

TRANSMITTAL SLIP

TO *Jim Lister, Federal Budget*

FROM *Mike Cruden, Construction Section*

DATE *5/26/74*

RE: *Tobacco City Wells*

4

URS final report

FOR ACTION AS INDICATED:

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AN INTERNATIONAL PROFESSIONAL SERVICES ORGANIZATION

URS CONSULTANTS, INC.

282 DELAWARE AVENUE
BUFFALO, NEW YORK 14202-1805
(716) 856-5636
FAX: (716) 856-2545

May 22, 1992

Mr. James G. Van Hoesen, P.E.
Chief, Western Field Services Section
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of
Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

RE: JOHNSON CITY WELLFIELD
W.A. D002340-12
FINAL REPORT SUBMISSION

Dear Mr. Van Hoesen:

Enclosed are ten (10) final copies of our report with appendix entitled:

"CONTAMINANT SOURCE INVESTIGATION
JOHNSON CITY WELLFIELD
JOHNSON CITY, BROOME COUNTY, NEW YORK
W.A. D002340-12"

The final report addresses the related Department comments of the draft report which was sent to URS on May 8, 1992. As numerically referenced in the Department correspondence, these comments are addressed in the following manner:

1. Section 3.5 - The last sentence of the first full paragraph on page 3-5 has been modified to more accurately read, "Discharge to the Susquehanna River was performed per discharge criteria developed by NYSDEC's Division of Water."
2. Section 4.1.3 - The discussion of potential contaminant sources on page 4-6 has been modified to include only those sites which might represent actual source areas.
3. Section 4.2.2 - The outwash sand and gravel unit depicted in the cross-sections can locally include finer grained ice-contact deposits that may have been created as overbank deposits, kame deposits or ice block depression fillings. However, the geologic cross-sections illustrated in Figure 4-3 and 4-4 have been revised to more accurately reflect the individual boring logs showing the local presence of the finer grained sediments.

The presence of the 1,1,1-trichloroethane in MW-3D may be significant. However it is not currently known whether this data suggests localized upper aquifer contamination or the lack of contaminant interception by the flow lines intersecting MW-2D.

4. Section 4.3.1 - We concur with the Department's interpretation of the contaminant concentration at MW-5. It is possible that MW-5 may be located at the fringe of a contaminant plume or that there may be a more concentrated plume of contamination affecting the Wellfield which MW-5 did not, by virtue of its location, intercept. However, as MW-5 was installed without the benefit of any previously existing hydrologic, or water quality data and information, the monitoring well, located between the Wellfield and a potential source, represents a good preliminary effort at contamination assessment. Accordingly, this comment may be best addressed by adding a recommendation to the report calling for the expanded use of soil gas surveys over the area influenced by the wellfield to better define the contaminant plume(s).
5. Section 4.4.2 - Some of the wells shown in Table 4-5 such as SW-1, DW-1, SW-6, DW-6, SW-8, DW-8, SW-9 and DW-9 were not shown on the maps because their locations were not accurately known prior to draft report completion due to a lack of survey data. Recent data received by URS on May 12 has allowed the integration of these well sites onto the final report maps. Despite repeated requests to the Air Force's Consultant and Department personnel, URS still does not have the geologic logs of these wells which preclude their addition to this report.
6. Sections 4.4.1 and 4.4.2 - The stream gauge readings shown in Figure 4-12 indicate an overall decrease in the Susquehanna River stage of about 0.8 feet over the course of the aquifer test. The general non-linear shape of the curve suggests a natural base flow recession punctuated by several intervals of short-term water level change which may represent intermittent diversions of river water. Attached to this correspondence is a hydrograph of Susquehanna River stage data recorded during and shortly after the aquifer test at the nearest U.S. Geological Survey stream gauge approximately 12 miles upstream in Conklin, New York. The Conklin gauge shows the same 0.8 foot stage decline measured at the Wellfield. As it is unlikely that the cone of depression generated by the test extended out to Conklin, it is unlikely that the decline in river stage was related to wellfield withdrawals during the test. This confirms the aquifer test data which, with little exception, appears to show the lack of significant recharge being induced through the river bed to the wellfield during the test.

The Department's comment regarding the amount of induced infiltration supporting the Endicott municipal wells and particularly its Ranney well is properly acknowledged. We agree that the question of river recharge to the Camden Street Wellfield needs further study. Towards that end, we believe that the site-specific computer model that URS proposes to develop for the Wellfield will provide better definition of this question. Accordingly, report references to induced river bed infiltration have been appropriately qualified.

7. Section 4.4.2 - Figure 4-13 has been closely reviewed and found to be based on erroneous observation well radial distances as shown in the ISOAQX input data of the draft Appendix. Although this error did not

effect report conclusions, it did have wide ranging implications, as in addition to Figure 4-13, Table 4-5, Table 4-6, Figure 4-14, and Figure 4-19 as well as all related portions of the text were revised for the sake of accuracy.

8. Section 4.4.2 - The comment on page 4-21 regarding the radial symmetry of the cone of depression was meant as a general comment. The comment is generally consistent with Figures 4-16 and 4-18. However, in the strictest technical sense, cones of depression in natural aquifers are rarely if ever truly symmetrical. Accordingly, to avoid any confusion, that section of the text on page 4-21 dealing with radial symmetry has been amended.
9. Section 4.3.3 - Other deep wells, such as DW-1, DW-6, DW-8 and DW-9 were not used in the draft version of Figure 4-16 because the measuring point elevations that are required for that Figure were not provided to URS until May 18. Figure 4-16 has been modified for the final report to include the data collected during the aquifer test.
10. Section 6 - We agree with the Department's comment regarding long-term water level monitoring. The use of all available wells for water level elevations would provide a more comprehensive data set. This recommendation has been modified accordingly in the final report.
11. Section 6 - An existing U.S. Geological Survey model of the Susquehanna River Valley in Southwestern Broome County has been reviewed. This regional-scale model is not directly applicable to the wellfield investigation due primarily to the accuracy provided by the scale of its grid. However, the model input data in the area of the Wellfield should provide valuable boundary data in the preparation of the site-specific model URS is proposing to develop to address wellfield related questions. Accordingly, the reference for this Water Resources Investigations report has been added to the final reference list of the contaminant source investigation.

The preliminary data provided by the Air Force through the Department's correspondence of May 8 has been reviewed. The data provided appears to be limited in scope as it appears to be a data validation report of the chemical analyses conducted on soil, water, and sediment samples recently collected on the AF-59 property. The highest frequency and concentration of volatile organic chemicals were detected in groundwater samples. Concentrations of most groundwater volatiles were in the low ppb range. However, trichloroethene (TCE) was detected in two samples at 95 and 97 ppb. 1,1,1-trichloroethane (TCA) was also detected in two groundwater samples at approximately 15 ppb. Semivolatiles do not appear to be of concern in the water samples. However, elevated (low ppm) concentrations of polynuclear aromatic hydrocarbons (PAHs) in a few soil samples appear to indicate localized organic combustion residuals. No pesticides or polychlorinated biphenyls were detected in water samples. The metal concentrations in the water samples were generally lower than drinking water MCL's. The two notable exceptions were chromium found in one groundwater sample at 63 ppb and cadmium found in one groundwater sample at 14 ppb. It is our

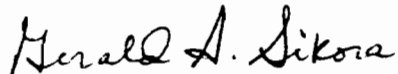
recommendation that when all the IRP investigation data becomes available to the Department, a thorough review be conducted.

The hydrogeologic system supporting the Johnson City Wellfield is both complex and dynamic. URS recommends that the Department continue the investigation of the chemical contaminants affecting this wellfield in a staged or phased fashion. The tasks recommended in the URS report should be implemented by focusing initial investigative efforts near the Trim Line Auto Pro Shop while completing a thorough review of the Air Force IRP for Plant 59. This work can be followed in turn by soil gas screening of selected areas near the Wellfield, development of the Wellfield aquifer model and finally, confirmatory observation well drilling, sampling, and chemical analysis.

URS would welcome the opportunity to serve the Department in the implementation of the recommendations set forth in this report.

Sincerely,

URS CONSULTANTS, INC.



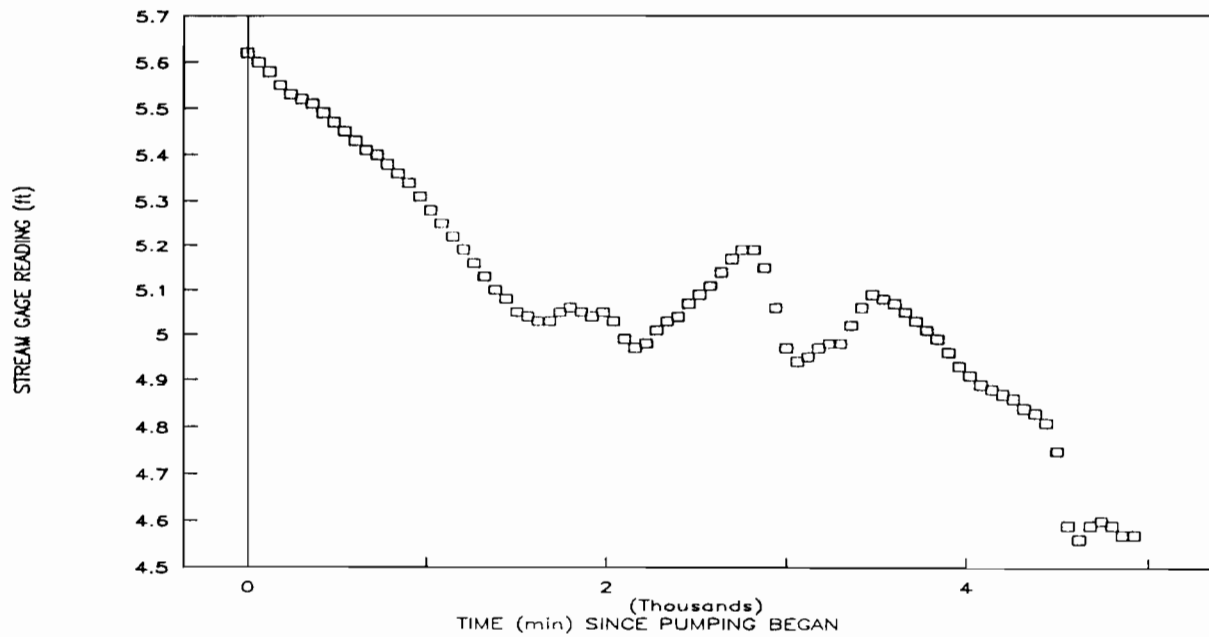
Gerald S. Sikora
Project Manager

GSS/ys
Enc.

5-22-92L.JVH

cc: **M. Cruden** - NYSDEC
J. Gorton - URS
C. Hurley - URS
A. LaPres - URS
File: 35238.00 (1000)

SUSQUEHANNA RIVER STAGE AT USGS GAGING STATION 01512500 (CONKLIN, NY)
UPSTREAM OF JOHNSON CITY WELLFIELD AQUIFER TEST
DECEMBER 17, 1991 - DECEMBER 20, 1991



NOTES: Time = 0 at 10:00 AM on December 17, 1991.
River stage information provided by U.S. Geological Survey, Albany, NY.

J. Lister



Date: October 31, 2000

Mr. Stephen G. Drake
Chief, AF Industrial Plants Divestiture
Acquisition Environmental, Safety
& Health Division, Engineering Directorate
Department of the Air Force
ASC/ENV(D)
1801 10th Street, Suite 2
Wright-Patterson AFB, OH 45433-7626

File Reference No: ESH/00/069

Via Federal Express

Subject: Air Force Plant #59 (AFP 59)
USAF Letter dated 31 August 2000 (PCBs and Dust Collection Systems)
LMCS Letter dated 26 July 2000, File Reference No: ESH/00/046

Dear Mr. Drake:

This letter responds to your letter of August 31, 2000. As related in more detail below, BAE SYSTEMS Controls ("BAE SYSTEMS"), formerly Lockheed Martin Control Systems, disagrees with the express positions and implied premise of your August 31 letter, and reasserts its position that the Air Force is responsible for corrective action addressing the PCB and dust collection system matters at AFP 59. This letter also contains information to update the USAF on the PCB matter since the 26 July 2000 LMCS letter, which should assist all parties to prepare for a December 6, 2000 meeting at AFP 59.

Paragraph-by-Paragraph Response to USAF August 31, 2000 Letter:

1. The PCBs and dust derive from transformers and dust collection systems installed with construction of AFP 59 in 1941-1942. AFP 59 was designed and built by the United States Government. The transformers and dust collection systems were installed in the original construction of the plant.

Douglas F. Garner, PE: Manager, ESH, Facilities, and Security, Room 109
(607) 770-2696 Fax (607) 770-2119
E-mail: douglas.f.garner@lmco.com

On March 21, 1997, the United States, represented by the Air Force, contracted to deed AFP 59 to the Broome County Industrial Development Agency ("BCIDA") (the "Contract"). The Contract states that the "Environmental Baseline Survey for Air Force Plant 59, Broome County, New York," dated February, 1995, ("EBS") is incorporated into the Contract. The Contract includes a commitment by the Air Force to (among other things), "perform all remedial action required to cleanup the contamination at all areas identified in the EBS as requiring additional evaluation..." This commitment stands as an express exception to any "As is, Where is" provision of the Contract.

The EBS identifies eight former PCB transformer locations that require further evaluation. The area of PCB impact now includes all nineteen (19) former transformer platforms, and that evaluation continues today. An attempted remediation of some of these locations several years ago failed. The EBS January 2000, Addendum mischaracterizes the results of the attempted remediation, and the Government has refused to participate in any subsequent PCB cleanup efforts. Continued refusal by the Air Force to perform in accordance with its contractual commitment provides BCIDA with the right to terminate the Contract, and we expressly reserve all rights with respect to such refusal.

2. The efforts to effect remediation of the PCB matter, conducted under the control and approval of the Air Force, failed. Thus, there has been no existing remediation to "maintain."
3. Given, but not limited to, the Air Force's contractual responsibility to address the PCB matter, the associated issues are properly a concern - and liability - of the Air Force.
4. The Government's liability as a potentially responsible party derives from, among other things, its capacities as designer, builder, owner, and operator of AFP 59 beginning in or about 1942. These activities and their duration include a period of substantial activity prior to and not duplicated by BAE SYSTEMS', Lockheed Martin's, Martin Marietta's, or even General Electric Company's presence at the plant. BAE SYSTEMS recognizes that the Air Force now alleges BAE SYSTEMS/Lockheed Martin are "PRPs" for conditions associated with the plant. This allegation does not diminish the Government's overwhelming responsibility for such conditions, which include the PCB and dust collection system matters.
5. BAE SYSTEMS is encouraged by the willingness of the Air Force, Lockheed Martin, and the BCIDA to meet to discuss the PCB and dust collection system matters. It is the desire of BAE SYSTEMS to secure Air Force payment of costs incurred in undertaking such activities. We look forward to a productive meeting on December 6, 2000 at AFP 59, and will forward a draft agenda along with proposed attendees under separate cover.

PCB Update Since July 26, 2000:

The July 26 letter indicated that BAE SYSTEMS had completed one round of sampling and analysis in an attempt to fully delineate the areas of PCB impact. Since this initial sampling round failed to completely delineate PCB impact, a second round was proposed. Round 2 has been completed and the results are presented in Enclosure 1, "PCB Round 2 Results". The interpretation of these results indicated that this sampling round also failed to completely delineate the extent of the areas impacted by PCBs. Of the 280 samples taken, approximately 30% were below the USEPA standard of 10 $\mu\text{g}/100 \text{ cm}^2$, 50% of the samples between 11 and 100 $\mu\text{g}/100 \text{ cm}^2$, and 20 % above 100 $\mu\text{g}/100 \text{ cm}^2$.

Interpretation of the Round 2 results indicates that the vertical truss members are generally clean, while the diagonal and horizontal truss members are impacted by PCBs. These areas of truss impact are generally worse directly beneath the former transformer footprints. Additionally, five (5) core samples taken in the floor system beneath former transformer locations exceeded the USEPA High Occupancy Standard of 1.0 mg/kg (volume). In two (2) of these locations, surface exceedances were observed and the areas were subsequently closed to use. One of these areas is about 20 feet square around an environmental test chamber and its controller in the company's System Integration and Test area, and the other location is about 8 feet by 30 feet in a production storage area. These are the first known instances where the PCB matter has impacted our company operations in areas other than the catwalks. In the remaining areas, which are active offices, no surface exceedances were observed in the floor areas, although some PCB impact has been identified in the subsurface flooring layers.

Accordingly, IT Corp. and BAE SYSTEMS then developed a Round 3 sampling plan with the goal to arrive at full PCB impact determination. This Round 3 sampling plan is provided in Enclosure 2, "Round 3 Sampling Plan". Round 3 sampling was concluded in September 2000, and these results are presented in Enclosure 3, "PCB Round 3 Results". The interpretation of these results indicated that this sampling round also failed to completely delineate the extent of the areas impacted by PCBs. However, a higher percentage of the Round 3 samples were clean or failed at lower concentrations than previous sampling rounds. The results of Round 3 sampling indicate that 41.5% of the samples from the outside of the southside of each catwalk were below applicable PCB standards, and 53.6% of the samples were less than 50 $\mu\text{g}/100 \text{ cm}^2$. Samples collected on the non-transformer platforms and crosswalks were below applicable PCB standards 81% of the time as were 54.5% of the core samples from the floor beneath former transformer locations.

Round 3 sampling results indicate that additional sampling is necessary under platforms 1, 9, 18, and 23 along with the northside of both catwalks (refer to Enclosure 4, "Catwalk Sample Locations"). BAE SYSTEMS and IT Corp. are currently in the process of developing a Round 4 Sampling Plan, which will be forwarded to interested parties upon its completion. The cost of the delineation work performed by IT Corp. for Rounds 1 through 3, inclusive, is around \$90,000.

On August 16, 2000, IT Corporation proposed to perform a remediation pilot test to evaluate various remedial alternatives and fireproofing of cleaned wood surfaces as presented in Enclosure 5, "Proposal for Test Cleaning Services." Subsequently, IT Corp. prepared a detailed work plan and health and safety plan for this pilot test, which are presented in Enclosures 6 and 7, "Work Plan for

Test Cleaning of Former PCB Contaminated Transformer Platforms” and “Site-Specific Health & Safety Plan for Pilot Scale Demonstration...”, respectively. The USEPA provided verbal approval of this pilot test, without requiring formal approval of the proposed workplan. This pilot test is currently being performed on platform # 8, with an estimated cost of \$77,600, exclusive of internal BAE SYSTEMS support and waste disposal costs.

Following complete delineation and an evaluation of the pilot test results, BAE SYSTEMS intends to solicit bids to perform remediation of all areas impacted by PCBs in AFP 59. The approach for conducting this remediation has not been determined, but it may consist of removal, extraction, and/or encapsulation of impacted materials. Prior to full-scale remediation, it will be necessary to obtain USEPA approval of the proposed work plan.

On a related matter, BAE SYSTEMS intends to request that the NYSDEC amend the AFP 59 entry on the “New York State Registry of Inactive Hazardous Waste Disposal Sites” to correctly characterize the AFP 59 site by adding the PCB and Dust Collection matters. This will facilitate proper waste classification associated with current and future remediation activities.

Please contact me if you have any questions or concerns, or desire any additional information. We look forward to a productive meeting in December.

Sincerely,



D.F. Garner, PE

Enclosures

- 1: PCB Round 2 Results, 21 pages, dated August 25, 2000
- 2: Round 3 Sampling Plan, 2 pages, dated August 28, 2000
- 3: PCB Round 3 Results, 14 pages, dated September 28, 2000
- 4: Catwalk Sample Locations, 2 pages, dated September 28, 2000
- 5: Proposal for Test Cleaning Services, 2 pages, dated August 16, 2000
- 6: Work Plan for Test Cleaning of Former PCB Contaminated Transformer Platforms, dated September 25, 2000
- 7: Site-Specific Health & Safety Plan for Pilot Scale Demonstration, Former Transformer Platforms in the Catwalk Areas, dated September 8, 2000

CC:

BCIDA, Joseph Meagher, Esq., Encl. 1-5
BCIDA, Richard D'Attilio, Encl. 1-5
NYSDEC, James Lister
DCMC, Nancy Gee, w/o Encl.
Lockheed Martin, Norm Varney, Esq.,
Lyle Nyberg, Esq., w/o Encl.
Stew Walls, w/o Encl.

LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

Final Second Round Sample Count

Platform Number	Truss Samples			Other Samples			Sample Number		
	North	Middle	South	Catwalk	Stringer	Miscellaneous	Total	Analyze	Hold
1	4	4	4	0	4	2	18		
2	4	3	5	0	2	8	22		
3	4	3	4	0	2	5	18		
4-5	9	8	9	5	4	6	41		
6	4	1	1	0	0	1	7		
7	1	4	4	0	2	1	12		
8	4	2	5	2	0	6	19		
9	4	2	4	2	0	5	17		
10	3	3	3	4	2	0	15		
11	3	3	4	4	0	2	16		
12-15	7	8	9	4	4	13	45		
16	1	5	4	0	0	1	11		
17	4	2	4	0	2	3	15		
18	5	3	1	0	2	6	17		
23	0	0	0	0	0	0	0		
Mi	0	0	0	0	0	7	7		
TOTALS	57	51	61	21	24	66	280	0	0

LOCKHEED MARTIN PCB DELINEATION
Johnson City, NY

Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)			Action Level	Notes
				A1016-A1254	A1260	Total		
07	382	Wipe	N \	< 0.3	29	29	10	
07	383	Wipe	M /			0	10	
07	384	Wipe	M \	< 3	240	240	10	
07	385	Wipe	M \			0	10	
07	386	Wipe	M small beam 1 to truss	< 0.3	37	37	10	
07	387	Wipe	S 1	< 0.3	5	5	10	
07	388	Wipe	S \	< 0.3	2	2	10	
07	389	Wipe	S /	< 0.3	6	6	10	
07	390	Wipe	S \	< 0.3	25	25	10	
07	391	Wipe	stringer G	< 0.3	2	2	10	
07	392	Wipe	stringer H	< 0.3	0.9	0.9	10	
06	393	Wipe	N /	< 0.3	19	19	10	
06	394	Wipe	N 1	< 0.3	1	1	10	
06	395	Wipe	N \	< 0.3	30	30	10	
06	396	Wipe	N \	< 0.3	17	17	10	
06	397	Wipe	near V box tween C&D	< 3	120	120	10	
0405	398	Wipe	N cat - 45	< 0.3	5	5	10	
0405	399	Wipe	N cat - 60				10	
0405	400	Wipe	S cat + 45	< 0.3	10	10	10	
0405	401	Wipe	N cat center beam @ -3	< 3	100	100	10	
0405	402	Wipe	S cat -45	< 0.3	9	9	10	
0405	403	Wipe	S cat -60	< 0.3	13	13	10	
0405	404	Wipe	N \	< 3	120	120	10	
05	405	Wipe	N 1	< 0.3	1	1	10	
05	406	Wipe	N \	< 0.3	19	19	10	
05	407	Wipe	N /	< 0.3	45	45	10	
05	408	Wipe	N \	< 0.3	49	49	10	
04	409	Wipe	M /	< 3	210	210	10	
04	410	Wipe	Dupe 409	< 3	120	120	10	
04	411	Wipe	M \			0	10	
04	412	Wipe	M right column	< 0.3	15	15	10	
04-05	413	Wipe	M 1	< 0.3	3	3	10	
04-05	414	Wipe	M \	< 250	3700	3700	10	
05	415	Wipe	S /	< 3	120	120	10	
05	416	Wipe	M left upright	< 0.3	4	4	10	
05	417	Wipe	M /	< 3	330	330	10	
04-05	418	Wipe	M pipe	< 3	460	460	10	
05	419	Wipe	stringer F	< 0.3	15	15	10	
05	420	Wipe	S /	< 0.3	33	33	10	
05	421	Wipe	stringer A	< 0.3	3	3	10	
05	422	Wipe	S \	< 0.3	32	32	10	
05	423	Wipe	S 1	< 0.3	2	2	10	
04-05	424	Wipe	S 1	< 0.3	3	3	10	
04-05	425	Wipe	S \	< 0.3	40	40	10	
04	426	Wipe	S /	< 0.3	25	25	10	
04	427	Wipe	Dupe 426	< 0.3	34	34	10	
04	428	Wipe	S 1	< 0.3	3	3	10	
04	429	Wipe	S \	< 0.3	33	33	10	
04	430	Wipe	stringer L	< 0.5	72	72	10	
04	431	Wipe	stringer M	< 0.3	3	3	10	
04	432	Wipe	S \	< 0.3	37	37	10	
04	433	Wipe	N \	< 0.5	76	76	10	
04	444	Wipe	N \	< 0.5	67	67	10	
0405	445	Wipe	N 1	< 0.3	4	4	10	
04	446	Wipe	N /	< 3	120	120	10	
03	447	Wipe	N /	< 0.3	39	39	10	
03	448	Wipe	N \ on a 4x8 beam	< 0.3	31	31	10	
03	449	Wipe	N 1	< 0.3	1	1	10	
03	450	Wipe	N \	< 0.3	22	22	10	
03	451	Wipe	N \	< 0.3	30	30	10	
03	452	Wipe	M on a 2x4 1 to truss	< 0.3	13	13	10	

LOCKHEED MARTIN PCB DELINEATION
Johnson City, NY

Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)			Action Level	Notes
				A1016-A1254	A1260	Total		
03	453	Wipe	M /	< 25	1400	1400	10	
03	454	Wipe	M /	< 0.3	15	15	10	
03	455	Wipe	M pipe	< 0.3	12	12	10	
03	456	Wipe	S \	< 0.3	21	21	10	
03	457	Wipe	S highest pipe of 4	< 0.3	13	13	10	
03	458	Wipe	S pipe 1 to truss	< 0.3	10	10	10	
03	459	Wipe	S top of elec box	< 0.3	38	38	10	
03	460	Wipe	S /	< 0.3	< 0.3	< 0.3	10	
03	461	Wipe	S /	< 0.3	29	29	10	
03	462	Wipe	S /	< 0.3	14	14	10	
03	463	Wipe	stringer G	< 0.3	7	7	10	
03	464	Wipe	stringer H	< 0.3	< 0.3	< 0.3	10	
02	465	Wipe	N \	< 0.3	37	37	10	
02	466	Wipe	N /	< 0.3	< 0.3	< 0.3	10	
02	467	Wipe	N /	< 0.5	54	54	10	
02	468	Wipe	N subcat 8' from M	< 500	71000	71000	10	
02	469	Wipe	N \	< 0.3	26	26	10	
02	470	Wipe	M subcat 4' from M	< 3	150	150	10	
02	471	Wipe	M elec box 3' from M	< 25	660	660	10	
02	472	Wipe	M /	< 0.3	0.9	0.9	10	
02	473	Wipe	M \	< 0.3	36	36	10	
02	474	Wipe	M /	< 2500	380000	380000	10	
02	475	Wipe	M 3" pipe 1 to truss	< 13	220	220	10	
02	476	Wipe	M 3" pipe /	< 0.3	40	40	10	
02	477	Wipe	M 2x6 1 to truss	< 50	5700	5700	10	
02	478	Wipe	S \	< 0.3	18	18	10	
02	479	Wipe	S /	< 0.3	3	3	10	
02	480	Wipe	S /	< 3	65	65	10	
02	481	Wipe	S /	< 3	71	71	10	
02	482	Wipe	Dupe 481	< 3	82	82	10	
02	483	Wipe	S 2" pipe 1 to truss	< 3	33	33	10	
02	484	Wipe	S Buss bar 1 to truss	< 3	79	79	10	
02	485	Wipe	stringer G	< 0.3	11	11	10	
02	486	Wipe	stringer H	< 0.3	7	7	10	
02	487	Wipe	M /	< 0.3	1	1	10	
02	488	Wipe	S cat - 45	< 0.3	6	6	10	
02	489	Wipe	S cat - 60				10	
01	490	Wipe	stringer A	< 0.3	< 0.3	< 0.3	10	
01	491	Wipe	stringer B	< 0.3	0.9	0.9	10	
01	492	Wipe	N /	< 0.3	16	16	10	
01	493	Wipe	N \	< 0.3	39	39	10	
01	494	Wipe	N /	< 0.3	< 0.3	< 0.3	10	
01	495	Wipe	N \	< 0.3	22	22	10	
01	496	Wipe	N 4x4 1 to truss	< 0.3	12	12	10	
01	497	Wipe	stringer G	< 0.3	< 0.3	< 0.3	10	
01	498	Wipe	stringer H	< 0.3	< 0.3	< 0.3	10	
01	499	Wipe	S /	< 0.3	14	14	10	
01	500	Wipe	S /	< 0.3	< 0.3	< 0.3	10	
01	501	Wipe	S /	< 0.3	22	22	10	
01	502	Wipe	S \	< 0.3	19	19	10	
01	503	Wipe	M \	< 0.3	14	14	10	
01	504	Wipe	M left 1	< 0.3	< 0.3	< 0.3	10	
01	505	Wipe	M /	< 3	68	68	10	
01	506	Wipe	M pipe ll to truss	< 0.3	23	23	10	
01	507	Wipe	M right 1	< 0.3	2	2	10	
0405	508	Wipe	ladder	< 3	90	90	10	
0405	509	Wipe	stairs	< 0.3	7	7	10	
0405	510	Wipe	platform				10	
06	511	Wipe	S \	< 3	39	39	10	
12-15	512	Wipe	S bottom beam under wall	< 0.3	2	2	10	
12-15	513	Wipe	M bottom beam @ center	< 3	53	53	10	

LOCKHEED MARTIN PCB DELINEATION
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Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)			Action Level	Notes
				A1016-A1254	A1260	Total		
12-15	514	Wipe	S \ @ 13	< 3	76	76	10	
12-15	515	Wipe	S / @ 14	< 3	140	140	10	
12-15	516	Wipe	M bottom beam @ 1213	< 3	140	140	10	
12-15	517	Wipe	N right l @ 1213	< 2500	300000	300000	10	
12-15	518	Wipe	M / 14-15	< 0.3	6	6	10	
12-15	519	Wipe	S1 @ 14	< 0.3	2	2	10	
12-15	520	Wipe	M \ @ 1213	< 25	140	140	10	
12-15	521	Wipe	N / @ 15	< 0.3	10	10	10	
12-15	522	Wipe	M1 @ 1415	< 0.3	10	10	10	
12-15	523	Wipe	S \ @ 14	< 3	78	78	10	
12-15	524	Wipe	Wall composite	< 0.3	5	5	10	
12-15	525	Wipe	N1 @ 15	< 3	130	130	10	
12-15	526	Wipe	M \ @ 1415	< 3	50	50	10	
12-15	527	Wipe	S1 @ 1314	< 0.3	5	5	10	
12-15	528	Wipe	See 524	--	--	--	10	
12-15	529	Wipe	N bottom beam @ 15	< 0.3	6	6	10	
12-15	530	Wipe	M1 @ 1213	< 0.3	3	3	10	
12-15	531	Wipe	S / @ 13	< 3	47	47	10	
12-15	532	Wipe	See 524	--	--	--	10	
12-15	533	Wipe	N \ @ 15	< 3	43	43	10	
12-15	534	Wipe	S bottom beam past right l @ 13	< 3	88	88	10	
12-15	535	Wipe	S1 @ 13	< 0.3	3	3	10	
12-15	536	Wipe	N bottom beam @ 12	< 0.3	5	5	10	
12-15	537	Wipe	N right l @ 12	< 0.3	13	13	10	
12-15	538	Wipe	N1 @ 12	< 3	140	140	10	
12-15	539	Wipe	S ladder	< 3	120	120	10	
12-15	540	Wipe	S subfloor by vent	< 3	85	85	10	
12-15	541	Wipe	S subfloor to ladder	< 3	140	140	10	
12-15	542	Wipe	N subfloor under cat	< 3	370	370	10	
12-15	543	Wipe	N platform by ladder	< 3	150	150	10	
12-15	544	Wipe	N outside cat beam	< 3	45	45	10	
12-15	545	Wipe	N ladder	< 3	150	150	10	
12-15	546	Wipe	N upper rail by ladder	< 25	240	240	10	
12-15	547	Wipe	dropped on N cat at ladder	NO SAMPLE			10	
12-15	548	Wipe	N lower rail by ladder	< 3	41	41	10	
12-15	549	Wipe	N stairs	< 0.3	16	16	10	
12-15	550	Wipe	S stairs	< 3	78	78	10	
12-15	551	Wipe	S - 45	< 0.3	23	23	10	
12-15	552	Wipe	S - 60	< 0.3	30	30	10	
12-15	553	Wipe	S + 45	< 0.3	17	17	10	
12-15	554	Wipe	S + 60	< 0.3	11	11	10	
06	555	Wipe	l/	< 25	330	330	10	
01	556	Wipe	l/	< 2500	400000	400000	10	
11	557	Wipe	S \	< 3	88	88	10	
11	558	Wipe	S1	< 0.3	< 0.3	< 0.3	10	
11	559	Wipe	S \	< 0.3	22	22	10	
16	560	Wipe	M /	< 3	46	46	10	
16	561	Wipe	M1	< 0.3	2	2	10	
16	562	Wipe	N1/	< 0.3	13	13	10	
16	563	Wipe	S \	< 0.3	25	25	10	
16	564	Wipe	S /	< 0.3	15	15	10	
16	565	Wipe	M1/	< 25	3500	3500	10	
16	566	Wipe	M \	< 3	< 3	< 3	10	
16	567	Wipe	S1/	< 3	< 3	< 3	10	
16	568	Wipe	S1	< 3	< 3	< 3	10	
16	569	Wipe	M1	< 3	< 3	< 3	10	
16	570	Wipe	S galv ductwork	< 3	< 3	< 3	10	
17	571	Wipe	M \	< 0.3	22	22	10	
17	572	Wipe	N \	< 0.3	< 0.3	< 0.3	10	
17	573	Wipe	M 5' N of 577	< 3	200	200	10	
17	574	Wipe	N1	< 0.3	< 0.3	< 0.3	10	

LOCKHEED MARTIN PCB DELINEATION
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Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)			Action Level	Notes
				A1016-A1254	A1260	Total		
17	575	Wipe	N \	< 0.3	15	15	10	
17	576	Wipe	N \	< 0.3	11	11	10	
17	577	Wipe	M SCW 1 to cat	< 3	< 3	< 3	10	
17	578	Wipe	M \	< 25	440	440	10	
17	579	Wipe	S \	< 0.3	8	8	10	
17	580	Wipe	M 6' S of 577	< 3	66	66	10	
17	581	Wipe	S \	< 0.3	< 0.3	< 0.3	10	
17	582	Wipe	S \	< 0.3	18	18	10	
17	583	Wipe	S \	< 0.3	12	12	10	
17	584	Wipe	stringer B	< 0.3	16	16	10	
17	585	Wipe	stringer C	< 0.3	< 0.3	< 0.3	10	
12-15	586	Wipe	stringer F	< 0.3	12	12	10	comp of 14&15
12-15	587	Wipe	stringer G	< 0.3	15	15	10	comp of 14&15
12-15	588	Wipe	stringer N	< 0.3	26	26	10	comp of 12&13
12-15	589	Wipe	stringer O	< 0.3	18	18	10	comp of 12&13
18	590	Wipe	stringer G	< 0.3	12	12	10	
18	591	Wipe	stringer H	< 0.3	24	24	10	
18	592	Wipe	S \	< 0.3	17	17	10	
18	593	Wipe	S vent pipe	< 0.3	28	28	10	
18	594	Wipe	N flex conduit	< 0.3	13	13	10	
18	595	Wipe	M \	< 25	330	330	10	
18	596	Wipe	N \	< 0.3	< 0.3	< 0.3	10	
18	597	Wipe	N \	< 0.3	< 0.3	< 0.3	10	
18	598	Wipe	M \	< 3	40	40	10	
11	599	Wipe	N \	< 0.3	23	23	10	
18	600	Wipe	M \	< 0.3	10	10	10	
18	601	Wipe	M 2x6 to N cat	< 0.3	5	5	10	
18	602	Wipe	M pipe ll to truss	< 0.3	20	20	10	
18	603	Wipe	N \	< 0.3	9	9	10	
18	604	Wipe	N buss bar box	< 0.3	28	28	10	
18	605	Wipe	M pipe insul ll to truss	< 0.3	< 0.3	< 0.3	10	
18	606	Wipe	N \	< 0.3	14	14	10	
11	607	Wipe	M \				10	
11	608	Wipe	M \				10	
11	609	Wipe	subwalk	< 0.3	17	17	10	
11	610	Wipe	M \	< 0.3	27	27	10	dripped encapsulant
11	611	Wipe	S \	< 25	1100	1100	10	
11	612	Wipe	subwalk	< 3	69	69	10	
11	613	Wipe	S cat - 45	< 0.3	12	12	10	
11	614	Wipe	S cat - 60				10	
11	615	Wipe	S cat + 45	< 0.3	14	14	10	
11	616	Wipe	S cat + 60				10	
11	617	Wipe	N \	< 3	48	48	10	
10	618	Wipe	stringer G	< 0.3	12	12	10	
11	619	Wipe	N \	< 3	36	36	10	
11	620	Wipe	N \	< 0.3	1	1	10	
10	621	Wipe	S \	< 3	35	35	10	sampled from catwalk
10	622	Wipe	S \	< 0.3	1	1	10	sampled from catwalk
09	623	Wipe	S \	< 3	39	39	10	
10	624	Wipe	S \	< 3	46	46	10	sampled from catwalk
09	625	Wipe	S \	< 3	49	49	10	on 4x4
10	626	Wipe	S cat - 45	< 3	41	41	10	
10	627	Wipe	stringer H	< 0.3	3	3	10	
10	628	Wipe	S cat - 60				10	
10	629	Wipe	S cat + 45	< 3	38	38	10	
10	630	Wipe	S cat + 60				10	
09	631	Wipe	N cat + 45	< 0.3	16	16	10	
09	632	Wipe	N cat + 60				10	
10	633	Wipe	M \	< 3	54	54	10	
10	634	Wipe	M \				10	
10	635	Wipe	M \				10	

LOCKHEED MARTIN PCB DELINEATION
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Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)			Action Level	Notes
				A1016-A1254	A1260	Total		
10	636	Wipe	N /	< 3	38	38	10	sampled from catwalk
10	637	Wipe	N I	< 3	26	26	10	sampled from catwalk
10	638	Wipe	N \	< 0.3	0.6	0.6	10	sampled from catwalk
09	639	Wipe	M /	< 25	180	180	10	
09	640	Wipe	N \	< 3	71	71	10	
09	641	Wipe	CI pipe 1 to CW	< 3	130	130	10	different section than 648
09	642	Wipe	S I	< 0.3	< 0.3	< 0.3	10	
09	643	Wipe	sub beam below RS of platform	< 3	220	220	10	
09	644	Wipe	N I	< 0.3	9	9	10	
09	645	Wipe	M /	< 3	370	370	10	
09	646	Wipe	2x6 1 to catwalks	< 3	190	190	10	
09	647	Wipe	S /	< 0.3	24	24	10	
09	648	Wipe	CI pipe 1 to CW	< 3	32	32	10	different section than 641
09	649	Wipe	N flex conduit	< 0.3	31	31	10	
09	650	Wipe	N /	< 3	46	46	10	
09	651	Wipe	dupe of 650	< 0.3	10	10	10	
08	652	Wipe	N I	< 0.3	2	2	10	
08	653	Wipe	4x4 1 to CW	< 25	720	720	10	on top of 2x8
08	654	Wipe	N \	< 0.3	9	9	10	
08	655	Wipe	N /	< 0.3	11	11	10	
08	656	Wipe	N \	< 0.3	25	25	10	
08	657	Wipe	1.5" L bracket 1 to CW	< 25	720	720	10	
08	658	Wipe	M \	< 0.5	89	89	10	
08	659	Wipe	M subfloor by box	< 25	680	680	10	
08	660	Wipe	M conduit box	< 25	390	390	10	
08	661	Wipe	M /	< 3	170	170	10	
08	662	Wipe	N subfloor by box	< 25	4200	4200	10	
08	663	Wipe	M beam under L	< 3	290	290	10	
08	664	Wipe	S cat + 45	< 0.3	13	13	10	
Mi	665	Wipe	bottom stair 1-7	< 0.3	5	5	10	
Mi	666	Wipe	floor under #8	< 0.3	4	4	10	
08	667	Wipe	S I	< 0.3	< 0.3	< 0.3	10	
08	668	Wipe	S /	< 0.3	14	14	10	
08	669	Wipe	S \	< 0.3	33	33	10	
08	670	Wipe	S \	< 0.3	28	28	10	
08	671	Wipe	Dupe of 667	< 0.3	< 0.3	< 0.3	10	
08	672	Wipe	S cat + 60				10	
07	673	Core	stringer D	< 1	140	140	1	
Mi	667	Core	wood floor at C-13	< 1	39	39	1	
Mi	668	Core	wood below tile under # 18	< 0.5	10	10	1	
Mi	669	Core	new subfloor below rug under #1	< 0.5	11	11	1	
Mi	670	Core	Tile below #5	< 0.5	< 0.5	< 0.5	1	
Mi	671	Chip	concrete under RS of hood under #23	< 0.5	36	36	1	
Mi	672	Core	Room O22 wood under rug & tile	< 0.5	< 0.5	< 0.5	1	
Mi	678	Wipe	bottom stair 8-18	< 0.3	2	2	10	
Mi	750	Core	column C-33	< 0.5	25	25	1	
Mi	751	Core	column C-32 underdesk	< 0.5	< 0.5	< 0.5	1	

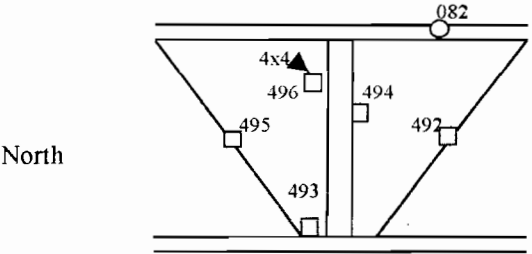
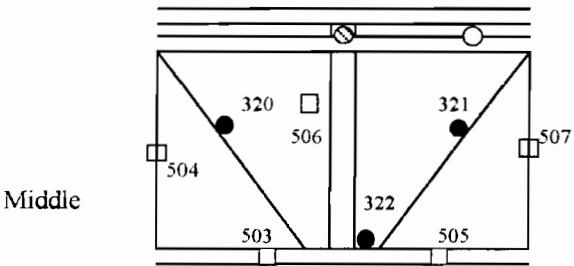
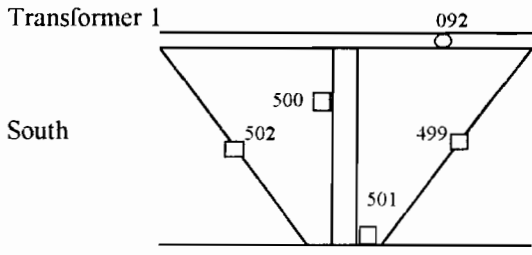
LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

Round 2 Truss Sample Locations

○ ≤ 10 ○ 11-100 ● 100-500 ● 500-1000 ● 1000-100K ● > 100K
 □ □ □ □ □ ■

Round 1
 Round 2



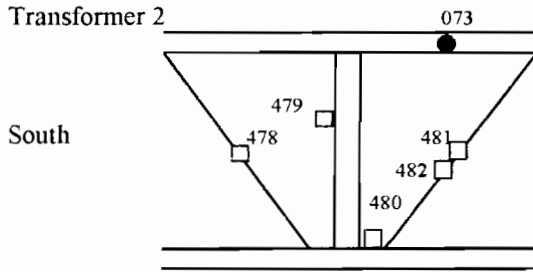
Additional Samples
 stringers
 A - < 0.3
 B - 0.9
 G - < 0.3
 H - < 0.3

LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

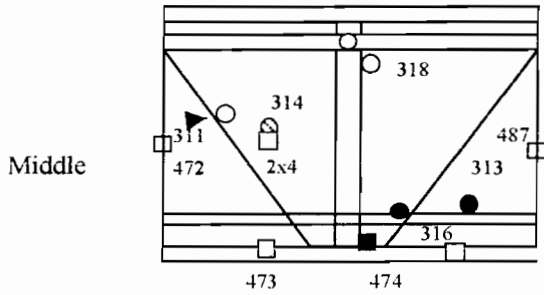
Round 2 Truss Sample Locations

○ ≤ 10 ○ 11-100 ● 100-500 ● 500-1000 ● 1000-100K ● > 100K **Round 1**
 □ □ □ □ □ ■ **Round 2**



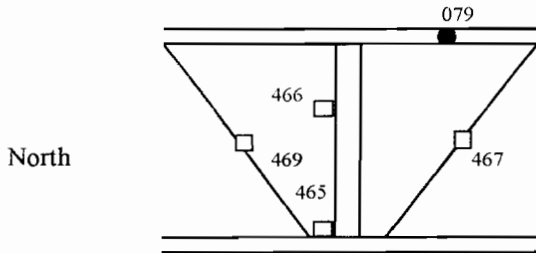
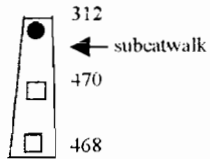
South

483 - 2" pipe ⊥ to truss - 33
484 - Buss bar ⊥ to truss - 79



Middle

475 - 3" pipe ⊥ to truss - 220
476 - 3" pipe from V box - 40
477 - 2x6 ⊥ to truss - 5700



North

Additional Samples

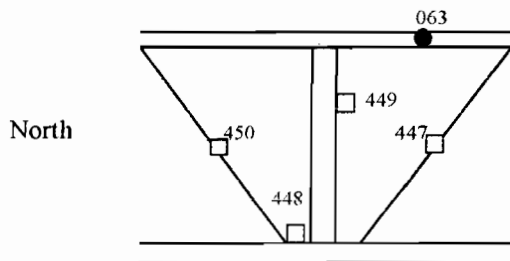
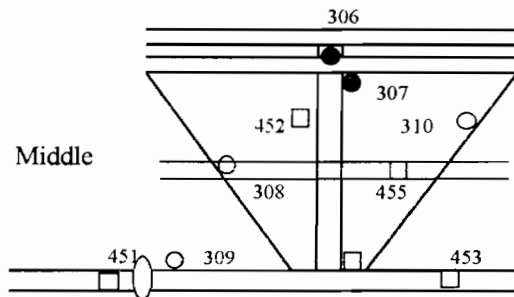
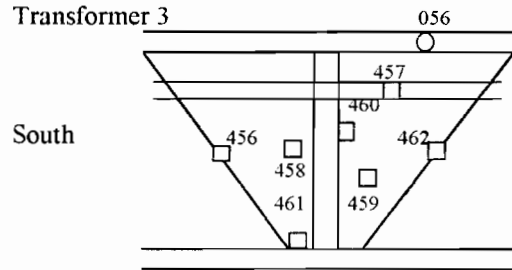
stringers	catwalk
G - 11	S-45 - 6
H - 7	

LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

Round 2 Truss Sample Locations

○ ≤ 10 ○ 11-100 ● 100-500 ● 500-1000 ● 1000-100K ● > 100K Round 1
□ □ □ □ □ ■ Round 2



Additional Samples

4 - subsamples

stringers

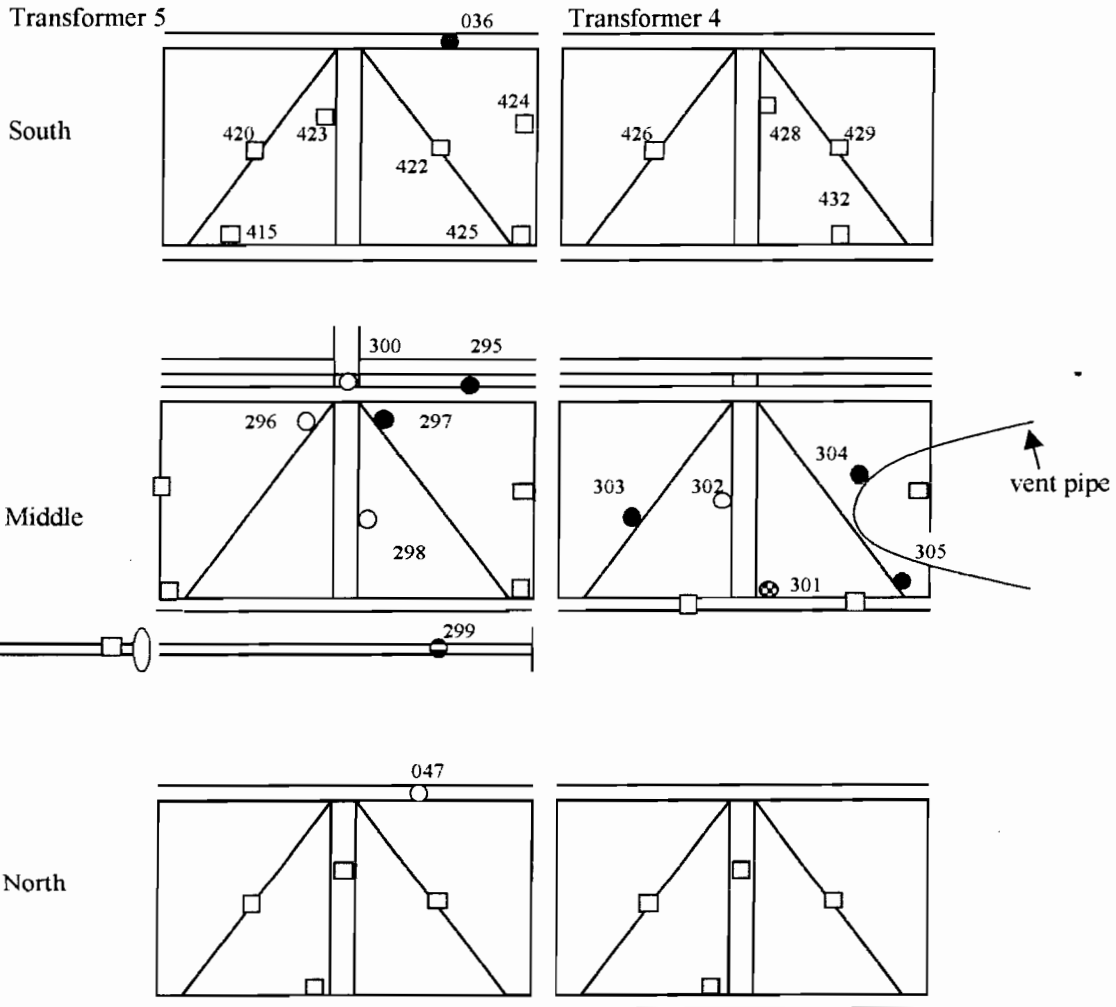
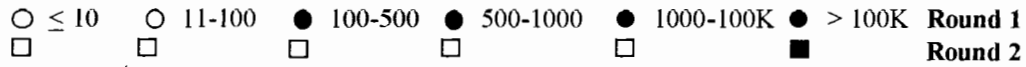
G - 7

H - < 0.3

LOCKHEED MARTIN PCB DELINEATION

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Round 2 Truss Sample Locations



Additional Samples

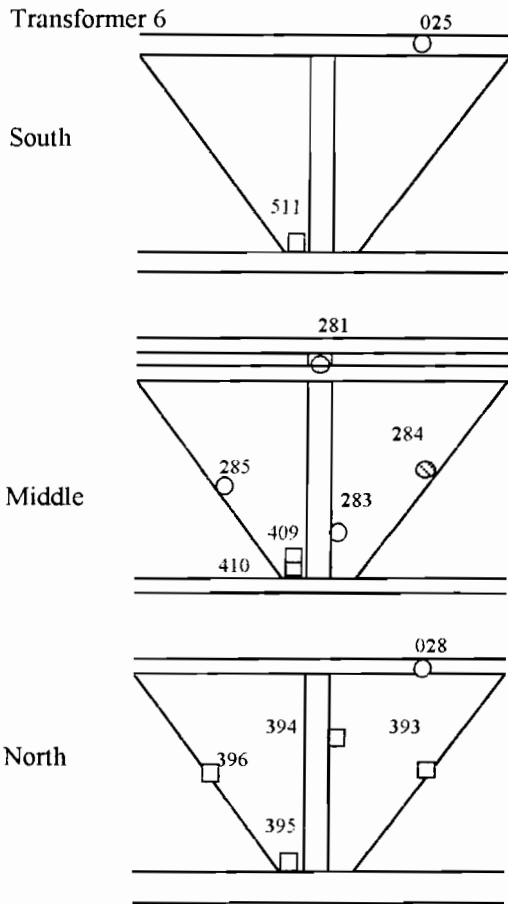
- 8 - subsamples
 - 2 - crossbeams outside platform
 - 3 - catwalk samples (\pm S45, - N45)
- | | |
|-----------|-------------|
| stringers | catwalks |
| A - 3 | S + 45 - 10 |
| F - 15 | S - 45 - 9 |
| L - 72 | S - 60 - 13 |
| M - 3 | N - 45 - 5 |

LOCKHEED MARTIN PCB DELINEATION

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Round 2 Truss Sample Locations

○ ≤ 10 ○ 11-100 ● 100-500 ● 500-1000 ● 1000-100K ● > 100K **Round 1**
□ □ □ □ □ ■ **Round 2**

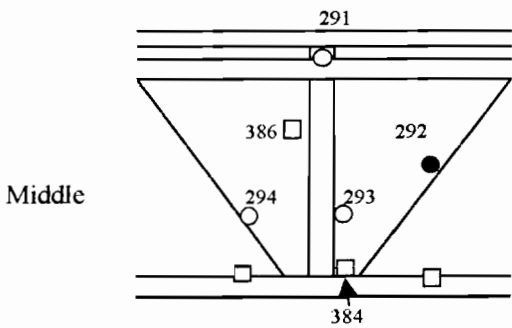
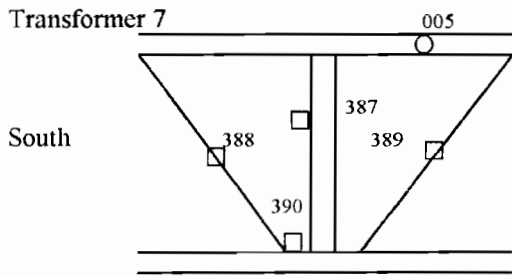
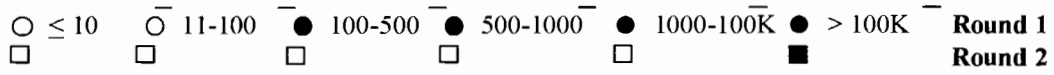


Additional Samples
4 - subsamples

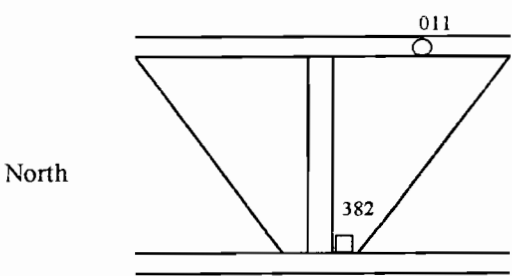
LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

Round 2 Truss Sample Locations



386 - small beam



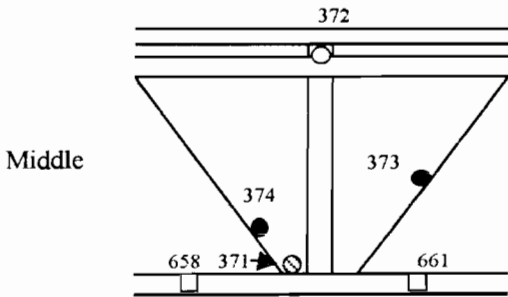
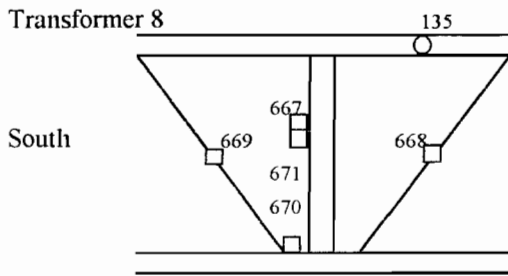
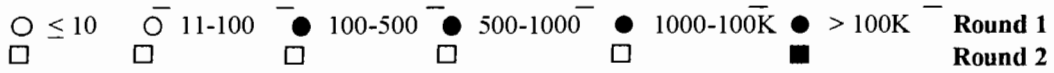
Additional Samples

- 4 - subsamples
- stringers
- G - 2
- H - 0.9

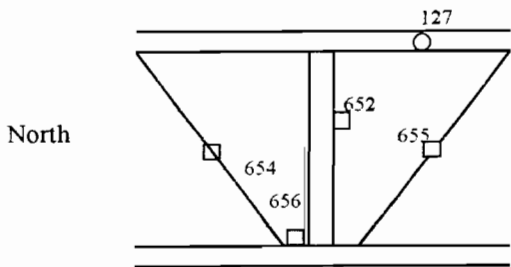
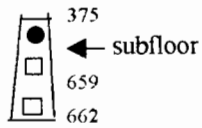
LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

Round 2 Truss Sample Locations



653-4x4 1 to truss - 720
 657-1.5" 'L' bracket 1 to truss - 720
 660-conduit box -
 663-beam below 'L' -

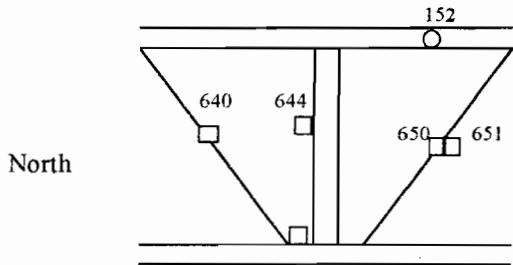
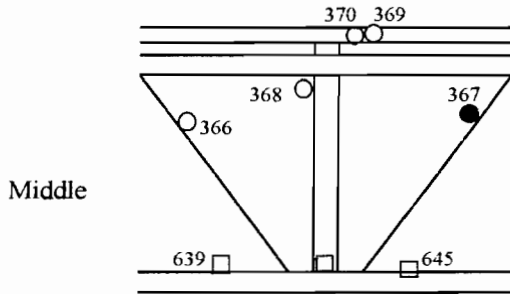
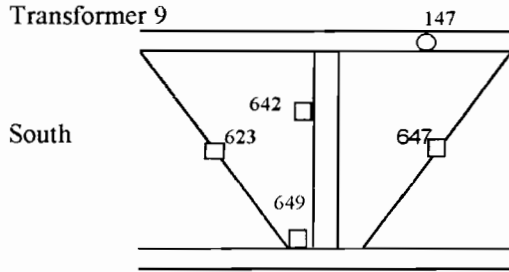
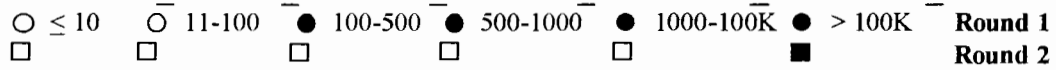


Additional Samples
 catwalk sample (+S45)
 S+45 -
 S+60 -

LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

Round 2 Truss Sample Locations



- 641-Cast iron pipe 1 to truss - 130
- 643-beam below right side of platform - 220
- 646-2x6 1 to truss - 190
- 648-Cast iron pipe 1 to truss - 32
- 649-Flex conduit on north side - 31
- Not sampled

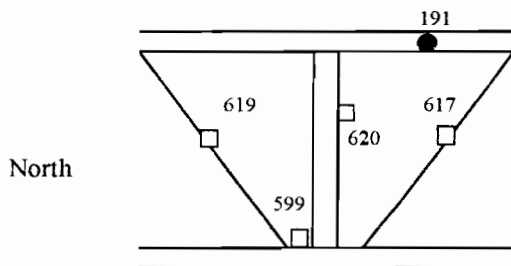
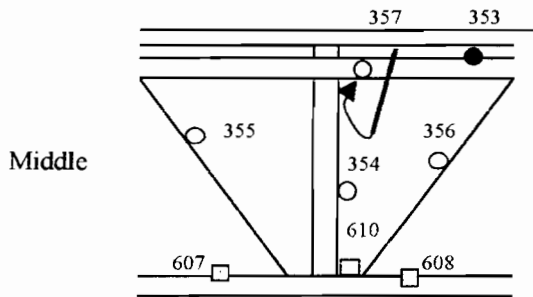
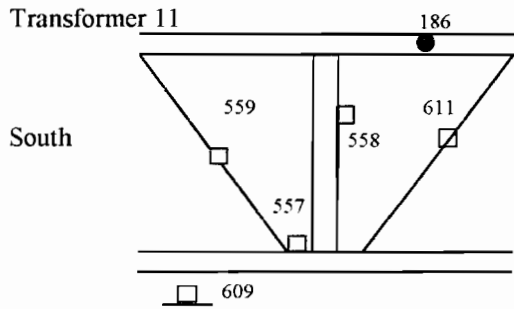
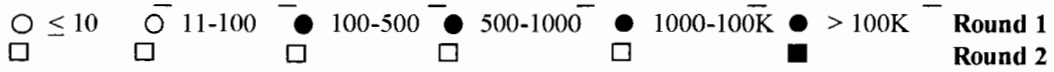
651 was collected directly over 650

Additional Samples
 catwalk
 S+45 - 16
 S+60

LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

Round 2 Truss Sample Locations



Additional Samples

catwalks

S-45 - 12

S-60 -

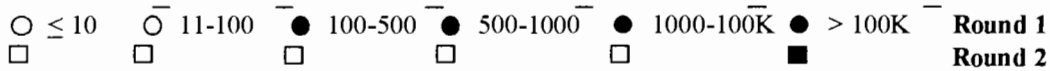
S+45 - 14

S+60 -

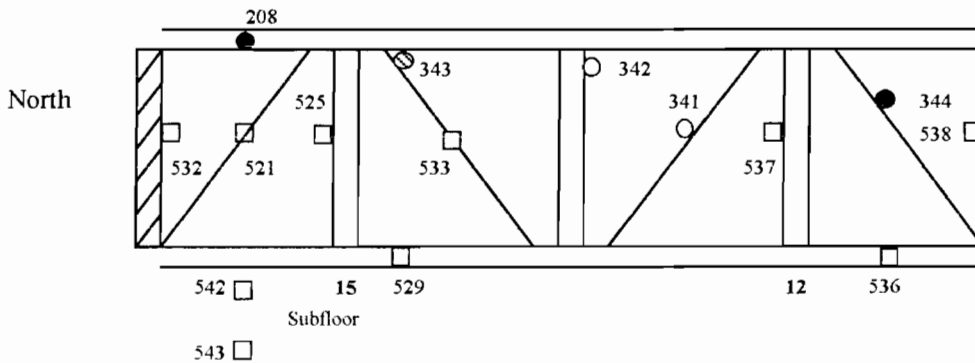
LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

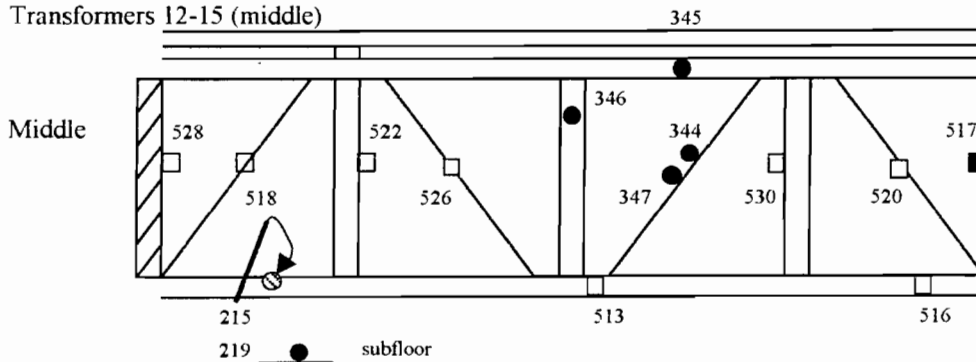
Round 2 Truss Sample Locations



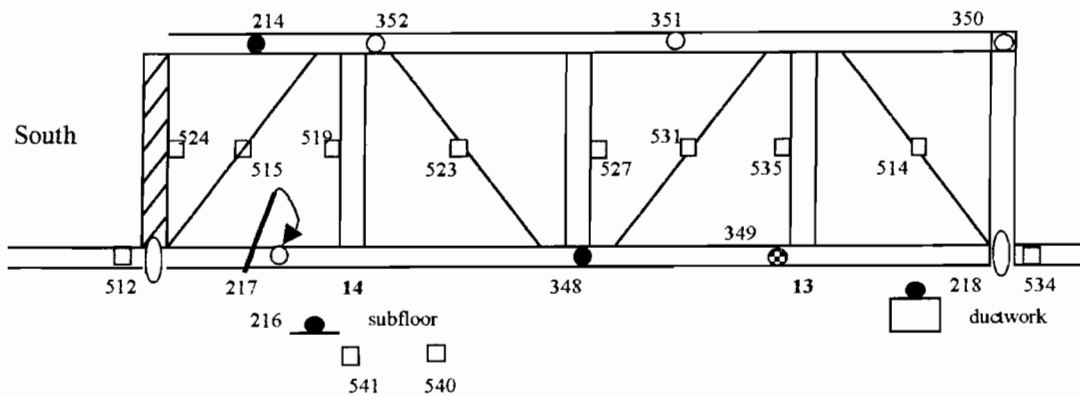
Transformers 12-15 (12 - 15 side)



Transformers 12-15 (middle)



Transformers 12-15 (13 - 14 side)



Additional Samples

stringers	catwalk	wall composite
F - 12	S+45 - 23	5
G - 15	S+60 - 30	
N - 26	S-45 - 17	

O - 18

S-60 - 11

S Ladder - 120

S stairs - 78

N Ladder - 150

N outside catwalk beam - 45

N upper railing - 240

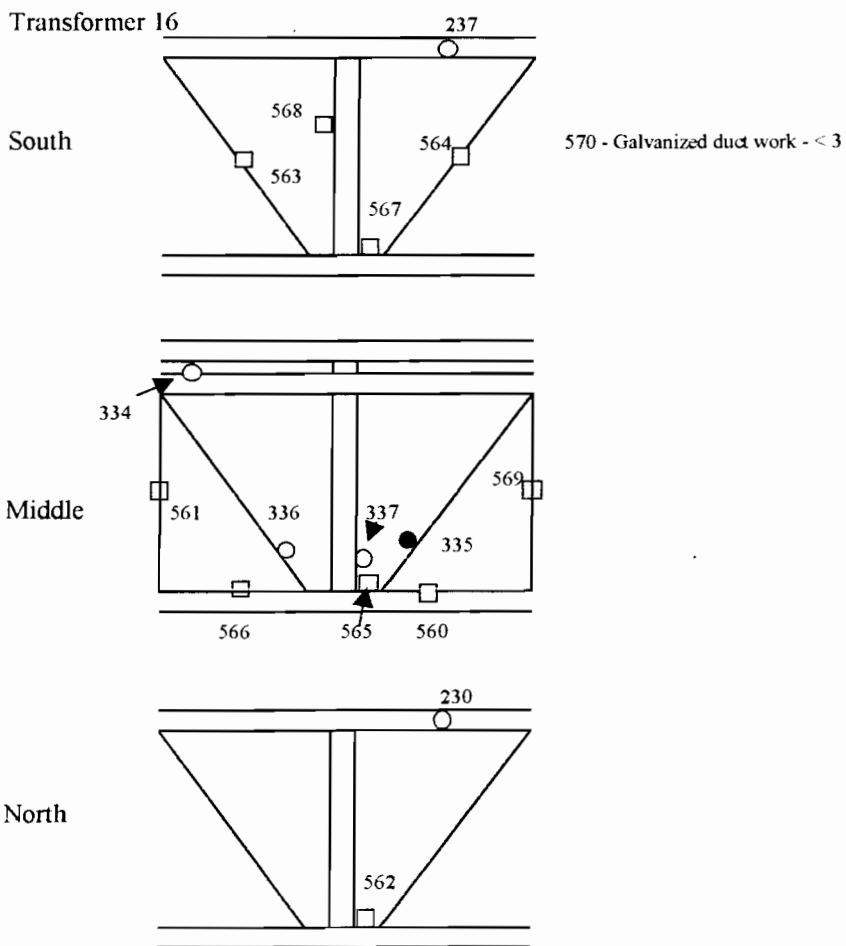
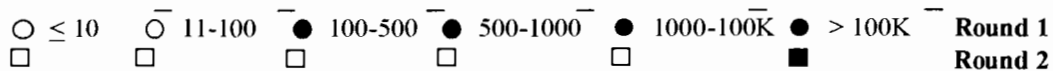
N lower railing - 41

N stairs - 16

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Round 2 Truss Sample Locations

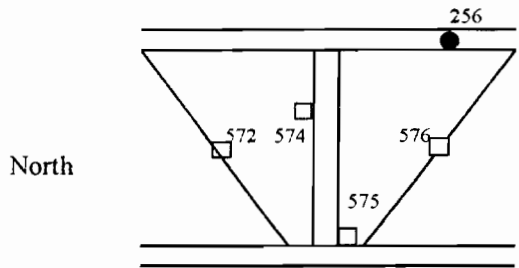
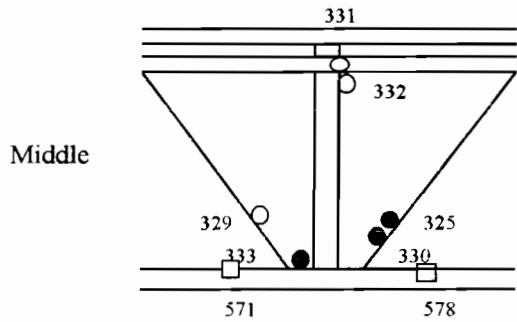
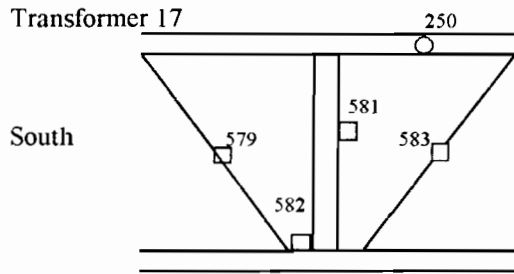
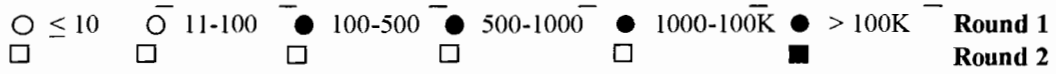


Additional samples
4 - subsamples

LOCKHEED MARTIN PCB DELINEATION

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Round 2 Truss Sample Locations



Additional Samples

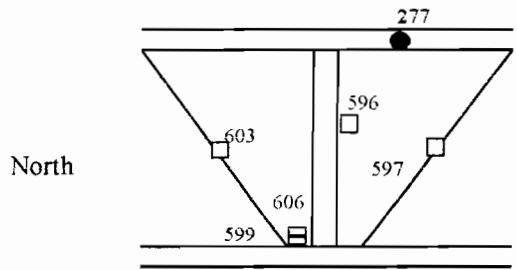
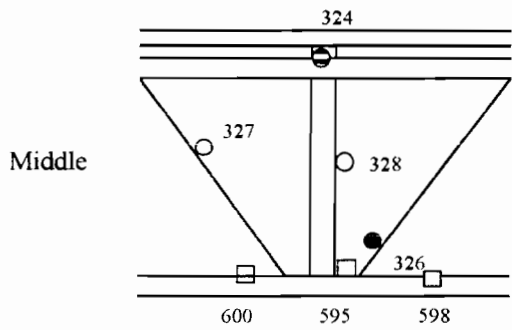
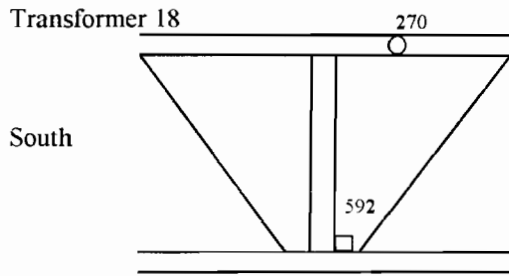
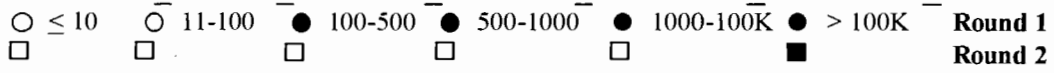
4 - subsamples

2 - stringer samples (B, C)

LOCKHEED MARTIN PCB DELINEATION

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Round 2 Truss Sample Locations



Additional Samples
stringers
G - 12
H - 24



IT Corporation
200 Horizon Center Boulevard
Trenton, NJ 08691-1904
Tel. 609.584.8900
Fax. 609.588-6300

A Member of The IT Group

August 28, 2000

Paul B. Smetana
Lockheed Martin Control Systems
600 Main Street
Johnson City, NY 13790

RE: Phase 3 Sampling Proposal
IT Corporation Project No. 808348

Dear Mr. Smetana,

As per our conference call on Friday, August 25, 2000 IT has developed a sampling strategy to investigate the PCB contamination beyond the footprint and below the platforms.

IT has calculated the average concentrations for all samples collected so far for each platform. The average does not include catwalks or cores, but all other results are used, including sub-platform wood, pipes and walkways. The following table provides these results:

<u>Platform</u>	<u>Average</u>	<u>Platform</u>	<u>Average</u>
1	48,560	9	97
2	30,337	10	8,172
3	337	11	25,954
4-5	5,060	12-15	15,877
6	75	16	6,016
7	17,418	17	157
8	3,912	18	4,628

The above platforms can be categorized as follows:

Low Concentration Platforms: 3, 6, 9, and 17
Medium Concentrations Platforms: 4-5, 8, 10, 16, and 18
High Concentrations Platforms: 1, 2, 7, 11, and 2-15

IT proposes that additional sampling be performed on the following platforms:

Low Concentrations Platforms: 3 and 9
Medium Concentration Platforms: 8, 10 and 16
High Concentration Platforms: 1, 2 and 11

We have selected multiple platforms from each concentration group to provide additional verification on the containment or spread of contamination from the platforms. Additional sampling for the other platforms may be necessary depending on the results of these samples.

Samples will be concentrated on the truss systems located on the far side of the catwalk adjacent to the platform. Samples will be taken on the upper and lower beam, and the two diagonals. Samples will not be taken on the vertical beams since past experience indicated these to be generally clean or only slightly contaminated. For the most part past this truss the areas are generally open space. However, IT will investigate each area and will take samples of equipment, structures, or members as appropriate.

IT will also investigate the area to the left and right (standing on the catwalk and facing the platform) of each platform and will sample any equipment, structures, or members adjacent to the platforms.

For the ground floor IT proposes to take additional cores expanding out in four directions (N.E, S and W) 5 feet and 10 feet under platforms 1 and 18, and to 10 feet and 20 feet under platforms 9, 12-15 and 23. The actual sample locations will need to be modified due to desks, drawers, cabinets, walls, etc.

PRICING

IT anticipates obtaining 12 samples for each platform, four on each truss and four miscellaneous samples. This would be a 96- sample. There would be 8 core samples per location for a total of 40 core samples.

IT anticipates the sampling activity to take 3 days plus mobilization and demobilization. The cost estimate is as follows:

Mobilization:	\$1,250.00
3-days sampling @ \$1,800.00/day	\$5,400.00
96-Wipe Samples @ \$48/sample	\$4,608.00
40-Core Samples @ \$63/sample*	\$2,520.00
<u>Total Estimated Cost</u>	<u>\$13,778.00</u>

*Upstate Labs charge more for core samples. In the past due to the low percentage of cores IT did not differentiate them.

The current value of our Purchase Order is \$80,500.00. To date we have performed \$73,348.00 in work leaving \$7,152.00 left on the amended purchase order.

If you have any questions or comments please do not hesitate to contact me at (609) 588-6305.

Sincerely,

Sid Archinal
Sid A. Archinal
Project Manager

cc: File

LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

Third PCB Delineation Round - Sorted by Sample Number

Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)					Action Level	Notes
				A101G-A1242	A1248	A1254	A1260	Total		
1718	679	wipe	~5' from west ladder	<0.3	<0.3	<0.3	2	2	10	
1718	680	wipe	entrance walk from stairs	<0.3	<0.3	<0.3	3	3	10	
1718	681	wipe	top of east stairs	<0.3	<0.3	<0.3	8	8	10	
16	682	wipe	outer platform near fire alarm	<0.3	<0.3	<0.3	2	2	10	
16	683	wipe	outer platform across from motor	<0.3	<0.3	<0.3	11	11	10	
16	684	wipe	on top of duct work ll to cw	<0.3	<0.3	<0.3	18	18	10	
16	685	wipe	on top of buss bar	<0.3	<0.3	<0.3	12	12	10	
16	686	wipe	on plank below vert buss bar ll to cw	<0.3	<0.3	<0.3	9	9	10	
11	687	wipe	ladder	<0.3	<0.3	<0.3	13	13	10	
11	688	wipe	2" Cast Iron (CI) pipe ll to cw	<0.3	<0.3	<0.3	11	11	10	
11	689	wipe	duct work below ladder	<3	<3	<3	170	170	10	
11	690	wipe	beam 1 to cw below ladder	<3	<3	<3	24	24	10	
11	691	wipe	4x4 1 to cw 10' west of ladder	<3	<3	<3	66	66	10	
11	692	wipe	plank ll to cw below 4x4	<0.3	<0.3	<0.3	26	26	10	
11	693	wipe	(+) angle	<0.3	<0.3	<0.3	7	7	10	
11	694	wipe	plank at +15	<3	<3	<3	45	45	10	large dark stain
10	695	wipe	ladder	<0.3	<0.3	<0.3	20	20	10	
10	696	wipe	(-) angle next to ladder	<0.3	<0.3	<0.3	9	9	10	
10	697	wipe	4x4 1 to cw 5' from stairs	<0.3	<0.3	<0.3	17	17	10	
10	698	wipe	(+) angle	<1	<1	<1	11	11	10	
10	699	wipe	beam below (+) angle	<3	<3	<3	50	50	10	
10	700	wipe	beam 1 to cw at +3	<3	<3	<3	26	26	10	
10	701	wipe	plank at +1	<3	<3	<3	14	14	10	
10	702	wipe	buss bar at 0	<3	<3	<3	39	39	10	
01	703	wipe	(-) angle	<0.3	<0.3	<0.3	2	2	10	
01	704	wipe	beam 1 to cw at (+) angle	<0.3	<0.3	<0.3	1	1	10	
01	705	wipe	buss bar at (+) angle	<1	<1	<1	13	13	10	
01	706	wipe	8" CI pipe	<0.3	<0.3	<0.3	3	3	10	
01	707	wipe	beam ll to cw at -3	<0.3	<0.3	<0.3	5	5	10	
01	708	wipe	(-) angle	<0.3	<0.3	<0.3	2	2	10	
01	709	wipe	ladder	<0.3	<0.3	<0.3	<0.3	<0.3	10	
M1	710	wipe	crosswalk at G 34	<0.3	<0.3	<0.3	4	4	10	
02	711	wipe	See sample location map	<0.3	<0.3	<0.3	3	3	10	
02	712	wipe	See sample location map	<0.3	<0.3	<0.3	2	2	10	
02	713	wipe	See sample location map	<0.3	<0.3	<0.3	4	4	10	
02	714	wipe	See sample location map	<0.3	<0.3	<0.3	2	2	10	
02	715	wipe	See sample location map	<0.3	<0.3	<0.3	5	5	10	
02	716	wipe	See sample location map	<0.3	<0.3	<0.3	2	2	10	
02	717	wipe	See sample location map	<0.3	<0.3	<0.3	2	2	10	
02	718	wipe	See sample location map	<0.3	<0.3	<0.3	3	3	10	
02	719	wipe	See sample location map	<0.3	<0.3	<0.3	3	3	10	
02	720	wipe	See sample location map	<0.3	<0.3	<0.3	7	7	10	

LOCKHEED MARTIN PCB DELINEATION
Johnson City, NY

Third PCB Delineation Round - Sorted by Sample Number

Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)						Action Level	Notes
				Δ1016-Δ1242	Δ1248	Δ1254	Δ1260	Total			
02	721	wipe	See sample location map	< 0.3	< 0.3	< 0.3	6	6	10		
02	722	wipe	See sample location map	< 0.3	< 0.3	< 0.3	9	9	10		
02	723	wipe	See sample location map	< 0.3	< 0.3	< 0.3	6	6	10		
02	724	wipe	See sample location map	< 0.3	< 0.3	< 0.3	3	3	10		
02	725	wipe	See sample location map	< 0.3	< 0.3	< 0.3	4	4	10		
02	726	wipe	See sample location map	< 0.3	< 0.3	< 0.3	2	2	10		
02	727	wipe	See sample location map	< 0.3	< 0.3	< 0.3	2	2	10		
02	728	wipe	See sample location map	< 0.3	< 0.3	< 0.3	3	3	10		
02	729	wipe	See sample location map	< 0.3	< 0.3	< 0.3	1	1	10		
02	730	wipe	See sample location map	< 0.3	< 0.3	< 0.3	1	1	10		
02	731	wipe	See sample location map	< 0.3	< 0.3	< 0.3	8	8	10		
02	732	wipe	See sample location map	< 0.3	< 0.3	< 0.3	6	6	10		
02	733	wipe	See sample location map	< 0.3	< 0.3	< 0.3	2	2	10		
02	734	wipe	See sample location map	< 3	< 3	< 3	97	97	10		
02	735	wipe	See sample location map	< 0.3	< 0.3	< 0.3	3	3	10		
02	736	wipe	See sample location map	< 0.3	< 0.3	< 0.3	3	3	10		
02	737	wipe	See sample location map	< 0.3	< 0.3	< 0.3	2	2	10		
03	738	wipe	(-) angle	< 0.3	< 0.3	< 0.3	3	3	10		
03	739	wipe	bottom beam (-) side (-) angle	< 0.3	< 0.3	< 0.3	8	8	10		
03	740	wipe	bottom stair	< 1	< 1	< 1	35	35	10		
M1	741	wipe	1-7 - platform @ column 38	< 0.3	< 0.3	< 0.3	4	4	10		
03	742	wipe	top of 12500 A transformer	< 0.3	< 0.3	< 0.3	3	3	10		
M1	743	wipe	1-7 - platform @ column 41	< 0.3	< 0.3	< 0.3	15	15	10		
03	744	wipe	plank at 0	< 0.3	< 0.3	< 0.3	6	6	10		
M1	745	wipe	1-7 - platform @ column 36	< 0.3	< 0.3	< 0.3	3	3	10		
M1	746	wipe	1-7 - platform @ column 31	< 0.3	< 0.3	< 0.3	4	4	10		
M1	747	wipe	1-7 - platform @ column 29	< 1	< 1	< 1	13	13	10		
M1	748	wipe	1-7 - platform @ column 26	< 0.3	< 0.3	< 0.3	4	4	10		
M1	749	wipe	1-7 - platform @ column 24	< 0.3	< 0.3	< 0.3	9	9	10		
M1	752	wipe	1-7 - platform @ column 23	< 1	< 1	< 1	23	23	10		
M1	753	wipe	1-7 - platform @ column 22	< 0.3	< 0.3	< 0.3	2	2	10		
M1	754	wipe	1-7 - platform @ column 21	< 3	< 3	< 3	81	81	10		
M1	755	wipe	1-7 - platform @ column 20	< 0.3	< 0.3	< 0.3	9	9	10		
M1	756	wipe	1-7 - platform @ column 16	< 0.3	< 0.3	< 0.3	4	4	10		
M1	757	wipe	1-7 - platform @ column 16	< 0.3	< 0.3	< 0.3	5	5	10		
M1	758	wipe	1-7 - platform @ column 14	< 0.3	< 0.3	< 0.3	5	5	10		
M1	759	wipe	1-7 - platform @ column 13	< 0.3	< 0.3	< 0.3	5	5	10		
M1	760	wipe	1-7 - platform @ column 13	< 0.3	< 0.3	< 0.3	3	3	10		
M1	761	wipe	1-7 - platform @ column 13	< 0.3	< 0.3	< 0.3	2	2	10		
M1	762	wipe	1-7 - platform @ column 9	< 0.3	< 0.3	< 0.3	3	3	10		
M1	763	wipe	8-18 - platform @ column 47	< 0.3	< 0.3	< 0.3	2	2	10		
M1	764	wipe	8-18 - platform @ column 47	< 0.3	< 0.3	< 0.3	1	1	10		

LOCKHEED MARTIN PCB DELINEATION
Johnson City, NY

Third PCB Delineation Round - Sorted by Sample Number

Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)							Action Level	Notes
				A1016-A1242	A1248	A1254	A1260	Total				
M1	765	wipe	8-18 - platform @ column 45	<0.3	<0.3	<0.3	2	2	10			
M1	766	wipe	8-18 - platform @ column 45	<0.3	<0.3	<0.3	3	3	10			
M1	767	wipe	8-18 - platform @ column 36	<3	<3	<3	45	45	10			
M1	768	wipe	8-18 - platform @ column 36	<0.3	<0.3	<0.3	7	7	10			
M1	769	wipe	8-18 - platform @ column 31	<1	<1	<1	<1	<1	10			
M1	770	wipe	8-18 - platform @ column 28	<1	<1	41	<1	41	10			
M1	771	wipe	8-18 - platform @ column 26	<1	<1	41	<1	41	10			
M1	772	wipe	8-18 - platform @ column 24	<1	<1	<1	<1	<1	10			
M1	773	wipe	8-18 - platform @ column 22	<1	<1	<1	16	16	10			
M1	774	wipe	8-18 - platform @ column 21	<1	<1	<1	22	22	10			
M1	775	wipe	8-18 - platform @ column 20	<1	<1	<1	10	10	10			
M1	776	wipe	8-18 - platform @ column 18	<0.3	<0.3	<0.3	3	3	10			
M1	777	wipe	8-18 - platform @ column 17	<0.3	<0.3	<0.3	2	2	10			
M1	778	wipe	8-18 - platform @ column 16	<0.3	<0.3	<0.3	<0.3	<0.3	10			
M1	779	wipe	8-18 - platform @ column 14	<0.3	<0.3	<0.3	8	8	10			
M1	780	wipe	8-18 - platform @ column 12	<0.3	<0.3	<0.3	4	4	10			
M1	781	wipe	8-18 - platform @ column 10	<3	<3	<3	23	23	10			
M1	782	wipe	8-18 - platform @ column 9	<1	<1	<1	14	14	10			
08	783	wipe	pipe ll to cw, cw side	<0.3	<0.3	<0.3	1	1	10			
08	784	wipe	beam below buss ll to cw, cw side	<1	<1	<1	21	21	10			
08	785	wipe	beam 1 to cw away from platform	<1	<1	<1	19	19	10			
08	786	wipe	plank ll to cw	<1	<1	<1	13	13	10			
09	787	wipe	beam 1 to cw below plank	<1	<1	<1	9	9	10			
09	788	wipe	plank ll to cw	<1	<1	<1	19	19	10			
09	789	wipe	beam 1 to cw above plank	<1	<1	<1	30	30	10			
09	790	wipe	pipe 1 to cw above plank	<1	<1	<1	34	34	10			
09	791	wipe	beam ll to cw below buss box	<0.3	<0.3	<0.3	<0.3	<0.3	10	stained area		
09	792	wipe	M 1/	<25	<25	<25	710	710	10			
01	800	core	east 5'	<0.5	<0.5	2.9	<0.5	2.9	1			
01	801	core	east 10'	<0.5	<0.5	<0.5	0.5	0.5	1			
01	802	core	south 5'	<0.5	<0.5	<0.5	<0.5	<0.5	1			
01	803	core	west 5'	<0.5	<0.5	3.5	<0.5	3.5	1			
01	804	core	west 10'	<0.5	<0.5	5	<0.5	5	1			
01	805	core	north 5'	<0.5	<0.5	<0.5	38	38	1	asbestos tile		
01	806	core	north 10'	<0.5	<0.5	6	<0.5	6	1	asbestos tile		
09	808	core	north 10'	<0.5	<0.5	90	<0.5	90	1			
09	809	core	east 10'	<0.5	57	<0.5	0.8	57.8	1			
09	810	core	west 10'	<5	950	<5	29	979	1			
09	811	core	east 20'	<0.5	<0.5	<0.5	0.7	0.7	1			
23	816	core	east 10'	<0.5	<0.5	<0.5	0.5	0.5	1			
23	817	core	southeast 10'	<0.5	<0.5	<0.5	0.5	2.9	1			
23	818	core	east 20'	<0.5	<0.5	<0.5	5	5	1			

LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

Third PCB Delineation Round - Sorted by Sample Number

Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)							Action Level	Notes
				A1016-A1242	A1248	A1254	A1260	Total				
23	819	core	southwest 10'	<0.5	<0.5	<0.5	6	6		1		
23	820	core	northwest 10'	<0.5	<0.5	<0.5	0.6	0.6		1		
1215	824	core	north 10'	<0.5	<0.5	<0.5	0.6	0.6		1	asbestos tile	
1215	825	core	north 20'	<0.5	<0.5	<0.5	0.8	0.8		1	asbestos tile	
1215	826	core	west 20'	<0.5	<0.5	<0.5	<0.5	<0.5		1	asbestos tile	
1215	827	core	west 10'	<0.5	<0.5	<0.5	<0.5	<0.5		1	asbestos tile	
1215	828	core	south 20'	<0.5	<0.5	<0.5	0.6	0.6		1	asbestos tile	
1215	829	core	south 10'	<0.5	<0.5	<0.5	0.7	0.7		1	asbestos tile	
1215	830	core	southwest corner	<0.5	<0.5	<0.5	0.5	0.5		1	asbestos tile	
1215	831	core	southeast corner	<0.5	<0.5	<0.5	<0.5	<0.5		1	asbestos tile	
18	832	core	east 5'	<0.5	<0.5	<0.5	<0.5	<0.5		1		
18	833	core	west 3'	<0.5	<0.5	2	<0.5	2		1		
18	834	core	west 6'	<0.5	<0.5	<0.5	<0.5	<0.5		1		
18	835	core	north 5'	<0.5	<0.5	<0.5	<0.5	<0.5		1		
18	836	core	north 10'	<0.5	<0.5	3	<0.5	3		1		
18	837	core	east 10'	<0.5	<0.5	4	<0.5	4		1		
18	838	core	south 5'	<0.5	<0.5	7	<0.5	7		1		
18	839	core	south 10'	<0.5	<0.5	<0.5	<0.5	<0.5		1		
1215	840	core	east 20'	<0.5	<0.5	<0.5	1	1		1		
1215	841	core	east 10'	<0.5	<0.5	<0.5	12	12		1		

LOCKHEED MARTIN PCB DELINEATION
Johnson City, NY

Third PCB Delineation Round - Sorted by Sample Result (Concentration)

Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)						Action Level	Notes
				A1016-A1242	A1248	A1254	A1260	Total			
09	792	wipe	M/V	<25	<25	<25	710	710	10		
11	689	wipe	duct work below ladder	<3	<3	<3	170	170	10		
02	734	wipe	See sample location map	<3	<3	<3	97	97	10		
M1	754	wipe	1-7 - platform @ column 21	<3	<3	<3	81	81	10		
11	691	wipe	4x4 <u>I</u> to cw 10' west of ladder	<3	<3	<3	66	66	10		
10	699	wipe	beam below (+) angle	<3	<3	<3	50	50	10		
11	694	wipe	plank at +15	<3	<3	<3	45	45	10	large dark stain	
M1	767	wipe	8-18 - platform @ column 36	<3	<3	<3	45	45	10		
M1	770	wipe	8-18 - platform @ column 28	<1	<1	41	<1	41	10		
M1	771	wipe	8-18 - platform @ column 26	<1	<1	41	<1	41	10		
10	702	wipe	buss bar at 0	<3	<3	<3	39	39	10		
03	740	wipe	bottom stair	<1	<1	<1	35	35	10		
09	790	wipe	pipe <u>I</u> to cw above plank	<1	<1	<1	34	34	10		
09	789	wipe	beam <u>I</u> to cw above plank	<1	<1	<1	30	30	10		
10	700	wipe	beam <u>I</u> to cw at +3	<3	<3	<3	26	26	10		
11	692	wipe	plank II to cw below 4x4	<0.3	<0.3	<0.3	26	26	10		
11	690	wipe	beam <u>I</u> to cw below ladder	<3	<3	<3	24	24	10		
M1	752	wipe	1-7 - platform @ column 23	<1	<1	<1	23	23	10		
M1	781	wipe	8-18 - platform @ column 10	<3	<3	<3	23	23	10		
M1	774	wipe	8-18 - platform @ column 21	<1	<1	<1	22	22	10		
08	784	wipe	beam below buss II to cw, cw side	<1	<1	<1	21	21	10		
10	695	wipe	ladder	<0.3	<0.3	<0.3	20	20	10		
08	785	wipe	beam <u>I</u> to cw away from platform	<1	<1	<1	19	19	10		
09	788	wipe	plank II to cw	<1	<1	<1	19	19	10		
16	684	wipe	on top of duct work II to cw	<0.3	<0.3	<0.3	18	18	10		
10	697	wipe	4x4 <u>I</u> to cw 5' from stairs	<0.3	<0.3	<0.3	17	17	10		
M1	773	wipe	8-18 - platform @ column 22	<1	<1	<1	16	16	10		
M1	743	wipe	1-7 - platform @ column 41	<0.3	<0.3	<0.3	15	15	10		
10	701	wipe	plank at +1	<3	<3	<3	14	14	10		
M1	782	wipe	8-18 - platform @ column 9	<1	<1	<1	14	14	10		
01	705	wipe	buss bar at (+) angle	<1	<1	<1	13	13	10		
08	786	wipe	plank II to cw	<1	<1	<1	13	13	10		
11	687	wipe	ladder	<0.3	<0.3	<0.3	13	13	10		
M1	747	wipe	1-7 - platform @ column 29	<1	<1	<1	13	13	10		
16	685	wipe	on top of buss bar	<0.3	<0.3	<0.3	12	12	10		
10	698	wipe	(+) angle	<1	<1	<1	11	11	10		
11	688	wipe	2" Cast Iron (CI) pipe II to cw	<0.3	<0.3	<0.3	11	11	10		
16	683	wipe	outer platform across from motor	<0.3	<0.3	<0.3	11	11	10		
M1	775	wipe	8-18 - platform @ column 20	<1	<1	<1	10	10	10		
02	722	wipe	See sample location map	<0.3	<0.3	<0.3	9	9	10		
09	787	wipe	beam <u>I</u> to cw below plank	<1	<1	<1	9	9	10		
10	696	wipe	(-) angle next to ladder	<0.3	<0.3	<0.3	9	9	10		

LOCKHEED MARTIN PCB DELINEATION
Johnson City, NY

Third PCB Delineation Round - Sorted by Sample Result (Concentration)

Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)						Action Level	Notes
				A1016-A1242	A1248	A1254	A1260	Total			
I6	686	wipe	on plank below vert buss bar II to cw	<0.3	<0.3	<0.3	9	9	10		
MI	749	wipe	1-7 - platform @ column 24	<0.3	<0.3	<0.3	9	9	10		
MI	755	wipe	1-7 - platform @ column 20	<0.3	<0.3	<0.3	9	9	10		
1718	681	wipe	top of east stairs	<0.3	<0.3	<0.3	8	8	10		
02	731	wipe	See sample location map	<0.3	<0.3	<0.3	8	8	10		
03	739	wipe	bottom beam (-) side (-) angle	<0.3	<0.3	<0.3	8	8	10		
MI	779	wipe	8-18 - platform @ column 14	<0.3	<0.3	<0.3	8	8	10		
02	720	wipe	See sample location map	<0.3	<0.3	<0.3	7	7	10		
11	693	wipe	(+) angle	<0.3	<0.3	<0.3	7	7	10		
MI	768	wipe	8-18 - platform @ column 36	<0.3	<0.3	<0.3	7	7	10		
02	721	wipe	See sample location map	<0.3	<0.3	<0.3	6	6	10		
02	723	wipe	See sample location map	<0.3	<0.3	<0.3	6	6	10		
02	732	wipe	See sample location map	<0.3	<0.3	<0.3	6	6	10		
03	744	wipe	plank at 0	<0.3	<0.3	<0.3	6	6	10		
01	707	wipe	beam II to cw at -3	<0.3	<0.3	<0.3	5	5	10		
02	715	wipe	See sample location map	<0.3	<0.3	<0.3	5	5	10		
MI	757	wipe	1-7 - platform @ column 16	<0.3	<0.3	<0.3	5	5	10		
MI	758	wipe	1-7 - platform @ column 14	<0.3	<0.3	<0.3	5	5	10		
MI	759	wipe	1-7 - platform @ column 13	<0.3	<0.3	<0.3	5	5	10		
02	713	wipe	See sample location map	<0.3	<0.3	<0.3	4	4	10		
02	725	wipe	See sample location map	<0.3	<0.3	<0.3	4	4	10		
MI	710	wipe	crosswalk at G 34	<0.3	<0.3	<0.3	4	4	10		
MI	741	wipe	1-7 - platform @ column 38	<0.3	<0.3	<0.3	4	4	10		
MI	746	wipe	1-7 - platform @ column 31	<0.3	<0.3	<0.3	4	4	10		
MI	748	wipe	1-7 - platform @ column 26	<0.3	<0.3	<0.3	4	4	10		
MI	756	wipe	1-7 - platform @ column 16	<0.3	<0.3	<0.3	4	4	10		
MI	780	wipe	8-18 - platform @ column 12	<0.3	<0.3	<0.3	4	4	10		
1718	680	wipe	entrance walk from stairs	<0.3	<0.3	<0.3	3	3	10		
01	706	wipe	8" CI pipe	<0.3	<0.3	<0.3	3	3	10		
02	711	wipe	See sample location map	<0.3	<0.3	<0.3	3	3	10		
02	718	wipe	See sample location map	<0.3	<0.3	<0.3	3	3	10		
02	719	wipe	See sample location map	<0.3	<0.3	<0.3	3	3	10		
02	724	wipe	See sample location map	<0.3	<0.3	<0.3	3	3	10		
02	728	wipe	See sample location map	<0.3	<0.3	<0.3	3	3	10		
02	735	wipe	See sample location map	<0.3	<0.3	<0.3	3	3	10		
02	736	wipe	See sample location map	<0.3	<0.3	<0.3	3	3	10		
03	738	wipe	(-) angle	<0.3	<0.3	<0.3	3	3	10		
03	742	wipe	top of 12500 A transformer	<0.3	<0.3	<0.3	3	3	10		
MI	745	wipe	1-7 - platform @ column 36	<0.3	<0.3	<0.3	3	3	10		
MI	760	wipe	1-7 - platform @ column 13	<0.3	<0.3	<0.3	3	3	10		
MI	762	wipe	1-7 - platform @ column 9	<0.3	<0.3	<0.3	3	3	10		
MI	766	wipe	8-18 - platform @ column 45	<0.3	<0.3	<0.3	3	3	10		

LOCKHEED MARTIN PCB DELINEATION
Johnson City, NY

Third PCB Delineation Round - Sorted by Sample Result (Concentration)

Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)							Action Level	Notes
				AI1016-AI242	AI248	AI254	AI260	Total				
M1	776	wipe	8-18 - platform @ column 18	<0.3	<0.3	<0.3	3	3	10			
1718	679	wipe	~5' from west ladder	<0.3	<0.3	<0.3	2	2	10			
01	703	wipe	(+) angle	<0.3	<0.3	<0.3	2	2	10			
01	708	wipe	(-) angle	<0.3	<0.3	<0.3	2	2	10			
02	712	wipe	See sample location map	<0.3	<0.3	<0.3	2	2	10			
02	714	wipe	See sample location map	<0.3	<0.3	<0.3	2	2	10			
02	716	wipe	See sample location map	<0.3	<0.3	<0.3	2	2	10			
02	717	wipe	See sample location map	<0.3	<0.3	<0.3	2	2	10			
02	726	wipe	See sample location map	<0.3	<0.3	<0.3	2	2	10			
02	727	wipe	See sample location map	<0.3	<0.3	<0.3	2	2	10			
02	733	wipe	See sample location map	<0.3	<0.3	<0.3	2	2	10			
02	737	wipe	See sample location map	<0.3	<0.3	<0.3	2	2	10			
16	682	wipe	outer platform near fire alarm	<0.3	<0.3	<0.3	2	2	10			
M1	753	wipe	1-7 - platform @ column 22	<0.3	<0.3	<0.3	2	2	10			
M1	761	wipe	1-7 - platform @ column 13	<0.3	<0.3	<0.3	2	2	10			
M1	763	wipe	8-18 - platform @ column 47	<0.3	<0.3	<0.3	2	2	10			
M1	765	wipe	8-18 - platform @ column 45	<0.3	<0.3	<0.3	2	2	10			
M1	777	wipe	8-18 - platform @ column 17	<0.3	<0.3	<0.3	2	2	10			
01	704	wipe	beam 1 to cw at (+) angle	<0.3	<0.3	<0.3	1	1	10			
02	729	wipe	See sample location map	<0.3	<0.3	<0.3	1	1	10			
02	730	wipe	See sample location map	<0.3	<0.3	<0.3	1	1	10			
08	783	wipe	pipe 11 to cw, cw side	<0.3	<0.3	<0.3	1	1	10			
M1	764	wipe	8-18 - platform @ column 47	<0.3	<0.3	<0.3	1	1	10			
M1	769	wipe	8-18 - platform @ column 31	<1	<1	<1	<1	<1	10			
M1	772	wipe	8-18 - platform @ column 24	<1	<1	<1	<1	<1	10			
01	709	wipe	ladder	<0.3	<0.3	<0.3	<0.3	<0.3	10			
09	791	wipe	beam 11 to cw below buss box	<0.3	<0.3	<0.3	<0.3	<0.3	10	stained area		
M1	778	wipe	8-18 - platform @ column 16	<0.3	<0.3	<0.3	<0.3	<0.3	10			
09	810	core	west 10'	<5	950	<5	29	979	1			
09	808	core	north 10'	<0.5	<0.5	90	<0.5	90	1			
09	809	core	east 10'	<0.5	57	<0.5	0.8	57.8	1			
01	805	core	north 5'	<0.5	<0.5	<0.5	38	38	1	asbestos tile		
1215	841	core	east 10'	<0.5	<0.5	<0.5	12	12	1			
18	838	core	south 5'	<0.5	<0.5	7	<0.5	7	1			
23	819	core	southwest 10'	<0.5	<0.5	<0.5	6	6	1			
01	806	core	north 10'	<0.5	<0.5	6	<0.5	6	1	asbestos tile		
23	818	core	east 20'	<0.5	<0.5	<0.5	5	5	1			
01	804	core	west 10'	<0.5	<0.5	5	<0.5	5	1			
18	837	core	east 10'	<0.5	<0.5	4	<0.5	4	1			
01	803	core	west 5'	<0.5	<0.5	3.5	<0.5	3.5	1			
18	836	core	north 10'	<0.5	<0.5	3	<0.5	3	1			
01	800	core	east 5'	<0.5	<0.5	2.9	<0.5	2.9	1			

LOCKHEED MARTIN PCB DELINEATION
Johnson City, NY

Third PCB Delineation Round - Sorted by Sample Result (Concentration)

Platform Number	Sample Number	Sample Type	Location	Result (ug/100cm ² or mg/kg)						Action Level	Notes
				A1016-A1242	A1248	A1254	A1260	Total	Total		
18	833	core	west 3'	<0.5	<0.5	2	<0.5	<0.5	2	1	
1215	840	core	east 20'	<0.5	<0.5	<0.5	1	1	1	1	
1215	825	core	north 20'	<0.5	<0.5	<0.5	0.8	0.8	0.8	1	asbestos tile
1215	829	core	south 10'	<0.5	<0.5	<0.5	0.7	0.7	0.7	1	asbestos tile
09	811	core	east 20'	<0.5	<0.5	<0.5	0.7	0.7	0.7	1	
23	820	core	northwest 10'	<0.5	<0.5	<0.5	0.6	0.6	0.6	1	
1215	824	core	north 10'	<0.5	<0.5	<0.5	0.6	0.6	0.6	1	asbestos tile
1215	828	core	south 20'	<0.5	<0.5	<0.5	0.6	0.6	0.6	1	asbestos tile
23	816	core	east 10'	<0.5	<0.5	<0.5	0.5	0.5	0.5	1	
23	817	core	southeast 10'	<0.5	<0.5	<0.5	0.5	0.5	0.5	1	
1215	830	core	southwest corner	<0.5	<0.5	<0.5	0.5	0.5	0.5	1	asbestos tile
01	801	core	east 10'	<0.5	<0.5	<0.5	0.5	0.5	0.5	1	
18	832	core	east 5'	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	
18	834	core	west 6'	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	
18	835	core	north 5'	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	
18	839	core	south 10'	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	
1215	826	core	west 20'	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	asbestos tile
1215	827	core	west 10'	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	asbestos tile
1215	831	core	southeast corner	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	asbestos tile
01	802	core	south 5'	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	

LOCKHEED MARTIN PCB DELINEATION

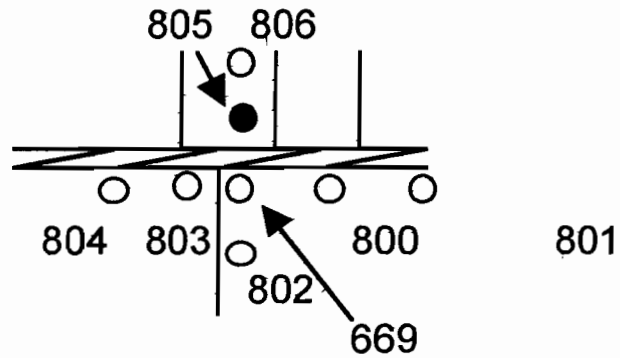
Johnson City, NY

Third PCB Delineation Round

Core Samples

○ ≤1 ○ 2-10 ● 11-50 ⊕ 51-100

Below Transformer 01



LOCKHEED MARTIN PCB DELINEATION

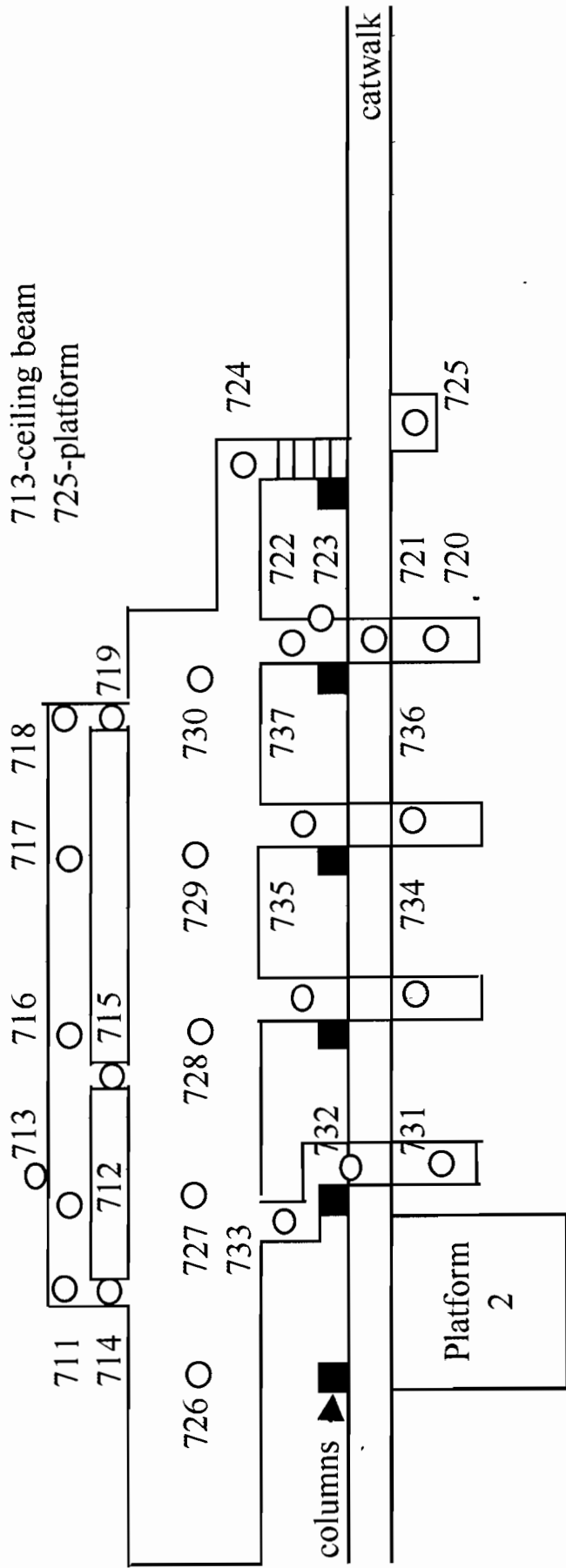
Johnson City, NY

Third PCB Delineation Round

Wipe Samples

- ≤ 10 ○ 11-100 ⊗ 100-500 ● 500-1000 ⊕ 1000-100K ● > 100K

Opposite Transformer 02



LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

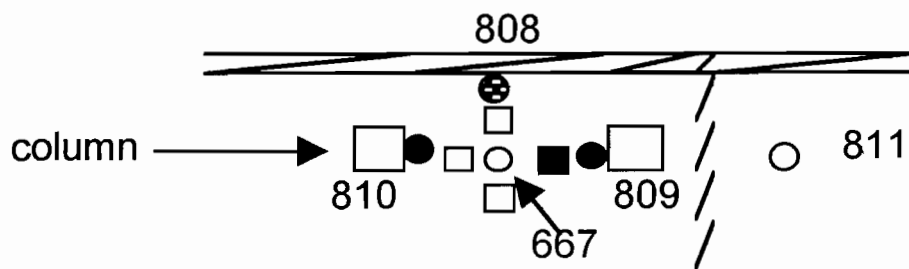
Third PCB Delineation Round

Core Samples

○ < 1 ○ 2-10 ● 11-50 ● 51-100 ● > 100

□ Lockheed Wipe Samples

Below Transformer 09



LOCKHEED MARTIN PCB DELINEATION

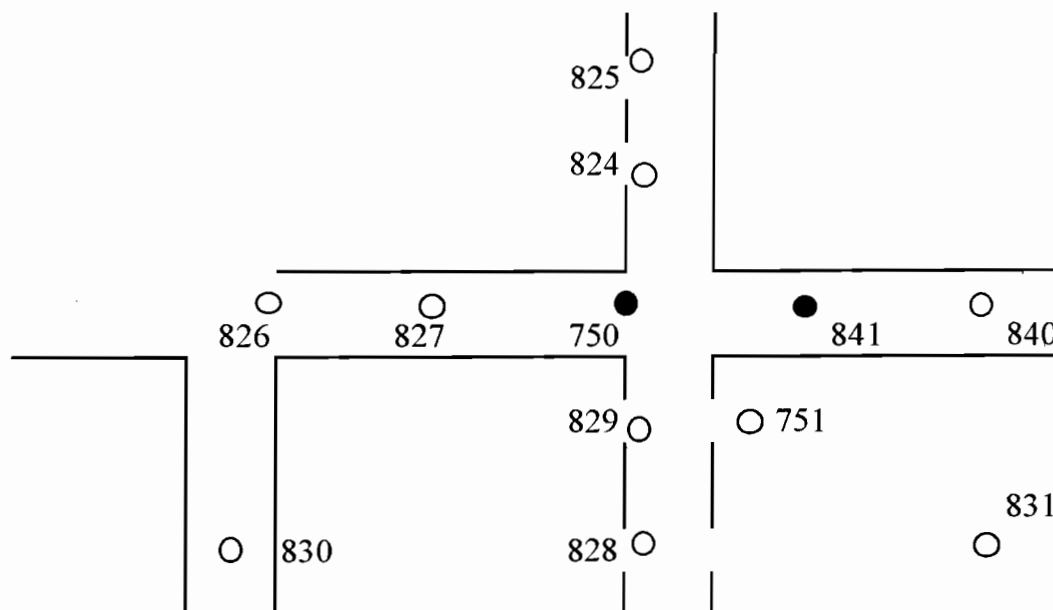
Johnson City, NY

Third PCB Delineation Round

Core Samples

○ ≤ 1 ○ 2-10 ● 11-50 ● 51-100

Below Transformers 12 - 15



LOCKHEED MARTIN PCB DELINEATION

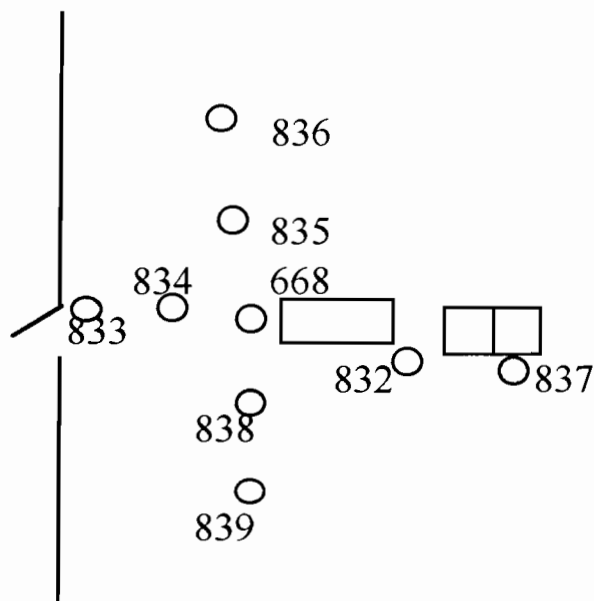
Johnson City, NY

Third PCB Delineation Round

Core Samples

○ < 1 ○ 2-10 ● 11-50 ● 51-100

Below Transformer 18



LOCKHEED MARTIN PCB DELINEATION

Johnson City, NY

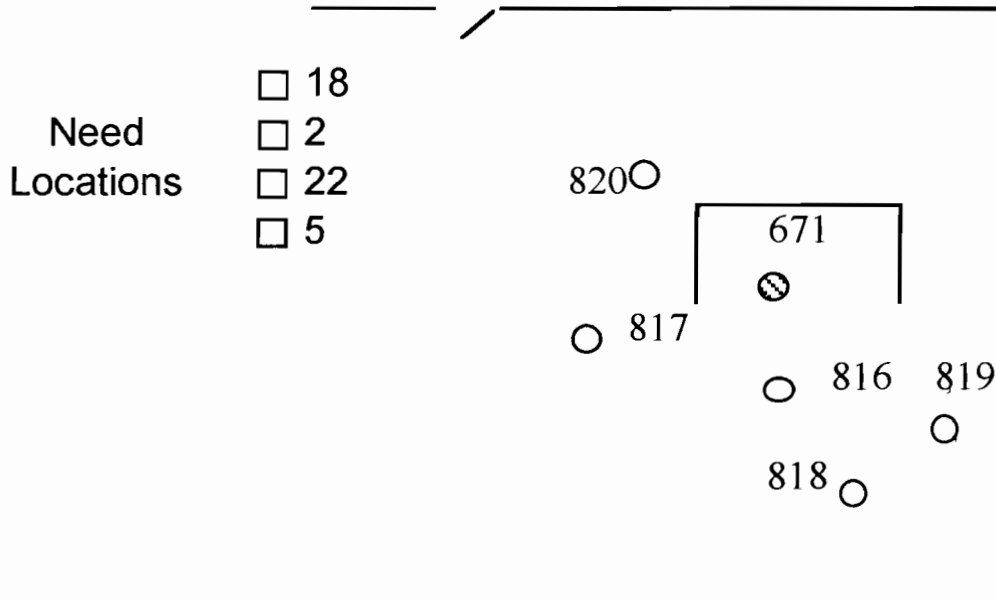
Third PCB Delineation Round

Core Samples

○ < 1 ○ 2-10 ● 11-50 ⊕ 51-100

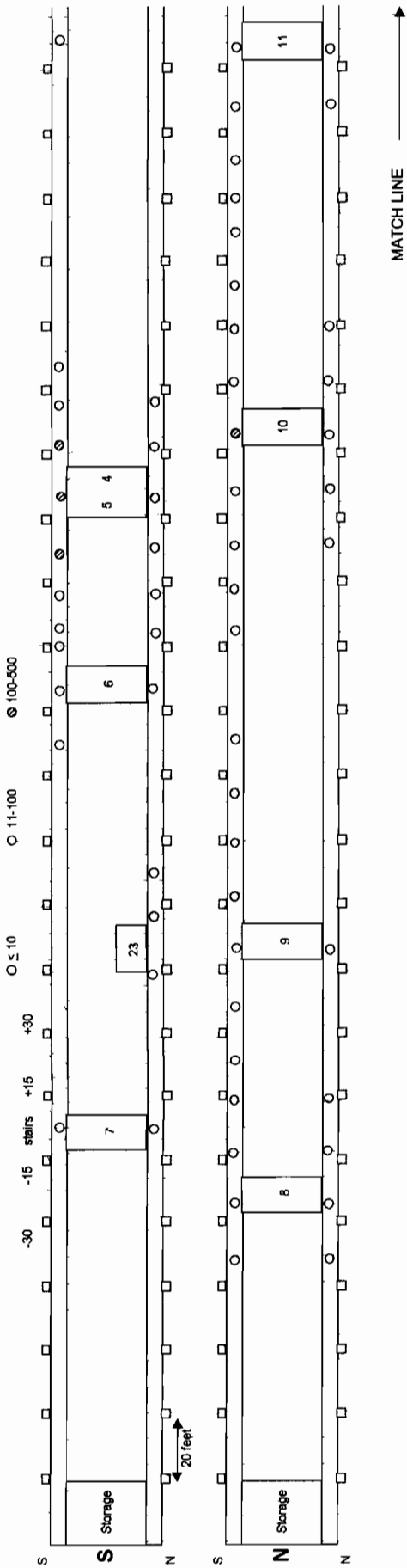
□ Lockheed Wipe Samples

Below Transformer 23

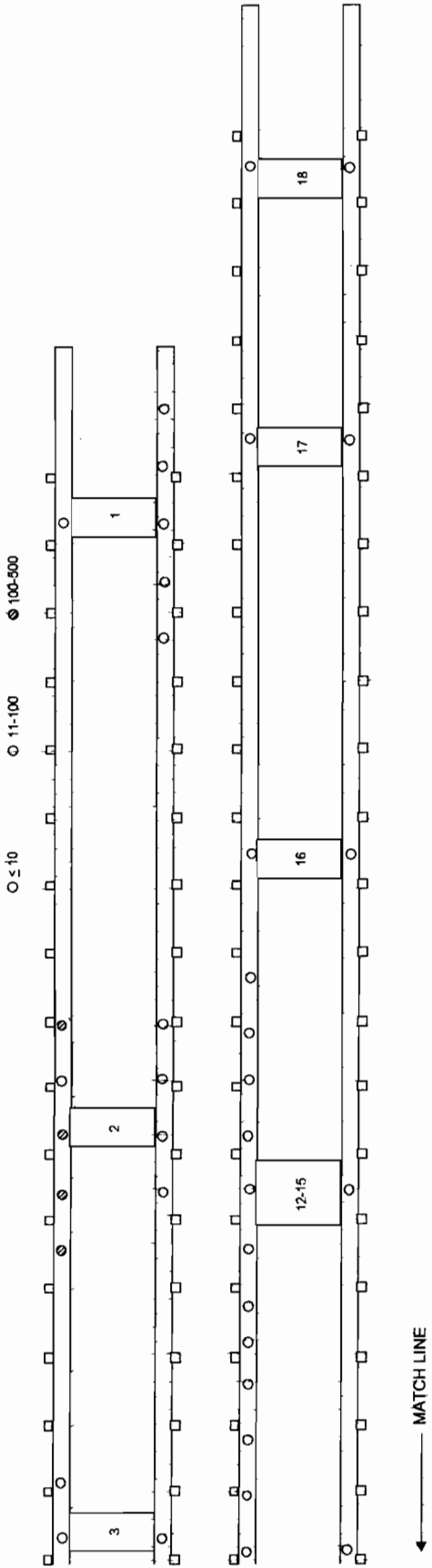


LOCKHEED MARTIN PCB DELINEATION
 Johnson City, NY
 Curwalk Sample Locations

Enclosure 4
 Curwalk PCB Sample Locations



LOCKHEED MARTIN PCB DELINEATION
Johnson City, NY
Carwalk Sample Locations





*IT Corporation
200 Horizon Center Boulevard
Trenton, NJ 08691-1904
Tel. 609.584.8900
Fax. 609.588-6300*

A Member of The IT Group

August 16, 2000

Paul B. Smetana
Lockheed Martin Control Systems
600 Main Street
Johnson City, NY 13790

RE: Proposal for Test Cleaning Services
IT Corporation Project No. 808348
Via e-mail

Dear Mr. Smetana

IT Corporation (IT) has prepared the following cost proposal for Lockheed Martin Control Systems (LMCS) for the decontamination demonstration of the PCB contaminated former transformer platforms and adjacent surfaces located in Lockheed Martin's Johnson City Facility.

Previous sampling investigations have indicated that PCB contamination is present at and adjacent to 19 former transformer areas. Areas of contamination include the wooden flooring, cross beams, trusses, catwalk flooring, and misc. items located directly under the platform.

The goals of the pilot-scale decontamination demonstration are as follows:

- Investigate various PCB decontamination technologies and their ability to meet TSCA cleanup levels
- Evaluate and determine containment and logistical requirements that will need to be implemented in full-scale decontamination.
- Develop an accurate cost estimate to decontaminate the areas of contamination.

IT proposes to jointly select the platform the test will be performed on after evaluation of Phase 2 sample results. The selection of the platform should be based on contamination levels, its relative ease of access, and any specific needs of LMCS. A platform with a wide range of contamination will allow us to try different decontamination techniques. Its relative ease of access will permit us to develop containment and access techniques that can later be expanded to use on the more difficult areas.

The test cleaning demonstration will consist of the following activities:

- Installation of a full containment poly structure underneath the platform that will contain all dirt, debris, and cleaning solutions generated during the demonstration.
- The raising and temporary supporting from above all items sitting on the platform.
- The complete removal of the platform flooring. All material that is removed from the area will be completely wrapped in plastic to prevent cross contamination.
- All cross braces will be dismantled and removed from the platform.
- The contaminated members of the trusses will be hand cleaned using two different PCB cleaning solutions. They are (Data sheets for the above three cleaning solutions will be provided for review):

- TechXtract
- Pipe-MetalX

Initial conversations with the manufacturers of the above products indicate that they should be successful on wood. IT could also evaluate other products that LMCS may be aware of.

- Wipe samples will be obtained from all cleaned areas to determine cleaning efficiency and contaminant reduction.
- Re-cleaning will be performed in areas that did not meet the cleanup level after the first cleaning (most products advertise a 90% contaminant reduction per application)
- After an area is sampled clean, additional samples will be obtained adjacent to the clean sample on the same beam to determine the overall accuracy of the cleaning. This information will be used to assist in determining the number of confirmatory samples needed during the full-scale decontamination.
- IT will further investigate the most applicable fireproof coating that can be used to seal the cleaned structures. Three products initially identified are Wood Safe, Inspecta-Shield, and Thermo-Lag 330-1. IT will apply the selected product to the cleaned surfaces.
- When complete IT will install new braces and platform flooring. The containment structure will be dismantled and all materials generated will be prepared for disposal by LMCS. If needed, IT can assist in the arrangement of the disposal of these materials.
- IT proposes to perform one additional task that wouldn't be performed during the full-scale decontamination. IT will clean the removed platform flooring and bracing using the two products to generate additional data that will be used to evaluate the product's performance. This will be done in a secure area provided by LMCS. Samples will be collected after cleaning.

During the demonstration IT will document all the activities and collect the following data:

- Manpower requirements for each activity.
- Ease of application and the ability to contain the product and reinstate.
- Amount of product required per application.
- Contaminant reduction per application

IT will prepare a final report that will provide all the above information, the results of all the sampling and analysis performed, and the results of each PCB cleaning product. The report will also contain "Lessons Learned" during the demonstration and propose different/better approaches to anticipated areas of concern. The cost summary section can be used to estimate the cost of the full decontamination.

This report will assist LMCS in evaluating cleanup levels and different approaches for the full-scale project as well as provide potential contractors valuable information in developing approaches and cost estimates.

PRICING

IT proposes to perform the pilot scale decontamination demonstration on combination Lump Sum and Time and Material basis as follows:

Project Setup

We propose to perform all the up front preparation work including the preparation of a Work Plan, Health and Safety Plan, procurement activities, and other activities necessary to set up the project for the Lump Sum price of \$5,500.00.

Mobilization/Demobilization

We propose to mobilize the crew, equipment, and all necessary materials necessary to perform the project for the Lump Sum Price of \$14,500. This cost also includes demobilization. Examples of materials supplied in this cost are PPE and other health and safety materials, plastic to wrap the wood, rigging and hoisting equipment, misc. hand tools, and other general materials. Materials specifically excluded include cleaning products, fire proofing, replacement wood, reinforced plastic, and other specialized materials and tools.

Field Activities

We anticipate the fieldwork to be approximately 3-weeks working 8 hours a day. All work will be performed under second shift or during the times stipulated by LMCS. The items in this task include the labor, equipment, major material/subcontractors necessary to perform the field activities described above, analytical, fireproofing material cost, and replacement wood cost. We have assumed that LMCS will provide assistance in the handling and securing of the electrical items located on the platform. We have also assumed that no truss members will be dismantled; therefore no shoring or bracing will be necessary. Our estimated cost for this activity is \$52,000.00. IT proposes to perform this work on a Time and Material (T&M) and will provide a detailed cost estimate and T&M rates after the scope of work has been agreed upon.

Final Report

IT will prepare a final report as described above for the Lump Sum Price of \$5,600.00.

IT is proposing to perform this demonstration project with the understanding that by performing it we will not be prevented from bidding the full-scale cleanup. IT also requests that all cost information be deleted from packages provided to bidders and/or competitors of IT.

IT looks forward to discussing our approach with LMCS and revising it based on your input. If you have any questions or comments please do not hesitate to contact me at (609) 588-6305.

Sincerely,

Sid A. Archinal
Sid A. Archinal
Project Manager

cc: Lacy
File