _____ 2/14/2011

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1102024	**Date Received:**	1/31/2011
Client Reference:	25009-009558.00/300-VANDENBERG AFB (BLDG 13140)	**Report Date:**	14-Feb-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
026A	***13140-8A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	Gray Grout	None Detected		Non-Detected		Binder/Filler
		Layer Comment:	Color different than noted on COC.					

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
027A	***13140-8B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	50	Homogeneous	Gray Grout	None Detected		Non-Detected		Binder/Filler
		Layer Comment:	Color different than noted on COC.					
(2)	50	Homogeneous	White Grout	None Detected		Non-Detected		Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
028A	***13140-8C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	90	Homogeneous	Gray Grout	None Detected		Non-Detected		Binder/Filler
		Layer Comment:	Color different than noted on COC.					
(2)	10	Homogeneous	White Grout	None Detected		Non-Detected		Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
029A	***13140-9A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	White Spray-on Acoustic Celling	None Detected		Non-Detected		Binder/Filler Styrofoam

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
030A	***13140-9B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	White Spray-on Acoustic Celling	None Detected		Non-Detected		Binder/Filler Styrofoam

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
031A	***13140-9C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	White Spray-on Acoustic Celling	None Detected		Non-Detected		Binder/Filler Styrofoam

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: _____ 2/14/2011

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1102024	**Date Received:**	1/31/2011
Client Reference:	25009-009558.00/300-VANDENBERG AFB (BLDG 13140)	**Report Date:**	14-Feb-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
032A	***13140-9D***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous White Spray-on Acoustic Celling	None Detected		Non-Detected		Binder/Filler Styrofoam

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
033A	***13140-9E***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous White Spray-on Acoustic Celling	None Detected		Non-Detected		Binder/Filler Styrofoam

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
034A	***13140-9F***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous White Spray-on Acoustic Celling	None Detected		Non-Detected		Binder/Filler Styrofoam

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
035A	***13140-9G***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous White Spray-on Acoustic Celling	None Detected		Non-Detected		Binder/Filler Styrofoam

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
036A	***13140-10A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	95	Homogeneous Gray Floor Tile	None Detected		Non-Detected		Binder/Filler
(2)	5	Homogeneous Tan Mastic	None Detected		Cellulose fiber	1%	Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
037A	***13140-10B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	97	Homogeneous Gray Floor Tile	None Detected		Non-Detected		Binder/Filler
(2)	3	Homogeneous Tan Mastic	None Detected		Cellulose fiber	1%	Binder/Filler

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: _____ 2/14/2011

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1102024	**Date Received:**	1/31/2011
Client Reference:	25009-009558.00/300-VANDENBERG AFB (BLDG 13140)	**Report Date:**	14-Feb-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
038A	***13140-10C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	97	Homogeneous	Gray Floor Tile	None Detected		Non-Detected		Binder/Filler
(2)	3	Homogeneous	Tan Mastic	None Detected		Cellulose fiber	1%	Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
039A	***13140-11A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	1	Homogeneous	Black Mastic	Chrysotile	3%	Non-Detected		Binder/Filler
(2)	94	Homogeneous	Gray Floor Tile	Chrysotile	3%	Non-Detected		Binder/Filler
(3)	3	Homogeneous	White Mineral Mixture	None Detected		Non-Detected		Binder/Filler
(4)	2	Homogeneous	Cream Mastic	None Detected		Cellulose fiber	1%	Binder/Filler
				Total	3%			

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
040A	***13140-11B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	70	Homogeneous	White Mineral Mixture	None Detected		Non-Detected		Binder/Filler
(2)	30	Homogeneous	Cream Mastic	None Detected		Cellulose fiber	1%	Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
041A	***13140-11C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	40	Homogeneous	Tan Mastic	None Detected		Cellulose fiber	2%	Binder/Filler
(2)	60	Homogeneous	Cream Mastic	None Detected		Synthetic fiber	3%	Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
042A	***13140-12A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	Beige Grout	None Detected		Non-Detected		Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
043A	***13140-12B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	Beige Grout	None Detected		Non-Detected		Binder/Filler

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: _____ 2/14/2011

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1102024	**Date Received:**	1/31/2011
Client Reference:	25009-009558.00/300-VANDENBERG AFB (BLDG 13140)	**Report Date:**	14-Feb-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
044A	***13140-12C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	Beige Grout	None Detected		Non-Detected		Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
045A	***13140-13A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	Black/White Roofing Mastic	None Detected		Non-Detected		Binder/Filler Rock

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
046A	***13140-13B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	Black/White Roofing Mastic	None Detected		Non-Detected		Binder/Filler Rock

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
047A	***13140-13C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	100	Homogeneous	Black/White Roofing Mastic	None Detected		Non-Detected		Binder/Filler Rock

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
048A	***13140-14A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	2	Homogeneous	Silver Paint	None Detected		Non-Detected		Binder/Filler
(2)	98	Homogeneous	Gray Duct Sealant	None Detected		Non-Detected		Binder/Filler Rubber

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
049A	***13140-14B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	2	Homogeneous	Silver Paint	None Detected		Non-Detected		Binder/Filler
(2)	98	Homogeneous	Gray Duct Sealant	None Detected		Non-Detected		Binder/Filler Rubber

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: _____ 2/14/2011

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1102024	**Date Received:**	1/31/2011
Client Reference:	25009-009558.00/300-VANDENBERG AFB (BLDG 13140)	**Report Date:**	14-Feb-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
050A	***13140-14C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	2	Homogeneous	Silver Paint	None Detected		Non-Detected		Binder/Filler
(2)	98	Homogeneous	Gray Duct Sealant	None Detected		Non-Detected		Binder/Filler Rubber

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
051A	***13140-15A***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	30	Homogeneous	Beige Textured Coating	None Detected		Non-Detected		Binder/Filler
(2)	70	Homogeneous	White Textured Coating	None Detected		Non-Detected		Binder/Filler Perlite

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
052A	***13140-15B***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	30	Homogeneous	Beige Textured Coating	None Detected		Non-Detected		Binder/Filler
(2)	70	Homogeneous	White Textured Coating	None Detected		Non-Detected		Binder/Filler Perlite

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
053A	***13140-15C***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	30	Homogeneous	Beige Textured Coating	None Detected		Non-Detected		Binder/Filler
(2)	70	Homogeneous	White Textured Coating	None Detected		Non-Detected		Binder/Filler Perlite

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
054A	***13140-15D***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology		Asbestos	%	Other Fibers	%	Particulate
(1)	30	Homogeneous	Beige Textured Coating	None Detected		Non-Detected		Binder/Filler
(2)	70	Homogeneous	White Textured Coating	None Detected		Non-Detected		Binder/Filler Perlite

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: _____ 2/14/2011

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1102024	**Date Received:**	1/31/2011
Client Reference:	25009-009558.00/300-VANDENBERG AFB (BLDG 13140)	**Report Date:**	14-Feb-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
055A	***13140-15E***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	30	Homogeneous Beige Textured Coating	None Detected		Non-Detected		Binder/Filler
(2)	70	Homogeneous White Textured Coating	None Detected		Non-Detected		Binder/Filler Perlite

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
056A	***13140-15F***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	30	Homogeneous Beige Textured Coating	None Detected		Non-Detected		Binder/Filler
(2)	70	Homogeneous White Textured Coating	None Detected		Non-Detected		Binder/Filler Perlite

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
057A	***13140-15G***	VK	01/25/2011	02/04/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	30	Homogeneous Beige Textured Coating	None Detected		Non-Detected		Binder/Filler
(2)	70	Homogeneous White Textured Coating	None Detected		Non-Detected		Binder/Filler Perlite

Laboratory Limits

Laboratory

Range	R Limit	Quartile Limit
0.1-1	100	+/- 1.482
10-100	100	+/- 22.23
1-10	100	+/- 7.41
Trace	100	+/- 1.482

Vera Khorosh (VK)

Range	R Limit	Quartile Limit
0.1-1	100	+/- 1.482
10-100	100	+/- 26.676
1-10	100	+/- 5.928
Trace	100	+/- 1.482

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: VKhorosh 2/14/2011

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT: BUREAU VERITAS - PLEASANTON

Sample Type: Bulk

Work Order No.: A1102024

Date Received: 1/31/2011

Client Reference: 25009-009558.00/300-VANDENBERG AFB (BLDG 131

Report Date: 2/14/2011 1:46:0

Method Referenc Asbestos Point Counting by PLM- California Method

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
001A	***13140-1A***	VK	01/25/2011	02/14/2011

Layer	POB	Sample Morphology	No. Points Counted	Identification	Count	%
(1)	100	Homogeneous Friable White Paint/Joint Compound	1000	Chrysotile	3	0.30
				Amosite	0	< 0.1
				Crocidolite	0	< 0.1
				Anthophyllite	0	< 0.1
				Actinolite	0	< 0.1
				Tremolite	0	< 0.1
				TOTALS	3	0.30

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
002A	***13140-1B***	VK	01/25/2011	02/14/2011

Layer	POB	Sample Morphology	No. Points Counted	Identification	Count	%
(1)	70	Homogeneous Friable White Paint/Joint Compound	1000	Chrysotile	2	0.20
				Amosite	0	< 0.1
				Crocidolite	0	< 0.1
				Anthophyllite	0	< 0.1
				Actinolite	0	< 0.1
				Tremolite	0	< 0.1
				TOTALS	2	0.20
(2)	30	Homogeneous Friable White Joint Compound/Tape	1000	Chrysotile	2	0.20
				Amosite	0	< 0.1
				Crocidolite	0	< 0.1
				Anthophyllite	0	< 0.1
				Actinolite	0	< 0.1
				Tremolite	0	< 0.1
				TOTALS	2	0.20

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT: BUREAU VERITAS - PLEASANTON
Sample Type: Bulk
Work Order No.: A1102024
Date Received: 1/31/2011
Client Reference: 25009-009558.00/300-VANDENBERG AFB (BLDG 131
Report Date: 2/14/2011 1:46:0
Method Referenc Asbestos Point Counting by PLM- California Method

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
003A	***13140-1C***	VK	01/25/2011	02/14/2011

Layer	POB	Sample Morphology	No. Points Counted	Identification	Count	%
(1)	30	Homogeneous Friable White Joint Compound	1000	Chrysotile	3	0.30
				Amosite	0	< 0.1
				Crocidolite	0	< 0.1
				Anthophyllite	0	< 0.1
				Actinolite	0	< 0.1
				Tremolite	0	< 0.1
				TOTALS	3	0.30
(2)	70	Homogeneous Friable White Joint Compound/Tape	1000	Chrysotile	5	0.50
				Amosite	0	< 0.1
				Crocidolite	0	< 0.1
				Anthophyllite	0	< 0.1
				Actinolite	0	< 0.1
				Tremolite	0	< 0.1
				TOTALS	5	0.50

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
004A	***13140-2A***	VK	01/25/2011	02/14/2011

Layer	POB	Sample Morphology	No. Points Counted	Identification	Count	%
(1)	100	Homogeneous Friable Green/Cream Textured Coating	1000	Chrysotile	5	0.50
				Amosite	0	< 0.1
				Crocidolite	0	< 0.1
				Anthophyllite	0	< 0.1
				Actinolite	0	< 0.1
				Tremolite	0	< 0.1
				TOTALS	5	0.50

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT: BUREAU VERITAS - PLEASANTON

Sample Type: Bulk

Work Order No.: A1102024

Date Received: 1/31/2011

Client Reference: 25009-009558.00/300-VANDENBERG AFB (BLDG 131

Report Date: 2/14/2011 1:46:0

Method Referenc Asbestos Point Counting by PLM- California Method

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
005A	***13140-2B***	VK	01/25/2011	02/14/2011

Layer	POB	Sample Morphology	No. Points Counted	Identification	Count	%
(1)	100	Homogeneous Friable White Textured Coating	1000	Chrysotile	3	0.30
				Amosite	0	< 0.1
				Crocidolite	0	< 0.1
				Anthophyllite	0	< 0.1
				Actinolite	0	< 0.1
				Tremolite	0	< 0.1
				TOTALS	3	0.30

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
006A	***13140-2C***	VK	01/25/2011	02/14/2011

Layer	POB	Sample Morphology	No. Points Counted	Identification	Count	%
(1)	100	Homogeneous Friable White Textured Coating	1000	Chrysotile	5	0.50
				Amosite	0	< 0.1
				Crocidolite	0	< 0.1
				Anthophyllite	0	< 0.1
				Actinolite	0	< 0.1
				Tremolite	0	< 0.1
				TOTALS	5	0.50

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
007A	***13140-2D***	VK	01/25/2011	02/14/2011

Layer	POB	Sample Morphology	No. Points Counted	Identification	Count	%
(1)	100	Homogeneous Friable Beige/White Textured Coating	1000	Chrysotile	2	0.20
				Amosite	0	< 0.1
				Crocidolite	0	< 0.1
				Anthophyllite	0	< 0.1
				Actinolite	0	< 0.1
				Tremolite	0	< 0.1
				TOTALS	2	0.20

ANALYTICAL RESULTS

Date: *14-Feb-11*

CLIENT: BUREAU VERITAS - PLEASANTON

Sample Type: Bulk

Work Order No.: A1102024

Date Received: 1/31/2011

Client Reference: 25009-009558.00/300-VANDENBERG AFB (BLDG 131

Report Date: 2/14/2011 1:46:0

Method Referenc Asbestos Point Counting by PLM- California Method

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
019A	***13140-5C***	VK	01/25/2011	02/14/2011

Layer	POB	Sample Morphology	No. Points Counted	Identification	Count	%
(1)	100	Homogeneous Friable White Mineral Mixture	1000	Chrysotile	3	0.30
				Amosite	0	< 0.1
				Crocidolite	0	< 0.1
				Anthophyllite	0	< 0.1
				Actinolite	0	< 0.1
				Tremolite	0	< 0.1
				TOTALS	3	0.30

Analyst(s) Name/Date: _____ 2/14/2011

ANALYTICAL RESULTS

Client: **BUREAU VERITAS - PLEASANTON**

Client Reference No.: **25009-009558.00/300-VANDENBERG AFB (BLDG 13140)**

Work Order No.: **A1102024** **Date:** *14-Feb-11*

Analytical Method: TEM Full-Quant Analysis EPA/600/R-93/116 Date Received: 1/31/2011
Sample Type: Bulk Report Date: 2/14/2011 1:46:07 PM
Reporting Limit (% by Weight): 0.1 Grid Box Identification: 02-10-11D-1

Lab Sample No.	Client Sample Identification	Date Sampled	Analysis Date	Analyst	Sample Description (Morphology)	Asbestos Identification	(%)*	Total Asbestos (%)**
A1102024-036A	13140-10A	01/25/11 @12:00 am	02/14/11 @12:02 pm	KRP	Beige Tile	None Detected	--	< 0.1
A1102024-045A	13140-13A	01/25/11 @12:00 am	02/14/11 @12:02 pm	KRP	Black Tar	None Detected	--	< 0.1

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 1/D675	14400x	100 KeV	2/9/2011

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

<: Result is less than the indicated limit of detection. --: Present but below the detection limit
*: The visual area estimation of asbestos content in the final residue.
**: The calculated total percent asbestos in the sample as received.

Analyst(s) Name/Date: Kuntal Parikh 2/14/2011

Request for Laboratory Analytical Services

IMPORTANT: Date results required:

Rush charges authorized? Yes [ ] No [X]

Fax or [ ] E-mail results [X]

E-mail Address:

For Lab Use Only

Lab Project No. A1102024

Bureau Veritas North America, Inc.

Report results to: **Client Project Number:** 25009-009558.00.300

Name M.Boyden

Company Bureau Veritas

Mailing Address

City, State, Zip San Mateo, Ca

Telephone No. Fax No.

Send invoice to: **P.O. No.**

Name

Company

Address

City, State, Zip

Special instructions and/or specific regulatory requirements:
(method, limit of detection, etc.)

DO NOT ANALYZE CERAMIC TILE

ANALYZE TO FIRST POSITIVE

BLDG 13140

Soil samples only: Which state are these from?

Water samples are:

Drinking water Groundwater

Wastewater

VANDENBERG PGONS

Client Sample Identification	Date Sampled	Time Sampled	Matrix/Media	Air Volume (Liters)	# of Jars	ANALYSIS REQUESTED (List each analyte on the lines below, multiple analytes per line)
13140-1 - A-C	1/25/11	n/a	n/a	n/a	3	PLM - drywall/ joint compound
13140-2 - A-G	1/25/11	n/a	n/a	n/a	7	PLM - texture coat on drywall
13140-3 - A-C	1/25/11	n/a	n/a	n/a	3	PLM - carpet mastic
13140-4 - A-C	1/25/11	n/a	n/a	n/a	3	PLM - 4" base cove/ mastic
13140-5 - A-C	1/25/11	n/a	n/a	n/a	3	PLM - 4" base cove/ mastic
13140-6 - A-C	1/25/11	n/a	n/a	n/a	3	PLM - pipe run paper jacket
13140-7 - A-C	1/25/11	n/a	n/a	n/a	3	PLM - 4" base cove/ mastic
13140-8 - A-C	1/25/11	n/a	n/a	n/a	3	PLM - grout
13140-9 - A-G	1/25/11	n/a	n/a	n/a	7	PLM - acoustic ceiling material
13140-10 - A-C	1/25/11	n/a	n/a	n/a	3	PLM - floor tile/ mastic

Collected by: R. McKenna ***Date/Time*** 1/25/2011 ***Collector's Signature:*** ***Date/Time*** 1/25/2011

Relinquished by: R. McKenna ***Date/Time*** 1/28/2011 ***Received by:*** ***Date/Time***

Relinquished by: ***Date/Time*** ***Received by:*** R. Smith ***Date/Time*** 1/31/2011

Method of Shipment: Fed Ex ***Sample Condition on Receipt:***

Authorized by: M.Boyden ***Acceptable*** ***Other:***

(Signature MUST accompany request!) ***(Explain)***

10:00 am

Ship to:

Detroit Lab
22345 Roethel Drive
Novi, MI 48375
248.344.2652
800.806.5887
Fax: 248.344.2655

Atlanta Lab
3380 Chastain Meadows Pkwy., Ste 300
Kennesaw, GA 30144
770.499.7500
800.252.9919
Fax: 770.499.7511

Chicago Lab
95 Oakwood Road
Lake Zurich, IL 60047
888.576.7522
847.726.3320
Fax: 847.726.3323

Canadian Clients
1415 Janette Ave
Windsor, ON N8X 1Z1

Visit our Website:
www.us.bureauveritas.com/hse

Request for Laboratory Analytical Services

IMPORTANT: Date results required:

Rush charges authorized? Yes [ ] No [X]

Fax or [ ] E-mail results [X]

E-mail Address:

For Lab Use Only

Lab Project No.

Bureau Veritas North America, Inc.

Report results to: **Client Project Number:** 25009-009558.00.300

Name M.Boyden

Company Bureau Veritas

Mailing Address

City, State, Zip San Mateo, Ca

Telephone No. Fax No.

Send invoice to: **P.O. No.**

Name

Company

Address

City, State, Zip

Special instructions and/or specific regulatory requirements:
(method, limit of detection, etc.)

DO NOT ANALYZE CERAMIC TILE

ANALYZE TO FIRST POSITIVE

BLDG 13140

Soil samples only: Which state are these from?

Water samples are:

Drinking water Groundwater

Wastewater

Client Sample Identification	Date Sampled	Time Sampled	Matrix/Media	Air Volume (Liters)	# of Jars	ANALYSIS REQUESTED (List each analyte on the lines below, multiple analytes per line)
13140-11 - A-C	1/25/11	n/a	n/a	n/a	3	PLM - floor tile/ mastic
13140-12 - A-C	1/25/11	n/a	n/a	n/a	3	PLM - grout
13140-13 - A-C	1/25/11	n/a	n/a	n/a	3	PLM - roofing mastic
13140-14 - A-C	1/25/11	n/a	n/a	n/a	3	PLM - duct sealant
13140-15 - A-G	1/25/11	n/a	n/a	n/a	7	PLM - texture coat on concrete

Collected by: R. McKenna ***Date/Time*** 1/25/2011 ***Collector's Signature:*** ***Date/Time*** 1/25/2011

Relinquished by: R. McKenna ***Date/Time*** 1/28/2011 ***Received by:*** ***Date/Time***

Relinquished by: ***Date/Time*** ***Received by:*** ***Date/Time***

Method of Shipment: Fed Ex ***Sample Condition on Receipt:***

Authorized by: M.Boyden ***Acceptable*** ***Other:***

(Signature MUST accompany request!) ***(Explain)***

Ship to:

Detroit Lab
22345 Roethel Drive
Novi, MI 48375
248.344.2652
800.806.5887
Fax: 248.344.2655

Atlanta Lab
3380 Chastain Meadows Pkwy., Ste 300
Kennesaw, GA 30144
770.499.7500
800.252.9919
Fax: 770.499.7511

Chicago Lab
95 Oakwood Road
Lake Zurich, IL 60047
888.576.7522
847.726.3320
Fax: 847.726.3323

Canadian Clients
1415 Janette Ave
Windsor, ON N8X 1Z1

Visit our Website:
www.us.bureauveritas.com/hse

ASBESTOS INSPECTION FIELD FORM

Sampling Date: 01/25/11

X CONVENIENCE SAMPLING
___ RANDOM SAMPLING

CLIENT INFO	
Name:	Vandenberg Air Force Base – Jason Burdett
Address:	1515 Iceland Avenue
City, State, Zip:	Vandenberg AFB, CA, 93437
Bureau Veritas Project #:	25009-009558.00

SITE INFO	
Name:	Building 13140
Address:	NA
City, State, Zip:	Vandenberg AFB, CA, 93437
Bureau Veritas Project Manager:	Odin Ansari

Bulk Sample I.D. #	HA #	Suspect Material Description	Classification	HA Location	Sample Location	Comments and Observations: Condition	Dam. Qty.	Total Qty.	NESHAP Category/DOSH Class
13140-1A-W	01	DRYWALL + JOINT COMPOUND WALLS + CEILING	SM (MM) TSI	THROUGHOUT BUILDING	ROOM 479 BEDROOM	GOOD	Ø	50,000 SF	
13140-1B-C	↓	↓	SM (MM) TSI	↓	ROOM 473 LIVING ROOM	↓	↓	↓	
13140-1C-W	↓	↓	SM (MM) TSI	↓	2ND FLOOR HALLWAY CLOSET	↓	↓	↓	
13140-2A-W	02	TEXTURE COAT ON DRYWALL WALLS + CEILINGS	(SM) MM TSI	THROUGHOUT BUILDING	ROOM 479 BEDROOM	GOOD	Ø	50,000 SF	
13140-2B-C	↓	↓	(SM) MM TSI	↓	ROOM 473 LIVING ROOM	↓	↓	↓	
13140-2C-W	↓	↓	(SM) MM TSI	↓	2ND FLOOR HALLWAY	↓	↓	↓	
13140-2D-W	↓	↓	(SM) MM TSI	↓	RM 433 CUSTODIAL	↓	↓	↓	
13140-2E-C	↓	↓	(SM) MM TSI	↓	RM 433 BREAKROOM	↓	↓	↓	
13140-2F-W	↓	↓	(SM) MM TSI	↓	1ST FLOOR LOUNGE	↓	↓	↓	

ASBESTOS INSPECTION FIELD FORM

Sampling Date: 01/25/11

X CONVENIENCE SAMPLING
___ RANDOM SAMPLING

CLIENT INFO	
Name:	Vandenberg Air Force Base – Jason Burdett
Address:	1515 Iceland Avenue
City, State, Zip:	Vandenberg AFB, CA, 93437

SITE INFO	
Name:	Building 13140
Address:	NA
City, State, Zip:	Vandenberg AFB, CA, 93437

Bureau Veritas Project #:	25009-009558.00

Bureau Veritas Project Manager:	Odin Ansari

Bulk Sample I.D. #	HA #	Suspect Material Description	Classification	HA Location	Sample Location	Comments and Observations: Condition	Dam. Qty.	Total Qty.	NESHAP Category/DOSH Class
13140-2G-W	02	TEXTURE COAT ON DRYWALL WALLS + CEILINGS	SM (SM) MM TSI	THROUGHOUT BUILDING	1ST FLOOR JAN. CLOSET	GOOD	Ø	50,000 SF	
13140-3A-F	03	YELLOW CARPET MASTIC	SM MM (MM) TSI	THROUGHOUT BUILDING	ROOM 479	GOOD	Ø	20,000 SF	
13140-3B-F	↓	↓	SM MM (MM) TSI	↓	ROOM 473	↓	↓	↓	
13140-3C-F	↓	↓	SM MM (MM) TSI	↓	2ND FLOOR HALLWAY	↓	↓	↓	
13140-4A-W	04	4" BEIGE BASE COVE + BROWN MASTIC	SM MM (MM) TSI	THROUGHOUT BLDG	ROOM 479	GOOD	Ø	4,000 LF	
13140-4B-W	↓	↓	SM MM (MM) TSI	↓	ROOM 473	↓	↓	↓	
13140-4C-W	↓	↓	SM MM (MM) TSI	↓	1ST FLOOR HALLWAY	↓	↓	↓	
13140-5A-F	05	4" BROWN BASE COVE + BROWN MASTIC	SM MM (MM) TSI	BATHROOMS THROUGHOUT BLDG	ROOM 479 BATHROOM	GOOD	Ø	500 LF	
13140-5B-F	↓	↓	SM MM (MM) TSI	↓	ROOM 473 BATHROOM	↓	↓	↓	

ASBESTOS INSPECTION FIELD FORM

Sampling Date: 01/25/11

X CONVENIENCE SAMPLING
___ RANDOM SAMPLING

CLIENT INFO		
	Name:	Vandenberg Air Force Base – Jason Burdett
	Address:	1515 Iceland Avenue
	City, State, Zip:	Vandenberg AFB, CA, 93437

SITE INFO		
	Name:	Building 13140
	Address:	NA
	City, State, Zip:	Vandenberg AFB, CA, 93437

Bureau Veritas Project #:	25009-009558.00

Bureau Veritas Project Manager:	Odin Ansari

Bulk Sample I.D. #	HA #	Suspect Material Description	Classification	HA Location	Sample Location	Comments and Observations: Condition	Dam. Qty.	Total Qty.	NESHAP Category/DOSH Class
13140-5C-W	05	4" BROWN BASE COVE + BROWN MASTIC	SM **MM** TSI	BATHROOMS THROUGHOUT BLDG.	1ST FLOOR JANITOR'S CLOSET	GOOD	∅	500 LF	
13140-6A-P	06	PIPE RUN INSUL. PAPER JACKET (RADIATOR)	SM MM **TSI**	THROUGHOUT BLDG	ROOM 479 (BY RADIATOR)	GOOD	∅	1,500 LF	
13140-6B-P	↓	↓	SM MM **TSI**	↓	ROOM 473 (BY RADIATOR)	↓	↓	↓	
13140-6C-P	↓	↓	SM MM **TSI**	↓	ROOM 433 (BY RADIATOR)	↓	↓	↓	
13140-7A-W	07	4" WHITE C.T. GROUT	SM **MM** TSI	BATHROOMS THROUGHOUT BLDG.	ROOM 479 BATHROOM	GOOD	∅	6,000 SF	
13140-7B-W	↓	↓	SM **MM** TSI	↓	ROOM 473 BATHROOM	↓	↓	↓	
13140-7C-W	↓	↓	SM **MM** TSI	↓	ROOM 433 BATHROOM	↓	↓	↓	
13140-8A-F	08	1" BEIGE C.T. GROUT	SM **MM** TSI	BATHROOMS THROUGHOUT BLDG	ROOM 479 BATHROOM	GOOD	∅	2,500 SF	
13140-8B-F	↓	↓	SM **MM** TSI	↓	ROOM 473 BATHROOM	↓	↓	↓	

1/20/2011

ASBESTOS INSPECTION FIELD FORM

Sampling Date: 01/25/11

✓ CONVENIENCE SAMPLING
___ RANDOM SAMPLING

CLIENT INFO		
	Name:	Vandenberg Air Force Base – Jason Burdett
	Address:	1515 Iceland Avenue
	City, State, Zip:	Vandenberg AFB, CA, 93437

SITE INFO		
	Name:	Building 13140
	Address:	NA
	City, State, Zip:	Vandenberg AFB, CA, 93437

Bureau Veritas Project #:	25009-009558.00

Bureau Veritas Project Manager:	Odin Ansari

Bulk Sample I.D. #	HA #	Suspect Material Description	Classification	HA Location	Sample Location	Comments and Observations: Condition	Dam. Qty.	Total Qty.	NESHAP Category/DOSH Class
13140-8C-F	08	1" BEIGE CT. GROUT	SM (MM) TSI	BATHROOM THROUGHOUT BLDG.	ROOM 433 BATHROOM	GOOD	ϕ	2,500 SF	
13140-9A-C	09	SPRAY-APPLIED ACOUSTIC CEILING MATERIAL	(SM) MM TSI	ROOMS THROUGHOUT BLDG	ROOM 479 LIVING ROOM	GOOD	ϕ	12,000 SF	
13140-9B-C	↓	↓	(SM) MM TSI	↓	ROOM 473 LIVINGROOM	↓	↓	↓	
13140-9C-C	↓	↓	(SM) MM TSI	↓	ROOM 473 BEDROOM	↓	↓	↓	
13140-9D-C	↓	↓	(SM) MM TSI	↓	ROOM 433 CUSTODIAL	↓	↓	↓	
13140-9E-C	↓	↓	(SM) MM TSI	↓	↓	↓	↓	↓	
13140-9F-C	↓	↓	(SM) MM TSI	↓	ROOM 433 BREAKROOM	↓	↓	↓	
13140-9G-C	↓	↓	(SM) MM TSI	↓	↓	↓	↓	↓	
13140-10A-F	10	12"x12" GRAY FLOORTILE + TAN MASTIC	SM (MM) TSI	CLOSETS THROUGHOUT BUILDING	2ND FLOOR HALLWAY CLOSET	GOOD	ϕ	400 SF	

1/20/2011

ASBESTOS INSPECTION FIELD FORM

Sampling Date: 01/25/11

X CONVENIENCE SAMPLING
___ RANDOM SAMPLING

CLIENT INFO		
	Name:	Vandenberg Air Force Base – Jason Burdett
	Address:	1515 Iceland Avenue
	City, State, Zip:	Vandenberg AFB, CA, 93437

SITE INFO		
	Name:	Building 13140
	Address:	NA
	City, State, Zip:	Vandenberg AFB, CA, 93437

Bureau Veritas Project #:	25009-009558.00

Bureau Veritas Project Manager:	Odin Ansari

Bulk Sample I.D. #	HA #	Suspect Material Description	Classification	HA Location	Sample Location	Comments and Observations: Condition	Dam. Qty.	Total Qty.	NESHAP Category/DOSH Class
13140-10B-F	10	12"x12" GRAY FLOOR TILE + TAN MASTIC	SM (MM) TSI	CLOSETS THROUGHOUT BUILDING	2ND FLOOR JANITOR'S CLOSET	GOOD	Ø	400 SF	
13140-10C-F	↓	↓	SM (MM) TSI	↓	1ST FLOOR HALL CLOSET	↓	↓	↓	
13140-11A-F	11	12"x12" GRAY FLOOR TILE + BLACK MASTIC (UNDER CARPET)	SM (MM) TSI	HALLWAYS, CLOSETS + LOUNGES THROUGH OUT BLDG	2ND FLOOR HALLWAY	GOOD	Ø	4,000 SF	
13140-11B-F	↓	↓	SM (MM) TSI	↓	1ST FLOOR HALLWAY	↓	↓	↓	
13140-11C-F	↓	↓	SM (MM) TSI	↓	1ST FLOOR LOUNGE	↓	↓	↓	
13140-12A-F	12	6" BEIGE C.T. GROUT	SM (MM) TSI	LAUNDRY ROOM	1ST FLOOR LAUNDRY RM	GOOD	Ø	250 SF	
13140-12B-F	↓	↓	SM (MM) TSI	↓	↓	↓	↓	↓	
13140-12C-F	↓	↓	SM (MM) TSI	↓	↓	↓	↓	↓	
13140-13A-R	13	ROOFING MASTIC (PENETRATIONS)	SM (MM) TSI	ROOF	ROOF - CENTER	GOOD	Ø	50 SF	

1/20/2011

ASBESTOS INSPECTION FIELD FORM

Sampling Date: 01/25/11

X CONVENIENCE SAMPLING
___ RANDOM SAMPLING

CLIENT INFO	
Name:	Vandenberg Air Force Base – Jason Burdett
Address:	1515 Iceland Avenue
City, State, Zip:	Vandenberg AFB, CA, 93437

SITE INFO	
Name:	Building 13140
Address:	NA
City, State, Zip:	Vandenberg AFB, CA, 93437

Bureau Veritas Project #:	25009-009558.00

Bureau Veritas Project Manager:	Odin Ansari

Bulk Sample I.D. #	HA #	Suspect Material Description	Classification	HA Location	Sample Location	Comments and Observations: Condition	Dam. Qty.	Total Qty.	NESHAP Category/DOSH Class
13140-13B-R	13	ROOFING MASTIC (PENETRATIONS)	SM **MM** TSI	ROOF	ROOF - NORTH	GOOD	Ø	50 SF	
13140-13C-R	↓	↓	SM **MM** TSI	↓	↓ - SOUTH	↓	↓	↓	
13140-14A-M	14	SILVER/GRAY DUCT SEALANT	SM **MM** TSI	ROOF	ROOF - HVAC UNIT - N	GOOD	Ø	80 LF	
13140-14B-M	↓	↓	SM **MM** TSI	↓	↓ - N	↓	↓	↓	
13140-14C-M	↓	↓	SM **MM** TSI	↓	↓ - S	↓	↓	↓	
13140-15A-W	15	TEXTURE COAT ON CONCRETE BLOCK WALLS	**SM** MM TSI	EXTERIOR WALLS	EXTERIOR - NE	GOOD	Ø	15,000 SF	
13140-15B-W	↓	↓	**SM** MM TSI	↓	↓ - NW	↓	↓	↓	
13140-15C-W	↓	↓	**SM** MM TSI	↓	↓ - W	↓	↓	↓	
13140-15D-W	↓	↓	**SM** MM TSI	↓	↓ - SW	↓	↓	↓	

1/20/2011

ASBESTOS INSPECTION FIELD FORM

Sampling Date: 01/25/11

X CONVENIENCE SAMPLING
___ RANDOM SAMPLING

CLIENT INFO		
	Name:	Vandenberg Air Force Base – Jason Burdett
	Address:	1515 Iceland Avenue
	City, State, Zip:	Vandenberg AFB, CA, 93437

SITE INFO		
	Name:	Building 13140
	Address:	NA
	City, State, Zip:	Vandenberg AFB, CA, 93437

Bureau Veritas Project #:	25009-009558.00

Bureau Veritas Project Manager:	Odin Ansari

Bulk Sample I.D. #	HA #	Suspect Material Description	Classification	HA Location	Sample Location	Comments and Observations: Condition	Dam. Qty.	Total Qty.	NESHAP Category/DOSH Class
13140-15E-W	15	TEXTURE COAT ON CONCRETE BLOCK WALLS	(SM) MM TSI	EXTERIOR WALLS	EXTERIOR -SE	GOOD	Ø	15,000 SF	
13140-15F-W	↓	↓	(SM) MM TSI	↓	↓ -E	↓	↓	↓	
13140-15G-W	↓	↓	(SM) MM TSI	↓	↓ -E	↓	↓	↓	
			SM MM TSI						
			SM MM TSI						
			SM MM TSI						
			SM MM TSI						
			SM MM TSI						
			SM MM TSI						

1/20/2011

Vera Khorosh/USA/VERITAS
02/08/2011 01:10 PM

To Tiffany Dixon/USA/VERITAS@VERITAS
cc
bcc
Subject Fw: Project No: 2500900955800 / Lab Workorder: A1102024 (BLDG 13140)
Ref

----- Forwarded by Vera Khorosh/USA/VERITAS on 02/08/2011 01:10 PM -----

Michael Boyden/USA/VERITAS
02/08/2011 01:05 PM

To Vera Khorosh/USA/VERITAS@VERITAS
cc Jeremy Gress/USA/VERITAS@VERITAS, Jeremy MacMann/USA/VERITAS@VERITAS
Subject Re: Project No: 2500900955800 / Lab Workorder: A1102024 (BLDG 13140)

Hi Vera,
Please conduct the following additional analysis:

1. Lab ID 1A-3A: PLM point count (1000) layers 1 and 2 (joint compound)
2. Lab ID 4A-7A: PLM point count (1000) layers 1 (textured coating)
3. Lab ID 19A: PLM point count (1000) layers 4 (white mineral mixture)
4. Lab ID 36A: quantitative transmission electron microscopy with gravimetric reduction on layers 1 (VFT).
5. Lab ID 45A: quantitative transmission electron microscopy with gravimetric reduction (black/white roofing).

Thanks for the help!

-Michael

-----Vera Khorosh/USA/VERITAS wrote: -----

To: Michael-Ray.Boyden@us.bureauveritas.com
From: Vera Khorosh/USA/VERITAS
Date: 02/07/2011 11:48AM
Subject: Project No: 2500900955800 / Lab Workorder: A1102024

Your results have been copied to the R:\Lab Folders directory under your office location and will be available after server replication within the hour. If you do not receive the file please contact the HelpDesk.

Regards,

The Bureau Veritas Team

3380 Chastain Meadows Parkway

Suite 300
Kennesaw, Georgia 30144-

(770) 499-7701

[attachment "FR_A1102024Ver01.pdf" removed by Michael Boyden/USA/VERITAS]

Michael Boyden/USA/VERITAS

02/09/2011 11:37 AM

To Kathy Cannon/USA/VERITAS@VERITAS

cc Carol Findlay/USA/VERITAS@VERITAS, Jon Perrenoud/USA/VERITAS@VERITAS, Nadiya Gapon/USA/VERITAS@VERITAS, Tiffany

bcc

Subject Re: Roofing - Vandenberg projects - analyze as TEM FQ composite

This is correct. Sorry for all the trouble.

Michael-Ray Boyden, CAC
Project Manager
Bureau Veritas North America, Inc.
Health, Safety, and Environmental Services
ISO 9001:2008 Certified
2430 Camino Ramon, Suite # 122 San Ramon, CA 94583
p: 925.498.6520, c: 925.382.7788, f: 925.426.0106
michael.boyden@us.bureauveritas.com
www.us.bureauveritas.com/hse

Kathy Cannon/USA/VERITAS

Kathy Cannon/USA/VERITAS

02/09/2011 08:36 AM

To Michael Boyden/USA/VERITAS@VERITAS

cc Vera Khorosh/USA/VERITAS@VERITAS, Carol Findlay/USA/VERITAS@VERITAS, Jon Perrenoud/USA/VERITAS@VERITAS, Tiffany Dixon/USA/VERITAS@VERITAS, Nadiya Gapon/USA/VERITAS@VERITAS

Subject Roofing - Vandenberg projects - analyze as TEM FQ composite

HI, Michael-Ray!

We will re-log in all the roofing samples as TEM FQ composites, per your request. Can you please respond and verify that this is correct?

Thanks!

Kathy Cannon
Microscopist
Bureau Veritas North America, Inc.
Health, Safety and Environmental Services
3380 Chastain Meadows Parkway, Suite 300
Kennesaw, GA 30144
Office: 770.590.6682, VOIP *706682, Fax: 770.499.7511
kathy.cannon@us.bureauveritas.com
http://www.us.bureauveritas.com/labs

This material is confidential and intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided.

March 28, 2011

Michael-Ray Boyden
BUREAU VERITAS - PLEASANTON
2430 Camino Ramon
Suite 122
San Ramon, CA 94583-

Bureau Veritas Work Order No. A1103232

Reference: VANDENBERG AFB BLDG 13140B/ 25009-009558.00.300

Dear Michael-Ray Boyden:

Bureau Veritas North America, Inc. received 6 samples on March 18, 2011 for the analyses presented in the following report.

The results apply only to the samples analyzed in this project. Please note that any unused portion of the samples will be discarded after a thirty-day holding period, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning the report, please contact the analyst whose name appears on the report or myself at (770) 499-7701.

Sincerely,

Alan M. Segrave, P.G.

Director, Laboratory Services
Electronic signature authorized through password protection

cc: Tim Coe

Bureau Veritas North America, Inc.

Health, Safety, and Environmental Services
3380 Chastain Meadows Parkway, Suite 300
Kennesaw, GA 30144

Main: (770) 499-7701
Fax: (770) 499-7511
www.us.bureauveritas.com

CASE NARRATIVE

Date: *28-Mar-11*

CLIENT: BUREAU VERITAS - PLEASANTON

Project: VANDENBERG AFB BLDG 13140B/ 25009-009558.00.300

Work Order No A1103232

ANALYTICAL METHOD FOR ASBESTOS IN BULK SAMPLES USING POLARIZED LIGHT MICROSCOPY (PLM)

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results, and 3) the industrial hygiene results have not been blank corrected unless otherwise noted.

Use of EPA/600/R-93/116 satisfies applicable requirements of the USEPA's "Interim Method for the Determination of Asbestos in Bulk Insulation Sample", EPA-600/M4-82-020, December 1982, published as Appendix E to Subpart E of 40CFR763. Bulk samples analyzed by New York State methods follow stratified point counting methods (198.1) or Method 198.6 for PLM non-friable organically bound materials (NYSDOH Lab Code –11645). Percentages are visual estimations of asbestos >10:1 aspect ratio. The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for which asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed. NESHAP requires point counting of a bulk sample when the result is <10% by a method other than point counting. EPA, however states that if 3 mounts of the sample are analyzed and the asbestos percentage is <10% by visual estimation, the client may elect to assume the amount to be greater than 1% or require verification by point counting. If the result by point counting is different than the result obtained by visual estimation, the point count result will be used. Sample friability or non-friability noted on the report is a requirement for the State of California and refers only to the condition of the sample under macroscopic examination. It does not imply friability or non-friability for the sample as collected or observed in the field as determined by the person collecting the sample. The Kennesaw, Georgia lab is accredited by NVLAP –Lab Code 101125-0.

(a)Polarized- light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing. When analysis of such materials by PLM yields results negative for the presence of asbestos, Bureau Veritas recommends utilizing quantitative transmission electron microscopy (TEM). For more information, contact the laboratory.

References

McCrone, Walter C. 1980. The Asbestos Particle Atlas. Ann Arbor, MI: Ann Arbor Science Publishers, Inc.

United States Environmental Protection Agency. Environmental Monitoring Systems Laboratory. 1982. Interim Method for the Determination of Asbestos in Bulk Insulation Samples. EPA-600/M4-82-020. Washington: GPO, December.

United States Environmental Protection Agency. Method for the Determination of Asbestos in Bulk Building Materials. EPA-600/R-93/116, July 1993 (PLM)

Fed. Reg. Vol. 55, No.224, 11/20/90, p.48415 (NESHAP)
EPA Memorandum 5/8/1991 –NESHAP Clarifications

NYSDOH Methods 198.1/198.6

QUANTITATIVE ANALYSIS OF BULK SAMPLES FOR ASBESTOS USING TRANSMISSION ELECTRON MICROSCOPY (TEM)

Upon receipt in the laboratory, samples are ground until homogeneous. Each sample is weighed in a tared silica crucible. The sample is placed in a muffle furnace at a temperature of 480C for at least 3 hours or until the weight has stabilized. The sample is allowed to cool to room temperature and immediately weighed to calculate percent organic loss.

Approximately 1 ml of nondiluted HCL acid is slowly added to remove calcite and dolomite from the ashed sample. After evolution of CO2 gas has ceased, the sample is immediately diluted with ultra-pure water. The sample is then dispersed in 50 ml of ultra-pure water and filtered onto a pre-weighed 47 mm, 0.45 um pore size, MCE filter. The filter is dried on a slide warmer and weighed once again.

A 1 cm2 portion of the filter is cut and placed in a clean silica crucible. Approximately 250 ul of both 20 ppm methyl cellulose solution and isopropyl alcohol are added and ultra-sonicated for 1 minute to remove the deposited sample into suspension. Approximately 3 ul of the suspension is pipetted onto a carbon-coated copper TEM grid and allowed to dry.

Grids are examined in the TEM at 15,000X magnification. Asbestos is identified using morphology, selected area electron diffraction, and energy-dispersive x-ray spectroscopy. From TEM examination, a visual area estimation is made of asbestos in the final residue. Percent asbestos in the final residue is then extrapolated using gravimetric records to percent asbestos in the total sample.

CLIENT:	BUREAU VERITAS - PLEASANTON
Project:	VANDENBERG AFB BLDG 13140B/ 25009-009558.00.300
Work Order No	A1103232

The Kennesaw, Georgia lab is accredited by NVLAP –Lab Code 101125-0.

References

Chatfield Method for Quantitative Analysis of Bulk Samples for Asbestos Using Transmission Electron Microscopy (unpublished).

United States Environmental Protection Agency. Method for the Determination of Asbestos in Bulk Building Materials. EPA-600/R-93/116, July 1993 (PLM)

NOTE: Some of the samples may have contained inseparable layers which were combined during preparation.

ANALYTICAL RESULTS

Date: *28-Mar-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1103232	**Date Received:**	3/18/2011
Client Reference:	VANDENBERG AFB BLDG 13140B/ 25009-009558.00.300	**Report Date:**	28-Mar-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
001A	***13140B-16A (R)***	KC	03/15/2011	03/23/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	15	Non-homogeneous Black/Gray Cap Sheet	None Detected		Synthetic fiber	10%	Binder/Filler Rock Tar
(2)	3	Homogeneous Black Roofing	None Detected		Fibrous glass	5%	Binder/Filler Tar
(3)	15	Homogeneous Black Roofing	None Detected		Fibrous glass	5%	Binder/Filler Tar
(4)	3	Homogeneous Black Roofing	None Detected		Cellulose fiber	60%	Binder/Filler Tar
(5)	2	Homogeneous Black Roofing	None Detected		Cellulose fiber	60%	Binder/Filler Tar
(6)	5	Homogeneous Black Tar	None Detected		Non-Detected		Binder/Filler
(7)	10	Homogeneous Beige Insulation	None Detected		Cellulose fiber	55%	Binder/Filler Perlite
(8)	47	Homogeneous Yellow Foam	None Detected		Non-Detected		Binder/Filler

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for v
asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: Kathy Carruba 3/28/2011

ANALYTICAL RESULTS

Date: *28-Mar-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1103232	**Date Received:**	3/18/2011
Client Reference:	VANDENBERG AFB BLDG 13140B/ 25009-009558.00.300	**Report Date:**	28-Mar-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
002A	***13140B-16B (R)***	KC	03/15/2011	03/23/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	15	Non-homogeneous Black/Gray Cap Sheet	None Detected		Fibrous glass	5%	Binder/Filler Rock Tar
(2)	3	Homogeneous Black Roofing	None Detected		Fibrous glass Cellulose fiber	5% < 1%	Binder/Filler Tar
(3)	5	Homogeneous Black Roofing	None Detected		Fibrous glass	5%	Binder/Filler Tar
(4)	3	Homogeneous Black Roofing	None Detected		Fibrous glass Cellulose fiber	3% 5%	Binder/Filler Tar
(5)	5	Homogeneous Black Tar	None Detected		Non-Detected		Binder/Filler
(6)	5	Homogeneous Black Roofing	None Detected		Cellulose fiber	60%	Binder/Filler Tar
(7)	20	Homogeneous Beige Insulation	None Detected		Cellulose fiber	55%	Binder/Filler Perlite
(8)	44	Homogeneous Yellow Foam	None Detected		Non-Detected		Binder/Filler

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
003A	***13140B-16C (R)***	KC	03/15/2011	03/23/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	15	Non-homogeneous Black/Gray Cap Sheet	None Detected		Synthetic fiber	20%	Binder/Filler Rock Tar
(2)	15	Homogeneous Black Roofing	None Detected		Fibrous glass	5%	Binder/Filler Tar
(3)	10	Homogeneous Black Roofing	None Detected		Cellulose fiber Fibrous glass	45% 3%	Binder/Filler Tar
(4)	20	Homogeneous Beige Insulation	None Detected		Cellulose fiber	55%	Binder/Filler Perlite
(5)	40	Homogeneous Yellow Foam	None Detected		Non-Detected		Binder/Filler

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for v
asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: Kathy Carruba 3/28/2011

ANALYTICAL RESULTS

Date: *28-Mar-11*

CLIENT:	BUREAU VERITAS - PLEASANTON	**Sample Type:**	Bulk
Work Order No.:	A1103232	**Date Received:**	3/18/2011
Client Reference:	VANDENBERG AFB BLDG 13140B/ 25009-009558.00.300	**Report Date:**	28-Mar-11
Method Reference:	EPA-600/M4-82-020/EPA/600/R-93/116/NYELAP 198.1		

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
004A	***13140B-17A (R)***	KC	03/15/2011	03/23/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	100	Non-homogeneous Black/Gray Penetration Mastic	None Detected		Non-Detected		Binder/Filler Rock Tar

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
005A	***13140B-17B (R)***	KC	03/15/2011	03/23/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	100	Non-homogeneous Black/Gray Penetration Mastic	None Detected		Non-Detected		Binder/Filler Rock Pollen Tar

Lab ID	Client Sample ID	Analyst	Date Sampled	Date Analyzed
006A	***13140B-17C (R)***	KC	03/15/2011	03/23/2011

Layer	POB	Sample Morphology	Asbestos	%	Other Fibers	%	Particulate
(1)	100	Non-homogeneous Black/Gray Penetration Mastic	None Detected		Non-Detected		Binder/Filler Rock Tar

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for v
asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: Kathy Cannon 3/28/2011

Laboratory Limits

Kathy Cannon (KC)

Range	R Limit	Quartile Limit
0.1-1	100	+/- 1.482
10-100	100	+/- 26.676
1-10	100	+/- 5.928
Trace	100	+/- 1.482

Laboratory

Range	R Limit	Quartile Limit
0.1-1	100	+/- 1.482
10-100	100	+/- 22.23
1-10	100	+/- 7.41
Trace	100	+/- 1.482

The reliable limit of quantitation of the method is 1%, although asbestos may be qualitatively detected at concentrations less than 1%. Samples for v
asbestos is detected at <1% are reported as trace, "<1%". "None Detected" indicates that no asbestos fibers were observed.

Analyst(s) Name/Date: Kathy Cannon 3/28/2011

ANALYTICAL RESULTS

Client: **BUREAU VERITAS - PLEASANTON**

Client Reference No.: **VANDENBERG AFB BLDG 13140B/ 25009-009558.00.300**

Work Order No.: **A1103232** **Date:** *28-Mar-11*

Analytical Method: TEM Full-Quant Analysis EPA/600/R-93/116
Sample Type: Bulk
Reporting Limit (% by Weight): 0.1

Date Received: 3/18/2011 3:56:42 PM
Report Date: 3/28/2011 3:54:40 PM
Grid Box Identification: 03-24-11E-1

Lab Sample No.	Client Sample Identification	Date Sampled	Analysis Date	Analyst	Sample Description (Morphology)	Asbestos Identification	(%)*	Total Asbestos (%)**
A1103232-001A	13140B-16A (R)	03/15/11 @12:00 am	03/28/11 @3:45 pm	KRP	Black Roofing	None Detected	--	< 0.1
Composite layers were analyzed.								
A1103232-004A	13140B-17A (R)	03/15/11 @12:00 am	03/28/11 @3:45 pm	KRP	Black/Gray Penetration Mastic	None Detected	--	< 0.1

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 1/D675	14530x	100 KeV	3/4/2010

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

<: Result is less than the indicated limit of detection. --: Present but below the detection limit
*: The visual area estimation of asbestos content in the final residue.
**: The calculated total percent asbestos in the sample as received.

Analyst(s) Name/Date: Khuntal Parikh 3/28/2011

Request for Laboratory Analytical Services

IMPORTANT: Date results required: _____
Rush charges authorized? Yes [ ] No [X]
Fax or [ ] E-mail results [X]
E-mail Address: _____

For Lab Use Only
Lab Project No. A1103232

Bureau Veritas North America, Inc.

Report results to: **Client Project Number:** 25009-009558.00.300
Name M.Boyden / T.Coe
Company Bureau Veritas
Mailing Address
City, State, Zip
Telephone No. Fax No.

Send invoice to: **P.O. No.**
Name
Company
Address
City, State, Zip

Special instructions and/or specific regulatory requirements:
(method, limit of detection, etc.) VANDENBERG AIR FORCE BASE
DO NOT ANALYZE CERAMIC TILE
ANALYZE TO FIRST POSITIVE

Soil samples only: Which state are these from?
Water samples are:
Drinking water _____ Groundwater _____
Wastewater _____

Client Sample Identification	Date Sampled	Time Sampled	Matrix/Media	Air Volume (Liters)	# of Jars	ANALYSIS REQUESTED (List each analyte on the lines below, multiple analytes per line)
13140B-16A-C (R)	3/15/11	NA	Asbestos	NA	3	PLM-Mineralized cap sheet and associated roofing ma
13140B-17A-C (R)					3	PLM-Pentration mastic

Collected by: T.Coe ***Date/Time*** 3/15/2011 ***Collector's Signature:*** ***Date/Time*** 3/15/2011
Relinquished by: ***Date/Time*** 3/17/2011 ***Received by:*** ***Date/Time***
Relinquished by: ***Date/Time*** ***Received by:*** ***Date/Time*** 3/18/11 356pm
Method of Shipment: Fed Ex ***Sample Condition on Receipt:***
Authorized by: M.Boyden ***Acceptable*** ✓ ***Other:***
(Signature MUST accompany request!) ***(Explain)***

Ship to:

Detroit Lab
22345 Roethel Drive
Novi, MI 48375
248.344.2652
800.806.5887
Fax: 248.344.2655

Atlanta Lab
3380 Chastain Meadows Pkwy., Ste 300
Kennesaw, GA 30144
770.499.7500
800.252.9919
770.499.7511

Chicago Lab
95 Oakwood Road
Lake Zurich, IL 60047
888.576.7522
847.726.3320
Fax: 847.726.3323

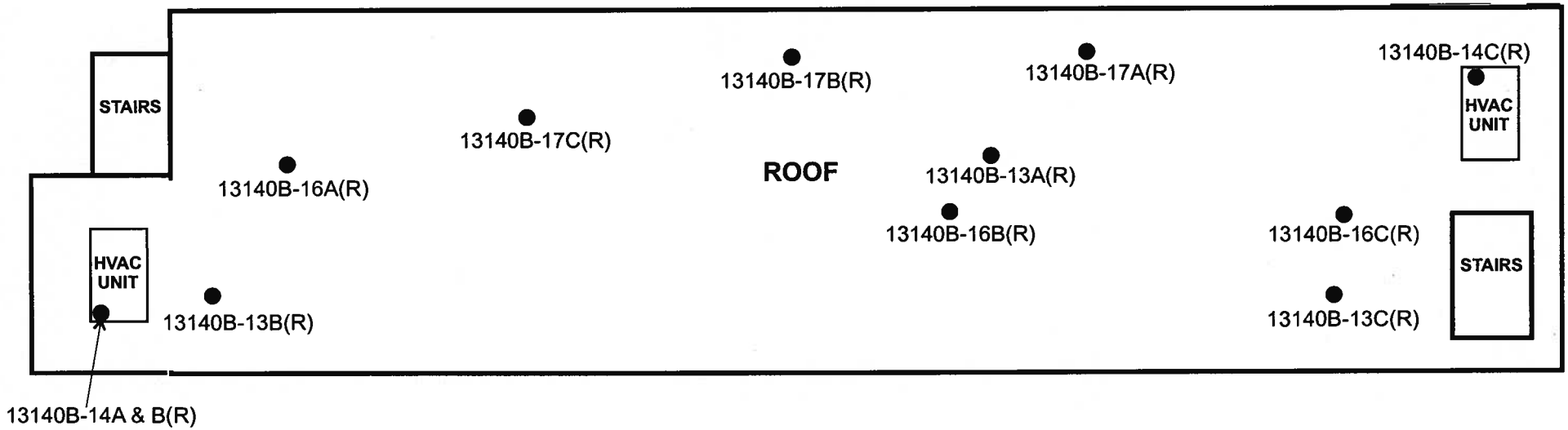
Canadian Clients
1415 Janette Ave
Windsor, ON N8X 1Z1

Visit our Website:
www.us.bureauveritas.com/hse

APPENDIX B-44
Building 13140B (continued)

SAMPLE AND ASEBESTOS LOCATION DRAWINGS

SAMPLE LOCATION DRAWING



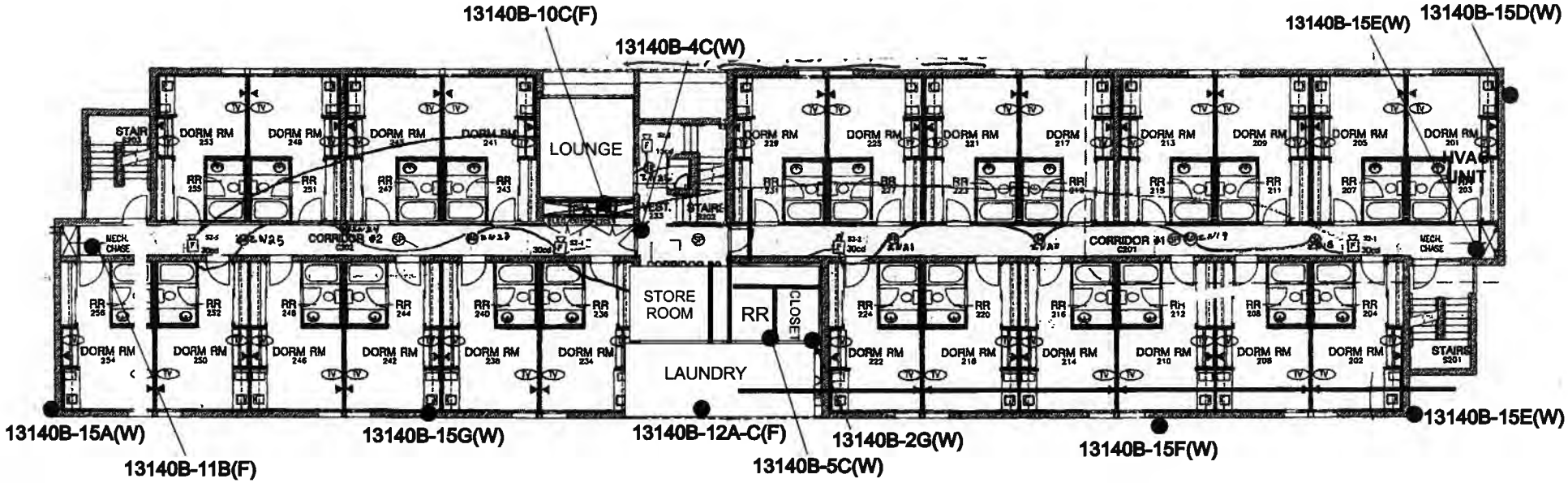
SAMPLE NO. PROTOCOL:
Bldg. No. - HA Sample No. - Component (ie: floor, wall)
Example: 13140B(F)
F = Floor
C = Ceiling
W = Wall
P = Plumbing
M = Miscellaneous
R = Roof
D = Door
I = Insulation

NOT TO SCALE

LEGEND	BUILDING 13140B - ROOF	FIGURE
● = Sample Location	Vandenberg Air Force Base 1515 Iceland Avenue Vandenberg AFB, California 93437 Vandenberg AFB Project No. XUMU091669E Bureau Veritas Project No. 25009-009558.00	1

BUREAU VERITAS

SAMPLE LOCATION DRAWING



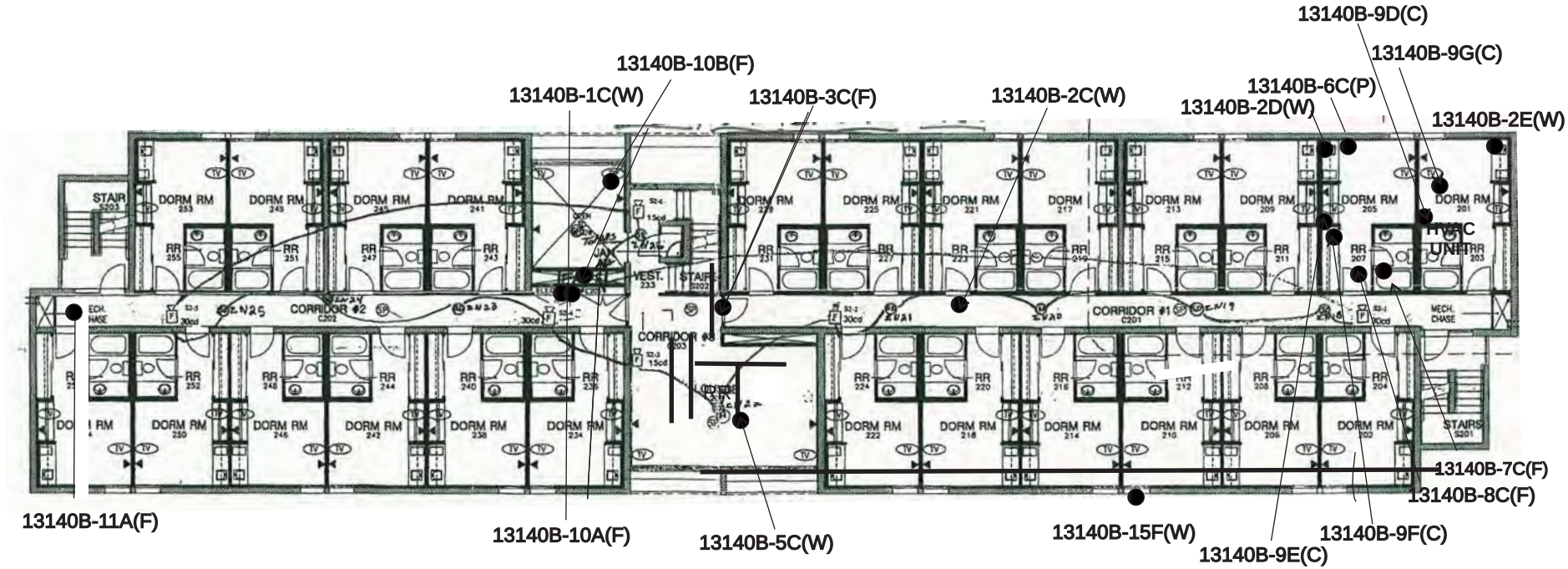
SAMPLE NO. PROTOCOL:
Bldg. No. - HA Sample No. - Component (ie: floor, wall)
Example: 13140B(F)
F = Floor
C = Ceiling
W = Wall
P = Plumbing
M = Miscellaneous
R = Roof
D = Door
I = Insulation

NOT TO SCALE

LEGEND	BUILDING 13140B - FIRST FLOOR	FIGURE
● = Sample Location	Vandenberg Air Force Base 1515 Iceland Avenue Vandenberg AFB, California 93437 Vandenberg AFB Project No. XUMU091669E Bureau Veritas Project No. 25009-009558.00	2

BUREAU VERITAS

SAMPLE LOCATION DRAWING



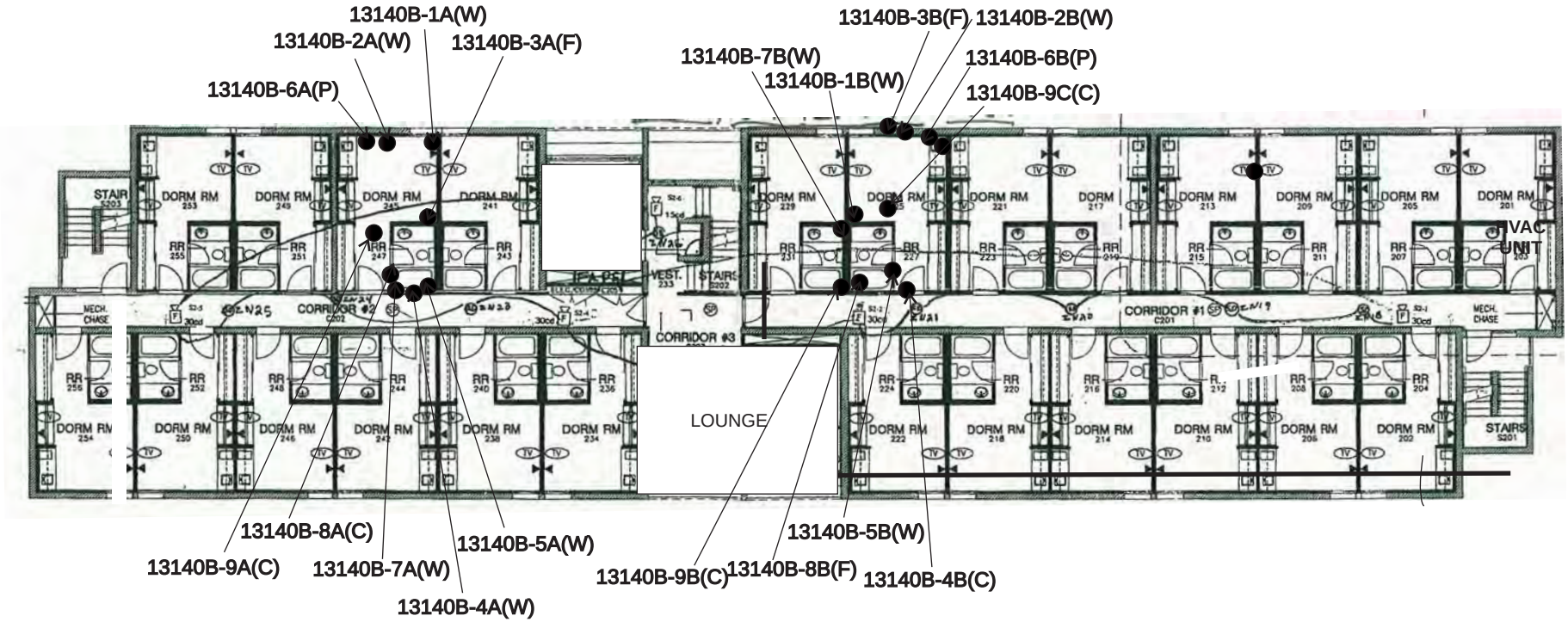
SAMPLE NO. PROTOCOL:
Bldg. No. - HA Sample No. - Component (ie: floor, wall)
Example: 13140B(F)
F = Floor
C = Ceiling
W = Wall
P = Plumbing
M = Miscellaneous
R = Roof
D = Door
I = Insulation

NOT TO SCALE

LEGEND	BUILDING 13140B - THIRD FLOOR	FIGURE
● = Sample Location	Vandenberg Air Force Base 1515 Iceland Avenue Vandenberg AFB, California 93437 Vandenberg AFB Project No. XUMU091669E Bureau Veritas Project No. 25009-009558.00	3

BUREAU VERITAS

SAMPLE LOCATION DRAWING



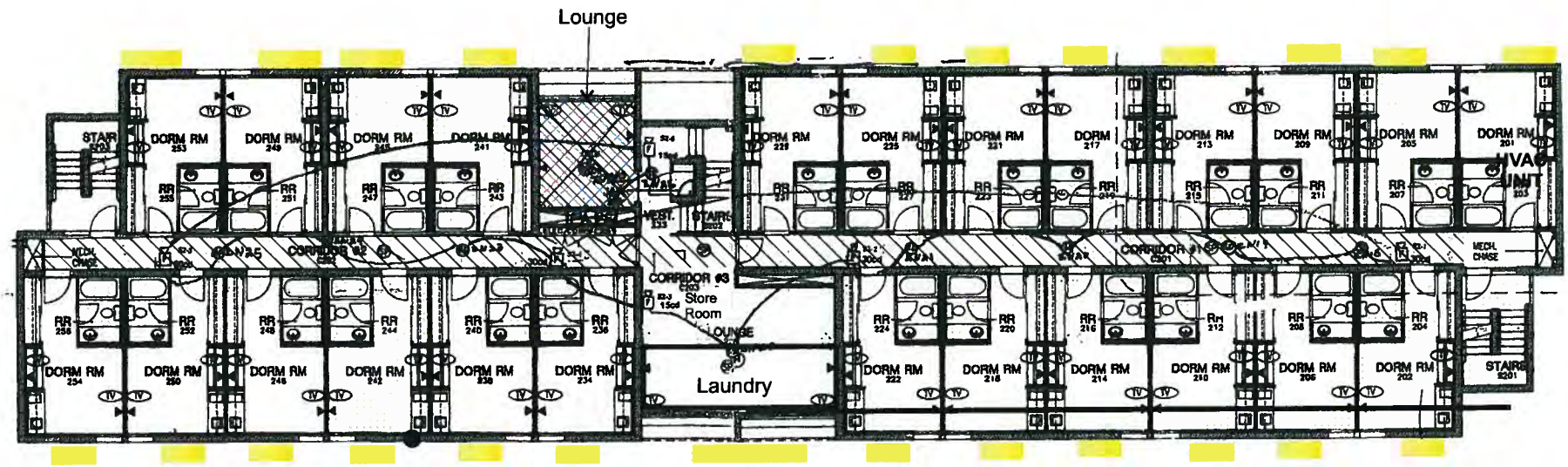
SAMPLE NO. PROTOCOL:
Bldg. No. - HA Sample No. - Component (ie: floor, wall)
Example: 13140B(F)
F = Floor
C = Ceiling
W = Wall
P = Plumbing
M = Miscellaneous
R = Roof
D = Door
I = Insulation

NOT TO SCALE

LEGEND	BUILDING 13140B - THIRD FLOOR	FIGURE
● = Sample Location	Vandenberg Air Force Base 1515 Iceland Avenue Vandenberg AFB, California 93437 Vandenberg AFB Project No. XUMU091669E Bureau Veritas Project No. 25009-009558.00	4

BUREAU VERITAS

ASBESTOS LOCATION DRAWING



LEGEND:

= **HA-11: 12" x 12" Gray Vinyl Floor Tile and Associated Black Mastic**

= **HA-17: Cementitious Panels - Assumed to Contain Asbestos Greater than 1%**

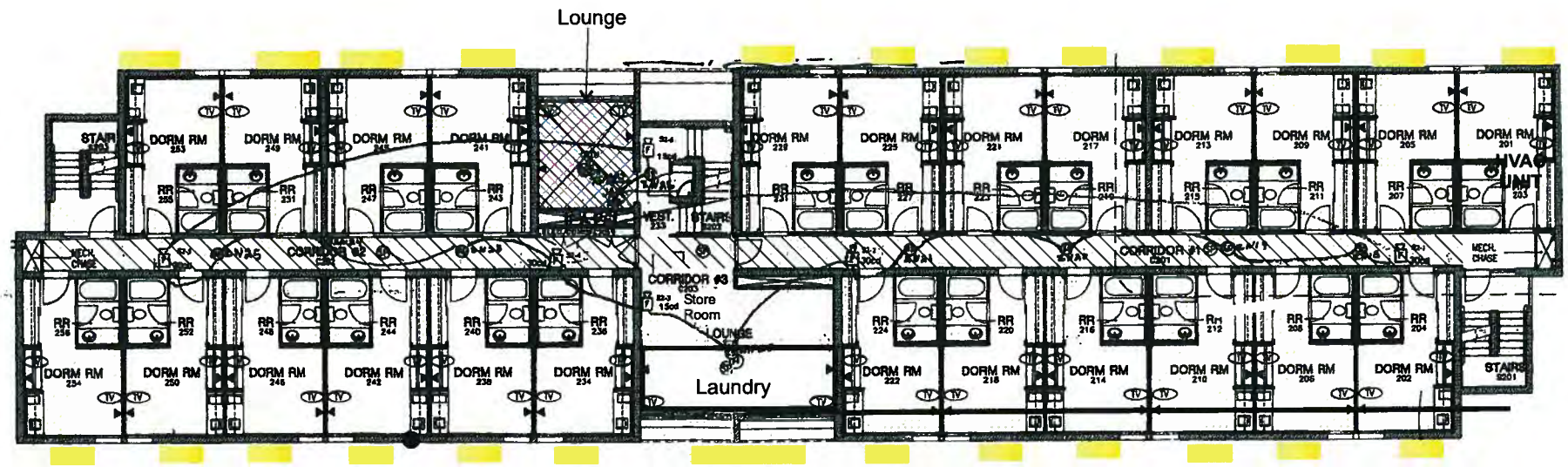
= **HA-18: 1' X 1' Ceiling Tiles and Associated Mastic - Assumed to Contain Asbestos Greater than 1%**

NOT TO SCALE

BUILDING 13140B - FIRST FLOOR	FIGURE
Vandenberg Air Force Base 1515 Iceland Avenue Vandenberg AFB, California 93437 Vandenberg AFB Project No. XUMU091669E Bureau Veritas Project No. 25009-009558.00	5

BUREAU VERITAS

ASBESTOS LOCATION DRAWING



LEGEND:

= HA-11: 12" x 12" Gray Vinyl Floor Tile and Associated Black Mastic

= HA-17: Cementitious Panels (Assumed)

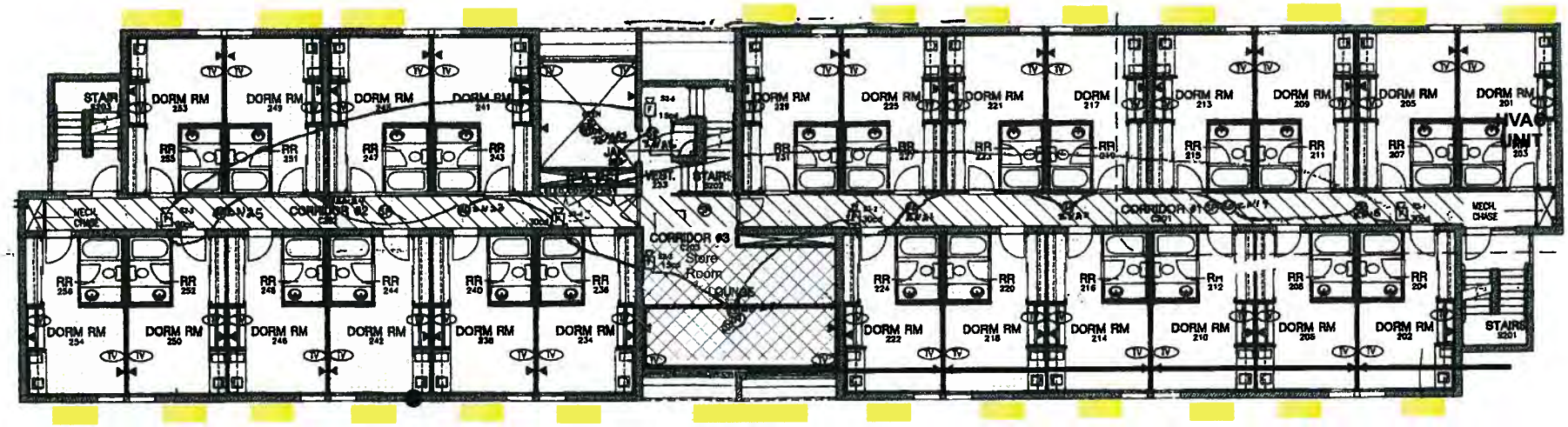
= HA-18: 1' X 1' Ceiling Tiles and Associated Mastic (Assumed) and HA-11: 12" x 12" Gray Vinyl Floor Tile and Associated Black Mastic

NOT TO SCALE

BUILDING 13140B - SECOND FLOOR	FIGURE
Vandenberg Air Force Base 1515 Iceland Avenue Vandenberg AFB, California 93437 Vandenberg AFB Project No. XUMU091669E Bureau Veritas Project No. 25009-009558.00	6

BUREAU VERITAS

ASBESTOS LOCATION DRAWING



LEGEND:

= **HA-11: 12" x 12" Gray Vinyl Floor Tile and Associated Black Mastic**

= **HA-17: Cementitious Panels (Assumed)**

= **HA-18: 1' X 1' Ceiling Tiles and Associated Mastic (Assumed) and HA-11: 12" x 12" Gray Vinyl Floor Tile and Associated Black Mastic**

NOT TO SCALE

BUILDING 13140B - THIRD FLOOR	FIGURE
Vandenberg Air Force Base 1515 Iceland Avenue Vandenberg AFB, California 93437 Vandenberg AFB Project No. XUMU091669E Bureau Veritas Project No. 25009-009558.00	7

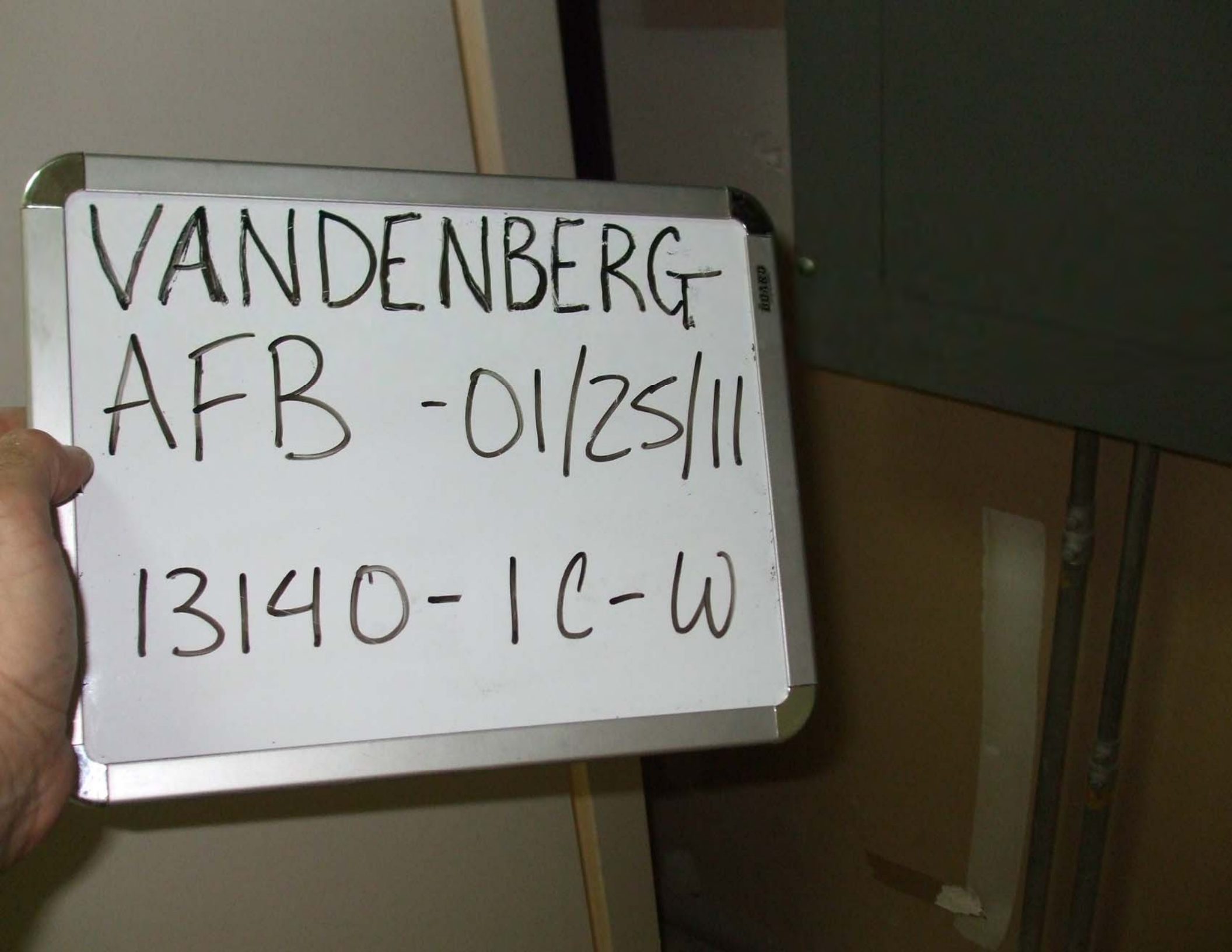
BUREAU VERITAS

VANDENBERG
AFB - 01/25/11

13140-1A-W

VANDENBERG
AFB - 01/25/11

13140-1B-W


VANDENBERG
AFB -01/25/11
13140-1C-W

VANDENBERG
AFB -01/25/11

13140-2A-W

VANDENBERG
AFB - 01/25/11

13140-2B-W

VANDENBERG
AFB -01/25/11

13140-2C-W

VANDENBERG
AFB - 01/25/11

13140 - 2D - W

VANDENBERG
AFB - 01/25/11

13140-2E-C

VANDENBERG
AFB -01/25/11

13140-2F-W

VANDENBERG
AFB -01/25/11
13140-2G-W

VANDENBERG
AFB -01/25/11

13140-3A-F

VANDENBERG
AFB -01/25/11

13140-3B-F

VANDENBERG
AFB - 01/25/11

13140-3C-F

VANDENBERG
AFB -01/25/11
13140-4A-W

VANDENBERG
AFB -01/25/11

13140-4B-W

VANDENBERG
AFB - 01/25/11

13140-4C-W

VANDENBERG
AFB -01/25/11

13140-5A-W

VANDENBERG
AFB - 01/25/11

13140-5B-W

VANDENBERG
AFB - 01/25/11

13140-5C-W

VANDENBERG
AFB - 01/25/11

13140-6A-P

VANDENBERG
AFB - 01/25/11

13140-6B-P

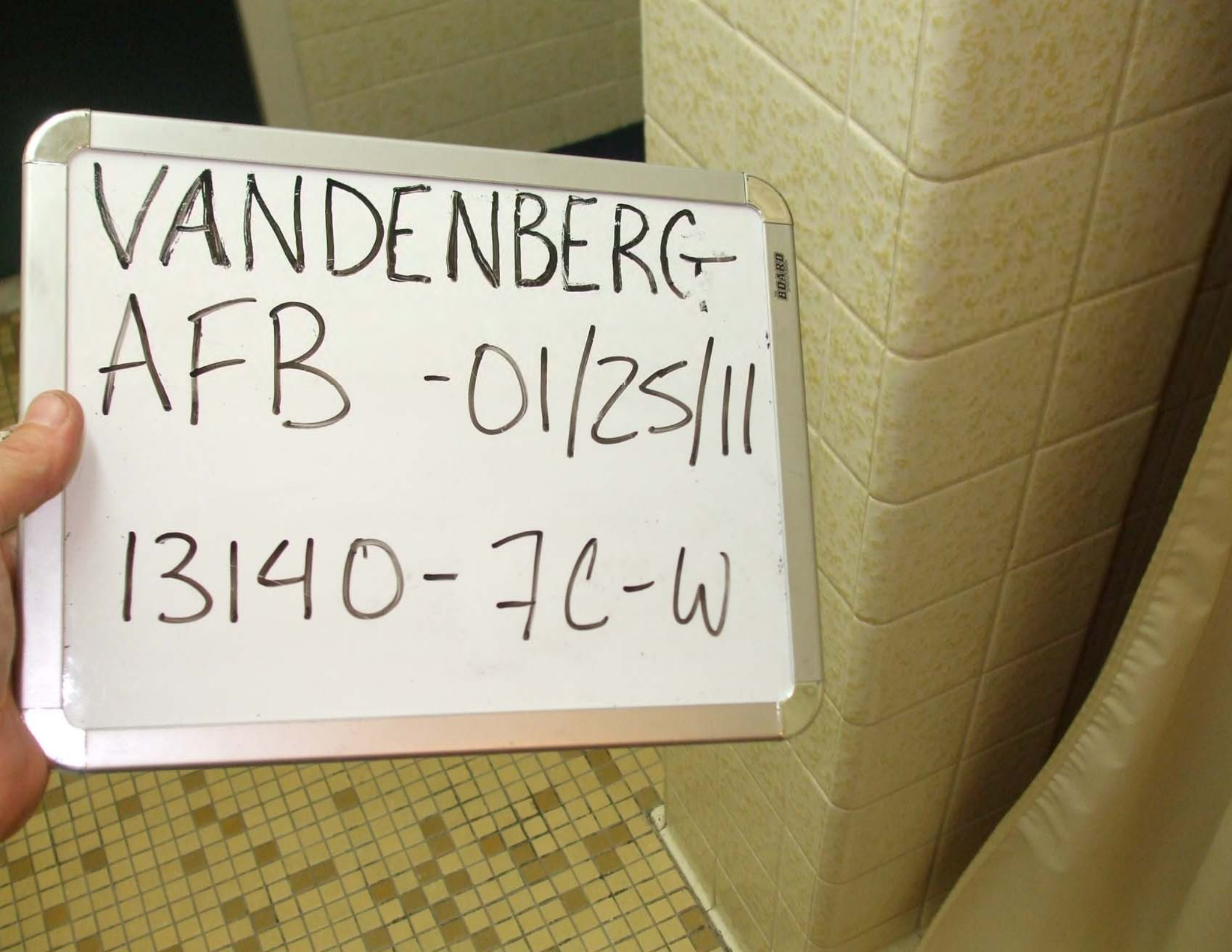
VANDENBERG
AFB - 01/25/11
13140-6C-P

VANDENBERG
AFB - 01/25/11

13140-7A-W

VANDENBERG
AFB -01/25/11

13140-7B-W

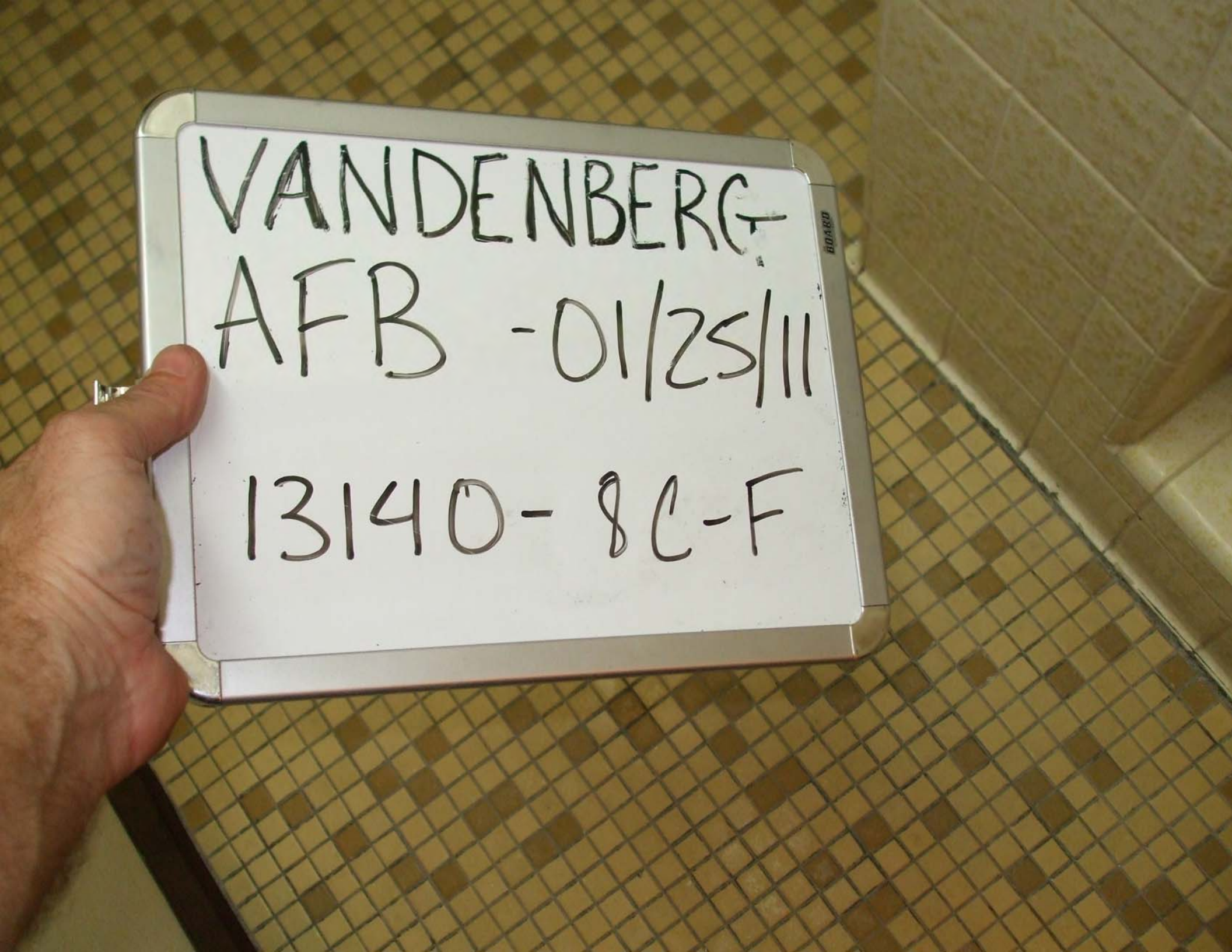

VANDENBERG
AFB -01/25/11
13140-7C-W

VANDENBERG
AFB -01/25/11

13140-8A-F

VANDENBERG
AFB -01/25/11

13140-8B-F


VANDENBERG
AFB -01/25/11
13140- 8C-F

VANDENBERG
AFB -01/25/11

13140-9A-C

VANDENBERG
AFB - 01/25/11

13140-9B-C

VANDENBERG
AFB - 01/25/11

13140-9C-C

VANDENBERG
AFB - 01/25/11

13140 - 9D - C

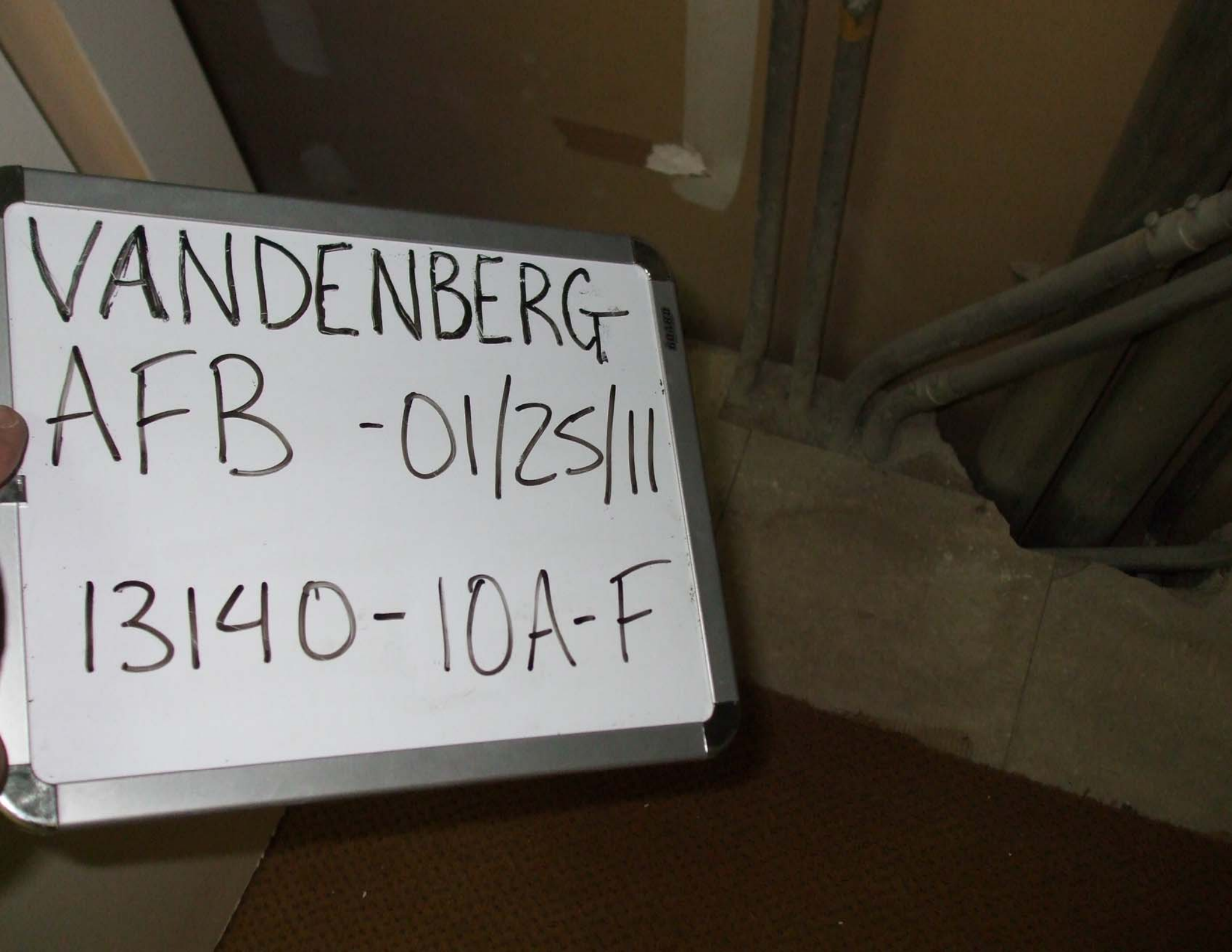
VANDENBERG
AFB -01/25/11
13140-9E-C

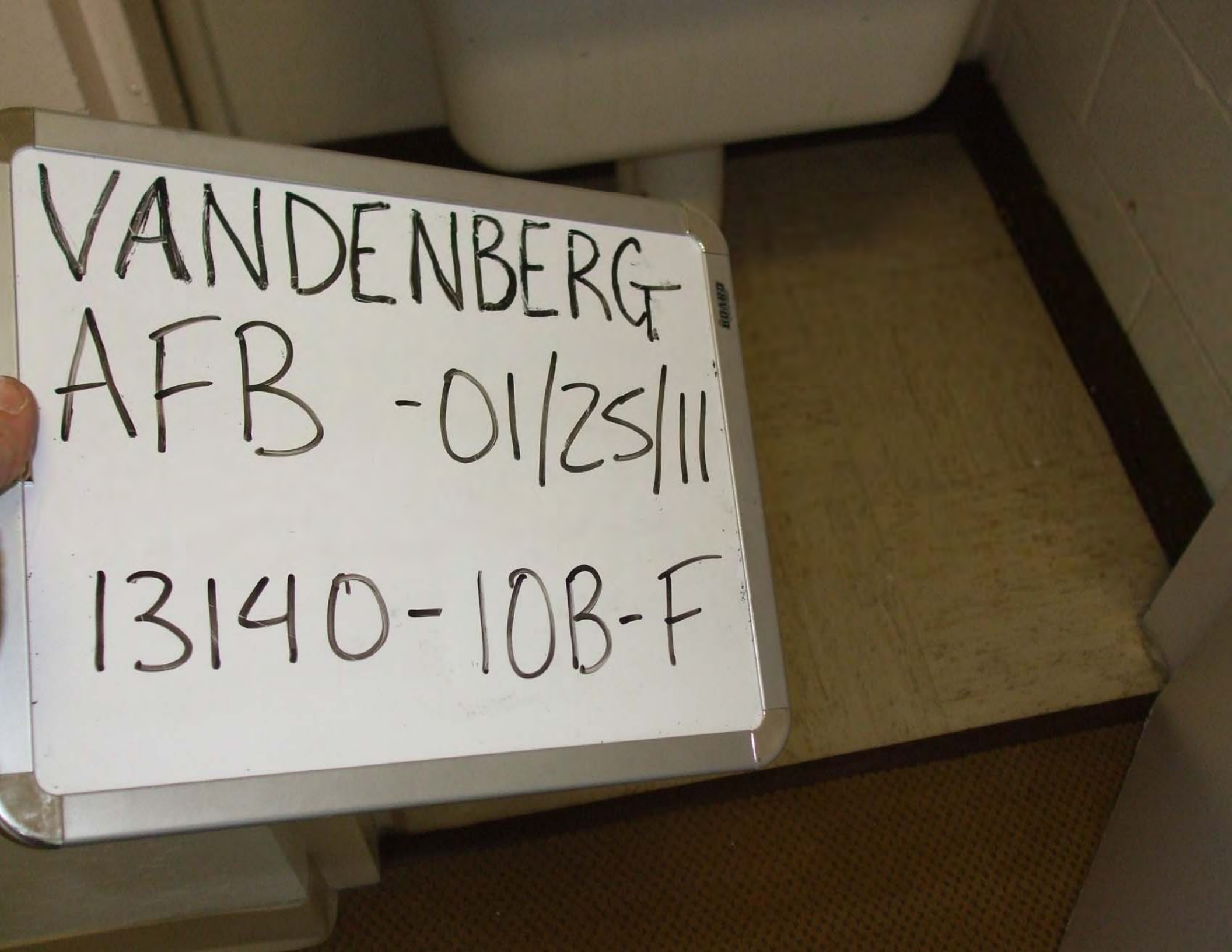
VANDENBERG
AFB - 01/25/11

13140-9F-C

VANDENBERG
AFB - 01/25/11

13140-9G-C


VANDENBERG
AFB -01/25/11
13140-10A-F


VANDENBERG
AFB -01/25/11
13140-10B-F

VANDENBERG
AFB -01/25/11

13140-10C-F

VANDENBERG
AFB -01/25/11

-11A-F

13140

AFB -01/25/11

1314.0-11B-F

BERG
1/25/11
1C-F

VANDEN
AFB -C
13140-

VANDENBERG
AFB - 01/25/11

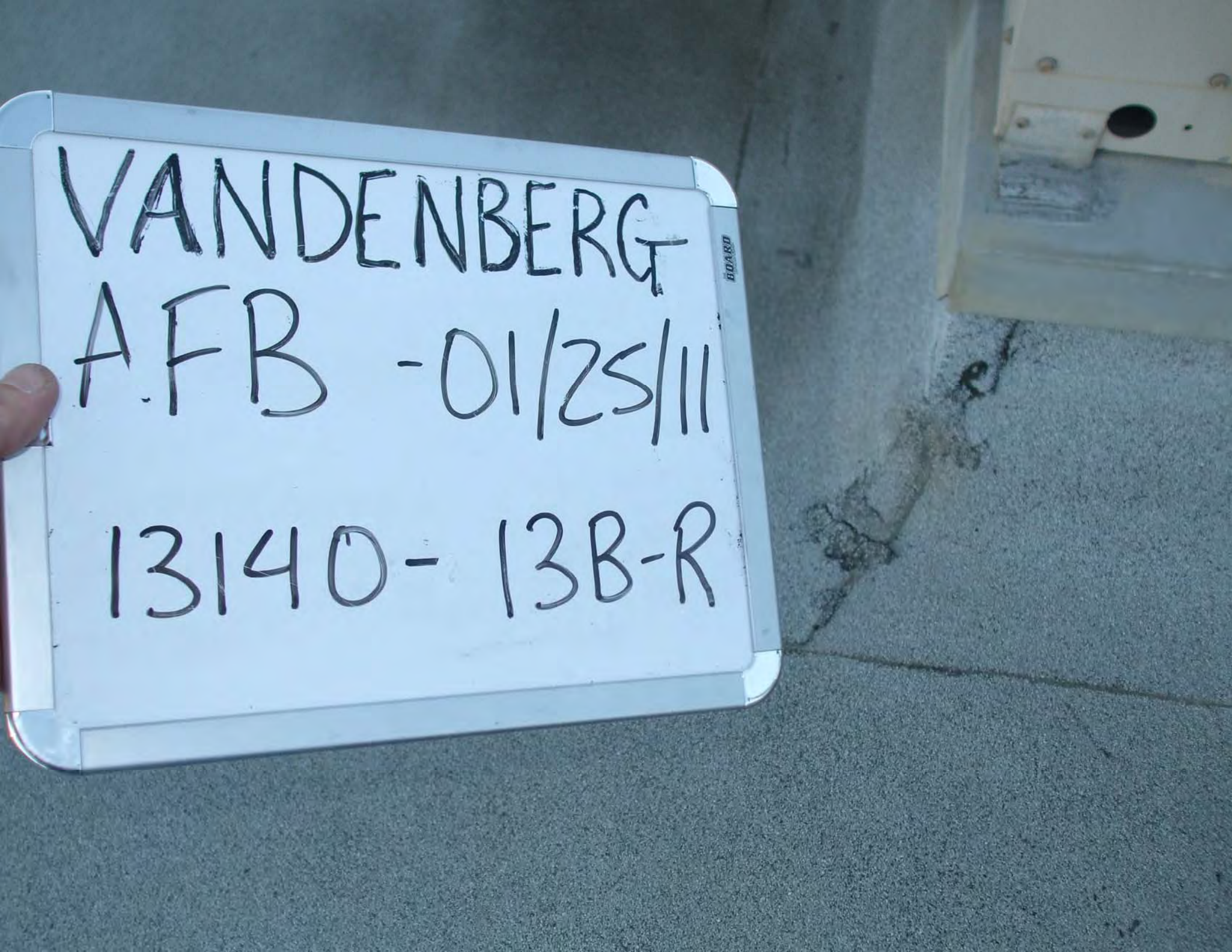
13140-12A-F

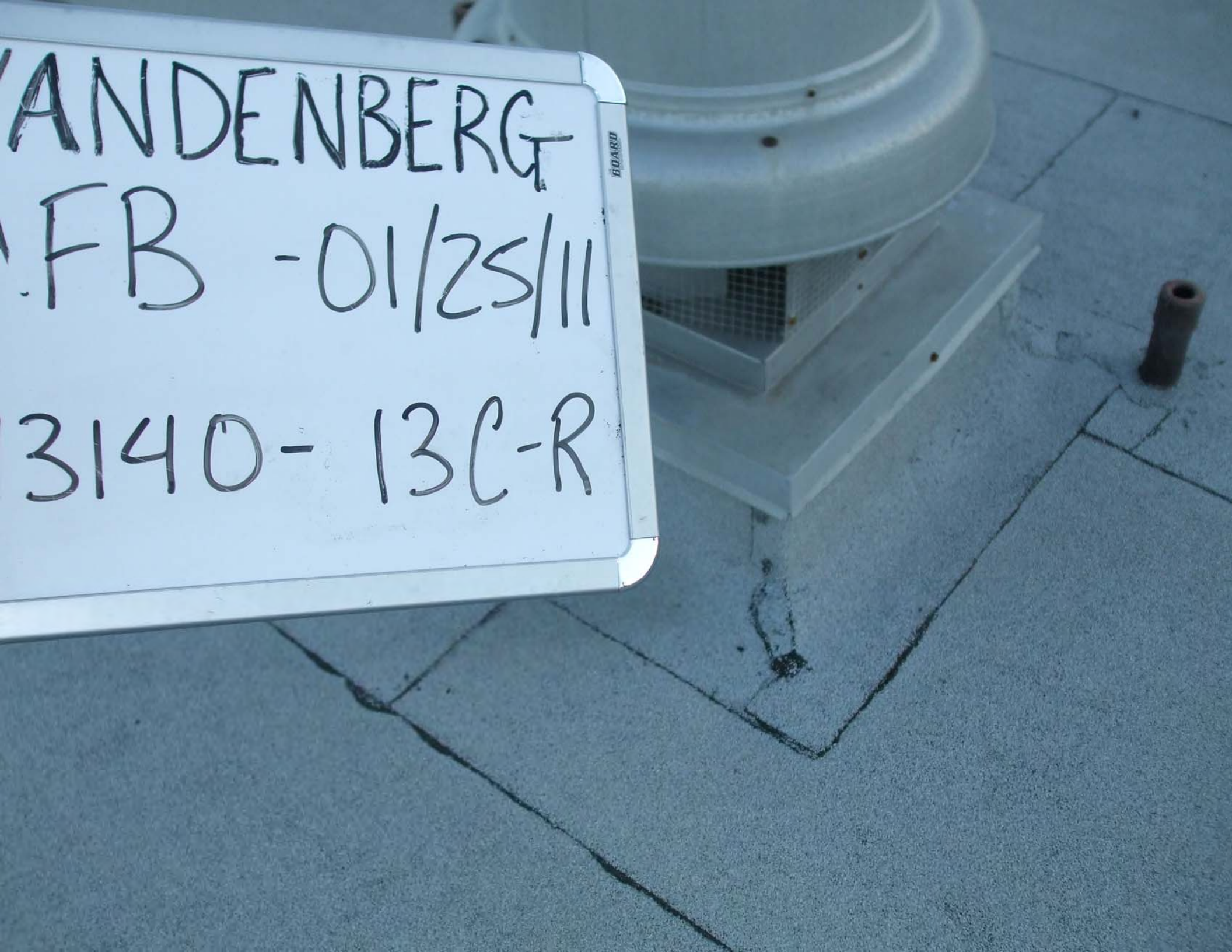
VANDENBERG
AFB -01/25/11
13140-12B-F

VANDENBERG
AFB -01/25/11

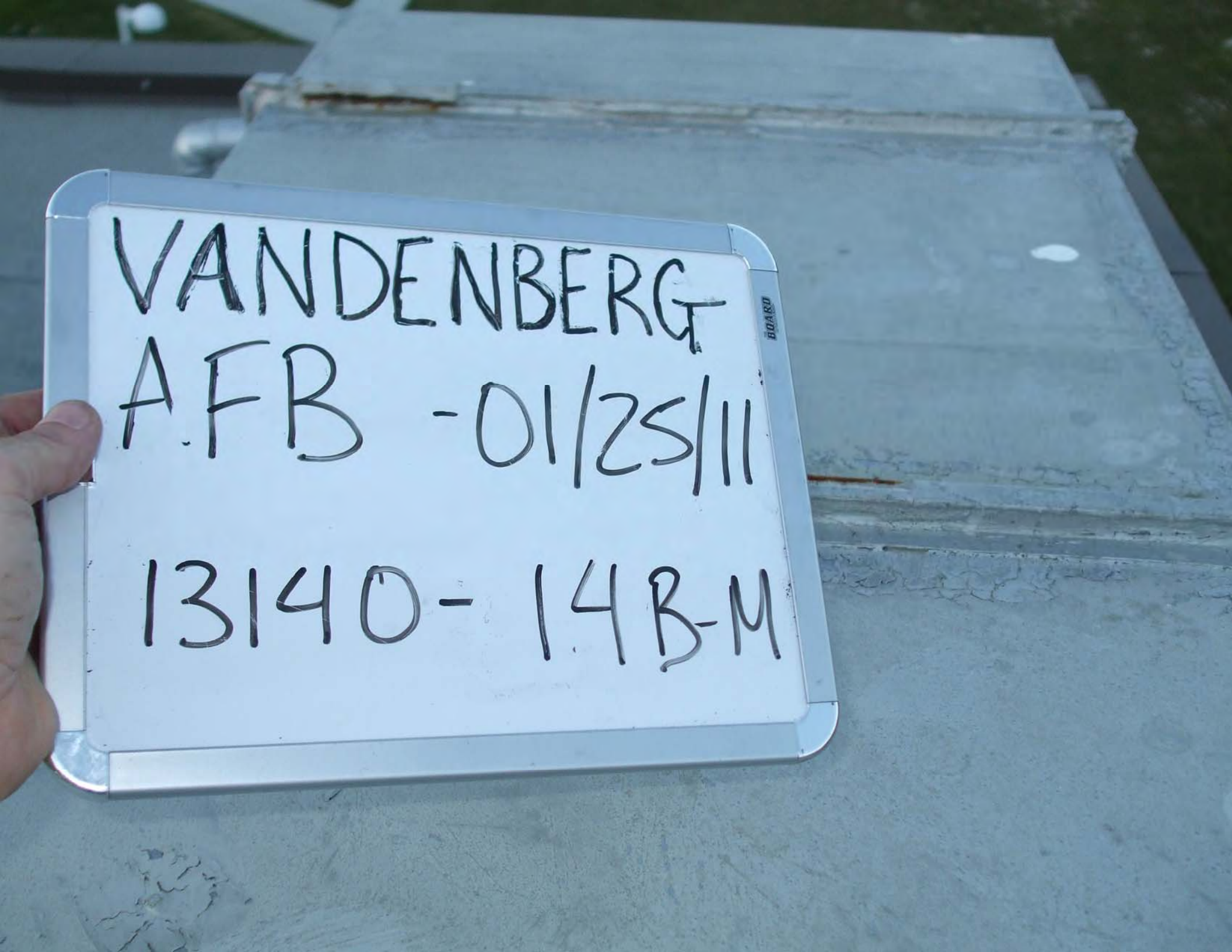
13140-12C-F

VANDENBERG
AFB -01/25/11
13140- 13A-R
DRYERASE
MARKER
BOARD


VANDENBERG
AFB -01/25/11
13140- 13B-R


VANDENBERG
AFB -01/25/11
3140- 13C-R

VANDENBERG
AFB -01/25/11
13140- 14A-M


VANDENBERG
AFB -01/25/11
13140- 14B-M

VANDENBERG
AFB -01/25/11
13140- 14C-M

VANDENBERG
AFB - 01/25/11

13140 - 15A-W

VANDENBERG
AFB - 01/25/11

13140 - 15B-W

VANDENBERG
AFB - 01/25/11

13140 - 15C-W

VANDENBERG
AFB - 01/25/11

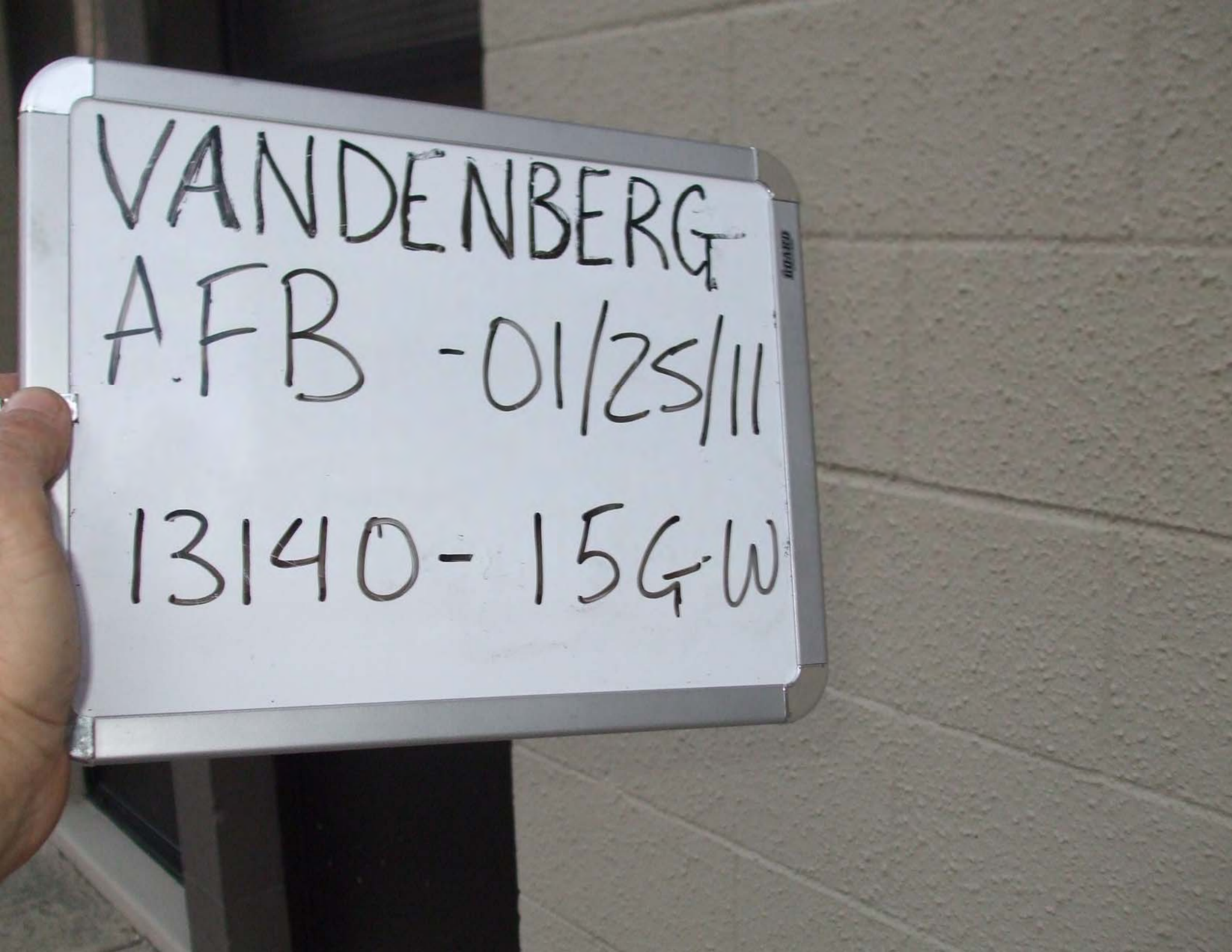
13140 - 15C-W

VANDENBERG
AFB - 01/25/11
13140- 15D-W

VANDENBERG
AFB -01/25/11
13140- 15E-W

VANDENBERG
AFB - 01/25/11

13140 - 15F-W


VANDENBERG
AFB - 01/25/11
13140 - 15GW