

**WASTEWATER STREAM
CHARACTERIZATION FOR
TA 46-42, 178, 179, 180,
200, 201, 202, 231, 232, 234,
250, 278, 310 AND 326**

**at
Los Alamos National Laboratory**

ENVIRONMENTAL STUDY

CHARACTERIZATION REPORT # 70

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CHARACTERIZATION FOR
TA 46-42, 178, 179, 180, 200, 201, 202, 231
232, 234, 250, 278, 310 AND 326

ENVIRONMENTAL STUDY

prepared for:
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EXECUTIVE SUMMARY

Buildings 42, 178, 179, 180, 200, 201, 202, 231, 232, 234, 250, 278, 310 and 326 were visited to document all drain piping and building outfalls and to make permitting recommendations. The pipes exiting the building are as follows:

- 1) from TA-46-42: one sanitary sewer connection, one storm water outfall, two natural gas vents, seven capped stubs, one N₂ disconnect, two air conditioning condensate drains, one air exhaust vent and one storm water downspout,
- 2) from TA-46-178: one sanitary sewer connection, two water heater pressure relief valve discharges and one evaporative cooler drain,
- 3) from TA-46-179: one sanitary sewer connection, one water heater pressure relief valve discharge and one evaporative cooler drain,
- 4) from TA-46-180: two air conditioning condensate drains,
- 5) from TA-46-200: one sanitary sewer connection, one non-potable water drain, cooling tower blowdown which discharges to the EPA 03A-136 permitted outfall, four storm water downspouts and four fire system drains,
- 6) from TA-46-201: one sanitary sewer connection, and two air conditioning condensate drains,
- 7) from TA-46-202: one sanitary sewer connection and two air conditioning condensate drains,
- 8) from TA-46-231: one fire system drain and two air conditioning condensate drains,
- 9) from TA-46-232: one air conditioning condensate drain,
- 10) from TA-46-234: one sanitary sewer connection, one air conditioning condensate drain and one water heater pressure relief valve discharge,
- 11) from TA-46-250: one sanitary sewer connection, seven storm drain downspouts, two fire system drains, one CO₂ vent, one Argon vent and one natural gas vent,

- 12) from TA-46-278 and TA-46-310: these buildings are transportainers and have no drains and
- 13) from TA-46-326: one sanitary sewer connection, three fire system drains, eight roof drains and six area drains.

Revised application forms have been included for the one permitted outfall. Flows shown on the included forms are estimated from site observations and discussions with users and analytical data are defined from information obtained from previously sampled outfalls.

Recommendations for repiping are provided to permit outfall consolidation to minimize permit maintenance requirements and to bring the facility into compliance with the Laboratory's NPDES permits and Environmental policies. Floor drain plugging and spill containment is recommended where the potential for discharge of pollutants exists.

A waste stream database has been prepared listing wastewater type and flow rate for each outfall.

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1.0 INTRODUCTION

During March and April, 1993, David Scherer of Santa Fe Engineering (SFE) toured buildings 42, 178, 179, 180, 200, 201, 202, 231, 232, 234, 250, 278, 310 and 326 at TA-46. The purpose of this study is to identify building drain piping and to characterize the wastewater flows and sources exiting at the time of the visit. At the time this study was conducted all TA-46 sanitary sewage was discharged to the 01S sanitary sewer outfall via the 13S collection system. This report will not reflect any subsequent changes in piping or operation. The Waste Stream Characterization Policy of September 10, 1992 was followed for this study. The following tasks were performed for this purpose:

1. Building drains and all piping exiting the building were identified and laid out in schematic form;
2. Wastewater sources were identified at each drain, and the wastewater was characterized according to flow rate and quality. The location of outfalls and their potential sources of discharge were determined. Potential pollutants were also noted;
3. Permit application for discharges of clean water were not prepared since these discharges do not require permitting at this time and,
4. Potential problems were identified and recommendations were made for repiping, floor drain plugging and spill containment, where deemed appropriate.

The field investigation proceeded by verifying drain schematic drawings prepared by SFE for the appropriate buildings (Figures 2 through 13) from drawings provided by Los Alamos National Laboratory (LANL) Facilities Engineering Division. The

other buildings were visited to insure that no drains exist for the buildings. The following process was used to define drain piping and characterize the wastewater streams:

1. Laboratory engineering drawings were used to prepare the SFE drain piping schematics. The Solid Waste Stream Characterization conducted by IT Corporation was also reviewed. The National Pollutant Discharge Elimination System (NPDES) Permit, the 1990 NPDES Permit Application submitted by Los Alamos National Laboratory (LANL) in September, 1990, the latest Federal Facilities Compliance Agreement (FFCA) between the Department of Energy (DOE) and the Environmental Protection Agency (EPA) and the Administrative Order (AO) Docket Number VI-92-1306 issued by EPA to the University of California were used for reference;
2. SFE verified drain piping by dye checking and
3. A site visit was performed to verify the SFE drain schematics and to identify potential outfall pipes exiting the building. The visit entailed a room by room inspection of wastewater sources and drains. Interviews with site personnel were conducted to assist in wastestream characterization.

2.0 FIELD INVESTIGATION

The pipes exiting the building have been assigned Outlet Piping Numbers. The four part number, sequentially, identifies the Technical Area where the pipe is located, the building from which the pipe discharges, the letters OPN to indicate that it is an outlet pipe number and the unique number for the pipe. The piping exiting the building will be labeled for easy identification in the future.

Each drain has a unique identification number. Each number consists of three parts. The first part indicates the floor on which the drain is located. The second part has letters that indicate the type of drain (see Table 1). The final part is the unique number for the drain. For example, the first floor drain in the sequence on the basement floor of a building would be labeled BFD1. Similarly, the first Roof Drain in a sequence would be identified as RD1.

The functions of each pipe exiting from the buildings are listed in Appendix 1, Tables 2 through 13, with an abbreviations list in Table 1. Table 14 in Appendix 1 contains recommendation information that is not specific to individual drains. Appendix 2 contains the wastestream characterization database output, listing wastewater source, flow rates and periodicity information for each outfall drain. Completed EPA forms are in Appendix 3 for the appropriate outfalls. Appendix 4 provides dye study information. Flow schematics of the drains from each building are attached in Appendix 5 as Figures 2 through 13. Figure 1 of Appendix 5 is a partial site plan of TA-46.

3.0 RECOMMENDATIONS FOR BUILDING 46-42

Table 2 is a list of the drains to the building outfalls and Figure 2 is a schematic of the drain piping. Table 1 lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for these recommendations.

3.1 Outfall 46-42-OPN-1

This outfall is from sanitary facilities and flows into a sewer manhole which drains to the TA-46 sanitary sewer system. Sanitary facilities that flow to this outfall include restroom floor drains (3), lavatories (6), showers (2), sink drains (3), toilets (5), urinals (2) and water fountains (2). No chemicals are drained into any of the drains or fixtures. No changes or permits are recommended for this outfall. No EPA forms were prepared.

3.2 Outfall 46-42-OPN-2

This outfall is from roof drains (3), floor drains (6) and laboratory sinks (2) and discharges to daylight on the north side of the building. The laboratory sink, 1SD3, located in the laser lab, room 101A, has been removed. It is recommended that the laboratory sink, 1SD9, located in the electronics lab, room 107, be repiped to the sanitary sewer system. Floor drains 1FD4, in room 115, and 1FD6, in room 101, could not be found. The existence of these drains should be verified by the user and they should be plugged if this has not already been done. It is recommended that floor drain 1FD3, located in the robotics lab, room 101, be plugged. Floor drain 1FD1, located in equipment room 124, receives inputs from a back flow preventer (BFP), a water heater pressure relief valve (PRV), a boiler drain, a boiler blowdown drain and an expansion tank drain. It is recommended that this floor drain be repiped to the sanitary

sewer system. Floor drain 1FD2, also located in equipment room 124, receives inputs from three air compressor tank drains and an air conditioning condensate drain. It is recommended that the air compressor drains be containerized and that the drain itself be repiped to the sanitary sewer system. Floor drain 1FD5, located in equipment room 117, receives inputs from a boiler PRV, an expansion tank drain, a condensate pump drain, a boiler drain, an air handler drain, a boiler blowdown drain, an industrial water PRV and a hot water system drain. Although this floor drain was dye tested several times, its flow to the outfall could not be verified, possibly due to a broken pipe preventing the flow from reaching its intended outfall. It is recommended that the user verify the location of the outfall for this drain and repipe it to the sanitary sewer system. It was also noted that the outfall, 46-42-OPN-2, was partially buried by crumbling asphalt from the parking lot. It is recommended that the outfall be uncovered. Of the drains currently piped to this outfall, only the roof drains should remain. An EPA Form 2D has been prepared for this outfall and is contained in Appendix 3. However, permitting is not recommended for this outfall.

3.3 Outfalls 46-42-OPN-3 and 46-42-OPN-4

These outfalls are natural gas vents and discharge to the atmosphere. No changes or permits are recommended. No EPA forms were prepared.

3.4 Outfalls 46-42-OPN-5, 46-42-OPN-6, 46-42-OPN-7, 46-42-OPN-8, 46-42-OPN-9, 46-42-OPN-10 and 46-42-OPN-11

These outfalls are 1/4 inch capped stubs with no discharge. No changes or permits are recommended. No EPA forms were prepared.

3.5 Outfall 46-42-OPN-12

This outfall is a N₂ disconnect that discharges to the atmosphere. No changes or permits are recommended. No EPA forms were prepared.

3.6 Outfalls 46-42-OPN-13 and 46-42-OPN-15

These outfalls are air conditioning condensate drains that discharge to daylight. These outfalls should be covered by a Notice of Intent (NOI) to Discharge. No piping changes are recommended. No EPA forms were prepared.

3.7 Outfall 46-42-OPN-14

This outfall is an air exhaust vent that discharges to the atmosphere. No changes or permits are recommended. No EPA forms were prepared.

3.8 Outfall 46-42-OPN-16

This outfall is a storm drain downspout that discharges to daylight. No changes or permits are recommended. No EPA forms were prepared.

4.0 RECOMMENDATIONS FOR BUILDING 46-178

Table 3 is a list of drains to the outfalls for building 46-178 and Figure 3 is a schematic of the piping. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

4.1 Outfall 46-178-OPN-1

This outfall is from sanitary facilities and flows into a sewer manhole which drains to the TA-46 sanitary sewer system. The sanitary facilities that flow to this outfall include lavatories (2), toilets (2) and a urinal (1). No chemicals are drained into any of the drains or fixtures. No changes or permits are recommended. No EPA forms were prepared.

4.2 Outfalls 46-178-OPN-2 and 46-178-OPN-3

These outfalls are from water heater PRVs, that discharge to daylight. These outfalls should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

4.3 Outfall 46-178-OPN-4

This outfall is from an evaporative cooler drain and discharges to daylight. This outfall should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

5.0 RECOMMENDATIONS FOR BUILDING 46-179

Table 4 is a list of drains to the outfalls for building 46-179 and Figure 4 is a schematic of the piping. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

5.1 Outfall 46-179-OPN-1

This outfall is from sanitary facilities and flows into a sewer manhole which drains to the TA-46 sanitary sewer system. The sanitary facilities that flow into this outfall include lavatories (2), toilets (2), a urinal (1) and a water fountain (1). No chemicals are drained into any of the drains or fixtures. No changes or permits are recommended. No EPA forms were prepared.

5.2 Outfalls 46-178-OPN-2

This outfall is from a water heater PRV, that discharges to daylight. This outfall should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

5.3 Outfall 46-179-OPN-3

This outfall is from an evaporative cooler drain and discharges to daylight. This outfall should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

6.0 RECOMMENDATIONS FOR BUILDING 46-180

Table 5 is a list of drains to the outfalls for building 46-180 and Figure 5 is a schematic of the piping. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping. Outfalls 46-180-OPN-1 and 46-180-OPN-2 are from air conditioning condensate drains and discharge to daylight. They should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

7.0 RECOMMENDATIONS FOR BUILDING 46-200

Table 6 is a list of drains to the outfalls for building 46-200 and Figure 6 is a schematic of the piping. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

7.1 Outfall 46-200-OPN-1

This outfall is from sanitary facilities and flows into a sewer manhole which drains to the TA-46 sanitary sewer system. The sanitary facilities that flow into this outfall include a lavatory (1), sink drains (5), a shower (1), a toilet (1) and a water fountain (1). Sink drain, 1SD2, is located in a fume hood in the chemistry lab, room 117. It is recommended that this sink drain be plugged, chemicals stored in the fume hood be placed into secondary containment and any flow from the sink be containerized. It is recommended that sink drains 1SD3 and 1SD4 be labeled as sanitary drains. In addition, this outfall also receives flow from equipment room floor sinks (4). Floor sink 1FS1, in equipment room 125 receives inputs from an air compressor drain. It is recommended that flow from the air compressor drain be containerized. Floor sink 1FS2, in equipment room 125, receives input from possible floor washings. Floor sink 1FS3, in equipment room 102 receives inputs from a hot water drain, a boiler PRV, a boiler drain, a water heater PRV and a cooling coil condensate drain. Floor sink 1FS4, in equipment room 102, receives inputs from water treatment feeders (2), and potable water back flow preventers (2). No changes or permits are recommended. No EPA forms were prepared.

7.2 Outfall 46-200-OPN-2

This outfall is from a potable water drain and discharges to daylight. It should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

7.3 Outfall 46-200-OPN-3

This outfall is from a cooling tower blowdown drain into the EPA permitted outfall 03A-136. This outfall flows into the storm water drain system into Cañada del Buey. It is recommended that the permit be eliminated and the drain be piped to the sanitary sewer system due to the small amount of blowdown from this cooling tower. It was also noted that one of the cooling tower pumps is experiencing some leakage. It is recommended that this pump be repaired. An updated EPA Form 2C, has been prepared and is contained in Appendix 3.

7.4 Outfalls 46-200-OPN-4, 46-200-OPN-5, 46-200-OPN-6 and 46-200-OPN-7

These outfalls are from storm drain downspouts and discharge to daylight. No changes or permits are recommended. No EPA forms were prepared.

7.5 Outfalls 46-200-OPN-8, 46-200-OPN-9, 46-200-OPN-10 and 46-200-OPN-11

These outfalls are fire system drains and should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

8.0 RECOMMENDATIONS FOR BUILDING 46-201

Table 7 is a list of drains to the outfalls for building 46-201 and Figure 7 is a schematic of the piping. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

8.1 Outfall 46-201-OPN-1

This outfall is from a water fountain and it is believed to have been connected to the TA-46 sanitary sewer system. The water fountain has been removed so this could not be verified. No changes or permits are recommended. No EPA forms were prepared.

8.2 Outfalls 46-201-OPN-2 and 46-201-3

These outfalls are from air conditioning condensate drains and discharge to daylight. They should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

9.0 RECOMMENDATIONS FOR BUILDING 46-202

Table 8 is a list of drains to the outfalls for building 46-202 and Figure 8 is a schematic of the piping. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

9.1 Outfall 46-202-OPN-1

This outfall is from sanitary facilities and flows into a sewer manhole which drains to the TA-46 sanitary sewer system. The sanitary facilities that flow into this outfall include lavatories (2), a sink drain (1), toilets (2), a urinal (1) and a water fountain(1). No chemicals are drained into any of the drains or fixtures. No changes or permits are recommended. No EPA forms were prepared.

9.2 Outfalls 46-202-OPN-2 and 46-202-OPN-3

These outfalls are from condensate drains and discharge to daylight. They should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

10.0 RECOMMENDATIONS FOR BUILDING 46-231

Table 9 is a list of drains to the outfalls for building 46-231 and Figure 9 is a schematic of the piping. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

10.1 Outfall 46-231-OPN-1

This outfall is from a fire system drain and discharges to daylight. It should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

10.2 Outfalls 46-231-OPN-2 and 46-231-OPN-3

These outfalls are air conditioning condensate drains and discharge to daylight. They should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

11.0 RECOMMENDATIONS FOR BUILDING 46-232

Table 10 is a list of drains to the outfalls for building 46-232 and Figure 9 is a schematic of the piping. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping. This outfall, 46-232-OPN-1, is from an air conditioning condensate drain and discharges to daylight. It should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

12.0 RECOMMENDATIONS FOR BUILDING 46-234

Table 11 is a list of drains to the outfalls for building 46-234 and Figure 10 is a schematic of the piping. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

12.1 Outfall 46-234-OPN-1

This outfall is from sanitary facilities and flows into a sewer manhole which drains to the TA-46 sanitary sewer system. Sanitary facilities that flow to this outfall include lavatories (2), showers (2), sink drains (2), toilets (2) and a water fountain (1). No chemicals are drained into any of the drains or fixtures. No changes or permits are recommended for this outfall. No EPA forms were prepared.

12.2 Outfall 46-234-OPN-2

This outfall is from an air conditioning condensate drain and discharges to daylight. It should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

12.3 Outfall 46-234-OPN-3

This outfall is from a water heater PRV and discharges to daylight. It should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

13.0 RECOMMENDATIONS FOR BUILDING 46-250

Table 12 is a list of drains to the outfalls for building 46-250 and Figure 11 is a schematic of the piping. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

13.1 Outfall 46-250-OPN-1

This outfall is from sanitary facilities and flows into a sewer manhole which drains to the TA-46 sanitary sewer system. Sanitary facilities that flow to this outfall include restroom floor drains (2), lavatories (2), sink drains (21), toilets (2) and a water fountain (1). Sink drains 1SD13, 1SD14, 1SD15, 1SD16, 1SD17, 1SD18, 1SD19, 1SD20 and 1SD21 are located in laboratory fume hoods. It is recommended that these sinks be plugged, any chemicals stored in these fume hoods be placed into secondary containment and any flow to these sinks be containerized. It is recommended that sink drains 1SD1, 1SD2, 1SD3, 1SD4, 1SD5, 1SD7, 1SD8, 1SD9, 1SD10 and 1SD11 be labeled as sanitary drains. There are equipment room floor sinks (5) that also flow to this outfall. Floor sink 1FS1, in equipment room 112 receives inputs from a condensate drain and air compressor drains (5). It is recommended that the flow from the air compressor drains be containerized. Floor sink 1FS2, in equipment room 112, receives input from an air handling unit condensate drain. Floor sink 1FS3, in equipment room 114, receives inputs from potable water back flow preventers (3). Floor sink 1FS4, in equipment room 114, receives inputs from a

boiler drain and a boiler PRV. Floor sink 1FS5, in equipment room 114, receives inputs from water heater pressure relief valves (2). No permits are required for this outfall and no EPA forms were prepared.

13.2 Outfalls 46-250-OPN-2, 46-250-OPN-3, 46-250-OPN-4, 46-250-OPN-5, 46-250-OPN-6, 46-250-OPN-7 and 46-250-OPN-8

These outfalls are from storm drain downspouts and discharge to daylight. No changes or permits are recommended. No EPA forms were prepared.

13.3 Outfall 46-250-OPN-9 and 46-250-OPN-10

These outfalls are from fire system drains and discharge to daylight. They should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

13.4 Outfall 46-250-OPN-11

This outfall is from a CO₂ vent and discharges to the atmosphere. No changes or permits are recommended. No EPA forms were prepared.

13.5 Outfall 46-250-OPN-12

This outfall is from a Argon vent and discharges to the atmosphere. No changes or permits are recommended. No EPA forms were prepared.

13.6 Outfall 46-250-OPN-13

This outfall is from a natural gas vent and discharges to the atmosphere. No changes or permits are recommended. No EPA forms were prepared.

14.0 RECOMMENDATIONS FOR BUILDING 46-278

This building in a transportainer used for storage of electronics equipment, hardware and fittings and pumps. It has no drains. No recommendations were made. No changes or permits are recommended. No EPA forms were prepared.

15.0 RECOMMENDATIONS FOR BUILDING 46-310

This building is a transportainer used mainly for equipment storage but is also used for the storage of some chemicals. It is recommended that secondary containment be provided for chemical storage. No permitting is recommended. No EPA forms were prepared.

16.0 RECOMMENDATIONS FOR BUILDING 46-326

Table 13 is a list of drains to the outfalls for building 46-326 and Figures 12 and 13 are schematics of the piping. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

16.1 Outfall 46-326-OPN-1

This outfall is from sanitary facilities and flows into a sewer manhole which drains to the TA-46 sanitary sewer system. The sanitary facilities that flow into this outfall include restroom floor drains (2), lavatories (4), sink drains (2), toilets (5), a urinal (1) and a water fountain(1). No chemicals are drained into any of the drains or fixtures. No changes or permits are recommended. No EPA forms were prepared.

16.2 Outfalls 46-326-OPN-2, 46-326-OPN-3 and 46-326-OPN-4

These outfalls are from fire system drains and discharge to daylight. They should be covered by an NOI. No piping change is recommended. No EPA forms were prepared.

16.3 Outfalls 46-326-OPN-5, 46-326-OPN-6, 46-326-OPN-7, 46-326-OPN-8, 46-326-OPN-9, 46-326-OPN-10, 46-326-OPN-11 and 46-326-OPN-12

These outfalls are from roof drains and discharge to daylight. No changes or permits are recommended. No EPA forms were prepared.

16.4 Outfalls 46-326-OPN-13, 46-326-OPN-14, 46-326-OPN-15, 46-326-OPN-16, 46-326-OPN-17 and 46-326-OPN-18

These outfalls are area drains that consist of concrete pipes that extend approximately one foot into the ground. These are probably intended for future landscaping. No changes or permits are recommended. No EPA forms were prepared.

Discharges of untreated water and condensate drains:

- | | | |
|------------------|------------------|------------------|
| 1. 46-42-OPN-13 | 2. 46-42-OPN-15 | 3. 46-178-OPN-4 |
| 4. 46-179-OPN-3 | 5. 46-180-OPN-1 | 6. 46-180-OPN-2 |
| 7. 46-200-OPN-2 | 8. 46-201-OPN-2 | 9. 46-201-OPN-3 |
| 10. 46-202-OPN-2 | 11. 46-202-OPN-3 | 12. 46-231-OPN-2 |
| 13. 46-231-OPN-3 | 14. 46-232-OPN-1 | 15. 46-234-OPN-2 |

Discharges of storm water:

- | | | |
|-------------------|-------------------|-------------------|
| 1. 46-42-OPN-2 | 2. 46-42-OPN-16 | 3. 46-200-OPN-4 |
| 4. 46-200-OPN-5 | 5. 46-200-OPN-6 | 6. 46-200-OPN-7 |
| 7. 46-250-OPN-2 | 8. 46-250-OPN-3 | 9. 46-250-OPN-4 |
| 10. 46-250-OPN-5 | 11. 46-250-OPN-6 | 12. 46-250-OPN-8 |
| 13. 46-326-OPN-5 | 14. 46-326-OPN-6 | 15. 46-326-OPN-7 |
| 16. 46-326-OPN-8 | 17. 46-326-OPN-9 | 18. 46-326-OPN-10 |
| 19. 46-326-OPN-11 | 20. 46-326-OPN-12 | 21. 46-326-OPN-13 |
| 22. 46-326-OPN-14 | 23. 46-326-OPN-15 | 24. 46-326-OPN-16 |
| 25. 46-326-OPN-17 | 26. 46-326-OPN-18 | |

Discharges to daylight from floor drains:

1. 46-42-OPN-2

Discharge from fire water systems:

- | | | |
|------------------|-----------------|------------------|
| 1. 46-200-OPN-8 | 2. 46-200-OPN-9 | 3. 46-200-OPN-10 |
| 4. 46-200-OPN-11 | 5. 46-231-OPN-1 | 6. 46-250-OPN-9 |
| 7. 46-250-OPN-10 | 8. 46-326-OPN-2 | 9. 46-326-OPN-3 |
| 10. 46-326-OPN-4 | | |

Recommended permitting and corrective action items are outlined in Tables 2 through 13 as well as in the above text. Corrective actions should be performed as soon as practicable to minimize the chance of unpermitted discharge of pollutants.

TABLE 1
SUMMARY OF ABBREVIATIONS

ABBREVIATION	MEANING
A/C	AIR CONDITIONING
AD	AREA DRAIN
EC	EVAPORATIVE COOLER
FD	FLOOR DRAIN
FS	FLOOR SINK
LV	LAVATORY
MH	MANHOLE
PRV	PRESSURE RELIEF VALVE
RD	ROOF DRAIN
SD	SINK DRAIN
SH	SHOWER
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN
WH	WATER HEATER

TABLE 2: TA 46-42 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-042-OPN-1 SANITARY	1FD7	RESTROOM	110	NO CHANGE	NO
	1LV1	RESTROOM	110	NO CHANGE	
	1LV2	RESTROOM	110	NO CHANGE	
	1SD4	JANITORS CLOSET	116	NO CHANGE	
	1SD5	ROBOTICS LAB	101	REMOVED	
	1SD6	ROBOTICS LAB	101	REMOVED	
	1SD7	ROBOTICS LAB	101	REMOVED	
	1SD8	ROBOTICS LAB	101	REMOVED	
	1SH1	RESTROOM	110	NO CHANGE	
	1TL1	RESTROOM	110	NO CHANGE	
	1UR1	RESTROOM	110	NO CHANGE	
	1WF1	ROBOTICS LAB	101	NO CHANGE	
	2FD1	RESTROOM	208	NO CHANGE	
	2FD2	RESTROOM	212	NO CHANGE	
	2LV1	RESTROOM	208	NO CHANGE	
	2LV2	RESTROOM	208	NO CHANGE	
	2LV3	RESTROOM	212	NO CHANGE	
	2LV4	RESTROOM	212	NO CHANGE	
	2SD1	JANITOR CLOSET	210	NO CHANGE	
	2SD2	CORRIDOR	201	NO CHANGE	
	2SH1	RESTROOM	212	NO CHANGE	
	2TL1	RESTROOM	208	NO CHANGE	
	2TL2	RESTROOM	208	NO CHANGE	
	2TL3	RESTROOM	212	NO CHANGE	
	2TL4	RESTROOM	212	NO CHANGE	
	2UR1	RESTROOM	208	NO CHANGE	
2WF1	CORRIDOR	201	NO CHANGE		
46-042-OPN-2 DAYLIGHT	1FD1	EQUIPMENT ROOM	124	PIPE TO S.S.	YES
	1FD2	EQUIPMENT ROOM	124	CONTAINERIZE	
	1FD3	ROBOTICS LAB	101	PLUG	
	1FD4	COMPUTER ROOM	115	VERIFY/PLUG	
	1FD5	EQUIP. ROOM	117	MODIFY	
	1FD6	ROBOTICS LAB	101	VERIFY/PLUG	
	1SD3	LASER LAB	111A	REMOVED	

TABLE 2: TA 46-42 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-042-OPN-2 CONT.	1SD9	ELECTRONICS LAB	107	PIPE TO S.S.	YES
	RD1	ROOF		NO CHANGE	
	RD2	ROOF		NO CHANGE	
	RD3	ROOF		NO CHANGE	
46-042-OPN-3	N/A	NATURAL GAS VENT	117	NO CHANGE	NO
46-042-OPN-4	N/A	NATURAL GAS VENT	115	NO CHANGE	NO
46-042-OPN-5	N/A	CAPPED STUB	101	NO CHANGE	NO
46-042-OPN-6	N/A	CAPPED STUB	101	NO CHANGE	NO
46-042-OPN-7	N/A	CAPPED STUB	101	NO CHANGE	NO
46-042-OPN-8	N/A	CAPPED STUB	101	NO CHANGE	NO
46-042-OPN-9	N/A	CAPPED STUB	101	NO CHANGE	NO
46-042-OPN-10	N/A	CAPPED STUB	101	NO CHANGE	NO
46-042-OPN-11	N/A	CAPPED STUB	101	NO CHANGE	NO
46-042-OPN-12	N/A	N2 DISCONNECT	101	NO CHANGE	NO
46-042-OPN-13	N/A	A/C CONDENSATE	EXT.	NOI	NO
46-042-OPN-14	N/A	AIR EXHAUST	EXT.	NO CHANGE	NO
46-042-OPN-15	N/A	EVAPORATIVE COOLER	EXT.	NOI	NO
46-042-OPN-16	N/A	STORM DRAIN DOWNSPOUT		NO CHANGE	NO

TABLE 3: TA 46-178 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-178-OPN-1 SANITARY	1LV1	RESTROOM	101	NO CHANGE	NO
	1LV2	RESTROOM	103	NO CHANGE	
	1TL1	RESTROOM	101	NO CHANGE	
	1TL2	RESTROOM	103	NO CHANGE	
	1UR1	RESTROOM	101	NO CHANGE	
46-178-OPN-2	N/A	WATER HEATER PRV	105	NOI	NO
46-178-OPN-3	N/A	WATER HEATER PRV	105	NOI	NO
46-178-OPN-4	N/A	EVAPORATIVE COOLER	EXT	NOI	NO

TABLE 4: TA 46-179 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-179-OPN-1 SANITARY	1LV1	RESTROOM	101	NO CHANGE	NO
	1LV2	RESTROOM	103	NO CHANGE	
	1TL1	RESTROOM	101	NO CHANGE	
	1TL2	RESTROOM	103	NO CHANGE	
	1UR1	RESTROOM	101	NO CHANGE	
	1WF1	CORRIDOR	100	NO CHANGE	
46-179-OPN-2	N/A	WATER HEATER PRV	101	NOI	NO
46-179-OPN-3	N/A	EVAPORATIVE COOLER	EXT	NOI	NO

TABLE 5: TA 46-180 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-180-OPN-1	N/A	A/C CONDENSATE	EXT.	NOI	NO
46-180-OPN-2	N/A	A/C CONDENSATE	EXT.	NOI	NO

TABLE 6: TA 46-200 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-200-OPN-1 SANITARY	1FS1	EQUIP. ROOM	125	CONTAINERIZE	NO
	1FS2	EQUIP. ROOM	125	NO CHANGE	
	1FS3	EQUIP. ROOM	102	NO CHANGE	
	1FS4	EQUIP. ROOM	102	NO CHANGE	
	1LV1	RESTROOM	111	NO CHANGE	
	1SD1	JANITOR CLOSET	106	NO CHANGE	
	1SD2	CHEMISTRY LAB	117	PLUG/CONTAIN	
	1SD3	LASER LAB	119	LABEL	
	1SD4	CHEMISTRY LAB	117	LABEL	
	1SD5	KITCHEN		NO CHANGE	
	1SH1	SHOWER ROOM	109	NO CHANGE	
	1TL1	RESTROOM	111	NO CHANGE	
1WF1	CORRIDOR		NO CHANGE		
46-200-OPN-2	N/A	NON-POTABLE WATER DRAIN	110	NOI	NO

TABLE 6: TA 46-200 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-200-OPN-3 03A-136	N/A	COOLING TOWER		REPIPE BLOWDOWN TO SANITARY SEWER	YES
46-200-OPN-4	N/A	STORM DRAIN DOWNSPOUT		NO CHANGE	NO
46-200-OPN-5	N/A	STORM DRAIN DOWNSPOUT		NO CHANGE	NO
46-200-OPN-6	N/A	STORM DRAIN DOWNSPOUT		NO CHANGE	NO
46-200-OPN-7	N/A	STORM DRAIN DOWNSPOUT		NO CHANGE	NO
46-200-OPN-8	N/A	FIRE SYSTEM DRAIN	110	NOI	NO
46-200-OPN-9	N/A	FIRE SYSTEM DRAIN	125	NOI	NO
46-200-OPN-10	N/A	FIRE SYSTEM DRAIN	125	NOI	NO
46-200-OPN-11	N/A	FIRE SYSTEM DRAIN	125	NOI	NO

TABLE 7: TA 46-201 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-201-OPN-1 SANITARY	1WF1	CORRIDOR	N/A	REMOVED	NO
46-201-OPN-2	N/A	A/C CONDENSATE	108A	NOI	NO
46-201-OPN-3	N/A	A/C CONDENSATE	108A	NOI	NO

TABLE 8: TA 46-202 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-202-OPN-1 SANITARY	1LV1	RESTROOM	107	NO CHANGE	NO
	1LV2	RESTROOM	115	NO CHANGE	
	1SD1	JANITOR CLOSET	111	NO CHANGE	
	1TL1	RESTROOM	107	NO CHANGE	
	1TL2	RESTROOM	115	NO CHANGE	
	1UR1	RESTROOM	107	NO CHANGE	
	1WF1	CORRIDOR		NO CHANGE	
46-202-OPN-2	N/A	CONDENSATE	109	NOI	NO
46-202-OPN-3	N/A	CONDENSATE	118	NOI	NO

TABLE 9: TA 46-231 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-231-OPN-1	N/A	FIRE SYSTEM DRAIN	111	NOI	NO
46-231-OPN-2	N/A	A/C CONDENSATE	EXT.	NOI	NO
46-231-OPN-3	N/A	A/C CONDENSATE	132	NOI	NO

TABLE 10: TA 46-232 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-232-OPN-1	N/A	A/C CONDENSATE	EXT.	NOI	NO

TABLE 11: TA 46-234 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-234-OPN-1 SANITARY	1LV1	REST ROOM	102	NO CHANGE	NO
	1LV2	REST ROOM	104	NO CHANGE	
	1SD1	KITCHEN	100	NO CHANGE	
	1SD2	JANITOR CLOSET	101	NO CHANGE	
	1SH1	REST ROOM	102	NO CHANGE	
	1SH2	REST ROOM	104	NO CHANGE	
	1TL1	REST ROOM	102	NO CHANGE	
	1TL2	REST ROOM	104	NO CHANGE	
	1WF1	CORRIDOR		NO CHANGE	
46-234-OPN-2	N/A	A/C CONDENSATE	120	NOI	NO
46-234-OPN-3	N/A	WATER HEATER PRV	120	NOI	NO

TABLE 12: TA 46-250 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-250-OPN-1 SANITARY	1FD1	RESTROOM	110C	NO CHANGE	NO
	1FD2	RESTROOM	110B	NO CHANGE	
	1FS1	EQUIP. ROOM	112	CONTAINERIZE	
	1FS2	EQUIP. ROOM	112	NO CHANGE	
	1FS3	EQUIP. ROOM	114	NO CHANGE	
	1FS4	EQUIP. ROOM	114	NO CHANGE	
	1FS5	EQUIP. ROOM	114	NO CHANGE	
	1LV1	RESTROOM	110B	NO CHANGE	
	1LV2	RESTROOM	110C	NO CHANGE	
	1SD1	MAGOOPTICS LAB	106	LABEL	
	1SD2	MAGOOPTICS LAB	106	LABEL	
	1SD3	ANAL. CHEM. TRNG. LAB.	108	LABEL	
	1SD4	ANAL. CHEM. TRNG. LAB.	108	LABEL	
	1SD5	JANITOR CLOSET	110A	LABEL	
	1SD6	KITCHEN	110	NO CHANGE	
	1SD7	ADV. ANALYTICAL DEVEL. LAB	105	LABEL	
	1SD8	ADV. ANALYTICAL DEVEL. LAB	105	LABEL	
	1SD9	ADV. ANALYTICAL DEVEL. LAB	107	LABEL	
	1SD10	ADV. ANALYTICAL DEVEL. LAB	107	LABEL	
	1SD11	NUCLEAR MAGNETICS LAB	109	LABEL	
	1SD12	LASER LAB	113	NO CHANGE	
	1SD13	ADV. ANALYTICAL DEVEL. LAB	105	PLUG/CONTAIN	
	1SD14	ADV. ANALYTICAL DEVEL. LAB	105	PLUG/CONTAIN	
	1SD15	ADV. ANALYTICAL DEVEL. LAB	107	PLUG/CONTAIN	
	1SD16	ADV. ANALYTICAL DEVEL. LAB	107	PLUG/CONTAIN	
	1SD17	LASER LAB	113	PLUG/CONTAIN	
	1SD18	ANAL. CHEM. TRNG. LAB.	108	PLUG/CONTAIN	
	1SD19	ANAL. CHEM. TRNG. LAB.	108	PLUG/CONTAIN	
	1SD20	MAGOOPTICS LAB	106	PLUG/CONTAIN	
	1SD21	MAGOOPTICS LAB	106	PLUG/CONTAIN	
	1TL1	RESTROOM	110B	NO CHANGE	
1TL2	RESTROOM	110C	NO CHANGE		
1WF1	CORRIDOR		NO CHANGE		
46-250-OPN-2	N/A	STORM DRAIN DOWNSPOUT		NO CHANGE	NO
46-250-OPN-3	N/A	STORM DRAIN DOWNSPOUT		NO CHANGE	NO
46-250-OPN-4	N/A	STORM DRAIN DOWNSPOUT		NO CHANGE	NO
46-250-OPN-5	N/A	STORM DRAIN DOWNSPOUT		NO CHANGE	NO

TABLE 12: TA 46-250 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-250-OPN-6	N/A	STORM DRAIN DOWNSPOUT		NO CHANGE	NO
46-250-OPN-7	N/A	STORM DRAIN DOWNSPOUT		NO CHANGE	NO
46-250-OPN-8	N/A	STORM DRAIN DOWNSPOUT		NO CHANGE	NO
46-250-OPN-9	N/A	FIRE SYSTEM DRAIN	105	NOI	NO
46-250-OPN-10	N/A	FIRE SYSTEM DRAIN	114	NOI	NO
46-250-OPN-11	N/A	CO2 VENT	113	NO CHANGE	NO
46-250-OPN-12	N/A	ARGON VENT	113	NO CHANGE	NO
46-250-OPN-13	N/A	NATURAL GAS VENT	113	NO CHANGE	NO

TABLE 13: TA 46-326 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-326-OPN-1 SANITARY	1FD1	RESTROOM	128	NO CHANGE	NO
	1FD2	RESTROOM	124	NO CHANGE	
	1FS1	EQUIP. ROOM	100D	NO CHANGE	
	1LV1	RESTROOM	128	NO CHANGE	
	1LV2	RESTROOM	128	NO CHANGE	
	1LV3	RESTROOM	124	NO CHANGE	
	1LV4	RESTROOM	124	NO CHANGE	
	1SD1	JANITORS CLOSET	126	NO CHANGE	
	1SD2	KITCHEN	120	NO CHANGE	
	1TL1	RESTROOM	128	NO CHANGE	
	1TL2	RESTROOM	128	NO CHANGE	
	1TL3	RESTROOM	124	NO CHANGE	
	1TL4	RESTROOM	124	NO CHANGE	
	1TL5	RESTROOM	124	NO CHANGE	
1UR1	RESTROOM	128	NO CHANGE		
1WF1	CORRIDOR	100B	NO CHANGE		
46-326-OPN-2	N/A	FIRE SYSTEM DRAIN	102	NOI	NO
46-326-OPN-3	N/A	FIRE SYSTEM DRAIN	100D	NOI	NO
46-326-OPN-4	N/A	FIRE SYSTEM DRAIN	100D	NOI	NO
46-326-OPN-5	RD7	ROOF		NO CHANGE	NO
46-326-OPN-6	RD8	ROOF		NO CHANGE	NO
46-326-OPN-7	RD6	ROOF		NO CHANGE	NO
46-326-OPN-8	RD5	ROOF		NO CHANGE	NO

TABLE 13: TA 46-326 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
46-326-OPN-9	RD1	ROOF		NO CHANGE	NO
46-326-OPN-10	RD2	ROOF		NO CHANGE	NO
46-326-OPN-11	RD3	ROOF		NO CHANGE	NO
46-326-OPN-12	RD4	ROOF		NO CHANGE	NO
46-326-OPN-13	AD1	OUTSIDE BUILDING (STORM)		NO CHANGE	NO
46-326-OPN-14	AD2	OUTSIDE BUILDING (STORM)		NO CHANGE	NO
46-326-OPN-15	AD3	OUTSIDE BUILDING (STORM)		NO CHANGE	NO
46-326-OPN-16	AD4	OUTSIDE BUILDING (STORM)		NO CHANGE	NO
46-326-OPN-17	AD5	OUTSIDE BUILDING (STORM)		NO CHANGE	NO
46-326-OPN-18	AD6	OUTSIDE BUILDING (STORM)		NO CHANGE	NO

TABLE 14

NON DRAIN RECOMMENDATIONS

TECHNICAL AREA	BUILDING NUMBER	ROOM OR LOCATION	RECOMMENDATION
46	42	46-42-OPN-2	UNCOVER OUTFALL
46	200	OUTSIDE	REPAIR LEAKING COOLING TOWER PUMP
46	200	COOLING TOWER	DELETE PERMIT 03A136
46	310	N/A	PROVIDE SECONDARY CONTAINMENT FOR STORED CHEMICALS

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
46	0	46-00	07S/SWSC	N/A	N/A	SEWAGE LAGOON		NO DRAINS	No	NO DRAINS
46	42	46-42-OPN-1	13S/SWSC	1FD7	110	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
46	42	46-42-OPN-1	13S/SWSC	1LV1	110	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	42	46-42-OPN-1	13S/SWSC	1LV2	110	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	42	46-42-OPN-1	13S/SWSC	1SD4	116	JANITORS CLOSET		5 DAYS A WEEK	No	CLEAN UP
46	42	46-42-OPN-1	13S/SWSC	1SD5	101	ROBOTICS LAB		REMOVED	No	NONE
46	42	46-42-OPN-1	13S/SWSC	1SD6	101	ROBOTICS LAB		REMOVED	No	NONE
46	42	46-42-OPN-1	13S/SWSC	1SD7	101	ROBOTICS LAB		REMOVED	No	NONE
46	42	46-42-OPN-1	13S/SWSC	1SD8	101	ROBOTICS LAB		REMOVED	No	NONE
46	42	46-42-OPN-1	13S/SWSC	1SH1	110	RESTROOM		5 DAYS A WEEK	No	SHOWER
46	42	46-42-OPN-1	13S/SWSC	1TL1	110	RESTROOM		5 DAYS A WEEK	No	TOILET
46	42	46-42-OPN-1	13S/SWSC	1UR1	110	RESTROOM		5 DAYS A WEEK	No	URINAL
46	42	46-42-OPN-1	13S/SWSC	1WF1	101	ROBOTICS LAB		5 DAYS A WEEK	No	WATER FOUNTAIN
46	42	46-42-OPN-1	13S/SWSC	2FD1	208	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
46	42	46-42-OPN-1	13S/SWSC	2FD2	212	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
46	42	46-42-OPN-1	13S/SWSC	2LV1	208	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	42	46-42-OPN-1	13S/SWSC	2LV2	208	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	42	46-42-OPN-1	13S/SWSC	2LV3	212	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	42	46-42-OPN-1	13S/SWSC	2LV4	212	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	42	46-42-OPN-1	13S/SWSC	2SD1	210	JANITOR		5 DAYS A WEEK	No	CLEAN UP
46	42	46-42-OPN-1	13S/SWSC	2SD2	201	CORRIDOR		5 DAYS A WEEK	No	DISH WASHING
46	42	46-42-OPN-1	13S/SWSC	2SH1	212	RESTROOM		5 DAYS A WEEK	No	SHOWER
46	42	46-42-OPN-1	13S/SWSC	2TL1	208	RESTROOM		5 DAYS A WEEK	No	TOILET
46	42	46-42-OPN-1	13S/SWSC	2TL2	208	RESTROOM		5 DAYS A WEEK	No	TOILET
46	42	46-42-OPN-1	13S/SWSC	2TL3	212	RESTROOM		5 DAYS A WEEK	No	TOILET
46	42	46-42-OPN-1	13S/SWSC	2TL4	212	RESTROOM		5 DAYS A WEEK	No	TOILET
46	42	46-42-OPN-1	13S/SWSC	2UR1	208	RESTROOM		5 DAYS A WEEK	No	URINAL
46	42	46-42-OPN-1	13S/SWSC	2WF1	201	CORRIDOR		5 DAYS A WEEK	No	WATER FOUNTAIN
46	42	46-42-OPN-10	N/A	N/A	101	CAPPED STUB		NO FLOW	No	NONE
46	42	46-42-OPN-11	N/A	N/A	101	CAPPED STUB		NO FLOW	No	NONE
46	42	46-42-OPN-12	N/A	N/A	101	N2 DISCONNECT		NO FLOW	No	NONE
46	42	46-42-OPN-13	DAYLIGHT	N/A	N/A	A/C CONDENSATE		FLOW IS NIL	Yes	A/C CONDENSATE DRAIN
46	42	46-42-OPN-14	ATMOS	N/A	N/A	AIR EXHAUST		NO FLOW	No	NONE

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
46	42	46-42-OPN-15	DAYLIGHT	N/A	N/A	EVAPORATIVE COOLER		FLOW IS NIL	Yes	A/C CONDENSATE
46	42	46-42-OPN-16	DAYLIGHT	N/A	N/A	DOWNSPOUT		MOSTLY IN SUMMER	Yes	STORM WATER
46	42	46-42-OPN-2	DAYLIGHT	1FD1	124	EQUIPMENT ROOM		FLOW IS NIL	No	BFP
46	42	46-42-OPN-2	DAYLIGHT	1FD1	124	EQUIPMENT ROOM		FLOW IS NIL	No	EXPANSION TANK DRAIN
46	42	46-42-OPN-2	DAYLIGHT	1FD1	124	EQUIPMENT ROOM		FLOW IS NIL	No	BOILER BLOWDOWN
46	42	46-42-OPN-2	DAYLIGHT	1FD1	124	EQUIPMENT ROOM		FLOW IS NIL	No	BOILER DRAIN
46	42	46-42-OPN-2	DAYLIGHT	1FD1	124	EQUIPMENT ROOM		FLOW IS NIL	No	WATER HEATER PRV
46	42	46-42-OPN-2	DAYLIGHT	1FD2	124	EQUIPMENT ROOM		FLOW IS NIL	No	(3) AIR COMPRESSOR DRAINS
46	42	46-42-OPN-2	DAYLIGHT	1FD2	124	EQUIPMENT ROOM		FLOW IS NIL	Yes	A/C CONDENSATE
46	42	46-42-OPN-2	DAYLIGHT	1FD3	101	ROBOTICS LAB		FLOW IS NIL	No	FLOOR WASHINGS
46	42	46-42-OPN-2	DAYLIGHT	1FD4	115	COMPUTER ROOM		FLOW IS NIL	No	FLOOR WASHINGS
46	42	46-42-OPN-2	DAYLIGHT	1FD5	117	EQUIP. ROOM		FLOW IS NIL	No	HOT WATER SYS. DRAIN
46	42	46-42-OPN-2	DAYLIGHT	1FD5	117	EQUIP. ROOM		FLOW IS NIL	No	BOILER DRAIN
46	42	46-42-OPN-2	DAYLIGHT	1FD5	117	EQUIP. ROOM		FLOW IS NIL	No	AIR HANDLER DRAIN
46	42	46-42-OPN-2	DAYLIGHT	1FD5	117	EQUIP. ROOM		FLOW IS NIL	No	BOILER BLOWDOWN
46	42	46-42-OPN-2	DAYLIGHT	1FD5	117	EQUIP. ROOM		FLOW IS NIL	No	INDUSTRIAL WATER PRV
46	42	46-42-OPN-2	DAYLIGHT	1FD5	117	EQUIP. ROOM		FLOW IS NIL	No	CONDENSATE PUMP DRAIN
46	42	46-42-OPN-2	DAYLIGHT	1FD5	117	EQUIP. ROOM		FLOW IS NIL	No	BOILER PRV
46	42	46-42-OPN-2	DAYLIGHT	1FD5	117	EQUIP. ROOM		FLOW IS NIL	No	EXPANSION TANK DRAIN
46	42	46-42-OPN-2	DAYLIGHT	1FD6	101	ROBOTICS LAB		FLOW IS NIL	No	FLOOR WASHINGS
46	42	46-42-OPN-2	DAYLIGHT	1SD3	111A	LASER LAB		REMOVED	No	NONE
46	42	46-42-OPN-2	DAYLIGHT	1SD9	107	ELECTRONICS LAB		5 DAYS A WEEK	No	CLEAN UP
46	42	46-42-OPN-2	DAYLIGHT	RD1	N/A	ROOF		MOSTLY IN SUMMER	Yes	STORM WATER
46	42	46-42-OPN-2	DAYLIGHT	RD2	N/A	ROOF		MOSTLY IN SUMMER	Yes	STORM WATER
46	42	46-42-OPN-2	DAYLIGHT	RD3	N/A	ROOF		MOSTLY IN SUMMER	Yes	STORM WATER
46	42	46-42-OPN-3	ATMOS	N/A	117	NATURAL GAS VENT		NO FLOW	No	NONE
46	42	46-42-OPN-4	ATMOS	N/A	115	NATURAL GAS VENT		NO FLOW	No	NONE
46	42	46-42-OPN-5	N/A	N/A	101	CAPPED STUB		NO FLOW	No	NONE
46	42	46-42-OPN-6	N/A	N/A	101	CAPPED STUB		NO FLOW	No	NONE
46	42	46-42-OPN-7	N/A	N/A	101	CAPPED STUB		NO FLOW	No	NONE
46	42	46-42-OPN-8	N/A	N/A	101	CAPPED STUB		NO FLOW	No	NONE
46	42	46-42-OPN-9	N/A	N/A	101	CAPPED STUB		NO FLOW	No	NONE
46	178	46-178-OPN-1	13S/SWSC	1LV1	101	RESTROOM		5 DAYS A WEEK	No	HAND WASHING

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
46	178	46-178-OPN-1	13S/SWSC	1LV2	103	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	178	46-178-OPN-1	13S/SWSC	1SD1	100	CORRIDOR		REMOVED	No	NONE
46	178	46-178-OPN-1	13S/SWSC	1TL1	101	RESTROOM		5 DAYS A WEEK	No	TOILET
46	178	46-178-OPN-1	13S/SWSC	1TL2	103	RESTROOM		REMOVED	No	NONE
46	178	46-178-OPN-1	13S/SWSC	1UR1	101	RESTROOM		5 DAYS A WEEK	No	URINAL
46	178	46-178-OPN-2	DAYLIGHT	N/A	105	WATER HEATER PRV		FLOW IS NIL	No	WATER HEATER PRV
46	178	46-178-OPN-3	DAYLIGHT	N/A	105	WATER HEATER PRV		FLOW IS NIL	No	WATER HEATER PRV
46	178	46-178-OPN-4	DAYLIGHT	N/A	N/A	EVAPORATIVE COOLER		FLOW IS NIL	Yes	EVAPORATIVE COOLER DRAIN
46	179	46-179-OPN-1	13S/SWSC	1LV1	101	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	179	46-179-OPN-1	13S/SWSC	1LV2	103	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	179	46-179-OPN-1	13S/SWSC	1TL1	101	RESTROOM		5 DAYS A WEEK	No	TOILET
46	179	46-179-OPN-1	13S/SWSC	1TL2	103	RESTROOM		5 DAYS A WEEK	No	TOILET
46	179	46-179-OPN-1	13S/SWSC	1UR1	101	RESTROOM		5 DAYS A WEEK	No	URINAL
46	179	46-179-OPN-1	13S/SWSC	1WF1	100	CORRIDOR		5 DAYS A WEEK	No	WATER FOUNTAIN
46	179	46-179-OPN-2	DAYLIGHT	N/A	101	WATER HEATER PRV		FLOW IS NIL	No	WATER HEATER PRV
46	179	46-179-OPN-3	DAYLIGHT	N/A	N/A	EVAPORATIVE COOLER		FLOW IS NIL	Yes	EVAPORATIVE COOLER DRAIN
46	180	46-180-OPN-1	DAYLIGHT	N/A	N/A	A/C CONDENSATE		FLOW IS NIL	Yes	A/C CONDENSATE DRAIN
46	180	46-180-OPN-2	DAYLIGHT	N/A	N/A	A/C CONDENSATE		FLOW IS NIL	Yes	A/C CONDENSATE DRAIN
46	200	46-200-OPN-1	13S/SWSC	1FS1	125	EQUIP. ROOM		ANNUAL TESTING	No	FIRE DRAIN
46	200	46-200-OPN-1	13S/SWSC	1FS1	125	EQUIP. ROOM		FLOW IS NIL	No	AIR COMPRESSOR DRAIN
46	200	46-200-OPN-1	13S/SWSC	1FS2	125	EQUIP. ROOM		FLOW IS NIL	No	FLOOR WASHINGS
46	200	46-200-OPN-1	13S/SWSC	1FS3	102	EQUIP. ROOM		FLOW IS NIL	No	WATER HEATER PRV
46	200	46-200-OPN-1	13S/SWSC	1FS3	102	EQUIP. ROOM		FLOW IS NIL	No	COOLING COIL COND. DRAIN
46	200	46-200-OPN-1	13S/SWSC	1FS3	102	EQUIP. ROOM		FLOW IS NIL	No	BOILER DRAIN
46	200	46-200-OPN-1	13S/SWSC	1FS3	102	EQUIP. ROOM		FLOW IS NIL	No	BOILER PRV
46	200	46-200-OPN-1	13S/SWSC	1FS3	102	EQUIP. ROOM		FLOW IS NIL	No	HOT WATER DRAIN
46	200	46-200-OPN-1	13S/SWSC	1FS4	102	EQUIP. ROOM		FLOW IS NIL	No	(2)POTABLE WATER BFP
46	200	46-200-OPN-1	13S/SWSC	1FS4	102	EQUIP. ROOM		FLOW IS NIL	No	(2)WATER TREATMENT FEEDER
46	200	46-200-OPN-1	13S/SWSC	1LV1	111	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	200	46-200-OPN-1	13S/SWSC	1SD1	106	JANITOR CLOSET		5 DAYS A WEEK	No	CLEAN UP
46	200	46-200-OPN-1	13S/SWSC	1SD2	117	CHEMISTRY LAB		5 DAYS A WEEK	No	FUME HOOD SINK
46	200	46-200-OPN-1	13S/SWSC	1SD3	119	LASER LAB		5 DAYS A WEEK	No	CLEAN UP
46	200	46-200-OPN-1	13S/SWSC	1SD4	117	CHEMISTRY LAB		5 DAYS A WEEK	No	CLEAN UP

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
46	200	46-200-OPN-1	13S/SWSC	1SD5	N/A	KITCHEN		5 DAYS A WEEK	No	DISH WASHING
46	200	46-200-OPN-1	13S/SWSC	1SH1	109	SHOWER ROOM		5 DAYS A WEEK	No	NON-EMERGENCY SHOWER
46	200	46-200-OPN-1	13S/SWSC	1TL1	111	RESTROOM		5 DAYS A WEEK	No	TOILET
46	200	46-200-OPN-1	13S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS A WEEK	No	WATER FOUNTAIN
46	200	46-200-OPN-10	DAYLIGHT	N/A	125	FIRE SYSTEM DRAIN		ANNUAL TESTING	No	FIRE DRAIN
46	200	46-200-OPN-11	DAYLIGHT	N/A	125	FIRE SYSTEM DRAIN		ANNUAL TESTING	No	FIRE DRAIN
46	200	46-200-OPN-2	DAYLIGHT	N/A	110	NON-POTABLE WATER DRAIN		FLOW IS NIL	No	NON-POTABLE WATER
46	200	46-200-OPN-3	03A136	N/A	N/A	COOLING TOWER	3370 GPY	ALL YEAR	No	COOLING TOWER BLOWDOWN
46	200	46-200-OPN-4	DAYLIGHT	N/A	N/A	DOWNSPOUT		MOSTLY SUMMER	Yes	STORM WATER
46	200	46-200-OPN-5	DAYLIGHT	N/A	N/A	DOWNSPOUT		MOSTLY SUMMER	Yes	STORM WATER
46	200	46-200-OPN-6	DAYLIGHT	N/A	N/A	DOWNSPOUT		MOSTLY SUMMER	Yes	STORM WATER
46	200	46-200-OPN-7	DAYLIGHT	N/A	N/A	DOWNSPOUT		MOSTLY SUMMER	Yes	STORM WATER
46	200	46-200-OPN-8	DAYLIGHT	N/A	110	FIRE SYSTEM DRAIN		ANNUAL TESTING	No	FIRE DRAIN
46	200	46-200-OPN-9	DAYLIGHT	N/A	125	FIRE SYSTEM DRAIN		ANNUAL TESTING	No	FIRE DRAIN
46	201	46-201-OPN-1	13S/SWSC	1WF1	N/A	CORRIDOR		REMOVED	No	NONE
46	202	46-202-OPN-1	13S/SWSC	1LV1	107	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	202	46-202-OPN-1	13S/SWSC	1LV2	115	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	202	46-202-OPN-1	13S/SWSC	1SD1	111	JANITOR CLOSET		5 DAYS A WEEK	No	CLEAN UP
46	202	46-202-OPN-1	13S/SWSC	1TL1	107	RESTROOM		5 DAYS A WEEK	No	TOILET
46	202	46-202-OPN-1	13S/SWSC	1TL2	115	RESTROOM		5 DAYS A WEEK	No	TOILET
46	202	46-202-OPN-1	13S/SWSC	1UR1	107	RESTROOM		5 DAYS A WEEK	No	URINAL
46	202	46-202-OPN-1	13S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS A WEEK	No	WATER FOUNTAIN
46	202	46-202-OPN-2	DAYLIGHT	N/A	109	CONDENSATE		FLOW IS NIL	Yes	A/C CONDENSATE
46	202	46-202-OPN-3	DAYLIGHT	N/A	118	CONDENSATE		FLOW IS NIL	Yes	A/C CONDENSATE
46	231	46-231-OPN-1	DAYLIGHT	N/A	111	FIRE SYSTEM DRAIN		ANNUAL TESTING	No	FIRE DRAIN
46	231	46-231-OPN-2	DAYLIGHT	N/A	N/A	A/C CONDENSATE		FLOW IS NIL	Yes	A/C CONDENSATE
46	231	46-231-OPN-3	DAYLIGHT	N/A	132	A/C CONDENSATE		FLOW IS NIL	Yes	A/C CONDENSATE
46	232	46-232-OPN-1	DAYLIGHT	N/A	N/A	A/C CONDENSATE		FLOW IS NIL	Yes	A/C CONDENSATE
46	234	46-234-OPN-1	13S/SWSC	1LV1	102	REST ROOM		5 DAYS A WEEK	No	HAND WASHING
46	234	46-234-OPN-1	13S/SWSC	1LV2	104	REST ROOM		5 DAYS A WEEK	No	HAND WASHING
46	234	46-234-OPN-1	13S/SWSC	1SD1	100	KITCHEN		5 DAYS A WEEK	No	DISH WASHING
46	234	46-234-OPN-1	13S/SWSC	1SD2	101	JANITOR CLOSET		5 DAYS A WEEK	No	CLEAN UP
46	234	46-234-OPN-1	13S/SWSC	1SH1	102	REST ROOM		5 DAYS A WEEK	No	SHOWER

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
46	234	46-234-OPN-1	13S/SWSC	1SH2	104	REST ROOM		5 DAYS A WEEK	No	SHOWER
46	234	46-234-OPN-1	13S/SWSC	1TL1	102	REST ROOM		5 DAYS A WEEK	No	TOILET
46	234	46-234-OPN-1	13S/SWSC	1TL2	104	REST ROOM		5 DAYS A WEEK	No	TOILET
46	234	46-234-OPN-1	13S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS A WEEK	No	WATER FOUNTAIN
46	234	46-234-OPN-2	DAYLIGHT	N/A	120	A/C CONDENSATE		FLOW IS NIL	Yes	A/C CONDENSATE
46	234	46-234-OPN-3	DAYLIGHT	N/A	120	WATER HEATER PRV		FLOW IS NIL	No	WATER HEATER PRV
46	250	46-250-OPN-1	13S/SWSC	1FD1	110C	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
46	250	46-250-OPN-1	13S/SWSC	1FD2	110B	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
46	250	46-250-OPN-1	13S/SWSC	1FS1	112	EQUIP. ROOM		FLOW IS NIL	No	(5) AIR COMPRESSOR DRAIN
46	250	46-250-OPN-1	13S/SWSC	1FS1	112	EQUIP. ROOM		FLOW IS NIL	No	CONDENSATE DRAIN
46	250	46-250-OPN-1	13S/SWSC	1FS2	112	EQUIP. ROOM		FLOW IS NIL	No	AHU CONDENSATE DRAIN
46	250	46-250-OPN-1	13S/SWSC	1FS3	114	EQUIP. ROOM		FLOW IS NIL	No	(3) POTABLE WATER BFP
46	250	46-250-OPN-1	13S/SWSC	1FS4	114	EQUIP. ROOM		FLOW IS NIL	No	BOILER DRAIN
46	250	46-250-OPN-1	13S/SWSC	1FS4	114	EQUIP. ROOM		FLOW IS NIL	No	BOILER PRV
46	250	46-250-OPN-1	13S/SWSC	1FS5	114	EQUIP. ROOM		FLOW IS NIL	No	(2)WATER HEATER PRV
46	250	46-250-OPN-1	13S/SWSC	1LV1	110B	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	250	46-250-OPN-1	13S/SWSC	1LV2	110C	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	250	46-250-OPN-1	13S/SWSC	1SD01	106	MAGOOPTICS LAB		5 DAYS A WEEK	No	CLEAN UP
46	250	46-250-OPN-1	13S/SWSC	1SD02	106	MAGOOPTICS LAB		5 DAYS A WEEK	No	CLEAN UP
46	250	46-250-OPN-1	13S/SWSC	1SD03	108	ANAL CHEM TRNG LAB		5 DAYS A WEEK	No	CLEAN UP
46	250	46-250-OPN-1	13S/SWSC	1SD04	108	ANAL CHEM TRNG LAB		5 DAYS A WEEK	No	CLEAN UP
46	250	46-250-OPN-1	13S/SWSC	1SD05	110A	JANITOR CLOSET		5 DAYS A WEEK	No	CLEAN UP
46	250	46-250-OPN-1	13S/SWSC	1SD06	110	KITCHEN		5 DAYS A WEEK	No	DISH WASHING
46	250	46-250-OPN-1	13S/SWSC	1SD07	105	ANALYTICAL DEVEL LAB		5 DAYS A WEEK	No	CLEAN UP
46	250	46-250-OPN-1	13S/SWSC	1SD08	105	ANALYTICAL DEVEL LAB		5 DAYS A WEEK	No	CLEAN UP
46	250	46-250-OPN-1	13S/SWSC	1SD09	107	ANALYTICAL DEVEL LAB		5 DAYS A WEEK	No	CLEAN UP
46	250	46-250-OPN-1	13S/SWSC	1SD10	107	ANALYTICAL DEVEL LAB		5 DAYS A WEEK	No	CLEAN UP
46	250	46-250-OPN-1	13S/SWSC	1SD11	109	NUCLEAR MAGNETICS LAB		5 DAYS A WEEK	No	CLEAN UP
46	250	46-250-OPN-1	13S/SWSC	1SD12	113	LASER LAB		5 DAYS A WEEK	No	CLEAN UP
46	250	46-250-OPN-1	13S/SWSC	1SD13	105	ANALYTICAL DEVEL LAB		5 DAYS A WEEK	No	FUME HOOD SINK
46	250	46-250-OPN-1	13S/SWSC	1SD14	105	ANALYTICAL DEVEL LAB		5 DAYS A WEEK	No	FUME HOOD SINK
46	250	46-250-OPN-1	13S/SWSC	1SD15	107	ANALYTICAL DEVEL LAB		5 DAYS A WEEK	No	FUME HOOD SINK
46	250	46-250-OPN-1	13S/SWSC	1SD16	107	ANALYTICAL DEVEL LAB		5 DAYS A WEEK	No	FUME HOOD SINK

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
46	250	46-250-OPN-1	13S/SWSC	1SD17	113	LASER LAB		5 DAYS A WEEK	No	FUME HOOD SINK
46	250	46-250-OPN-1	13S/SWSC	1SD18	108	ANAL. CHEM. TRNG. LAB.		5 DAYS A WEEK	No	FUME HOOD SINK
46	250	46-250-OPN-1	13S/SWSC	1SD19	108	ANAL. CHEM. TRNG. LAB.		5 DAYS A WEEK	No	FUME HOOD SINK
46	250	46-250-OPN-1	13S/SWSC	1SD20	106	MAGOOPTICS LAB		5 DAYS A WEEK	No	FUME HOOD SINK
46	250	46-250-OPN-1	13S/SWSC	1SD21	106	MAGOOPTICS LAB		5 DAYS A WEEK	No	FUME HOOD SINK
46	250	46-250-OPN-1	13S/SWSC	1TL1	110B	RESTROOM		5 DAYS A WEEK	No	TOILET
46	250	46-250-OPN-1	13S/SWSC	1TL2	110C	RESTROOM		5 DAYS A WEEK	No	TOILET
46	250	46-250-OPN-1	13S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS A WEEK	No	WATER FOUNTAIN
46	250	46-250-OPN-10	DAYLIGHT	N/A	114	FIRE SYSTEM DRAIN		ANNUAL TESTING	No	FIRE DRAIN
46	250	46-250-OPN-11	ATMOS	N/A	113	CO2 VENT		NO FLOW	No	NONE
46	250	46-250-OPN-12	ATMOS	N/A	113	ARGON VENT		NO FLOW	No	NONE
46	250	46-250-OPN-13	ATMOS	N/A	113	NATURAL GAS VENT		NO FLOW	No	NONE
46	250	46-250-OPN-2	DAYLIGHT	N/A	N/A	DOWNSPOUT		MOSTLY IN SUMMER	Yes	STORM WATER
46	250	46-250-OPN-3	DAYLIGHT	N/A	N/A	DOWNSPOUT		MOSTLY IN SUMMER	Yes	STORM WATER
46	250	46-250-OPN-4	DAYLIGHT	N/A	N/A	DOWNSPOUT		MOSTLY IN SUMMER	Yes	STORM WATER
46	250	46-250-OPN-5	DAYLIGHT	N/A	N/A	DOWNSPOUT		MOSTLY IN SUMMER	Yes	STORM WATER
46	250	46-250-OPN-6	DAYLIGHT	N/A	N/A	DOWNSPOUT		MOSTLY IN SUMMER	Yes	STORM WATER
46	250	46-250-OPN-7	DAYLIGHT	N/A	N/A	DOWNSPOUT		MOSTLY IN SUMMER	Yes	STORM WATER
46	250	46-250-OPN-8	DAYLIGHT	N/A	N/A	DOWNSPOUT		MOSTLY IN SUMMER	Yes	STORM WATER
46	250	46-250-OPN-9	DAYLIGHT	N/A	105	FIRE SYSTEM DRAIN		ANNUAL TESTING	No	FIRE DRAIN
46	278	46-278	ND	N/A	N/A	TRANSPORTAINER		NO DRAINS	No	NONE
46	310	46-310	ND	N/A	N/A	TRANSPORTAINER		NO DRAINS	No	NONE
46	326	46-326-OPN-1	13S/SWSC	1FD1	128	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
46	326	46-326-OPN-1	13S/SWSC	1FD2	124	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
46	326	46-326-OPN-1	13S/SWSC	1FS1	100D	EQUIP. ROOM		FLOW IS NIL	No	FLOOR WASHINGS
46	326	46-326-OPN-1	13S/SWSC	1FS1	100D	EQUIP. ROOM		FLOW IS NIL	No	POTABLE WATER BFP
46	326	46-326-OPN-1	13S/SWSC	1LV1	128	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	326	46-326-OPN-1	13S/SWSC	1LV2	128	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	326	46-326-OPN-1	13S/SWSC	1LV3	124	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	326	46-326-OPN-1	13S/SWSC	1LV4	124	RESTROOM		5 DAYS A WEEK	No	HAND WASHING
46	326	46-326-OPN-1	13S/SWSC	1SD1	126	JANITORS CLOSET		5 DAYS A WEEK	No	CLEAN UP
46	326	46-326-OPN-1	13S/SWSC	1SD2	120	KITCHEN		5 DAYS A WEEK	No	DISH WASHING
46	326	46-326-OPN-1	13S/SWSC	1TL1	128	RESTROOM		5 DAYS A WEEK	No	TOILET

REPORT #

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
46	326	46-326-OPN-1	13S/SWSC	1TL2	128	RESTROOM		5 DAYS A WEEK	No	TOILET
46	326	46-326-OPN-1	13S/SWSC	1TL3	124	RESTROOM		5 DAYS A WEEK	No	TOILET
46	326	46-326-OPN-1	13S/SWSC	1TL4	124	RESTROOM		5 DAYS A WEEK	No	TOILET
46	326	46-326-OPN-1	13S/SWSC	1TL5	124	RESTROOM		5 DAYS A WEEK	No	TOILET
46	326	46-326-OPN-1	13S/SWSC	1UR1	128	RESTROOM		5 DAYS A WEEK	No	URINAL
46	326	46-326-OPN-1	13S/SWSC	1WF1	100B	CORRIDOR		5 DAYS A WEEK	No	WATER FOUNTAIN
46	326	46-326-OPN-10	DAYLIGHT	RD2	N/A	ROOF		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-11	DAYLIGHT	RD3	N/A	ROOF		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-12	DAYLIGHT	RD4	N/A	ROOF		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-13	DAYLIGHT	AD1	N/A	AREA DRAIN		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-14	DAYLIGHT	AD2	N/A	AREA DRAIN		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-15	DAYLIGHT	AD3	N/A	AREA DRAIN		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-16	DAYLIGHT	AD4	N/A	AREA DRAIN		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-17	DAYLIGHT	AD5	N/A	AREA DRAIN		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-18	DAYLIGHT	AD6	N/A	AREA DRAIN		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-2	DAYLIGHT	N/A	102	FIRE SYSTEM DRAIN		ANNUAL TESTING	No	FIRE DRAIN
46	326	46-326-OPN-3	DAYLIGHT	N/A	100D	FIRE SYSTEM DRAIN		ANNUAL TESTING	No	FIRE DRAIN
46	326	46-326-OPN-4	DAYLIGHT	N/A	100D	FIRE SYSTEM DRAIN		ANNUAL TESTING	No	FIRE DRAIN
46	326	46-326-OPN-5	DAYLIGHT	RD7	N/A	ROOF		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-6	DAYLIGHT	RD8	N/A	ROOF		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-7	DAYLIGHT	RD6	N/A	ROOF		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-8	DAYLIGHT	RD5	N/A	ROOF		MOSTLY IN SUMMER	Yes	STORM WATER
46	326	46-326-OPN-9	DAYLIGHT	RD1	N/A	ROOF		MOSTLY IN SUMMER	Yes	STORM WATER

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?
 YES (complete the following table) NO (go to Section III)

1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		5. FLOW RATE (in mgd)		4. FLOW b. TOTAL VOLUME (specify with units)		c. DURATION (in days)
		a. DAYS PER WEEK (specify average)	d. MONTHS PER YEAR (specify average)	5. FLOW RATE		b. TOTAL VOLUME		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
03A136	Cooling Tower Blowdown	5	12	0.00001	0.0001	10 GPD	100 GPD	260 day/yr

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?
 YES (complete Item III-B) NO (to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?
 YES (complete Item III-C) NO (go to Section IV)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.
 YES (complete the following table) NO (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED
EPA Docket No. VI-92-1306		All	Complete Waste Stream Characterization surveys and implement corrective actions.	7/31/93	FY96

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction. MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See Instructions before proceeding — Complete one set of tables for each outfall — Annotate the outfall number in the space provided.
 NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
see attached datasheet			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

YES (list all such pollutants below)

NO (go to Item VI-B)

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

YES (identify the test(s) and describe their purposes below)

NO (go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (type or print)	B. PHONE NO. (area code & no.)
JERRY L. BELLOWS, AREA MANAGER, DOE	505-667-5105
ALLEN J. TIEDMAN, ASSOC. DIRECTOR FOR OPERATIONS	505-667-9390
C. SIGNATURE	D. DATE SIGNED

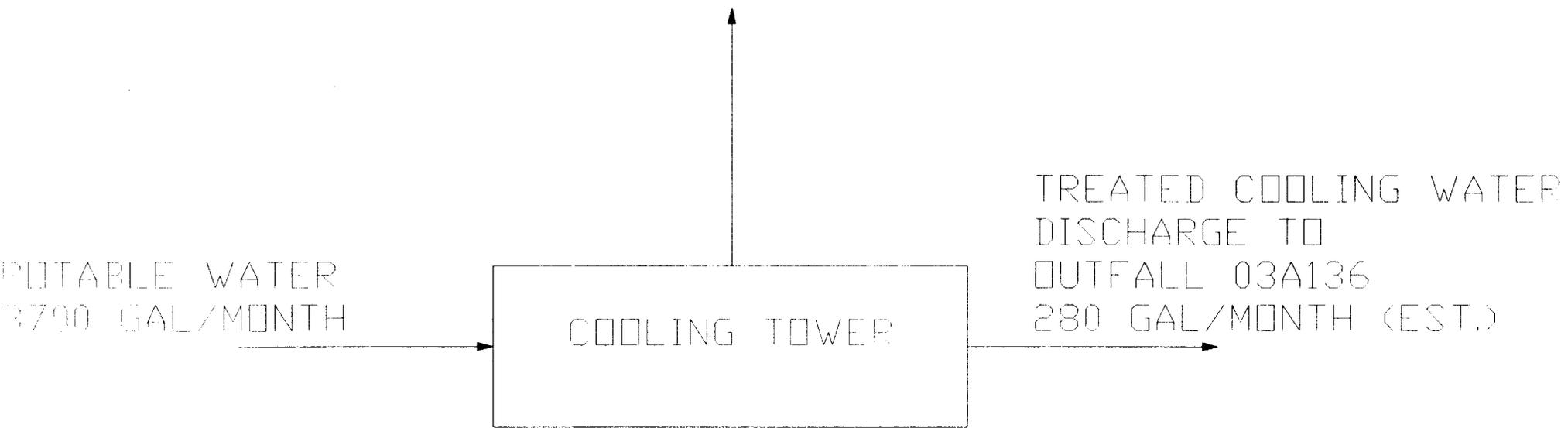
POTABLE WATER
3790 GAL/MONTH

EVAPORATION
3420 GAL/MONTH (EST.)

COOLING TOWER

TREATED COOLING WATER
DISCHARGE TO
OUTFALL 03A136
280 GAL/MONTH (EST.)

TA-46-200
COOLING TOWER



PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

NM0890010515

Form Approved
OMB No. 2040-0086
Approval expires 7-31-88

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO.
03A136

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	b. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	2.0	0.8						mg/l	g/d			
b. Chemical Oxygen Demand (COD)	42.0	15.9						mg/l	g/d			
c. Total Organic Carbon (TOC)	7.4	2.8						mg/l	g/d			
d. Total Suspended Solids (TSS)	10.0	3.8						mg/l	g/d			
e. Ammonia (as N)	< .01	< 3.785						mg/l	mg/d			
f. Flow	VALUE 100		VALUE		VALUE			gal/day		VALUE		
g. Temperature (winter)	VALUE 36.9		VALUE		VALUE			°C		VALUE		
h. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM 6.8	MAXIMUM 8.8	MINIMUM 6.0	MAXIMUM 9.0	X			STANDARD UNITS		X		

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	b. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-8)	X		3.24	1.2						mg/l	g/d			
b. Chlorine, Total Residual		X	0.0	0.0						mg/l	mg/d			
c. Color	X		10							units				
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)	X		2.97	1.1						mg/l	g/d			
f. Nitrate-Nitrite (as N)	X		1.13	0.4						mg/l	g/d			

ITEM V-8 CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	B. RECEIVED PRE-SENT	D. RECEIVED AS-SENT	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		E. LONG TERM AVG. VALUE (if available)		D. NO. OF ANALYSES	B. CONCENTRATION	D. MASS	AVERAGE VALUE		D. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)	X		2.3	0.9						mg/l	g/d			
h. Oil and Grease		X	< 1.2	< 0.5						mg/l	g/d			
i. Phosphorus (as P), Total (7723-14-0)	X		0.67	0.3						mg/l	g/d			
j. Radioactivity														
(1) Alpha, Total	X		14	5.3						pCi/l	nCi/d			
(2) Beta, Total	X		6.6	2.5						pCi/l	nCi/d			
(3) Radium, Total	X													
(4) Radium 226, Total	X		0.07	26.5						pCi/l	nCi/d			
k. Sulfate (as SO ₄) (14808-79-8)	X		143	54.1						mg/l	g/d			
l. Sulfide (as S)	X		0.16	60.6						mg/l	mg/d			
m. Sulfite (as SO ₃) (14285-45-3)	X		18.8	7.1						mg/l	g/d			
n. Surfactants	X		0.11	41.6						mg/l	mg/d			
o. Aluminum, Total (7429-90-6)	X		0.06	22.7						mg/l	mg/d			
p. Barium, Total (7440-39-3)	X		0.11	41.6						mg/l	mg/d			
q. Boron, Total (7440-42-8)	X		0.33	0.1						mg/l	g/d			
r. Cobalt, Total (7440-48-4)		X	< 0.1	< 37.9						mg/l	mg/d			
s. Iron, Total (7439-89-6)	X		1.1	0.4						mg/l	g/d			
t. Magnesium, Total (7439-96-4)	X		5.8	2.2						mg/l	g/d			
u. Molybdenum, Total (7439-96-7)	X		1.7	0.6						mg/l	g/d			
v. Manganese, Total (7439-96-5)	X		0.05	18.9						mg/l	mg/d			
w. Tin, Total (7440-31-5)		X	< 0.050	< 18.9						mg/l	mg/d			
x. Titanium, Total (7440-32-6)		X	< 0.004	< 1.5						mg/l	mg/d			

NM0890010515

03A136

Form Approved.
OMB No. 2040-0086
Approval expires 7-31-88

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. YES/NO RE- QUIT	b. SE- LIEVED PRE- SENT	c. SE- LIEVED AB- SENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANAL- YSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)			X	< 0.050	< 18.9						mg/l	mg/d			
2M. Arsenic, Total (7440-38-2)		X		0.04	15.1						mg/l	mg/d			
3M. Beryllium, Total, 7440-41-7)			X	< 0.1	< 37.9						mg/l	mg/d			
4M. Cadmium, Total (7440-43-9)		X		.004	1.5						mg/l	mg/d			
5M. Chromium, Total (7440-47-3)		X		.260	98.4						mg/l	mg/d			
6M. Copper, Total (7440-50-8)		X		0.1	37.9						mg/l	mg/d			
7M. Lead, Total (7439-92-1)		X		.050	18.9						mg/l	mg/d			
8M. Mercury, Total (7439-97-6)			X	< .0002	< 0.1						mg/l	mg/d			
9M. Nickel, Total (7440-02-0)		X		.28	0.1						mg/l	g/d			
10M. Selenium, Total (7782-49-2)			X	< .001	< 0.4						mg/l	mg/d			
11M. Silver, Total (7440-22-4)			X	< 0.01	< 3.8						mg/l	mg/d			
12M. Thallium, Total (7440-28-0)		X		0.51	0.2						mg/l	g/d			
13M. Zinc, Total (7440-66-6)		X		.071	26.9						mg/l	mg/d			
14M. Cyanide, Total (57-12-6)		X		.013	4.9						mg/l	mg/d			
15M. Phenols, Total		X		.017	6.4						mg/l	mg/d			
DIOXIN															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1784-01-6)			X	DESCRIBE RESULTS											

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)			X												
2V. Acrylonitrile (107-13-1)			X												
3V. Benzene (71-43-2)			X	< 0.005	< 1.9						mg/l	mg/d			
4V. Bis (Chloromethyl) Ether (542-88-1)			X												
5V. Bromoform (75-26-2)		X		0.006	2.3						mg/l	mg/d			
6V. Carbon Tetrachloride (56-23-5)			X	< 0.005	< 1.9						mg/l	mg/d			
7V. Chlorobenzene (108-90-7)			X	< 0.005	< 1.9						mg/l	mg/d			
8V. Chlorodibromomethane (124-48-1)			X	< 0.005	< 1.9						mg/l	mg/d			
9V. Chloroethane (75-00-3)			X	< 0.010	< 0.00						mg/l	mg/d			
10V. 2-Chloroethylvinyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)			X	< 0.005	< 1.9						mg/l	mg/d			
12V. Dichlorobromomethane (75-27-4)			X	< 0.005	< 1.9						mg/l	mg/d			
13V. Dichlorodifluoromethane (75-71-8)			X												
14V. 1,1-Dichloroethene (75-34-3)			X	< 0.005	< 1.9						mg/l	mg/d			
15V. 1,2-Dichloroethene (107-06-2)			X	< 0.005	< 1.9						mg/l	mg/d			
16V. 1,1-Dichloroethylene (75-35-4)			X	< 0.005	< 1.9						mg/l	mg/d			
17V. 1,2-Dichloropropane (78-87-5)			X	< 0.005	< 1.9						mg/l	kg/d			
18V. 1,3-Dichloropropane (542-75-8)			X	< 0.005	< 1.9						mg/l	mg/d			
19V. Ethylbenzene (100-41-4)			X	< 0.005	< 1.9						mg/l	mg/d			
20V. Methyl Bromide (74-83-9)			X	< 0.010	< 3.8						mg/l	mg/d			
21V. Methyl Chloride (74-87-3)			X	< 0.010	< 3.8						mg/l	mg/d			

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						d. NO. OF ANALYSES	4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. AS-RECEIVED PRESENT	c. BELIEVED PRESENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			b. CONCENTRATION	d. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			X	< 0.005	< 1.9						mg/l	mg/d			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X	< 0.005	< 1.9						mg/l	mg/d			
24V. Tetrachloroethylene (127-18-4)			X	< 0.005	< 1.9						mg/l	mg/d			
25V. Toluene (108-88-3)			X	< 0.005	< 1.9						mg/l	mg/d			
26V. 1,2-Dichloroethylene (156-50-5)			X	< 0.005	< 1.9						mg/l	mg/d			
27V. 1,1,1-Trichloroethane (71-55-6)			X	< 0.005	< 1.9						mg/l	mg/d			
28V. 1,1,2-Trichloroethane (79-00-5)			X	< 0.005	< 1.9						mg/l	mg/d			
29V. Trichloroethylene (79-01-6)			X	< 0.005	< 1.9						mg/l	mg/d			
30V. Trichlorofluoromethane (75-69-4)			X	< 0.005	< 1.9						mg/l	mg/d			
31V. Vinyl Chloride (75-01-4)			X	< 0.010	< 3.8						mg/l	mg/d			
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			X	< 0.010	< 3.8						mg/l	mg/d			
2A. 2,4-Dichlorophenol (120-83-2)			X	< 0.010	< 3.8						mg/l	mg/d			
3A. 2,4-Dimethylphenol (105-67-9)			X	< 0.010	< 3.8						mg/l	mg/d			
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X	< 0.010	< 3.8						mg/l	mg/d			
5A. 2,4-Dinitrophenol (51-28-5)			X	< 0.010	< 3.8						mg/l	mg/d			
6A. 2-Nitrophenol (88-75-5)			X	< 0.010	< 3.8						mg/l	mg/d			
7A. 4-Nitrophenol (100-02-7)			X	< 0.010	< 3.8						mg/l	mg/d			
8A. P-Chloro-M-Cresol (59-50-7)			X	< 0.010	< 3.8						mg/l	mg/d			
9A. Pentachlorophenol (87-86-5)			X	< 0.010	< 3.8						mg/l	mg/d			
10A. Phenol (108-95-2)			X	< 0.010	< 3.8						mg/l	mg/d			
11A. 2,4,6-Trichlorophenol (88-06-2)			X	< 0.010	< 3.8						mg/l	mg/d			

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT					4. UNITS		5. INTAKE (optional)					
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		G. LONG TERM AVG. VALUE (if available)		D. NO. OF ANALYSES	B. CONCENTRATION	b. MASS	E. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS																
1B. Acenaphthene (83-32-9)			X	< 0.010	< 3.8						mg/l	mg/d				
2B. Acenaphthylene (206-96-8)			X	< 0.010	< 3.8						mg/l	mg/d				
3B. Anthracene (120-12-7)			X	< 0.010	< 3.8						mg/l	mg/d				
4B. Benzidine (92-87-5)			X	< 0.010	< 3.8						mg/l	mg/d				
5B. Benzo (a) Anthracene (56-55-3)			X	< 0.010	< 3.8						mg/l	mg/d				
6B. Benzo (a) Pyrene (50-32-8)			X	< 0.010	< 3.8						mg/l	mg/d				
7B. 3,4-Benzo-fluoranthene (206-99-2)			X	< 0.010	< 3.8						mg/l	mg/d				
8B. Benzo (ghi) Perylene (191-24-2)			X	< 0.010	< 3.8						mg/l	mg/d				
9B. Benzo (k) Fluoranthene (207-08-9)			X	< 0.010	< 3.8						mg/l	mg/d				
10B. Bis (2-Chloroethoxy) Methane (111-91-1)			X	< 0.010	< 3.8						mg/l	mg/d				
11B. Bis (2-Chloroethyl) Ether (111-44-4)			X	< 0.010	< 3.8						mg/l	mg/d				
12B. Bis (2-Chloropropyl) Ether (102-60-1)			X	< 0.010	< 3.8						mg/l	mg/d				
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)			X	< 0.010	< 3.8						mg/l	mg/d				
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X	< 0.010	< 3.8						mg/l	mg/d				
15B. Butyl Benzyl Phthalate (85-68-7)			X	< 0.010	< 3.8						mg/l	mg/d				
16B. 2-Chloronaphthalene (91-58-7)			X	< 0.010	< 3.8						mg/l	mg/d				
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			X	< 0.010	< 3.8						mg/l	mg/d				
18B. Chrysene (218-01-9)			X	< 0.010	< 3.8						mg/l	mg/d				
19B. Dibenzo (a,h) Anthracene (53-70-3)			X	< 0.010	< 3.8						mg/l	mg/d				
20B. 1,2-Dichlorobenzene (95-50-1)			X	< 0.010	< 3.8						mg/l	mg/d				
21B. 1,3-Dichlorobenzene (541-73-1)			X	< 0.010	< 3.8						mg/l	mg/d				

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING RE-QUIRED	b. SE-RIEVALISE-SENT	c. SE-RIEVALISE-SENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANAL-YSES	e. CONCEN-TRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANAL-YSES
				(1) CONCEN-TRATION	(2) MASS	(1) CONCEN-TRATION	(2) MASS	(1) CONCEN-TRATION	(2) MASS				(1) CONCEN-TRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichloro-benzene (106-46-7)			X	< 0.010	< 3.8						mg/l	mg/d			
23B. 3,3'-Dichloro-benzidine (91-94-1)			X	< 0.010	< 3.8						mg/l	mg/d			
24B. Diethyl Phthalate (84-86-2)			X	< 0.010	< 3.8						mg/l	mg/d			
25B. Dimethyl Phthalate (131-11-3)			X	< 0.010	< 3.8						mg/l	mg/d			
26B. Di-N-Butyl Phthalate (84-74-2)			X	< 0.010	< 3.8						mg/l	mg/d			
27B. 2,4-Dinitro-toluene (121-14-2)			X	< 0.010	< 3.8						mg/l	mg/d			
28B. 2,6-Dinitro-toluene (606-20-2)			X	< 0.010	< 3.8						mg/l	mg/d			
29B. Di-N-Octyl Phthalate (117-84-0)			X	< 0.010	< 3.8						mg/l	mg/d			
30B. 1,2-Diphenyl-hydrazine (as Azo-benzene) (122-66-7)			X	< 0.010	< 3.8						mg/l	mg/d			
31B. Fluoranthene (206-44-0)			X	< 0.010	< 3.8						mg/l	mg/d			
32B. Fluorene (86-73-7)			X	< 0.010	< 3.8						mg/l	mg/d			
33B. Hexachlorobenzene (118-74-1)			X	< 0.010	< 3.8						mg/l	mg/d			
34B. Hexa-chlorobutadiene (87-68-3)			X	< 0.010	< 3.8						mg/l	mg/d			
35B. Hexachloro-cyclopentadiene (77-47-4)			X	< 0.010	< 3.8						mg/l	mg/d			
36B. Hexachloro-ethane (67-72-1)			X	< 0.010	< 3.8						mg/l	mg/d			
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X	< 0.010	< 3.8						mg/l	mg/d			
38B. Isophorone (78-59-1)			X	< 0.010	< 3.8						mg/l	mg/d			
39B. Naphthalene (91-20-3)			X	< 0.010	< 3.8						mg/l	mg/d			
40B. Nitrobenzene (98-96-3)			X	< 0.010	< 3.8						mg/l	mg/d			
41B. N-Nitro-sodimethylamine (62-75-9)			X	< 0.010	< 3.8						mg/l	mg/d			
42B. N-Nitrosodi-N-Propylamine (621-64-7)			X	< 0.010	< 3.8						mg/l	mg/d			

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TESTING RE-QUIR-ED	B. BE-LIEVED PRE-SENT	C. BE-LIEVED AB-SENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANAL-YSES	e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANAL-YSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)			X	< 0.010	< 3.8						mg/l	mg/d			
44B. Phenanthrene (85-01-8)			X	< 0.010	< 3.8						mg/l	mg/d			
45B. Pyrene (129-00-0)			X	< 0.010	< 3.8						mg/l	mg/d			
46B. 1,2,4-Trichlorobenzene (120-82-1)			X	< 0.010	< 3.8						mg/l	mg/d			
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)			X	< 0.06	< 22.7						ug/l	ug/d			
2P. α -BHC (319-84-6)			X	< 0.02	< 7.6						ug/l	ug/d			
3P. β -BHC (319-85-7)			X	< 0.1	< 37.9						ug/l	ug/d			
4P. γ -BHC (68-89-9)			X	< 0.03	< 11.4						ug/l	ug/d			
5P. δ -BHC (319-86-8)			X	< 0.12	< 45.4						ug/l	ug/d			
6P. Chlordane (57-74-9)			X	< 0.25	< 94.6						ug/l	ug/d			
7P. 4,4'-DDT (50-29-3)			X	< 0.06	< 22.7						ug/l	ug/d			
8P. 4,4'-DDE (72-65-9)			X	< 0.08	< 30.3						ug/l	ug/d			
9P. 4,4'-DDD (72-64-8)			X	< 0.08	< 30.3						ug/l	ug/d			
10P. Dieldrin (60-57-1)			X	< 0.08	< 30.3						ug/l	ug/d			
11P. α -Endosulfan (115-29-7)			X	< 0.05	< 18.9						ug/l	ug/d			
12P. β -Endosulfan (115-29-7)			X	< 0.08	< 30.3						ug/l	ug/d			
13P. Endosulfan Sulfate (1031-07-8)			X	< 0.09	< 34.1						ug/l	ug/d			
14P. Endrin (72-20-8)			X	< 0.06	< 22.7						ug/l	ug/d			
15P. Endrin Aldehyde (7421-93-4)			X	< 0.62	< 0.2						ug/l	mg/d			
16P. Heptachlor (76-44-8)			X	< 0.03	< 11.4						ug/l	ug/d			

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CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TEST ING RE- QUI- RE- D	b. DE- LIVED PRE- SENT	c. BE- LIEVED AB- SEN- T	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANAL- YSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)			X	< 0.08	< 30.3						ug/l	ug/d			
18P. PCB-1242 (53489-21-0)			X	< 0.71	< 0.3						ug/l	mg/d			
19P. PCB-1254 (11097-89-1)			X	< 0.71	< 0.3						ug/l	mg/d			
20P. PCB-1221 (11104-28-2)			X	N.D.											
21P. PCB-1232 (11141-16-5)			X	N.D.											
22P. PCB-1248 (12672-29-6)			X	N.D.											
23P. PCB-1260 (11098-82-5)			X	< 0.71	< 0.3						ug/l	mg/d			
24P. PCB-1016 (12674-11-2)			X	N.D.											
26P. Toxaphene (8001-35-2)			X	< 2.5	< 0.9						ug/l	mg/d			

B. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item III-A. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

C. Except for storm runoff, leaks, or spills, will any of the discharges described in item III-A be intermittent or seasonal?

Yes (complete the following table) No (go to item IV)

Outfall Number	1. Frequency		2. Flow		
	a. Days Per Week (specify average)	b. Months Per Year (specify average)	a. Maximum Daily Flow Rate (in mgd)	b. Maximum Total Volume (specify with units)	c. Duration (in days)
46-42-OPN-2	5	12	.000005	5 GPD	260

IV. Production

If there is an applicable production-based effluent guideline or NSPS, for each outfall list the estimated level of production (projection of actual production level, not design), expressed in the terms and units used in the applicable effluent guideline or NSPS, for each of the first 3 years of operation. If production is likely to vary, you may also submit alternative estimates (attach a separate sheet).

Year	a. Quantity Per Day	b. Units of Measure	c. Operation, Product, Material, etc (specify)
			N/A

C. Use the space below to list any of the pollutants listed in Table 2D-3 of the instructions which you know or have reason to believe will be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it will be present.

1. Pollutant	2. Reason for Discharge
N/A	

VI. Engineering Report on Wastewater Treatment

A. If there is any technical evaluation concerning your wastewater treatment, including engineering reports or pilot plant studies, check the appropriate box below.

Report Available

No Report

Waste Stream Characterization Report #70

B. Provide the name and location of any existing plant(s) which, to the best of your knowledge, resembles this production facility with respect to production processes, wastewater constituents, or wastewater treatments.

Name	Location
N/A	

VII. Other Information (Optional)

Use the space below to expand upon any of the above questions or to bring to the attention of the reviewer any other information you feel should be considered in establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

See attached 04A datasheets. Sink drain discharges are consistent with potable water with hand washing activities (grey water). Floor drain discharges include air compressor drains, expansion tank drains, boiler drains, condensate drains, industrial water and floor washings.

VIII. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title (type or print)

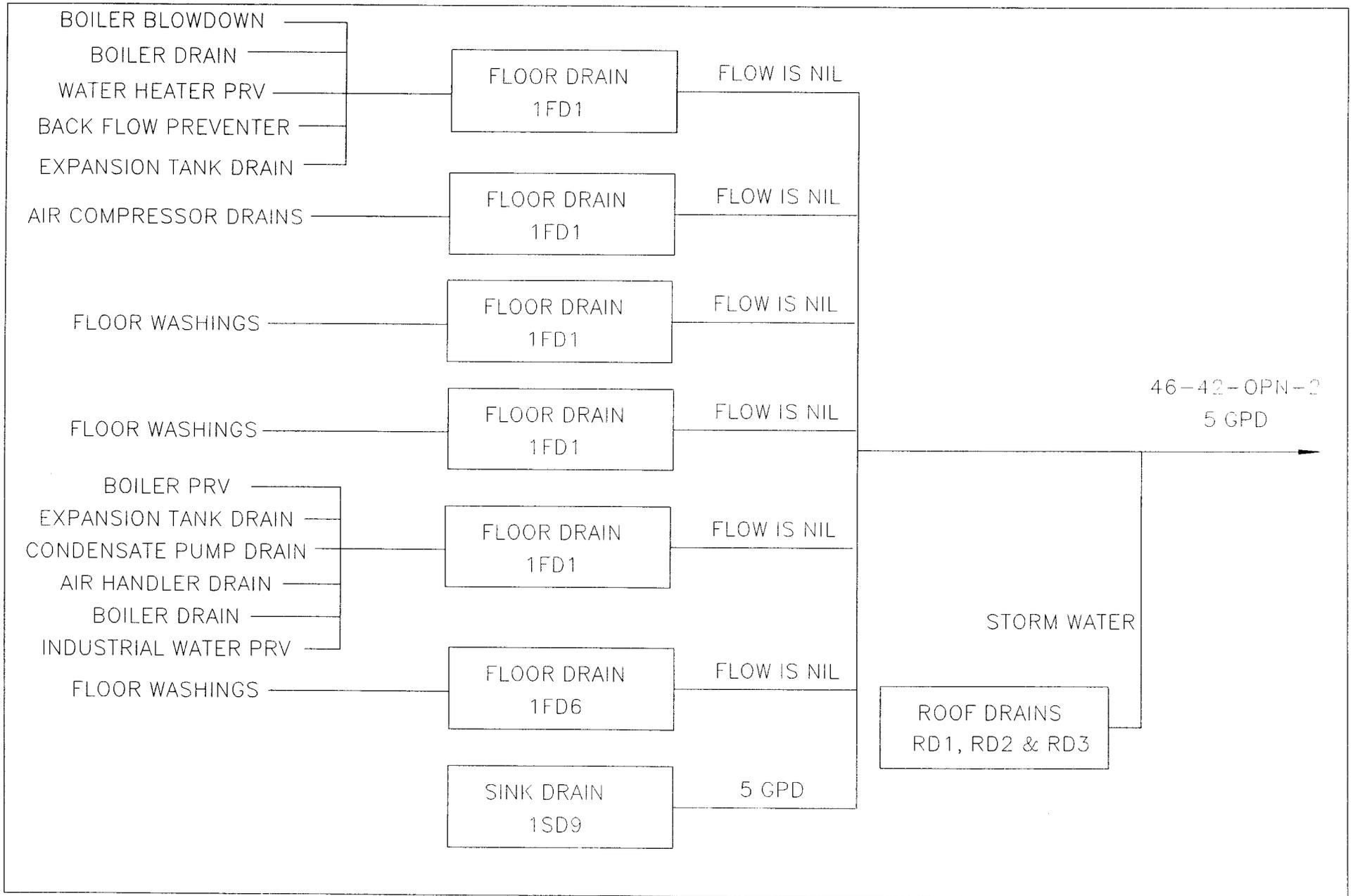
JERRY L. BELLOWS, AREA MANAGER, DOE
ALLEN J. TIEDMAN, ASSOC. DIRECTOR FOR OPERATIONS

B. Phone No.

505-667-5105
505-667-9390

C. Signature

D. Date Signed



PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)

NM0890010515

Form Approved.
OMB No. 2040-0086
Approval expires 7-31-88

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO.
04A

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	b. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	< 2.0	< 37.9						mg/l	g/d			
b. Chemical Oxygen Demand (COD)	< 10.0	< 0.2						mg/l	g/d			
c. Total Organic Carbon (TOC)	0.6	11.2						mg/l	g/d			
d. Total Suspended Solids (TSS)	18.0	0.3						mg/l	g/d			
e. Ammonia (as N)	< 0.1	< 1.893						mg/l	g/d			
f. Flow	VALUE 5		VALUE		VALUE			gal/day		VALUE		
g. Temperature (winter)	VALUE 13.9		VALUE		VALUE			°C		VALUE		
h. Temperature (summer)	VALUE N/A		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM 8.45	MAXIMUM 8.80	MINIMUM	MAXIMUM	X			STANDARD UNITS		X		

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	b. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		X	< 0.5	< 9.5						mg/l	g/d			
b. Chlorine, Total Residual	X		0.05	0.0						mg/l	mg/d			
c. Color	X		7.0							units				
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)	X		0.21	4.0						mg/l	g/d			
f. Nitrate-Nitrite (as N)	X		0.304	5.8						mg/l	g/d			

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. DE-RIEVED PRE-SENT	b. DE-RIEVED AB-SENT	c. MAXIMUM DAILY VALUE		d. MAXIMUM 30 DAY VALUE (if available)		e. LONG TERM AVG. VALUE (if available)		d. NO. OF ANAL-YSES	f. CONCENTRATION	g. MASS	h. LONG TERM AVERAGE VALUE		i. NO. OF ANAL-YSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)		X	< 0.5	< 9.5						mg/l	mg/d			
h. Oil and Grease		X	< 1.05	< 19.9						mg/l	mg/d			
i. Phosphorus (as P), Total (7723-14-0)	X		0.05	0.9						mg/l	mg/d			
j. Radioactivity														
(1) Alpha, Total	X		0.1	1.9						pCi/l	pCi/d			
(2) Beta, Total	X		6.6	0.1						pCi/l	nCi/d			
(3) Radium, Total	X													
(4) Radium 226, Total	X		0.06	1.1						pCi/l	pCi/d			
k. Sulfate (as SO ₄) (14806-79-8)	X		3.16	59.8						mg/l	mg/d			
l. Sulfide (as S)		X		0.0						mg/l	mg/d			
m. Sulfite (as SO ₃) (14266-45-3)		X	< 0.05	< 0.9						mg/l	mg/d			
n. Surfactants		X	< 0.1	< 1.9						mg/l	mg/d			
o. Aluminum, Total (7429-90-6)		X	< 0.04	< 0.8						mg/l	mg/d			
p. Barium, Total (7440-39-3)	X		0.03	0.6						mg/l	mg/d			
q. Boron, Total (7440-42-8)	X		0.02	0.4						mg/l	mg/d			
r. Cobalt, Total (7440-48-4)		X	< 0.1	< 1.9						mg/l	mg/d			
s. Iron, Total (7439-89-6)	X		0.41	7.8						mg/l	mg/d			
t. Magnesium, Total (7439-96-4)	X		2.5	47.3						mg/l	mg/d			
u. Molybdenum, Total (7439-98-7)		X	< 0.02	< 0.4						mg/l	mg/d			
v. Manganese, Total (7439-96-5)	X		0.01	0.2						mg/l	mg/d			
w. Tin, Total (7440-31-5)		X	< 0.050	< 0.9						mg/l	mg/d			
x. Titanium, Total (7440-32-6)		X	< 0.004	< 0.1						mg/l	mg/d			

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	b. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)			X	< 0.050	< 0.9						mg/l	mg/d			
2M. Arsenic, Total (7440-38-2)		X		0.002	0.0						mg/l	mg/d			
3M. Beryllium, Total, 7440-41-7)			X	< 0.001	< 0.0						mg/l	mg/d			
4M. Cadmium, Total (7440-43-9)			X	< 0.010	< 0.2						mg/l	mg/d			
5M. Chromium, Total (7440-47-3)		X		0.040	0.8						mg/l	mg/d			
6M. Copper, Total (7440-50-8)		X		0.031	0.6						mg/l	mg/d			
7M. Lead, Total (7439-92-1)			X	< 0.050	< 0.9						mg/l	mg/d			
8M. Mercury, Total (7439-97-6)			X	< 0.0002	< 0.00						mg/l	mg/d			
9M. Nickel, Total (7440-02-0)		X		0.06	1.1						mg/l	mg/d			
10M. Selenium, Total (7782-49-2)			X	< 0.001	< 0.0						mg/l	mg/d			
11M. Silver, Total (7440-22-4)			X	< 0.010	< 0.2						mg/l	mg/d			
12M. Thallium, Total (7440-28-0)			X	< 0.4	< 7.6						mg/l	mg/d			
13M. Zinc, Total (7440-66-6)		X		0.043	0.8						mg/l	mg/d			
14M. Cyanide, Total (57-12-6)			X	0.01	0.2						mg/l	mg/d			
15M. Phenols, Total			X	< 0.01	< 0.2						mg/l	mg/d			
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)			X	DESCRIBE RESULTS											

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	B. CONCENTRATION	b. MASS	B. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)			X												
2V. Acrylonitrile (107-13-1)			X												
3V. Benzene (71-43-2)			X	< 0.005	< 0.1						mg/l	mg/d			
4V. Bis (Chloromethyl) Ether (642-88-1)			X												
5V. Bromoform (75-25-2)			X	< 0.005	< 0.1						mg/l	mg/d			
6V. Carbon Tetrachloride (66-23-5)			X	< 0.005	< 0.1						mg/l	mg/d			
7V. Chlorobenzene (108-90-7)			X	< 0.005	< 0.1						mg/l	mg/d			
8V. Chlorodibromomethane (124-48-1)			X	< 0.005	< 0.1						mg/l	mg/d			
9V. Chloroethane (75-00-3)			X	< 0.010	< 0.000						mg/l	mg/d			
10V. 2-Chloroethylvinyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)			X	< 0.005	< 0.1						mg/l	mg/d			
12V. Dichlorobromomethane (75-27-4)			X	< 0.005	< 0.1						mg/l	mg/d			
13V. Dichlorodifluoromethane (75-71-8)			X												
14V. 1,1-Dichloroethane (75-34-3)			X	< 0.005	< 0.1						mg/l	mg/d			
15V. 1,2-Dichloroethane (107-06-2)			X	< 0.005	< 0.1						mg/l	mg/d			
16V. 1,1-Dichloroethylene (75-35-4)			X	< 0.005	< 0.1						mg/l	mg/d			
17V. 1,2-Dichloropropane (78-87-5)			X	< 0.005	< 0.1						mg/l	kg/d			
18V. 1,3-Dichloropropene (642-75-8)			X	<	< 0.0						mg/l	mg/d			
19V. Ethylbenzene (100-41-4)			X	< 0.005	< 0.1						mg/l	mg/d			
20V. Methyl Bromide (74-83-9)			X	< 0.010	< 0.2						mg/l	mg/d			
21V. Methyl Chloride (74-87-3)			X	< 0.010	< 0.2						mg/l	mg/d			

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	B. TESTING REQUIRED	D. BELIEVED PRESENT	C. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			X	< 0.005	< 0.1						mg/l	mg/d			
23V. 1,1,2,2-Tetrachloroethane (79-34-6)			X	< 0.005	< 0.1						mg/l	mg/d			
24V. Tetrachloroethylene (127-18-4)			X	< 0.005	< 0.1						mg/l	mg/d			
26V. Toluene (108-98-3)			X	< 0.005	< 0.1						mg/l	mg/d			
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X	< 0.005	< 0.1						mg/l	mg/d			
27V. 1,1,1-Trichloroethane (71-55-6)			X	< 0.005	< 0.1						mg/l	mg/d			
28V. 1,1,2-Trichloroethane (79-00-5)			X	< 0.005	< 0.1						mg/l	mg/d			
29V. Trichloroethylene (79-01-6)			X	< 0.005	< 0.1						mg/l	mg/d			
30V. Trichlorofluoromethane (75-69-4)			X	< 0.005	< 0.1						mg/l	mg/d			
31V. Vinyl Chloride (75-01-4)			X	< 0.010	< 0.2						mg/l	mg/d			
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			X	< 0.010	< 0.2						mg/l	mg/d			
2A. 2,4-Dichlorophenol (120-83-2)			X	< 0.010	< 0.2						mg/l	mg/d			
3A. 2,4-Dimethylphenol (105-67-9)			X	< 0.010	< 0.2						mg/l	mg/d			
4A. 4,6-Dinitro-O-Cresol (834-52-1)			X	< 0.010	< 0.2						mg/l	mg/d			
5A. 2,4-Dinitrophenol (51-28-5)			X	< 0.010	< 0.2						mg/l	mg/d			
6A. 2-Nitrophenol (88-75-5)			X	< 0.010	< 0.2						mg/l	mg/d			
7A. 4-Nitrophenol (100-02-7)			X	< 0.010	< 0.2						mg/l	mg/d			
8A. P-Chloro-M-Cresol (59-50-7)			X	< 0.010	< 0.2						mg/l	mg/d			
9A. Pentachlorophenol (87-86-5)			X	< 0.010	< 0.2						mg/l	mg/d			
10A. Phenol (108-95-2)			X	< 0.010	< 0.2						mg/l	mg/d			
11A. 2,4,6-Trichlorophenol (88-06-2)			X	< 0.010	< 0.2						mg/l	mg/d			

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	3. MAXIMUM DAILY VALUE		d. MAXIMUM 30 DAY VALUE (if available)		e. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	3. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			X	< 0.010	< 0.2						mg/l	mg/d			
2B. Acenaphthylene (208-96-8)			X	< 0.010	< 0.2						mg/l	mg/d			
3B. Anthracene (120-12-7)			X	< 0.010	< 0.2						mg/l	mg/d			
4B. Benzidine (92-87-8)			X	< 0.010	< 0.2						mg/l	mg/d			
5B. Benzo (a) Anthracene (56-55-3)			X	< 0.010	< 0.2						mg/l	mg/d			
6B. Benzo (a) Pyrene (50-32-8)			X	< 0.010	< 0.2						mg/l	mg/d			
7B. 3,4-Benzo-fluoranthene (205-99-2)			X	< 0.010	< 0.2						mg/l	mg/d			
8B. Benzo (ghi) Perylene (191-24-2)			X	< 0.010	< 0.2						mg/l	mg/d			
9B. Benzo (k) Fluoranthene (207-08-9)			X	< 0.010	< 0.2						mg/l	mg/d			
10B. Bis (2-Chloroethoxy) Methane (111-91-1)			X	< 0.010	< 0.2						mg/l	mg/d			
11B. Bis (2-Chloroethyl) Ether (111-44-4)			X	< 0.010	< 0.2						mg/l	mg/d			
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)			X	< 0.010	< 0.2						mg/l	mg/d			
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)			X	< 0.010	< 0.2						mg/l	mg/d			
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X	< 0.010	< 0.2						mg/l	mg/d			
15B. Butyl Benzyl Phthalate (85-68-7)			X	< 0.010	< 0.2						mg/l	mg/d			
16B. 2-Chloronaphthalene (91-58-7)			X	< 0.010	< 0.2						mg/l	mg/d			
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			X	< 0.010	< 0.2						mg/l	mg/d			
18B. Chrysene (218-01-9)			X	< 0.010	< 0.2						mg/l	mg/d			
19B. Dibenzo (a,h) Anthracene (53-70-3)			X	< 0.010	< 0.2						mg/l	mg/d			
20B. 1,2-Dichlorobenzene (95-50-1)			X	< 0.010	< 0.2						mg/l	mg/d			
21B. 1,3-Dichlorobenzene (541-73-1)			X	< 0.010	< 0.2						mg/l	mg/d			

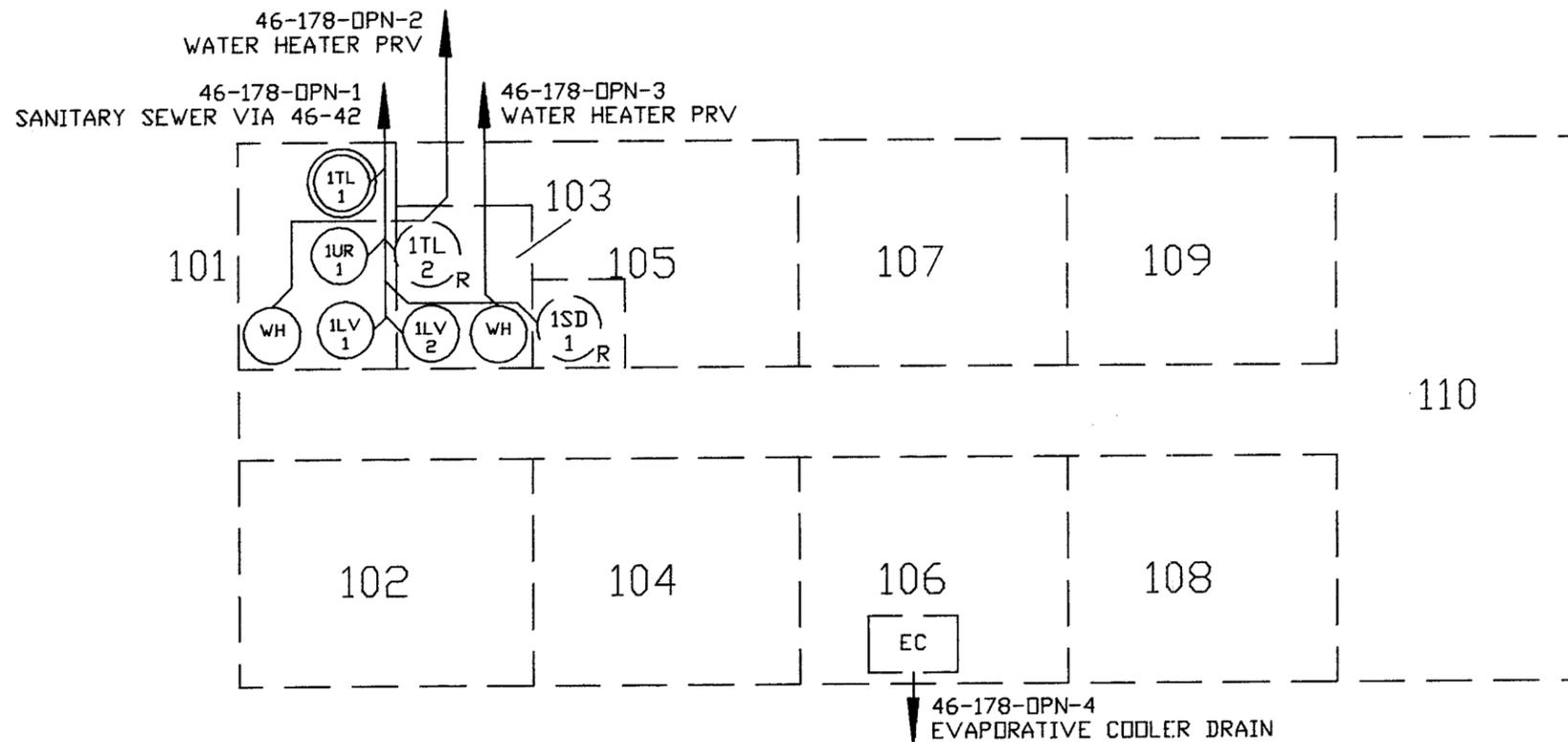
1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	b. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)			X	< 0.010	< 0.2						mg/l	mg/d			
23B. 3,3'-Dichlorobenzidine (91-94-1)			X	< 0.010	< 0.2						mg/l	mg/d			
24B. Diethyl Phthalate (84-66-2)			X	< 0.010	< 0.2						mg/l	mg/d			
25B. Dimethyl Phthalate (131-11-3)			X	< 0.010	< 0.2						mg/l	mg/d			
26B. Di-N-Butyl Phthalate (84-74-2)			X	< 0.010	< 0.2						mg/l	mg/d			
27B. 2,4-Dinitrotoluene (121-14-2)			X	< 0.010	< 0.2						mg/l	mg/d			
28B. 2,6-Dinitrotoluene (606-20-2)			X	< 0.010	< 0.2						mg/l	mg/d			
29B. Di-N-Octyl Phthalate (117-84-0)			X	< 0.010	< 0.2						mg/l	mg/d			
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)			X	< 0.010	< 0.2						mg/l	mg/d			
31B. Fluoranthene (206-44-0)			X	< 0.010	< 0.2						mg/l	mg/d			
32B. Fluorane (86-73-7)			X	< 0.010	< 0.2						mg/l	mg/d			
33B. Hexachlorobenzene (118-74-1)			X	< 0.010	< 0.2						mg/l	mg/d			
34B. Hexachlorobutadiene (87-68-3)			X	< 0.010	< 0.2						mg/l	mg/d			
35B. Hexachlorocyclopentadiene (77-47-4)			X	< 0.010	< 0.2						mg/l	mg/d			
36B. Hexachloroethane (67-72-1)			X	< 0.010	< 0.2						mg/l	mg/d			
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X	< 0.010	< 0.2						mg/l	mg/d			
38B. Isophorone (78-59-1)			X	< 0.010	< 0.2						mg/l	mg/d			
39B. Naphthalene (91-20-3)			X	< 0.010	< 0.2						mg/l	mg/d			
40B. Nitrobenzene (98-95-3)			X	< 0.010	< 0.2						mg/l	mg/d			
41B. N-Nitrosodimethylamine (62-75-9)			X	< 0.010	< 0.2						mg/l	mg/d			
42B. N-Nitrosodi-N-Propylamine (621-64-7)			X	< 0.010	< 0.2						mg/l	mg/d			

1. POLLUTANT AND GAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TEST-ING RE-QUIR-ED	B. BE-LIEVED PRE-SENT	C. BE-LIEVED AB-SENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANAL-YSES	a. CONCENT-RATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL-YSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitro-sodiphenylamine (86-30-6)			X	< 0.010	< 0.2						mg/l	mg/d			
44B. Phenanthrene (85-01-8)			X	< 0.010	< 0.2						mg/l	mg/d			
45B. Pyrene (129-00-0)			X	< 0.010	< 0.2						mg/l	mg/d			
46B. 1,2,4-Trichlorobenzene (120-82-1)			X	< 0.010	< 0.2						mg/l	mg/d			
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)			X	< 0.06	< 1.1						ug/l	ug/d			
2P. α-BHC (319-84-6)			X	< 0.02	< 0.4						ug/l	ug/d			
3P. β-BHC (319-85-7)			X	< 0.1	< 1.9						ug/l	ug/d			
4P. γ-BHC (58-89-9)			X	< 0.03	< 0.6						ug/l	ug/d			
5P. δ-BHC (319-86-8)			X	< 0.12	< 2.3						ug/l	ug/d			
6P. Chlordane (57-74-9)			X	< 0.25	< 4.7						ug/l	ug/d			
7P. 4,4'-DDT (50-29-3)			X	< 0.06	< 1.1						ug/l	ug/d			
8P. 4,4'-DDE (72-65-9)			X	< 0.08	< 1.5						ug/l	ug/d			
9P. 4,4'-DDD (72-54-8)			X	< 0.08	< 1.5						ug/l	ug/d			
10P. Dieldrin (60-57-1)			X	< 0.08	< 1.5						ug/l	ug/d			
11P. α-Endosulfan (115-29-7)			X	< 0.05	< 0.9						ug/l	ug/d			
12P. β-Endosulfan (115-29-7)			X	< 0.08	< 1.5						ug/l	ug/d			
13P. Endosulfan Sulfate (1031-07-8)			X	< 0.09	< 1.7						ug/l	ug/d			
14P. Endrin (72-20-8)			X	< 0.06	< 1.1						ug/l	ug/d			
16P. Endrin Aldehyde (7421-93-4)			X	< 0.62	< 11.7						ug/l	ug/d			
16P. Heptachlor (76-44-8)			X	< 0.3	< 5.7						ug/l	ug/d			

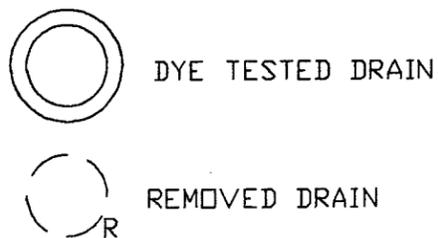
1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		D. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (102457-3)			X	< 0.04	< 0.8							ug/l	ug/d		
18P. PCB-1242 (53469-21-9)			X	< 0.68	< 12.9							ug/l	ug/d		
19P. PCB-1254 (11097-69-1)			X	< 0.68	< 12.9							ug/l	ug/d		
20P. PCB-1221 (11104-28-2)			X	N.D.											
21P. PCB-1232 (11141-16-5)			X	N.D.											
22P. PCB-1248 (12672-29-6)			X	N.D.											
23P. PCB-1260 (11098-82-5)			X	< 0.68	< 12.9							ug/l	ug/d		
24P. PCB-1016 (12674-11-2)			X	N.D.											
25P. Toxaphene (8001-35-2)			X	< 2.5	< 47.3							ug/l	ug/d		

DYE STUDY INFORMATION

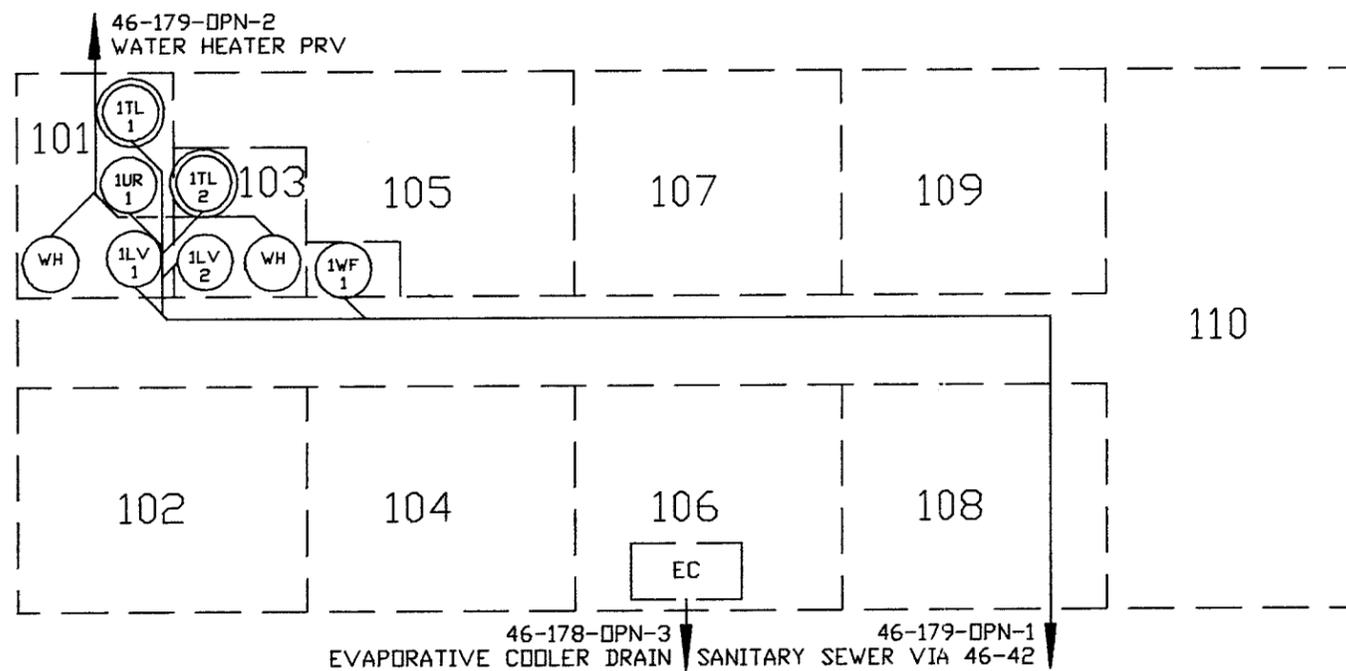
BUILDING NUMBER	DRAIN NUMBER	DID DYE REACH EXPECTED DESTINATION?	COMMENTS
46-42	1TL1	YES	46-42-OPN-1 SANITARY
46-42	2SD1	YES	46-42-OPN-1 SANITARY
46-42	2TL1	YES	46-42-OPN-1 SANITARY
46-42	2TL3	YES	46-42-OPN-1 SANITARY
46-42	1FD2	YES	46-42-OPN-2
46-42	1FD5	NO	VERIFY OUTFALL
46-42	1SD9	YES	46-42-OPN-2
46-178	1TL1	YES	46-178-OPN-1 SANITARY
46-179	1TL1	YES	46-179-OPN-1 SANITARY
46-179	1TL2	YES	46-179-OPN-1 SANITARY
46-200	1SD1	YES	46-200-OPN-1 SANITARY
46-200	1SD5	YES	46-200-OPN-1 SANITARY
46-200	1TL1	YES	46-200-OPN-1 SANITARY
46-202	1SD2	YES	46-202-OPN-1 SANITARY
46-202	1TL1	YES	46-202-OPN-1 SANITARY
46-202	1TL2	YES	46-202-OPN-1 SANITARY
46-234	1SD2	YES	46-234-OPN-1 SANITARY
46-234	1TL1	YES	46-234-OPN-1 SANITARY
46-234	1TL2	YES	46-234-OPN-1 SANITARY
46-250	1SD5	YES	46-250-OPN-1 SANITARY
46-250	1SD8	YES	46-250-OPN-1 SANITARY
46-250	1SD19	YES	46-250-OPN-1 SANITARY
46-250	1TL1	YES	46-250-OPN-1 SANITARY
46-250	1TL2	YES	46-250-OPN-1 SANITARY
46-326	2EW7	YES	46-326-OPN-1 SANITARY
46-326	2SD11	YES	46-326-OPN-1 SANITARY
46-326	2SD26	YES	46-326-OPN-1 SANITARY



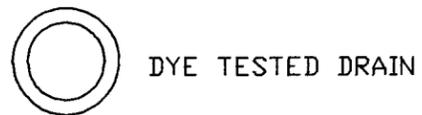
SYMBOL LEGEND	
SD	SINK DRAIN
TL	TOILET
LV	LAVATORY
UR	URINAL
WH	WATER HEATER
PRV	PRESSURE RELIEF VALVE
EC	EVAPORATIVE COOLER



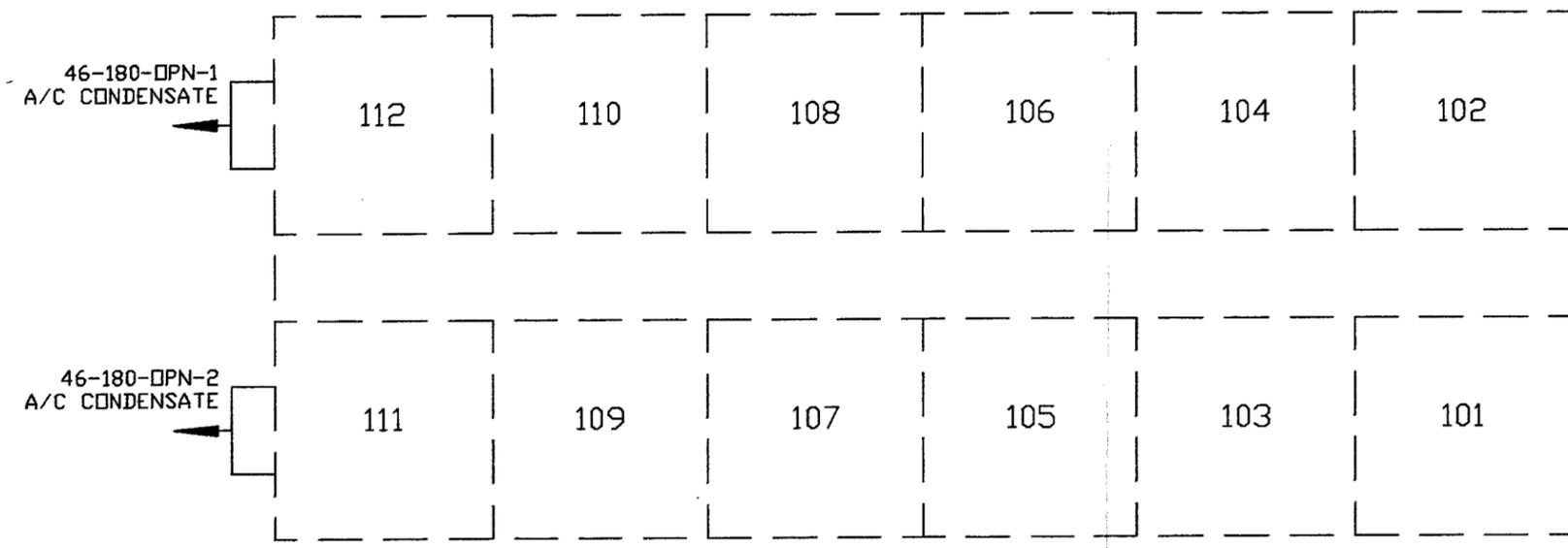
SANTA FE ENGINEERING, LTD.			
TA-46-178 DRAIN SCHEMATIC	DRAWN	DRS	
	DESIGN	DRS	
	CHECKED	PEB	
	DATE	4/1/93	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-70	FIGURE 3	



SYMBOL LEGEND	
EC	EVAPORATIVE COOLER
TL	TOILET
LV	LAVATORY
UR	URINAL
WH	WATER HEATER
WF	WATER FOUNTAIN

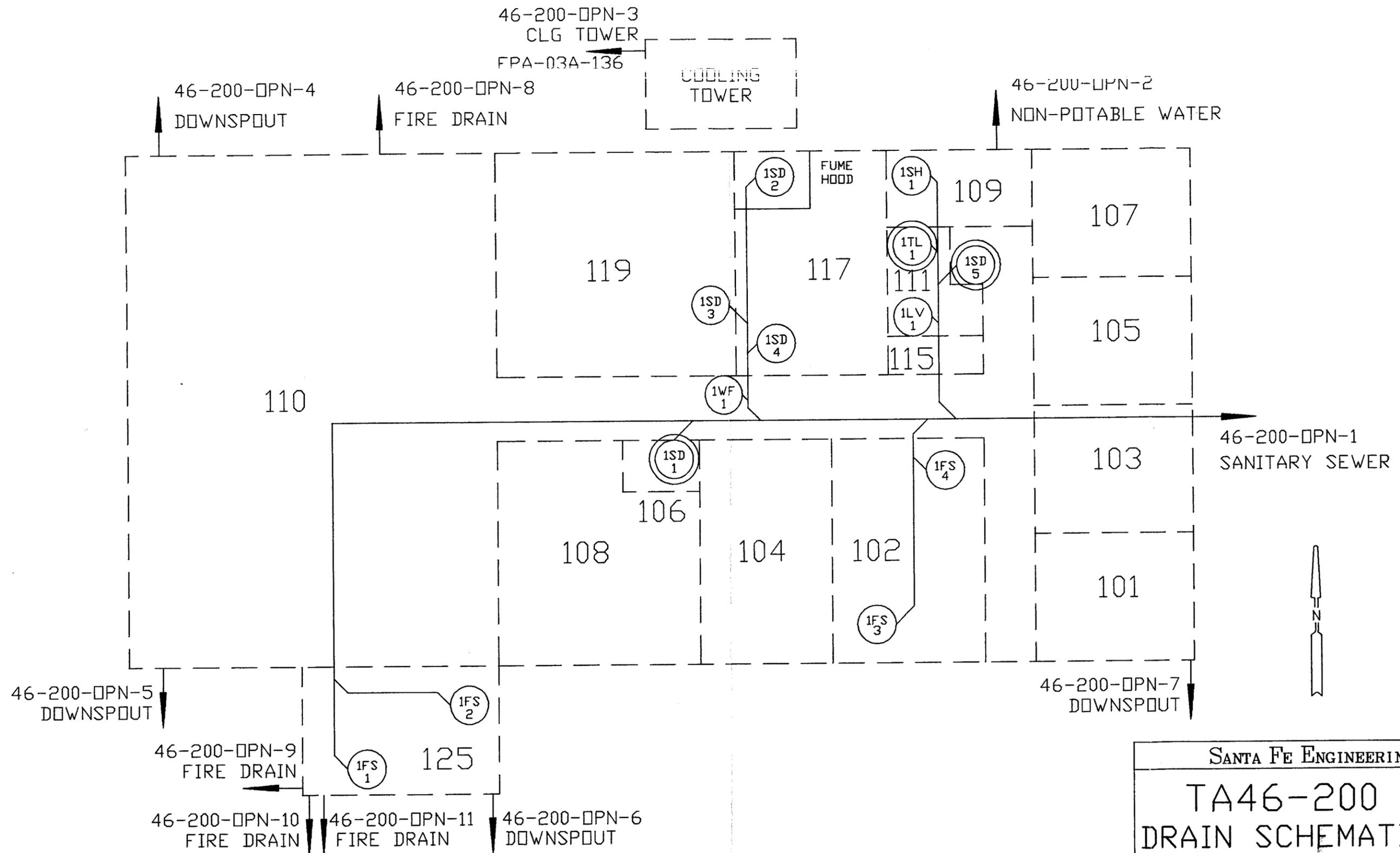


SANTA FE ENGINEERING, LTD.			
TA-46-179 DRAIN SCHEMATIC	DRAWN	DRS	
	DESIGN	DRS	
	CHECKED	PEB	
	DATE	3/24/93	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-70	FIGURE 4	

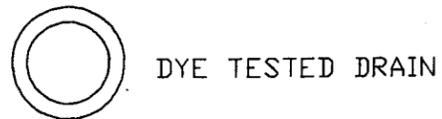


SYMBOL LEGEND	
A/C	AIR CONDITIONING

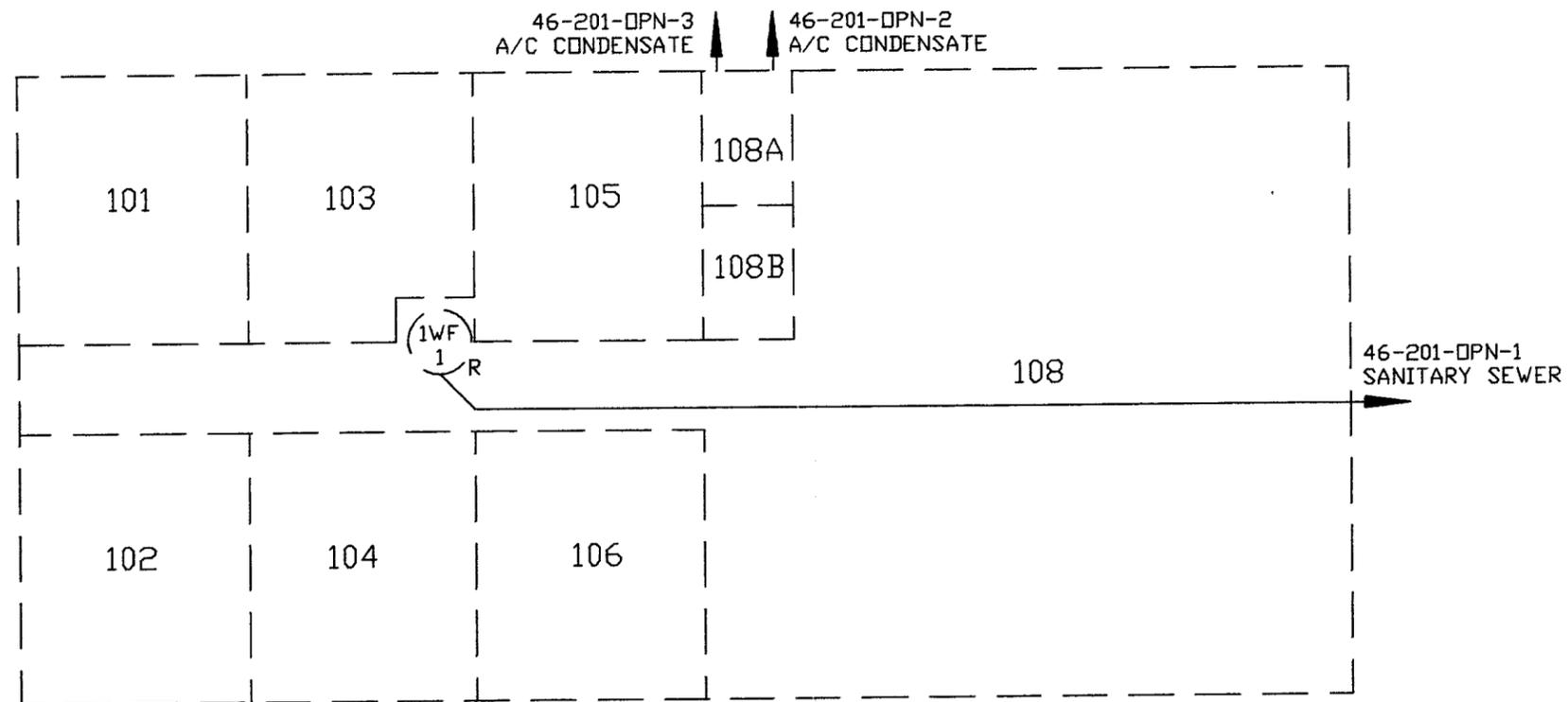
SANTA FE ENGINEERING, LTD.			
TA-46-180 DRAIN SCHEMATIC	DRAWN	DRS	
	DESIGN	DRS	
	CHECKED	PEB	
	DATE	3/24/93	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-70	FIGURE 5	



SYMBOL LEGEND	
FS	FLOOR SINK
SD	SINK DRAIN
TL	TOILET
LV	LAVATORY
SH	SHOWER
WF	WATER FOUNTAIN



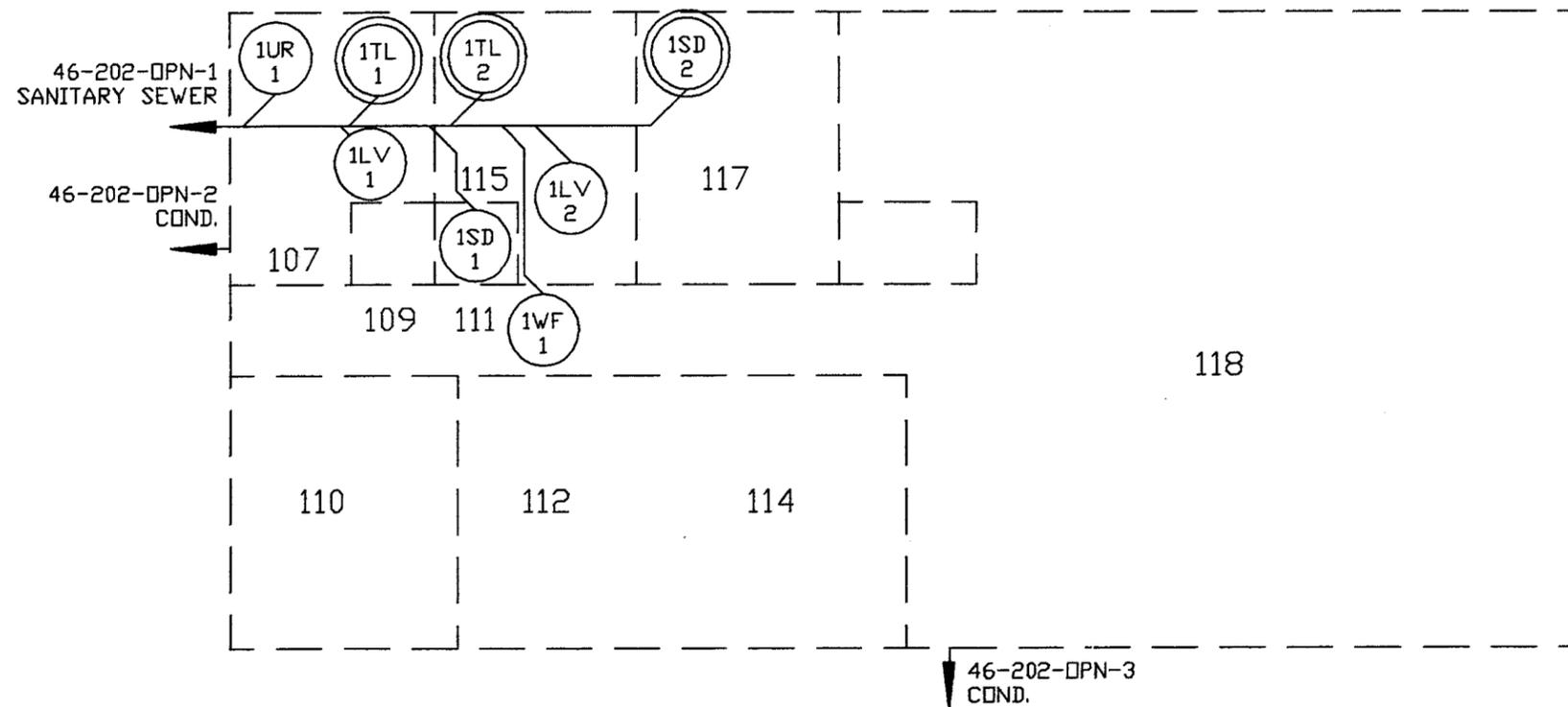
SANTA FE ENGINEERING, LTD.			
TA46-200 DRAIN SCHEMATIC		DRAWN	DRS
		DESIGN	DRS
		CHECKED	PEB
		DATE	4/1/93
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP	11056-70	FIGURE 6	



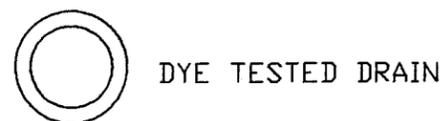
SYMBOL LEGEND	
A/C	AIR CONDITIONING
WF	WATER FOUNTAIN

 REMOVED DRAIN

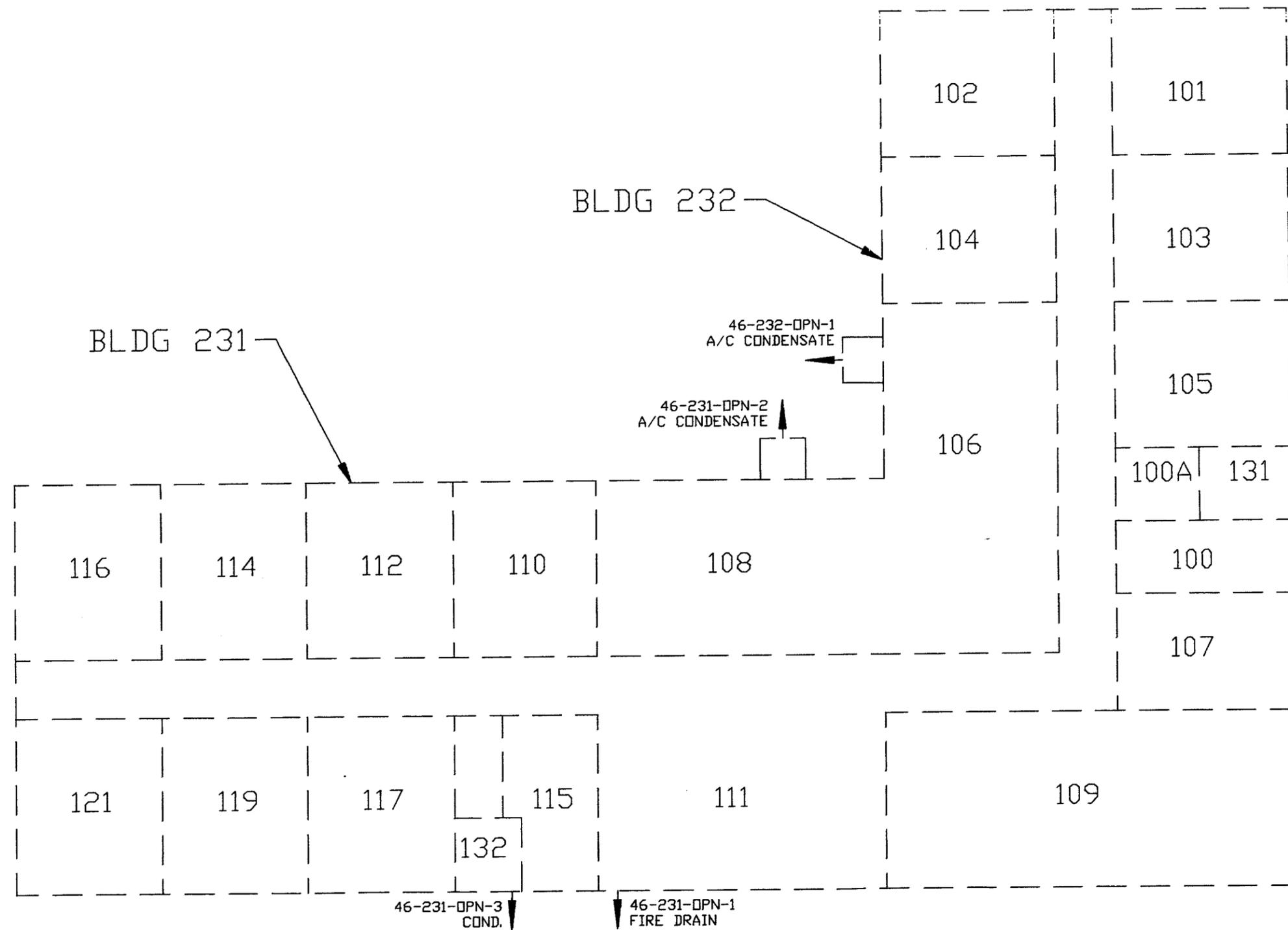
SANTA FE ENGINEERING, LTD.			
TA-46-201 DRAIN SCHEMATIC	DRAWN	DRS	
	DESIGN	DRS	
	CHECKED	PEB	
	DATE	4/1/93	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545			SHEET OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP	11056-70	FIGURE 7	



SYMBOL LEGEND	
SD	SINK DRAIN
TL	TOILET
LV	LAVATORY
UR	URINAL
WF	WATER FOUNTAIN

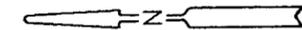
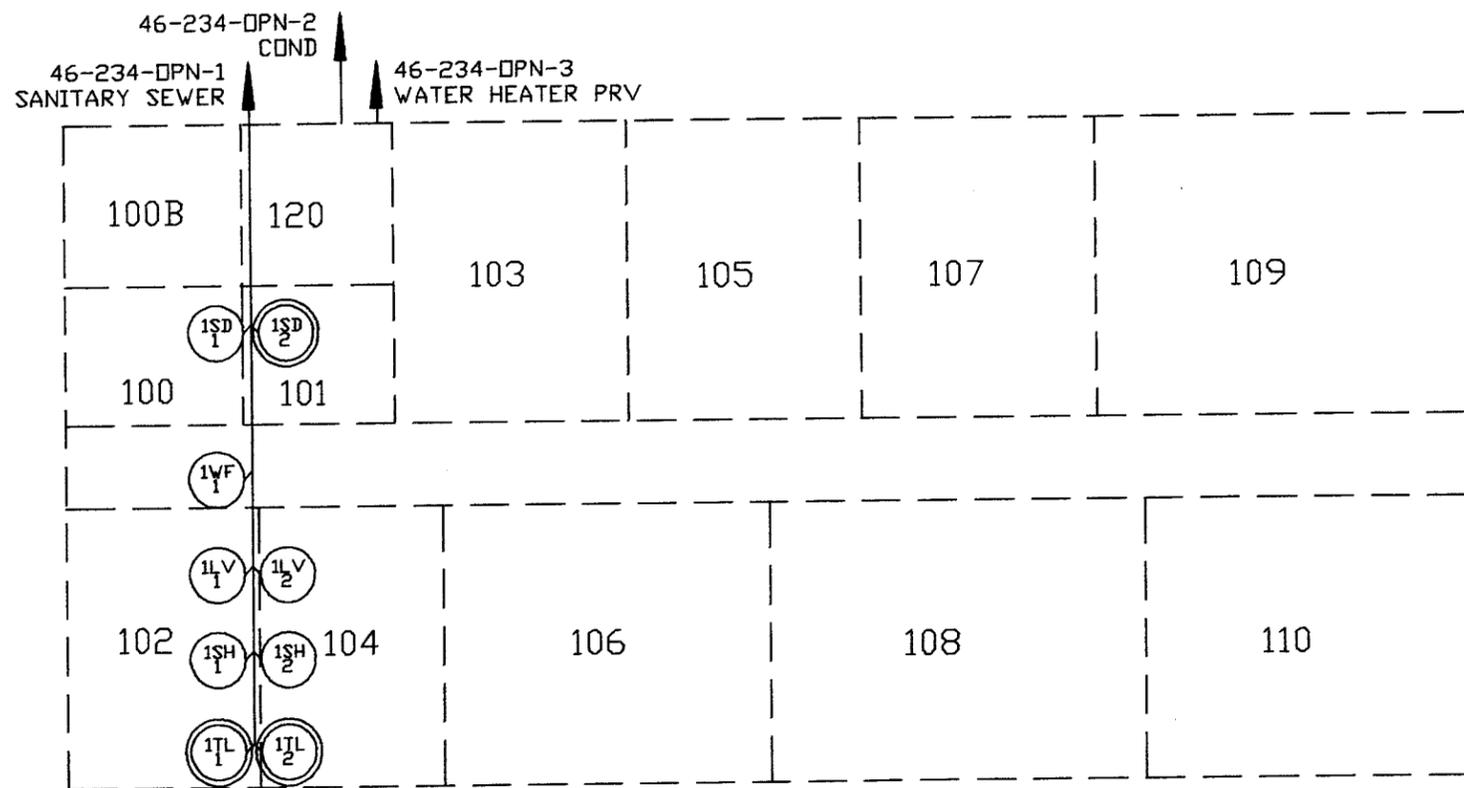


SANTA FE ENGINEERING, LTD.			
TA-46-202 DRAIN SCHEMATIC	DRAWN	DRS	
	DESIGN	DRS	
	CHECKED	PEB	
	DATE	4/1/93	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-70	FIGURE 8	

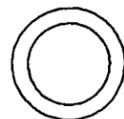


SYMBOL LEGEND	
A/C	AIR CONDITIONING

SANTA FE ENGINEERING, LTD.			
TA-46-231 & TA-46-232 DRAIN SCHEMATIC	DRAWN	DRS	
	DESIGN	DRS	
	CHECKED	PEB	
	DATE	3/25/93	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	SHEET OF
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-70	FIGURE 9	

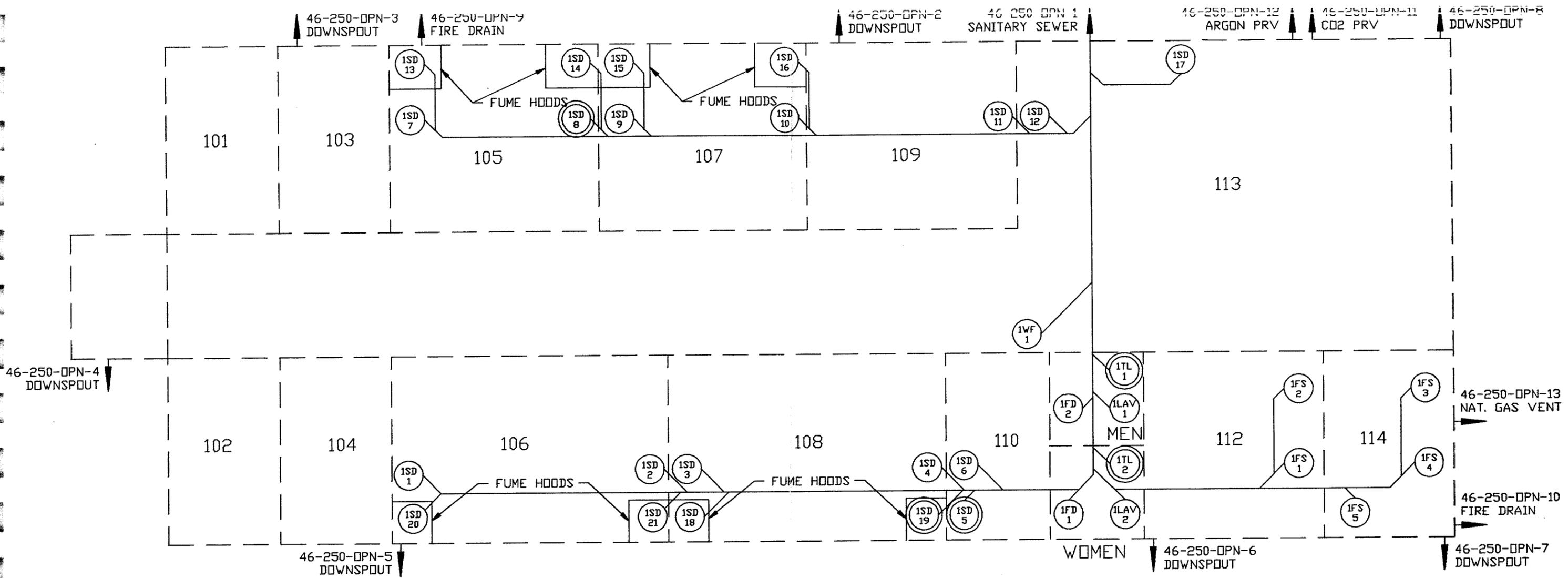


SYMBOL LEGEND	
SD	SINK DRAIN
TL	TOILET
LV	LAVATORY
PRV	PRESSURE RELIEF VALVE
WF	WATER FOUNTAIN

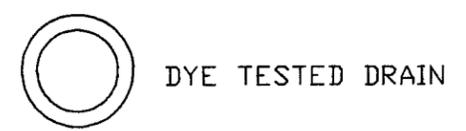


DYE TESTED DRAIN

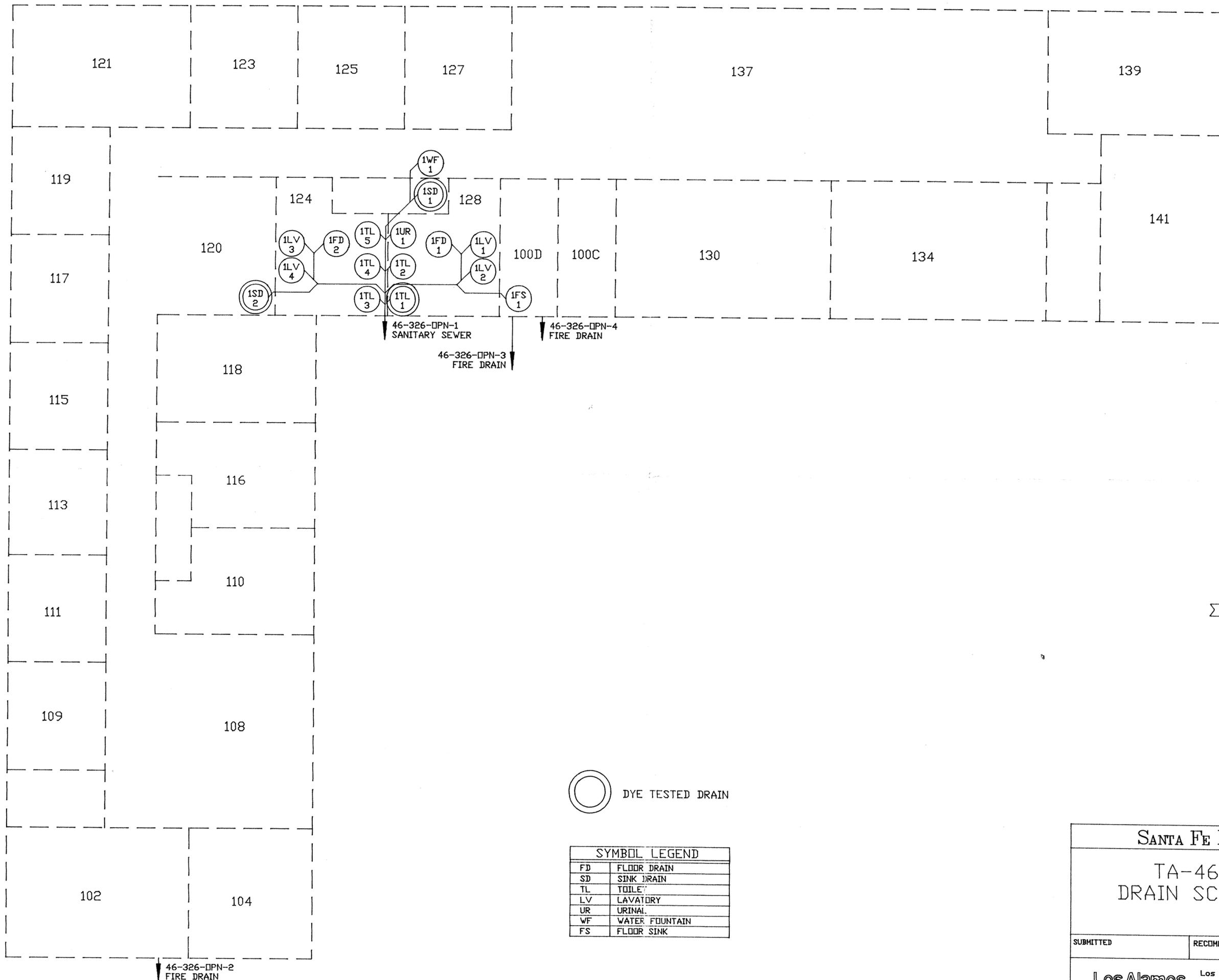
SANTA FE ENGINEERING, LTD.			
TA-46-234 DRAIN SCHEMATIC	DRAWN	DRS	
	DESIGN	DRS	
	CHECKED	PEB	
	RELEASED		
	DATE	4/1/93	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	SHEET
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP	1056-70	FIGURE 10	DF
EM-8			



SYMBOL LEGEND	
FD	FLOOR DRAIN
SD	SINK DRAIN
TL	TOILET
LV	LAVATORY
WF	WATER FOUNTAIN
FS	FLOOR SINK



SANTA FE ENGINEERING, LTD.			
TA-46-250 DRAIN SCHEMATIC	DRAWN	DRS	
	DESIGN	DRS	
	CHECKED	PEB	
	RELEASED		
	DATE	4/1/93	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP	11056-70	FIGURE 11	

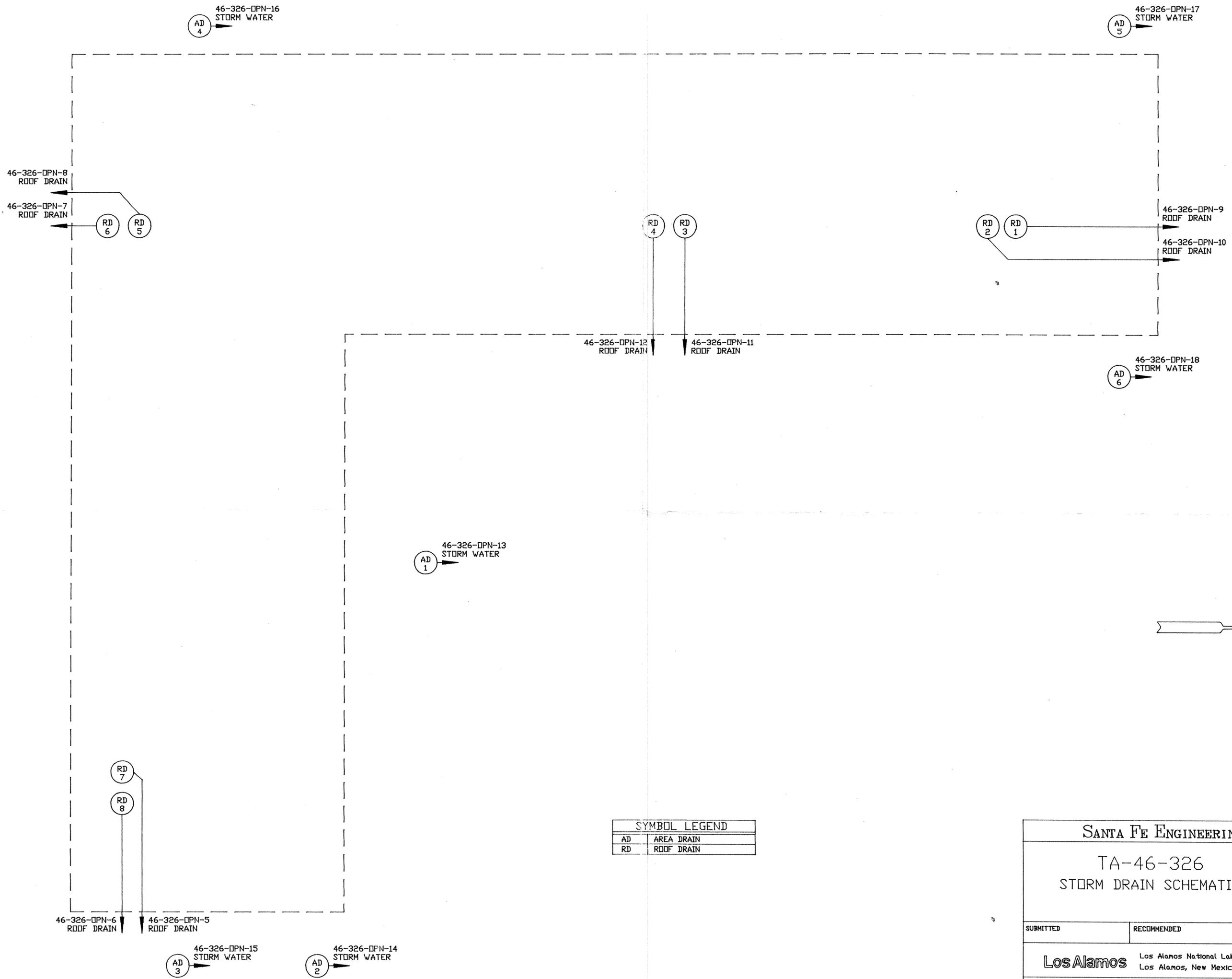



 DYE TESTED DRAIN

SYMBOL LEGEND	
FD	FLOOR DRAIN
SD	SINK DRAIN
TL	TOILET
LV	LAVATORY
UR	URINAL
WF	WATER FOUNTAIN
FS	FLOOR SINK

SANTA FE ENGINEERING, LTD.			
TA-46-326 DRAIN SCHEMATIC		DRAWN	DRS
		DESIGN	DRS
		CHECKED	P.E.B.
		DATE	4/1/93
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	SHEET OF
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-70	FIGURE 12	

15309-B



SYMBOL LEGEND	
AD	AREA DRAIN
RD	ROOF DRAIN

SANTA FE ENGINEERING, LTD.			
TA-46-326		DRAWN	DRS
STORM DRAIN SCHEMATIC		DESIGN	DRS
		CHECKED	P.E.B.
		DATE	3/25/93
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-70	FIGURE 13	

15309-C