135853

AVTEX FIBERS FRONT ROYAL INC.
AVTEX FIBERS SITE

RESPONSE MEASURES WORK PLAN
VOLUME III

ADMINISTRATIVE ORDER
Docket No. III-90-010-DC

Prepared for U.S. Environmental Protection Agency
Hazardous Waste Management Division

Region III

November 7, 1989

AVTEX FIBERS FRONT ROYAL INC.
Kendrick Lane
P. O. Box 1169
Front Royal, Virginia 22630

AVTEX FIBERS FRONT ROYAL INC.
AVTEX FIBERS SITE

APPENDIX B
SCOPE AND HISTORY

ADMINISTRATIVE ORDER
Docket No. III-90-01-DC

Prepared for U.S. Environmental Protection Agency
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APPENDIX B

SCOPE AND HISTORY

This appendix contains a chronological summary of activities undertaken by Avtex Fibers Front Royal, Inc. aimed at clean up of sites within the facility potentially contaminated with PCBs. In addition a copy of the Administrative Order addressed by this work plan and relevant correspondence including previous Administrative Orders by Consent are included as references.

SCOPE OF WORK:

Avtex Fibers is a rayon fibers manufacturing plant located in Front Royal, Virginia. The plant site is approximately 440 acres , with 55-60 acres under roof. Much of the original process capacity is now abandoned. This PCB clean-up project was initiated by the Engineering Department of Avtex Fibers. The project was assigned to P. J. Malina Jr. on 22 JUNE 89. The following is a summary of the progress of project work. A daily log has not been kept to date, however; upon approval of EPA docket No. III-90-01-DC Administrative Consent Order (ACO) a detailed log will be maintained.

26 JUNE 89:

Joe Burza , of S.D. Myers,Inc. , was contacted to make a site visit to discuss the possibility of PCB clean-up on Plant site. S. D. Myers, Inc. has been on the plant site since 1972 monitoring all transformers for maintenance and PCB levels. P.O. isssued today FR9-10992. Joe Burza to be on plant site 28 JUNE 89.

28 JUNE 89:

Joe Burza on plant site to walk thru possible PCB areas and retrieve soil samples from R. H. Hughes, Avtex Executive Vice President.

5 JULY 89:

Joe Burza returned call with data on soil samples. No. 2 - 320 ppm and No. 5 2 ppm. The number two sample is from the Polyester dock area. S. D. Myers scheduled to take samples from the "Box Shop" roof transformers (75) and the polyester dock areas along with Sub 1A and Compressor room roof.

18 JULY 89:

Joe Burza called to notify Avtex of sample testing. Data due 21 JULY 89 after QA approval.

21 JULY 89:

Rick Barret called to discuss test results. Power House roof confirmed high PCB presence. Sub 1A pure askarel, therefore, high PCB concentration. Polyester dock area positive. "Box Shop" roof transformers clean, as tested in DEC 82.

1 AUG 89:

Rick Barret confirmed the sending of a crew to begin clean-up in areas of PCB detection. Mark Roberts and Leroy Franklin due on plant.

15 AUG 89:

Manifest document No. 89294 documents the removal of one Askarel transformer and one mineral oil transformer from Sub 1A.

17 AUG 89:

Manifest document No. 89295 documents the removal of capacitors and drummed askarel oil.

28 AUG 89:

State Water Control Board personnel on plant site along with the State Police. See memo dated 28 AUG 89 P.J. Malina to C. K. Wagner.

1 SEPT 89:

Manifest No. 89340 documents the further removal of capacitors and solid waste.
See memo to F.L. Wickham dated 1 Sept 89.

21-23 SEPT 89:

Construct temporary wood roof over the Compressor room roof to facilitate PCB clean-up.

25 SEPT 89:

S.D. Myers begins concentrated effort to remove Compressor room roof. See S.D. Myers project progress chart. Began clean-up in Polyester area.

26 SEPT 89:

EPA personnel on plant site, see memo to R. G. Histing dated 26 SEPT 89.

27 SEPT 89:

See memo to C. K. Wagner dated 27 SEPT 89.

28 SEPT 89:

See memo to C. K. Wagner dated 28 SEPT 89.
Initial load of waste from Compressor room roof, manifest No.89381.
Installed Silt fence at Polyester site.

29 SEPT 89:

See memo to C. K. Wagner dated 29 SEPT 89.

30 SEPT 89:

Manifest No. 89395 load of waste from Compressor room roof.

2 OCT 89:

Manifest No. 89381 load of waste from Compressor room roof.

5 OCT 89:

Manifest No. 89394 load of waste from Compressor room roof.
S.D. Myers begins cleaning process of sewers at A-44. Robinson Pipe Cleaning Co. videos sewer lines. See drawing number FR-41361-5 as marked to test data and dates of progress.

7 OCT 89:

Manifest number 89388 load of waste from Compressor room roof.

9 OCT 89:

Began Drum sampling and consolidation through out plant.

10 OCT 89:

S. D. Myers begins removal of soils at Sub 1A. Begins sampling procedure for manhole testing. Tested roof for effectiveness of clean-up.

11 OCT 89:

Manifest No. 89407 last load of waste from Compressor room roof. Test transformer storage area outside of Sub 2A. Data received on roof shows that two (2) spots still "hot" at 173 and 41 ppm. [illegible] points on the grid were ND (non-detect) and or below 10 [illegible]

spots will be recleaned. Administrative Consent Order (ACO) received.

12 OCT 89:

Manifest numbers 89410 and 89411 removal of soils at Sub 1A. Drained transformer 4C on Power House roof. Test (3) transformers at the old Allied Chemical plant.

13 OCT 89:

Test data from transformers at the Allied plant shows a reading of 4.2 ppm in each. A clean-up will be done of the area and surrounding soils. Repair of the leaking transformers is scheduled for 20 OCT 89.

17 OCT 89:

Recleaned roof over Compressor room. Samples sent out.

18 OCT 89:

Retest soils at Sub 1A and the Compressor room dumpster site. Begin cleaning of Process sewers from manhole MHI to waste treatment. Conco begins encapsulating manholes as discussed with the Judge and EPA. See sketch detailing process of encapsulation.

19 OCT 89:

Re-sample roof areas that were cleaned, and clean concrete walkway. Begin the process of removing Thermonal from the Abbey dryer system in Polyester and cleaning of all equipment.

20 OCT 89:

Prep transformers from spare storage area and 2A/5A units for disposal. Partially drained the Abbey dryer system in Polyester area. All areas of project progress hindered by weather (excessive rain).

21 OCT 89:

Drained two (2) askarell units (2A & 5A) for disposal. Removed earth from the sub station at the old Allied Chem p[illegible] clean-up of process sewer from MHI to waste treat[illegible] covers and unplugged sewers.

22 OCT 89:

Began draining holding tank in fenced in area of Polyester dock, and cleaned a small portion of the fenced in area. Steam Kat consolidated waste materials.

23 OCT 89:

Loaded truck with transformers from the storage area plus 2A and 5A units. Material manifested and sent out for disposal. Drained askarel oil from unit 4A on Power House roof. Cleaned some in the ployester area. Steam Kat assisted Conco in the encapsulation process for manholes A-44 thru NA-11 including A-31, A-28 , and A-26.

EPA and State personnel on plant for tour, see memo to C.K. Wagner dated 23 OCT 89.

24 OCT 89:

The EPA team toured the CS_2 ponds for structural integrity of concrete , piping, and sampled water. See memo to C. K. Wagner dated 24 OCT 89. OSHA rep on plant today, see above referenced memo.

S. D. Myers began repairs on transformers in the "old Allied" plant today. The condition of the internal windings is such that the units should be abandoned (entirely too much rust). These transformers will be prepared for disposal. A capacitor bank within the confines of the sub station will also be disposed of. Mr. Histing and Mr. Snipes will notify Bill Knepp of the condition and remediation. S. D. Myers will research the availability of a 3-phase unit 2300 › 480v. Mr. Histing will research the possibility of having the power company run direct.

N&W and USPCI reps. were on plant site today to review loading of gondola cars. It was realized that the present gondola cars are not unloadable at the USPCI site in Utah , due to a high bulk head at each end. Four new type gondola cars will be sent in within 2-3 days. One car loaded and covered with plastic and sand bags. RANT continued to scrape and stockpile earth.

Steam Kat transported waste slurry from waste treatment. The cleaning of MHI to MHJ continued. CONCO was assisted by Steam Kat personnel in the process of sewer floor encapsulation. A-45, A-46, A-30, and A-32 manholes were completed on daylight. [illegible] A-50 will be completed tonight. Na-11 to A-39 wi

25 OCT 89:

Prepared transformers at the spare storage area for transport. S. D. Myers cleaned Polyester area, packed sand bags for rail service, and covered railcar with plastic. Steam Kat assisted Conco in encapsulating manhole number 39, and retrieved 7 samples and one removed brick sample wipe. Encapsulated A-39, A-40, and A-42 manholes.

26 OCT 89:

Failure of ASH pump system in power house caused delay in encapsulation process due to excess water. Encapsulated A-41 and sump, along with A-8. S. D. Myers continued to prepare transformers for shippment. Sampled at sub 1A area.

27 OCT 89:

S.D. Myers continued to drain Abbey dryer system in polyester. Cleaned in the polyester area. No rail cars to date, therefore contractor sent home for weekend. A-55 encapsulated. Steam Kat assisted with encapsulation process and hauled water for waste treatment.

28 OCT 89:

S. D. Myers continued to drain Abbey dryer system.

29 OCT 89:

S. D. Myers continued to drain Abbey system and transformers for shippment. Eighteen (18) capacitors at Allied plant will be shipped in cabinet as one unit. Steam Kat continued to clean manholes I through Q in the process sewer.

30 OCT 89:

S. D. Myers shipped four (4) transformers from the spare storage area. The area is now ready for soil excavation down twelve inches. Steam Kat continued cleaning in the process sewers. A-33 and A-9 encapsulated today. Soil consolidated at the polyester area in preparation for the four railcars received. Steam Kat continued cleaning effort in the process sewers.

"old Allied Plant" to a staging area for disposal shipment. One rail car loaded for shipment. This excavation work held up due to rain. Continued removal of oil from Abbe dryer system. New EPA personnel on plant today. Roger Claff and Brian Hillis of SAIC (Science Applications International Corp.) were given a tour of the plant and all project work. Removal of the four roof drain pipes at the Compressor room roof was detailed and scheduled work to begin 1 NOV 89. Conco completed A-11 manhole encapsulation. Steam Kat continues cleaning of process sewers. Waste is being drummed.

1 NOV 89:

S. D. Myers loaded one railcar. Ron Sharp of the N&W railroad was on plantsite to witness loading cars. Steam Kat continued cleaning in the process sewer line. Final wipe samples were initiated in the storm sewer lines begining at A-44. Conco encapsulated A-10. S. D. Myers relocated the transformers from the "old Allied plant". Riggs continued removal of roof drain lines in the compressor room.

The consent order became effective today.

2 NOV 89:

Conco encapsulated A-23, all manholes except A-51 and A-54 are presently encapsulated. The aforementioned are N.D. and on "hold". S.D. Myers began cleaning of the compressor room walkway, in preparation for total encapsulation. The encapsulation process will entail an airless applied concrete sealer coat, an intermediate coat of "red" paint and a "top" coat of gray. All coatings will be applied by the "airless" process to eliminate any possibility of propagating contamination. One additional rail car has been filled. This is a total of four (4), the fifth car is "unacceptable" due to lack of integrity in the bulkhead. Ten additional railcars are scheduled to arrive on plantsite within three to four days. A tour of the "project" areas was conducted for Mr. Harry Daw; EPA project coordinator.

3 NOV 89:

S. D. Myers began final clean-up of Compressor room roof concrete walkway. A silt fence was put up around the excavated transformer storage area. The dumpster site at the compressor room was filled in with "N.D. fill". The roof drains from the "transformer" side of the compressor room roof are being removed and rerouted to eliminate the possibility of further contamination.

Steam Kat finished all wipe samples of st
forwarded to S. D. Myers lab for analysis.

4 NOV 89:

S. D. Myers completed final clean of Compressor room walkway and wipe sampled per grid pattern. The first "sealer coat" of encapsulation was applied to the walkway. Removed ramp from compressor room roof.

Intermediate "red" coat applied on second shift. Sampled sub 5A per grid pattern.

5 NOV 89:

S. D. Myers continued application of final coat of encapsulation of Compressor room roof walkway. Cleaned the "old Allied" transformer site and removed (18) capacitors.

Sample data revealed a need to continue cleaning the sewer lines in the storm sewer system. Steam Kat actively involved in the recleaning process, samples taken as work progresses.

6 NOV 89:

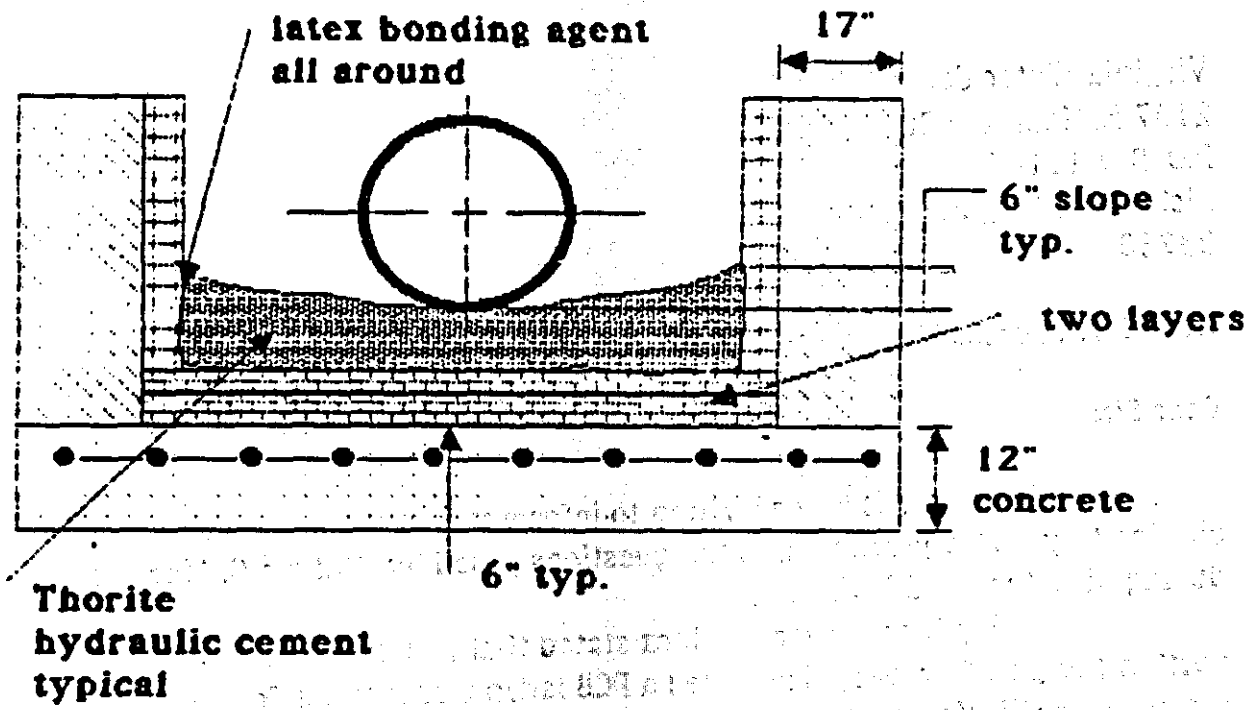
S. D. Myers completed encapsulation of Compressor room roof walkway. Steam Kat continues recleaning of storm sewer lines. The cleaning process will follow the original cleaning procedure as detailed in the WP, along with a "sandblasting" of joint areas and cracks. The etched areas will then be cleaned and sealed with a grout. Final cleaning and wipe samples will be done as work progresses.

The shipment of anything from the plant site has been stopped by the EPA until the WP is approved. This will obviously impact detrimentally on the progress of work as it now exists. Schedules can not be met during this aimless period of "limbo".

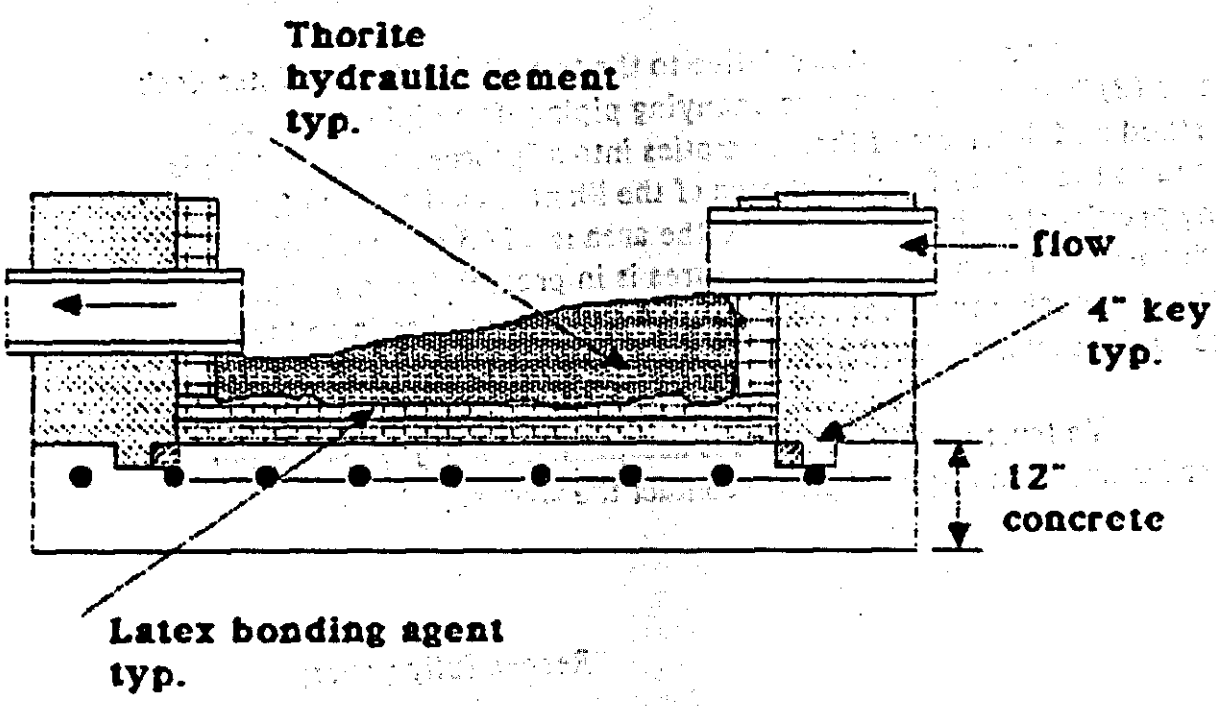
The Work Plan Administrative Order manual is complete and will be submitted for review and approval per the requirement of the Order , on 7 NOV 89, exactly within the required time span for submission.

Let it be noted that the delay caused by the verbal restraint of oil/water shipments issued by the EPA Project Coordinator will result in a cost increase as follows. Avtex will be charged $845/day demurage per tank trailer and $2128/tractor return trip. At present this will result in $2535/day for trailer demurage starting 6 NOV 89 and continuing untill EPA approval of WP. A one time charge of $4256 will result in the return trip for the two tractors. S. D. Myers has also turned away one trailer which was to have picked up surplus transformers not i:

TYPICAL SUMP DETAILS
Total 30 sumps



Section view parallel to Sewer



Typical section view perpendicular

30 AUG 89

Virginia Water Control Board
2107 N. Hamilton St.
P.O. Box 11143
Richmond, Virginia
23230

Attn: Mr. Thomas M. Felvey- Program Manager

Dear Sir:

This letter is being written to inform you of the answers obtained by Avtex personnel, to the questions posed by William G. Maddox during his site visit 28 AUG 89.

During his visit Mr. Maddox stated that Avtex had recently (within the past few weeks) received a PCB laden transformer from our former Nitro,W. Va. plant. This statement is erroneous and is easily proven by records now in the possession of your board. Transformer Consultants Number 57 is a Kulman (s/n 2-40661) 1000 KVA/468 gal. transformer originally tested on plant site 12/82 and determined to be Non-PCB.

The second point is relative to the test site at the polyester dock and two (2) "sump pits" and accompanying piping. The piping has been unearthed and determined that it empties into a "process sewer" which is directed to the Waste Treatment area of the Plant. Based on data from testing previously initiated by Avtex ,the area is a PCB contaminated area and clean-up per EPA approved measures is in progress now. The pipe will be removed during the removal process of contaminated soils and the access to the sewer blanked off. Further testing and clean-up will continue.

We trust this information is acceptable. Should there be any further information required please contact the writer.

Respectfully yours;

Paul J. Malina Jr.
Utilities Engine

1 SEPT 89

To: F. L. Wickham

From: P. J. Malina Jr.

Subject: Virginia Water Control Board Visit

This letter is being written to document the transactions of today, concerning the (8) eight WCB personnel on the Plant site. A brief meeting was had in the Main conference room with the following personnel in attendance:

William G. Maddox - VWCB
Durwood Willus - VWCB
Anne Field - VHWM

F. L. Wickham - Avtex
R. E. Licklider - Avtex
P. J. Malina Jr.- Avtex

The main concern of the WCB was the Avtex activity at the Polyester dock area. Curiosity appeared to be the main concern. A plant map was used to explain the findings, a brief sketch was drawn to show the area, and a brief verbal explanation by Avtex personnel was presented.

This did not satisfy the WCB personnel and a formal site visit was given. Questions from Audrey Weber concerning the procedures and findings at the Polyester site were asked of the writer. The writer's explanation was sufficient to satisfy all inquiries.

At the request of the State manhole MHI was opened and a "dye" test run to determine outfall. The original Plant drawing, the initial meeting explanation, and the actual State "dye" test all proved the same. The outfall of manhole MHI is the Waste Treatment Plant.

Roger Licklider accompanied Durwood Willus in the taking of samples at MH A8. Soil and water samples were taken at MHH and MHI. Duplicate soil samples were given to Avtex.

At some time during the Plant tour WCB personnel discovered the "empty drum storage" area behind the old Paint Shop. This area has been identified by Avtex as an area to be tested for PCB content and then properly cleaned thereafter. The position of the WCB was that this must be cleaned up. The writer informed them that Avtex personnel are fully aware of this fact and that measures to clean this area per EPA regulations have been instituted by Avtex, over one and a h

information came as a surprise to the State

The writer informed them of Chemical Waste Management Inc.'s involvement in this portion of our clean-up efforts and they were satisfied. A request was made by the writer, as to any further information being needed at this time. The reply of the State was a thank you, however; no further information was needed.

The VWCB people left the Plant approximately 5:00 PM.

cc: C. K. Wagner
P. Hughes
R. G. Histing

23 OCT 89
cc: R. H. Hughes
F. L. Wickham
T. Allen

To: C. K. Wagner

From: P. J. Malina Jr.

Subject: EPA / State Water Control Board Visit

This letter is being written to document the activities of today (23 OCT 89), relative to the visitors on plant site. The following were n attendance:

EPA
R. E. Caron
W. F. Lee,Ph.D- Enforcement Officer
T. Naquin- TAT
M. Kaarlela- TAT

State
T. M. Felvey- Program Manager
M. G. Ferguson- Permits Program Manager
J. V. Roland- Assistant Direct of Operations (Office of Enforcement)
Derwood Willus
Suzanne Bambacus
Melanie Donahue

Avtex
M. Carrol
B. Zawatowski
P. J. Malina Jr.

The tour was conducted in two locations simultaneously. Kaarlela, Naquin, and Lee walked the Allied Chemical plant unattended for the most part. It was explained to the writer that they were to walk through and video the plant site.

The remainder of the group was directed by R. E. Caron, and intercepted by the writer ,at the Polyester dock area. Ferguson,from the WCB, was armed with a video camera and Donahue with a 35mm. The excavation site at polyester was videod and photographed sample was taken at MHI, sampling the effluent coming in 2 basin. The sample was handed over to T. Allen by the wr

The tour continued to the drum storage area behind the "old paint shop". Again video and photos were taken of this area. A brief explaination of the Chemical Waste Management work was discussed.

Next we reviewed and documented on cellulose the "hazardous waste" storage area. A point was made by Mr. Caron concerning the proper labeling of PCB drum waste and photos taken.

The excursion continued to the Power House where the parapet wall outfall was noted and photos taken. The dumpster site was reviewed and photos taken also. Next we proceeded to the roof area and once again captured it all on film.

The final step in the tour was to peer down into A-44 manhole to observe the encapsualtion of the sump floor. The tour ended with the group returning to F.L. Wickham and the waste treatment plant.

27 SEPT 89 cc: R. G. Histing

To: C. K. Wagner

From: P. J. Malina Jr.

Subject: EPA Visit 27 SEPT 89

This letter is being written to document the visit of EPA and Virginia State Waste Management personnel. The team took samples and reviewed "in house" progress on PCB clean-up, and reviewed the Chemical Waste Management clean-up effort. Those in attendance were:

Robert E. Caron EPA - Region III
John Fellinger - CCJM (EPA consultant)
Chris Zuiebel - RAI (EPA consultant)
Rosann Park-Jones - ICF (EPA consultant)
Randolph P. Lathrop - Va. Dept. of Waste Management

Avtex

E. Zawistowski
P. Ehlers
P. J. Malina Jr.

The day commenced with a brief meeting in the Engineering Conference room to discuss the day's agenda. Initial points were made , based on the tour of 26 SEPT 89. It was confirmed the effort and committment of Avtex ,in this clean-up, is clearly apparent and should continue. More aggressiveness must be put forth in the handling of the contractor, S. D. Myers; to provide the needed data and manpower to complete this clean-up in a timely fashion.

Three key points were made:
1.- the area of contamination must be contained
2.- the affected area must be surveyed to determine the impact to the environment (Example: Storm sewer contamination over the years & Waste Treatment contamination, therefore possible river outfall.)
3.- Schedule in detail for total project control

It was noted that point one is clearly defined , however; in the Polyester area a "silt fence" must be installed around the perimeter. This was relayed to S. D. Myers and it will be accomplished no later than Friday of this week.

The other two points were relayed to S being addressed. A detail schedule of all work must be completed and submitted

detailed follow up of clean-up work. Robert Caron of the EPA will over see the work on plant site until Harold Daws takes responsibility as Project Manager.

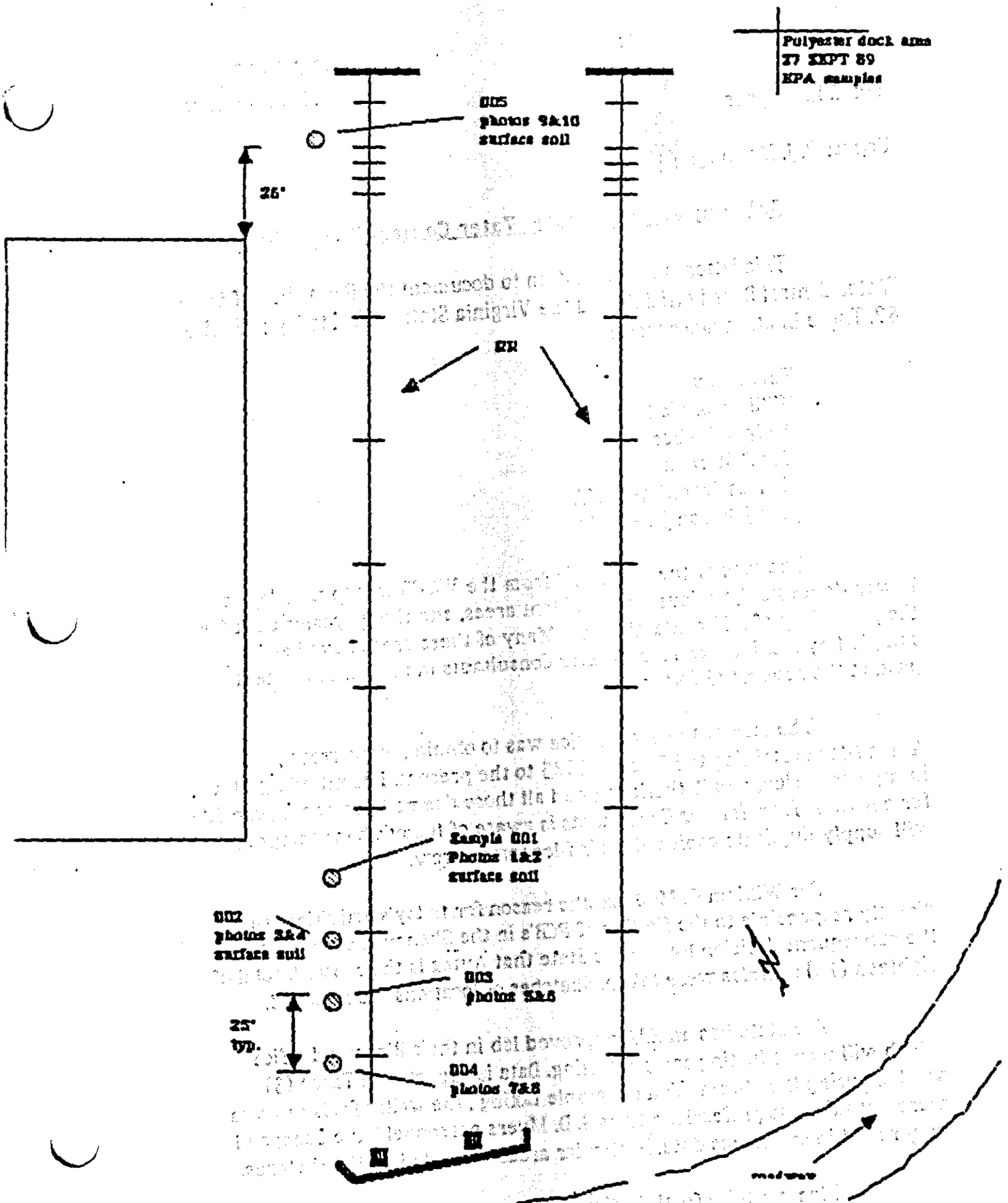
A tour was had to investigate the "bulk" storage areas for CS_2 storage, Soda storage, and Acid storage. Points were made of the eventual requirement for sufficient dike measures around the storage tanks.

The remediation procedures for CS_2-1 and AR-2 areas were discussed at the site and received a positive response from both the EPA and The State Waste Management personnel. R. Lathrope is the contact on all the clean-up slated for the Chemical Waste Management contract. The present approach taken by Avtex appears to be satisfactory in the opinion of Mr. Lathrope. He will forward, to the writer ,the Virginia Hazardous Waste regulations tomorrow. Written approval of clean-up plans is recommended, however; not required to initiate the clean-up effort. Turn around times on written authorization is 2- 4 weeks. Should a "hazardous" condition be discovered during clean-up it MUST be reported to the State and EPA and the proper clean-up effected.

The new "waste storage" area was reviewed in detail and deemed acceptable by both the EPA and the State. A recommendation was made that any "hazardous waste" NOT be stacked.

Five samples in the Polyester area were taken in duplicate with one set going to the EPA and the other to Avtex. Ms. Zawatowski accepted the samples. The attached sketch details location, ten photos were taken at the sample sites.

It the impression of the writer that the last two days have been positive and Avtex can "work" with the EPA and State regulatory commissions to effect a resolution.


Polymer dock area
27 SEPT 89
EPA samples
005
photos 9&10
surface soil
25'
EH
Sample 001
Photos 1&2
surface soil
002
photos 3&4
surface soil
003
photos 5&6
25'
typ.
004
photos 7&8
N

28 AUG 89
cc: F. L. Wickham

To: C. K. Wagner

From: P. J. Malina Jr.

Subject: Virginia State Water Control Board Visit

This letter is being written to document the Plant Visit of State Water Control Board officials and the Virginia State Police, today ; 28 AUG 89. Those in attendance were:

Tom Felby
William G. Maddox
Audrey Weber
"Mac" Sterrett
Charles Franklin- OSHA
Jack Johnson Jr. - OSHA

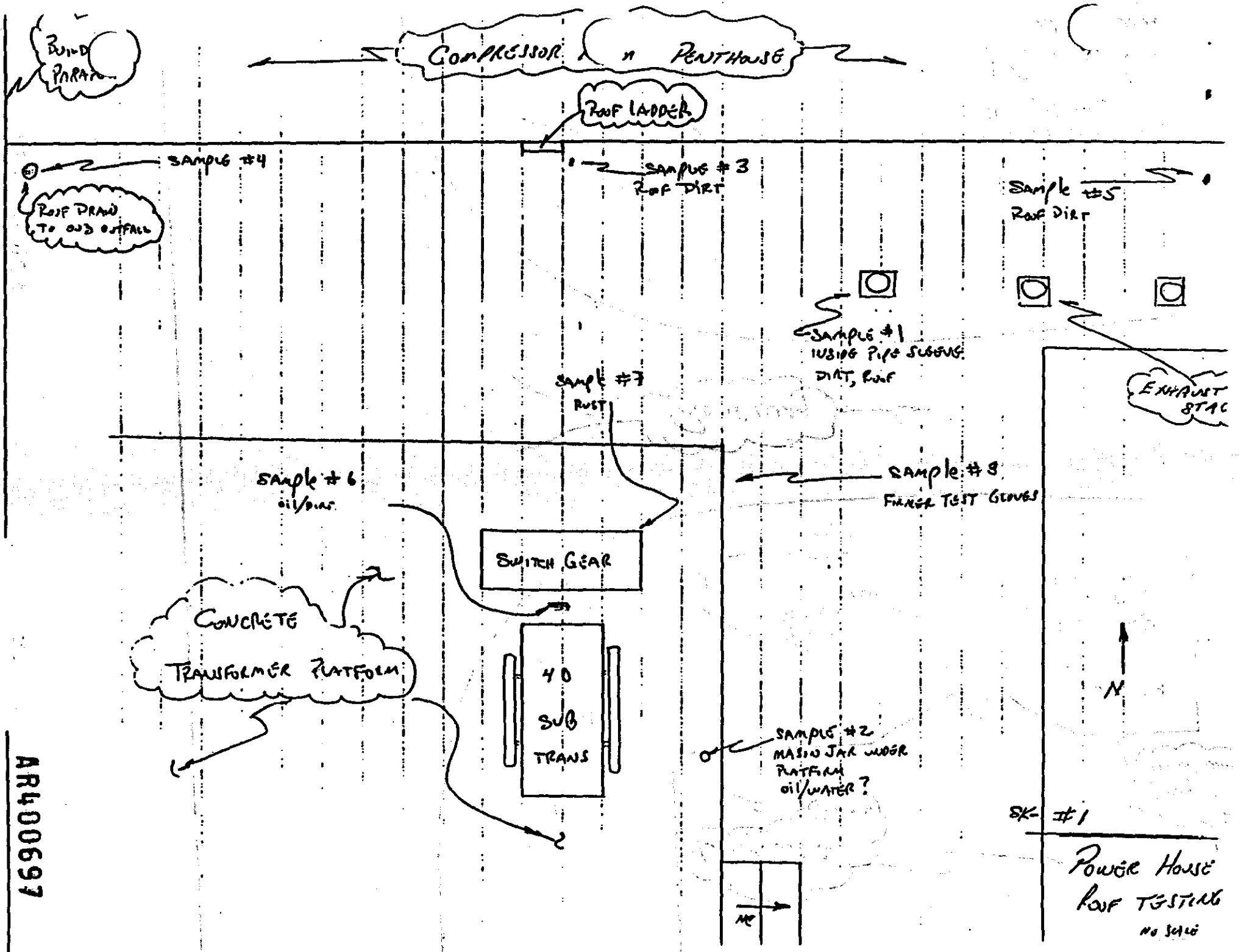
The task of the personnel from the VWCB was to sample the Power House Roof, various Suspect Plant areas, and the Polyester dock for the possibility of PCB contamination. Many of these areas have been sampled by S.D. Myers/ Transformer Consultants in the not too distant past, at the request of Avtex.

The task of the State Police was to obtain , by warrant , all Avtex files pertaining to PCB's for 1985 to the present. I remitted all files in my possession, and R. G. Histing had all those deemed pertenant , copied for our files. Transformer Consultants is aware of today's happenings and will supply duplicate copies of their files tommorrow.

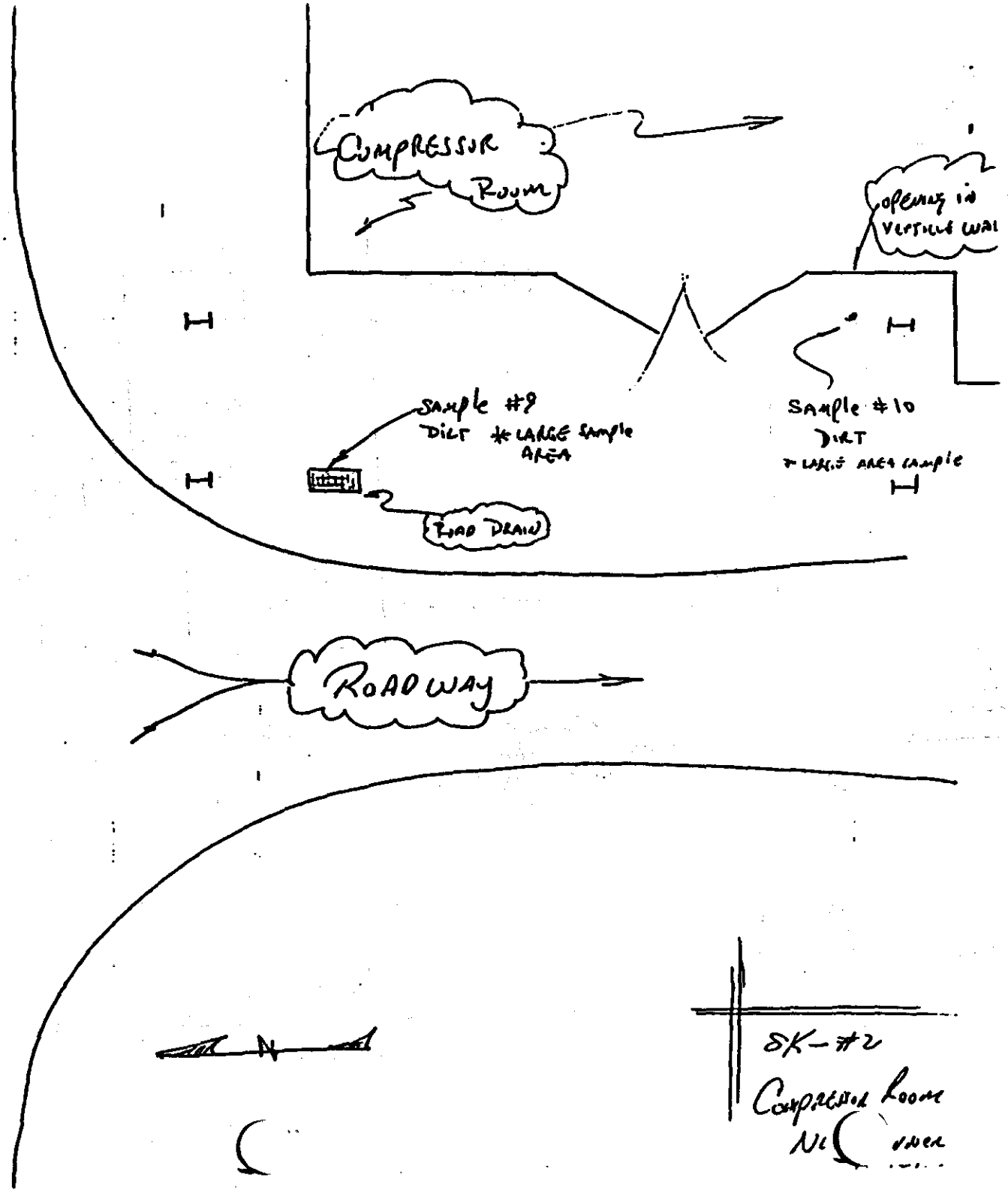
Per William G. Maddox ,the reason for today's activities are directly responsible to the finding of PCB's in the Shenandoah River; and the subsequent decision by the the State that Avtex is the cause. A total of eighteen (18) samples were taken. Sketches of locations are attached.

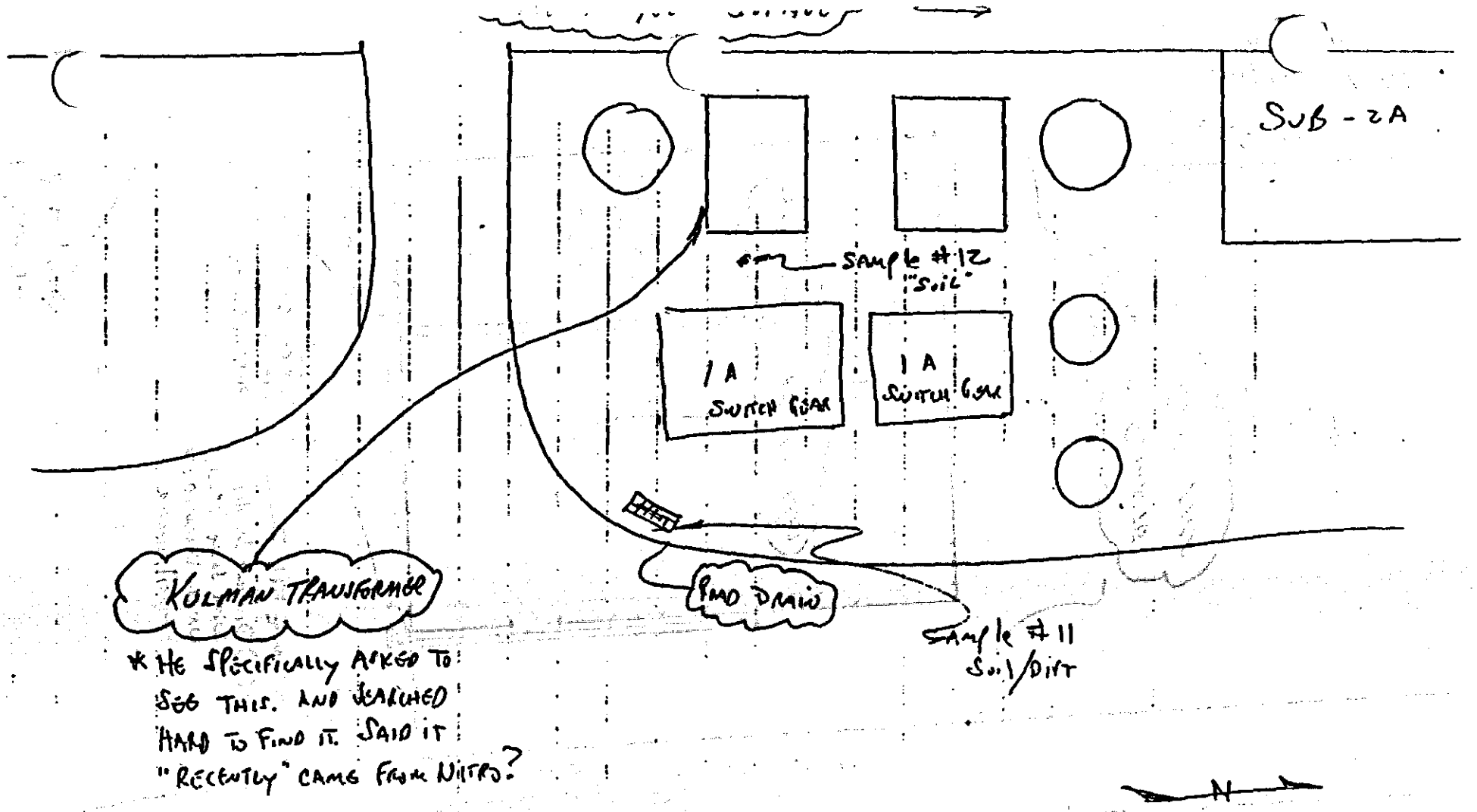
The State has an EPA approved lab in their Richmond office which will be conducting sample testing. Data is expected in Three (3) weeks. During the observation of sample taking , the writer feels samples were not taken as professionally as S. D. Myers personnel have done; and may result in erroneous data. Particular areas are noted on the sketches.

Please advise further direction. Possil ples by S. D. Myers?


Compressor & Penthouse
Roof Ladder
Sample #4
Roof Drain To Old Outfall
Sample #3
Roof Dirt
Sample #5
Roof Dirt
Sample #1
Using Pipe Sucking
Dirt, Roof
Exhaust Stac
Sample #7
Rust
Sample #6
oil/dirt
Sample #8
Finger Test Gloves
Switch Gear
Concrete
Transformer Platform
40
Sub
Trans
Sample #2
Mason Jar under
Platform
oil/water?
N
SK- #1
Power House
Roof Testing
No Scale

AR400697


COMPRESSOR ROOM
OPENING IN VERTICAL WAL
SAMPLE #9
DIRT * LARGE SAMPLE AREA
SAMPLE #10
DIRT
* LARGE AREA SAMPLE
ROAD DRAIN
ROADWAY
N
SK-#2
Compressor Room
NE Corner



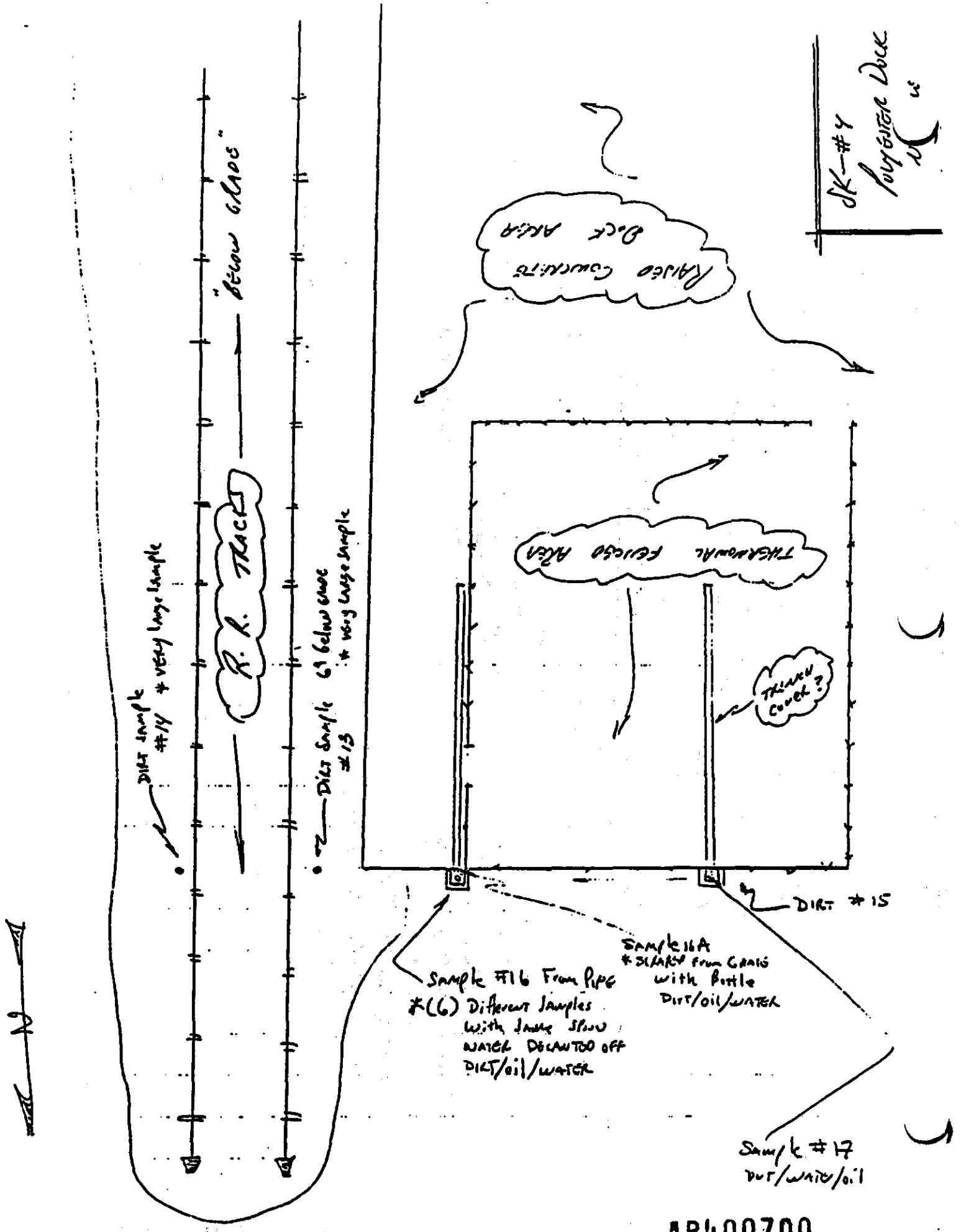
* HE SPECIFICALLY ASKED TO SEE THIS. AND SEARCHED HARD TO FIND IT. SAID IT "RECENTLY" CAME FROM NITRO?

SK-#3

SPARE SUB STORAGE OUTSIDE SUB 2-A

NO SCALE

AR400699


"Below Grade"
R. R. Track
Dirt Sample #14 * very large sample
Dirt Sample #13 69 below grade * very large sample
Raised Concrete Dock Area
Thermoman Fenced Area
Thermo Cover?
Dirt #15
Sample #16 From Pipe
*(6) Different Samples with Same Slow Water Decanted off Dirt/oil/water
Sample 16A
* Slurry from Crane with Bottle Dirt/oil/water
Sample #17
Dirt/water/oil
dk #4 Polyester Dock

AR400700

28 SEPT 89 cc: R. G. Histing

To: C. K. Wagner

From: P. J. Malina Jr.

Subject: EPA / VWCB visit 28 SEPT 89

This letter is being written to document today's activities with the EPA and State personnel. Those present were as follows:

R. E. Caron - EPA
M. W. Kaarlela - EPA TAT (independent consultant)
P. E. Herrera - EPA TAT (independent consultant)
S. Guilles - EPA TAT (independent consultant)

W. G. Maddox - VWCB
J. Hartman - VWCB

Avtex

C. K. Wagner
P. J. Malina Jr.

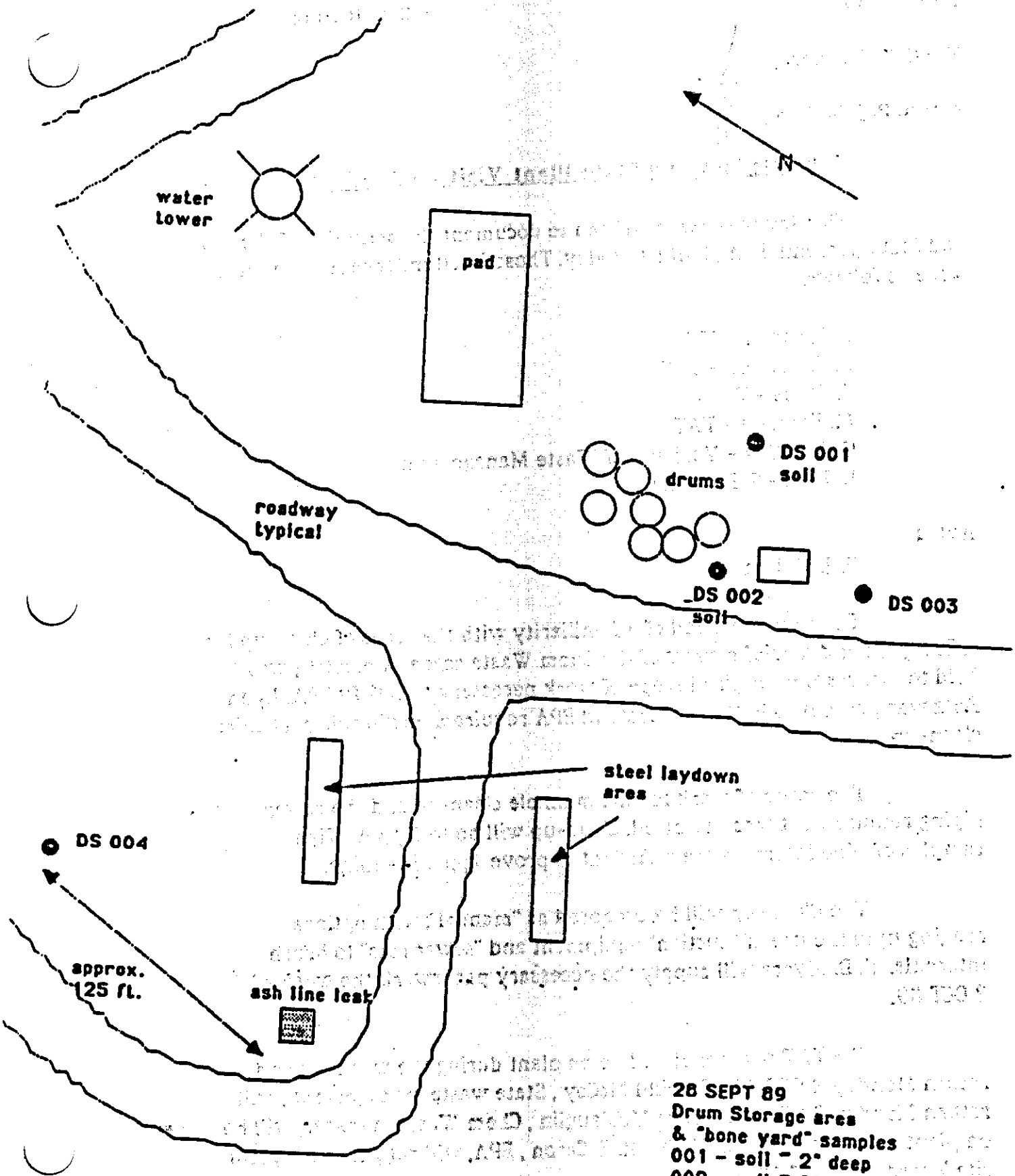
The State Water Control personnel were shown the three areas of process water repiping. The three areas being Soda Cooling water, Soft water backwash, and Power House process water. Other areas of investigation were presented by R. Lichliter. The State people did have a brief conversation with Mr. Caron of the EPA (content unknown).

The EPA personnel were concerned with sample taking in the old drum storage area. A sketch is attached detailing location of the four samples. Avtex received a duplicate soil sample of each. It should be noted that these samples, as was the case yesterday, are going to be sampled not only for PCB content, but the complete array of "hazardous waste" requirements. Should Avtex also sample for the same? This would require split samples to S. D. Myers and Chem Waste. Please advise.

R. Caron and the writer reviewed all process areas of clean-up on plantsite. He approves of the S. D. Myers and Chem Waste work in progress and has commented ..."things look good". He suggested that the "hydrocarbon waste" in areas of spills could be handled more economically in a biological manner. This remediation process is satisfactory with the EPA, however; it must be approved by the St[illegible] this approach should at least be investigated.

oil" drums are unsuitable for shippment. This is an acknowledged fact and Chem Waste will either re-drum or bulk load out after sampling. It should also be noted that during the relocation process a pallet failed and one drum "burst" spilling its contents. The EPA was present and sampled at the location.

The EPA will return tomorrow to further sample, observe, and investigate outfalls 003 & 004. The EPA TAT personnel will be on plantsite during the weekend to observe the S. D. Myers work. Lynn Fritz , R. E. Caron, and the writer will meet tomorrow to firm up a schedule for completion of the S. D. Myers work.



28 SEPT 89
Drum Storage area
& "bone yard" samples
001 - soil - 2" deep
002 - soil - 2" deep
003 - soil - 2" deep
[illegible] soil & water low

AR400703

29 SEPT 89 cc: R. G. Histing

To: C. K. Wagner

From: P. J. Malina Jr.

Subject: EPA and State Plant Visit 29 SEPT 89

This letter is being written to document the activities of the EPA and State personnel on plant site today. Those in attendance for site tours were as follows:

R. E. Caron - EPA
P. E. Herrera - TAT
S. Guille - TAT
M. Kaarlela - TAT
G. J. McCoy - Va. Dept. of Waste Management
L. Fritz - S. D. Myers

Avtex

P. J. Malina Jr.

The tour consisted of a familiarity with the areas of clean-up for S. D. Myers and a brief review of the Chem Waste scope. A meeting was held to discuss the required scope of work necessary to satisfy EPA. Lynn Fritz was present to better understand EPA requirements in this particular clean-up.

The scope of work for the manhole clean-up and the sewer piping requirement was reviewed. Clean-up will be to 1 ppm. Wipe samples of pipe internals are sufficient to prove 1ppm in piping.

The Clean-up will be proposed as "manual", with options ranging upto the use of "suction" equipment and "sewer rats" to brush internals. S. D. Myers will supply the necessary paperwork the week of 2 OCT 89.

The TAT personnel will be on plant during the weekend and return Monday 2 OCT 89. Gerould McCoy, State waste management, will return Monday 2 OCT 89. Bruce McGlauglin, Chem Waste manager, will be on plant site Monday, 2 OCT 89. R. E. Caron, EPA, will return to the plant site Tuesday, 3 OCT 89.

Chem Waste will "tank tightness" test UST Wednesday of next week. The State Boiler inspector check #2 Boiler 4 OCT 89 and review pressure vessel-

24 OCT 89
cc: R. H. Hughes
F. L. Wickham
T. Allen
J. Cosgrove

To: C. K. Wagner

From: P. J. Malina Jr.

Subject EPA and OSHA site visit 24 OCT 89

This letter is being written to document the EPA and OSHA tours on plant site. Those in attendance:

EPA
R. E. Caron
M. Kaarlela
T. Naquin
W. F. Lee
R. E. Claff-Science Applications International Corp. (new TAT)

P. J. Hawes, Jr.- OSHA

Avtex
D. Clark
N. Reed
C. Hinson
P. J. Malina Jr.

The tour began at No. 2 CS_2 pond, with R. E. Caron absent. Walter Lee brought up points about "violations" such as leaking valves, improper/illegable signs, severly washed out rail sections, concrete spalling and cracks in the pond walls. Mr. Lee feels the ponds are going to fall under RCRA laws and thereby require eventual remediation. His justification is the "possible" CS_2 laden water which is recycled back to the ponds during normal operation. This point would put Avtex in violation of Virginia law for operating a RCRA impoundment without a permit.

Matt Kaarlela and Troy Naquin sampled water at the outfall (staircase trough). A total of four samples were taken Avtex received two. Matt and Troy also videod and photograghed sample points and points of contention; such as concrete spalling and hoses draining to the ground. At the outfall of these hoses definite signs of "stressed vegetation" exists.

We proceeded to the No. 1 pond where samp and photographs were taken. A "biased sample" was tak

and debris floating atop the pond pool. The writer received a second set of samples for a total of four. These samples were turned over to Dr. Allen immediately after receipt.

It was noted and logged on film, that the west side of the pond wall is severely decayed and spalled to the point , several large gaps exist in the concrete. One is leaking profusely. A sample was taken here also.

R. E. Caron was present for this tour and stressed Mr. Lee's opinion of a RCRA violation. He stated , should the samples prove high in CS_2 content remediation will have to be according to RCRA laws and it will become part of the consent order. He suggested both ponds be eliminated and an above ground storage be set up with "state of the art" storage / handling facilities provided.

An OSHA representitive was on plant site due to a "complaint" that asbestos was present and posing a danger during the removal of the compressor room roof. A site visit proved this not to be the case. He apologized, photograhed an encapsulated pipe, and stated there "was no problem". He continued to harass Plant and contractor personnel through his own apparent ignorance, for several hours after this visit. The ordeal was settled to his satisfaction when Conco personnel supplied him with copies of sample data proving beyond a doubt that no asbestos was present in the "cork insulation" and its wrappings.

A new person from the EPA TAT team was on plant today to follow the TAT personnel around and become familiar with the scope of work past, present , and future. He, or someone from his firm will be on plant daily as soon as the ACO is signed and the present TAT personnel leave.

S. D. Myers found the transformers at the Allied plant to be unrepairable. They are being readied for disposal along with the capacitor bank within the sub station fence.

K. Markee Clay

AVTEX FIBERS FRONT ROYAL INC. INTEROFFICE

October 26, 1989

Memo to: Guards

cc: Staff & Dept. Heads
L. Osborne
M. Schryver

From: Dave Clark

Subject: Procedure for Handling Plant Visitors

Due to the plant's recent downsizing and subsequent reduction in force, it is necessary to re-emphasize the Plant's Visitor Policy.

The following procedures will be in force.

1. The names of those individuals requesting entry to the plant <u>must</u> be submitted to either Ms. Schryver (Ext. 179) or Ms. Osborne (Ext. 112) along with the following information:

   a. Name of company/agency they are representing;
   b. date and time of visit;
   c. Avtex contact person; and
   d. nature of visit.

2. Guards will be responsible for:

   a. Stopping and logging in all visitors;
   b. notifying Avtex contact person of their visitor's arrival and clearance;
   c. issue plant visitors pass with Visitor's name, date, time issued so indicated;
   d. Avtex contact person should either go to the gate to pick up their visitor or make arrangements to meet them at a central location;
   e. visitor should return their pass to the Guard on leaving the plant; and
   f. visitor's log sheet should continue to show time of arrival and departure for each visitor.

3. Visitor protocol for regulatory agencies as follows:

   a. GSX (consultants for Commonwealth of Virginia) to be handled per memo T.C. Allen dated 10/23/89.

b. EPA and their contractors are to be allowed into the plant, but upon exiting the plant need to state when they will be returning or who will be taking their place.

c. State regulatory agencies will be kept at the Guard house until an Avtex employee or their consultant arrives to escort them into the plant.

4. Visitor protocol for Avtex consultants as follows:

a. Avtex consultants are requested to submit the names of their personnel who will be on site to Ms. Schryver (Ext. 179) or Ms. Osborn (Ext. 112) for notification to the Guards.

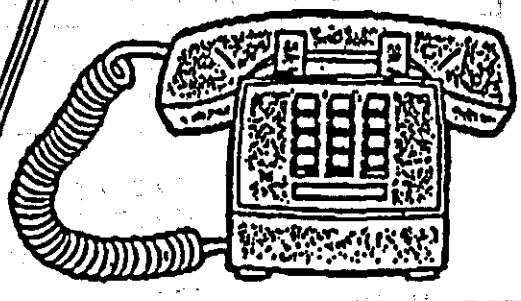
b. Daily passes are to be issued and returned for all consultant personnel with drive-in privileges.

If questions arise, please contact the writer.

David E. Clark
Vice President of Manufacturing
and Human Resources

Distribution:
Ahlers, E.W. (40)
Allen, T.C. (R&D)
Bowen, L.B. (40)
Brinklow, T. (40)
Clark, D.E. (Visc.)
Cooper, R.A. (Visc.)
overston, J.J. (40)
ehlers, P.W. (Mgr's)
Hicks, W.T. (Ship.)
Hinson, C. (Safety)
Histing, R. (40)
Hughes, P. (Corp.)
Knepp, W.H. (Purch)
Licklider, R. (PrdSe)
Markee, R.S. (Corp.)
Mills, D.W. (PP)
Reed, A.K. (E.R.)
Smith, C.H. (Acid)
Snapp, H.A. (Tech.)
Stevens, R. (Accnt)
Toothman, D. (Stores)
Tousignant, D. (Corp)
Wagner, C.K. (Corp.)
Wickham, F. (Corp.)
Woodson, L. (D/D)
Radomsky, S Tech.
Brinklow-ACTWU
Guards
Beulke, M. (Tech)
Jackson, R. (Spin.

AVTEX FIBERS FRONT ROYAL INC.
Box 1169, Kendrick Lane, Front Royal, VA 22630-1169 (703) 635-2141



TELECOPIER COVER SHEET

DATE: 23 OCT 89

TO: Tim Mock

FROM: P. J. MALUNA JR.

PAGES: 2 INCLUDING COVER SHEET

IF THERE ARE ANY PROBLEMS AND/OR QUESTIONS, CALL 703/635-2141 AND ASK FOR THE SENDER.

HAVE A GOOD DAY!

AVTEX FIBERS FRONT ROYAL INC.

PURCHASE ORDER

FORM 154 REV. 9/84

Ship to and Bill in Duplicate

AVTEX FIBERS FRONT ROYAL INC.

PO BOX 1169 KENDRICK LANE
FRONT ROYAL, VA. 22630

Important—All shipping papers, invoices and bills of lading mu
Order Number and be sent direct to Consignee at destination.

PURCHASE ORDER NO. FR9-10996
RELEASE NO. 000

TO: CHEMICAL WASTE MANAGEMENT INC.
100 NASSAU PARK BLVD

PRINCETON NJ 08540

Purchase Order Date	9/06/89
Vendor Number	00277 01
Terms of Payment	AS ARRANGED
F.O.B.	DELD
Ship Via	N/A
Shipping terms	YOUR ACCOUNT PREPAID

UANTITY & UNIT	ARTICLE	UNIT PRICE	TOTAL
1 LOT	CONTRACT TO PERFORM NECESSARY ENVIRONMENTAL CLEAN-UP & UNDERGROUND STORAGE TANK COMPLIANCE TO EPA REGULATIONS.	.00	.00
	.		
	EACH PHASE WILL NOT BEGIN UNTIL A BUDGET ESTIMATE IS SUBMITTED AND APPROVED BY AVTEX FIBERS.		
	W/O 08399 7-8842-50100-070 SYMBOL> NS-04-7090		
	E/O 1 LOT		

DELIVERY DATE: 1995
TO: P J MALINA JR.
USE: PLANT WIDE

/
/
\\ CONFIRMING TO: MOLLY CLARK 8/31/89
.
NOTE: INVOICE EVERY TWO (2) WEEKS DIRECTLY TO: C. K. WAGNER

] Taxes applicable [X] Tax exempt 300-996301-5
Exemption certificate number

P/O TOTAL .00

ddress all correspondence relating to this order to:
) FIBERS FRONT ROYAL INC.
o address
k. Purchasing Department

Purchasing A

W. H. NEPP

he Equal Opportunity clause in Sectic
1246, or as may be amended, relati
pportunity and such implementing R
ay be issued by the Secretary of
erein by specific reference.

AR400710

Please read the reverse side hereof carefully. By shipping the above goods or by acknowledging receipt of this order or by performing the above work you agree to the terms and conditions of sale set forth on the reverse side hereof as well as those set forth on the face hereof. These terms and conditions constitute an offer by the buyer and may only be accepted on the exact terms set forth and no other terms and conditions shall be controlling; and those terms and conditions supersede the terms and conditions of your proposal or acknowledgment form, if any.

STEAM KAT HAZ MAT

OF VIRGINIA

STORM SEWER CLEANING PROJECT

Interim Report

AVTEX FIBERS

Front Royal, VA

Storm Sewer Cleaning Project

Interim Report

1. Purpose:

The purpose of this interim report is to describe the operations of Steam Kat during the storm sewer cleaning at Avtex Fibers, Front Royal, VA, from October 5 through October 18, 1989.

2. Description of Operations:

Storm sewer cleaning operations were coordinated closely with in-plant maintenance personnel to block storm sewers, divert water and provide support such as water and electricity. Water was diverted primarily by blocking specific storm sewers with air bags and pumping water to other sewer systems.

Personnel and equipment were mobilized on October 5 and 6. Beginning on October 6, manholes were checked with a combined gas monitor (oxygen level, toxic gases and explosive atmospheres) and an H Nu photoionization trace gas analyzer then entered for cleaning. Work crews wore EPA/OSHA Level C or Level B personal protective equipment (PPE) depending on the task to be completed. High pressure hydro cleaning equipment was used to clean manholes and connecting storm sewers. Removal of water and debris was done with vacuum trucks. All surfaces were triple rinsed with commercial cleaning products designed to remove oils, greases and other hydrocarbons from concrete and brick surfaces. Solids removed from manholes and storm sewers were bulked and staged in a contaminated area on-site for later disposal with other materials. Water removed from the system was placed in an on-site storage tank for later treatment or disposal as appropriate. Twenty-four hour operations began at 8:00 AM Friday, October 6, and continued until all storm sewers and manholes between the plant and the outfall at the river were cleaned. The outfall was reached at approximately 6:00 AM, Thursday, October 12. Sampling was completed as cleaning progressed. Originally, one sample was taken from the center of each manhole. If contamination was found, the manhole was recleaned and sampled on a seven point hexagonal grid in accordance with EPA guidance documents. Samples were delivered to S.D. Myers personnel on-site for shipment and analysis.

Designated areas were recleaned with both high pressure and hand scrubbing. Contamination in some manholes was reduced to below detectable levels. Other manholes have residual contamination as of the date of this report. Work continues.

One section, approximately 700 feet long, in the coal yard on the east side of the power plant was cleaned by Jet Blast of Hopewell, VA, to remove the bulk of the coal dust and calcium deposits prior to chemical cleaning by Steam Kat.

Before being demobilized from the site, all vacuum trucks, pumps

and any other equipment that had been used to handle contaminated or suspect-contaminated debris or water from the storm sewers was decontaminated by high pressure equipment or hand cleaning. Residues from this decontamination as well as used PPE was staged for later disposal.

AVTEX FIBERS FRONT ROYAL INC.
Box 1169, Kendrick Lane, Front Royal, VA 22630-1169 (703) 635-2141

CERTIFIED

FAXED 11/6/89

November 6, 1989

Mr. Harry T. Daw
Enforcement Project Manager
U: S. Environmental Protection Agency
Enforcement and Title III Section (3HW33)
841 Chestnut Building
Philadelphia, PA 19107

Dear Mr. Daw:

During your visit to Front Royal last week, you asked that we not ship out anything for disposal until you had received our Workplan. However, when Mr. Caron was on site, he specifically told us not to hold up any clean up activity awaiting either an Administrative Order or a Court Order.

Therefore, we contracted with Chem Waste Management Inc. to dispose of certain empty drums and a quantity of drums of used oil and water. Today, they brought in two (2) trucks to begin removal of the oil and water. If these trucks are not permitted to leave, the cost to Avtex will be excessive.

I have tried since early this morning to contact either you or Karen Walper concerning the need to release these trucks and since oil and water mixtures are not considered hazardous material, we plan to release this shipment as of 2:00 p.m. today (11/6/89).

Sincerely,

C. Kenneth Wagner
Executive Vice President - Engineering
Avtex Fibers Front Royal Inc.
Front Royal, VA 22630

CKW/ms

cc: Karen Walper - EPA - Philadelphia
Paul Malina - Avtex
Ralph Markee - "
Pat Hughes - "

I certify that the information contained in or accompanying this letter is true, accurate and complete.

Signature _____

Name: C. K. Wagner

Title: Ex. Vice President - Engineering

AVTEX FIBERS FRONT ROYAL INC.
AVTEX FIBERS SITE

APPENDIX C
MANIFESTS/WASTE MATERIAL REMOVAL STATEMENTS
AND MATERIAL SAFETY DATA SHEETS

ADMINISTRATIVE ORDER
Docket No. III-90-01-DC

Prepared for U.S. Environmental Protection Agency
Hazardous Waste Management Division

Region III

November 7, 1989

AVTEX FIBERS FRONT ROYAL INC.
Kendrick Lane
P.O. Box 1169
Front Royal, Virginia 22630

AVTEX FIBERS FRONT ROYAL INC.
AVTEX FIBERS SITE

WORK PLAN

WASTE REMOVAL STATEMENT

Section 8.13

Avtex will not remove any waste materials from the Site except in conformance with the terms of this order and any applicable Federal, state or local laws or regulations.

ADMINISTRATIVE ORDER

Docket III-90-010-DC

Prepared for

U. S. Environmental Protection Agency

Region III

November 1989

AVTEX FIBERS FRONT ROYAL INC.
Kendrick Lane
P. O. Box 1169
Front Royal, Virginia 22630

MONSANTO PRODUCT NAME

Polychlorinated Biphenyls (PCBs)

MONSANTO COMPANY
800 N. LINDBERGH BLVD.
ST. LOUIS, MO 63167

Emergency Phone No.
(Call Collect)
314-694-1000

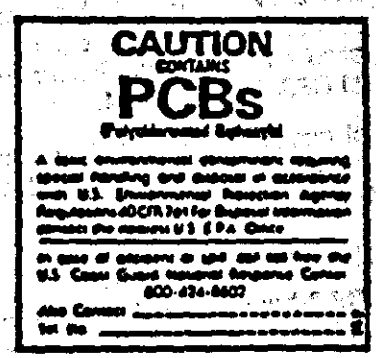
PRODUCT IDENTIFICATION

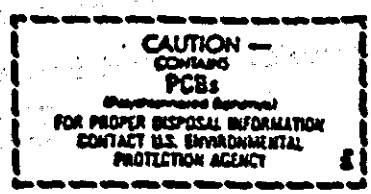
The following materials contain 99.9% or greater PCBs. For information about other ingredients in formulations containing PCBs, contact the manufacturer of those ingredients.

Synonyms:	PCBs Chlorodiphenyl (__% Cl) Chlorinated biphenyl Polychlorinated biphenyl Chlorinated biphenyls (approx. __% Cl)
Trade Names *(Commonly used Monsanto products)*	Askarel™ Aroclor®' Series 1016, 1221, 1232, 1242, 1248, 1254, 1260 Therminol®' FR Series
CAS No.:	001336363, 053469219, 012672296, 011097691, 011096825 and others

WARNING STATEMENTS

Federal regulations under the Toxic Substances Control Act require PCBs and PCB items to be marked. (Check regulations for details.)





PRECAUTIONARY MEASURES

Care should be taken to prevent entry into the environment through spills, leakage, use, vaporization, or disposal of liquid or containers. Avoid prolonged breathing of vapors or mists. Avoid contact with eyes or prolonged contact with skin. If skin contact occurs, remove by washing with soap and water. Following eye contact, flush with water. In case of spillage onto clothing, the clothing should be removed as soon as practical, skin washed, and clothing laundered. Comply with all federal, state, and local regulations.

EMERGENCY AND FIRST AID PROCEDURES

Ingestion: Consult a physician. Do not induce vomiting or give any oily laxatives. NOT PHYSICIAN—If large amounts are ingested, gastric lavage is suggested.

Skin: If liquid or solid PCBs are splashed or spilled on skin, contaminated clothing should b removed and the skin washed thoroughly with soap and water. NOTE T PHYSICIAN—Hot PCBs may cause thermal burns.

Eyes: Eyes should be irrigated immediately with copious quantities of running water for a least 15 minutes if liquid or solid PCBs get into them. A petrolatum-based ophthalmic ointment may be applied to the eye to relieve the irritating effects of PCBs.

Inhalation: Remove to fresh air. If skin rash or respiratory irritation persists, consult a physician. NOTE TO PHYSICIAN—If electrical equipment arcs over, PCBs or other chlorinatec hydrocarbon dielectric fluids may decompose to produce HCl, hydrochloric acid, a respiratory irritant.

OCCUPATIONAL CONTROL PROCEDURES

Eye Protection: Wear chemical splash goggles and have eye baths available where there is significant potential for eye contact.

Skin Protection: Wear appropriate protective gloves and protective clothing that provide a barrier to prevent skin contact. Consult glove manufacturer to determine appropriate type glove for given application. Wear chemical safety goggles and a face shield and a protective apron that provides a barrier when splashing is likely. Wash immediately if skin is contaminated. Remove contaminated clothing promptly and launder before reuse. Clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash thoro after handling.

ATTENTION: Repeated or prolonged contact may cause chloracne in some people.

Respiratory Protection: Avoid breathing vapor or mist. Use NIOSH/MSHA approved equipment when airborne exposure limits are exceeded. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical splash goggles. Consult respirator manufacturer to determine type equipment for given application. The respirator use limitations specified by NIOSH/MSHA or the manufacturer must be observed. High airborne concentrations may require use of self-contained breathing apparatus or supplied air respirator. Respiratory protection programs must be in compliance with 29 CFR Part 1910.134.

Ventilation: Provide ventilation to control exposure levels below airborne exposure limits. Use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Airborne Exposure Limits: Chlorinated biphenyl (approximately 42% chlorine)

OSHA PEL: 1 mg/m³ 8-hour time-weighted average - Skin*
ACGIH TLV®: 1 mg/m³ 8-hour time-weighted average - Skin*
2 mg/m³ short-term exposure limit - Skin*

Chlorinated biphenyl (approximately 54% chlorine)

OSHA PEL: 0.5 mg/m³ 8-hour time-weighted average - Skin*
ACGIH TLV®: 0.5 mg/m³ 8-hour time-weighted average - Skin*
1 mg/m³ short-term exposure limit - Skin*

**Skin notation means that skin absorption of this material may add to the overall exposure. Avoid skin contact.*

FIRE PROTECTION INFORMATION

Fire and Explosion: PCBs are fire-resistant compounds. They may decompose to form CO, CO_2, HCl, phenolics, aldehydes and other toxic combustion products under severe conditions such as exposure to flame or hot surfaces.

At temperatures in the range of 600-650°C in the presence of excess oxygen PCBs may form polychlorinated dibenzofurans (PCDFs). Laboratory studies under similar conditions have demonstrated that PCBs do *not* produce polychlorinated dibenzo-p-dioxins (PCDDs).

PCBs in electrical equipment have been reported to produce both chlorinated dioxins (PCDDs) and furans (PCDFs) during fire situations. These combustion products may result all, or in part, from non-PCB components of the dielectric fluids or other combusted materials. Consult the equipment manufacturer for information regarding composition of the dielectric fluids in electrical apparatus.

Standard fire fighting wearing apparel and self-contained breathing apparatus should be worn when fighting fires that involve possible exposure to chemical combustion products. Fire fighting equipment should be thoroughly cleaned and decontaminated after use.

If a PCB transformer is involved in fire-related incident, the owner of the transformer may be required to report the incident. Consult and follow appropriate federal, state, and local regulations.

REACTIVITY DATA

PCBs are very stable, fire-resistant compounds.

HEALTH EFFECTS SUMMARY

Skin Contact: PCBs can be absorbed through intact skin. Local action on skin is similar to that of common organic solvents where contact leads to removal of natural fats and oils with subsequent drying and cracking of the skin. A potential exists for the contracting of chloracne.

Eye Contact: The liquid products and their vapors are moderately irritating to eye tissues.

Ingestion: The acute oral toxicities of the undiluted compounds are: LD_{50} rats—8.65 gm/kg for 42% chlorinated, and 11.9 gm/kg for 54% chlorinated—"slightly toxic."

Inhalation: Animal experiments of varying duration and at different air concentrations show that for similar exposure conditions, the 54% chlorinated material produces more liver injury than the 42% chlorinated material.

Other: There are literature reports that PCBs can impair reproductive functions in monkeys. A study reported in the literature with female rats using Aroclor® 1260 stated that Aroclor 1260 caused liver cancers. Monsanto sponsored animal feeding studies of Aroclor 1242, 1254 and 1260. These compounds, fed to both sexes of rats, did not produce cancers. The National Cancer Institute performed a study in 1977 using Aroclor 1254 with both sexes of rats. NCI stated that the PCB, Aroclor 1254, was not carcinogenic under the conditions of their bioassay.

(Health Effects Summary Continued On Next Page)

HEALTH EFFECTS SUMMARY (Continued)

The consistent finding in animal studies with PCBs is that they produce liver inj lowing prolonged and repeated exposure by any route, if the exposure is of sufficien degree and duration. Liver injury is produced first, and by exposures that are less thar those reported to cause cancer in rodents. Therefore, exposure by all routes shoulc be kept sufficiently low to prevent liver injury.

Numerous epidemiological studies of humans, both occupationally exposed and non-worker environmentally exposed populations, have not demonstrated any statistically significant causal relationship between PCB exposures and chronic human illnesses such as cancer or neurological or cardiovascular effects. Nor was there any increase in overall cancer mortality as a result of PCB exposure. PCBs can cause dermatological symptoms; however, these are reversible upon removal of exposure source.

PCBs are identified as hazardous chemicals under criteria of the OSHA Hazard Communication Standard (29 CFR Part 1910.1200). The Standard requires that this document mention that PCBs have been listed in the International Agency for Research on Cancer (IARC) Monographs (1982)-Group 2B and in the National Toxicology Program (NTP) Annual Report on Carcinogens (Third).

PHYSICAL DATA

Properties of Selected Aroclors[6]

Property	1016	1221	1232	1242	1248	1254	1260
Color (APHA)	40	100	100	100	100	100	150
Physical state	mobile oil	mobile oil	mobile oil	mobile oil	mobile oil	viscous liquid	sticky resin
Stability	inert	inert	inert	inert	inert	inert	inert
Density (lb/gal 25°C)	11.40	9.85	10.55	11.50	12.04	12.82	13.50
Specific gravity w/15.5°C	1.36-1.37 x-25°	1.18-1.19 x-25°	1.27-1.28 x-25°	1.30-1.39 x-25°	1.40-1.41 x-65°	1.49-1.50 x-65°	1.55-1.56 x-90°
Distillation range (°C)	323-356	275-320	290-325	325-366	340-375	365-390	385-420
Acidity mg KOH/g. maximum	.010	.014	.014	.015	.010	.010	.014
Fire point (°C)	none to boiling point	176	238	none to boiling point	none to boiling point	none to boiling point	none to boiling point
Flash point (°C)	170	141-150	152-154	176-180	193-196	none	none
Vapor pressure (mm Hg @ 100°F)	NA	NA	0.005	0.001	0.00037	0.00006	NA
Viscosity (Saybolt Univ. Sec. @ 100°F)	71-81	38-41	44-51	82-92	185-240	1800-2500	—

NA - Not Available

SPILL, LEAK & DISPOSAL INFORMATION

Disposal of liquid PCBs and other PCB items is strictly regulated by the federal government. The regulations are found at 40 CFR Part 761. Consult these regulations as well as applicable state and local regulations prior to any disposal of PCBs, PCB items, or PCB-contaminated items.

If PCBs leak or are spilled, the following steps should be taken immediately:

All non-essential personnel should leave the leak or spill area.

The area should be adequately ventilated to prevent the accumulation of vapors.

The spill/leak should be contained. Loss to sewer systems, navigable waterways and streams should be prevented. Spills/leaks should be removed promptly by means of absorptive material, such as sawdust, vermiculite, dry sand, clay, dirt or other similar materials, or trapped and removed by pumping or other suitable means (traps, drip-pans, trays, etc.).

Personnel entering the spill or leak area should be furnished with appropriate personal protective equipment and clothing as needed. See Occupational Control Procedures section of this MSDS.

Personnel trained in the emergency procedures and protected against the attendant hazards should shut off sources of PCBs, clean up spills, control and repair leaks and fight fires in PCB areas.

All wastes and residues containing PCBs (e.g., wiping cloths, absorbent material, used disposable protective gloves, clothing, etc.) should be collected, placed in proper containers, marked and disposed of in the manner prescribed by EPA regulations (40 CFR Part 761) and applicable state and local regulations.

Various federal, state, and local regulations may require reporting of PCB spills and may also define spill clean-up levels. Consult your attorney or appropriate regulatory officials for information relating to spill reporting and spill clean-up.

ADDITIONAL COMMENTS

Polychlorinated Biphenyls

For regulatory purposes, under the Toxic Substances Control Act the term "PCBs" refers to a chemical substance limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contain such substance (40 CFR Part 761).

Chemically, commercial PCBs are defined as a series of technical mixtures, consisting of many isomers and compounds that vary from mobile oily liquids to white crystalline solids and hard non-crystalline resins. Technical products vary in composition, in the degree of chlorination and possibly according to batch.

The mixtures generally used contain an average of 3 atoms of chlorine per molecule (42% chlorine) to 5 atoms of chlorine per molecule (54% chlorine). They are used as components of dielectric fluids in transformers and capacitors. Prior to 1972, PCB applications included heat transfer media, hydraulic and other industrial fluids, plasticizers, carbonless paper, paints, inks and adhesives. Federal regulations specify that non-totally enclosed PCB activities are permitted only if specifically exempted or authorized. (40 CFR Part 761).

CAS No. 001336363: For general class of compounds

(Additional Comments Continued On Next Page)

ADDITIONAL COMMENTS (Continued)

Trade Names/Common Names

**ASKAREL - Generic name for a broad class of fire-resistant synthetic chlorinated hydrocarbons and mixtures used as dielectric fluids that commonly contained about 30-70% PCBs. Some ASKAREL fluids contained 99% or greater PCBs.

PYRANOL[a] and INERTEEN[b] are trademarks for commonly used dielectric fluids that may have contained varying ratios of PCBs as well as other components including chlorinated benzenes.

[a] Registered trademark of Monsanto Company
[b] Registered trademark of General Electric Company
[c] Registered trademark of Westinghouse Electric Corporation

This list of trade names is representative of several commonly used Monsanto products (or formulated with Monsanto products). Other trademarked PCB products were marketed by Monsanto and other manufacturers. PCBs were also manufactured and sold by several European and Japanese companies. Contact the manufacturer of the trademarked product directly, if not in this listing, to determine if the formulation contained PCBs and its composition.

DATE: 10/15/85 **REVISED:** **SUPERSEDES:** All prior to 10/15/85
MSDS NO.: G 4048

FOR ADDITIONAL NON-EMERGENCY INFORMATION, CONTACT:

John H. Craddock
Product & Environmental Safety Director

Robert G. Kaley, II
Product & Environmental Safety Manager

Environmental Policy Staff
Monsanto Company
800 North Lindbergh Boulevard
St. Louis, Missouri 63167
(314) 694-4764

Material Safety Data Sheet*

AKZO

Chemical Division

SODIUM HYDROSULFIDE SOLUTION
(45% SOLUTION IN WATER)

This Material Safety Data Sheet (MSDS) meets the requirements of the federal OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Controlled Product Regulation, WHMIS classified; D-1B, D-2B, E.

New Issue 3/89
Supersedes Issue Dated 11/87
MSDS No. 984722/SOD090
PIN: UN2922

EMERGENCY TELEPHONE NUMBERS

Transportation Emergencies:

USA-CHEMTREC: 1-800-424-9300
CANADA-CANUTEC: 613-996-6666

All Other Emergencies Call:
312-906-7054

I. PRODUCT IDENTIFICATION/COMPOSITION

COMPOSITION:

Sodium Hydrosulfide (45%), CAS Registry Number: 16721-80-5, CAS Index Name: Sodium Sulfide (9CI).

Water (55%)

SYNONYMS:

Sodium bisulfide; Sodium hydrogen sulfide; Sodium sulfhydrate; NASH.

FORMULA: NaHS - Aqua

FORMULA WEIGHT: 56.07 - Aqua

II. PHYSICAL/CHEMICAL PROPERTIES

The following represent all available, applicable physical hazard data on this product.

PHYSICAL/STATE DESCRIPTION:

Pale yellow liquid at 68°F (20°C) with odor characteristic of rotten eggs.

SPECIFIC GRAVITY (WATER = 1):

1.314 at 60°F (15.6°C)

FREEZING POINT:

63°F (17.2°C)

SOLUBILITY:

Soluble in water and alcohols

pH: 9-12 (45% solution)

III. CHEMICAL REACTIVITY

Solution reacts with all acids, including weak organic acids, liberating poisonous hydrogen sulfide gas. It also reacts with oxidizing agents to precipitate elemental sulfur. Solution can be diluted with water in all proportions and is miscible with alcohols. This product is not sensitive to physical impact.

In Canada: Akzo Chemicals Ltd., 100 University Avenue, Ste. 908,
Toronto, Ontario M5J 1V6

*referred to as a Product Safety Information Sheet

Akzo Chemicals Inc.
300 S. Riverside Plaza
go, Illinois 60606
906-7500

IV. STABILITY

Upon warming the aqueous solution, poisonous hydrogen sulfide gas will evolve with increasing temperature. Because sodium hydrosulfide solutions are shipped hot, the vapor space of containers normally will contain hydrogen sulfide gas. Exposure of sodium hydrosulfide solution to air will cause some oxidation.

V. FIRE HAZARD

Not considered flammabl: or combustible. However, under fire conditions decomposes to give off poisonous hydrogen sulfide gas. Once liberated, hydrogen sulfide will burn and has an explosive range of 4.3 - 45% in air. It is not sensitive to static discharge.

VI. FIREFIGHTING TECHNIQUES

Vapors from combustion are irritating to the respiratory tract and may cause breathing difficulty and pulmonary edema. Symptoms may be delayed several hours or longer depending upon the extent of exposure.

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate nonessential personnel from the fire area. Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing.

Use standard firefighting techniques to extinguish fires involving this material. Use water spray, dry chemicals or carbon dioxide.

If not leaking, use a water spray to keep fire-exposed containers cool to prevent rupture due to excessive heat. High pressure water hose may spread product from broken containers increasing contamination or fire hazard.

If hydrogen sulfide is evolved and is burning, it should be allowed to burn until the fire causing the decomposition of sodium hydrosulfde solution is extinguished.

Do not allow runoff to enter sewers, public waterway or any area where acids may be present. Diking procedures should be implemented for containment purposes. (See SECTION XI: SPILL HANDLING.)

Contaminated buildings, areas and equipment must not be used until they are properly decontaminated.

VII. TOXICOLOGY

INGESTION:

The acute oral LD50 is 58.4 mg/kg in male rats. A single oral dose of 50 mg/kg produced hyperactivity immediately after dosing followed by a moderate to severe decrease in physical activity and 30 percent mortality in male rats.

SKIN CONTACT:

The acute dermal LD50 is greater than 200 mg/kg in rabbits. A single dermal application of 200 mg/kg did not produce signs of toxicity or mortality in rabbits.

Corrosive to rabbit skin following a 4-hour exposure.

T-1861, T-4054, T-6307

VIII. HUMAN HEALTH

DANGER: Causes burns to skin and eyes. Can cause death if swallowed. Do not breath vapor. Do not get in eyes, on skin or on clothing.

Inhalation of sodium hydrosulfide mist may produce respiratory irritation and coughing. Sodium hydrosulfide can dissociate or be acidified to form poisonous hydrogen sulfide gas which inhaled may cause headache, dizziness, nausea and vomiting. Exposure to high concentrations of hydrogen sulfide may cause loss of consciousness, pulmonary edema, respiratory failure and death. Although hydrogen sulfide has a characteristic odor of rotten eggs, high concentrations rapidly "deaden" the sense of smell, thus making odor a very unreliable means of protecting against overexposure.

Contact of the solution with the skin may produce burns. Repeated exposure to low concentrations of the solution or mists may result in dermatitis.

Splashes of solution or mist may produce eye irritation or burns and tears. Prolonged contact may cause corneal injury.
Ingestion of the solution may cause severe burning of the throat and digestive tract, followed by abdominal pain, nausea, vomiting and diarrhea. In severe cases, loss of consciousness and respiratory paralysis or death may occur.

IX. FIRST AID

CALL A POISON CENTER OR A PHYSICIAN IMMEDIATELY.

If a known exposure occurs or is suspected, immediately initiate the recommended procedures below. Simultaneously contact a Poison Center, a physician or the nearest hospital. Inform the person contacted of the type and extent of exposure, describe the victim's symptoms and follow the advice given.

INGESTION:

If swallowed, immediately give several glasses of water, and induce vomiting by gagging the victim with a finger placed on the back of the victim's tongue. Give fluids until vomitus is clear. If victim is unconscious or convulsing, do not induce vomiting or give anything by mouth.

SKIN CONTACT:

Under a safety shower, immediately flush all affected areas with large amounts of running water for at least 15 minutes. Remove contaminated clothing and shoes. Do not attempt to neutralize with chemical agents. Get medical attention immediately. Wash clothing before reuse.

EYE CONTACT:

Immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water. Do not attempt to neutralize with chemical agents. Obtain medical attention immediately. Oils or ointments should not be used. Continue the flushing for an additional 15 minutes if a physician is not immediately available.

INHALATION:

Remove to fresh air. If not breathing, clear victim's airway and start mouth-to-mouth, artificial respiration which may be supplemented by the use of a bag-mask respirator or a manually triggered oxygen supply capable of delivering one liter per second or more. Once breathing is restored, provide alternately 100% oxygen and amyl nitrate. Give the victim 100% oxygen from a demand-type or a continuous-flow inhaler, preferably with a physician's advice. Break an amyl nitrate pearl (ampule) in a cloth and hold it close to a victim's mouth and nose for 15-30 seconds. Remove cloth and let victim breathe oxygen for 30 seconds. Repeat this procedure five times at 30 second intervals for each amyl nitrate pearl. Repeat as necessary using a fresh amyl nitrate pearl every 5 minutes until 3 or 4 additional pearls have been given. If victim stops breathing at any time, restart artificial respiration. Get medical attention immediately.

X. INDUSTRIAL HYGIENE

The recommendations described in this section are provided as general guidance for minimizing exposure when handling this product. Because use conditions will vary depending upon customer applications, specific safe handling procedures should be developed by a person knowledgeable of the intended use conditions and equipment. During the development of safe handling procedures, consideration should be given to the need for cleaning of equipment and piping systems to render them nonhazardous before maintenance and repair activities are performed. Waste resulting from these procedures should be handled in accordance with SECTION XIV: DISPOSAL OF MATERIAL/ CONTAINER.

ENGINEERING CONTROLS:

In those cases where engineering controls are indicated by the use conditions, the following traditional exposure control techniques may be used to effectively minimize employee exposure: local exhaust ventilation, enclosed system design or process isolation and remote control in combination with appropriate use of personal protective equipment.

INGESTION:

All food should be kept in a separate area away from the storage/use location. Eating, drinking and smoking should be prohibited in areas where there is a potential for significant exposure to this material. Before eating, hands and face should be thoroughly washed.

SKIN CONTACT:

Skin contact with liquid or its aerosol must be prevented through the use of impervious clothing, gloves and footwear selected with regard for use condition exposure potential.

Safety showers, with quick opening valves which stay open, should be readily available in all areas where the material is handled or stored. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather.

EYE CONTACT:

Eye contact with liquid or aerosol must be prevented through the use of chemical safety glasses, goggles or a face shield selected with regard for use condition exposure potential.

Eye wash fountains, or other means of washing the eyes with a gentle flow of tap water, should be readily available in all areas where this material is handled or stored. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather.

INHALATION:

If use conditions generate airborne mist, handle this material only in an open (e.g., outdoor) or well-ventilated area. Where adequate ventilation is not available, use NIOSH-approved dust, mist and fume respirators to reduce exposure. Where exposure potential under the use conditions necessitates a higher level of protection, use a positive-pressure, air-supplied respirator.

Either half-face respirators in combination with chemical goggles or full-face respirators may be required in certain use conditions to prevent eye contact or irritation.

EXPOSURE LIMITS:

No exposure limits have been established for this material. However, the following exposure limits apply for hydrogen sulfide, a decomposition product:

Federal OSHA Permissible Exposure Limit (PEL): Ceiling of 20 ppm and a 50 ppm 10-minute excursion above ceiling. (1).

Recommended Threshold Limit Value (TLV): 10 ppm (14 mg/m^3 as an 8-hour, time-weighted average and a Short-Term Exposure Limit (STEL) of 15 ppm (21 mg/m^3) (2.)

XI. SPILL HANDLING

Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices (refer to SECTION X: INDUSTRIAL HYGIENE).

Any person entering either a significant spill area or an area of unknown concentration of a gas or vapor should use a positive-pressure, self-contained breathing apparatus or a positive-pressure, supplied-air respirator with escape pack.

Soak up pooled liquid with a suitable absorbent such as clay, sawdust or kitty litter. Sweep up absorbed material and place in a chemical waste container for disposal (refer to SECTION XIV: DISPOSAL OF MATERIAL/CONTAINER). Do not use chemical waste container which contains acidic waste. Generously cover contaminated area with hydrated lime to further absorb liquid and minimize odor. When all liquid possible has been absorbed, wash the area thoroughly with water.

Spills should not be allowed to enter a sewer in which acidic waste might be present. This could result in the liberation of poisonous hydrogen sulfide and could be fatal to personnel near catch basins and manholes along the route of the sewer.

Large spills should be handled according to a predetermined plan.

XII. CORROSIVITY TO MATERIALS OF CONSTRUCTION

Solution is slightly corrosive to iron and steel. It is highly corrosive to aluminum, zinc and copper. Corrosion of steel is accelerated if moisture is present.

XIII. STORAGE REQUIREMENTS

Containers should be stored in a cool, dry, well-ventilated area (preferably out of doors) away from flammable materials and sources of heat or flame. Store away from foodstuffs or animal feed. Exercise due caution to prevent damage to or leakage from the container.

Storage tanks built of carbon steel ¼" thick should last at least 20 years. Several resin-fiberglass reinforced tanks are now in service with sodium hydrosulfide solution. Partially full tanks will cause corrosion problems because of the action with moist air; therefore, the use of a number of small tanks is recommended to minimize this problem. Heat is needed to keep the solution from freezing. Its freezing point is 63°F (17°C).

Because sodium hydrosulfide can dissociate to poisonous and flammable hydrogen sulfide, storage tanks should be closed vessels having a vent pipe equipped with a flame arrestor to prevent any flashback or explosion in case vented hydrogen sulfide is burning. Continuous detectors and alarms in all storage and use areas are recommended to detect the presence of poisonous hydrogen sulfide gas.

XIV. DISPOSAL OF MATERIAL/CONTAINER

Material that cannot be used or chemically reprocessed and empty containers should be disposed of at an approved facility in accordance with any applicable regulations. NOTE: State and local regulations may be more stringent than federal.

XV. PREPARATION INFORMATION

Prepared by: Product Stewardship, Akzo Chemicals Inc., Chicago, Illinois, (312) 906-7500.

REFERENCES CITED:

(1) 29 CFR 1910:1000

(2) American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values and Biological Exposure Indices for 1988-89, ACGIH: Cincinnati, OH, 1988.

Material Safety Data Sheet*

AKZO

Chemical Division

CARBON DISULFIDE
POISON

This Material Safety Data Sheet (MSDS) meets the requirements of the federal OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Controlled Product Regulation, WHMIS classified as: B-2, D-2A, D-2B.

New Issue 3/89
Supersedes Issue Dated 9/85
MSDS No 983101/CAR016
PIN: UN1131

EMERGENCY TELEPHONE NUMBERS

Transportation Emergencies:

USA-CHEMTREC: 1-800-424-9300
CANADA-CANUTEC: 613-996-6666

All Other Emergencies Call:

312-906-7054

I. PRODUCT IDENTIFICATION/COMPOSITION

Carbon Disulfide (100%), CAS Registry Number: 75-15-0.

FORMULA: CS_2

MOLECULAR WEIGHT: 76.14

SYNONYM: Carbon bisulfide

CAS INDEX NAME (8CI9CI):

Carbon disulfide

II. PHYSICAL/CHEMICAL PROPERTIES

The following represent all available, applicable physical hazard data on this product.

PHYSICAL STATE/DESCRIPTION:

Clear, colorless to slightly yellow, mobile liquid at 68°F (20°C).

AUTOIGNITION TEMPERATURE:

194°F (90°C)

BOILING POINT:

115°F (46.3°C) at 760 mm Hg

DENSITY:

10.5 lb/gallon at 77°F (25°C)

FLAMMABLE RANGE:

(% by volume in air at 68°F (20°C)

Lower limit: 1.3
Upper limit: 50

FLASH POINT:

-22°F (-30°C), Closed Cup

In Canada: Akzo Chemicals Ltd., 100 University Avenue, Ste. 908, Toronto, Ontario M5J 1V6

referred to as a Product Safety Information Sheet

Akzo Chemicals Inc.
300 S. Riverside Plaza
Chicago, Illinois 60606
(312) 906-7500

MELTING POINT:

-169.1°F (-111.7°C)

ODOR:

Generally disagreeable, slight sulfide odor when pure.

SOLUBILITY:

0.22 g/100 ml water at 72°F (22°C).

Soluble in most organic liquids such as benzene, alcohol, carbon tetrachloride and ether.

SPECIFIC GRAVITY:

1.26 (water = 1)

VAPOR DENSITY:

2.63 (air = 1)

VAPOR PRESSURE:

100 mm Hg at 23°F (-5°C)
200 mm Hg at 51.1°F (10.6°C)
400 mm Hg at 82°F (28°C)

VISCOSITY:

0.36 cps at 73°F (22.8°C)

III. CHEMICAL REACTIVITY

Not considered highly reactive. However, reacts incandescently with chemically active metals such as zinc, sodium and potassium. Contact with azides and inorganic amines can be explosive. Not compatible with strong oxidizing agents. It is not sensitive to physical impact.

IV. STABILITY

Stable at ambient temperatures and atmospheric pressure when kept in a closed container.

V. FIRE HAZARD

Carbon disulfide is a flammable liquid. It gives off flammable vapors, even at low temperatures (e.g., -22°F/-30°C, which can form explosive mixtures in confined areas over a wide range of vapor/air mixtures. The material decomposes under fire conditions to give off toxic materials such as sulfur dioxide and carbon monoxide. Do not use welding or cutting : rch on or near any container of this material, even empty, because an explosion could occur. Do not use, pour, spill or store near heat or open flame.

Tests have shown that carbon disulfide, because of its low ignition temperature and because of the extremely small joint clearance required to arrest its flame, cannot be included in any of the atmospheric groups in Section 500-2 of the National Electric Code. Carbon disulfide should never be transferred by means of air. Use pump, water or inert gas to transfer. Do not use spark-producing tools or devices where product is stored, handled or used. Use wooden measuring stick for measuring contents of containers and tanks. No electrical installations or heating facilities should be permitted in or near storage area. Protect against lightning and static electricity (1).

VI. FIREFIGHTING TECHNIQUES

Products of combustion are irritating to the respiratory tract and may cause breathing difficulty and pulmonary edema. Symptoms may be delayed several hours or longer depending upon the extent of exposure.

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate nonessential personnel from the fire area. Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing.

Large carbon disulfide fires are best extinguished by completely blanketing the fire area with water fog or a water spray. This will help prevent possible reignition of the carbon disulfide. Continue the water fog or water spray until the fire area is completely cooled off. Carbon dioxide (or other inert gases) or dry chemical extinguishing agents may be used on small carbon disulfide fires.

Contaminated buildings, areas and equipment must not be used until they are properly decontaminated.

VII. TOXICOLOGY

INGESTION:

The acute oral LD50 is 3188 mg/kg in rats (2).

INHALATION:

The acute inhalation LC50 is 2500 mg/m^3 in rats following a 2-hour exposure (2).

Citations to original sources of toxicity data are available in RTECS; accession number: FF6650000 (2).

VIII. HUMAN HEALTH

Carbon disulfide can affect the body if it is inhaled, comes in contact with the eyes or skin or is swallowed. It may enter the body through the skin.

Inhalation of carbon disulfide vapor may cause headache, nausea, drop in blood pressure, dizziness, unconsciousness and death. Liquid carbon disulfide and high concentrations of the vapor may cause irritation of the skin, eyes and nose. The liquid may cause burns. Swallowing carbon disulfide may cause loss of consciousness and convulsions. If small amounts are swallowed, vomiting, diarrhea and headache may occur.

Prolonged or repeated exposure to carbon disulfide may damage the nervous system and cause muscle weakness, numbness, unsteady walking and difficulty in swallowing. In addition, memory loss, headache, difficulty in sleeping, nervousness, fatigue, depression, suicidal tendencies and psychosis may occur. Increased arteriosclerosis may occur which may cause or increase damage to the heart and other organs. Repeated or prolonged exposure of the skin to carbon disulfide may cause a rash (3).

There are sufficient human and animal data to indicate that prolonged or repeated exposure to high levels of carbon disulfide may be toxic to the reproductive systems of both the male and female, as well as the fetus. The available evidence indicates that keeping exposures below the current ACGIH TLV (10 ppm, 8-hour TWA) and OSHA PEL (4 ppm, 8-hour TWA and 12 ppm, 15-minute STEL) provides adequate protection against these risks.

There is no convincing evidence that CS_2 is a human mutagen or teratogen at the present TLV/PEL for regular work exposure (4).

There are no data available which address medical conditions that are generally recognized as being aggravated by exposure to this product.

IX. FIRST AID

CALL A POISON CENTER OR A PHYSICIAN IMMEDIATELY.

If a known exposure occurs or if poisoning is suspected, do not wait for symptoms to develop.

Immediately start the recommended procedures below and simultaneously contact a Poison Center, a physician or the nearest hospital. Inform the person contacted of the type and extent of exposure, describe the victim's symptoms and follow the advice given.

INGESTION:

If swallowed, immediately give several glasses of water and induce vomiting by gagging the victim with a finger placed on the back of the victim's tongue. Give fluids until vomitus is clear. If victim is unconscious or convulsing, do not induce vomiting or give anything by mouth.

SKIN CONTACT:

Under a safety shower, immediately flush all affected areas with large amounts of running water for at least 15 minutes. Remove contaminated clothing and shoes. Do not attempt to neutralize with chemical agents. Get medical attention immediately. Wash clothing before reuse.

EYE CONTACT:

Immediately flush the eyes with large quantities of running water for a minimum of 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water. Do not attempt to neutralize with chemical agents. Obtain medical attention as soon as possible. Oils or ointments should not be used at this time. Continue the flushing for an additional 15 minutes if a physician is not immediately available.

INHALATION:

If inhaled, remove to fresh air. If not breathing, clear victim's airway and start mouth-to-mouth, artificial respiration, which may be supplemented by the use of a bag-mask respirator or manually triggered oxygen supply capable of delivering one liter per second or more. If victim is breathing, oxygen may be given from a demand-type or continuous-flow inhaler, preferably with a physician's advice. Get medical attention immediately.

X. INDUSTRIAL HYGIENE

The recommendations described in this section are provided as general guidance for minimizing exposure when handling this product. Because use conditions will vary depending upon customer applications, specific safe handling procedures should be developed by a person knowledgeable of the intended use conditions and equipment. During the development of safe handling procedures, consideration should be given to the need for cleaning of equipment and piping systems to render them nonhazardous before maintenance and repair activities are performed.

ENGINEERING CONTROLS:

In those cases where engineering controls are indicated by the use conditions, the following traditional exposure control techniques may be used to effectively minimize employee exposure: local exhaust ventilation, enclosed system design or process isolation and remote control, in combination with appropriate use of personal protective equipment.

INGESTION:

All food must be kept in a separate area away from the storage/use location. Eating, drinking, smoking and carrying of tobacco products must be prevented in areas where there is a potential for exposure to this material.

Before eating, drinking or smoking, hands and face must be thoroughly washed.

SKIN CONTACT:

Skin contact with liquid or its aerosol must be prevented through the use of impervious clothing, gloves and footwear selected with regard for use condition exposure potential. Footwear should not have exposed nails or metal inserts.

Safety showers, with quick opening valves which stay open, should be readily available in all areas where the material is handled or stored. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather.

EYE CONTACT:

Eye contact with liquid or aerosol must be prevented through the use of chemical safety glasses, goggles or a face shield selected with regard for use condition exposure potential.

Eye wash fountains, or other means of washing the eyes with a gentle flow of tap water, should be readily available in all areas where this material is handled or stored. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather.

Either half-face respirators in combination with chemical goggles or full-face respirators may be required in certain use conditions to prevent eye contact or irritation.

INHALATION:

If use conditions generate airborne vapor, the material should be handled in an open (e.g., outdoor) or well-ventilated area. Where adequate ventilation is not available, use NIOSH-approved, organic vapor respirators to reduce exposure.

Where exposure potential under the use conditions necessitates a higher level of protection, use a positive-pressure, air-supplied respirator.

EXPOSURE LIMITS:

The federal OSHA Permissible Exposure Limit (PEL) is 4 ppm as an 8-hour, time-weighted average and 12 ppm as a 15-minute short-term exposure limit (STEL) with a skin notation (5).

The American Conference of Governmental Industrial Hygienists (ACGIH) has recommended a Threshold Limit Value (TLV) of 10 ppm (30 mg/m^3) as an 8-hour, time-weighted average with a skin notation (6).

PELs and TLVs refer to airborne concentrations measured in the breathing zone by appropriate sampling techniques.

XI. SPILL HANDLING

Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices (refer to SECTION X: INDUSTRIAL HYGIENE).

Any person entering either a significant spill area or an area of unknown concentration of a gas or vapor, should use a positive-pressure, self-contained breathing apparatus or a positive-pressure, supplied-air respirator with escape pack.

Small spills can be handled routinely. Use adequate ventilation and/or wear a NIOSH-approved, organic vapor respirator to prevent inhalation exposure. Wear protective clothing to prevent skin and eye contact. Use the following procedures:

Evacuate all nonessential personnel from the spill area to a location upwind of the spill and far enough removed to avoid potential exposure. Use water to flush the spilled carbon disulfide into an impervious trench or other low-lying area from which it can be removed via pumping or similar method. Carbon disulfide is more dense than water; it will settle to the bottom of the trench and will be covered by a layer of water. This water layer serves as a protective covering over the carbon disulfide and thereby reduces fire and exposure hazards. The collection trench should be sufficiently baffled or blocked to retain the carbon disulfide so that it does not escape from the maintained area. Dispose of collected material on-site, if possible. If on-site disposal is not possible, proper shipping regulations should be considered before transporting the spilled material to a disposal location.

Large spills should be zoned off and handled according to a predetermined plan which includes proper design and grading of storage and handling areas for spill control. Part of this plan should include fire fighting techniques.

XII. CORROSIVITY TO MATERIALS OF CONSTRUCTION

Noncorrosive to metallic materials commonly used in the construction of process equipment and storage and shipping containers. Because of this product's solvency action, caution should be used when shipping, storing or processing it in contact with plastic material.

XIII. STORAGE REQUIREMENTS

Containers should be stored in a cool, dry, well-ventilated area away from flammable materials, sources of heat or flame and direct sunlight. Store away from foodstuffs or animal feed. Exercise due caution to prevent damage to or leakage from the container. No smoking signs should be posted. Firefighting equipment should be immediately available. No electrical installations or heating facilities should be permitted in or near storage areas. Protect against lightning and static electricity.

Storage area should be in an isolated location away from other buildings, preferably in a building of noncombustible construction and equipped with floor level ventilation. During hot weather, spray drums to keep vapor pressure down.

Tanks should be submerged in water or located over concrete basins containing water. Basins should be of sufficient capacity to hold all of the tank contents in addition to the water. Water or inert gas should be provided over the carbon disulfide in all tanks.

Bulk material can be stored in underground tanks, tanks submerged in water or above ground tanks which are diked and have water in the dike. The void above the carbon disulfide must be filled with water, nitrogen or other suitable inert material.

XIV. DISPOSAL OF MATERIAL/ CONTAINER

Material that cannot be used or chemically reprocessed and empty containers should be disposed of at an approved facility in accordance with any applicable regulations. NOTE: State and local regulations may be more stringent than federal.

XV. PREPARATION INFORMATION

Prepared by: Product Stewardship, Akzo Chemicals Inc., Chicago, Illinois, (312)906-7500.

REFERENCES CITED:

(1) National Fire Protection Association (NFPA), Hazardous Chemicals Data, Standard 49, NFPA: Quincy, MA, 1975.

(2) National Institute for Occupational Safety and Health (NIOSH), Registry of Toxic Effects of Chemical Substances (RTECS), NIOSH: Cincinnati, OH, 1983.

(3) National Institute for Occupational Safety and Health (NIOSH), Occupational Health Guideline for Carbon Disulfide-Reproductive System, NIOSH: Cincinnati, OH, 1978.

(4) American Medical Association, Council on Scientific Affairs, Advisory Panel on Reproductive Hazards in the Workplace, Effects of Toxic Chemicals on the Reproductive System, Chicago, IL, 1985.

(5) 29 CFR 1910.1000.

(6) American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values and Biological Exposure Indices for 1988-89, ACGIH: Cincinnati, OH, 1988.

Allied Chemical

CHEMICALS COMPANY

PRODUCT SAFETY DATA SHEET

A. GENERAL INFORMATION

TRADE NAME (COMMON NAME OR SYNONYM)	☒ C.A.S. NO. ☐ ALLIED PRODUCT CODE
Sulfuric Acid	7664-93-9

CHEMICAL NAME
Sulfuric Acid

FORMULA	MOLECULAR WEIGHT
58% to 99% H_2SO_4 in water	98.08

COMPANY/PLANT ADDRESS (No., STREET, CITY, STATE AND ZIP CODE)
Chemicals Company
P.O. Box 1139R
Morristown, N.J. 07960

CONTACT	PHONE NUMBER	ISSUED DATE	REVISED DATE
Director - Technical Service	(315) 487-4990	June 12, 1980	

B. FIRST AID MEASURES

EMERGENCY PHONE NUMBER
(201) 455-2000

Skin or Eyes: Promptly flush with plenty of water for at least 15 minutes. Remove contaminated clothing.
Ingestion: Drink large amounts of water (or milk if available) to dilute the acid. Do not induce vomiting.
Get prompt medical attention for ingestion, inhalation, eye contact, irritation or burns.
Additional procedures are outlined in references listed in Section J.

C. HAZARDS INFORMATION

FIRE AND EXPLOSION

FLASH POINT	AUTO IGNITION TEMPERATURE	FLAMMABLE LIMITS IN AIR (% BY VOL.)
Not Flammable °C ☐ OPEN CUP ☐ CLOSED CUP	NA - Not Applicable °C	LOWER NA UPPER NA

UNUSUAL FIRE AND EXPLOSION HAZARDS
Flammable and potentially explosive hydrogen gas can be generated inside metal drums and storage tanks.
Concentrated acid can ignite combustible materials.

HEALTH

INHALATION
Inhalation of fumes or acid mist can cause irritation or corrosive burns to the upper respiratory system, including nose, mouth and throat. Lung irritation and pulmonary edema can also occur.

INGESTION
Can cause irritation and corrosive burns to mouth, throat, and stomach.
Can be fatal if swallowed.

SKIN
Can cause corrosive burns or irritation.

EYES
Can cause irritation, corneal burns, and conjunctivitis.

PERMISSIBLE CONCENTRATION: AIR (SEE SECTION J) Threshold Limit Value (TLV): 1 mg/m^3 as 100% H_2SO_4 BIOLOGICAL

UNUSUAL CHRONIC TOXICITY

AR400736

D. PRECAUTIONS/PROCEDURES

VENTILATION

Sufficient to reduct acid mist below current permissible TLV levels.
Packaging and unloading areas and open processing equipment may require mechanical exhaust systems.

NORMAL HANDLING

Use protective equipment outlined in Section E. Procedures are detailed in references listed in Section J. Safety showers and eyewash facilities should be available nearby all H_2SO_4 handling equipment. Do not add water to acid. When diluting, always add acid to water cautiously and with agitation.

STORAGE

Store in cool, well-ventilated area away from combustibles and reactive chemicals. Vent metal containers weekly or more frequently in hot weather to prevent H_2 gas build-up. Diking of storage tanks is recommended.

PRECAUTIONARY LABEL ☐ ATTACHED ☒ NOT ATTACHED

Label warning statement(s): "Danger! Liquid is corrosive. Causes severe burns. Vapor may contain explosive hydrogen. Keep sources of ignition away."

SPILL OR LEAK

Dilute small spills or leaks cautiously with plenty of water. Neutralize residue with alkali such as soda ash or lime. Adequate ventilation is required for soda ash due to release of CO_2 gas.
(See Section I for disposal methods.)

FIRE EXTINGUISHING AGENTS RECOMMENDED

NA

FIRE FIGHTING PRECAUTIONS

[illegible]mperatures, H_2SO_4 mists or SO_3 gas can be released from vented or ruptured containers. If water is added to concentrated sulfuric acid, violent spattering can occur, and considerable heat may be evolved. Full protective equipment is recommended.

FIRE EXTINGUISHING AGENTS TO AVOID

NA

SPECIAL PRECAUTIONS/PROCEDURES

To prevent ignition of hydrogen gas generated in metal containers from contact with sulfuric acid, smoking, open flames, and sparks must not be permitted in storage areas.

E. PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION

Where required, use a respirator approved by NIOSH for sulfuric acid gas or mists, as applicable. Some exposures may require NIOSH-approved, self-contained breathing apparatus or air-supplied respirator.

EYES AND FACE

At a minimum, wear hard hat, chemical safety goggles, and full-face plastic shield. Do not wear contact lenses.

HANDS, ARMS, AND BODY

[illegible]mum, wear acid-resistant apron, protective clothing, boots and gauntlet gloves for routine product use. For [illegible]otection, include acid-resistant trousers and jacket.

OTHER CLOTHING AND EQUIPMENT

F. PHYSICAL DATA

MATERIAL IS (AT NORMAL CONDITIONS):	APPEARANCE AND ODOR	
☒ LIQUID ☐ SOLID ☐ GAS ☐ _____	Oily, colorless to slightly yellow, clear to turbid liquid. Odorless.	
BOILING POINT a. 136 °C b. 279 °C MELTING POINT c. 310 °C	SPECIFIC GRAVITY (H_2O = 1) a. 1.480 b. 1.835 c. 1.842	VAPOR DENSITY (AIR = 1) NA
SOLUBILITY IN WATER (% by weight) complete	pH 1% solution; pH = 0.9	VAPOR PRESSURE (mm Hg at 20° C) negligible
EVAPORATION RATE (Butyl Acetate = 1) Less than 1	% VOLATILES BY VOLUME (At 20° C) NA	1°) a. 47° Be' = 58% H_2SO_4 b. 66° Be' = 93% H_2SO_4 c. 99% H_2SO_4

G. REACTIVITY DATA

STABILITY	CONDITIONS TO AVOID
☐ UNSTABLE ☒ STABLE	

INCOMPATIBILITY (MATERIALS TO AVOID)

Avoid contact with combustible materials, carbides, chlorates, nitrates, fulminates, picrates, metallic powders, sulfides, or strong reducing agents. Considerable heat is evolved, and violent reaction can occur if water is added to acid in a container.

HAZARDOUS DECOMPOSITION PRODUCTS

SO_3 gas

HAZARDOUS POLYMERIZATION	CONDITIONS TO AVOID
☐ MAY OCCUR ☒ WILL NOT OCCUR	

H. HAZARDOUS INGREDIENTS (Mixtures Only)

MATERIAL OR COMPONENT	%	HAZARD DATA (SEE SECT. J)
NA		

AR400738

ENVIRONMENTAL

DEGRADABILITY	OCTANOL/WATER PARTITION COEFFICIENT

WASTE DISPOSAL METHODS*

Dilute with water, neutralize with alkali and flush to sewer with plenty of water if permitted by applicable disposal regulations. Neutralized waste may have to be disposed of by an approved contractor.

*DISPOSER MUST COMPLY WITH FEDERAL, STATE AND LOCAL DISPOSAL OR DISC. ..RGE LAWS.

REFERENCES

PERMISSIBLE CONCENTRATION REFERENCES

OSHA standard, 29 CFR, Part 1910.1000 (July 1, 1977).

"Criteria for a Recommended Standard . . . Occupational Exposure to Sulfuric Acid, "NIOSH (U.S. Dept. of HEW), 1974.

REGULATORY STANDARDS

DOT Classification - Corrosive; Placard - Corrosive; Label - Corrosive (49 CFR). Designated a hazardous substance by EPA (40 CFR, Parts 116 - 117).

GENERAL

Criteria for a Recommended Standard . . . Occupational Exposure to Sulfuric Acid," NIOSH (U.S. Dept. of HEW) 974. Also available are Allied Chemical's sulfuric acid wall chart, a Technical Service Report which discusses storage nd handling, and a product information bulletin.

ADDITIONAL INFORMATION

nformation (hazards, precautions, first aid, etc.) is abbreviated. More detailed information is contained in references found Section J.

This product is not for food or drug use.

Paul Ehlers

MATERIAL SAFETY DATA SHEET

CAS # 7733-02-0

Zinc Corporation of America
300 Frankfort Road
Monaca, Pa. 15061

412-774-1020

Common Name and Synonyms: ~~Zinc Sulfate Liquor~~
Zinc Sulfate Solution
$ZnSO_4$

MSDS #: 926

Date Issued: 11/6/87

Source: Bag Filter Dust Circuit

Date Revised:

HAZARDOUS INGREDIENTS — Section I

Ingredient	%	NTP or IARC Carcinogen	8-hr Exposure Limit (mg/M^3) TLV	PEL

Does not contain US EPA defined hazardous substances.

PHYSICAL DATA — Section II

Appearance: Clear, colorless, odorless liquid. Specific gravity = 1.4, pH=5. Produces white crystals when evaporated to dryness.

Solubility in Water: Complete.

FIRE AND EXPLOSION HAZARD DATA — Section III

Combustibility: Noncombustible as solution or as dried crystals.

Extinguishing Media and Fire Fighting Procedures: Any suitable for the supporting fire.

REACTIVITY DATA — Section IV

Stability: Stable. Dry crystals decompose above 1364° F to evolve SO_2.

Incompatability (Materials/Conditions to Avoid): None indicated.

AR400740

Paul Ehlers

MATERIAL SAFETY DATA SHEET Cont'd.

HEALTH HAZARD DATA — Section V

Effects of Overexposure: Liquid or mist irritating to eye, nose and throat. Prolonged exposure to skin can cause dryness and irritation.

Emergency and First Aid Procedures: Flush area of contact with water. It is unlikely that overexposure to this material would result in an acute illness. However, if symptoms are present, the individual should be removed from exposure and the plant nurse or physician consulted.

SPILL OR LEAK PROCEDURES — Section VI

Steps to take in case of spill or accidental release: Place spilled or contaminated material in drums or other suitable container.

Waste Disposal Method (Location): Ship to approved chemical disposal site.

SPECIAL PROTECTION INFORMATION — Section VII

Respiratory Protection (Specify Type): NIOSH-approved dust/mist respirator, such as Comfo II, when exposed to mist or dust from dried material.

Ventilation: May be needed to control mist.

Other Protective Equipment: Goggles and water proof gloves.

SPECIAL PRECAUTIONS — Section VIII

Precautions to be taken in handling and storage: No unusual precautions. Minimize direct contact.

CASTROL INDUSTRIAL EAST INC.
775 Louis Drive
Warminster, PA 18974
(215) 443-7080

SECTION I

PRODUCT NAME OR NUMBER: COMX-CLEAN 900

MANUFACTURER'S NAME: ~~CASTROL INDUSTRIAL~~
GREAT LAKES INCORPORATED
ADDRESS: 1445 McPherson Park Dr., P.O. Box 860, Howell, MI 48844-0860

PROPER SHIPPING NAME(49 CFR 172.101): Not regulated
HAZARD CLASS(49 CFR 172.101: Not regulated
HAZARD ID NUMBER: Not applicable

CHEMICAL FAMILY: Alkaline water base solution

SECTION II

Blend of surfactants, couplers, builders, dyes, conditioners and water	85-99%	
Sodium hydroxide	1-5%	TLV*: 2mg/m3 (OSHA) 2mg/m3 (ceiling) (ACGIH)

means Threshold Limit Value. * This refers to airborne concentrations of substances and represent conditions believed that nearly all workers may be repeatedly exposed day after day without adverse effect.*

SECTION III TYPICAL PHYSICAL DATA NOT TO BE CONSIDERED SPECIFICATIONS

BOILING POINT (initial):	approx. water
SPECIFIC GRAVITY:	1.2
VAPOR PRESSURE (mm Hg):	approx. water
VAPOR DENSITY (air=1):	approx. water
EVAPORATION RATE (ether=1):	approx. 1
PERCENT VOLATILE BY WEIGHT:	65-75
SOLUBILITY IN WATER:	Complete
pH:	Concentrate - 12.5-13.0 5% dilution - 11.9-12.3
APPEARANCE AND ODOR:	Clear pale yellow-green liquid; mild odor

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (method used): None

FLAMMABLE LIMITS IN AIR, % BY VOLUME: Lower(lel) Upper(uel)
Not applicable

EXTINGUISHING MEDIA: Fire and heat may drive off water leaving chemical ingredients which may burn.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus when fire fighting in a confined space

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

CONTAINER HANDLING: Do not cut or weld empty drums unless they are thoroug

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Not established for this product; not listed as.

LISTED CARCINOGEN (NTP, IARC OR OSHA): This product does not contain any listed carcinogens.

POSSIBLE OF EXPOSURE AND ACUTE EFFECTS:

Corrosive

Skin Contact: The concentrate will irritate or burn skin after short contact due to high alkalinity. Dilutions of 1% in water alone have alkalinity similar to hand soap, although the product is not intended for use as hand soap.

Eye Contact: Concentrate will irritate or burn eye tissue. Dilutions will be irritating.

Inhalation: The concentrate is not volatile, so no inhalation should be possible.

Ingestion: Concentrate will be harmful if swallowed. Because of its alkalinity, it will irritate or burn mucous membrane tissue.

CHRONIC EFFECTS: A review of literature suggests no long-term [illegible] of the product. Chronic exposure is very limited.

EMERGENCY AND FIRST AID PROCEDURES:

Skin Contact: Concentrate - wash off with plain water. Dilution - wash with soap and water. Launder contacted clothing before reuse.

Eye Contact: Flush with water for at least 15 minutes. Contact physician.

Inhalation: If throat is irritated by vapors, move to fresh air.

Ingestion: If concentrate is swallowed, DO NOT induce vomiting. Give large quantities of water. Contact physician immediately. Never give anything by mouth to an unconscious person.

SECTION VI REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Contact with strong acids; contact of concentrate with active metal fines such as aluminum.

INCOMPATIBILITY: Store away from strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrocarbon decomposition products at elevated temperatures.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: None known

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Small Spills: Soak up with absorbent material.

Large Spills: Dike area to prevent runoff, recover liquid, soak up remaining liquid with absorbent material

WASTE DISPOSAL METHOD: Dispose of in accordance with local, state and federal regulations

RCRA HAZARDOUS WASTE DESIGNATION: This product does fall under current EPA RCRA definitions of hazardous waste with designation D002 because of its alkalinity if the product is disposed of in its original form.

CERCLA (Superfund) REPORTABLE QUANTITY: This product does contain a CERCLA regulated material, sodium hydroxide, RQ=1000 LBS.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Good industrial hygiene practices recommend that engineering controls (such as local and/or mechanical ventilation) be used to reduce environmental concentrations to the permissible exposure level. Respirators may be used when engineering and work practice controls are not technically feasible, when such controls are in the process of being installed, or when they fail and need to be supplemented. If the use of a respirator is necessary, use only a NIOSH/MSHA approved air purifying respirator or an air purifying respirator.

PROTECTIVE GLOVES: Impervious gloves (such as rubber, neoprene, NBR nitrile, polyethylene) when handling the concentrate.

EYE PROTECTION: Safety glasses with side shields or chemical goggles

OTHER PROTECTIVE EQUIPMENT: Appropriate clothing to avoid skin contact

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SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep drums and containers of concentrate closed when not in use. Allow to warm to temperature before dilution.

Do not add any other additive ingredients to the concentrate.

Do not use aluminum, magnesium, or zinc equipment with this product in the concentrated form.

OTHER PRECAUTIONS: None known

SECTION X OTHER HAZARD INFORMATION

Cone Clean is not considered corrosive according to D.O.T. regulations.

SECTION XI ADDITIONAL REGULATORY INFORMATION

OCCUPATIONAL SAFETY and HEALTH ADMINISTRATION (OSHA)
29 CFR 1910.1200 Hazardous Chemicals: Yes

SUPERFUND AMENDMENTS And REAUTHORIZATION ACT Of 1986 (SARA)
Section 302, Extremely Hazardous Substances: No
Section 311, Hazardous Chemical: Yes
Hazard categories: Fire - No, Reactivity - No, Sudden release of pressure - No, Immediate - Yes, Delayed - No
Section 313, Toxic chemical: Yes - sodium hydroxide 1310-73-2 1-5%

TOXIC SUBSTANCE CONTROL ACT (TSCA)
TSCA Inventory: This product is a mixture and is not listed in the TSCA Inventory. The individual ingredients in the product are listed in the Inventory.

APPROVAL: DRB

DISCLAIMER

Information presented herein has been compiled from information provided to us by our suppliers and other sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or the use of any product in violation of any patent or in violation of any law or regulation. It is the users' responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use are not under our control, we necessarily disclaim all liability with respect to the use of any material supplied by us.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep drums and containers of concentrate closed when not in use. Allow to warm [illegible] temperature before dilution.

Do [illegible] add any other additive ingredients to the concentrate.

Do not use aluminum, magnesium, or zinc equipment with this product in the concentrated form.

OTHER PRECAUTIONS: None known

SECTION X OTHER HAZARD INFORMATION

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1,1,1-TRICHLOROETHANE
1,1,1-TRICHLOROETHANE
1,1,1-TRICHLOROETHANE

MATERIAL SAFETY DATA SHEET

FISHER SCIENTIFIC
CHEMICAL DIVISION
1 REAGENT LANE
FAIR LAWN NJ 07410
(201) 796-7100

EMERGENCY CONTACTS:
GASTON L. PILLORI
(201) 796-7100

SUBSTANCE IDENTIFICATION

CAS-NUMBER 71-55-6

SUBSTANCE: **1,1,1-TRICHLOROETHANE**

TRADE NAMES/SYNONYMS: METHYL CHLOROFORM; ETHYLIDYNE CHLORIDE; UN 2831

CHEMICAL FAMILY:
HYDROCARBON, ALIPHATIC

MOLECULAR FORMULA: C2-H3-CL3 MOL WT: 133.41

CERCLA RATINGS (SCALE 0-3): HEALTH=2 FIRE=0 REACTIVITY=2 PERSISTENCE=3
NFPA RATINGS (SCALE 0-4): HEALTH=3 FIRE=1 REACTIVITY=1

COMPONENTS AND CONTAMINANTS

PERCENT: >95 COMPONENT: 1,1,1-TRICHLOROETHANE

PERCENT: <5 COMPONENT: INHIBITOR TO PREVENT CORROSION OF METALS

OTHER CONTAMINANTS: NONE

EXPOSURE LIMITS:
350 PPM OSHA TWA; 350 PPM ACGIH TWA; 450 ACGIH STEL;
350 PPM NIOSH RECOMMENDED 15 MINUTE CEILING

PHYSICAL DATA

DESCRIPTION: COLORLESS LIQUID WITH A MILD CHLOROFORM-LIKE ODOR.

BOILING POINT: 165 F (74 C) MELTING POINT: -36 F (-32 C)

SPECIFIC GRAVITY: 1.3 VAPOR PRESSURE: 100 MMHG @ 20 C

EVAPORATION RATE: (CCL4=1) 1 TTE SOLUBILITY IN WATER 0

SOLVENT SOLUBILITY: ACETONE, BENZENE, CCL4, METHANOL, AND ETHER.

ODOR THRESHOLD: 20-100 PPM VAPOR DENSITY: 4.6

FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD:
NEGLIGIBLE FIRE HAZARD AND EXPLOSION HAZARD WHEN EXPOSED TO HEAT OR FLAME.

FLASH POINT: NONFLAMMABLE UPPER EXPLOSION LIMIT: 10.5%

LOWER EXPLOSION LIMIT: 8.0% AUTOIGNITION TEMP.: 998 F (537 C)

FLAMMABILITY CLASS(OSHA): IIIA

FIREFIGHTING MEDIA:
DRY CHEMICAL OR CARBON DIOXIDE
(1984 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.3).

FOR LARGER FIRES, USE WATER SPRAY, FOG OR ALCOHOL FOAM
(1984 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.3).

FIREFIGHTING:
STAY AWAY FROM STORAGE TANK ENDS. COOL CONTAINERS EXPOSED TO FLAMES WITH WATER FROM SIDE UNTIL WELL AFTER FIRE IS OUT (1984 EMERGENCY RESPONSE GUIDEBOOK DOT P 5800.3).

TOXICITY

27 GM/M3/10 MIN INHALATION-MAN LCLO; 1000 PPM INHALATION-RAT LCLO, 10300 MG/KG ORAL-RAT LD50, 11240 ORAL-MOUSE LD50; MUTAGENIC DATA (RTECS); REPRODUCTIVE EFFECTS DATA (RTECS); INDEFINITE ANIMAL CARCINOGEN (IARC). DATA AVAILABLE DO NOT PERMIT EVALUATION OF CARCINOGENICITY OF 1,1,1-TRICHLOROETHANE TO BE HAZE 1,1,1-TRICHLOROETHANE IS A SKIN IRRITANT AND CENTRAL NERVOUS SYSTEM DEPRESSANT. EXPOSURE MAY IRRITATE THE EYES AND MUCOUS MEMBRANES. POISONING MAY AFFECT THE CARDIOVASCULAR SYSTEM AND LIVER. ALCOHOLIC BEVERAGES MAY ENHANCE THE SYSTEMIC EFFECTS.

HEALTH EFFECTS AND FIRST AID

INHALATION:
NARCOTIC. 1000 PPM IS IMMEDIATELY DANGEROUS TO LIFE AND HEALTH.
ACUTE EXPOSURE- INDIVIDUALS EXPOSED TO 900-1000 PPM FOR 20 MINUTES EXPERIENCED LIGHT-HEADEDNESS, INCOORDINATION, AND IMPAIRED EQUILIBRIUM. EXPOSURE TO HIGHER CONCENTRATIONS FOR EXTENDED PERIODS OF TIME MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION WITH DIZZINESS, INCOORDINATION, DROWSINESS, INCREASED REACTION TIME, UNCONSCIOUSNESS, AND DEATH. "SUDDEN DEATHS" MAY OCCUR DUE TO SENSITIZATION OF THE MYOCARDIUM TO EPINEPHRINE. (CAUSING CARDIAC ARRYTHMIA). DEATH MAY ALSO BE CAUSED BY ASPHYXIA DUE TO THE REDUCTION IN OXYGEN AVAILABLE FOR BREATHING. AT EXTREMELY HIGH CONCENTRATIONS, LIVER AND KIDNEY INJURY MAY OCCUR. REPEATED EXPOSURE TO THE POINT OF ANESTHESIA MAY CAUSE REVERSIBLE HEPATITIS (ANIMAL).

CHRONIC EXPOSURE- IN EXPERIMENTAL ANIMALS, LIVER AND KIDNEY DAMAGE HAVE BEEN MINIMAL. SEE ANIMAL MUTAGENIC AND REPRODUCTIVE EFFECTS REFERENCES IN TOXICITY SECTION. AT 1000 TO 10,000 PPM: 3-MONTH EXPOSURES OF ANIMALS CAUSED SOME PATHOLOGIC CHANGES IN THE LIVERS AND LUNGS OF SOME SPECIES. WHEN REPEATED, REDUCED TO 500 PPM: PATHOLOGIC CHANGES WERE ELIMATED, BUT THERE WAS SOME GROWTH LOSS.

FIRST AID- REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. IF BREATHING WITH DIFFICULTY, GIVE OXYGEN. REMOVE ANY CONTAMINATED CLOTHING. DO NOT GIVE EPINEPHRINE (ADRENALIN). KEEP AFFECTED PERSON WARM AND AT REST. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT:
IRRITANT.

ACUTE EXPOSURE- CONTACT WITH THE LIQUID MAY CAUSE IMMEDIATE IRRITATION AND REDNESS. THE SUBSTANCE CAN BE ABSORBED TO A MODERATE DEGREE PRODUCING SYSTEMIC EFFECTS OF DIZZINESS, HEADACHE, INCOORDINATION, AND DROWSINESS.

CHRONIC EXPOSURE- REPEATED SKIN CONTACT MAY PRODUCE A DRY, SCALY, FISSURED DERMATITIS DUE TO THE DEFATTING PROPERTIES OF THE LIQUID. SEE ANIMAL MUTAGENIC AND REPRODUCTIVE REFERENCES IN TOXICITY SECTION.

FIRST AID- REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECT AREA WITH SOAP OR MILD DETERGENT AND LARGE AMOUNTS OF WATER UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT:
IRRITANT.

ACUTE EXPOSURE- HIGH VAPOR CONCENTRATIONS (800-1000 PPM) MAY CAUSE IRRITATION AND REDDNESS DIRECT CONTACT OF THE LIQUID MAY CAUSE TEMPORARY INJURY WITH COMPLETE RECOVERY EXPECTED IN 48 HOURS. DIRECT APPLICATION TO THE EYES OF RABBITS HAS CAUSED CONJUNCTIVAL IRRITATION, BUT NO CORNEAL DAMAGE.

CHRONIC EXPOSURE- NO EFFECTS KNOWN IN HUMANS.

FIRST AID- WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER, OCCASIONALLY LIFTING THE UPPER AND LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 10-20 MINUTES). GET MEDICAL ATTENTION.

INGESTION:
NARCOTIC.

ACUTE EXPOSURE- SYMPTOMS PROGRESS THROUGH HEADACHE, DIZZINESS, NAUSEA, FAINTING, RESPIRATORY DEPRESSION, HYPOTENSION, ARRHYTHMIAS, AND UNCONSCIOUSNESS. LIVER AND KIDNEY DAMAGE MAY OCCUR. THE ADULT FATAL DOSE IS ESTIMATED TO BE 5 ML.

FIRST AID- GET MEDICAL ATTENTION IMMEDIATELY. IF MEDICAL ATTENTION IS NOT IMMEDIATELY AVAILABLE, AND IF VICTIM IS CONSCIOUS, ATTEMPT TO INDUCE VOMITING BY TOUCHING FINGER TO BACK OF THROAT.

REACTIVITY

ACTIVITY:
ABLE UNDER NORMAL CONDITIONS. REACTS VIOLENTLY WITH ALKALI, EARTH-ALKALINE, AND WITH VARIOUS METAL POWDERS. THE SUBSTANCE CAN BE HYDROLYZED BY WATER TO FORM HYDROCHLORIC ACID AND ACETIC ACID. THE SUBSTANCE WILL REACT WITH STRONG CAUSTICS, SUCH AS CAUSTIC SODA OR CAUSTIC POTASH TO FORM FLAMMABLE OR EXPLOSIVE MATERIAL. AN INHIBITOR IS REQUIRED TO PREVENT THE CORROSION OF METALS.

INCOMPATIBILITIES:

ACETONE + BASE: EXPLOSION.
LIQUID OXYGEN + IGNITION SOURCE: EXPLOSION.
SODIUM-POTASSIUM ALLOY + LIQUID OXYGEN WITH AN ENERGY SOURCE: EXPLOSION.
STRONG OXIDIZERS: VIOLENT REACTION.
STRONG CAUSTICS: VIOLENT REACTION.
CHEMICALLY ACTIVE METALS (ALUMINUM POWDER, SODIUM, POTASSIUM, MAGNESIUM POWDER): VIOLENT REACTION.
NATURAL RUBBER: DECOMPOSES.
SODIUM: SPONTANEOUSLY FLAMMABLE COMPOUND FORMED.
SODIUM HYDROXIDE: SPONTANEOUSLY FLAMMABLE COMPOUND FORMED.
NITROGEN TETRAOXIDE: EXPLODES.

DECOMPOSITION:
THE SUBSTANCE WILL DECOMPOSE AT HIGH TEMPERATURES UPON CONTACT WITH HOT METAL OR UNDER ULTRAVIOLET RADIATION TO PRODUCE TOXIC AND CORROSIVE GASES SUCH AS ROGEN CHLORIDE, DICHLOROACETYLENE, AND VERY SMALL-AMOUNTS OF CHLORINE AND SGENE.

POLYMERIZATION:
NOT KNOWN TO OCCUR.

****

CONDITIONS TO AVOID

MAY BURN BUT DOES NOT IGNITE READILY. CONTAINER MAY EXPLODE IN HEAT OF FIRE. AVOID ULTRAVIOLET RADIATION. AVOID OPEN FLAMES, WELDING ARCS OR OTHER HIGH TEMPERATURE SOURCES, WHICH INDUCE THERMAL DECOMPOSITION OR EXPLOSION. AVOID AUTOIGNITION TEMPERATURE, 537 C.

****

SPILL AND LEAK PROCEDURES

OCCUPATIONAL SPILL:
SHUT OFF IGNITION SOURCES. STOP LEAK IF YOU CAN DO IT WITHOUT RISK. FOR SMALL LIQUID SPILLS, TAKE UP WITH SAND, EARTH OR OTHER ABSORBENT MATERIAL. FOR LARGER SPILLS, DIKE FAR AHEAD OF SPILL FOR LATER DISPOSAL. NO SMOKING, FLAME OR FLARES IN HAZARD AREA! KEEP UNNECESSARY PEOPLE AWAY.

PROTECTIVE EQUIPMENT

TILATION:
IDE LOCAL EXHAUST VENTILATION SYSTEM TO MEET PERMISSIBLE EXPOSURE LIMITS.

AVTEX FIBERS FRONT ROYAL INC.
AVTEX FIBERS SITE

APPENDIX D
GRID PATTERN DATA

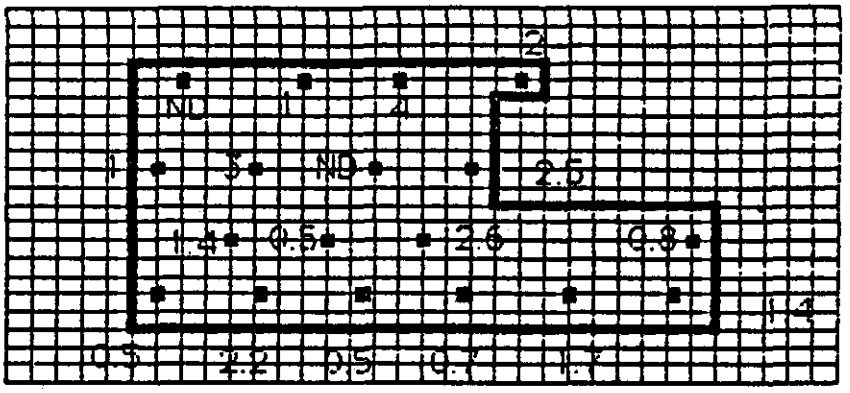
ADMINISTRATIVE ORDER
Docket No. III-90-01-DC

Prepared for U.S. Environmental Protection Agency
Hazardous Waste Management Division

Region III

November 7, 1989

AVTEX FIBERS FRONT ROYAL INC.
Kendrick Lane
P.O. Box 1169
Front Royal, Virginia 22630



DUMPSTER SITE AT COMPRESSOR ROOM

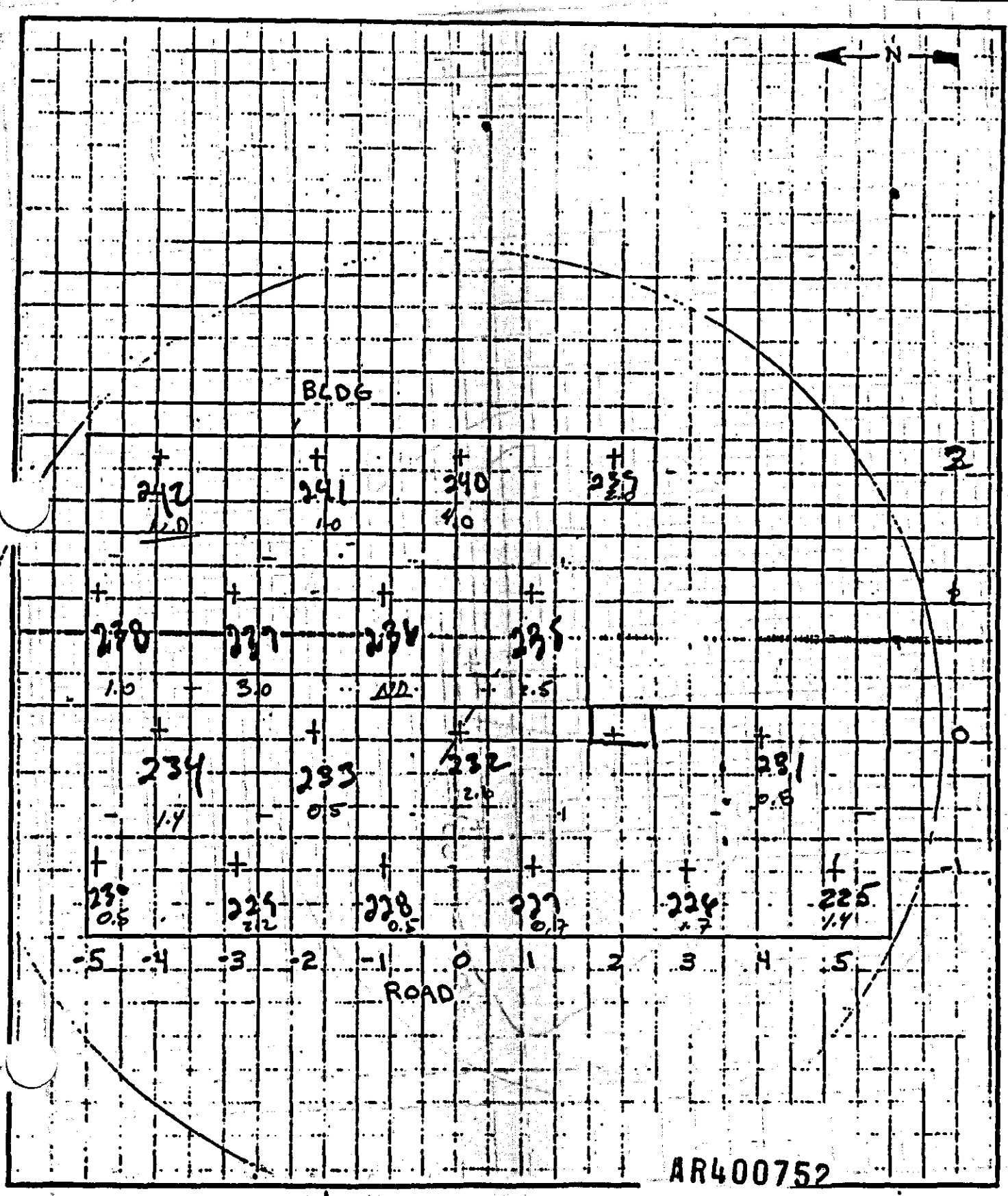
FINAL READINGS AFTER 12 INCHES OF EARTH REMOVED.
HIGH 4 ppm LOW Non Detected
Will refill with clean fill

[redacted]

S.D.MYERS, INC.
FIELD SERVICE DIVISION

Page:
Job. No.:
Date: 10/17/89
By: L.F.

Subject: Compressor Room Roof Over Flow
Location: Aytex Fibers



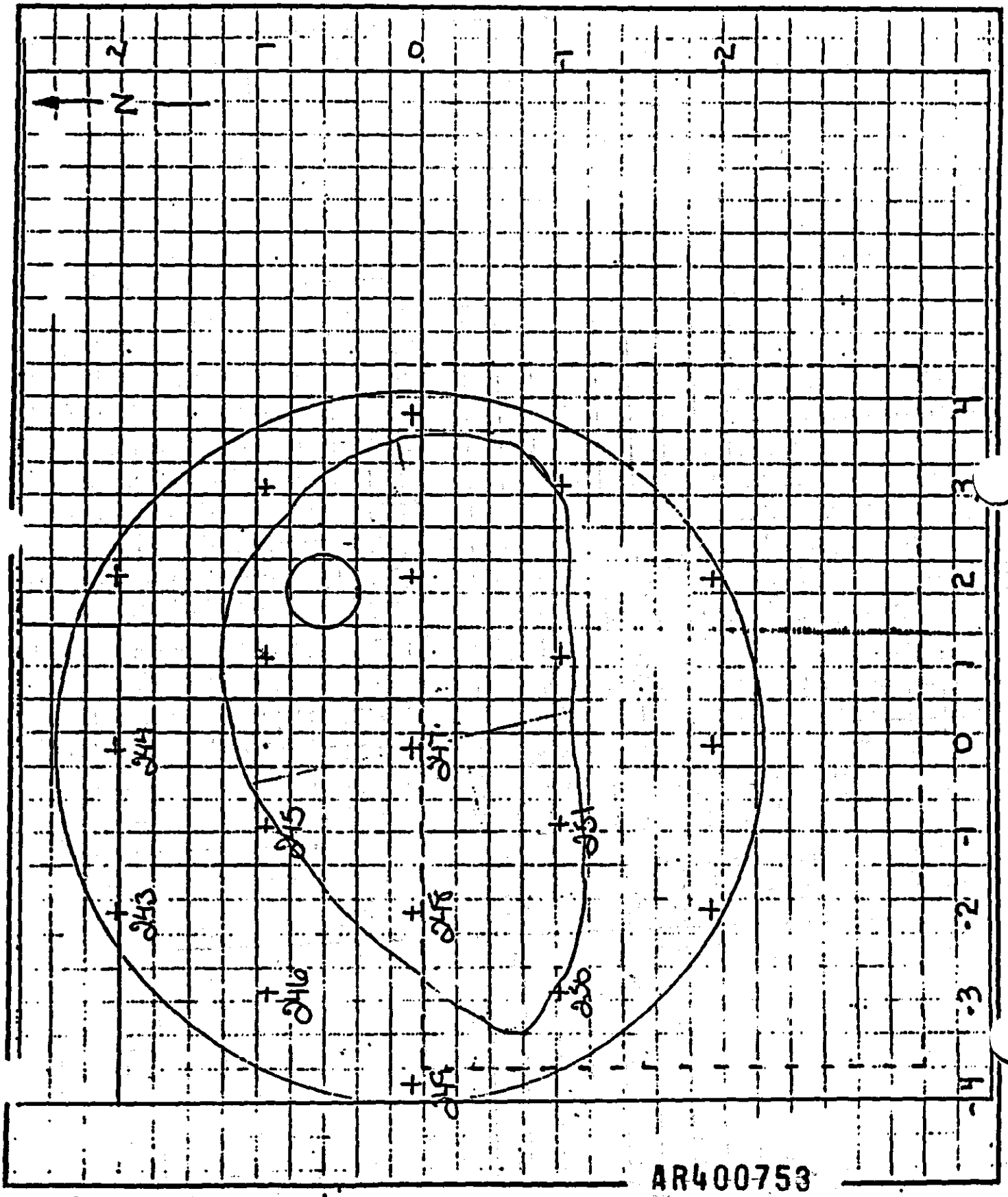
AR400752

SCALE — ONE SQUARE = 1 FT

S.D.MYERS, INC.
FIELD SERVICE DIVISION

Page: 1
Job. No.:
Date: 10/17/8
By: L.F.

Subject: SUB 1-A Post Clean up GRID
Location: Aytex Fibers



AR400753

SCALE — ONE SQUARE = 1 FT.

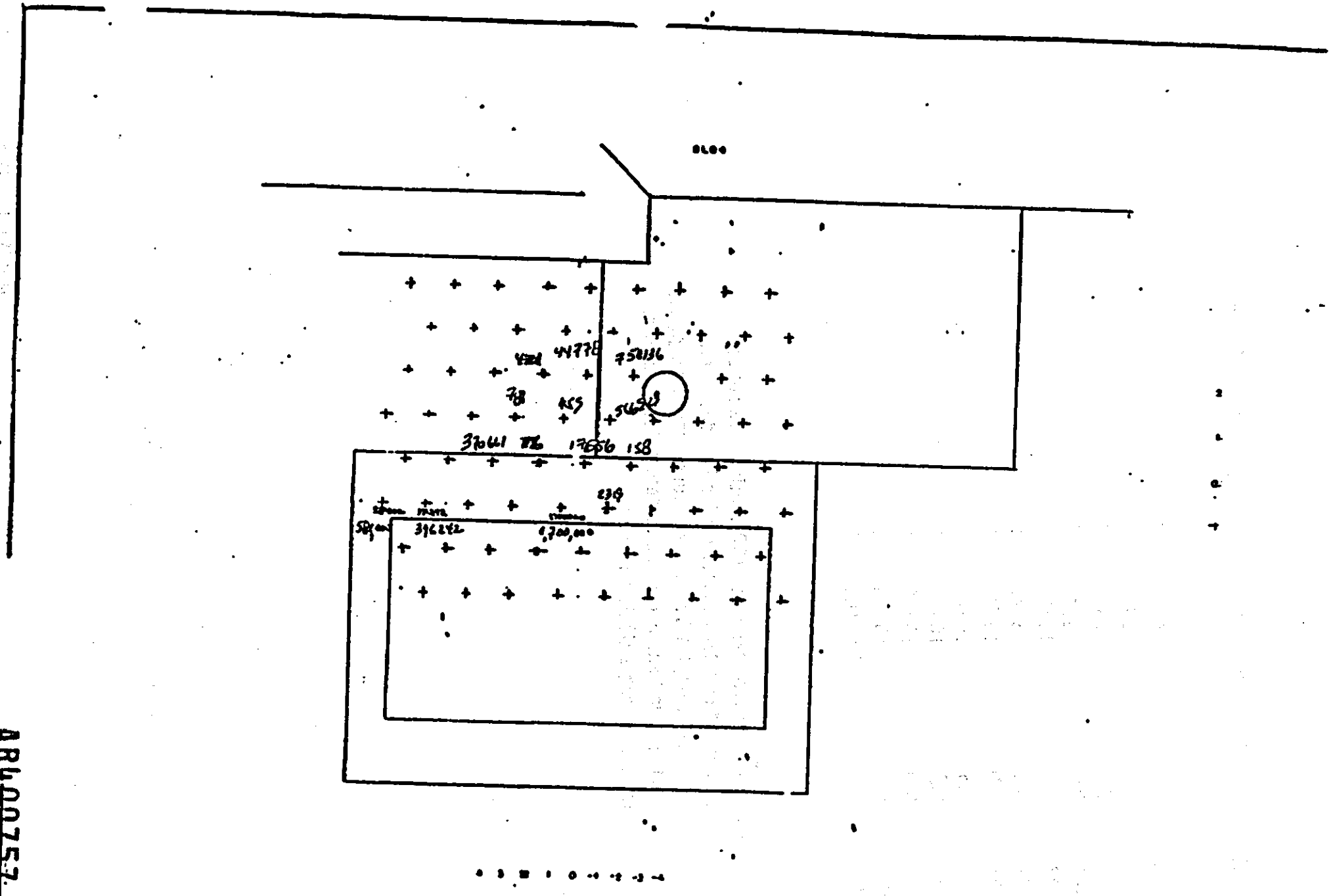
MANHOLE WIPE SAMPLE SUMMARY

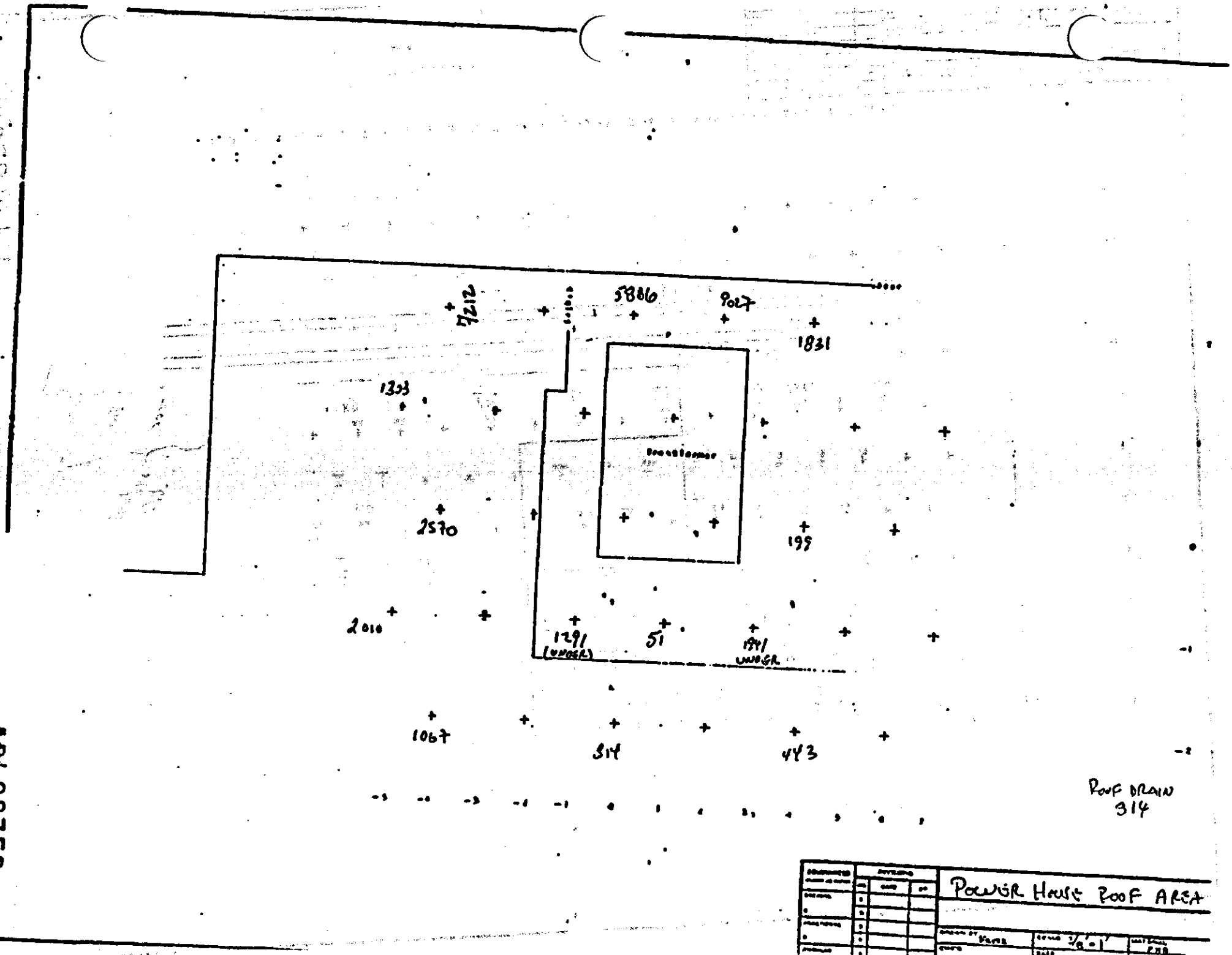
MANHOLE WIPE SAMPLE SUMMARY

MH #	*mg/100cm^2	DATE	# SAMPLES	ENCAPSULATED
A-55	N.D.	12 OCT	1	
A-54	N.D	12 OCT	1	
A-51	2.2	12 OCT	1	
A-51	N.D	14 OCT	7	
A-50	4.2	12 OCT	1	
A-50	15.3	14 OCT	7	
A-50	55	16 OCT	7	
A-10	N.D	12 OCT	1	
A-11	218	12 OCT	1	
A-11	N.D	14 OCT	7	
A-16	4.5	11 OCT	1	
A-16	238	14 OCT	7	
A-16	37	15 OCT	7	
A-21	127	12 OCT	1	
A-21	31	13 OCT	7	
A-21	25	16 OCT	7	
A-22	5.1	11 OCT	1	
A-22	1.5	12 OCT	1	
A-22	14.8	13 OCT	7	
A-24	7326	11 OCT	1	
A-24	6065	13 OCT	7	
A-24	4978	15 OCT	7	18 OCT
A-26	138	11 OCT	1	
A-26	3072	13 OCT	7	
A-26	5036	15 OCT	7	
A-27	4.7	11 OCT	1	
A-27	138	15 OCT	7	18 OCT
A-28	15	11 OCT	1	
A-28	108	13 OCT	7	
A-31	5.4	11 OCT	1	
A-31	2.9	13 OCT	7	
A-31	7.5	16 OCT	7	
A-33	N.D	11 OCT	1	
A-39				
A-40	16	16 OCT	1	
Sump	31	16 OCT	1	
A-41	83	16 OCT	1	
A-42	1269	16 OCT	1	
NA-13	4.4	16 OCT	1	
NA-11	N.D.	10 OCT	7	
NA-10	N.D	10 OCT	7	
A-43	N.D	10 OCT	7	

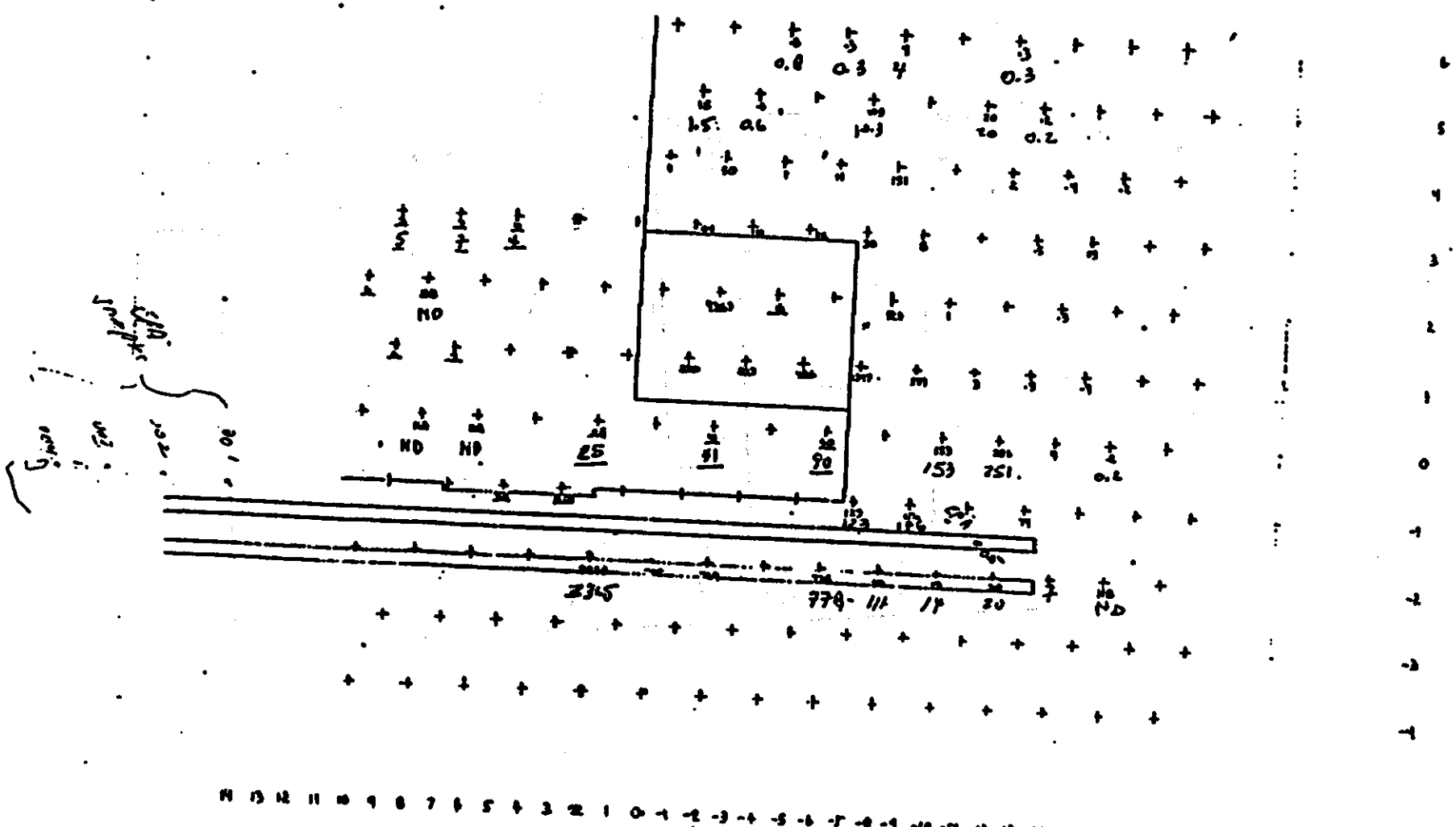
MH #	*mg/100cm^2	DATE	# SAMPLES	ENCAPSULATED
A-44	N.D	10 OCT	7	
A-45	N.D.	10 OCT	7	
A-46	7.7	10 OCT	7	
A-46	252	14 OCT	7	
A-23	N.D	11 OCT	7	
A-29	N.D	13 OCT	1	
A-61	N.D	15 OCT	1	
A-30	5.3	16 OCT	1	
A-32	5.3	16 OCT	1	
A-7	N.D	15 OCT	1	
A-8	4	15 OCT	1	
A-9	6	15 OCT	1	

* mg/100 cm^2 = micro grams per 100 centimeters squared
A method of relative measure for PCB detection in "wipe" samples. This has no corollation to ppm, parts per million. A method to detect PCB concentration in oil and/or particulate matter.


SUB 1A AREA
1-A


7212
5886
9027
1831
1323
2570
195
2010
1291
(UNDER)
51
1941
UNDER
1067
314
443
ROOF DRAIN
314
POWER HOUSE ROOF AREA

A-400750



POLYESTER DOCK AREA

L.E.

AR400759

Acts 4:12

DIVISION OF Myers TRANSFORMER CONSULTANTS

Date 7/26/89 No. Samples 10

Customer Number 03720000

Company Name Aytex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

	Type				Arochlor			
Sample No.	Wipe	Dirt	Other	Location	1248	1016	1260	Total ppm
TC# 2023		x		1/7 N.W. dock	1474			1474
TC# 2026		x		-1/9 N.W. dock	176			176
TC# 2027		x		-1/7 N.W. dock	123			123
TC# 2029		x		-1/3 N.W. dock	905			905
TC# 2030		x		-1/-7 N.W. dock	71			71
[illegible]031		x		3/3 N.W. dock	36			36
TC# 2038		x		1/-1 1A	1549			1549
TC# 2041		x		0/2 1A	17,656			17,656
TC# 2044		x		3/3 1A	2153			2153
TC# 2045		x		0/0 1A		76		76

AR400760

Acts 4:12

DIVISION OF J.D. Myers TRANSFORMER CONSULTANTS

Date 7/26/89 No. Samples 6

Customer Number 03720000

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type: Wipe	Type: Dirt	Type: Other	Location	Arochlor 1248	Arochlor 1016	Arochlor 1260	Total ug/100 c
TC# 2017	x			1/3 N.W. dock	227			227
TC# 2018	x			1/0 N.W. dock	256			256
TC# 2021	x			1/5 N.W. dock	486			486
TC# 2024	x			0/6 N.W. dock	90			
TC# 2034	x			0/-4 1A	158			
TC# 2035	x			1/1 1A	1320			1320

AR400761

PCBA118

Acts 4:12

DIVISION OF S.D. Myers TRANSFORMER CONSULTANTS

Date 7/26/89 No. Samples 10

Customer Number 03720000

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type			Location	Arochlor			
	Wipe	Dirt	Other		1242	1254	1260	Total ppm
TC# 2012		x		-1/-1 power house			1291	1291
TC# 2013		x		-2/0 power house			814	814
TC# 2014		x		-1/3 power house			1941	1941
TC# 2015		x		-2/4 power house			443	443
TC# 2016		x		roof drain power house			314	314
[illegible]22		x		2/7 N.W. dock	1643			1643
T[illegible] 2039		x		2/0 1A	44,778			44,778
TC# 2040		x		2/-2 1A	421			421
TC# 2042		x		1/-3 1A	78			78
TC# 2043		x		0/4 1A				ND

AR400762

PCBA1M

Acts 4:12

DIVISION OF S.D. Myers TRANSFORMER CONSULTANTS

Date 7/26/89 No. Samples 19

Customer Number 03720000

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

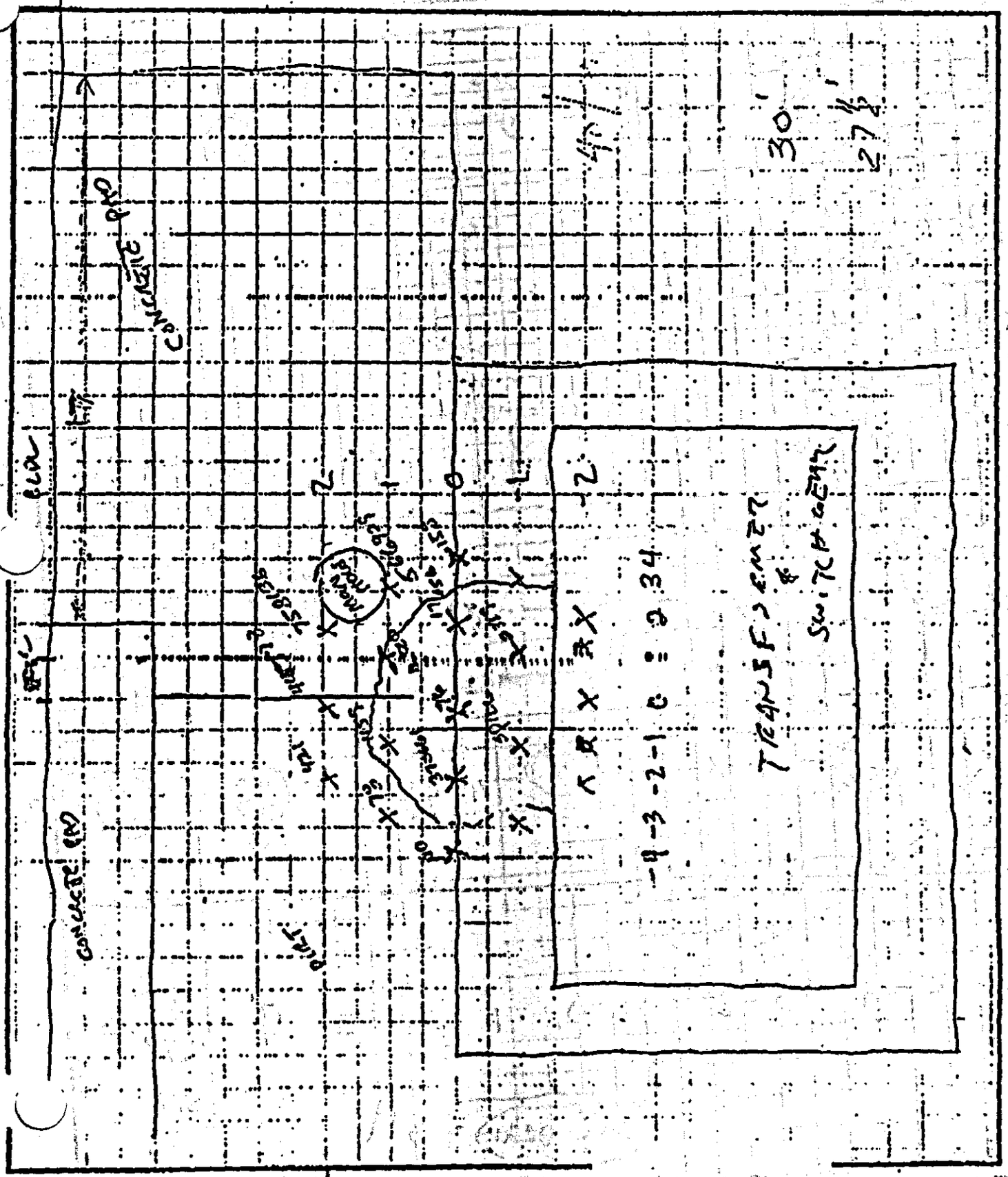
	Type				Arochlor			
Sample No.	Wipe	Dirt	Other	Location	1242	1254	1260	Total ug/100 cm
TC# 2001	x			0/4 power house	3		196	199
TC# 2002	x			2/-4 power house	1414		5798	7212
TC# 2003	x			2/2 power house			9027	9027
TC# 2004	x			2/0 power house			5886	5886
TC# 2005	x			0/0 power house			1841	18[illegible]
TC# 2006	x			-1/1 power house			51	[illegible]
TC# 2007	x			2/4 power house			1831	1831
TC# 2008	x			1/-5 power house			1303	1303
TC# 2009	x			0/-4 power house			2520	2520
TC# 2010	x			-1/-5 power house			2010	2010
TC# 2011	x			-2/-4 power house			1067	1067
TC# 2019	x			2/2 N.W. dock	4367			4367
TC# 2020	x			2/4 N.W. dock	8			8
TC# 2025	x			0/-2 N.W. dock	25			25
TC# 2028	x			0/2 N.W. dock	41			41
TC# 2032	x			2/2 1A	758.136			758.136
TC# 2033	x			1/3 1A	566.929			566.929
TC# 2036	x			0/-2 1A	370.661			370.661
TC# 2037	x			-1/1 1A	2319			2319

AR400763

S.D.MYERS, INC.
FIELD SERVICE DIVISION

Page: ________
Job. No.: ________
Date: ________
By: ________

Subject: ________
Location: I A SUBSTATION

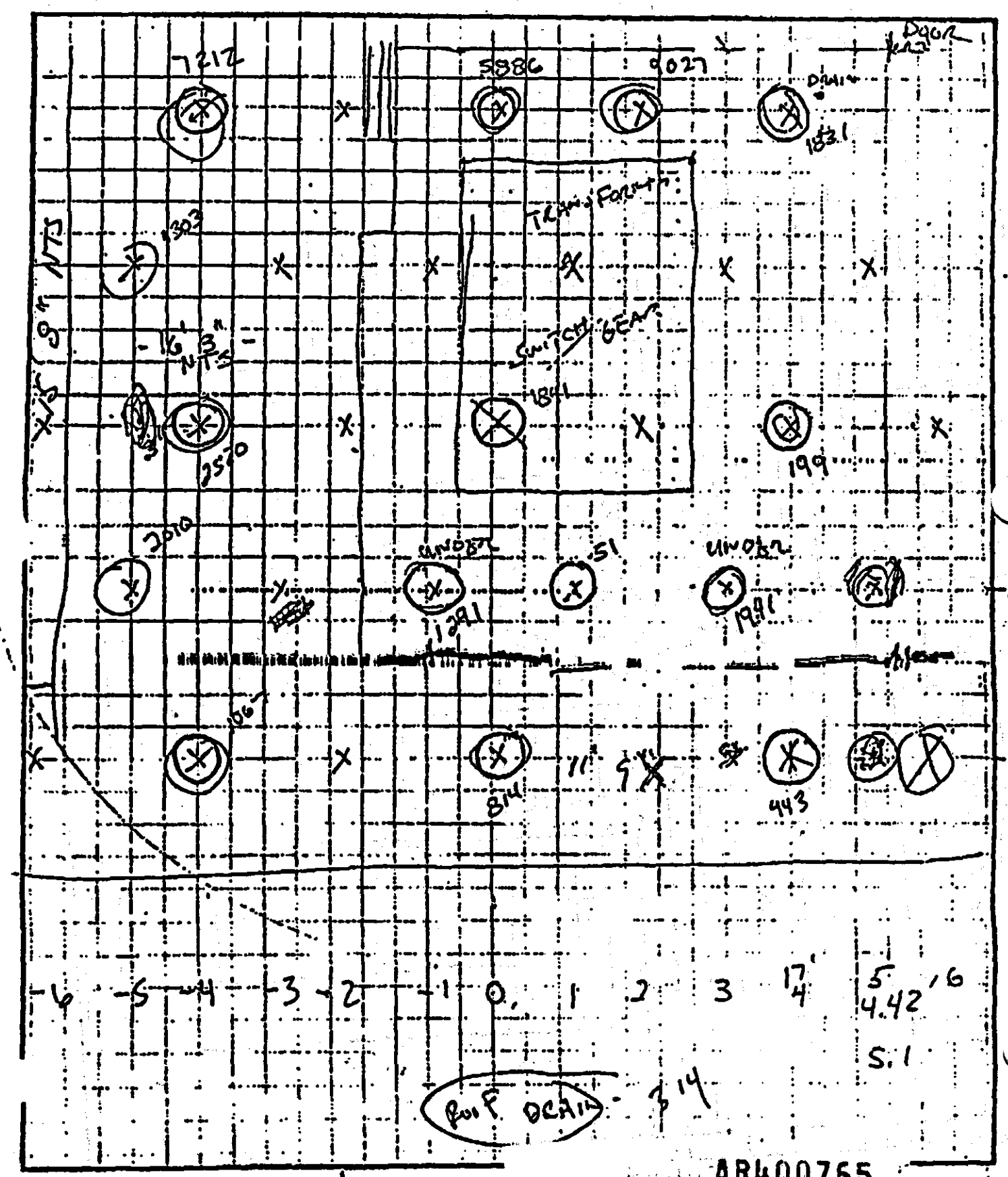


SCALE — ONE SQUARE = 1 FT.

S.D.MYERS, INC.
FIELD SERVICE DIVISION

Page: 1 of 2
Job No.:
Date: 7/6/85
By:

Subject: AVTEX FIBERS
Location: POWERHOUSE ROOF



SCALE — ONE SQUARE = 1 FT.

NT

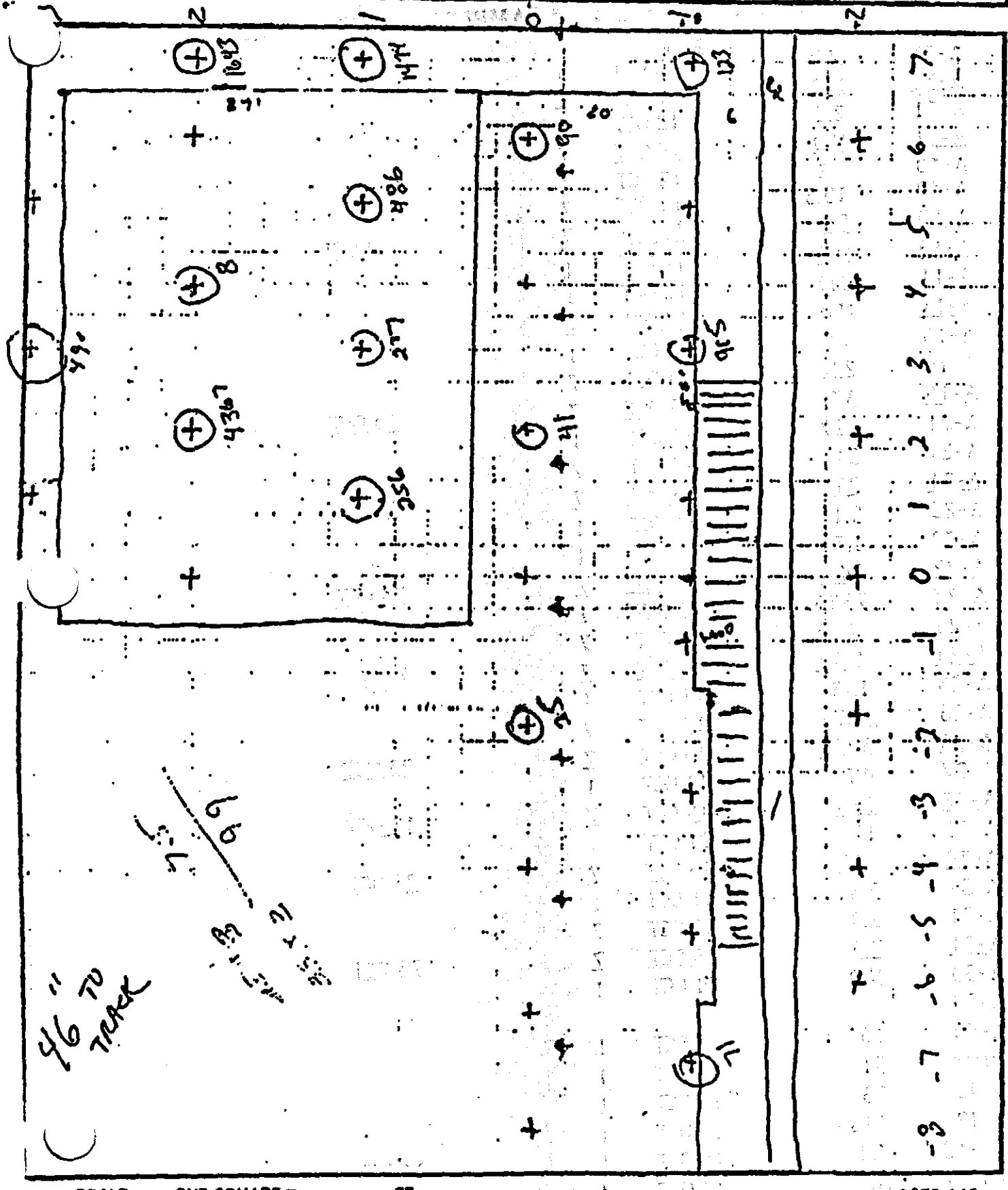
AR400765

ACTS 4:12

S.D.MYERS, INC.
FIELD SERVICE DIVISION

Page:
Job. No.:
Date:
By:

Subject: POLYESTER
Location: NORTH WEST DOCK



SCALE — ONE SQUARE = _____ FT.

ACTS 4:12

AR400766

MANHOLE WIPE SAMPLE SUMMARY

MH #	*mg/100cm^2	DATE	# SAMPLES	ENCAPSULATED
A-55	N.D.	12 OCT	1	
A-54	N.D	12 OCT	1	
A-51	2.2	12 OCT	1	
A-51	N.D	14 OCT	7	
A-50	4.2	12 OCT	1	
A-50	15.3	14 OCT	7	
A-50	55	16 OCT	7	24 OCT
A-10	N.D	12 OCT	1	
A-11	218	12 OCT	1	
A-11	N.D	14 OCT	7	
A-16	4.5	11 OCT	1	
A-16	238	14 OCT	7	
A-16	37	15 OCT	7	24 OCT
A-21	127	12 OCT	1	
A-21	31	13 OCT	7	
A-21	25	16 OCT	7	24 OCT
A-22	5.1	11 OCT	1	
A-22	1.5	12 OCT	1	
A-22	14.8	13 OCT	7	24 OCT
A-24	7326	11 OCT	1	
A-24	6065	13 OCT	7	
A-24	4978	15 OCT	7	18 OCT
A-26	138	11 OCT	1	
A-26	3072	13 OCT	7	
A-26	5036	15 OCT	7	23 OCT
A-27	4.7	11 OCT	1	
A-27	138	15 OCT	7	18 OCT
A-28	15	11 OCT	1	
A-28	108	13 OCT	7	23 OCT
A-31	5.4	11 OCT	1	
A-31	2.9	13 OCT	7	
A-31	7.5	16 OCT	7	23 OCT
A-33	N.D	11 OCT	1	
A-39				
A-40	16	16 OCT	1	
Sump	31	16 OCT	1	
A-41	83	16 OCT	1	
A-42	1269	16 OCT	1	
NA-13	4.4	16 OCT	1	24 OCT
NA-11	N.D.	10 OCT	7	23 OCT
NA-10	N.D	10 OCT	7	
A-43	N.D	10 OCT	7	

AR400767

MH #	*mg/100cm^2	DATE	# SAMPLES	ENCAPSULATED
A-44	N.D	10 OCT	7	23 OCT
A-45	N.D.	10 OCT	7	24 OCT
A-46	7.7	10 OCT	7	
A-46	252	14 OCT	7	24 OCT
A-23	N.D	11 OCT	7	
A-29	N.D	13 OCT	1	
A-61	N.D	15 OCT	1	
A-30	5.3	16 OCT	1	24 OCT
A-32	5.3	16 OCT	1	24 OCT
A-7	N.D	15 OCT	1	
A-8	4	15 OCT	1	
A-9	6	15 OCT	1	

* mg/100 cm^2 = micro grams per 100 centimeters squared
A method of relative measure for PCB detection in "wipe" samples. This has no corollation to ppm, parts per million. A method to detect PCB concentration in oil and/or particulate matter.

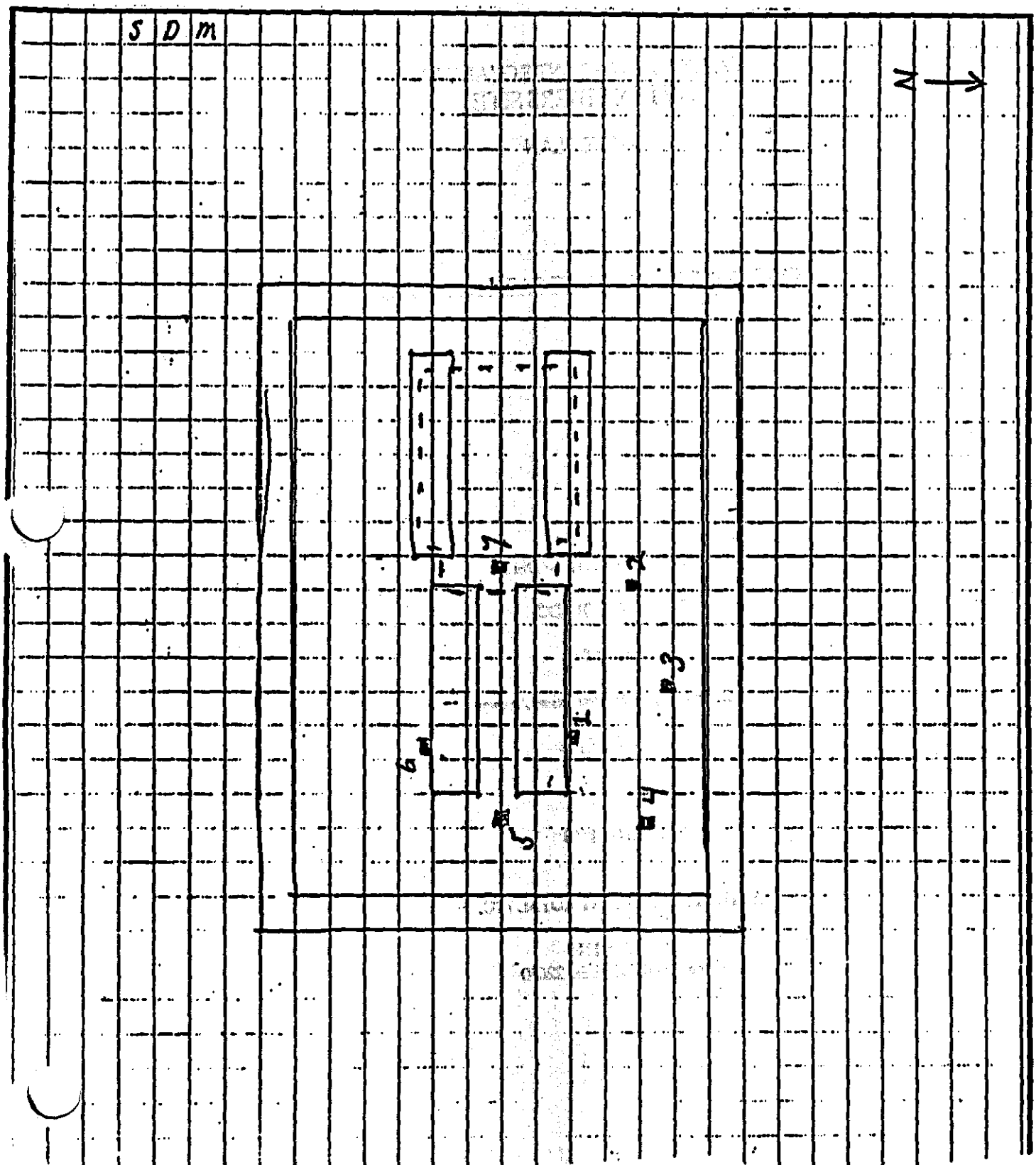
MH *	*mg/100cm^2	DATE	* SAMPLES	ENCAPSULATED
A-43	N.D	10 OCT	7	23 OCT
A-44	N.D	10 OCT	7	23 OCT (N. D under brick)
A-45	N.D.	10 OCT	7	24 OCT
A-46	7.7	10 OCT	7	
A-46	252	14 OCT	7	24 OCT
A-23	N.D	11 OCT	7	2 NOV
A-29	N.D	13 OCT	1	-------
A-61	N.D	15 OCT	1	-------
A-30	5.3	16 OCT	1	24 OCT
A-32	5.3	16 OCT	1	24 OCT
A-7	N.D	15 OCT	1	-------
A-8	4	15 OCT	1	26 OCT
A-9	6	15 OCT	1	30 OCT
MHI	64	18 OCT	1	
MHJ	49	18 OCT	1	
MHK	10	3 NOV	1	
MHL	10	3 NOV	1	
MHM	10	3 NOV	1	

* mg/100 cm^2 = micro grams per 100 centimeters squared
A method of relative measure for PCB detection in "wipe" samples. This has no corollation to ppm, parts per million. A method to detect PCB concentration in oil and/or particulate matter.

S.D.MYERS, INC.
FIELD SERVICE DIVISION

Page: 1
Job. No.:
Date:
By: DB

Subject: Sub S-A Grid
Location:



AR400770

SCALE — ONE SQUARE = 1.

AVTEX FIBERS FRONT ROYAL INC.
AVTEX FIBERS SITE

WORK PLAN

COPIES OF ANALYTICAL RESULTS

ADMINISTRATIVE ORDER

Docket III-90-010-DC

Prepared for

U. S. Environmental Protection Agency

Region III

November 1989

AVTEX FIBERS FRONT ROYAL INC.
Kendrick Lane
P. O. Box 1169
Front Royal, Virginia 22630

QUALIFICATION RECAP

CUST# 03720000 AVTEX FIBERS FRONT ROYAL VA

TC#	SERIAL NUMBER	SUBSTATION NAME	SIZE KVA	BALLOONS LIQUID TYPE	PCB CLASS	PCB DATE	LST	SD	AF	ICP	PF	SERVICE PRODUCT
1	1646271	SUB 2	200	121 OIL	NON-PCB	4/14/88	AC	AC	OU		AC	
2	1646273	SUB 2	200	121 OIL	NON-PCB	2/13/89	AC	AC	AC		AC	
3	1646272	SUB 2	200	121 OIL	NON-PCB	2/13/89	AC	AC	AC			
4	1638034	SUB 2	1500	857 OIL	NON-PCB	2/13/89	AC	AC	OU			
5	1638033	SUB 2	1500	857 OIL	NON-PCB	4/14/88	AC	AC	OU		AC	
6	5060444	SUB 17	1500	649 OIL	NON-PCB	4/14/88	AC	AC	AC			
7	1706299	SUB 5	333	360 OIL	NON-PCB	4/14/88	AC	AC	OU		AC	
8	1706300	SUB 5	333	360 OIL	NON-PCB	4/14/88	AC	OU	AC		AC	
9	1706298	SUB 5	333	360 OIL	NON-PCB	4/14/88	AC	AC	AC		AC	
10	5357119	SUB 5A	1500	205 ASKAREL	PCB		AC		AC			
11	7022651	SUB 7A	2000	409 OIL	CONTAMINATED	4/14/88	UN	AC	AC			
12	3411932	SUB 7	2500	1024 OIL	NON-PCB	4/14/88	AC	AC	AC		PC	
13	3411933	SUB 6	2000	715 OIL	NON-PCB	4/14/88	AC	AC	AC		AC	
14	2630721	SUB 1	200	214 OIL	NON-PCB	4/14/88	AC	AC	OU		AC	
15	2630720	SUB 1	200	214 OIL	NON-PCB	4/14/88	AC	PC	OU		AC	
	007??	SUB 1	200	214 OIL	NON-PCB	4/14/88	AC	AC	AC		AC	
	2856043	SUB 1	1500	600 OIL	NON-PCB	2/13/89	AC	AC	AC			
18	C256044	SUB 1	1500	600 OIL	NON-PCB	4/14/88	AC	AC	AC			
19	3857789	SUB 1A	1500	205 ASKAREL	PCB		AC		AC			
20	5390224	WASTE TREATMENT PLT	300	270 OIL	NON-PCB	12/14/82		AC				
24	E9E1050	POWER HOUSE	1500	525 ASKAREL	PCB				AC			
25	E9E1052	POWER HOUSE	1500	535 ASKAREL	PCB		AC		AC			
26	E9E1051	POWER HOUSE	1500	535 ASKAREL	PCB		AC		AC			
27	E9E1049	POWER HOUSE	1500	555 ASKAREL	PCB		AC		AC			
28	3412195	SUB 11	500	285 OIL	NON-PCB	4/14/88	AC	OU	AC		AC	
29	3412159	SUB 8	1000	406 OIL	NON-PCB	4/14/88	AC	AC	AC		AC	
30	3412150	SUB 9	2000	715 OIL	NON-PCB	4/14/88	AC	OU	AC			
31	3412194	SUB 10	500	285 OIL	NON-PCB	4/14/88	AC	AC	AC		AC	
32	3502503	SUB 18	2000	620 ASKAREL	PCB		AC		AC			
33	3412185	SUB 14	1500	659 OIL	NON-PCB	4/14/88	AC	OU	AC		AC	
34	3416291	SUB 15	750	460 OIL	NON-PCB	4/14/88	AC	AC	OU			
35	18110	SUB E	2000	322 ASKAREL	PCB		UN		AC			
36	18111	SUB B	2000	322 ASKAREL	PCB		AC		AC			
37	18112	SUB F	2000	322 ASKAREL	PCB		PC		AC			
38	18114	SUB A	2000	322 ASKAREL	PCB		AC		AC			
39	53115	SUB F	1500	262 ASKAREL	PCB		PC		AC			
40	18342	SUB I	1500	400 ASKAREL	PCB		AC		AC			
41	18113	SUB G	2000	322 ASKAREL	PCB		AC		AC			
42	18341	SUB H	2000	322 ASKAREL	PCB		AC		AC			
43	20218	SUB E	1500	262 ASKAREL	PCB		AC		AC			
	3	SUB J	1500	436 ASKAREL	PCB		AC		AC			
	40		1500	580 ASKAREL	PCB		UN		AC			
							AC		AC			

AR400772

CUST# 03320000 AVTEX FIBERS FRONT ROYAL VA 8/29/89

TCB SERIAL NUMBER	SUBSTATION NAME	SIZE KVA	GALLONS LIQUID TYPE	PCB CLASS	PCB DATE	LST	SC	XF	ICP	PF	SERVICE PRODUCT
46 E86319	WASTE TREATMENT PLT	1500	880 ASKAREL PCB				AC		AC		
47 PEV575601	POWERHOUSE	1500	325 ASKAREL PCB				AC		AC		
48 1507855	18 SUB	1500	726 OIL	NON-PCB	4/14/89	UN	AC	OU		AC	
49 1638035	SUB 6	1500	857 OIL	NON-PCB	4/14/89	AC	AC	AC		AC	
50 4812197	OUTSIDE SUB 2	833	420 OIL	CONTAMINATED	4/14/89	OU	AC	OU			
51 4812195	OUTSIDE SUB 2	833	420 OIL	NON-PCB	2/13/89	AC	AC	OU			
52 4812196	OUTSIDE SUB 2	833	420 OIL	NON-PCB	2/13/89	AC	AC	OU			
53 PAT732201	RIVER PUMPHOUSE	1000	149 SILICON	NON-PCB	4/14/88	AC	OU	AC			
54 2242494	18 LIGHTING	15	18 OIL	NON-PCB	4/14/88	AC				AC	
55 2517407	SPARE OUTSIDE SUB 6	50	64 OIL	NON-PCB	12/20/82						
56 2242498	SUB 6 LIGHTING	15	18 OIL	NON-PCB	12/20/82	UN					
57 40561	SPARE BY SUB 6	1000	468 OIL	NON-PCB	12/20/82		AC				
58 HB37734	19 ZINC RECOVERY	1500	211 ASKAREL PCB			AC		AC			
59 B8019260	POWERHOUSE	1500	308 ATEMP	NON-PCB	4/14/88	AC	OU	OU			
60 1625690	ROOF	50	39 OIL	NON-PCB	7/06/89						
61 1625654	ROOF	50	39 OIL	NON-PCB	7/06/89						
62 1625696	ROOF	50	39 OIL	NON-PCB	7/06/89						
63 1625624	ROOF	50	39 OIL	NON-PCB	7/06/89						
64 1625669	ROOF	50	39 OIL	NON-PCB	7/06/89						
65 1625596	ROOF	50	39 OIL	NON-PCB	7/06/89						
66 1625612	ROOF	50	39 OIL	NON-PCB	7/06/89						
67 1625598	ROOF	50	39 OIL	NON-PCB	7/06/89						
68 1625612	ROOF	50	39 OIL	NON-PCB	7/06/89						
69 1625583	ROOF	50	39 OIL	NON-PCB	7/06/89						
70 1625675	ROOF	50	39 OIL	NON-PCB	7/06/89						
71 1625557	ROOF	50	39 OIL	NON-PCB	7/06/89						
72 1625623	ROOF	50	39 OIL	NON-PCB	7/06/89						
73 1625639	ROOF	50	39 OIL	NON-PCB	7/06/89						
74 1625659	ROOF	50	39 OIL	NON-PCB	7/06/89						
75 1625612	ROOF	50	39 OIL	NON-PCB	7/06/89						
76	ROOF: 300 FT.	50	39 OIL	NON-PCB	7/06/89						
77 1625167	ROOF	50	39 OIL	NON-PCB	7/06/89						
78 1625137	ROOF	50	39 OIL	NON-PCB	7/06/89						
79 1625438	ROOF	50	39 OIL	NON-PCB	7/06/89						
80 1625665	ROOF	50	39 OIL	NON-PCB	7/06/89						
81 1625648	ROOF	50	39 OIL	NON-PCB	7/06/89						
82 1625653	ROOF	50	39 OIL	NON-PCB	7/06/89						
83 1625634	ROOF	50	39 OIL	NON-PCB	7/06/89						
84 1625644	ROOF	50	39 OIL	NON-PCB	7/06/89						
85 1625644	ROOF	50	39 OIL	NON-PCB	7/06/89						
86 1625673	ROOF	50	39 OIL	NON-PCB	7/06/89						
1625636	ROOF	50	39 OIL	NON-PCB	7/06/89						

QUALIFICATION RECAP

CUST# 03720000 AVTEX FIBERS FRONT ROYAL VA

TCN SERIAL NUMBER	SUBSTATION NAME	SIZE KVA	GALLONS LIQUID TYPE	PCB CLASS	PCB DATE	LST BC KP ICP PF	SERVICE PRODUCT
130 1215559	ROOF	50	39 OIL	NON-PCB	7/06/89		
131 1215593	ROOF	50	39 OIL	NON-PCB	7/06/89		
132 1265260	ROOF	50	39 OIL	NON-PCB	7/06/89		
133 1265657	ROOF	50	39 OIL	NON-PCB	7/06/89		
134 1015000		50	39 OIL	NON-PCB	7/06/89		

AR400774

QUALIFICATION RECAP

CUST# 02720000 AVTEX FIBERS FRONT ROYAL VA 9/23/99

* SUMMARY OF RESULTS *

TOTAL RANGING OF [illegible]	[illegible]
TOTAL UNITS NON-PCB	109
TOTAL UNITS CONTAMINATED	2
TOTAL UNITS PCB	21
TOTAL REQUIRING PCB TEST	0
TOTAL REQUIRING SERVICE	
TOTAL KVA	72575
ESTIMATED VALUE OF UNITS	1,596,716.00

NOTE: EPA # CFR40-761 states that any transformer not tested for pcb content ----> must be considered contaminated (50-500ppm)

The national average cost of annual transformer maintenance is 6 pct of transformer investment. (EPRI JOURNAL, March, 1986). Based on the above estimated value of units, average annual maintenance for these units would be $95,802.96

PERCENT OF VALUE RANGE 8.82% TO 8.[illegible]

BUDGETARY RANGE $46,029.60 TO $135,020.16

While in your plant, I observed the need for the following services:

___ Oil Reclamation
___ PCB Reduction
___ Field Repair
___ Other
___ Max-Life
___ Dehydration
___ Paint or I.S.
___ E.T./Breaker Testing

Notes_____

___ Yes, please forward me a formal written quotation on the above services.

Signed_____

___ Please send me a budgetary figure on the above services.

Signed

AR400775

Company Name AVTEX FIBERS

9-18-89

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type: Wipe	Type: Dirt	Type: Other	Location	Aroclor 1242	Aroclor 1254	Aroclor 1260	Total
1531057		X					19	19
1531056		X					5	5
1531054		X					64	64
1531052		X					187	187
1531055		X		1,4-1240			.5	1.9
15310510		X					2.7	2.7
1531051		X					43	43
1531053		X					.8	.8
[illegible]		X					1.6	1.6
[illegible]		X					.7	.7

PCBA1188

AR400776

Company Name [illegible]

9-15-88

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type: Wipe	Type: Dirt	Type: Other	Location	Arochlor: 1242	Arochlor: 1254	Arochlor: 1260	Tot
1/-3	X			NORTH WEST DK. 4 - 1248				4
2/-4	X			NORTH WEST DK 161 - 1248				161
1/-5	X			NORTHWEST DK 1230 - 1248				1230
2/-2	X			NORTH WEST DK 3 - 1248				3
1/-1	X			NORTH WEST DK 3 - 1248				3
2/0	X			NORTH WEST DOCK 1 - 1248				1

Company Name AVTEX FIBERS

9-19-89

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type: Wipe	Type: Dirt	Type: Other	Location	Arochlor: 1242	Arochlor: 1254	Arochlor: 1260	Arochlor: Total
-2/-14		X		NORTH WEST DK 7 - 1248				7
-2/-16		X		NORTH WEST DOCK				ND
4/-16		X		NORTH WEST DOCK		.24		.24
4/-14		X		NORTH WEST DOCK		.4		.4
5/-13		X		NORTH WEST DOCK		.25		.25
6/-4		X		NORTH WEST DOCK		.8		.8
6/-8		X		NORTH WEST DK 4.2 - 1248				4.2
6/-6		X		NORTH WEST DOCK		.3		.3
2		X		NORTH WEST DOCK		.3		.3
17R		X		NORTH-WEST DOCK				ND
A020R		X		NORTH WEST DOCK				ND

PCB

DIVISION OF S.D. Myers TRANSFORMER CONSULTANTS

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type			Location	Arochlor			Tot.
	Wipe	Dirt	Other		1242	1254	1260	
1		x						ND
2		x						ND
3		x						ND
4		x						ND
5		x						ND
6		x						ND
7		x						ND
8		x						
9		x						ND
10		x						ND
11		x						ND
12		x						ND
13		x						ND
14		x						ND
15		x						ND
16		x						ND
17		x						ND
18		x						ND
19		x						ND
20		x						ND
21		x						ND
22	x						7.7	7.7
23		x						ND
24	x						3.3	3
25		x						

PCB

Acts 4:12

DIVISION OF S.D. Myers TRANSFORMER CONSULTANTS

Date _____ No. Samples _____

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type			Location	Arochlor			Total
	Wipe	Dirt	Other		1242	1254	1260	
26		x						ND
27	x						2.4	2.4
28		x						ND
29		x						ND
30		x						ND
31		x						ND
[illegible]		x						ND
33		x						ND
34		x						ND
35		x						ND
36		x						ND
37		x						ND
38		x						ND
39		x						ND
40		x						ND
41		x						ND
42		x						ND
43			x					ND
44			x					ND
45		x						ND
46		x						ND
47		x						ND
48		x						ND
[illegible]		x						ND
50		x						ND

PCB

Acts 4:12

DIVISION OF S.D. Myers TRANSFORMER CONSULTANTS

Date _____ No. Samples _____

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

	Type				Arochlor			
Sample No.	Wipe	Dirt	Other	Location	1242	1254	1260	Total
51		x						ND
52		x						ND.
53	x				4.6		3.6	8.2
54		x						ND.
55	x						5	5
56		x					173	173
57		x						
8		x						ND
59	x						35	35
60		x						ND.
61	x						4	4
62	x						3.7	3.7
63	x						41	41.
64		x						ND
65	x						4.5	4.5
66		x						ND
67		x						ND
68		x						ND
69	x						7.5	7.5
70	x						11	11
71	x						1.7	1.7
72		x						ND
73		x						ND
74		x						
5		x						ND

PCBA

AR400781

DIVISION OF S.D. Myers TRANSFORMER CONSULTANTS

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

	Type				Arochlor			
mple No.	Wipe	Dirt	Other	Location	1242	1254	1260	Total
76	x						2.8	2.8
77		x						ND
78	x						2.4	2.4
79	x				7.9		138.3	146.2
80	x				5.4		1.7	7.1
81	x						15	15
82	x				3.3		4.7	8.0
		x					93	93
84		x					3	3
85		x					55	55
86		x					51	51
87		x					3.2	3.2
88		x					59	59
89		x					20	20
90		x						ND
91	x				3.8		5.1	8.9
92		x					54.7	54.7
93	x						2.4	2.4
94		x						
95			x				4	4
96			x				4	4
97			x				4	4
98		x						ND
99	x				3.6		4.5	8.1
	x						1.5	1.5

PCBA1144

Acts 4:12

DIVISION OF Sid Myers TRANSFORMER CONSULTANTS

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type			Location	Arochlor			
	Wipe	Dirt	Other		1242	1254	1260	Total
101	x						7326	7326
102	x						218	218
103	x						2.2	2.2
104	x						12.7	12.7
105	x						4.2	4.2
106		x					8	8
107		x						ND
108		x						ND
109		x						ND
110		x						ND
111	x						2.9	2.9
112	x						2.6	2.6
113	x						7.5	7.5
114	x						1.8	1.8
115	x						1.6	1.6
116	x						1.6	1.6
117	x						1.4	1.4
118	x						10.2	10.2
119	x						6.9	6.9
120	x						21.4	21.4
121	x						5.5	5.5
122	x						84	84.
123	x						108.0	108.
124	x						79.3	79.
125	x						19.6	19.6

PCBA

DIVISION OF DONAGHEY TRANSFORMER CONSULTANTS

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

	Type				Arochlor			
Sample No.	Wipe	Dirt	Other	Location	1242	1254	1260	Total
126				NO SAMPLE- HIGH WATER				
127	x						17.9	17.9
128	x						138.2	138.2
129	x						11.4	11.4
130	x						22.0	22.0
131	x						22.3	22.3
[illegible]	x						1219.0	1219.0
[illegible]	x						277.0	277.0
134	x						2618.0	2618.0
135	x						383.0	383.0
136	x						482.0	482.0
137	x						3072.0	3072.0
138				NO SAMPLE-BAG IN OUTFLOW PIPE				
139	x						101	101
140	x						338	338
141	x						261	261
142	x						417	417
143	x						6065	6065
144	x						96.8	96.
145	x						221	221
146	x						24	24
147	x						17	17
148	x						14	14
[illegible]	x						25	25
150	x						17	17

DIVISION OF Sidney Myers TRANSFORMER CONSULTANTS

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type			Location	Arochlor			
	Wipe	Dirt	Other		1242	1254	1260	Total
151	x						10	10
152	x						31	31
153	x						43	43
154	x						11.2	11.2
155	x						4.9	4.9
156	x						11	11
157	x						252	252
	x						67.8	67
159	x						17	17
160	x						5.4	5.4
161	x						1.1	1.1
162	x						1.1	1.1
163	x						2.2	2.2
164	x						55	55
165	x						9.2	9.2
166	x						15.3	15.3
167		x						ND
168		x						ND
169		x						ND
170				NO SAMPLE - WATER				
171				"				
172				"				
173				"				
174	x						31.5	31.5
	x						238.7	23

DIVISION OF S.D. Myers TRANSFORMER CONSULTANTS

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type			Location	Arochlor			
	Wipe	Dirt	Other		1242	1254	1260	Total
176	x						53.8	53.8
177	x						19.2	19.2
178	x						42.4	42.4
179	x						53.4	53.4
180				NO SAMPLE - WATER				
181		x						ND
182	x						7.5	7.5
[illegible]		x						ND
[illegible]		x						ND
185		x						ND
186		x						ND
187		x						ND
188	x						3.8	3.8
189	x						12.1	12.1
190	x						4.3	4.3
191	x						7.8	7.8
192	x						13.1	13.1
193	x						14.8	14.8
194		x						ND
195		x						ND
196	x						4978	4978
197	x						217	217
198	x						540	540
199	x						1746	1746
[illegible]	x						95	95

PCBA11M

:4:12

DIVISION OF Dayers TRANSFORMER CONSULTANTS

Date _____ No. Samples _____

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

	Type				Arochlor			
ample No.	Wipe	Dirt	Other	Location	1242	1254	1260	Total
201	x						3886	3886
202	x						198	198
203	x						39	39
204	x						5036	5036
205	x						95	95
206		x					54	54
2		x					35	3
208		x					201	20
209		x					15	15
210		x					17	17
211		x					37	37
212		x					2	2
213		x					19	19
214		x					8	8
215		x					4	4
216		x					6	6
217		x						ND
218	x						1267	1267
219	x						4.4	4.4
220	x						83	83
221	x						31	31
222	x						5.3	5.3
223	x						5.3	5.3
	x						16	
225		x					1.8	1.8

PCBAIIM

AR400787

:s 4:12

DIVISION OF D. Myers TRANSFORMER CONSULTANTS

Date _____ No. Samples _____

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

mple No.	Type			Location	Arochlor			Total
	Wipe	Dirt	Other		1242	1254	1260	
26		x					1.7	1.7
27		x					.65	.65
28		x					.45	.45
29		x					2.2	2.2
30		x					.5	.5
31		x					.8	.8
[illegible]		x					2.6	2.6
[illegible]		x					.5	.5
34		x			1.2		1.4	2.6
35		x				2.8		2.8
36		x						ND
37		x					3	3
38		x					1	1
39		x					2	2
40		x					4	4
41		x					1	1
42		x						ND
43		x		2.3 / 1248			.8	3.1
44		x		278 / 1248				278
45		x			273			273
46		x		10 ppm / 1248			19	29
47		x					2.4	2.4
48		x					.8	.8
49		x					244	244
[illegible]		x		4 / 1248				4

PCBA1188

AR400788

DIVISION OF S.D. Myers TRANSFORMER CONSULTANTS

Customer Number 03720000

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

	Type				Arochlor			
ample No.	Wipe	Dirt	Other	Location	1242	1254	1260	Total
251		x			4			4
252	x						6.7	6.7
253	x						35	35
254	x						8.8	8.8
255	x						17	17
256	x				64			64
257	x				49			49
[illegible]	x				39			39
25[illegible]	x							ND
260	x						65	65
261	x						13	13
262	x						23	23
263	x						1	1
264	x						40	40
265	x						141	141
266	x						6	6
267	x			28 / 1248				28
268	x			37 / 1248				37
269	x			508 / 1248				508
270	x			105 / 1248				105
271	x			121 / 1248				121
272	x			10 / 1248				10
273		x			25			25
274		x			7			7
[illegible]		x			5			5

PCBA1188

DIVISION OF SDMyers TRANSFORMER CONSULTANTS

Date _____ No. Samples _____

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type: Wipe	Type: Dirt	Type: Other	Location	Arochlor: 1242	Arochlor: 1254	Arochlor: 1260	Total
276		x		2 / 1248				2
277		x						ND
278	x							ND
279		x					2	2

PCBA11

AR400790

DIVISION OF S.D. Myers TRANSFORMER CONSULTANTS

No. Samples

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

NORTHWEST DOCK AREA

	Type				Arochlor			
Sample No.	Wipe	Dirt	Other	Location	1242	1254	1260	Tot
-3/-1		X		7-1248				7
-3/5		X		9.4-1248				9.4
-3/3		X		15-1248				15
4/-10		X		20-1248				20
-3/-7		X		.6-1248				.6
-3/-11		X		191-1248				191
-3/1		X		12-1248				1
'8		X		.9-1248				.9
'7		X		2.4-1248				2.4
5/-17		X		1.3-1248				1.3
-3/-5		X		58-1248				58
-2/4		X		.3-1248				.3
-3/-3		X		.8-1248				.8
-2/6		X		.3-1248				.3
-3/-9		X		158-1248				158
-3/-15		X		2-1248				2
-1/-15		X		5.4-1248				5.4
4/-6		X						ND
/-17		X						ND
4/-12		X						ND
/-16		X						ND
3/46		X						ND
/4		X						ND
/-2		X						ND
		X						ND

AR400791

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DIVISION OF S.D. Myers TRANSFORMER CONSULTANTS

Date _____ No. Samples _____

Customer Number 03720000

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

NORTHWEST DOCK AREA

	Type				Arochlor			
Sample No.	Wipe	Dirt	Other	Location	1242	1254	1260	Total
/-4	X			57-1248				57
2/-4	X			16-1248				16
/0	X			32-1248		30		62
/1	X			38-1248				38
3/-3	X			3-1248				3
3/-5	X			2.5-1248				2.5
	X			755-1248				755
/-	X			62-1248				62
/2	X			1907-1248				1907
/-2	X			13-1248				13
-2/-6	X			6.4-1248				6.4
2/4	X			34-1248		30		64
-3/1	X			4-1248				4
/3	X			61-1248				61
/0	X			1463-1248				1463
2/2	X			6-1248				6
3/-5	X					18		18
-1/-3	X			1600-1248				1600
/-6	X			2.4-1248				2.4

PCRA11

AR400792

SDMyers CONSULTANTS

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

	Type				Arochlor			
Sample No.	Wipe	Dirt	Other	Location	1242	1254	1260	To
-2/-6		X		NORTH WEST DK. 778 - 1248				778
-2/2		X		NORTH WEST DK 3238 - 1248				323
-2/-12		X		NORTH WEST DK 20 - 1248				2
-2/.3		X		NORTH WEST DOCK	769			76
-2/0		X		NORTH WEST DK 745 - 1248				74
-2/-10		X		NORTH WEST DOCK 14 - 1248				1
3/-15		X		NORTH WEST DOCK 13 - 1248				1
3/-13		X		NORTH WEST DOCK .5 - 1248				.
3/-12		X		NORTH WEST DOCK 2 - 1248				
0/-16		X		-		.2		.
0/-14		X			4.2			4.
5/-3		X					.6	.
5/-11		X		20 - 1248				2
5/-1		X				1.5		1.
5/-7		X		103 - 1248				10
1/-15		X			.4			.
2/-14		X				.3		.
1/-13		X				.3		.

50 Years TRANSFORMER CONSULTANTS

Customer Number 03720000

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type			Location	Arochlor			
	Wipe	Dirt	Other		1242	1254	1260	Total
#1		x						ND
#2		x			320			320
#3		x						ND
#4		x						ND
#5		x			1		1	2
#6		x						ND
#8		x						ND
		x						ND

PCBA1186

AR400794

Customer Number 05720000

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type			Location	Arochlor			
	Wipe	Dirt	Other		1242	1254	1260	Total ppm
TC# 2050		x		R153-67B	5.2		.9	6.1
TC# 2051		x		R153-67E				ND
TC# 2052		x		R153-67A				ND
TC# 2054		x		R153-67D			121	121
TC# 2055		x		R153-67C	1.8		13.9	15.7

PCB

Customer Number 03720000

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type: Wipe	Type: Dirt	Type: Other	Location	Arochlor 1242	Arochlor 1254	Arochlor 1260	Total ug/100 cm
C# 2001	x			0/4 power house	3		196	199
C# 2002	x			2/-4 power house	1414		5798	7212
C# 2003	x			2/2 power house			9027	9027
C# 2004	x			2/0 power house			5886	5886
C# 2005	x			0/0 power house			1841	1841
C# 2006	x			-1/1 power house			51	51
# 2007	x			2/4 power house			1831	1831
# 2008	x			1/-5 power house			1303	1303
[illegible]	x			0/-4 power house			2520	2520
[illegible]	x			-1/-5 power house			2010	2010
2011	x			-2/-4 power house			1067	1067
2019	x			2/2 N.W. dock	4367			4367
2020	x			2/4 N.W. dock	8			8
2025	x			0/-2 N.W. dock	25			25
2028	x			0/2 N.W. dock	41			41
2032	x			2/2 1A	758.136			758.136
2033	x			1/3 1A	566.929			566.929
2036	x			0/-2 1A	370.661			370.661
2037	x			-1/1 1A	2319			2319

PCBA1188

AR400796

Acts 4:12

DIVISION OF S.D. Myers TRANSFORMER CONSULTANTS

Date 7/26/89 No. Samples 10

Customer Number 03720000

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type: Wipe	Type: Dirt	Type: Other	Location	Arochlor 1242	Arochlor 1254	Arochlor 1260	Total ppm
TC# 2012		x		-1/-1 power house			1291	1291
TC# 2013		x		-2/0 power house			814	814
TC# 2014		x		-1/3 power house			1941	1941
TC# 2015		x		-2/4 power house			443	443
TC# 2016		x		roof drain power house			314	314
TC# 2022		x		2/7 N.W. dock	1643			16[illegible]
2039		x		2/0 1A	44,778			44,77[illegible]
TC# 2040		x		2/-2 1A	421			421
TC# 2042		x		1/-3 1A	78			78
TC# 2043		x		0/4 1A				ND

PCBA11M

AR400797

DIVISION OF Sid Mayers TRANSFORMER CONSULTANTS

Customer Number 03720000

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type: Wipe	Type: Dirt	Type: Other	Location	Arochlor 1240	Arochlor 1016	Arochlor 1260	Tot ug/10
TC# 2017	x			1/3 N.W. dock	227			2
TC# 2018	x			1/0 N.W. dock	256			2
TC# 2021	x			1/5 N.W. dock	486			4
TC# 2024	x			0/0 N.W. dock	40			
TC# 2034	x			0/-4 1A	158			1
TC# 2035	x			1/1 1A	1320			13

DIVISION OF S.D. Myers TRANSFORMER CONSULTANTS

Customer Number 03720000

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type: Wipe	Type: Dirt	Type: Other	Location	Arochlor 1248	Arochlor 1016	Arochlor 1260	Total ppm
TC# 2025		x		1/7 N.W. dock	1474			147
TC# 2026		x		-1/9 N.W. dock	176			17
TC# 2027		x		-1/7 N.W. dock	123			12
TC# 2029		x		-1/3 N.W. dock	905			90
TC# 2030		x		-1/-7 N.W. dock	71			7
TC# 2031		x		3/3 N.W. dock	36			3
TC# 2038		x		1/-1 1A	1549			154
TC# 2041		x		0/2 1A	17,656			1[illegible]
TC# 2044		x		3/3 1A	2153			215
TC# 2045		x		0/0 1A		76		7

AR400799

[illegible] CONSULTANTS

Customer Number 03720000

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

	Type				Aroclor			
Sample No.	Wipe	Dirt	Other	Location	1242	1254	1260	Total
2056			x	Sump Hole Drain from Roof				ND
2057			x	Dumpster Turned from Sump Hole				ND

AR400800

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type			Location	Arochlor			Total
	Wipe	Dirt	Other		1242	1254	1260	
R153741		X					.4	.4
R153746		X					.1	.1
R1537411		X					1	1
R153747		X					45	45
R153742		X					.1	.1
R153748		X					4	4
R153744		X					.2	.2
R153745		X					.6	
F [illegible]743		X					.6	
R1[illegible]749		X					65	65
R1537412		X					.7	.7
R1537413		X					.3	.3
R1547410		X					.7	.7
				PUMP COMPOSITE (PCB OIL)				ND

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type: Wipe	Type: Dirt	Type: Other	Location	Arochlor: 1242	Arochlor: 1254	Arochlor: 1260	Arochlor: Total
1/9		X		SUB 1-A .9 - 1248				.9
2/4		X		SUB 1-A 32 - 1248				32
1/5		X		SUB 1-A 33 - 1248				33
1/7		X		SUB 1-A 14 - 1248				14
2/2		X		SUB 1-A 22 - 1248				22
1/3		X		SUB 1-A 405 - 1248				405
1/1		X		SUB 1-A 282 - 1248				282
2/0		X		SUB 1-A 1010 - 1248				1010

PCRA11

Myers CONSULTANTS

Customer Number _____

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type			Location	Arochlor			Total
	Wipe	Dirt	Other		1242	1254	1260	
0/8	X			NORTH WEST DOCK				ND
1/7	X			NORTH WEST DOCK	3.8	2.3		6.1
3/7	X			NORTH WEST DOCK	2.9	4.		6.9
3/5	X			NORTH WEST DOCK	3.	1.		4.
2/10	X			NORTH WEST DOCK	3.8	2.		5.8
1/9	X			NORTH WEST DOCK	4.5	1.2		5.7
3/9	X			NORTH WEST DOCK	2.			2.
[illegible]6	X			NORTH WEST DOCK				ND
[illegible]	X			NORTH WEST DOCK				ND
-1/3	X			NORTH WEST DOCK				ND
2/8	X			NORTH WEST DOCK				ND
-1/9		X		NORTH WEST DOCK 13-1248			3	16
3/-5		X		NORTH WEST DOCK 52-1248				52
-1/1		X		NORTH WEST DOCK 22-1248				22
-1/-1		X		NORTH WEST DOCK 352-1248				352
2/-8		X		NORTH WEST DOCK 147-1248				147
3/-7		X		NORTH WEST DOCK 30-1248				30
3/-1		X		NORTH WEST DOCK 84-1248				84
0/-10		X		NORTH WEST DOCK 153-1248				153
1/-9		X		NORTH WEST DOCK 547-1248				547
3/-3		X		NORTH WEST DOCK 11-1248				11
3/1		X		NORTH WEST DOCK 1.6-1248				1.6

Customer Number 03720000

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type: Wipe	Type: Dirt	Type: Other	Location	Arochlor 1242	Arochlor 1254	Arochlor 1260	Total
# 2056			x	cc row/double deck. drum				ND
# 2057			x	dd row/double deck. drum				ND
# 2058			x	oil drum #3664-box shop west				ND
# 2059			x	oil drum #3666-box shop east		11		11

PCBA11M

Company Name Avtex Fibers

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

Sample No.	Type: Wipe	Type: Dirt	Type: Other	Location SUB 1-A	Arochlor 1242	Arochlor 1254	Arochlor 1260	Arochlor Total
-2/2	X				408			408
-3/3	X				48			48
-1/3	X				328			328
-1/-9	X				444			444
0/4	X				1331			1331
-1/-1	X				2026			2026
-2/44	X				65			65
0/2	X				2708			2708
/-4	X				816			816
-2/-2	X				1354			1354
-2/-6	X				2934			2934
-1/-3	X				1707			1707
-1/5	X				45			45
0/8	X				155			155
-3/5	X				47			47

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

ample No.	Type			Location	Arochlor			
	Wipe	Dirt	Other		1242	1254	1260	Total
-1/-13		X		NORTH WEST DOCK 38-1248		36		74
4/-6		X		NORTH WEST DOCK 4-1248		7		11
3/-5		X		NORTH WEST DOCK 2-1248		3		5
1/-11		X		NORTH WEST DOCK 1.5-1248			1.4	2.9
0/-12		X		NORTH WEST DOCK 251-1248				251
4/-2		X		NORTH WEST DOCK		50		50
4/-4		X		NORTH WEST DOCK		7.4		7.4
7/-10		X		NORTH WEST DOCK		.9		.9
		X		NORTH WEST DOCK	1,341			1,341
-2/-14		X		NORTH WEST DOCK 11-1248				11
4/-8		X		NORTH WEST DOCK 151-1248				151
4/0		X		NORTH WEST DOCK 1.6-1248				1.6

PCTA1

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

	Type				Arochlor			
Sample No.	Wipe	Dirt	Other	Location	1242	1254	1260	Total
0/0	X			SUB 1-A	4,763			4,763
-1/7	X			SUB 1-A	33			33
-1/1	X			SUB 1-A	1,771			1,771
-1/9	X			SUB 1-A	58			58
0/6	X			SUB 1-A	1,777			1,777
-3/-1	X			SUB 1-A	131			131
-3/1	X			SUB 1-A	557			557
-2/0	X			SUB 1-A	275			275
2		X		SUB 1-A 148-1248				
2/6		X		SUB 1-A 21-1248				21
2/8		X		SUB 1-A	15			15
1/3		X		SUB 1-A 13-1248				13
2/0		X		SUB 1-A 55-1248				55
1/1		X		SUB 1-A 89-1248				89
2/4		X		SUB 1-A 74-1248				74
1/-3	X			SUB 1-A	3,807			3,807
1/-7	X			SUB 1-A	372			372
1/-1	X			SUB 1-A	2,526			2,526
0/-10	X			SUB 1-A	295			295
-1/-5	X			SUB 1-A	8,560			8,560
2/-2	X			SUB 1-A	3,539			3,539
0/-4	X			SUB 1-A	3,377			3,377
1/-5	X			SUB 1-A	1,119			1,119
0/-2	X			SUB 1-A	4,358			4,358
0/-8	X			SUB 1-A 393-1248				393

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

	Type				Arochlor			
Sample No.	Wipe	Dirt	Other	Location	1242	1254	1260	To
0/-6	X			SUB 1-A 1,012-1248				1,0
-2/-8	X			SUB 1-A	219			2
-3/-3	X			SUB 1-A	246			2
-3/-5	X			SUB 1-A	260			2
-1/-7	X			SUB 1-A 1,182-1248				1,1

PCB

Company Name AVTEX FIBERS

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

	Type				Arochlor			
Sample No.	Wipe	Dirt	Other	Location	1242	1254	1260	Tot
0/-6	X			SUB 1-A 1,012-1248				1,01
-2/-8	X			SUB 1-A	219			21
-3/-3	X			SUB 1-A	246			24
-3/-5	X			SUB 1-A	260			26
-1/-7	X			SUB 1-A 1,182-1248				1,18

Company Name AVTEX FIBERS

9-5-89

POLYCHLORINATED BIPHENYL (PCB) ANALYSIS
STATEMENT OF CERTIFICATION

	Type				Arochlor			
Sample No.	Wipe	Dirt	Other	Location	1242	1254	1260	Total
.002L		X		15 - 1232				15
029R		X						ND
030R		X						ND
004L		X						ND
004R		X						ND
006R		X						ND
012R		X						ND
014R		X						ND
		X					12	12
)[illegible]R		X					3	3
028P		X					33	33
010R		X						ND
011R		X					3	3
013R		X					6	6
015R		X					16	16
016R		X					21	21
017R		X					6.4	6.4
27R		X		TIME 16:13			.3	.3

PCBA31

AR400810

Chemical Waste Management, Inc.

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

Shaded areas are for CWM use only.

PART A. SAMPLING METHOD

Questions concerning sample waiver should be referred to your Chemical Waste Management, Inc. Sales Representative.

Check the sampling method employed.

This sample should be collected in accordance with "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods", SW846, USEPA, Office of Solid Waste, Washington, D.C. 20460 and/or 40CFR261-Appendix I. A suitable sample container for most wastes is a wide mouth glass bottle with a plastic cap having a non-reactive liner. Plastic containers are recommended for strong caustics or fluorides. Fill to approximately 90% of capacity to allow for expansion during transportation. The peel off label on this form must be completed prior to removal from the form. Ultimately, the label must be attached to the sample container, not the shipping container.

If this waste is a hazardous material, the sample must be packaged and shipped in accordance with USDOT regulations (49CFR171.2) and any specific requirements imposed by the carrier. Improperly packaged samples may be disposed of upon receipt.

PART B. SAMPLE SOURCE

The sampler is to describe exactly from where the sample was taken (e.g. conveyor, drum, lagoon, pipe, pit, pond, tank, vat).

PART C. SAMPLE LABEL

THE SAMPLE LABEL MUST BE COMPLETED BEFORE IT IS REMOVED FROM THIS FORM

Apply the completed peel off label to the container which actually holds the sample - not to the shipping carton. DO NOT WRITE ON THE BAR CODE (if present).

1. WASTE PROFILE SHEET CODE - If not preprinted, enter the appropriate Waste Profile Sheet Code. This Certification and peel off label must be used to identify ONLY the sample of the waste described in the Generator's Waste Material Profile Sheet bearing the same Waste Profile Sheet Code.

   GENERATOR'S NAME - Enter the name of the generating facility.

3. NAME OF WASTE - Enter a name which is generally descriptive of this waste (e.g., cyanide plating waste, paint sludge, PCB contaminated dirt, still bottoms, wastewater treatment sludge) as it appears on the Generator's Waste Material Profile Sheet.
4. SAMPLE HOUR/DATE - Enter the hour and date sample was collected.
5. SAMPLER'S SIGNATURE - The sampler must sign in the space provided.
6. PRINT SAMPLER'S NAME - Enter the sampler's name.
7. SAMPLER'S TITLE - Enter the sampler's title.
8. SAMPLER'S EMPLOYER (If CWM, See D. Below) - Enter the sampler's employer's name.

Remove the completed peel off label and affix it to the sample container at the time of sampling. If this label is lost or destroyed, the sample must be labeled with equivalent information, including the Waste Profile Sheet Code. If the Certification of Representative Sample Form is lost or destroyed, please contact your Chemical Waste Management, Inc. Sales Representative to obtain a new one.

PART D. WITNESS VERIFICATION (If required):

In the event that a Chemical Waste Management, Inc. employee obtains the sample on your site, one of your employees must be present to direct our employee to the sample source and to witness the sampling. Your employee must also provide the information requested in this PART D.

1. WITNESS' SIGNATURE - Sign in the space provided.
2. WITNESS' NAME - Print the name of the person who witnessed the sampling.
3. WITNESS' TITLE - Enter the witness' title.

   NESS' EMPLOYER - Enter the witness' employer's name.

   E - Enter the date the sampling event was witnessed.

[illegible] OR TYPE (Form, to print).

RJ181088

DTS J 10108

Waste Profile Sheet Code

M.Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: [ ]

This completed form must be returned, with the representative sample, to:

_____

_____

_____

_____

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

A. SAMPLING METHOD (Indicate which method was employed)

If sampling requirement has been waived by Chemical Waste Management, Inc., do not complete this Generator's Certification of Representative Sample form.

1. ☐ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I.
2. ☑ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above using a method equivalent to the sampling methods described in 40 CFR 261-Appendix I.

SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)

Drum

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:		1. Waste Profile Sheet Code:
2. [redacted] Generator's Name:	AUTEX FIBERS Inc.	2. Generator's Name:
3. [redacted] Name of Waste:	OIL + WATER	3. Name of Waste:
4. [redacted] Sample Hour/Date:	1:00 pm / 10/3/99	4. Sample Hour/Date:
5. [redacted] Sampler's Signature:	John B. Beard	5. Sampler's Signature:

6. Print Sampler's Name: JOHN BEARD
7. Sampler's Title: FIELD ANALYST
8. Sampler's Employer (if CWM, see D. below): CWM TECH SERVICES.

D. WITNESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.

I was personally present during the sampling described. I directed the waste source to be sampled, and I verify the information noted above.

1. Witness' Signature: P. J. Malwa
2. Witness' Name: P. J. MALWA JR.
3. Witness' Title: PROJECT MANAGER
4. Witness' Employer: AUTEX FIBERS

I-3
Drums
40 - 60

GENERATOR'S WASTE MATERIAL PROFILE SHEET

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

VTS

Waste Profile Sheet Code

Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: _____

A. GENERAL INFORMATION

1. Generator Name: AVTEX FIBERS
2. Generator USEPA ID: VAD072352624
3. Facility Address: 1169 KENDRICK LANE
FRONT ROYAL, VA
4. Generator State ID: _____
5. Zip Code: 22630
6. Technical Contact: Paul MAHINA
7. Title: UTILITIES ENGR.
8. Phone: (703) 635 - 2141

B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO

1. ☐ Generating Facility (A. above), or
2. Company Name: CWM TECHNICAL SERVICES
3. Phone: (703) 775 - 9000
4. Address: PO BOX 96
SEALSTON, VA
5. Zip Code: 22547

C.

1. NAME OF WASTE: WASTE OIL + WATER
2. PROCESS GENERATING WASTE: OIL CHANGES - FIRE
3. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
☐ Yes ☑ No If yes, DO NOT COMPLETE this form. Contact your Chemical Waste Management, Inc. sales representative for assistance.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color	2. Does the waste have a strong incidental odor?	3. Physical State @ 70°F	4. Layers	5. Specific Gravity	6. Free Liquids
Tar!	☐ No ☐ Yes If known, describe: LINK	☐ Solid ☐ Semi-Solid ☑ Liquid ☐ Powder Other: _____	☑ Multilayered ☐ Bi-layered ☐ Single Phased	Range: _____	☑ Yes ☐ No Volume: 100 %

7. pH: ☐ ≤ 2 ☐ > 2-4 ☐ 4-7 ☑ 7 ☐ 7-10 ☐ 10- < 12.5 ☐ ≥ 12.5 ☐ Range _____ ☐ NA

8. Liquid Flash Point: ☐ < 73°F ☐ 73-99°F ☐ 100-139°F ☐ 140-199°F ☐ ≥ 200°F ☐ None ☐ Closed Cup ☐ Open Cup

E. CHEMICAL COMPOSITION

1.	RANGE MIN.	MAX.	
Oil	[illegible]	[illegible]	%
H2O	[illegible]	[illegible]	%
Solids	[illegible]	[illegible]	%
			%
			%
			%
			%
			%
			%
			%
			%
			%

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. TOTAL: _____ %

2. Indicate if this waste contains any of the following: TO BE DETERMINED

	NONE	or LESS THAN	or ACTUAL
[illegible]	☐	☐ < 50 ppm	_____ ppm
[illegible]ides	☐	☐ < 50 ppm	_____ ppm
Phenolics	☐	☐ < 50 ppm	_____ ppm
Sulfides	☐	☐ < 50 ppm	_____ ppm

F. METALS

TO BE DETERMINED

Indicate if this waste contains any of the following:
1. ☐ EP TOX/TCLP or 2. ☐ Total

METAL	LESS THAN (Parts Per Million)	or	ACTUAL
Arsenic	☐ < 5	☐ < 500	_____
Barium	☐ < 100		_____
Cadmium	☐ < 1	☐ < 100	_____
Chromium	☐ < 5		_____
Lead	☐ < 5	☐ < 500	_____
Mercury	☐ < 0.2	☐ < 20	_____
Selenium	☐ < 1	☐ < 100	_____
Silver	☐ < 5		_____
Chromium-Hex	☐ < 5	☐ < 500	_____
Copper	☐ < 5		_____
Nickel	☐ < 5	☐ < 134	_____
Thallium	☐ < 5	☐ < 130	_____
Zinc	☐ < 5		_____
_____	☐ <		_____
_____	☐ <		_____
_____	☐ <		_____

TURN PAGE AND COMPLETE SIDE 2

AR400813

GENERATOR'S WASTE MATERIAL PROFILE SHEET (Continued)

VTS J 10108
Waste Profile Sheet Code

G. OTHER HAZARDOUS CHARACTERISTICS TO BE DETERMINED

1. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)? ☐ Yes ☐ No
2. Does this waste contain greater than 1000 ppm total halogenated organic compounds? ☐ Yes ☐ No
3. Indicate if this waste is any of the following:
   - ☐ RCRA Reactive
   - ☐ Water Reactive
   - ☐ Explosive
   - ☐ Shock Sensitive
   - ☐ Pyrophoric
   - ☐ Radioactive
   - ☐ Etiological
   - ☐ Pesticide Manufacturing Waste
   - ☐ Other _____
   - ☐ None of the above

H. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS or INCINERATION TBD

	LESS THAN	or	ACTUAL
Beryllium	☐ < 5000 ppm		_____ ppm
Potassium	☐ < 5000 ppm		_____ ppm
Sodium	☐ < 5000 ppm		_____ ppm
Total Bromine	☐ < 2 %		_____ %
Total Chlorine	☐ < 35 %		_____ %
Total Fluorine	☐ < 1 %		_____ %
Total Sulfur			_____ %

I. OPTIONAL — RECLAMATION, FUELS, OR INCINERATION PARAMETERS Provide if information is available. TBD

Range

1. Heat Value (BTU/lb): _____ 2. Water: _____ %
3. Viscosity (cps): _____ @ ☐ _____ °F ☐ 100°F ☐ 150°F
4. Ash: _____ % 5. Settleable solids: _____ %
6. Vapor Pressure @ STP (mm/Hg): _____
7. Is this waste a pumpable liquid? ☐ Yes ☐ No
   Type of pump? _____
8. Can this waste be heated to improve flow? ☐ Yes ☐ No
9. Is this waste soluble in water? ☐ Yes ☐ No
10. Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? ☐ Yes ☐ No

TRANSPORTATION INFORMATION

1. Is this a DOT Hazardous Material? ☑ Yes ☐ No 2. Anticipated Annual Volume/Units: _____ / _____
3. Proper Shipping Name: WASTE Petroleum Oil, N.O.S.
4. Hazard Class: _____ 5. I.D. #: _____
6. Additional Description: (_____)
7. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☐ Drum (Type/Size): _____ / _____ Other: _____
8. CERCLA Reportable Quantity (RQ): _____ 9. RQ Units (lb/kg): _____
10. USEPA Hazardous Waste? ☐ Yes ☐ No 11. USEPA Hazardous Waste Number(s): _____
12. State Hazardous Waste? ☐ Yes ☐ No 13. State Hazardous Waste Number(s): _____

K. SPECIAL HANDLING INFORMATION Send Disposal Decision to SEALSTON, VA

☐ Additional Page(s) Attached

L. GENERATOR CERTIFICATION I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.

1. Paul J. Manna Jr. — Signature
2. PROJECT MANAGER — Title
3. PAUL J. MANNA JR. — Name (Type or Print)
4. 5 OCT 89

Side 2 of 2

AR400814

J10108

DTS J 10108

Waste Profile Sheet Code

CWM Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: _____

This completed form must be returned, with the representative sample, to:

_____

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

A. SAMPLING METHOD (Indicate which method was employed)
If sampling requirement has been waived by Chemical Waste Management, Inc., do not complete this Generator's Certification of Representative Sample form.

1. ☐ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I.
2. ☑ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above using a method equivalent to the sampling methods described in 40 CFR 261-Appendix I.

B. SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)
Drum

SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:		1. Waste Profile Sheet Code:
2. Generator's Name:	AUTEX FIBERS Inc.	2. Generator's Name:
3. Name of Waste:	OIL + WATER	3. Name of Waste:
4. Sample Hour/Date:	1:00 pm 12/3/99	4. Sample Hour/Date:
5. Sampler's Signature:	John D. Beard	5. Sampler's Signature:

6. Print Sampler's Name: JOHN BEARD
7. Sampler's Title: FIELD ANALYST
8. Sampler's Employer (if CWM, see D. below): CWM TECH SERVICES.

WITNESS VERIFICATION (If required) In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.
I was personally present during the sampling described. I directed the waste source to be sampled, and I verify the information noted above.

1. Witness' Signature: P. J. Malya
2. Witness' Name: P. J. MALYA JR. 3. Witness' Title: _____
4. Witness' Employer: AUTEX FIBERS 5. Date: 5 0

AR400815

J10108

DTS J 10108

Waste Profile Sheet Code

VM Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: _____

This completed form must be returned, with the representative sample, to:

_____

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

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B. SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)

Drum

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:		1. Waste Profile Sheet Code:
2. [redacted] Generator's Name:	AUTEX FIBERS Inc.	2. Generator's Name:
3. [redacted] Name of Waste:	OIL + WATER	3. Name of Waste:
4. [redacted] Sample Hour/Date:	100 pm / 10/3/89	4. Sample Hour/Date:
5. [redacted] Sampler's Signature:	John R. Beard	5. Sampler's Signature:

6. Print Sampler's Name: JOHN BEARD
7. Sampler's Title: FIELD ANALYST
8. Sampler's Employer (if CWM, see D. below): CWM TECH SERVICES.

D. WITNESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.

I was personally present during the sampling described. I directed the waste source to be sampled, and I verify the informatio noted above.

1. Witness' Signature: P. J. Malaya
2. Witness' Name: P. J. MALAYA JR.
3. Witness' Title: PROJECT MANAGER
4. Witness' Employer: AUTEX FIBERS
5. Date: 5 OCT 89

DTS J 10108

Waste Profile Sheet Code

CWM Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: _____

This completed form must be returned, with the representative sample, to:

_____

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

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B. SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)
Drum

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

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2. [redacted] Generator's Name:	AUTEX FIBERS Inc	2. Generator's Name:
3. [redacted] Name of Waste:	OIL + WATER	3. Name of Waste:
4. [redacted] Sample Hour/Date:	1:00 pm 10/3/99	4. Sample Hour/Date:
5. [redacted] Sampler's Signature:	John B. Beard	5. Sampler's Signature:

6. Print Sampler's Name: JOHN BEARD
7. Sampler's Title: FIELD ANALYST
8. Sampler's Employer (if CWM, see D. below): CWM TECH SERVICES.

D. WITNESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.
I was personally present during the sampling described. I directed the waste source to be sampled, and I verify the information noted above.

1. Witness' Signature: P. J. Malwa
2. Witness' Name: P. J. MALWA JR.
3. Witness' Title: PROJECT MANAGER
4. Witness' Employer: AUTEX FIBERS
5. Date: 5 OCT 99

AR400817

aJ10108a

DTS J 10108

Waste Profile Sheet Code

YM Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: _____

This completed form must be returned, with the representative sample, to:

_____

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

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B. SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)
Drum

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:		1. Waste Profile Sheet Code:
2. Generator's Name:	AUTEX FIBERS Inc.	2. Generator's Name:
3. Name of Waste:	OIL + WATER	3. Name of Waste:
4. Sample Hour/Date:	1:00 Pm 10/3/99	4. Sample Hour/Date:
5. Sampler's Signature:	John D. Beard	5. Sampler's Signature:

6. Print Sampler's Name: JOHN BEARD
7. Sampler's Title: FIELD ANALYST
8. Sampler's Employer (If CWM, see D. below): CWM TECH SERVICES.

D. WITNESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.
I was personally present during the sampling described. I directed the waste source to be sampled, and I verify the information noted above.

1. Witness' Signature: P. J. Malina Jr.
2. Witness' Name: P. J. MALINA JR.
3. Witness' Title: PROJECT MANAGER
4. Witness' Employer: AUTEX FIBERS
5.

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89018007 PROF: MADJ10108 10/13/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/20/89
SRCE: MAD SITE: SRR INC
OIL/WATER

SAMPLE PREP: 1.03g +1.0g DI H2O
DILUTION FACTOR: (2X)

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC 16-17	0-0.5
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: n/f	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

[ ] If checked, multiply detection limits by dilution factor above.

[X] Top Layer [ ] Middle Layer [ ] Bottom Layer [ ] Not Applicable

Date Completed: 10-18-89 Analy: —

Comments:

Reviewed by:

AR400819

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89018007 PROF: MADJ10108 10/13/89
AVTEX FIBERS, INC
RONT ROYAL, VA DUE 10/20/89
SRCE: MAD SITE: SRR INC
OIL/WATER

SAMPLE PREP: liquid
DILUTION FACTOR:

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC	
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: N/A	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected. Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

[ ] If checked, multiply detection limits by dilution factor above.

[ ] Top Layer [ ] Middle Layer [✓] Bottom Layer [ ] Not Applicable

Date Completed: 10-18-89 Analyst: [illegible]

Comments:

AR400820

LOCATION OF ORIGINAL: MAD

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.

(See Computer Label)
Waste Profile Sheet Code
FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management Technical Center Analytical Laboratories
ADDRESS: 150 West 137th Street, Riverdale, Illinois 60627 LAB MGR. PHONE: (312) 841-8360
SITE SAMPLE RECEIVED AT LAB: (See Computer Label) DATE SAMPLE TAKEN: 10/4/89
SAMPLE NUMBER ASSIGNED: (See Computer Label) CERTIFICATION OF REP. SAMPLE OBTAINED? ☒ YES ☐ NO

CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision. For Chemical Waste Management, Inc. companies, sample preparation and analytical methods and analytical equipment specified or approved in the facility's waste analysis plan were used in conducting this analysis. This laboratory follows a quality assurance control program.

DATE OF REPORT: OCT 23 1989
LAB MANAGER NAME: Roger Kell
SIGNATURE: RKell

PHYSICAL CHARACTERISTICS OF WASTE 10/13/89

SAMPLE VOLUME	COLOR	DOES THE WASTE HAVE A STRONG INCIDENTAL ODOR?	PHYSICAL STATE @ 70°F	LAYERS	FREE LIQUIDS
	60% yellow brown 40% brown	☐ YES ☒ NO IF KNOWN, DESCRIBE	☐ SOLID ☐ SEMI-SOLID ☒ LIQUID ☐ POWDER	☐ MULTILAYERED ☒ BI-LAYERED ☐ SINGLE PHASED	☒ YES ☐ NO VOLUME 100%

✓	Test	As Received	Extraction Procedure	Date of Analysis	✓	Test	As Received	Extraction Procedure	Date of Analysis
✓	Specific Gravity	0.9		10/14/89	✓	Sulfur, as S, % TOTAL	<0.5		10/23/89
	pH, s.u. UNDISSOLVED/SOLUBLE	5.5		10/13/89					
	Acidity, %, as					Phenols, mg/l Noticeable	<5.		10/12/89
	Alkalinity, %, as					Cyanides, as CN, Total mg/l			
	C.O.D., mg/l					Cyanides, as CN, Free mg/l			
	B.O.D., mg/l					Ammonia Nitrogen, as N, mg/l			
✓	Total Solids @ 105°C, %	94.0		10/19/89		89018009 PROF: MADJ10120 10/13/89			
	Total Dissolved Solids, mg/l					AVTEX FIBERS, INC			
	R.O.E. @ 180°C, mg/l					FRONT ROYAL, VA DUE 10/20/89			
						SRCE: MAD SITE: SRR INC			
	Flash Point, °F (closed cup)					OIL/WATER			
	Ash Content, on ignition, %	<0.5		10/19/89		Calcium Hardness, as CaCO3, mg/l			
	Heating Value, BTU/lb	18000.		10/17/89		Magnesium Hardness, as CaCO3, mg/l			
	POTASSIUM KOH, mg/l	<17.		10/19/89		SRR COMP. TAPYDATION 100%			10/13/89
	Arsenic, as As, mg/l					Oil and Grease, mg/l			
✓	Barium, as Ba, mg/l	1.37				Paint Filter Test, free liquids, %	FAIL		10/13/89
	Cadmium, as Cd, mg/l				✓	Water Content, as H_2O, %	2.3		10/20/89
✓	Chromium, Total, as Cr, mg/l	0.22			✓	VISCOSITY, cps	303.		10/19/89
	Chromium, Hexavalent, as Cr^{+6}, mg/l					Aldrin, mg/l			
	Cobalt, as Co, mg/l					Chlordane, mg/l			
✓	Copper, as Cu, mg/l	3.17				DDT, mg/l			
	Iron, Total, as Fe, mg/l					Dieldrin, mg/l			
	Iron, Dissolved, as Fe, mg/l					Heptachlor, mg/l			
✓	Lead, as Pb, mg/l	<0.30				Parathion, mg/l			
✓	Manganese, as Mn, mg/l	<0.26				Endrin, mg/l			
	Magnesium, as Mg, mg/l					Lindane, mg/l			
✓	Mercury, as Hg, mg/l	<0.002				Methoxychlor, mg/l			
✓	Nickel, as Ni, mg/l	<0.07				Toxaphene, mg/l			
	Selenium, as Se, mg/l					2,4-D, mg/l			
	Silver, as Ag, mg/l					2,4,5-TP (Silvex), mg/l			
	Thallium, as Tl, mg/l				✓	PCBs, ppm	<5.		10/19/89
✓	Zinc, as Zn, mg/l	147.				PCBs, mg/l			
✓	Sodium as Na, mg/l	57.8		✓	✓	DEPLETED REPORT ATTACHED			
	Bicarbonates, as HCO_3, mg/l					pH Screen, s.u.			
✓	Bromides, as Br, mg/l % TOTAL	<0.5		10/23/89		Cyanide Screen, (+,-) mg/l	<10.		10/13/89
	Carbonates, as CO_3, mg/l					Flammability Screen, (+,-)	NEG.		
	Chlorides, as Cl, mg/l %, TOTAL	<0.5		10/23/89		Oxidizer Screen, (+,-)	NEG.		
	Fluorides, as F, mg/l TOTAL	<200		10/18/89		Radiation Screen, (+,-)	FOREGROUND		
	Nitrates, as NO_3, mg/l					Sulfide Screen, (+,-) mg/l	<.2.		
	Nitrites, as NO_2, mg/l					Water Mix Screen, (+,-)		TEST	
	Phosphates, as P, mg/l								
	Sulfates, as SO_4, mg/l								

AR400821

Chemical Waste Management, Inc.

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

Shaded areas are for CWM use only.

PART A. SAMPLING METHOD

Questions concerning sample waiver should be referred to your Chemical Waste Management, Inc. Sales Representative.

Check the sampling method employed.

This sample should be collected in accordance with "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods", SW846, USEPA, Office of Solid Waste, Washington, D.C. 20460 and/or 40CFR261-Appendix I. A suitable sample container for most wastes is a wide mouth glass bottle with a plastic cap having a non-reactive liner. Plastic containers are recommended for strong caustics or fluorides. Fill to approximately 90% of capacity to allow for expansion during transportation. The peel off label on this form must be completed prior to removal from the form. Ultimately, the label must be attached to the sample container, not the shipping container.

If this waste is a hazardous material, the sample must be packaged and shipped in accordance with USDOT regulations (49CFR171.2) and any specific requirements imposed by the carrier. Improperly packaged samples may be disposed of upon receipt.

PART B. SAMPLE SOURCE

The sampler is to describe exactly from where the sample was taken (e.g. conveyor, drum, lagoon, pipe, pit, pond, tank, vat).

PART C. SAMPLE LABEL

THE SAMPLE LABEL MUST BE COMPLETED BEFORE IT IS REMOVED FROM THIS FORM

Apply the completed peel off label to the container which actually holds the sample - not to the shipping carton. DO NOT WRITE ON THE BAR CODE (if present).

1. WASTE PROFILE SHEET CODE - If not preprinted, enter the appropriate Waste Profile Sheet Code. This Certification and its peel off label must be used to identify ONLY the sample of the waste described in the Generator's Waste Material Profile Sheet bearing the same Waste Profile Sheet Code.
2. GENERATOR'S NAME - Enter the name of the generating facility.
3. NAME OF WASTE - Enter a name which is generally descriptive of this waste (e.g., cyanide plating waste, paint sludge, PCB contaminated dirt, still bottoms, wastewater treatment sludge) as it appears on the Generator's Waste Material Profile Sheet.
4. SAMPLE HOUR/DATE - Enter the hour and date sample was collected.
5. SAMPLER'S SIGNATURE - The sampler must sign in the space provided.
6. PRINT SAMPLER'S NAME - Enter the sampler's name.
7. SAMPLER'S TITLE - Enter the sampler's title.
8. SAMPLER'S EMPLOYER (If CWM, See D. Below) - Enter the sampler's employer's name.

Remove the completed peel off label and affix it to the sample container at the time of sampling. If this label is lost or destroyed, the sample must be labeled with equivalent information, including the Waste Profile Sheet Code. If the Certification of Representative Sample Form is lost or destroyed, please contact your Chemical Waste Management, Inc. Sales Representative to obtain a new one.

PART D. WITNESS VERIFICATION (If required):

In the event that a Chemical Waste Management, Inc. employee obtains the sample on your site, one of your employees must be present to direct our employee to the sample source and to witness the sampling. Your employee must also provide the information requested in this PART D.

1. WITNESS' SIGNATURE - Sign in the space provided.
2. WITNESS' NAME - Print the name of the person who witnessed the sampling.
3. WITNESS' TITLE - Enter the witness' title.
4. WITNESS' EMPLOYER - Enter the witness' employer's name.

- Enter the date the sampling event was witnessed.

GENERATOR'S CERTIFICATION

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

J10109

VTS J 10109

Waste Profile Sheet Code

CWM Location of Original: (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #:

This completed form must be returned, with the representative sample, to:

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

A. SAMPLING METHOD (Indicate which method was employed)

If sampling requirement has been waived by Chemical Waste Management, Inc., do not complete this Generator's Certification of Representative Sample form.

1. ☐ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I.
2. ☑ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above using a method equivalent to the sampling methods described in 40 CFR 261-Appendix I.

B. SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)

DRUM

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:	
2. [redacted] Generator's Name:	AVTEX FIBERS INC.
3. [redacted] Name of Waste:	(JLB) 1:10 PM 10/3/89
4. [redacted] Sample Hour/Date:	OIL & WATER
5. [redacted] Sampler's Signature:	John Beard

1. Waste Profile Sheet Code:	
2. Generator's Name:	
3. Name of Waste:	
4. Sample Hour/Date:	
5. Sampler's Signature:	

6. Print Sampler's Name: JOHN BEARD
7. Sampler's Title: FIELD ANALYST
8. Sampler's Employer (if CWM, see D. below): CWM TEST SERVICES

D. WITNESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.

I was personally present during the sampling described. I directed the waste source to be sampled, and I verify the information noted above.

1. Witness' Signature: P.J. MACHIA
2. Witness' Name: P.J. MACHIA JR
3. Witness' Title: PROJECT MANAGER
4. Witness' Employer: AVTEX FIBERS
5.

GENERATOR'S WASTE MATERIAL PROFILE SHEET

18017

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

I-2
Drums
24 - 40

J 10109

Waste Profile Sheet Code

CWM Location of Original: (SHADED AREAS FOR CWM USE ONLY); CWM Sales Rep. #:

A. GENERAL INFORMATION

1. Generator Name: AVTEX FIBERS INC
2. Generator USEPA ID: VAD070355484
3. Facility Address: 1169 KENDRICK LANE, FRONT ROYAL, VA
4. Generator State ID:
5. Zip Code: 22630
6. Technical Contact: Paul Malina
7. Title: UTILITIES ENGR
8. Phone: (703) 635-2141

B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO 1. ☐ Generating Facility (A, above), or

2. Company Name: CWM TECH SERVICES
3. Phone: (703) 275-9800
4. Address: PO BOX 96, SEALSTON, VA
5. Zip Code: 22547

C. 1. NAME OF WASTE: WASTE OIL + WATER

2. PROCESS GENERATING WASTE: MACHINE FLUIDS / OIL CHANGES

3. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
☐ Yes ☑ No If yes, DO NOT COMPLETE this form. Contact your Chemical Waste Management, Inc. sales representative for assistance.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color:	2. Does the waste have a strong incidental odor?	3. Physical State @ 70°F:	4. Layers:	5. Specific Gravity:	6. Free Liquids:
Brown	☐ No ☐ Yes If known, describe: Oily	☐ Solid ☐ Semi-Solid ☑ Liquid ☐ Powder Other:	☑ Multilayered ☐ Bi-layered ☐ Single Phased	Range: 1.0 - 1.2	☑ Yes ☐ No Volume: 100 %

7. pH: ☐ ≤ 2 ☐ > 2-4 ☐ 4-7 ☑ 7 ☐ 7-10 ☐ 10- < 12.5 ☐ ≥ 12.5 ☐ Range ____ ☐ NA

8. Liquid Flash Point: ☐ < 73°F ☐ 73-99°F ☐ 100-139°F ☐ 140-199°F ☐ ≥ 200°F ☐ None ☐ Closed Cup ☐ Open Cup

E. CHEMICAL COMPOSITION

1.	RANGE MIN.	MAX.	
~~OIL~~	~~75~~	~~90~~	%
~~WATER~~	~~20~~	~~25~~	%
			%
OIL	80	90	%
WATER	10	20	%
			%
Pass (OKITE		5	%
corrosive)			%
			%
			%
			%
			%

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. TO BE DETERMINED TOTAL: ____ %

2. Indicate if this waste contains any of the following:

	NONE	or LESS THAN	or ACTUAL	
	☐	☐ < 50 ppm	____	ppm
Cyanides	☐	☐ < 50 ppm	____	ppm
Phenolics	☐	☐ < 50 ppm	____	ppm
Sulfides	☐	☐ < 50 ppm	____	ppm

F. METALS TO BE DETERMINED Indicate if this waste contains any of the following:

1. ☐ EP TOX/TCLP or 2. ☐ Total

METAL	LESS THAN	or	ACTUAL (Parts Per Million)
Arsenic	☐< 5	☐< 500	
Barium	☐< 100		
Cadmium	☐< 1	☐< 100	
Chromium	☐< 5		
Lead	☐< 5	☐< 500	
Mercury	☐< 0.2	☐< 20	
Selenium	☐< 1	☐< 100	
Silver	☐< 5		
Chromium-Hex	☐< 5	☐< 500	
Copper	☐< 5		
Nickel	☐< 5	☐< 134	
Thallium	☐< 5	☐< 130	
Zinc	☐< 5		
	☐<		
	☐<		

TURN PAGE AND COMPLETE SIDE 2

AR400824

VTS J 10109
Waste Profile Sheet Code

OTHER HAZARDOUS CHARACTERISTICS To Be Determined

1. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)? ☐ Yes ☐ No
2. *Does this waste contain greater than 1000 ppm total halogenated organic compounds?* ☐ Yes ☐ No
3. Indicate if this waste is any of the following:
   - ☐ RCRA Reactive
   - ☐ Water Reactive
   - ☐ Explosive
   - ☐ Shock Sensitive
   - ☐ Pyrophoric
   - ☐ Radioactive
   - ☐ Etiological
   - ☐ Pesticide Manufacturing Waste
   - ☐ Other _____
   - ☐ None of the above

H. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS or INCINERATION

TBD

	LESS THAN	or	ACTUAL
Beryllium	☐ < 5000 ppm		_____ ppm
Potassium	☐ < 5000 ppm		_____ ppm
Sodium	☐ < 5000 ppm		_____ ppm
Total Bromine	☐ < 2 %		_____ %
Total Chlorine	☐ < 35 %		_____ %
Total Fluorine	☐ < 1 %		_____ %
Total Sulfur			_____ %

I. OPTIONAL — RECLAMATION, FUELS, OR INCINERATION PARAMETERS Provide if information is available. TBD

Range

1. Heat Value (BTU/lb): _____ 2. Water: _____ %
3. Viscosity (cps): _____ @ ☐ _____ °F ☐ 100°F ☐ 150°F
4. Ash: _____ % 5. Settleable solids: _____ %
6. Vapor Pressure @ STP (mm/Hg): _____
7. Is this waste a pumpable liquid? ☐ Yes ☐ No
   Type of pump? _____
8. Can this waste be heated to improve flow? ☐ Yes ☐ No
9. Is this waste soluble in water? ☐ Yes ☐ No
10. Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? ☐ Yes ☐ No

J. TRANSPORTATION INFORMATION TBD

1. Is this a DOT Hazardous Material? ☑ Yes ☐ No 2. Anticipated Annual Volume/Units: _____
3. Proper Shipping Name: WASTE Petroleum oil, N.O.S.
4. Hazard Class: _____ 5. I.D. #: _____
6. Additional Description: (_____)
7. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☐ Drum (Type/Size): _____ Other: _____
8. CERCLA Reportable Quantity (RQ): _____ 9. RQ Units (lb/kg): _____
10. USEPA Hazardous Waste? ☐ Yes ☐ No 11. USEPA Hazardous Waste Number(s): _____
12. State Hazardous Waste? ☐ Yes ☐ No 13. State Hazardous Waste Number(s): _____

K. SPECIAL HANDLING INFORMATION Send Disposal Decision to Selston

☐ Additional Page(s) Attached

L. GENERATOR CERTIFICATION I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.

1. Signature: Paul J. Maun Jr. 2. Title: PROJECT MANAGER
3. Name (Type or Print): PAUL J. MAUN JR. 4. Date: 5 OCT 89

AR400825

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89018019 PROF: MADJ10109 10/13/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/20/89
SRCE: MAD SITE: SRR INC
OIL/WATER

SAMPLE PREP: 1.06g + 1.07g in Sx
DILUTION FACTOR: 2X

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC 15-17	0.2
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: n/a	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

[X] If checked, multiply detection limits by dilution factor above.

[X] Top Layer [ ] Middle Layer [ ] Bottom Layer [ ] Not Applicable

Date Completed: 10-[illegible]-89 Analyst: [illegible]

Comments:

Reviewed by: [illegible]

AR400826

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89018019 PROF: MADJ10109 10/13/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/20/89
TRCE: MAD SITE: SRR INC
OIL/WATER

SAMPLE PREP: Digest
DILUTION FACTOR:

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol	0-0.3	Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC	
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: N/A	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

[ ] If checked, multiply detection limits by dilution factor above.

[ ] Top Layer [ ] Middle Layer [✓] Bottom Layer [ ] Not Applicable

Date Completed: 10-26 Analyst: [illegible]

Comments:

Reviewed by: X Date:

AR400827

LOCATION OF ORIGINAL: MAD

This Report is intended for the sole and final benefit of Waste Management and its customers. No representation concerning significance of the reported data is made to any other person or entity.

(See Computer Label)
Waste Profile Sheet Code
FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management Technical Center Analytical Laboratories
ADDRESS: 150 West 137th Street, Riverdale, Illinois 60627 LAB MGR. PHONE: (312) 841-8360
DATE SAMPLE RECEIVED AT LAB: (See Computer Label) DATE SAMPLE TAKEN: 10/3/89
LAB SAMPLE NUMBER ASSIGNED: (See Computer Label) CERTIFICATION OF REP. SAMPLE OBTAINED? ☒ YES ☐ NO

CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision. For Chemical Waste Management, Inc. employees, sample preparation and analytical methods and analytical equipment specified or approved of the facility's waste analysis plan were used in conducting this analysis. This laboratory follows a quality assurance control program.

DATE OF REPORT: OCT 24 1989
LAB MANAGER NAME: Roger Kell
SIGNATURE: Richard J. Kell

PHYSICAL CHARACTERISTICS OF WASTE 10/13/89

SAMPLE VOLUME	COLOR	DOES THE WASTE HAVE A STRONG INCIDENTAL ODOR?	PHYSICAL STATE @ 70°F	LAYERS	FREE LIQUIDS
	60% yellow 20% light brown 20% brown	☐ YES ☒ NO - IF KNOWN, DESCRIBE	☐ SOLID ☐ SEMI-SOLID ☒ LIQUID ☐ POWDER	☒ MULTILAYERED ☐ BI-LAYERED ☐ SINGLE PHASED	☒ YES ☐ NO VOLUME 100 %

✓	Test	As Received	Extraction Procedure	Date of Analysis	✓	Test	As Received	Extraction Procedure	Date of Analysis
✓	Specific Gravity	0.71		10/19/89	✓	Sulfur, as S, % TOTAL	<0.5		10/23/89
	pH, s.u. / MEMBRANE pH	6.01		10/13/89					
	Acidity, %, as					Phenols, mg/l DIRECT	<5.		10/13/
	Alkalinity, %, as					Cyanides, as CN, Total mg/l			
	C.O.D., mg/l					Cyanides, as CN, Free mg/l			
	B.O.D., mg/l					Ammonia Nitrogen, as N, mg/l			
✓	Total Solids @ 105°C, %	95.6		10/19/89		89018017 PROF: MADJ10112 10/13/89			
	Total Dissolved Solids, mg/l					AVTEX FIBERS, INC			
	R.O.E. @ 180°C, mg/l					FRONT ROYAL, VA DUE 10/20/89			
						SRCE: MAD SITE: SRR INC			
	Flash Point, °F (closed cup)					OIL/WATER			
	Ash Content, on ignition, %	<0.5		10/19/89					
	Heating Value, BTU/lb	11800.		10/17/89		Magnesium Hardness, as $CaCO_3$, mg/l			
✓	Potassium, as K, mg/l	784.		10/19/89	✓	VISCOSITY, CPS	323.		10/19/
	Arsenic, as As, mg/l					Oil and Grease, mg/l			
✓	Barium, as Ba, mg/l	1.14				Paint Filter Test, free liquids, %	FAIL		10/15/
	Cadmium, as Cd, mg/l				✓	Water Content, as H_2O, %	35.3		10/20/
✓	Chromium, Total, as Cr, mg/l	<0.10				SRR COMP.: NAPL: 100% SAMPLE 10/13/			
	Chromium, Hexavalent, as Cr⁺⁶, mg/l					Alcohol: MEOH + Other: 80% SAMPLE			
	Cobalt, as Co, mg/l					Chlorinated mg/l 20% HEAVIER			
✓	Copper, as Cu, mg/l	2.23				DDT, mg/l			
	Iron, Total, as Fe, mg/l					Dieldrin, mg/l			
	Iron, Dissolved, as Fe, mg/l					Heptachlor, mg/l			
✓	Lead, as Pb, mg/l	<1.25				Parathion, mg/l			
✓	Manganese, as Mn, mg/l	0.24				Endrin, mg/l			
	Magnesium, as Mg, mg/l					Lindane, mg/l			
✓	Mercury, as Hg, mg/l	<0.015				Methoxychlor, mg/l			
✓	Nickel, as Ni, mg/l	<0.07				Toxaphene, mg/l			
	Selenium, as Se, mg/l					2,4-D, mg/l			
	Silver, as Ag, mg/l					2,4,5-TP (Silvex), mg/l			
	Thallium, as Tl, mg/l				✓	PCBs, ppm	<5.		10/18/
✓	Zinc, as Zn, mg/l	34.0				PCBs, mg/l			
✓	Sulfides, as H_2S, mg/l	50.2		✓	✓	Halogenated Solvents, Other Chlorin.			10/20/
	Bicarbonates, as HCO_3, mg/l					pH Screen, s.u.			
✓	Bromides, as Br, mg/l TOTAL	<0.5		10/23/89		Cyanide Screen, (+,-) mg/l	<10.		10/13/
	Carbonates, as CO_3, mg/l					Flammability Screen, (+,-)	NEG		
	Chlorides, as Cl, mg/l TOTAL	<0.5		10/23/89		Oxidizer Screen, (+,-)	NEG		
	Fluorides, as F, mg/l TOTAL	<200.		10/13/89		Radiation Screen, (+,-)	= BACKGROUND		
	Nitrates, as NO_3, mg/l					Sulfide Screen, (+,-) mg/l	<2.		
	Nitrites, as NO_2, mg/l					Water Mix			
	Phosphates, as P, mg/l								
	Sulfates, as SO_4, mg/l								

AR400828

Chemical Waste Management, Inc.

GENERATOR'S WASTE MATERIAL PROFILE SHEET

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

Sil

II

VTC J87366

Waste Profile Sheet Code

CWM Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: _____

A. GENERAL INFORMATION

1. Generator Name: AVTEX FIBERS, INC 2. Generator USEPA ID: VAD 123364
3. Facility Address: KENDRICK LANE PO BOX 1 4. Generator State ID: _____
FONT ROYAL, VA
5. Zip Code: _____
6. Technical Contact: Bill MALLIE 7. Title: UTILITIES ENGINEER 8. Phone: (703) 635-2141

B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO 1. ☐ Generating Facility (A. above), or
2. Company Name: CWM 3. Phone: (703) 775-9000
4. Address: PO BOX 96
Sealston, VA
5. Zip Code: 22547

C. 1. NAME OF WASTE OIL CONTAMINATED ~~BIO~~ SLUDGE
2. PROCESS GENERATING WASTE OIL DISPOSAL ~~SOME~~
3. Is this waste a Dioxin -ted waste as defined in 40 CFR 261.31 (e.g., F020 F021, F022, F023, F026, F027, or F028)?
☐ Yes ☒ No If yes, DO NOT COMPLETE this form Contact your Chemical Waste Management, Inc. sales representative for assistance.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color	2. Does the waste have a strong incidental odor?	3. Physical State @ 70°F:	4. Layers:	5. Specific Gravity.	6. Free Liquids:
L	☐ No ☒ Yes if known. Describe: OIL	☐ Solid ☒ Semi-Solid ☐ Liquid ☐ Powder Other: _____	☒ Multilayered ☐ Bi-layered ☐ Single Phased	TBD Range: _____	☒ Yes ☐ No Volume: 75

7. pH: ☐ ≤ 2 ☐ > 2-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 10- < 12.5 ☐ ≥ 12.5 ☐ Range _____

8. Liquid Flash Point: ☐ < 70°F ☐ 70-99°F ☐ 100-139°F ☐ 140-199°F ☒ ≥ 200°F ☐ None ☐ Closed Cup ☐ Open C

E. CHEMICAL COMPOSITION

	RANGE MIN. - MAX.
WATER	45 - 55 %
OIL	15 %
SOLIDS	%
	%
	%
	%
	%
	%
	%
	%
	%

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. TOTAL: _____ %

Indicate if this waste contains any of the following TO BE DETERMINED

	NONE	or	LESS THAN	or	ACTUAL
PCB's	☐		☐ < 50 ppm		_____ ppm
Cyanides	☐		☐ < 50 ppm		_____ ppm
Phenolics	☐		☐ < 50 ppm		_____ ppm
Sulfides	☐		☐ < 50 ppm		_____ ppm

F. METALS Indicate if this waste contains any the following: TO BE DETERMINED
☒ EP TOX/TCLP or 2. ☐ Total

METAL	LESS THAN	or	ACTUAL (Parts Per Million)
	☐ < 5	☐ < 500	_____
Arsenic	☐ < 100		_____
Cadmium	☐ < 1	☐ < 100	_____
Chromium	☐ < 5		_____
Lead	☐ < 5	☐ < 500	_____
Mercury	☐ < 0.2	☐ < 20	_____
Selenium	☐ < 1	☐ < 100	_____
Silver	☐ < 5		_____
Chromium-Hex	☐ < 5	☐ < 500	_____
Copper	☐ < 5		_____
Nickel	☐ < 5	☐ < 134	_____
Thallium	☐ < 5	☐ < 130	_____
Zinc	☐ < 5		_____
	☐ <		_____

AR400829

TURN PAGE AND COMPLETE SIDE

Chemical Waste Management, Inc.

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

#J87366#

VTS

Waste Profile Sheet Code

CWM Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #:

This completed form must be returned, with the representative sample, to:

_____

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

A. SAMPLING METHOD (Indicate which method was employed)

If sampling requirement has been waived by Chemical Waste Management, Inc., do not complete this Generator's Certification of Representative Sample form.

1. ☐ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I.
2. ☑ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above using a method equivalent to the sampling methods described in 40 CFR 261-Appendix I.

B. SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat) ground

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:
2. [redacted] Generator Name:
3. [redacted] Name of Waste:
4. [redacted] Sample Hour/Date:
5. [redacted] Sampler's Signature:
6. Print Sampler's Name: JOHN L. BEAM
7. Sampler's Title: FIELD ANALYST
8. Sampler's Employer (if CWM, see D. below): [illegible]

D. WITNESS VERIFICATION (if required): In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.

I was personally present during the sampling described. I directed the waste source to be sampled. I verify the information noted above.

1. Witness Signature: [signature]
2. Witness Name: P. TURALIWA JR
3. Witness Employer: AUTEX FUELS

AR400830

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89017751 PROF: MADJ87366 10/09/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/16/89
CE: MAD SITE: ALA TWI
OIL/SOIL

SAMPLE PREP: 3.38g + 3.38g Sr
DILUTION FACTOR:

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC	
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: N/A	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

☐ If checked, multiply detection limits by dilution factor above.

☐ Top Layer ☐ Middle Layer ☐ Bottom Layer ☒ Not Applicable

Date Completed: 10-13-89 Analyst: EMN

Comments:

Reviewed by: R 10-17-89

REV 8/28/89 LM 8/28/89

AR400831

SPECIAL WASTE ANALYSIS REPORT

LOCATION OF ORIGINAL: MAD

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.

(See Computer Label)
Waste Profile Sheet Code
FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management Technical Center Analytical Laboratories
ADDRESS: 150 West 137th Street, Riverdale, Illinois 60627 LAB MGR. PHONE: (312) 841-8360
DATE SAMPLE RECEIVED AT LAB: (See Computer Label) DATE SAMPLE TAKEN: 9/28/89
LAB SAMPLE NUMBER ASSIGNED: (See Computer Label) CERTIFICATION OF REP. SAMPLE OBTAINED? ☒ YES ☐ NO

CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision. For Chemical Waste Management, Inc. companies, sample preparation and analytical methods and analytical equipment specified or approved in the facility's waste analysis plan were used in conducting this analysis. The laboratory follows a quality assurance control program.

DATE OF REPORT: OCT 18 1989
LAB MANAGER NAME: Roger Kell SIGNATURE: RKell

PHYSICAL CHARACTERISTICS OF WASTE 10/17/89

SAMPLE VOLUME	COLOR	DOES THE WASTE HAVE A STRONG INCIDENTAL ODOR?	PHYSICAL STATE @ 70°F	LAYERS	FREE LIQUIDS
	Black	☐ YES ☒ NO IF KNOWN, DESCRIBE	Chunks ☒ SOLID ☐ SEMI-SOLID ☐ LIQUID ☐ POWDER	☐ MULTILAYERED ☐ BI-LAYERED ☒ SINGLE PHASED	☐ YES ☒ NO VOLUME

✓	Test	As Received	Extraction Procedure	Date of Analysis	✓	Test	As Received	Extraction Procedure	Date of Analysis
✓	Specific Gravity	2.1		10/16/89	✓	Sulfur, as S, % TOTAL	<0.5		10/16/8
	pH, s.u. 10% sol. for pos	5.0		10/17/89					
	Acidity, %, as					Phenols, mg/l SCREEN	<5.		10/17/8
	Alkalinity, %, as					Cyanides, as CN, Total mg/l			
	C.O.D., mg/l					Cyanides, as CN, Free mg/l			
	B.O.D., mg/l					Ammonia Nitrogen, as N, mg/l			
✓	Total Solids @ 105°C, %	90.0		10/16/89		89017751 PROF: MADJ87366 10/09/89			
	Total Dissolved Solids, mg/l					AVTEX FIBERS, INC			
	T.O.E. @ 180°C, mg/l					FRONT ROYAL, VA DUE 10/16/89			
						SRCE: MAD SITE: ALA TWI			
	Flash Point, °F (closed cup)					OIL/SOIL			
	Ash Content, on ignition, %	79.4		10/16/89					
✓	Heating Value, BTU/lb	8000.		10/12/89		Magnesium Hardness, as $CaCO_3$, mg/l			
			EPT						
✓	Arsenic, as As, mg/l	16.8	<0.01	10/17/89		Oil and Grease, mg/l			
✓	Barium, as Ba, mg/l	92.4	0.64			Paint Filter Test, free liquids, %	PASS		10/17/8
✓	Cadmium, as Cd, mg/l	0.44			✓	Water Content, as H_2O, %	6.0		10/16/8
✓	Chromium, Total, as Cr, mg/l	13.2	<0.01						
	Chromium, Hexavalent, as Cr^{+6}, mg/l					Aldrin, mg/l			
	Cobalt, as Co, mg/l					Chlordane, mg/l			
✓	Copper, as Cu, mg/l	19.5				DDT, mg/l			
	Iron, Total, as Fe, mg/l					Dieldrin, mg/l			
	Iron, Dissolved, as Fe, mg/l					Heptachlor, mg/l			
✓	Lead, as Pb, mg/l	82.7	0.28			Parathion, mg/l			
	Manganese, as Mn, mg/l					Endrin, mg/l			
	Magnesium, as Mg, mg/l					Lindane, mg/l			
✓	Mercury, as Hg, mg/l	0.083				Methoxychlor, mg/l			
✓	Nickel, as Ni, mg/l	11.6				Toxaphene, mg/l			
✓	Selenium, as Se, mg/l	<0.12				2,4-D, mg/l			
✓	Silver, as Ag, mg/l	<0.14				2,4,5-TP (Silvex), mg/l			
	Thallium, as Tl, mg/l				✓	PCBs, ppm	<5.		10/17/8
✓	Zinc, as Zn, mg/l	403.				PCBs, mg/l			
					✓	SOLVENTS REPORT ATTACHED			
	Bicarbonates, as HCO_3, mg/l					pH Screen, s.u.			
	Bromides, as Br, mg/l					Cyanide Screen, (+,-) mg/l	<10.		10/17/89
	Carbonates, as CO_3, mg/l					Flammability Screen, (+,-)	NEG.		
✓	Chlorides, as Cl, mg/l % TOTAL	<0.5		10/16/89		Oxic	NEG		
✓	Fluorides, as F, mg/l TOTAL	220.		10/12/89		Radi	BACKGROUND		
	Nitrates, as NO_3, mg/l						25.		
	Nitrites, as NO_2, mg/l						NON-REACTIVE		
	Phosphates, as P, mg/l						INSOLUBLE, HEAVIER		
	Sulfates, as SO_4, mg/l								

AR400832

Chemical Waste Management, Inc.

17753

GENERATOR'S WASTE MATERIAL PROFILE SHEET

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

II Model City

VTS 787367

Waste Profile Sheet Code

CWM Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: _____

A. GENERAL INFORMATION

1. Generator Name: AVTEX FIBERS INC
2. Generator USEPA ID: VAD 072353634
3. Facility Address: KENDRICK LANE ROUTE 1-3, FLOYD ROYAL, VA
4. Generator State ID:
5. Zip Code:
6. Technical Contact: Paul MALING
7. Title: UTILITIES ENGINEER
8. Phone: (703) 635-2141

B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO 1. ☐ Generating Facility (A, above), or

2. Company Name: CWM
3. Phone: (703) 775-9020
4. Address: PO BOX 96, Scottsville, VA
5. Zip Code: 22947

C. 1. NAME OF WASTE OIL ~~CONTAMINATED~~ SLUDGE

2. PROCESS GENERATING WASTE OIL DISPOSAL ~~[illegible]~~

3. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
☐ Yes ☒ No If yes, DO NOT COMPLETE this form. Contact your Chemical Waste Management, Inc. sales representative for assistance.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color:	2. Does the waste have a strong incidental odor?	3. Physical State @ 70°F:	4. Layers:	5. Specific Gravity	6. Free Liquids
Black	☐ No ☒ Yes if known. Describe: Oil	☐ Solid ☒ Semi-Solid ☒ Liquid ☐ Powder Other:	☒ Multilayered ☐ Bi-layered ☐ Single Phased	TBD Range:	☒ Yes ☐ No Volume: 75

7. pH: ☐ ≤ 2 ☐ > 2-4 ☒ 4-7 ☐ 7 ☐ 7-10 ☐ 10-<12.5 ☐ ≥ 12.5 ☐ Range _____ ☐ N/A

8. Liquid Flash Point: ☐ < 73°F ☐ 73-99°F ☐ 100-139°F ☐ 140-199°F ☒ ≥ 200°F ☐ None ☐ Closed Cup ☐ Open Cup

E. CHEMICAL COMPOSITION

1.	RANGE MIN. - MAX.	
WATER	45 - 55	%
OIL	15	%
SLUDGE	33	%
		%
		%
		%
		%
		%
		%
		%
		%
		%

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. TOTAL: _____ %

Indicate if this waste contains any of the following. TRACE DETERMINATIONS

	NONE	or	LESS THAN	or	ACTUAL
PCB's	☒	☐	< 50 ppm		____ ppm
Cyanides	☒	☐	< 50 ppm		____ ppm
Phenolics	☒	☐	< 50 ppm		____ ppm
Sulfides	☒	☐	< 50 ppm		____ ppm

F. METALS Indicate if this waste contains any of the following: TS BE DETERMINED

1. ☒ EP TOX TCLP or 2. ☒ Total

METAL	LESS THAN	or	ACTUAL (Parts Per Million)
Arsenic	☒ < 5	☐ < 500	.42
Barium	☒ < 100		35.1
Cadmium	☒ < 1	☐ < 100	.31
Chromium	☐ < 5		5.95
Lead	☐ < 5	☒ < 500	57.2
Mercury	☒ < 0.2	☐ < 20	
Selenium	☒ < 1	☐ < 100	
Silver	☒ < 5		
Chromium-Hex	☒ < 5	☐ < 500	
Copper	☐ < 5		102
Nickel	☐ < 5	☒ < 134	5.9
Thallium	☒ < 5	☐ < 130	
Zinc	☐ < 5		145

AR400833

GENERATOR'S WASTE MATERIAL PROFILE SHEET (Continued)

UTS
Waste Profile Sheet Code

G. OTHER HAZARDOUS CHARACTERISTICS TO BE DETERMINED

1. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)? ☐ Yes ☐ No
2. Does this waste contain greater than 1000 ppm total halogenated organic compounds? ☐ Yes ☐ No
3. Indicate if this waste is any of the following:

☐ RCRA Reactive ☐ Radioactive
☐ Water Reactive ☐ Etiological
☐ Explosive ☐ Pesticide Manufacturing Waste
☐ Shock Sensitive ☐ Other _____
☐ Pyrophoric ☐ None of the above

H. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS or INCINERATION

		TO BE LESS THAN	or	ACTUAL
Beryllium	☐ <	5000 ppm		_____ ppm
Potassium	☐ <	5000 ppm		_____ ppm
Sodium	☐ <	5000 ppm		_____ ppm
Total Bromine	☐ <	2 %		_____ %
Total Chlorine	☐ <	35 %		_____ %
Total Fluorine	☐ <	1 %		_____ %
Total Sulfur				_____ %

I. OPTIONAL — RECLAMATION, FUELS, OR INCINERATION PARAMETERS Provide if information is available.

DETERMINED. Range

1. Heat Value (BTU/lb): _____ 2. Water: _____ %
3. Viscosity (cps): _____ @ ☐ _____ °F ☐ 100°F ☐ 150°F
4. Ash: _____ % 5. Settleable solids: _____ %
6. Vapor Pressure @ STP (mm/Hg): _____
7. Is this waste a pumpable liquid? ☐ Yes ☐ No
   Type of pump? _____
8. Can this waste be heated to improve flow? ☐ Yes ☐ No
9. Is this waste soluble in water? ☐ Yes ☐ No
10. Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? ☐ Yes ☐ No

J. TRANSPORTATION INFORMATION To be determined

1. Is this a DOT Hazardous Material? ☐ Yes ☐ No 2. Anticipated Annual Volume/Units: _____
3. Proper Shipping Name: _____
4. Hazard Class: _____ 5. I.D. #: _____
6. Additional Description: _____
7. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☐ Drum (Type/Size): _____ Other: _____
8. CERCLA Reportable Quantity (RQ): _____ 9. RQ Units (lb/kg): _____
10. USEPA Hazardous Waste? ☐ Yes ☐ No 11 USEPA Hazardous Waste Number(s): _____
12. State Hazardous Waste? ☐ Yes ☐ No 13. State Hazardous Waste Number(s): _____

K. SPECIAL HANDLING INFORMATION Gold Mining Operation - Siva King George VA

☐ Additional Page(s) Attached

L. GENERATOR CERTIFICATION I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.

1. [signature] Signature
2. UTILITIES COORDINATOR Title
3. P.J. MALNA JR. Name (Type or Print)
4. 28 SEPT 89 Date

AR400834

Chemical Waste Management, Inc.

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

#J87367#

VTS J 87367

Waste Profile Sheet Code

CWM Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: [ ]

This completed form must be returned, with the representative sample, to:

_____

_____

_____

_____

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

A. SAMPLING METHOD (Indicate which method was employed)

If sampling requirement has been waived by Chemical Waste Management, Inc., do not complete this Generator's Certification of Representative Sample form.

1. ☐ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I.
2. ☑ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above using a method equivalent to the sampling methods described in 40 CFR 261-Appendix I.

B. SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)

OIL ~~[illegible]~~ PIT.

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:
2. [redacted] Generator's Name:
3. [redacted] Name of Waste:
4. [redacted] Sample Hour Date:
5. [redacted] Sampler's Signature:
6. Print Sampler's Name: JOHN L BEARD
7. Sampler's Title: FIELD ANALYST.
8. Sampler's Employer (if CWM, see D. below): CWM TECH SERVICES KING GEORGE, VA

WITNESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.

I was personally present during the sampling described. I directed the waste source to be sampled, and I verify the information noted above.

1. Witness Signature: [signature]
2. Witness Name: [illegible] UTILITIES ENGINEER

AR400835

Chemical Waste Management, Inc.
GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

Shaded areas are for CWM use only.

PART A. SAMPLING METHOD

Questions concerning sample waiver should be referred to your Chemical Waste Management, Inc. Sales Representative

Check the sampling method employed.

This sample should be collected in accordance with "Test Methods for the Evaluation of Solid Waste Physical/Chemical Methods", SW846, USEPA, Office of Solid Waste, Washington, D.C. 20460 and/or 40CFR261-Appendix I. A suitable sample container for most wastes is a wide mouth glass bottle with a plastic cap having a non-reactive liner. Plastic containers are recommended for strong caustics or fluorides. Fill to approximately 90% of capacity to allow for expansion during transportation. The peel off label on this form must be completed prior to removal from the form. Ultimately, the label must be attached to the sample container, not the shipping container.

If this waste is a hazardous material, the sample must be packaged and shipped in accordance with USDOT regulations (49CFR171.2) and any specific requirements imposed by the carrier. Improperly packaged samples may be disposed of upon receipt

PART B. SAMPLE SOURCE

The sampler is to describe exactly from where the sample was taken (e.g. conveyor, drum, lagoon, pipe, pit, pond, tank, vat)

PART C. SAMPLE LABEL

THE SAMPLE LABEL MUST BE COMPLETED BEFORE IT IS REMOVED FROM THIS FORM

Apply the completed peel off label to the container which actually holds the sample - not to the shipping carton. DO NOT WRITE ON THE BAR CODE (if present).

1. WASTE PROFILE SHEET CODE - If not preprinted, enter the appropriate Waste Profile Sheet Code. This Certification and its peel off label must be used to identify ONLY the sample of the waste described in the Generator's Waste Material Profile Sheet bearing the same Waste Profile Sheet Code.
2. GENERATOR'S NAME - Enter the name of the generating facility.
3. NAME OF WASTE - Enter a name which is generally descriptive of this waste (e.g., cyanide plating waste, paint sludge, PCB contaminated dirt, still bottoms, wastewater treatment sludge) as it appears on the Generator's Waste Material Profile Sheet.
4. SAMPLE HOUR/DATE - Enter the hour and date sample was collected.
5. SAMPLER'S SIGNATURE - The sampler must sign in the space provided.
6. PRINT SAMPLER'S NAME - Enter the sampler's name.
7. SAMPLER'S TITLE - Enter the sampler's title.
8. SAMPLER'S EMPLOYER (If CWM, See D. Below) - Enter the sampler's employer's name.

Remove the completed peel off label and affix it to the sample container at the time of sampling. If this label is lost or destroyed, the sample must be labeled with equivalent information, including the Waste Profile Sheet Code. If the Certification of Representative Sample Form is lost or destroyed, please contact your Chemical Waste Management, Inc. Sales Representative to obtain a new one.

PART D. WITNESS VERIFICATION (If required):

In the event that a Chemical Waste Management, Inc. employee obtains the sample on your site, one of your employees must be present to direct our employee to the sample source and to witness the sampling. Your employee must also provide the information requested in this PART D.

1. WITNESS' SIGNATURE - Sign in the space provided.
2. WITNESS' NAME - Print the name of the person who witnessed the sampling.
3. WITNESS' TITLE - Enter the witness' title.
4. WITNESS' EMPLOYER - Enter the witness' employer's name.
5. DATE - Enter the date the sampling event was witnessed.

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89017753 PROF: MADJ87367 10/09/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/16/89
SRCE: MAD SITE: ALA TWI
OIL SLUDGE

SAMPLE PREP: 1.00g + 4.07gr
DILUTION FACTOR: 5X

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC	
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: N/A	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U - Compounds on list were analyzed but not detected. Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

[X] If checked, multiply detection limits by dilution factor above.

[ ] Top Layer [ ] Middle Layer [ ] Bottom Layer [X] Not Applicable

Date Completed: 10-13-89 Analyst: EMN

Comments:

Reviewed by: [illegible] 10/13/89

REV 8/28/89 LM 8/28

SPECIAL WASTE ANALYSIS REPORT

LOCATION OF ORIGINAL: MAD

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.

(See Computer Label)
Waste Profile Sheet Code
FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management Technical Center Analytical Laboratories
ADDRESS: 150 West 137th Street, Riverdale, Illinois 60627 LAB MGR. PHONE: (312) 841-83
DATE SAMPLE RECEIVED AT LAB: (See Computer Label) DATE SAME TAKEN:
LAB SAMPLE NUMBER ASSIGNED: (See Computer Label) CERTIFICATION OF REP. SAMPLE OBTAINED? ☒ YES ☐ NO

CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision. For Chemical Waste Management, Inc. companies, sample preparation and analytical methods and analytical equipment specified or approved in the facility's waste analysis plan were used in conducting this analysis. This laboratory follows a quality assurance control program.

DATE OF REPORT: OCT 17 1989
SIGNATURE: RKell
LAB MANAGER NAME: Roger Kell

PHYSICAL CHARACTERISTICS OF WASTE

SAMPLE VOLUME	COLOR	DOES THE WASTE HAVE A STRONG INCIDENTAL ODOR?	PHYSICAL STATE @ 70°F	LAYERS	FREE LIQUIDS
	Top Black opaque 50% Bottom Colorless clear 50%	☐ YES ☒ NO IF KNOWN, DESCRIBE	☐ SOLID ☐ SEMI-SOLID ☒ LIQUID ☐ POWDER	☐ MULTILAYERED ☒ BI-LAYERED ☐ SINGLE PHASED	☒ YES ☐ NO VOLUME 100

✓	Test	As Received	Extraction Procedure	Date of Analysis	✓	Test	As Received	Extraction Procedure	Date of Analysis
✓	Specific Gravity	1.0		10/16/89	✓	Sulfur, as S, % TOTAL	<0.5		10/16/89
	pH, s.u. Top layer	6.0		10/7/89					
	Acidity, %, as					Phenols, mg/l Top layer	<5		10/7/89
	Alkalinity, %, as					Cyanides, as CN, Total mg/l			
	C.O.D., mg/l					Cyanides, as CN, Free mg/l			
	B.O.D., mg/l					Ammonia Nitrogen, as N, mg/l			
✓	Total Solids @ 105°C, %	21.2		10/16/89					
	Total Dissolved Solids, mg/l								
	R.O.E. @ 180°C, mg/l								
	Flash Point, °F (closed cup)								
	Ash Content, on ignition, %	<0.5		10/16/89					
	Heating Value, BTU/lb	11900		10/13/89		Magnesium Hardness, as $CaCO_3$, mg/l			
			EPT						
✓	Arsenic, as As, mg/l	0.92		10/16/89		Oil and Grease, mg/l			
✓	Barium, as Ba, mg/l	38.8				Paint Filter Test, free liquids, %	FAIL		10/7/89
✓	Cadmium, as Cd, mg/l	0.31			✓	Water Content, as H_2O, %	3.5		10/16/89
✓	Chromium, Total, as Cr, mg/l	5.75	<0.01						
	Chromium, Hexavalent, as Cr^{+6}, mg/l					Aldrin, mg/l			
	Cobalt, as Co, mg/l					Chlordane, mg/l			
✓	Copper, as Cu, mg/l	102.				DDT, mg/l			
	Iron, Total, as Fe, mg/l					Dieldrin, mg/l			
	Iron, Dissolved, as Fe, mg/l					Heptachlor, mg/l			
✓	Lead, as Pb, mg/l	57.3	0.02			Parathion, mg/l			
	Manganese, as Mn, mg/l					Endrin, mg/l			
	Magnesium, as Mg, mg/l					Lindane, mg/l			
✓	Mercury, as Hg, mg/l	<0.015				Methoxychlor, mg/l			
	Nickel, as Ni, mg/l	5.90				Toxaphene, mg/l			
✓	Selenium, as Se, mg/l	0.32				2,4-D, mg/l			
✓	Silver, as Ag, mg/l	0.15				2,4,5-TP (Silvex), mg/l			
	Thallium, as Tl, mg/l				✓	PCBs, ppm	<5		10/13/89
✓	Zinc, as Zn, mg/l	148				PCBs, mg/l			
					✓	Reactive Sulfide Test	Negative		
	Bicarbonates, as HCO_3, mg/l				✓	pH Screen, s.u.			
	Bromides, as Br, mg/l					Cyanide Screen, (+,-) mg/l	<10		
	Carbonates, as CO_3, mg/l					Flammability Screen, (+,-)	NEG.		
	Chlorides, as Cl, mg/l TOTAL %	<0.5		10/16/89		Oxidizer Screen, (+,-)	NEG.		
✓	Fluorides, as F, mg/l TOTAL	<200.		10/13/89		Radiation Screen, (+,-)	Negative		
	Nitrates, as NO_3, mg/l					Sulfide Screen, (+,-) mg/l	<2		
	Nitrites, as NO_2, mg/l					Reactivity Screen, (+,-)	NEGATIVE: no reactivity, light, medium reactivity		
	Phosphates, as P, mg/l								
	Sulfates, as SO_4, mg/l								

89017753 PROF: MADJ87367 10/09/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/16/89
SRCE: MAD SITE: ALA TWI
OIL SLUDGE

Chemical Waste Management, Inc.

GENERATOR'S WASTE MATERIAL PROFILE SHEET

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

17752

Ft Wayne

Soil

III Composite W1 J87364

JTS J 87368

Waste Profile Sheet Code

CWM Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: _____

A. GENERAL INFORMATION

1. Generator Name: AITEX FIBERS, INC
2. Generator USEPA ID: VAD072355631
3. Facility Address: KENDRICK LANE PO BOX FLOYD, VA 1160
4. Generator State ID:
5. Zip Code: 22630
6. Technical Contact: PAUL MALINIA
7. Title: UTILITIES ENGINEER
8. Phone: (703) 635-2141

B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO 1. ☐ Generating Facility (A, above), or

2. Company Name: CWM TECHNICAL SERVICES
3. Phone: (703) 775-9000
4. Address: PO BOX 96 SEALSTON, VA
5. Zip Code: 22547

C. 1. NAME OF WASTE OIL CONTAMINATED SOIL

2. PROCESS GENERATING WASTE DRUM STORAGE (LEAKS)

3. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
☐ Yes ☒ No If yes, DO NOT COMPLETE this form. Contact your Chemical Waste Management, Inc. sales representative for assistance.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color:	2. Does the waste have a strong incidental odor?	3. Physical State @ 70°F:	4. Layers:	5. Specific Gravity	6. Free Liquids:
BLK	☐ No ☒ Yes If known, describe: OIL	☒ Solid ☐ Semi-Solid ☐ Liquid ☐ Powder Other:	☐ Multilayered ☐ Bi-layered ☒ Single Phased	TBD Range:	☐ Yes ☒ No Volume:

7. pH: ☐ ≤ 2 ☐ > 2-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 10-<12.5 ☐ ≥ 12.5 ☐ Range ☒ NA

8. Liquid Flash Point: ☐ < 73°F ☐ 73-99°F ☐ 100-139°F ☐ 140-199°F ☐ ≥ 200°F ☒ None ☐ Closed Cup ☐ Open Cup

E. CHEMICAL COMPOSITION

	RANGE MIN. - MAX.	
1. Soil, clay, rock	80	%
OIL	20	%
		%
		%
		%
		%
		%
		%
		%
		%
		%
		%

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. TOTAL: _____ %

2. Indicate if this waste contains any of the following: NONE

	NONE	or	LESS THAN	or	ACTUAL
PCB's	☒		☐ < 50 ppm		_____ ppm
Cyanides	☒		☐ < 50 ppm		_____ ppm
Phenolics	☒		☐ < 50 ppm		
Sulfides	☒		☐ < 50 ppm		

F. METALS Indicate if this waste contains any of the following: TO BE DETERMINED

1. ☒ EP TOX/TCLP or 2. ☐ Total

METAL	LESS THAN (Parts Per Million)	or	ACTUAL (Parts Per Million)
Arsenic	☐ < 5	☒ < 500	
Barium	☒ < 100		
Cadmium	☐ < 1	☒ < 100	
Chromium	☐ < 5		13.2
Lead	☐ < 5	☒ < 500	12.7
Mercury	☒ < 0.2	☐ < 20	
Selenium	☒ < 1	☐ < 100	
Silver	☒ < 5		
Chromium-Hex	☒ < 5	☐ < 500	
Copper	☒ < 5		
Nickel	☒ < 5	☐ < 134	
Thallium	☒ < 5	☐ < 130	
Zinc	☐ < 5		403
	☐ <		
	☐ <		
	☐ <		

AR400839

GENERATOR'S WASTE MATERIAL PROFILE SHEET (Continued)

VTS , ??? ??

Waste Profile Sheet Code

G. OTHER HAZARDOUS CHARACTERISTICS TO BE DETERMINED

1. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)? ☐ Yes ☑ No
2. Does this waste contain greater than 1000 ppm total halogenated organic compounds? ☐ Yes ☑ No
3. Indicate if this waste is any of the following:

☐ RCRA Reactive ☐ Radioactive
☐ Water Reactive ☐ Etiological
☐ Explosive ☐ Pesticide Manufacturing Waste
☐ Shock Sensitive ☐ Other _____
☐ Pyrophoric ☑ None of the above

H. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS or INCINERATION

TO BE DETERMINED.

	LESS THAN	or	ACTUAL
Beryllium	☐ < 5000 ppm		_____ ppm
Potassium	☐ < 5000 ppm		_____ ppm
Sodium	☐ < 5000 ppm		_____ ppm
Total Bromine	☐ < 2 %		_____ %
Total Chlorine	☐ < 35 %		_____ %
Total Fluorine	☐ < 1 %		_____ %
Total Sulfur			_____ %

I. OPTIONAL — RECLAMATION, FUELS, OR INCINERATION PARAMETERS Provide if information is available.

Range

1. Heat Value (BTU/lb): _____ 2. Water: _____ %
3. Viscosity (cps): _____ @ ☐ _____ °F ☐ 100°F ☐ 150°F
4. Ash: _____ % 5. Settleable solids: _____ %
6. Vapor Pressure @ STP (mm/Hg): _____
7. Is this waste a pumpable liquid? ☐ Yes ☐ No
   Type of pump? _____
8. Can this waste be heated to improve flow? ☐ Yes ☐ No
9. Is this waste soluble in water? ☐ Yes ☐ No
10. Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? ☐ Yes ☐ No

J. TRANSPORTATION INFORMATION To be determined

1. Is this a DOT Hazardous Material? ☑ Yes ☐ No 2. Anticipated Annual Volume/Units: 200 rail loads/year
3. Proper Shipping Name: Hazardous Waste Solid NOS
4. Hazard Class: ORM-B 5. I.D. #: NA9189
6. Additional Description: (_____
7. Method of Shipment: ☐ Bulk Liquid ☑ Bulk Solid ☐ Drum (Type/Size): _____ / _____ Other: _____
8. CERCLA Reportable Quantity (RQ): _____ 9. RQ Units (lb/kg): _____
10. USEPA Hazardous Waste? ☑ Yes ☐ No 11. USEPA Hazardous Waste Number(s): D004, D001, D008
12. State Hazardous Waste? ☑ Yes ☐ No 13. State Hazardous Waste Number(s): _____

K. SPECIAL HANDLING INFORMATION SEND DISPOSAL DECISION TO

~~SEND~~ OUT SPAULDING VA

SEND DISPOSAL DECISION TO ANNE SPAULDING - CWM, VA. (703)-775-9000

☐ Additional Page(s) Attached

L. GENERATOR CERTIFICATION I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.

1. [signature] Signature
2. UTILITIES ENGINEER Title
3. P.J. MALWA JR Name (Type or Print)
4. 28 SEP 89 Date

A

AR400840

Chemical Waste Management, Inc.

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

#J67368#

VTS J 87368

Waste Profile Sheet Code

CWM Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: [ ]

This completed form must be returned, with the representative sample, to:

_____

_____

_____

_____

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

A. SAMPLING METHOD (Indicate which method was employed)

If sampling requirement has been waived by Chemical Waste Management, Inc., do not complete this Generator's Certification of Representative Sample form.

1. ☐ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I.
2. ☑ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above using a method equivalent to the sampling methods described in 40 CFR 261-Appendix I.

SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)

CWM STORAGE AREA ~~on~~ ground

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:
2. [redacted] Generator's Name:
3. [redacted] Name of Waste:
4. [redacted] Sample Hour/Date:
5. [redacted] Sampler's Signature:
6. Print Sampler's Name: JOHN L. BEARD
7. Sampler's Title: FIELD ANALYST.
8. Sampler's Employer (if CWM, see D. below): CWM TECH SERVICES SEALSTON, VA

D. WITNESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.

I was personally present during the sampling described. I directed the waste source to be sampled, and I verify the information noted above.

1. Witness' Signature: P. [signature]
2. Witness' Name: P.T. MALUNA JR
3. Witness' Employer: AUTEX FIBERS

AR400841

Chemical Waste Management, Inc.

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

Shaded areas are for CWM use only

PART A. SAMPLING METHOD

Questions concerning sample waiver should be referred to your Chemical Waste Management, Inc. Sales Representative

Check the sampling method employed.

This sample should be collected in accordance with "Test Methods for the Evaluation of Solid Waste. Physical/Chemical Methods", SW846, USEPA, Office of Solid Waste, Washington, D.C. 20460 and/or 40CFR261-Appendix 1. A suitable sample container for most wastes is a wide mouth glass bottle with a plastic cap having a non-reactive liner. Plastic containers are recommended for strong caustics or fluorides. Fill to approximately 90% of capacity to allow for expansion during transportation. The peel off label on this form must be completed prior to removal from the form. Ultimately, the label must be attached to the sample container, not the shipping container

If this waste is a hazardous material, the sample must be packaged and shipped in accordance with USDOT regulations (49CFR171.2) and any specific requirements imposed by the carrier. Improperly packaged samples may be disposed of upon receipt.

PART B. SAMPLE SOURCE

The sampler is to describe exactly from where the sample was taken (e.g. conveyor, drum, lagoon, pipe, pit, pond, tank, vat).

PART C. SAMPLE LABEL

THE SAMPLE LABEL MUST BE COMPLETED BEFORE IT IS REMOVED FROM THIS FORM

Apply the completed peel off label to the container which actually holds the sample - not to the shipping carton. DO NOT WRITE ON THE BAR CODE (if present).

1. WASTE PROFILE SHEET CODE - If not preprinted, enter the appropriate Waste Profile Sheet Code. This Certification and its peel off label must be used to identify ONLY the sample of the waste described in the Generator's Waste Material Profile Sheet bearing the same Waste Profile Sheet Code.
2. GENERATOR'S NAME - Enter the name of the generating facility.
3. NAME OF WASTE - Enter a name which is generally descriptive of this waste (e.g., cyanide plating waste, paint sludge, PCB contaminated dirt, still bottoms, wastewater treatment sludge) as it appears on the Generator's Waste Material Profile Sheet.
4. SAMPLE HOUR/DATE - Enter the hour and date sample was collected.
5. SAMPLER'S SIGNATURE - The sampler must sign in the space provided.
6. PRINT SAMPLER'S NAME - Enter the sampler's name.
7. SAMPLER'S TITLE - Enter the sampler's title.
8. SAMPLER'S EMPLOYER (If CWM, See D. Below) - Enter the sampler's employer's name.

Remove the completed peel off label and affix it to the sample container at the time of sampling. If this label is lost or destroyed, the sample must be labeled with equivalent information, including the Waste Profile Sheet Code. If the Certification of Representative Sample Form is lost or destroyed, please contact your Chemical Waste Management, Inc. Sales Representative to obtain a new one.

PART D. WITNESS VERIFICATION (If required):

In the event that a Chemical Waste Management, Inc. employee obtains the sample on your site, one of your employees must be present to direct our employee to the sample source and to witness the sampling. Your employee must also provide the information requested in this PART D.

1. WITNESS' SIGNATURE - Sign in the space provided.
2. WITNESS' NAME - Print the name of the person who witnessed the sampling.
3. WITNESS' TITLE - Enter the witness' title.
4. WITNESS' EMPLOYER - Enter the witness' employer's name.
5. DATE - Enter the date the sampling event was witnessed.

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89017752 PROF: MADJ87368 10/09/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/16/89
SRCE: MAD SITE: ALA TWI
OIL/SOIL

SAMPLE PREP: 2.82g + 2.8ug/g
DILUTION FACTOR:

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC	
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS:	
Isobutanol		N/A	
Trichloroethylene			
N-Butanol			

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

*ESTIMATED CONCENTRATION

☐ If checked, multiply detection limits by dilution factor above.

☐ Top Layer ☐ Middle Layer ☐ Bottom Layer ☑ Not Applicable

Date Completed: 10-13-89 Analyst: EMN

Comments:

Reviewed by: R Date: 10-17-89

REV 8/28/89 IM 8/28/89 A

AR400842

SPECIAL WASTE ANALYSIS REPORT

LOCATION OF ORIGINAL: MAD

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.

(See Computer Lab
Waste Profile Sheet Code
FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management Technical Center Analytical Laboratories
ADDRESS: 150 West 137th Street, Riverdale, Illinois 60627 LAB MGR. PHONE: (312) 841-836
DATE SAMPLE RECEIVED AT LAB: (See Computer Label) DATE SAMPLE TAKEN:
LAB SAMPLE NUMBER ASSIGNED: (See Computer Label) CERTIFICATION OF REP. SAMPLE OBTAINED? ☒ YES ☐

CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision. For Chemical Waste Management, Inc. companies, sam preparation and analytical methods and analytical equipment specified or approved in the facility's waste analysis plan were used in conducting this analysis. This laboratory follows a quality assura control program.

DATE OF REPORT: OCT 17 1989 SIGNATURE: RKell
LAB MANAGER NAME: Roger Kell

PHYSICAL CHARACTERISTICS OF WASTE

SAMPLE VOLUME	COLOR	DOES THE WASTE HAVE A STRONG INCIDENTAL ODOR?	PHYSICAL STATE @ 70°F	LAYERS	FREE LIQUIDS
	Black	☐ YES ☒ NO IF KNOWN, DESCRIBE	☒ SOLID ☐ SEMI-SOLID ☐ LIQUID ☐ POWDER	☐ MULTILAYERED ☐ BI-LAYERED ☒ SINGLE PHASED	☐ YES ☒ NO VOLUME

✓	Test	As Received	Extraction Procedure	Date of Analysis	✓	Test	As Received	Extraction Procedure	Date Analy
✓	Specific Gravity	1.9		10/16/89	✓	Sulfur, as S, % TOTAL	<0.5		10/16/8
	pH, s.u. 1% solution by wgt	5.0		10/7/89					
	Acidity, %, as 7.7					Phenols, mg/l dorsen	<.5		10/7/8
	Alkalinity, %, as					Cyanides, as CN, Total mg/l			
	C.O.D., mg/l					Cyanides, as CN, Free mg/l			
	B.O.D., mg/l					Ammonia Nitrogen, as N, mg/l			
✓	Total Solids @ 105°C, %	91.1		10/16/89					
	Total Dissolved Solids, mg/l								
	R.O.E. @ 180°C, mg/l								
	Flash Point, °F (closed cup)								
✓	Ash Content, on ignition, %	79.8		10/16/89					
✓	Heating Value, BTU/lb	350C.		10/12/89		Magnesium Hardness, as $CaCO_3$, mg/l			
			EPT						
✓	Arsenic, as As, mg/l	9.36	<0.01	10/17/89		Oil and Grease, mg/l			
✓	Barium, as Ba, mg/l	51.6				Paint Filter Test, free liquids, %	PPS		10/7/8
✓	Cadmium, as Cd, mg/l	0.46			✓	Water Content, as H_2O, %	4.9		10/16/8
✓	Chromium, Total, as Cr, mg/l	13.6	<0.01						
	Chromium, Hexavalent, as Cr^{+6}, mg/l					Aldrin, mg/l			
	Cobalt, as Co, mg/l					Chlordane, mg/l			
✓	Copper, as Cu, mg/l	37.5				DDT, mg/l			
	Iron, Total, as Fe, mg/l					Dieldrin, mg/l			
	Iron, Dissolved, as Fe, mg/l					Heptachlor, mg/l			
✓	Lead, as Pb, mg/l	68.2	0.16			Parathion, mg/l			
	Manganese, as Mn, mg/l					Endrin, mg/l			
	Magnesium, as Mg, mg/l					Lindane, mg/l			
✓	Mercury, as Hg, mg/l	0.257	<0.003			Methoxychlor, mg/l			
✓	Nickel, as Ni, mg/l	2.6				Toxaphene, mg/l			
✓	Selenium, as Se, mg/l	<0.12				2,4-D, mg/l			
✓	Silver, as Ag, mg/l	<0.15				2,4,5-TP (Silvex), mg/l			
	Thallium, as Tl, mg/l				✓	PCBs, ppm	<5		10/17/8
✓	Zinc, as Zn, mg/l	200.				PCBs, mg/l			
					✓	Solvents Report attached.			
	Bicarbonates, as HCO_3, mg/l					pH Screen, s.u.			
	Bromides, as Br, mg/l					Cyanide Screen, (+,-) mg/l	<10		11/
	Carbonates, as CO_3, mg/l					Flammability Screen, (+,-)	Neg.		
✓	Chlorides, as Cl, mg/l TOTAL %	<0.5		10/16/89		Oxidizer Screen, (+,-)	Neg.		
✓	Fluorides, as F, mg/l TOTAL	230.		10/12/89		Reactive Cyanide, (+,-)	= to background		
	Nitrites, as NO_2, mg/l						NEGATIVE		
	Nitrates, as NO_3, mg/l						NEGATIVE		
	Phosphates, as P, mg/l								

89017752 PROF: MADJ87368 10/09/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/16/89
SRCE: MAD SITE: ALA TWI
OIL/SOIL

SEQUOIA

AR400843

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

18000

VTS J 10103

Waste Profile Sheet Code

CWM Location of Original: (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #:

A. GENERAL INFORMATION

1. Generator Name: AVTEX FIBERS INC
2. Generator USEPA ID: VAD072358684
3. Facility Address: KENDRICK LANE, FRONT ROYAL, VA
4. Generator State ID:
5. Zip Code: 22630
6. Technical Contact: PAUL MAUNA
7. Title: UTILITIES ENGR.
8. Phone: (703) 635-2141

B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO 1. ☐ Generating Facility (A, above), or

2. Company Name: CWM TECHNICAL SERVICES
3. Phone: (703) 775-9000
4. Address: PO BOX 96, SEALSTON, VA
5. Zip Code: 22547

C. 1. NAME OF WASTE WASTE OIL + RESIN

2. PROCESS GENERATING WASTE UNKNOWN

3. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
☐ Yes ☑ No If yes, DO NOT COMPLETE this form. Contact your Chemical Waste Management, Inc. sales representative for assistance.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color:	2. Does the waste have a strong incidental odor?	3. Physical State @ 70°F:	4. Layers:	5. Specific Gravity:	6. Free Liquids:
ORANGE	☐ No ☐ Yes If known, describe: UNK.	☐ Solid ☑ Semi-Solid ☐ Liquid ☐ Powder Other:	☑ Multilayered ☐ Bi-layered ☐ Single Phased	Range: -	☐ Yes ☑ No Volume: %

☐ ≤ 2 ☐ > 2-4 ☐ 4-7 ☐ 7 ☐ 7-10 ☐ 10- < 12.5 ☐ ≥ 12.5 ☐ Range - ☑ NA

8. Liquid Flash Point: ☐ < 73°F ☐ 73-99°F ☐ 100-139°F ☐ 140-199°F ☐ ≥ 200°F ☐ None ☐ Closed Cup ☐ Open Cup

E. CHEMICAL COMPOSITION

1.	RANGE MIN. - MAX.
RESIN	95 - 100 %
OIL	- 5 %
WATER	- 5 %
	- %
	- %
	- %
	- %
	- %
	- %
	- %
	- %
	- %

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. TOTAL: %

2. Indicate if this waste contains any of the following: TO BE DETERMINED

	NONE	LESS THAN	ACTUAL
PCB's	☐	☐ < 50 ppm	ppm
Cyanides	☐	☐ < 50 ppm	ppm
Phenolics	☐	☐ < 50 ppm	ppm
Sulfides	☐	☐ < 50 ppm	ppm

TO BE DETERMINED

F. METALS Indicate if this waste contains any of the following:

1. ☐ EP TOX/TCLP or 2. ☐ Total

METAL	LESS THAN (Parts Per Million)	or	ACTUAL
Arsenic	☐< 5	☐< 500	
Barium	☐< 100		
Cadmium	☐< 1	☐< 100	
Chromium	☐< 5		
Lead	☐< 5	☐< 500	
Mercury	☐< 0.2	☐< 20	
Selenium	☐< 1	☐< 100	
Silver	☐< 5		
Chromium-Hex	☐< 5	☐< 500	
Copper	☐< 5		
Nickel	☐< 5	☐< 134	
Thallium	☐< 5	☐< 130	
Zinc	☐< 5		
	☐<		
	☐<		
	☐<		

AR400844

GENERATOR'S WASTE MATERIAL PROFILE SHEET (Continued)

YTS J 10103
Waste Profile Sheet Code

G. OTHER HAZARDOUS CHARACTERISTICS TO BE DETERMINED.

1. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)? ☐ Yes ☐ No
2. Does this waste contain greater than 1000 ppm total halogenated organic compounds? ☐ Yes ☐ No
3. Indicate if this waste is any of the following:

☐ RCRA Reactive ☐ Radioactive
☐ Water Reactive ☐ Etiological
☐ Explosive ☐ Pesticide Manufacturing Waste
☐ Shock Sensitive ☐ Other _____
☐ Pyrophoric ☐ None of the above

H. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS or INCINERATION TO BE DETERMINED.

	LESS THAN	or	ACTUAL
Beryllium	☐ < 5000 ppm		_____ ppm
Potassium	☐ < 5000 ppm		_____ ppm
Sodium	☐ < 5000 ppm		_____ ppm
Total Bromine	☐ < 2 %		_____ %
Total Chlorine	☐ < 35 %		_____ %
Total Fluorine	☐ < 1 %		_____ %
Total Sulfur			_____ %

I. OPTIONAL — RECLAMATION, FUELS, OR INCINERATION PARAMETERS Provide if information is available. TBD

Range

1. Heat Value (BTU/lb): _____ 2. Water: _____ %
3. Viscosity (cps): _____ @ ☐ _____ °F ☐ 100°F ☐ 150°F
4. Ash: _____ % 5. Settleable solids: _____ %
6. Vapor Pressure @ STP (mm/Hg): _____
7. Is this waste a pumpable liquid? ☐ Yes ☑ No
   Type of pump? _____
8. Can this waste be heated to improve flow? ☐ Yes ☑ No
9. Is this waste soluble in water? ☐ Yes ☐ No
10. Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? ☐ Yes ☐ No

J. TRANSPORTATION INFORMATION TO BE DETERMINED.

1. Is this a DOT Hazardous Material? ☐ Yes ☐ No 2. Anticipated Annual Volume/Units: _____ / _____
3. Proper Shipping Name: _____
4. Hazard Class: _____ 5. I.D. #: _____
6. Additional Description: (_____)
7. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☐ Drum (Type/Size): _____ / _____ Other: _____
8. CERCLA Reportable Quantity (RQ): _____ 9. RQ Units (lb/kg): _____
10. USEPA Hazardous Waste? ☐ Yes ☐ No 11. USEPA Hazardous Waste Number(s): _____
12. State Hazardous Waste? ☐ Yes ☐ No 13. State Hazardous Waste Number(s): _____

K. SPECIAL HANDLING INFORMATION

SEND DISPOSAL DECISION TO KING GEORGE, VA

☐ Additional Page(s) Attached

L. GENERATOR CERTIFICATION I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.

1. Paul J. Malina — Signature
2. Project Eng. — Title
3. PAUL J. MALINA JR. — Name (Type or Print)
4. 6 OCT 87 — Date

Side 2 of 2

AR400845

Chemical Waste Management, Inc.

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

Shaded areas are for CWM use only.

PART A. SAMPLING METHOD

Questions concerning sample waiver should be referred to your Chemical Waste Management, Inc. Sales Representative.

Check the sampling method employed.

This sample should be collected in accordance with "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods", SW846, USEPA, Office of Solid Waste, Washington, D.C. 20460 and/or 40CFR261-Appendix I. A suitable sample container for most wastes is a wide mouth glass bottle with a plastic cap having a non-reactive liner. Plastic containers are recommended for strong caustics or fluorides. Fill to approximately 90% of capacity to allow for expansion during transportation. The peel off label on this form must be completed prior to removal from the form. Ultimately, the label must be attached to the sample container, not the shipping container.

If this waste is a hazardous material, the sample must be packaged and shipped in accordance with USDOT regulations (49CFR171.2) and any specific requirements imposed by the carrier. Improperly packaged samples may be disposed of upon receipt.

PART B. SAMPLE SOURCE

The sampler is to describe exactly from where the sample was taken (e.g. conveyor, drum, lagoon, pipe, pit, pond, tank, vat).

PART C. SAMPLE LABEL

THE SAMPLE LABEL MUST BE COMPLETED BEFORE IT IS REMOVED FROM THIS FORM

Apply the completed peel off label to the container which actually holds the sample - not to the shipping carton. DO NOT WRITE ON THE BAR CODE (if present).

1. WASTE PROFILE SHEET CODE - If not preprinted, enter the appropriate Waste Profile Sheet Code. This Certification and its peel off label must be used to identify ONLY the sample of the waste described in the Generator's Waste Material Profile Sheet bearing the same Waste Profile Sheet Code.
2. GENERATOR'S NAME - Enter the name of the generating facility.
3. NAME OF WASTE - Enter a name which is generally descriptive of this waste (e.g., cyanide plating waste, paint sludge, PCB contaminated dirt, still bottoms, wastewater treatment sludge) as it appears on the Generator's Waste Material Profile Sheet.
4. SAMPLE HOUR/DATE - Enter the hour and date sample was collected.
5. SAMPLER'S SIGNATURE - The sampler must sign in the space provided.
6. PRINT SAMPLER'S NAME - Enter the sampler's name.
7. SAMPLER'S TITLE - Enter the sampler's title.
8. SAMPLER'S EMPLOYER (If CWM, See D. Below) - Enter the sampler's employer's name.

Remove the completed peel off label and affix it to the sample container at the time of sampling. If this label is lost or destroyed, the sample must be labeled with equivalent information, including the Waste Profile Sheet Code. If the Certification of Representative Sample Form is lost or destroyed, please contact your Chemical Waste Management, Inc. Sales Representative to obtain a new one.

PART D. WITNESS VERIFICATION (If required):

In the event that a Chemical Waste Management, Inc. employee obtains the sample on your site, one of your employees must be present to direct our employee to the sample source and to witness the sampling. Your employee must also provide the information requested in this PART D.

1. WITNESS' SIGNATURE - Sign in the space provided.
2. WITNESS' NAME - Print the name of the person who witnessed the sampling.
3. WITNESS' TITLE - Enter the witness' title.
4. WITNESS' EMPLOYER - Enter the witness' employer's name.
5. DATE - Enter the date the sampling event was witnessed.

VTS J 10103

Waste Profile Sheet Code

CWM Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: _____

This completed form must be returned, with the representative sample, to:

_____

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

A. SAMPLING METHOD (Indicate which method was employed)
If sampling requirement has been waived by Chemical Waste Management, Inc., do not complete this Generator's Certification of Representative Sample form.

1. ☐ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I.
2. ☑ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above using a method equivalent to the sampling methods described in 40 CFR 261-Appendix I.

B. SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)
Drum

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:		1. Waste Profile Sheet Code:
2. [redacted] Generator's Name:	AVTEX FIBERS INC	2. Generator's Name:
3. [redacted] Name of Waste:		3. Name of Waste:
4. [redacted] Sample Hour/Date:	400 PM 10/3/89	4. Sample Hour/Date:
5. [redacted] Sampler's Signature:	[signature]	5. Sampler's Signature:

6. Print Sampler's Name: JOHN BEARD
7. Sampler's Title: FIELD ANALYST
8. Sampler's Employer (if CWM, see D. below): CWM TECH SERVICES

D. WITNESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.
I was personally present during the sampling described. I directed the waste source to be sampled, and I verify the information noted above.

1. Witness' Signature: [signature]
2. Witness' Name: P. J. MALINA JR
3. Witness' Title: UTILITIES ENG.
4. Witness' Employer: AVTEX FIBERS
5. Date: 4 OCT 89

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89018006 PROF: MADJ10103 10/13/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/20/89
SRCE: MAD SITE: SRR INC
OIL/RESIN

CS2 insoluble

SAMPLE PREP: 2.01g + 4.10g CS2
DILUTION FACTOR: 2X

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC	
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: N/A	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

[X] If checked, multiply detection limits by dilution factor above.

[ ] Top Layer [ ] Middle Layer [ ] Bottom Layer [X] Not Applicable

Date Completed: 10-17-89 Analyst: EMM

Comments:

Reviewed by: Date:

SPECIAL WASTE ANALYSIS REPORT

LOCATION OF ORIGINAL: MAD

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.

(See Computer Label)
Waste Profile Sheet Code
FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management Technical Center Analytical Laboratories
ADDRESS: 150 West 137th Street, Riverdale, Illinois 60627 LAB MGR. PHONE: (312) 841-836
DATE SAMPLE RECEIVED AT LAB: (See Computer Label) DATE SAME TAKEN: 10/13/89
LAB SAMPLE NUMBER ASSIGNED: (See Computer Label) CERTIFICATION OF REP. SAMPLE OBTAINED? ☒ YES ☐ NO

CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision. For Chemical Waste Management, Inc. companies, sample preparation and analytical methods and analytical equipment specified or approved in the facility's waste analysis plan were used in conducting the analysis. This laboratory follows a quality assurance control program.

DATE OF REPORT: OCT 23 1989 SIGNATURE: [signature]
LAB MANAGER NAME: Roger Kell

PHYSICIAL CHARACTERISTICS OF WASTE 10/13/89

SAMPLE VOLUME	COLOR	DOES THE WASTE HAVE A STRONG INCIDENTAL ODOR?	PHYSICAL STATE @ 70°F	LAYERS	FREE LIQUIDS
	80% yellow-brown opaque liq. 20% brown cloudy liq.	☐ YES ☒ NO IF KNOWN, DESCRIBE	☐ SOLID ☐ SEMI-SOLID ☒ LIQUID ☐ POWDER	☐ MULTILAYERED ☒ BI-LAYERED ☐ SINGLE PHASED	☒ YES ☐ NO VOLUME 100

✓	Test	As Received	Extraction Procedure	Date of Analysis	✓	Test	As Received	Extraction Procedure	Date of Analysis
✓	Specific Gravity	0.9		10/19/89	✓	Sulfur, as S, % TOTAL	<0.5		10/23/
	pH, s.u. litmus paper	5.5		10/13/89					
	Acidity, %, as					Phenols, mg/l Screen	<5.	-	10/19/89
	Alkalinity, %, as					Cyanides, as CN, Total mg/l			
	C.O.D., mg/l					Cyanides, as CN, Free mg/l			
	B.O.D., mg/l					Ammonia Nitrogen, as N, mg/l			
✓	Total Solids @ 105°C, %	98.8		10/19/89					
	Total Dissolved Solids, mg/l								
	R.O.E. @ 180°C, mg/l								
	Flash Point, °F (closed cup)								
	Ash Content, on ignition, %	<0.5		10/19/89					
✓	Heating Value, BTU/lb	16100		10/17/89		Magnesium Hardness, as $CaCO_3$, mg/l			
✓	Potassium as K, mg/l	23.6		10/19/89	✓	Viscosity cps	224		10/19/
	Arsenic, as As, mg/l					Oil and Grease, mg/l			
✓	Barium, as Ba, mg/l	1.26				Paint Filter Test, free liquids, %	FAIL		10/13/89
	Cadmium, as Cd, mg/l				✓	Water Content, as H_2O, %	2.17		10/20/
✓	Chromium, Total, as Cr, mg/l	<0.23			✓	SRR Time; Top: 100% soluble			10/19/89
	Chromium, Hexavalent, as Cr^{+6}, mg/l					Aldrin, mg/l Screen - Insoluble, Heavies			
	Cobalt, as Co, mg/l					Chlordane, mg/l			
✓	Copper, as Cu, mg/l	1.47				DDT, mg/l			
	Iron, Total, as Fe, mg/l					Dieldrin, mg/l			
	Iron, Dissolved, as Fe, mg/l					Heptachlor, mg/l			
✓	Lead, as Pb, mg/l	1.41		-		Parathion, mg/l			
✓	Manganese, as Mn, mg/l	0.31				Endrin, mg/l			
	Magnesium, as Mg, mg/l					Lindane, mg/l			
✓	Mercury, as Hg, mg/l	<0.014				Methoxychlor, mg/l			
✓	Nickel, as Ni, mg/l	<0.23				Toxaphene, mg/l			
	Selenium, as Se, mg/l					2,4-D, mg/l			
	Silver, as Ag, mg/l					2,4,5-TP (Silvex), mg/l			
	Thallium, as Tl, mg/l				✓	PCBs, ppm	<5.		10/16/
✓	Zinc, as Zn, mg/l	49.3				PCBs, mg/l			
✓	Sodium as Na, mg/l	<47.		↓	✓	MSDS report attached			
	Bicarbonates, as HCO_3, mg/l					pH Screen, s.u.			
✓	Bromides, as Br, mg/l % TOTAL	<0.5		10/23/89		Cyanide Screen, (+,-) mg/l	<10.		10/
	Carbonates, as CO_3, mg/l					Flammability Screen, (+,-)	NEG		
	Chlorides, as Cl, mg/l % TOTAL	<0.5		10/23/89		Oxidizer Screen, (+,-)	NEG		
✓	Fluorides, as F, mg/l TOTAL	<2.0		10/18/89		Radiation Screen, (+,-)	= BACKGROUND		
	Nitrites, as NO_2, mg/l					Sulfide Screen, (+,-) mg/l	<2.		
	Nitrates, as NO_3, mg/l						NEGATIVE		
	Phosphates, as P, mg/l								
	Sulfates, as SO_4, mg/l								

89018007 PROF: MADJ10108 10/13/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/20/89
SRCE: MAD SITE: SRR INC
OIL/WATER

AR400849

TCD 1
#261

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

VTS J 10106
Waste Profile Sheet Code

CWM Location of Original: (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #:

A. GENERAL INFORMATION

1. Generator Name: AVTEX FIBERS INC
2. Generator USEPA ID: VAD070358684
3. Facility Address: 1128 KENDRICK LANE
FRONT ROYAL VA 22630
4. Generator State ID:
5. Zip Code: 22630
6. Technical Contact: PAUL MAUNA
7. Title: UTILITIES ENGR.
8. Phone: (703) 635 - 2141

B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO 1. ☐ Generating Facility (A, above), or
2. Company Name: CLINA TECHNICAL SERVICES
3. Phone: (703) 775 - 9000
4. Address: PO BOX 96
SKELETON, VA
5. Zip Code: 22547

C. 1. NAME OF WASTE WASTE MACHINE OIL.
2. PROCESS GENERATING WASTE LUBRICATING OIL CHANGE
3. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
☐ Yes ☑ No If yes, DO NOT COMPLETE this form. Contact your Chemical Waste Management, Inc. sales representative for assistance.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color:	2. Does the waste have a strong incidental odor?	3. Physical State @ 70°F:	4. Layers:	5. Specific Gravity:	6. Free Liquids:
TAN	☐ No ☐ Yes If known, describe: INK	☐ Solid ☐ Semi-Solid ☑ Liquid ☐ Powder Other:	☐ Multilayered ☑ Bi-layered ☐ Single Phased	Range: 1.0 - 1.2	☑ Yes ☐ No Volume: 100 %

☐ ≤ 2 ☐ > 2-4 ☐ 4-7 ☑ 7 ☐ 7-10 ☐ 10- < 12.5 ☐ ≥ 12.5 ☐ Range - ☐ NA

8. Liquid Flash Point: ☐ < 73°F ☐ 73-99°F ☐ 100-139°F ☐ 140-199°F ☐ ≥ 200°F ☐ None ☐ Closed Cup ☐ Open Cup

E. CHEMICAL COMPOSITION

1.		RANGE MIN. - MAX.	
	OIL	100	%
	WATER	1	%
			%
			%
			%
			%
			%
			%
			%
			%
			%
			%

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. TOTAL: ____ %

2. Indicate if this waste contains any of the following: TO BE DETERMINED

	NONE	or LESS THAN	or ACTUAL	
PCB's	☐	☐ < 50 ppm		ppm
Cyanides	☐	☐ < 50 ppm		ppm
Phenolics	☐	☐ < 50 ppm		ppm
Sulfides	☐	☐ < 50 ppm		ppm

TO BE DETERMINED

F. METALS Indicate if this waste contains any of the following:
1. ☐ EP TOX/TCLP or 2. ☐ Total

METAL	LESS THAN (Parts Per Million)	or	ACTUAL
Arsenic	☐ < 5	☐ < 500	
Barium	☐ < 100		
Cadmium	☐ < 1	☐ < 100	
Chromium	☐ < 5		
Lead	☐ < 5	☐ < 500	
Mercury	☐ < 0.2	☐ < 20	
Selenium	☐ < 1	☐ < 100	
Silver	☐ < 5		
Chromium-Hex	☐ < 5	☐ < 500	
Copper	☐ < 5		
Nickel	☐ < 5	☐ < 134	
Thallium	☐ < 5	☐ < 130	
Zinc	☐ < 5		
	☐ <		
	☐ <		
	☐ <		

TURN PAGE AND COMPLETE SIDE 2

AR400650

R S WASTE MATERIAL PROFILE SHEET (Continued)

VT3 J 10106
Waste Profile Sheet Code

OTHER HAZARDOUS CHARACTERISTICS

1. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)? ☐ Yes ☐ No
2. Does this waste contain greater than 1000 ppm total halogenated organic compounds? ☐ Yes ☐ No
3. Indicate if this waste is any of the following: TO BE DETERMINED

☐ RCRA Reactive ☐ Radioactive
☐ Water Reactive ☐ Etiological
☐ Explosive ☐ Pesticide Manufacturing Waste
☐ Shock Sensitive ☐ Other _____
☐ Pyrophoric ☐ None of the above

H. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS or INCINERATION TO BE DETERMINED.

	LESS THAN	or	ACTUAL
Beryllium	☐ < 5000 ppm		_____ ppm
Potassium	☐ < 5000 ppm		_____ ppm
Sodium	☐ < 5000 ppm		_____ ppm
Total Bromine	☐ < 2 %		_____ %
Total Chlorine	☐ < 35 %		_____ %
Total Fluorine	☐ < 1 %		_____ %
Total Sulfur			_____ %

I. OPTIONAL — RECLAMATION, FUELS, OR INCINERATION PARAMETERS Provide if information is available. TO BE DETERMINED.

1. Heat Value (BTU/lb): _____ Range 2. Water: _____ %
3. Viscosity (cps): _____ @ ☐ _____ °F ☐ 100°F ☐ 150°F
4. Ash: _____ % 5. Settleable solids: _____ %
6. Vapor Pressure @ STP (mm/Hg): _____
7. Is this waste a pumpable liquid? ☐ Yes ☐ No
   Type of pump? _____
8. Can this waste be heated to improve flow? ☐ Yes ☐ No
9. Is this waste soluble in water? ☐ Yes ☐ No
10. Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? ☐ Yes ☐ No

J. TRANSPORTATION INFORMATION TO BE DETERMINED.

1. Is this a DOT Hazardous Material? ☐ Yes ☐ No 2. Anticipated Annual Volume/Units: _____ / _____
3. Proper Shipping Name: _____
4. Hazard Class: _____ 5. I.D. #: _____
6. Additional Description: (_____)
7. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☐ Drum (Type/Size): _____ / _____ Other: _____
8. CERCLA Reportable Quantity (RQ): _____ 9. RQ Units (lb/kg): _____
10. USEPA Hazardous Waste? ☐ Yes ☐ No 11. USEPA Hazardous Waste Number(s): _____
12. State Hazardous Waste? ☐ Yes ☐ No 13. State Hazardous Waste Number(s): _____

K. SPECIAL HANDLING INFORMATION Send disposal decision to Seabrook, VA

☐ Additional Page(s) Attached

L. GENERATOR CERTIFICATION I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.

1. Signature: Paul J. Mac[illegible] 2. Title: PROJECT MANAGER
3. Name (Type or Print): PAUL J. MACKA JR. 4. Date: 5 OCT 89

Side 2 of 2

AR400851

Chemical Waste Management, Inc.

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

J10106

VTS J 10106

Waste Profile Sheet Code

CWM Location of Original: (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #:

This completed form must be returned, with the representative sample, to:

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

A. SAMPLING METHOD (Indicate which method was employed)

If sampling requirement has been waived by Chemical Waste Management, Inc., do not complete this Generator's Certification of Representative Sample form.

1. ☐ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I.
2. ☑ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above using a method equivalent to the sampling methods described in 40 CFR 261-Appendix I.

B. SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)

Drum.

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:		1. Waste Profile Sheet Code:
2. [redacted] Generator's Name:	AUTEX FIBERS	2. Generator's Name:
3. [redacted] Name of Waste:	OIL	3. Name of Waste:
4. [redacted] Sample Hour/Date:	1200 PM 10/15/89	4. Sample Hour/Date:
5. [redacted] Sampler's Signature:	John D. Beard	5. Sampler's Signature:

6. Print Sampler's Name: JOHN BEARD
7. Sampler's Title: FIELD ANALYST.
8. Sampler's Employer (if CWM, see D. below): CLEAN TECH SERVICES SEALSTON, VA

[illegible]NESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in which [illegible]mical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.

I was personally present during the sampling described. I directed the waste sour[illegible] the information noted above.

1. Witness' Signature: [illegible]
2. Witness' Name: P.J. MALINA JR. 3. Wi[illegible]
4. Witness' Employer: AUTEX FIBERS 5. Da[illegible]

AR400852

Chemical Waste Management, Inc.
GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

Shaded areas are for CWM use only.

PART A. SAMPLING METHOD

Questions concerning sample waiver should be referred to your Chemical Waste Management, Inc. Sales Representative.

Check the sampling method employed.

This sample should be collected in accordance with "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods", SW846, USEPA, Office of Solid Waste, Washington, D.C. 20460 and/or 40CFR261-Appendix I. A suitable sample container for most wastes is a wide mouth glass bottle with a plastic cap having a non-reactive liner. Plastic containers are recommended for strong caustics or fluorides. Fill to approximately 90% of capacity to allow for expansion during transportation. The peel off label on this form must be completed prior to removal from the form. Ultimately, the label must be attached to the sample container, not the shipping container.

If this waste is a hazardous material, the sample must be packaged and shipped in accordance with USDOT regulations (49CFR171.2) and any specific requirements imposed by the carrier. Improperly packaged samples may be disposed of upon receipt.

PART B. SAMPLE SOURCE

The sampler is to describe exactly from where the sample was taken (e.g. conveyor, drum, lagoon, pipe, pit, pond, tank, vat).

PART C. SAMPLE LABEL

THE SAMPLE LABEL MUST BE COMPLETED BEFORE IT IS REMOVED FROM THIS FORM

Apply the completed peel off label to the container which actually holds the sample - not to the shipping carton. DO NOT WRITE ON THE BAR CODE (If present).

1. WASTE PROFILE SHEET CODE - If not preprinted, enter the appropriate Waste Profile Sheet Code. This Certification and its peel off label ~~must be used to~~ identify ONLY the sample of the waste described in the Generator's Waste Material Profile Sheet bearing the same Waste Profile Sheet Code.
2. GENERATOR'S NAME - Enter the name of the generating facility.
3. NAME OF WASTE - Enter a name which is generally descriptive of this waste (e.g., cyanide plating waste, paint sludge, PCB contaminated dirt, still bottoms, wastewater treatment sludge) as it appears on the Generator's Waste Material Profile Sheet.
4. SAMPLE HOUR/DATE - Enter the hour and date sample was collected.
5. SAMPLER'S SIGNATURE - The sampler must sign in the space provided.
6. PRINT SAMPLER'S NAME - Enter the sampler's name.
7. SAMPLER'S TITLE - Enter the sampler's title.
8. SAMPLER'S EMPLOYER (If CWM, See D. Below) - Enter the sampler's employer's name.

Remove the completed peel off label and affix it to the sample container at the time of sampling. If this label is lost or destroyed, the sample must be labeled with equivalent information, including the Waste Profile Sheet Code. If the Certification of Representative Sample Form is lost or destroyed, please contact your Chemical Waste Management, Inc. Sales Representative to obtain a new one.

PART D. WITNESS VERIFICATION (If required):

In the event that a Chemical Waste Management, Inc. employee obtains the sample on your site, one of your employees must be present to direct our employee to the sample source and to witness the sampling. Your employee must also provide the information requested in this PART D.

1. WITNESS' SIGNATURE - Sign in the space provided.
2. WITNESS' NAME - Print the name of the person who witnessed the sampling.
3. WITNESS' TITLE - Enter the witness' title.
4. WITNESS' EMPLOYER - Enter the witness' employer's name.
5. DATE - Enter the date the sampling event was witnessed.

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89018011 PROF: MADJ10106 10/13/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/20/89
SRCE: MAD SITE: SRR INC
OIL

SAMPLE PREP: 0.98g-1.01g
DILUTION FACTOR: 2X

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC 16-17	0-0.7
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: N/A	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

[X] If checked, multiply detection limits by dilution factor above.

[ ] Top Layer [ ] Middle Layer [ ] Bottom Layer [X] Not Applicable

Date Completed: 10-17-89 Analyst: [illegible]

Comments:

Reviewed by:

AR400854

SPECIAL WASTE ANALYSIS REPORT

LOCATION OF ORIGINAL: MAD

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.

(See Computer Label)
Waste Profile Sheet Code
FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management Technical Center Analytical Laboratories
ADDRESS: 150 West 137th Street, Riverdale, Illinois 60627 LAB MGR. PHONE: (312) 841-83
DATE SAMPLE RECEIVED AT LAB: (See Computer Label) DATE SAMPLE TAKEN: 10/4/89
LAB SAMPLE NUMBER ASSIGNED: (See Computer Label) CERTIFICATION OF REP. SAMPLE OBTAINED? ☒ YES ☐ N

CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision. For Chemical Waste Management, Inc. companies, sample preparation and analyses/methods and analytical equipment specified or approved in the facility's waste analysis plan were used in conducting this analysis. The laboratory follows a quality assurance control program.

DATE OF REPORT: OCT 23 1989
SIGNATURE: RKell
LAB MANAGER NAME: Roger Kell

PHYSICAL CHARACTERISTICS OF WASTE 10/13/89

SAMPLE VOLUME	COLOR	DOES THE WASTE HAVE A STRONG INCIDENTAL ODOR?	PHYSICAL STATE @ 70°F	LAYERS	FREE LIQUIDS
	90% yellow brown 10% brown	☐ YES ☒ NO IF KNOWN, DESCRIBE	☐ SOLID ☐ SEMI-SOLID ☒ LIQUID ☐ POWDER	☐ MULTILAYERED ☒ BILAYERED ☐ SINGLE PHASED	☒ YES ☐ NO VOLUME 100

✓	Test	As Received	Extraction Procedure	Date of Analysis	✓	Test	As Received	Extraction Procedure	Date of Analysis
✓	Specific Gravity	0.9		10/19/89	✓	Sulfur, as S, % TOTAL	<0.5		10/23/8
	pH, s.u. WATER MIX/paper	5.0		10/13/89					
	Acidity, %, as					Phenols, mg/l SCREEN	<5.		10/13/8
	Alkalinity, %, as					Cyanides, as CN, Total mg/l			
	C.O.D., mg/l					Cyanides, as CN, Free mg/l			
	B.O.D., mg/l					Ammonia Nitrogen, as N, mg/l			
✓	Total Solids @ 105°C, %	14.2		10/19/89		89018014 PROF: MADJ10119 10/13/89			
	Total Dissolved Solids, mg/l					AVTEX FIBERS, INC			
	R.O.E. @ 180°C, mg/l					FRONT ROYAL, VA DUE 10/20/89			
						SRCE: MAD SITE: SRR INC			
	Flash Point, °F (closed cup)					OIL/WATER			
✓	Ash Content, on ignition, %	<0.5		10/19/89					
✓	Heating Value, BTU/lb	16600		10/19/89		Magnesium Hardness, as $CaCO_3$, mg/l			
✓	POTASSIUM ASK MIX	<18.		10/19/89		SPE COMP.: TCP-100% SA. BARN-[illegible]			
	Arsenic, as As, mg/l ✓					~~Oil and Grease, mg/l~~	Heavier		10/13/
✓	Barium, as Ba, mg/l	0.01				Paint Filter Test, free liquids, %	FAIL		10/23/
	Cadmium, as Cd, mg/l				✓	Water Content, as H_2O, %	8.0		10/20/
✓	Chromium, Total, as Cr, mg/l	<0.10			✓	VISCOSITY, cps	2600.		10/19/8
	Chromium, Hexavalent, as Cr^{+6}, mg/l					Aldrin, mg/l			
	Cobalt, as Co, mg/l					Chlordane, mg/l			
✓	Copper, as Cu, mg/l	1.16				DDT, mg/l			
	Iron, Total, as Fe, mg/l					Dieldrin, mg/l			
	Iron, Dissolved, as Fe, mg/l					Heptachlor, mg/l			
✓	Lead, as Pb, mg/l	<0.86				Parathion, mg/l			
✓	Manganese, as Mn, mg/l	0.52				Endrin, mg/l			
	Magnesium, as Mg, mg/l					Lindane, mg/l			
✓	Mercury, as Hg, mg/l	<0.014				Methoxychlor, mg/l			
✓	Nickel, as Ni, mg/l	<0.09				Toxaphene, mg/l			
	Selenium, as Se, mg/l					2,4-D, mg/l			
	Silver, as Ag, mg/l					2,4,5-TP (Silvex), mg/l			
	Thallium, as Tl, mg/l				✓	PCBs, ppm	<5.		10/19/8
✓	Zinc, as Zn, mg/l	65.1				PCBs, mg/l			
✓	Cyanides, as CN, mg/l	30.5		✓	✓	SULFIDE DEPLETION	REJECTED		✓
	Bicarbonates, as HCO_3, mg/l ✓					pH Screen, s.u.			
✓	Bromides, as Br, mg/l ~~%~~ TOTAL	<0.5		10/23/89		Cyanide Screen, (+,-) mg/l	<10.		10/
	Carbonates, as CO_3, mg/l					Flammability Screen, (+,-)	Yes		
	Chlorides, as Cl, mg/l ~~%~~, TOTAL	<0.5		10/23/89		Oxidizer Screen, (+,-)	No.		
✓	Fluorides, as F, mg/l TOTAL	<200.		10/19/89		Radiation Screen, (+,-) = BACKGROUND			
	Nitrates, as NO_3, mg/l					Sul	2.		
	Nitrites, as NO_2, mg/l					Wat			✓
	Phosphates, as P, mg/l								
	Sulfates, as SO_4, mg/l								

AR400855

PCB 2
#262
Model City

18010

GENERATOR'S WASTE MATERIAL PROFILE SHEET

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

#J10107#

VTS J 10107

Waste Profile Sheet Code

Location of Original: _____ (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #: _____

A. GENERAL INFORMATION

1. Generator Name: ANTEX FIBERS INC
2. Generator USEPA ID: VAD070358684
3. Facility Address: 1169 KENDRICK LANE
FRONT ROYAL, VA
4. Generator State ID: _____
5. Zip Code: 22630
6. Technical Contact: PAUL MAINA
7. Title: UTILITIES ENGR
8. Phone: (703) 635-2141

B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO

1. ☐ Generating Facility (A, above), or
2. Company Name: CWM TECHNICAL SERVICES
3. Phone: (703) 775-9000
4. Address: PO BOX 94
SEALSTON, VA
5. Zip Code: 22547

C.

1. NAME OF WASTE WASTE OIL
2. PROCESS GENERATING WASTE MACHINE OIL CHANGE
3. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
☐ Yes ☑ No If yes, DO NOT COMPLETE this form. Contact your Chemical Waste Management, Inc. sales representative for assistance.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color:	2. Does the waste have a strong incidental odor?	3. Physical State @ 70°F:	4. Layers:	5. Specific Gravity:	6. Free Liquids:
BLK	☐ No ☐ Yes If known, describe: UNK	☐ Solid ☐ Semi-Solid ☑ Liquid ☐ Powder Other: _____	☐ Multilayered ☑ Bi-layered ☐ Single Phased	Range: 1.0 - 1.2	☑ Yes ☐ No Volume: 100 %

7. pH: ☐ ≤ 2 ☐ > 2-4 ☑ 4-7 ☑ 7 ☐ 7-10 ☐ 10- < 12.5 ☐ ≥ 12.5 ☐ Range _____ ☐ NA

8. Liquid Flash Point: ☐ < 73°F ☐ 73-99°F ☑ 100-139°F ☐ 140-199°F ☐ ≥ 200°F ☐ None ☐ Closed Cup ☐ Open Cup

E. CHEMICAL COMPOSITION

1.	RANGE MIN. - MAX.	
OIL	95 - 100	%
WATER	0 - 5	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. TOTAL: _____ %

Indicate if this waste contains any of the following: TO BE DETERMINED

	NONE	or	LESS THAN	or	ACTUAL
PCB's	☑	☐	< 50 ppm		_____ ppm
Pesticides	☑	☐	< 50 ppm		_____ ppm
Phenolics	☑	☐	< 50 ppm		_____ ppm
Sulfides	☑	☐	< 50 ppm		_____ ppm

F. METALS

TO BE DETERMINED

Indicate if this waste contains any of the following:
1. ☐ EP TOX/TCLP or 2. ☐ Total

METAL		LESS THAN (Parts Per Million)	or	ACTUAL
Arsenic	☑ <	5	☐ < 500	
Barium	☐ <	100		3.47
Cadmium	☑ <	1	☐ < 100	
Chromium	☐ <	5		2.60
Lead	☐ <	5	☐ < 500	29.5
Mercury	☐ <	0.2	☐ < 20	0.24
Selenium	☑ <	1	☐ < 100	
Silver	☑ <	5		
Chromium-Hex	☑ <	5	☐ < 500	
Copper	☐ <	5		215
Nickel	☐ <	5	☐ < 134	3.48
Thallium	☑ <	1	☐ < 130	
Zinc	☐ <	5		142
	☐ <			
	☐ <			
	☐ <			

AR400856

ERATOR'S WASTE MATERIAL PROFILE SHEET (Continued)

VTS
Waste Profile Sheet Code

G. OTHER HAZARDOUS CHARACTERISTICS

1. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)? ☐ Yes ☑ No
2. Does this waste contain greater than 1000 ppm total halogenated organic compounds? ☐ Yes ☑ No
3. Indicate if this waste is any of the following:

☐ RCRA Reactive ☐ Radioactive
☐ Water Reactive ☐ Etiological
☐ Explosive ☐ Pesticide Manufacturing Waste
☐ Shock Sensitive ☐ Other _____
☐ Pyrophoric ☑ None of the above

H. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS or INCINERATION

		LESS THAN	or	ACTUAL
Beryllium	☑ <	5000 ppm		____ ppm
Potassium	☑ <	5000 ppm		____ ppm
Sodium	☑ <	5000 ppm		____ ppm
Total Bromine	☑ <	2 %		____ %
Total Chlorine	☑ <	35 %		____ %
Total Fluorine	☑ <	.1 %		____ %
Total Sulfur				<.5 %

I. OPTIONAL — RECLAMATION, FUELS, OR INCINERATION PARAMETERS Provide if information is available.

Range

1. Heat Value (BTU/lb): _____ 2. Water: _____ %
3. Viscosity (cps): _____ @ ☐ _____ °F ☐ 100°F ☐ 50°F
4. Ash: _____ % 5. Settleable solids: _____ %
6. Vapor Pressure @ STP (mm/Hg): _____
7. Is this waste a pumpable liquid? ☐ Yes ☐ No
   Type of pump? _____
8. Can this waste be heated to improve flow? ☐ Yes ☐ No
9. Is this waste soluble in water? ☐ Yes ☐ No
10. Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? ☐ Yes ☐ No

TRANSPORTATION INFORMATION TBD

1. Is this a DOT Hazardous Material? ☑ Yes ☐ No 2. Anticipated Annual Volume/Units: 20 dr year
3. Proper Shipping Name: Waste Oil N.O.S.
4. Hazard Class: Combustible Liquid 5. I.D. #: NA1273
6. Additional Description: (_____)
7. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☑ Drum (Type/Size): 17E 1 55g Other: _____
8. CERCLA Reportable Quantity (RQ): _____ 9. RQ Units (lb/kg): _____
10. USEPA Hazardous Waste? ☑ Yes ☐ No 11. USEPA Hazardous Waste Number(s): D001, D008
12. State Hazardous Waste? ☑ Yes ☐ No 13. State Hazardous Waste Number(s): D001, D008

K. SPECIAL HANDLING INFORMATION Send Disposal Decision to Sealston, VA

☐ Additional Page(s) Attached

L. GENERATOR CERTIFICATION I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed:

1. Signature: Paul J. Mac[illegible]
2. Title: Project Manager
3. Name (Type or Print): Paul J. Macia Jr
4. Date: 5 Oct 83

Side 2 of 2
Form CWM-6000 © 1987 Chemical Waste Management, Inc.

AR400857

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

J10107

VTS J 10107

Waste Profile Sheet Code

CWM Location of Original: _____ **(SHADED AREAS FOR CWM USE ONLY)** **CWM Sales Rep. #:** [ ]

This completed form must be returned, with the representative sample, to:

_____

_____

_____

_____

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

A. SAMPLING METHOD (Indicate which method was employed)

If sampling requirement has been waived by Chemical Waste Management, Inc., do not comp[illegible]e this Generator's Certification of Representative Sample form.

1. ☐ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I.
2. ☑ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above using a method equivalent to the sampling methods described in 40 CFR 261-Appendix I.

[illegible]MPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)

Drum

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:
2. [redacted] Generator's Name:
3. [redacted] Name of Waste:
4. [redacted] Sample Hour/Date:
5. [redacted] Sampler's Signature:
6. Print Sampler's Name: JOHN BEARD
7. Sampler's Title: FIELD ANALYST
8. Sampler's Employer (if CWM, see D. below): CWM TECH SERVICES, SERVISTAR

D. WITNESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be [illegible]pled, to witness the sampling, and to complete this Part D.

[illegible] personally present during the sampling described. I directed the waste source to be sampled, and I verify the information noted above.

1. Witness Signature: [signature]
2. Witness Name: P.J. MALLIA JR
3. Witness Title: PROJECT MANAGER
4. Witness Employer: AUTOX FIBERS

AR400858

Chemical Waste Management, Inc.

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

Shaded areas are for CWM use only.

PART A. SAMPLING METHOD

Questions concerning sample waiver should be referred to your Chemical Waste Management, Inc. Sales Representative

Check the sampling method employed.

This sample should be collected in accordance with "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods", SW846, USEPA, Office of Solid Waste, Washington, D.C. 20460 and/or 40CFR261-Appendix I. A suitable sample container for most wastes is a wide mouth glass bottle with a plastic cap having a non-reactive liner. Plastic containers are recommended for strong caustics or fluorides. Fill to approximately 90% of capacity to allow for expansion during transportation. The peel off label on this form must be completed prior to removal from the form. Ultimately, the label must be attached to the sample container, not the shipping container.

If this waste is a hazardous material, the sample must be packaged and shipped in accordance with USDOT regulations (49CFR171.2) and any specific requirements imposed by the carrier. Improperly packaged samples may be disposed of upon receipt.

PART B. SAMPLE SOURCE

The sampler is to describe exactly from where the sample was taken (e.g. conveyor, drum, lagoon, pipe, pit, pond, tank, vat).

PART C. SAMPLE LABEL

THE SAMPLE LABEL MUST BE COMPLETED BEFORE IT IS REMOVED FROM THIS FORM

Apply the completed peel off label to the container which actually holds the sample - not to the shipping carton. DO NOT WRITE ON THE BAR CODE (if present).

1. WASTE PROFILE SHEET CODE - If not preprinted, enter the appropriate Waste Profile Sheet Code. This Certification and its peel off label must be used to identify ONLY the sample of the waste described in the Generator's Waste Material Profile Sheet bearing the same Waste Profile Sheet Code.
2. GENERATOR'S NAME - Enter the name of the generating facility.
3. NAME OF WASTE - Enter a name which is generally descriptive of this waste (e.g., cyanide plating waste, paint sludge, PCB contaminated dirt, still bottoms, wastewater treatment sludge) as it appears on the Generator's Waste Material Profile Sheet.
4. SAMPLE HOUR/DATE - Enter the hour and date sample was collected.
5. SAMPLER'S SIGNATURE - The sampler must sign in the space provided.
6. PRINT SAMPLER'S NAME - Enter the sampler's name.
7. SAMPLER'S TITLE - Enter the sampler's title.
8. SAMPLER'S EMPLOYER *(If CWM, See D. Below) - Enter the sampler's employer's name.*

Remove the completed peel off label and affix it to the sample container at the time of sampling. If this label is lost or destroyed, the sample must be labeled with equivalent information, including the Waste Profile Sheet Code. If the Certification of Representative Sample Form is lost or destroyed, please contact your Chemical Waste Management, Inc. Sales Representative to obtain a new one.

PART D. WITNESS VERIFICATION (If required):

In the event that a Chemical Waste Management, Inc. employee obtains the sample on your site, one of your employees must be present to direct our employee to the sample source and to witness the sampling. Your employee must also provide the information requested in this PART D.

1. *WITNESS' SIGNATURE - Sign in the space provided.*
2. WITNESS' NAME - Print the name of the person who witnessed the sampling.
3. WITNESS' TITLE - Enter the witness' title.
4. WITNESS' EMPLOYER - Enter the witness' employer's name.
5. DATE - Enter the date the sampling event was witnessed.

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89018010 PROF: MADJ10107 10/13/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/20/89
SRCE: MAD SITE: SRR INC
OIL

SAMPLE PREP: 1.10g + 1.09g (2)
DILUTION FACTOR: (2X)

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC 9-14	0-22.
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: N/A	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

☐ If checked, multiply detection limits by dilution factor above.

☐ Top Layer ☐ Middle Layer ☐ Bottom Layer ☑ Not Applicable

Date Completed: 10-18-89 Analyst: EMN

Comments:

Reviewed by: R

DCU 9/29/90 IM 9/29/90

AR400860

SPECIAL WASTE ANALYSIS REPORT

LOCATION OF ORIGINAL: MAD

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.

(See Computer Label)
Waste Profile Sheet Code
FROM SAMPLE CONTAINER

LAB NAME: Chemical Waste Management Technical Center Analytical Laboratories
150 West 137th Street, Riverdale, Illinois 60627 LAB MGR. PHONE: (312) 841-8360

DATE SAMPLES RECEIVED AT LAB: (See Computer Label) DATE SAMPLE TAKEN:

LAB SAMPLE NUMBER ASSIGNED: (See Computer Label) CERTIFICATION OF REP. SAMPLE OBTAINED? ☒ YES ☐ NO

CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision. For Chemical Waste Management, Inc. companies, sample separation and analytical methods and analytical equipment specified or approved in the facility's waste analysis plan were used in conducting the analysis. This laboratory follows a quality assurance control program.

DATE OF REPORT: OCT 17 1989 SIGNATURE: RKell

LAB MANAGER NAME: Roger Kell

PHYSICAL CHARACTERISTICS OF WASTE

SAMPLE VOLUME:	COLOR	DOES THE WASTE HAVE A STRONG INCIDENTAL ODOR?	PHYSICAL STATE @ 70°F	LAYERS	FREE LIQUIDS
	Top Black-opaque 50% Bottom Colorless clear 50%	☐ YES ☒ NO IF KNOWN, DESCRIBE:	☐ SOLID ☐ SEMI-SOLID ☒ LIQUID ☐ POWDER	☐ MULTILAYERED ☒ BI-LAYERED ☐ SINGLE PHASED	☒ YES ☐ NO VOLUME 100 %

Test	As Received	Extraction Procedure	Date of Analysis	✓	Test	As Received	Extraction Procedure	Date of Analysis
Specific Gravity	1.0		10/16/89	✓	Sulfur, as S, % TOTAL	<0.5		10/16/89
pH, s.u. — Top layer	6.0		10/7/89					
Acidity, % as					Phenols, mg/l Bottom	<5		10/7/89
Alkalinity % as					Cyanides, as CN, Total mg/l			
C.O.D., mg					Cyanides, as CN, Free mg/l			
B.O.D., mg					Ammonia Nitrogen, as N, mg/l			
Total Solids @ 105°C, %	21.2		10/16/89					
Total Dissolved Solids, mg/l								
C.O.D. @ °C, mg/l								
Flash Point (closed cup)								
Ash Content, % ignition, %	<0.5		10/16/89					
Heating Value, BTU/lb	11900.		10/12/89		Magnesium Hardness, as $CaCO_3$, mg/l			
		EPT						
Arsenic, as As, mg/l	0.92		10/16/89		Oil and Grease, mg/l			
Barium, as Ba, mg/l	38.8				Paint Filter Test, free liquids, %	FAIL		10/7/89
Cadmium, as Cd, mg/l	0.31			✓	Water Content, as H_2O, %	3.5		10/16/89
Chromium, Total, as Cr, mg/l	5.75	<0.01						
Chromium, Hexavalent, as Cr^{+6}, mg/l					Aldrin, mg/l			
Cobalt, as Co, mg/l					Chlordane, mg/l			
Copper, as Cu, mg/l	102.				DDT, mg/l			
Iron, Total, as Fe, mg/l					Dieldrin, mg/l			
Iron, Dissolved, as Fe, mg/l					Heptachlor, mg/l			
Lead, as Pb, mg/l	57.3	0.02			Parathion, mg/l			
Manganese, as Mn, mg/l					Endrin, mg/l			
Magnesium, as Mg, mg/l					Lindane, mg/l			
Mercury, as Hg, mg/l	<0.015				Methoxychlor, mg/l			
Nickel, as Ni, mg/l	5.90				Toxaphene, mg/l			
Selenium, as Se, mg/l	0.32				2,4-D, mg/l			
Silver, as Ag, mg/l	0.15				2,4,5-TP (Silvex), mg/l			
Thallium, as Tl, mg/l				✓	PCBs, ppm	<5		10/13/89
Zinc, as Zn, mg/l	148				PCBs, mg/l			
					See Report Attached			
Bicarbonate, as HCO_3, mg/l				✓	pH Screen, s.u.			
Chloride, as Cl, mg/l					Cyanide Screen, (+,-) mg/l	<10		10/7/89
Sulfate, as SO_4, mg/l					Flammability Screen, (+,-)	NEG.		
Nitrate, as NO_3, mg/l TOTAL %	<0.5		10/16/89		Oxidizer Screen, (+,-)	NEG.		
Nitrate, as N, mg/l TOTAL	<220.		10/12/89		Radiation Screen, (+,-)			
Nitrite, as NO_2, mg/l					Sulfide Screen, (+,-)			
Nitrite, as NO_2, mg/l					Water Mix Screen, (+,-)			
Phosphate, as P, mg/l								

89017753 PROF: MADJ87367 10/09/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/16/89
SRCE: MAD SITE: ALA TWI
OIL SLUDGE

AR400861

89018010 PROF: MADJ10107 10/13/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/20/89
SRCE: MAD SITE: SRR INC
OIL

SAMPLE PREP: 1.10g + 1.09g C2
DILUTION FACTOR: 2X

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC 9-14	0-22.
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: N/A	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

[ ] If checked, multiply detection limits by dilution factor above.

[ ] Top Layer [ ] Middle Layer [ ] Bottom Layer [X] Not Applicable

Date Completed: 10-8-89 Analyst: EMN

Comments:

Reviewed by: R Date: 10/11/89

REV 8/28/89 LM 8/28/89

AR400862

LOCATION OF ORIGINAL: MAD

(See Computer Label)
Waste Profile Sheet Code
FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management Technical Center Analytical Laboratories
ESS: 150 West 137th Street, Riverdale, Illinois 60627 LAB MGR PHONE: (312) 841-8360
DATE SAMPLE RECEIVED AT LAB: (See Computer Label) DATE SAMPLE TAKEN: 10/5/89
LAB SAMPLE NUMBER ASSIGNED: (See Computer Label) CERTIFICATION OF REP. SAMPLE OBTAINED? ☒ YES ☐ NO

CERTIFICATION: Except as expressly noted, all analytical data reported below were obtained under my direction and supervision. For Chemical Waste Management, Inc. companies, sample preparation and analytical methods and analytical equipment specified or approved in the facility's waste analysis plan were used in conducting the analysis. This laboratory follows a quality assurance control program.

DATE OF REPORT: OCT 24 1989
LAB MANAGER NAME: Roger Kell
SIGNATURE: Richard J. Lisec

PHYSICAL CHARACTERISTICS OF WASTE 10/13/89

SAMPLE VOLUME	COLOR	DOES THE WASTE HAVE A STRONG INCIDENTAL ODOR?	PHYSICAL STATE @ 70°F	LAYERS	FREE LIQUIDS
	90% dark brown 10% brown	☐ YES ☒ NO IF KNOWN, DESCRIBE	low viscosity ☐ SOLID ☐ SEMI-SOLID ☒ LIQUID ☐ POWDER	☐ MULTILAYERED ☒ BI-LAYERED ☐ SINGLE PHASED	☒ YES ☐ NO VOLUME 100

✓	Test	As Received	Extraction Procedure	Date of Analysis	✓	Test	As Received	Extraction Procedure	Date of Analysis
✓	Specific Gravity	0.9		10/19/89	✓	Sulfur, as S, % Total	<0.5		10/23/89
	pH, s.u. (water mix/paper)	5.5		10/13/89					
	Acidity, %, as					Phenols, mg/l Screen	<5.		10/23/89
	Alkalinity, %, as					Cyanides, as CN, Total mg/l			
	C O D, mg/l					Cyanides, as CN, Free mg/l			
	B O D, mg/l					Ammonia Nitrogen, as N, mg/l			
✓	Total Solids @ 105°C, %	73.4		10/19/89		990180.1 FPROF: MADJ10107 10/13/89			
	Total Dissolved Solids, mg/l					AVTEX FIBERS, INC			
	R O E @ 180°C, mg/l					FRONT ROYAL, VA DUE 10/20/89			
			EPT			SRCE: MAD SITE: SRR INC			
	Flash Point, °F (closed cup)	120.		10/20/89		OIL			
	Ash Content, on ignition, %	<0.5		10/19/89		Calcium Hardness, as CaCO3, mg/l			
✓	Heating Value, BTU/lb	15000.		10/17/89		Magnesium Hardness, as CaCO3, mg/l			
✓	Potassium as K, mg/l	<18.		10/23/89					
	Arsenic, as As, mg/l					Oil and Grease, mg/l			
✓	Barium, as Ba, mg/l	3.47				Paint Filter Test, free liquids, %	FAIL		10/[illegible]
	Cadmium, as Cd, mg/l				✓	Water Content, as H2O, %	<1.		10/[illegible]
✓	Chromium, Total, as Cr, mg/l	2.60			✓	VISCOSITY, cps	113.		10/[illegible]
	Chromium, Hexavalent, as Cr+6, mg/l					~~Aldrin, mg/l~~ SRR COMP:			
	Cobalt, as Co, mg/l					~~Chlordane, mg/l~~ Top-100% soluble,			10/[illegible]
	Copper, as Cu, mg/l	.215.				~~DDT, mg/l~~ Bottom-9% soluble,			
	Iron, Total, as Fe, mg/l					Dieldrin, mg/l see cover 1			
	Iron, Dissolved, as Fe, mg/l					Heptachlor, mg/l			
	Lead, as Pb, mg/l	29.5	19.2			Parathion, mg/l			
	Manganese, as Mn, mg/l	9.45				Endrin, mg/l			
	Magnesium, as Mg, mg/l					Lindane, mg/l			
	Mercury, as Hg, mg/l	0.024				Methoxychlor, mg/l			
	Nickel, as Ni, mg/l	3.46				Toxaphene, mg/l			
	Selenium, as Se, mg/l					2,4-D, mg/l			
	Silver, as Ag, mg/l					2,4,5-TP (Silvex), mg/l			
	Thallium, as Tl, mg/l				✓	PCBs, ppm	<5.		10/[illegible]
	Zinc, as Zn, mg/l	142.	TCLP			PCBs, mg/l			
	Sodium as Na, mg/l	553.	10/24/89	✓	✓	Attached report attached			10/[illegible]
	Bicarbonates, as HCO3, mg/l					pH Screen, s.u.			
	Bromides, as Br, mg/l % Total	<0.5		10/23/89		Cyanide Screen, (+,-) mg/l	<10.		10/[illegible]
	Nitrates, as CO3, mg/l					Flammability Screen, (+,-)	POS.		
	Chlorides, as Cl, mg/l % Total	<0.5		10/23/89		Oxidizer Screen, (+,-)	NEG.		
	Fluorides, as F, mg/l Total	<200		10/15/89		Reactivity Screen, (+,-)	= Background		
	Nitrates, as NO3, mg/l					Sulfide Screen, (+,-) mg/l	<2.		
	Nitrites, as NO2, mg/l					Water Mix Screen, (+,-)	non-reactive		
	Phosphates, as P, mg/l					Rp: Opaque, [illegible]			
	Sulfates, as SO4, mg/l								

AR400863

I-1

Drums 1-20

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

VTS J 10110

Waste Profile Sheet Code

Location of Original: (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #:

A. GENERAL INFORMATION

1. Generator Name: AJTEK FIBERS INC
2. Generator USEPA ID: VAD070358424
3. Facility Address: 1169 KENDRICK LANE, FRONT ROYAL, VA
4. Generator State ID:
5. Zip Code: 22630
6. Technical Contact: Paul Malina
7. Title: UTILITIES ENGR.
8. Phone: (703) 635-2141

B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO 1. ☐ Generating Facility (A, above), or

2. Company Name: CM TECH SERVICES
3. Phone: (703) 775-9000
4. Address: PO BOX 96, SEALSTON, VA
5. Zip Code: 22547

C. 1. NAME OF WASTE WASTE OIL + WATER

2. PROCESS GENERATING WASTE OIL MACHINE CHANGE, FILE (WATER EXT.)

3. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
☐ Yes ☐ No If yes, DO NOT COMPLETE this form. Contact your Chemical Waste Management, Inc. sales representative for assistance.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color:	2. Does the waste have a strong incidental odor?	3. Physical State @ 70°F:	4. Layers:	5. Specific Gravity:	6. Free Liquids:
Brown	☐ No ☐ Yes If known, describe: UNK	☐ Solid ☐ Semi-Solid ☒ Liquid ☐ Powder Other:	☐ Multilayered ☒ Bi-layered ☐ Single Phased	Range: 10 - 12	☒ Yes ☐ No Volume: 100 %

7. pH: ☐ ≤ 2 ☐ > 2-4 ☐ 4-7 ☒ 7- ☐ 7-10 ☐ 10- < 12.5 ☐ ≥ 12.5 ☐ Range - ☐ NA

8. Liquid Flash Point: ☐ < 73°F ☐ 73-99°F ☐ 100-139°F ☐ 140-199°F ☐ ≥ 200°F ☐ None ☐ Closed Cup ☐ Open Cup

E. CHEMICAL COMPOSITION

1.	RANGE MIN. - MAX.	
OIL	90 - 95	%
WATER	5 - 10	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. TOTAL: ____ %

2. Indicate if this waste contains any of the following: TO BE DETERMINED

	NONE	or LESS THAN	or ACTUAL	
PCB's	☐	☐ < 50 ppm	____	ppm
Cyanides	☐	☐ < 50 ppm	____	ppm
Phenolics	☐	☐ < 50 ppm	____	ppm
Sulfides	☐	☐ < 50 ppm	____	ppm

F. METALS TO BE DETERMINED. Indicate if this waste contains any of the following:

1. ☐ EP TOX/TCLP or 2. ☐ Total

METAL	LESS THAN	or	ACTUAL (Parts Per Million)
Arsenic	☐< 5	☐< 500	
Barium	☐< 100		
Cadmium	☐< 1	☐< 100	
Chromium	☐< 5		
Lead	☐< 5	☐< 500	
Mercury	☐< .02	☐< 20	
Selenium	☐< 1	☐< 100	
Silver	☐< 5		
Chromium-Hex	☐< 5	☐< 500	
Copper	☐< 5		
Nickel	☐< 5	☐< 134	
Thallium	☐< 5	☐< 130	
Zinc	☐< 5		
	☐<		
	☐<		
	☐<		

TURN PAGE AND COMPLETE SIDE

AR400864

NERATOR'S WASTE MATERIAL PROFILE SHEET (Continued)

VTS J 10110
Waste Profile Sheet Code

G. OTHER HAZARDOUS CHARACTERISTICS TO BE DETERMINED (TBD)

1. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)? ☐ Yes ☐ No
2. Does this waste contain greater than 1000 ppm total halogenated organic compounds? ☐ Yes ☐ No
3. Indicate if this waste is any of the following:

☐ RCRA Reactive ☐ Radioactive
☐ Water Reactive ☐ Etiological
☐ Explosive ☐ Pesticide Manufacturing Waste
☐ Shock Sensitive ☐ Other _____
☐ Pyrophoric ☐ None of the above

H. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS or INCINERATION TBD

	LESS THAN	or	ACTUAL
Beryllium	☐ < 5000 ppm		_____ ppm
Potassium	☐ < 5000 ppm		_____ ppm
Sodium	☐ < 5000 ppm		_____ ppm
Total Bromine	☐ < 2 %		_____ %
Total Chlorine	☐ < 35 %		_____ %
Total Fluorine	☐ < 1 %		_____ %
Total Sulfur			_____ %

I. OPTIONAL — RECLAMATION, FUELS, OR INCINERATION PARAMETERS Provide if information is available. TBD

Range

1. Heat Value (BTU/lb): _____ - _____ 2. Water: _____ %
3. Viscosity (cps): _____ @ ☐ _____ °F ☐ 100°F ☐ 150°F
4. Ash: _____ % 5. Settleable solids: _____ %
6. Vapor Pressure @ STP (mm/Hg): _____
7. Is this waste a pumpable liquid? ☐ Yes ☐ No
   Type of pump? _____
8. Can this waste be heated to improve flow? ☐ Yes ☐ No
9. Is this waste soluble in water? ☐ Yes ☐ No
10. Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? ☐ Yes ☐ No

TRANSPORTATION INFORMATION

1. Is this a DOT Hazardous Material? ☑ Yes ☐ No 2. Anticipated Annual Volume/Units: 1000 Drums / 10 tankers
3. Proper Shipping Name: WASTE Petroleum oil, No. 5.
4. Hazard Class: None 5. I.D. #: _____
6. Additional Description: (_____)
7. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☐ Drum (Type/Size): _____ / _____ Other: _____
8. CERCLA Reportable Quantity (RQ): _____ 9. RQ Units (lb/kg): _____
10. USEPA Hazardous Waste? ☐ Yes ☐ No 11. USEPA Hazardous Waste Number(s): _____
12. State Hazardous Waste? ☐ Yes ☐ No 13. State Hazardous Waste Number(s): _____

K. SPECIAL HANDLING INFORMATION Spill Disposal Decision to Saltford, VA

☐ Additional Page(s) Attached

L. GENERATOR CERTIFICATION I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.

1. Signature: Paul J. Malina Jr.
2. Title: PROJECT MANAGER
3. Name (Type or Print): PAUL J. MALINA JR.
4. Date: 5 OCT 89

AR400865

Chemical Waste Management, Inc.

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

Shaded areas are for CWM use only.

PART A. SAMPLING METHOD

Questions concerning sample waiver should be referred to your Chemical Waste Management, Inc. Sales Representative.

Check the sampling method employed.

This sample should be collected in accordance with "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods", SW846, USEPA, Office of Solid Waste, Washington, D.C. 20460 and/or 40CFR261-Appendix I. A suitable sample container for most wastes is a wide mouth glass bottle with a plastic cap having a non-reactive liner. Plastic containers are recommended for strong caustics or fluorides. Fill to approximately 90% of capacity to allow for expansion during transportation. The peel off label on this form must be completed prior to removal from the form. Ultimately, the label must be attached to the sample container, not the shipping container.

If this waste is a hazardous material, the sample must be packaged and shipped in accordance with USDOT regulations (49CFR171.2) and any specific requirements imposed by the carrier. Improperly packaged samples may be disposed of upon receipt.

PART B. SAMPLE SOURCE

The sampler is to describe exactly from where the sample was taken (e.g. conveyor, drum, lagoon, pipe, pit, pond, tank, vat).

PART C. SAMPLE LABEL

THE SAMPLE LABEL MUST BE COMPLETED BEFORE IT IS REMOVED FROM THIS FORM

the completed peel off label to the container which actually holds the sample - not to the shipping carton. DO NOT E ON THE BAR CODE (If present).

1. WASTE PROFILE SHEET CODE - If not preprinted, enter the appropriate Waste Profile Sheet Code. This Certification and its peel off label must be used to identify ONLY the sample of the waste described in the Generator's Waste Material Profile Sheet bearing the same Waste Profile Sheet Code.
2. GENERATOR'S NAME - Enter the name of the generating facility.
3. NAME OF WASTE - Enter a name which is generally descriptive of this waste (e.g., cyanide plating waste, paint sludge, PCB contaminated dirt, still bottoms, wastewater treatment sludge) as it appears on the Generator's Waste Material Profile Sheet.
4. SAMPLE HOUR/DATE - Enter the hour and date sample was collected.
5. SAMPLER'S SIGNATURE - The sampler must sign in the space provided.
6. PRINT SAMPLER'S NAME - Enter the sampler's name.
7. SAMPLER'S TITLE - Enter the sampler's title.
8. SAMPLER'S EMPLOYER (If CWM, See D. Below) - Enter the sampler's employer's name.

Remove the completed peel off label and affix it to the sample container at the time of sampling. If this label is lost or destroyed, the sample must be labeled with equivalent information, including the Waste Profile Sheet Code. If the Certification of Representative Sample Form is lost or destroyed, please contact your Chemical Waste Management, Inc. Sales Representative to obtain a new one.

PART D. WITNESS VERIFICATION (If required):

In the event that a Chemical Waste Management, Inc. employee obtains the sample on your site, one of your employees must be present to direct our employee to the sample source and to witness the sampling. Your employee must also provide the information requested in this PART D.

1. WITNESS' SIGNATURE - Sign in the space provided.

TNESS' NAME - Print the name of the person who witnessed the sampling.

TNESS' TITLE - Enter the witness' title.

4. WITNESS' EMPLOYER - Enter the witness' employer's name.
5. DATE - Enter the date the sampling event was witnessed.

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

J10110

VTS J 10110

Waste Profile Sheet Code

CWM Location of Original: (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #:

This completed form must be returned, with the representative sample, to:

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

A. SAMPLING METHOD (Indicate which method was employed)

If sampling requirement has been waived by Chemical Waste Management, Inc., do not complete this Generator's Certification of Representative Sample form.

1. ☐ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I.
2. ☑ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above using a method equivalent to the sampling methods described in 40 CFR 261-Appendix I.

B. SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)

Drum

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:	
2. Generator's Name:	AVTEX FIBERS
3. Name of Waste:	WASTE OIL + WATER
4. Sample Hour/Date:	100 PM 12/9/88
5. Sampler's Signature:	[signature]

1. Waste Profile Sheet Code:
2. Generator's Name:
3. Name of Waste:
4. Sample Hour/Date:
5. Sampler's Signature:

6. Print Sampler's Name: JOHN BEAND
7. Sampler's Title: FIELD ANALYST
8. Sampler's Employer (if CWM, see D. below): CWM TECH SERVICES

D. WITNESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in which Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to be sampled, to witness the sampling, and to complete this Part D.

I was personally present during the sampling described. I directed the waste source to be sampled, and I verify the information noted above.

1. Witness' Signature: [signature]
2. Witness' Name: P.J. MALLWATT JR.
3. Witness' Employer: AVTEX FIBERS

PROJECT MANAGER

AR400867

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89018018 PROF: MADJ10110 10/13/89
AVTEX FIBERS, INC
RONT ROYAL, VA DUE 10/20/89
CE: MAD SITE: SRR INC
IL/WATER

SAMPLE PREP: liquid
DILUTION FACTOR:

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol	0-0.3	Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC	
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: N/A	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

[ ] If checked, multiply detection limits by dilution factor above.

[ ] Top Layer [ ] Middle Layer [✓] Bottom Layer [ ] Not Applicable

Date Completed: 10-30-89 Analyst: Eiml

Comments:

AR400868

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89018018 PROF: MADJ10110 10/13/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/20/89
SRCE: MAD SITE: SRR INC
OIL/WATER

SAMPLE PREP: 1.08g + 1.09g = 2
DILUTION FACTOR: 2X

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC 16-17	0-0.4
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: N.A.	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

[X] If checked, multiply detection limits by dilution factor above.

[X] Top Layer [ ] Middle Layer [ ] Bottom Layer [ ] Not Applicable

Date Completed: 10-20-89 Analyst: EMN

Comments:

Reviewed by: R 10/89

AR400869

LOCATION OF ORIGINAL: MAD

The Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.

(See Computer Label)
Waste Profile Sheet Code
FROM SAMPLE CONTAINER

LABORATORY NAME: Chemical Waste Management Technical Center Analytical Laboratories
ADDRESS: 150 West 137th Street, Riverdale, Illinois 60627 LAB MGR. PHONE: (312) 841-8360
DATE SAMPLE RECEIVED AT LAB: (See Computer Label) DATE SAMPLE TAKEN: 10/3/89
LAB SAMPLE NUMBER ASSIGNED: (See Computer Label) CERTIFICATION OF REP. SAMPLE OBTAINED? ☒ YES ☐ NO

CERTIFICATION: Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision. For Chemical Waste Management, Inc. companies, sample preparation and analytical methods and analytical equipment specified or approved in the facility's waste analysis plan were used in conducting this analysis. This laboratory follows a quality assurance control program.

DATE OF REPORT: OCT 24 1989
LAB MANAGER NAME: Roger Kell
SIGNATURE: Richard J. Lisac
Richard J. Lisac

PHYSICAL CHARACTERISTICS OF WASTE 10/13/89

SAMPLE VOLUME	COLOR	DOES THE WASTE HAVE A STRONG INCIDENTAL ODOR?	PHYSICAL STATE @ 70°F	LAYERS	FREE LIQUIDS
	60% yellow brown 40% brown	☐ YES ☒ NO ☐ UNKNOWN. DESCRIBE	☐ SOLID ☐ SEMI-SOLID ☒ LIQUID ☐ POWDER	☐ MULTILAYERED ☒ BI-LAYERED ☐ SINGLE PHASED	☒ YES ☐ NO VOLUME 100

✓	Test	As Received	Extraction Procedure	Date of Analysis	✓	Test	As Received	Extraction Procedure	Date of Analysis
✓	Specific Gravity	0.9		10/19/89	✓	Sulfur, as S, % Total	<0.5		10/23/89
	pH, s.u. Initial/final	6.0		10/13/89					
	Acidity, %, as					Phenols, mg/l Screen	Positive		10/13/89
	Alkalinity, %, as					Cyanides, as CN, Total mg/l			
	C.O.D., mg/l					Cyanides, as CN, Free mg/l			
	B.O.D., mg/l					Ammonia Nitrogen, as N, mg/l			
✓	Total Solids @ 105°C, %	84.5		10/19/89					
	Total Dissolved Solids, mg/l								
	R.O.E. @ 180°C, mg/l								
	Flash Point, °F (closed cup)								
	Ash Content, on ignition, %	<0.5		10/19/89					
✓	Heating Value, BTU/lb	8300.		10/17/89		Magnesium Hardness, as $CaCO_3$, mg/l			
✓	Potassium, mg/l	25.3		10/19/89	✓	Viscosity, cps	287.		10/19/89
	Arsenic, as As, mg/l					Oil and Grease, mg/l			
✓	Barium, as Ba, mg/l	2.21				Paint Filter Test, free liquids, %	FAIL		10/12/89
	Cadmium, as Cd, mg/l				✓	Water Content, as H_2O, %	24.1		10/23/89
✓	Chromium, Total, as Cr, mg/l	0.47				SEP COMP: TOP: 100% Solvent			10/13/89
	Chromium, Hexavalent, as Cr^{+6}, mg/l					Alarm, mg/l BOTTOM: Immiscible			
	Cobalt, as Co, mg/l					Chlorane, mg/l Heavier			
✓	Copper, as Cu, mg/l	4.53				DDT, mg/l			
	Iron, Total, as Fe, mg/l					Dieldrin, mg/l			
	Iron, Dissolved, as Fe, mg/l					Heptachlor, mg/l			
✓	Lead, as Pb, mg/l	3.15				Parathion, mg/l			
✓	Manganese, as Mn, mg/l	0.74				Endrin, mg/l			
	Magnesium, as Mg, mg/l					Lindane, mg/l			
✓	Mercury, as Hg, mg/l	<0.014				Methoxychlor, mg/l			
✓	Nickel, as Ni, mg/l	0.51				Toxaphene, mg/l			
	Selenium, as Se, mg/l					2,4-D, mg/l			
	Silver, as Ag, mg/l					2,4,5-TP (Silvex), mg/l			
	Thallium, as Tl, mg/l				✓	PCBs, ppm	<5.		10/15/89
✓	Zinc, as Zn, mg/l	87.3				PCBs, mg/l			
✓	Sodium, as Na, mg/l	<47.			✓	Ignitability, °F	[illegible]		
	Bicarbonates, as HCO_3, mg/l					pH Screen, s.u.			
✓	Bromides, as Br, mg/l %, Total	<0.5		10/23/89		Cyanide Screen, (+,-) mg/l	<10.		10/12/89
	Carbonates, as CO_3, mg/l					Flammability Screen, (+,-)	[illegible]		
	Chlorides, as Cl, mg/l %, Total	<0.5		10/23/89		Oxidizer Screen, (+,-)	[illegible]		
✓	Fluorides, as F, mg/l Total	<200.		10/18/89		Radiation Screen, (+,-)	[illegible]		
	Nitrates, as NO_3, mg/l					Sulfide Screen			
	Nitrites, as NO_2, mg/l					Water Mix Test	[illegible]		
	Phosphates, as P, mg/l					[illegible]	[illegible]		
	Sulfates, as SO_4, mg/l					[illegible]			

89018019 PROF: MADJ10109 10/13/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/20/89
SRCE: MAD SITE: SRR INC
OIL/WATER

AR400870

GENERATOR'S WASTE MATERIAL PROFILE SHEET (Continued)

UTS J 10112
Waste Profile Sheet Code

OTHER HAZARDOUS CHARACTERISTICS TO BE DETERMINED

1. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)? ☐ Yes ☐ No
2. Does this waste contain greater than 1000 ppm total halogenated organic compounds? ☐ Yes ☐ No
3. Indicate if this waste is any of the following:

☐ RCRA Reactive ☐ Radioactive
☐ Water Reactive ☐ Etiological
☐ Explosive ☐ Pesticide Manufacturing Waste
☐ Shock Sensitive ☐ Other _____
☐ Pyrophoric ☐ None of the above

H. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS or INCINERATION TBD

	LESS THAN	or	ACTUAL
Beryllium	☐ < 5000 ppm		_____ ppm
Potassium	☐ < 5000 ppm		_____ ppm
Sodium	☐ < 5000 ppm		_____ ppm
Total Bromine	☐ < 2 %		_____ %
Total Chlorine	☐ < 35 %		_____ %
Total Fluorine	☐ < 1 %		_____ %
Total Sulfur			_____ %

I. OPTIONAL — RECLAMATION, FUELS, OR INCINERATION PARAMETERS Provide if information is available. TBD

Range

1. Heat Value (BTU/lb): _____ 2. Water: _____ %
3. Viscosity (cps): _____ @ ☐ _____ °F ☐ 100°F ☐ 150°F
4. Ash: _____ % 5. Settleable solids: _____ %
6. Vapor Pressure @ STP (mm/Hg): _____
7. Is this waste a pumpable liquid? ☐ Yes ☐ No
   Type of pump? _____
8. Can this waste be heated to improve flow? ☐ Yes ☐ No
9. Is this waste soluble in water? ☐ Yes ☐ No
10. Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? ☐ Yes ☐ No

J. TRANSPORTATION INFORMATION TO BE DETERMINED

1. Is this a DOT Hazardous Material? ☐ Yes ☐ No 2. Anticipated Annual Volume/Units: _____
3. Proper Shipping Name: WASTE OIL
4. Hazard Class: _____ 5. I.D. #: _____
6. Additional Description: (_____)
7. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Solid ☐ Drum (Type/Size): _____ Other: _____
8. CERCLA Reportable Quantity (RQ): _____ 9. RQ Units (lb/kg): _____
10. USEPA Hazardous Waste? ☐ Yes ☐ No 11. USEPA Hazardous Waste Number(s): _____
12. State Hazardous Waste? ☐ Yes ☐ No 13. State Hazardous Waste Number(s): _____

K. SPECIAL HANDLING INFORMATION Send Disposal Decision to STALSTAN, UA

☐ Additional Page(s) Attached

L. GENERATOR CERTIFICATION I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.

1. Signature: Paul J. Malina Jr.
2. Title: PROJECT MANAGER
3. Name (Type or Print): PAUL J. MALINA JR.
4. Date: 5 OCT 89

AR400871

GENERATOR'S WASTE MATERIAL PROFILE SHEET

PRINT IN INK OR TYPE (Elite, 12-pitch).

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80-.

VTS J 10112

Waste Profile Sheet Code

CWM Location of Original: (SHADED AREAS FOR CWM USE ONLY). CWM Sales Rep. #:

A. GENERAL INFORMATION

1. Generator Name: ANTEX FIBERS INC
2. Generator USEPA ID: VAD 072035634
3. Facility Address: 1149 KEOWEE [illegible]
   FRONT ROYAL, VA
4. Generator State ID:
5. Zip Code: 22630
6. Technical Contact: Paul MALINA
7. Title: UTILITIES ENGR.
8. Phone: (703) 635-2141

B. MAIL CHEMICAL WASTE MANAGEMENT, INC. INVOICES TO

1. ☐ Generating Facility (A, above), or
2. Company Name: CWM TECHNICAL SERVICES
3. Phone: (703) 775-9200
4. Address: PO BOX 96
   STRASBURG, VA
5. Zip Code: 22657

C.

1. NAME OF WASTE: WASTE OIL + WATER
2. PROCESS GENERATING WASTE: OIL CHANGES / FRA
3. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
   ☐ Yes ☐ No If yes, DO NOT COMPLETE this form. Contact your Chemical Waste Management, Inc. sales representative for assistance.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. Color:	2. Does the waste have a strong incidental odor?	3. Physical State @ 70°F:	4. Layers:	5. Specific Gravity:	6. Free Liquids:
TAN	☐ No ☐ Yes if known, describe: UNK	☐ Solid ☐ Semi-Solid ☑ Liquid ☐ Powder Other:	☑ Multilayered ☐ Bi-layered ☐ Single Phased	Range: 1.0 - 1.2	☑ Yes ☐ No Volume: 100

pH: ☐ ≤ 2 ☐ > 2-4 ☐ 4-7 ☑ 7 ☐ 7-10 ☐ 10- < 12.5 ☐ ≥ 12.5 ☐ Range ____ ☐ NA

8. Liquid Flash Point: ☐ < 73°F ☐ 73-99°F ☐ 100-139°F ☐ 140-199°F ☐ ≥ 200°F ☐ None ☐ Closed Cup ☐ Open Cup

E. CHEMICAL COMPOSITION

1.

	RANGE MIN. - MAX.	
OIL	45 - 50	%
(Rinse Solution) WATER + UNKNOWN	35 - 40	%
WATER	20 - 10	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%
	-	%

Please note: The chemical composition total in the maximum column must be greater than or equal to 100%. TOTAL: ____ %

2. Indicate if this waste contains any of the following: To be determined

	NONE	or LESS THAN	or ACTUAL	
PCB's	☐	☐ < 50 ppm	____	ppm
Cyanides	☐	☐ < 50 ppm	____	ppm
Phenolics	☐	☐ < 50 ppm	____	ppm
Sulfides	☐	☐ < 50 ppm	____	ppm

F. METALS

To be determined

Indicate if this waste contains any of the following: 1. ☐ EP TOX/TCLP or 2. ☐ Total

METAL	LESS THAN (Parts Per Million)	or	ACTUAL
Arsenic	☐ < 5	☐ < 500	
Barium	☐ < 100		
Cadmium	☐ < 1	☐ < 100	
Chromium	☐ < 5		
Lead	☐ < 5	☐ < 500	
Mercury	☐ < 0.2	☐ < 20	
Selenium	☐ < 1	☐ < 100	
Silver	☐ < 5		
Chromium-Hex	☐ < 5	☐ < 500	
Copper	☐ < 5		
Nickel	☐ < 5	☐ < 134	
Thallium	☐ < 5	☐ < 130	
Zinc	☐ < 5		
	☐ <		
	☐ <		
	☐ <		

TURN PAGE AND COMPLE

AR400872

Chemical Waste Management, Inc.

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

Shaded areas are for CWM use only.

PART A. SAMPLING METHOD

Questions concerning sample waiver should be referred to your Chemical Waste Management, Inc. Sales Representative.

Check the sampling method employed.

This sample should be collected in accordance with "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods", SW846, USEPA, Office of Solid Waste, Washington, D.C. 20460 and/or 40CFR261-Appendix I. A suitable sample container for most wastes is a wide mouth glass bottle with a plastic cap having a non-reactive liner. Plastic containers are recommended for strong caustics or fluorides. Fill to approximately 90% of capacity to allow for expansion during transportation. The peel off label on this form must be completed prior to removal from the form. Ultimately, the label must be attached to the sample container, not the shipping container.

If this waste is a hazardous material, the sample must be packaged and shipped in accordance with USDOT regulations (49CFR171.2) and any specific requirements imposed by the carrier. Improperly packaged samples may be disposed of upon receipt.

PART B. SAMPLE SOURCE

The sampler is to describe exactly from where the sample was taken (e.g. conveyor, drum, lagoon, pipe, pit, pond, tank, vat).

PART C. SAMPLE LABEL

THE SAMPLE LABEL MUST BE COMPLETED BEFORE IT IS REMOVED FROM THIS FORM

Apply the completed peel off label to the container which actually holds the sample - not to the shipping carton. DO NOT ON THE BAR CODE (if present).

1. WASTE PROFILE SHEET CODE - If not preprinted, enter the appropriate Waste Profile Sheet Code. This Certification and its peel off label must be used to identify ONLY the sample of the waste described in the Generator's Waste Material Profile Sheet bearing the same Waste Profile Sheet Code.
2. GENERATOR'S NAME - Enter the name of the generating facility.
3. NAME OF WASTE - Enter a name which is generally descriptive of this waste (e.g., cyanide plating waste, paint sludge, PCB contaminated dirt, still bottoms, wastewater treatment sludge) as it appears on the Generator's Waste Material Profile Sheet.
4. SAMPLE HOUR/DATE - Enter the hour and date sample was collected.
5. SAMPLER'S SIGNATURE - The sampler must sign in the space provided.
6. PRINT SAMPLER'S NAME - Enter the sampler's name.
7. SAMPLER'S TITLE - Enter the sampler's title.
8. SAMPLER'S EMPLOYER (If CWM, See D. Below) - Enter the sampler's employer's name.

Remove the completed peel off label and affix it to the sample container at the time of sampling. If this label is lost or destroyed, the sample must be labeled with equivalent information, including the Waste Profile Sheet Code. If the Certification of Representative Sample Form is lost or destroyed, please contact your Chemical Waste Management, Inc. Sales Representative to obtain a new one.

PART D. WITNESS VERIFICATION (If required):

In the event that a Chemical Waste Management, Inc. employee obtains the sample on your site, one of your employees must be present to direct our employee to the sample source and to witness the sampling. Your employee must also provide the information requested in this PART D.

1. WITNESS' SIGNATURE - Sign in the space provided.
2. WITNESS' NAME - Print the name of the person who witnessed the sampling.
3. WITNESS' TITLE - Enter the witness' title.
4. WITNESS' EMPLOYER - Enter the witness' employer's name.
5. DATE - Enter the date the sampling event was witnessed.

AR400873

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLE

PLEASE PRINT IN INK OR TYPE (Elite, 12-pitch).

VTS J 10112

Waste Profile Sheet Code

CWM Location of Original: (SHADED AREAS FOR CWM USE ONLY) CWM Sales Rep. #:

This completed form must be returned, with the representative sample, to:

INSTRUCTIONS FOR COMPLETING THIS FORM ARE FOUND ON THE OPPOSITE SIDE. In order to determine whether Chemical Waste Management, Inc. can accept the special waste described in the Generator's Waste Material Profile Sheet referenced above, you must obtain and supply us with a representative sample of the waste. We may analyze the sample to verify the information that you have provided to us. A representative sample is defined as a sample obtained using any of the applicable sampling methods specified in 40 CFR 261-Appendix I or an equivalent method. Collect a representative sample of your waste and complete the form below. Apply the peel off label and ship your sample along with this form to the address noted above. If you have any questions regarding obtaining a representative sample of your waste, please refer to the instructions for this form, or contact your Chemical Waste Management, Inc. sales representative.

A. SAMPLING METHOD (Indicate which method was employed)

If sampling requirement has been waived by Chemical Waste Management, Inc., do not complete this Generator's Certification of Representative Sample form.

1. ☐ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above according to the sampling methods specified in 40 CFR 261-Appendix I.
2. ☑ I have obtained a representative sample of the waste material described in the Generator's Waste Material Profile Sheet referenced above using a method equivalent to the sampling methods described in 40 CFR 261-Appendix I.

B. SAMPLE SOURCE (e.g., drum, lagoon, pit, pond, tank, vat)

Drum

C. SAMPLE LABEL — COMPLETE LABEL BEFORE REMOVING

1. Waste Profile Sheet Code:		1. Waste Profile Sheet Code:
2. [redacted] Generator's Name:	AVTEX FIBERS INC	2. Generator's Name:
3. [redacted] Name of Waste:	WASTE OIL + WATER	3. Name of Waste:
4. [redacted] Sample Hour/Date:	400 PM 10/3/89	4. Sample Hour/Date:
5. [redacted] Sampler's Signature:	John Beard	5. Sampler's Signature:

6. Print Sampler's Name: JOHN BEARD
7. Sampler's Title: FIELD ANALYST
8. Sampler's Employer (if CWM, see D. below): CWM TECH SERVICES

D. WITNESS VERIFICATION (if required) In most circumstances you will be obtaining the sample. However, in those cases in wh Chemical Waste Management, Inc. obtains the sample, one of your employees must be present to direct the particular source to sampled, to witness the sampling, and to complete this Part D.

I was personally present during the sampling described. I directed the [illegible] and I verify the information noted above.

1. Witness' Signature: [illegible]
2. Witness' Name: P.J. MALINA JR.
3. V MANAGER
4. Witness' Employer: AVTEX FIBERS
5. D

AR400874

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89018017 PROF: MADJ10112 10/13/89
AVTEX FIBERS, INC
FRONT ROYAL, VA DUE 10/20/89
SRCE: MAD SITE: SRR INC
OIL/WATER

SAMPLE PREP: 1.07g + 1.07g = Σ
DILUTION FACTOR: 2X

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC/GFT	0-0.7
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: N/A	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

[X] If checked, multiply detection limits by dilution factor above.

[X] Top Layer [ ] Middle Layer [ ] Bottom Layer [ ] Not Applicable

Date Completed: 10-19-89 Analyst: EMM

Comments:

Reviewed by:

AR400875

WASTE SAMPLE SOLVENT SCREEN REPORT (GC/FID)
-Weight % Solvents-

89018017 PROF: MADJ10112 10/13/89
AVTEX FIBERS, INC
'RONT ROYAL, VA DUE 10/20/89
-RCE: MAD SITE: SRR INC
OIL/WATER

SAMPLE PREP: 1801T.
DILUTION FACTOR: liquid

Trichlorofluoromethane		1,4-Dioxane	
Methanol		Propyl Acetate	
Ether		Toluene	
1,1,2-Trichloro-1,2,2-trifluoroethane		2-Ethoxyethanol	
Ethanol		Methyl Isobutyl Ketone	
Acetone		Tetrachloroethylene	
Isopropanol		Butyl Acetate	
Methylene Chloride		Chlorobenzene	
t-1,2-Dichloroethylene		Ethylbenzene	
Acetonitrile		Xylenes	
Ethyl Acetate		Styrene	
1,1,1-Trichloroethane		2-Ethoxyethanol Acetate	
Methyl Ethyl Ketone		Cyclohexanone	
Carbon Tetrachloride		2-Butoxyethanol	
Chloroform		Dichlorobenzene	
N-Propanol		*Hydrocarbons HC	
Benzene		*High Boiling Organics (BP >290°C)	
1,2-Dichloroethane		*OTHER SOLVENTS: N/A	
Isobutanol			
Trichloroethylene			
N-Butanol			

*ESTIMATED CONCENTRATION

U = Compounds on list were analyzed but not detected.
Average detection limit for each compound is 0.01% by weight (100 ppm), except for Methanol which is 0.03% by weight (300 ppm).

[ ] If checked, multiply detection limits by dilution factor above.

[ ] Top Layer [ ] Middle Layer [x] Bottom Layer [ ] Not Applicable

Date Completed: 10-19 Analyst: [illegible]

Comments:

Reviewed by: [illegible]

AR400876