

Asbestos Survey of the City of Alpena Wastewater Treatment Plant

Prepared for:

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INTRODUCTION

On February 16, 1999, Mr. Martin Lalick and Mr. Ron Partilla, Michigan accredited asbestos building inspectors, performed an asbestos survey of Alpena's Wastewater Treatment Plant (AWWTP). The purpose of this investigation was to locate, quantify, and sample suspect asbestos containing materials (ACM) prior to any demolition and renovation activities. After the inspection all samples were sent to RJ Lee Group, Inc. in Monroeville, Pennsylvania for analysis. RJ Lee Group, Inc. is a certified laboratory that participates in the NVLAP (National Voluntary Laboratory Accreditation Program). Polarizing Light Microscopy (PLM) was used to determine the presence of asbestos in a sample. A report is then provided informing whether the sample collected contains asbestos, if the sample does then the type of asbestos material and the amount in the sample is included. A copy of RJ Lee Group, Inc. qualifications (Appendix A), Mr. Lalick's and Mr. Partilla's Certifications (Appendix B) are included in this report, along with the laboratory sample results (Appendix C).

SURVEY AND SAMPLING METHODS

The survey at the AWWTP was performed in accordance with 40 CFR 763, using the following protocol:

- Assign location specific Function Areas (FA) numbers to the inspection area (Appendix D).
- Assign Homogenous Areas (HA) numbers to suspect asbestos containing materials by order of similar appearance, color, texture (Table 1).
- Determine if the sample is friable or non-friable. Friability is the ability to crush or pulverize under hand pressure.
- Categorize each material inspected. All materials fall into three categories: TSI - Thermal System Insulation (pipe insulation's or mud compounds); SM - Surfacing Material (plasters or sprayed on materials); MM - Miscellaneous Material (all other materials that do not fit in the above categories).
- Determine the condition of the materials, potential for disturbance, exposure to vibration and air erosion, and accessibility to the materials.
- Provide an approximate quantity of all ACM materials encountered in the survey.
- After visual inspections are completed, samples of each suspect asbestos containing building material (ACM) were collected under the following procedures: Thermal System Insulation requires a minimum of three bulk samples. The quantity of samples required for surfacing materials is determined by friability. Non-friable surfacing materials require a minimum of one sample for each homogeneous area. Friable surfacing material requires a minimum of three

samples for a Homogeneous Area (HA) <1,000 square feet, a minimum of five samples for a Homogeneous Area 1,000 to 5,000 square feet and a minimum of seven samples for a Homogeneous Area >5,000 square feet. Miscellaneous Materials requires that a minimum of one sample per homogeneous area is to be collected for laboratory analysis.

All proper chain of custody procedures was followed during the shipment of samples to the laboratory for analysis.

AWWTP SITE DESCRIPTION AND FINDINGS

The AWWTP survey included the inspection of the administrative building and basement, laboratory, basement corridors, basement boiler room, the main filter/storage areas, the maintenance/garage area, the methane storage building, service garage, feed/conveyor building and the pump/electric building. The surveyed areas were separated into 25 function area (FA) locations (Figures 12 through 23), where 18 homogeneous materials were identified. A detailed description of the homogeneous materials found, quantities of the materials, and the asbestos type and content are provided in Table 1. Sample results of each suspected ACM, and sample locations are provided in Table 2.

Administrative Building and Basement/Laboratory

The administrative building/laboratory was constructed with structural steel and concrete. Twelve homogeneous materials were located in these areas. The homogeneous materials that contain greater than 1% asbestos in these areas were: aircell pipe insulation (HA-1), mud compound insulation on aircell lines (HA-2), mud compound insulation on fiberglass lines (HA-3), 12" x 12" floor tile (HA-6), 9" x 9" floor tile (HA-7), 9" x 9" floor tile (HA-8) and 12" x 12" floor tile (HA-9). The floor tile under the carpet (HA-4), fire doors (HA-5), transite lab counter tops (HA-11), the transite panels in the fume hood (HA-12) and the built up roof over the administrative building (HA-15) were items assumed to contain asbestos due to inability to take samples and to the lack of construction data.

Basement Corridors/Basement Boiler Room

The basement corridors/basement boiler room was constructed with concrete wall and ceilings. Four homogeneous materials were located in these areas. The homogeneous materials that contain greater than 1% asbestos in these areas were: aircell pipe insulation (HA-1), mud compound insulation on aircell lines (HA-2), mud compound insulation on fiberglass lines (HA-3) and tank covering (HA-17).

Main Filter/Storage Area

The main filter/storage areas were constructed with structural steel and block walls. Three homogeneous materials were located in these areas. The homogeneous materials that contain greater than 1% asbestos in these areas were: mud compound insulation on fiberglass lines (HA-3) and block window caulk (HA-13). The fire door (HA-5) and the built up roof (HA-15) were assumed to contain asbestos due to the inability to sample and the lack of construction data.

Maintenance/Garage Area

The maintenance garage area was constructed with structural steel and block walls. Five homogeneous materials were located in this area. The homogeneous materials that contain greater than 1% asbestos in this area are: aircell pipe insulation (HA-1), mud compound insulation on aircell lines (HA-2) and mud compound insulation on fiberglass lines (HA-3). The fire doors (HA-5) and the transite flute pipe (HA-14) and the built up roof (HA-15) were assumed to contain asbestos due to the inability to sample and the lack of construction data.

Methane Storage Area

The methane storage area was constructed with structural steel and block walls. Two homogeneous materials were located in this area. The homogeneous material that contains greater than 1% asbestos in this area is: mud compound insulation on fiberglass lines (HA-3). The fire doors (HA-5) are assumed to contain asbestos due to the inability to sample and the lack of construction data.

Service Garage Area

The service garage area was constructed with structural steel and block walls. Two homogeneous materials were located in this area. The homogeneous material that contains greater than 1% asbestos in this area is mud compound insulation on fiberglass lines (HA-3). The fire doors (HA-5) are assumed to contain asbestos due to the inability to sample and the lack of construction data.

Feed/Conveyor Building

The feed/conveyor building was constructed with structural steel and block walls. Two homogeneous materials were located in this area. The homogeneous material that contains greater than 1% asbestos in this area is: mud compound insulation on fiberglass lines (HA-3). The fire doors (HA-5) are assumed to contain asbestos due to the inability to sample and the lack of construction data.

Pump/Electrical Building

The pump/electrical building was constructed with structural steel and block walls. One homogeneous material was located in this area. The fire doors (HA-5) are assumed to contain asbestos due to the inability to sample and the lack of construction data.

RECOMMENDATIONS

Earth Tech recommends the following activities in response to the known asbestos containing materials:

1. Abatement of ACM at the AWWTP.

- FOR SCHEDULES
- 1.1 Repair significantly damaged asbestos containing pipe, and mud compound insulation in the basement below the office (FA-11), and in basement corridor (FA-12), in accordance with 40 CFR Part 763.
 - 1.2 Remove and properly dispose of a significantly damaged fire door in (FA-18) in accordance with 40 CFR Part 763.
 - 1.3 Prior to any demolition or renovation activities asbestos materials present in these areas will be abated in accordance with 40 CFR Part 61, Subpart M.
 - 1.4 When abatement is required hire a Michigan licensed asbestos abatement contractor to perform the removal. This is required in accordance with Michigan Public Act 135 of 1986.

2. Management of ACM at the AWWTP.

- 2.1. Inform all employees on the presence and location of all ACM in accordance with *Communication of hazards to employees* in 29 CFR 1910.1001(j) and 29 CFR 1910.1200.
- 2.2. Have an Operation & Maintenance Plan developed in accordance with 40 CFR Part 763.91 *the Asbestos Model Accreditation Plan*, which will include the following tasks:
 - 2.2.1. Notification and labeling all asbestos containing materials
 - 2.2.2. Training for staff performing maintenance activities on ACM materials.
 - 2.2.3. Employee protection and medical surveillance programs.
 - 2.2.4. Specialized cleaning procedures.
 - 2.2.5. Maintenance/renovation permit system.
 - 2.2.6. Special work practices for maintenance activities
 - 2.2.7. Special work practices for renovation

2.2.8. Emergency response procedures

2.2.9. Periodic ACM surveillance

2.2.10. Record Keeping

CONCLUSION

The AWWTP contains a total of nine homogeneous materials known to contain asbestos and six materials assumed. If ACM is located in areas where demolition or renovation is scheduled, prior to the activities abatement of the ACM will be required. Also, when scheduling abatement activities, plan on waiting a minimum of ten working days prior to the start of the abatement. This will allow time required for the submittal of a written notification to the United States Environmental Protection Agency (U.S. EPA). Please remember that the submittal of this notification is required for demolition and renovation activities even when ACM is not present in work areas. Usually, when hiring a contractor to perform abatement, demolition, or renovation, the contractor, as a service, will submit the notification. Check with the contractor to make sure that this will be performed before starting the work. In the future, if you require any assistance with asbestos abatement consulting, require assistance with abatement proposal review, contractor selection, abatement over-site, air monitoring, or with development of an operations and maintenance manual we are capable and willing to provide you with these services.

TABLES

TABLE 1

HOMOGENEOUS AREA REPORTPROJECT NAME: ALPENA WASTEWATER TREATMENT PLANTPROJECT NUMBER: 33475.02

HOMOGENEOUS NAME	HA#	F/NF	K/A/ND	Class	Type of Asbestos	Percent	Quantity
AIRCELL PIPE INSULATION	1	F	K	TSI	Chrysotile	8%-40%	1040 LF
MUD COMPOUND INSULATION ON AIRCELL LINES	2	F	K	TSI	Chrysotile	19%-24%	280 JTS
MUD COMPOUND INSULATION ON FIBERGLASS LINES	3	F	K	TSI	Chrysotile	2%-48%	142 JTS
FLOOR TILE UNDER CARPET	4	NF	A	MM	-	-	240 SF
FIRE DOORS	5	NF	A	MM	-	-	25 DOORS
12" X 12" FLOOR TILE, YELLOW W/BROWN FLECKS	6	NF	K	MM	Chrysotile	2%	16 SF
9" X 9" FLOOR TILE, RED W/BROWN FLECKS	7	NF	K	MM	Chrysotile	10%	2 SF
9" X 9" FLOOR TILE, BEIGE W/BROWN FLECKS	8	NF	K	MM	Chrysotile	3%	8 SF
12" X 12" FLOOR TILE, WHITE W/BROWN FLECKS	9	NF	K	MM	Chrysotile	2%	504 SF
2' X 2' CEILING TILE, WHITE W/GROOVES AND PINHOLES	10	F	ND	MM	-	-	-
TRANSITE COUNTER TOPS	11	NF	A	MM	-	-	144 SF
TRANSITE PANELS IN FUME HOOD	12	NF	A	MM	-	-	48 SF
BLOCK WINDOW CAULK	13	NF	K	MM	Chrysotile	3%	54 SF
TRANSITE FLUTE PIPE	14	NF	A	MM	-	-	10 LF

LEGEND

F - FRIABLE
 NF - NON FRIABLE
 K - KNOWN
 A - ASSUME
 ND - NON-DETECTED (<1% Asbestos Content)
 JTS - JOINTS

TSI - THERMAL SYSTEM INSULATION
 SM - SURFACING MATERIAL
 MM - MISCELLANEOUS MATERIAL
 SF - SQUARE FEET
 LF - LINEAL FOOT
 MCI - MUD COMPOUND INSULATION

TABLE 2

ASBESTOS SAMPLE REPORTPROJECT NAME: ALPENA WASTE WATER TREATMENT PLANTPROJECT NUMBER: 33457.02

SAMPLE NAME & LOCATION	SA#	HA#	F/NF	K/A/ND	Class	Type of Asbestos	Percent
AIRCELL PIPE INSULATION FA-1	FA-1	HA-101	1	F	K	TSI	Chrysotile 36%
AIRCELL PIPE INSULATION FA-1	FA-1	HA-102	1	F	K	TSI	Chrysotile 8%
AIRCELL PIPE INSULATION FA-2	FA-2	HA-103	1	F	K	TSI	Chrysotile 40%
AIRCELL PIPE INSULATION FA-2	FA-2	HA-104	1	F	K	TSI	Chrysotile 40%
AIRCELL PIPE INSULATION FA-3	FA-3	HA-105	1	F	K	TSI	Chrysotile 10%
AIRCELL PIPE INSULATION FA-3	FA-3	HA-106	1	F	K	TSI	Chrysotile 38%
AIRCELL PIPE INSULATION FA-3	FA-3	HA-107	1	F	K	TSI	Chrysotile 21%
MUD COMPOUND INSLUATION ON AIRCELL LINES FA-1	FA-1	HA-201	2	F	K	TSI	Chrysotile 24%
MUD COMPOUND INSLUATION ON AIRCELL LINES FA-1	FA-1	HA-202	2	F	K	TSI	Chrysotile 24%
MUD COMPOUND INSLUATION ON AIRCELL LINES FA-2	FA-2	HA-203	2	F	K	TSI	Chrysotile 19%
MUD COMPOUND INSLUATION ON AIRCELL LINES FA-2	FA-2	HA-204	2	F	K	TSI	Chrysotile 24%
MUD COMPOUND INSLUATION ON AIRCELL LINES FA-3	FA-3	HA-205	2	F	K	TSI	Chrysotile 19%
MUD COMPOUND INSLUATION ON AIRCELL LINES FA-3	FA-3	HA-206	2	F	K	TSI	Chrysotile 24%
MUD COMPOUND INSLUATION ON AIRCELL LINES FA-3	FA-3	HA-207	2	F	K	TSI	Chrysotile 19%
MUD COMPOUND INSULATION ON FIBERGLASS LINES FA-1	FA-1	HA-301	3	F	K	TSI	Chrysotile 19%
MUD COMPOUND INSULATION ON FIBERGLASS LINES FA-3	FA-3	HA-302	3	F	K	TSI	Chrysotile 48%

LEGEND

F - FRIABLE
 NF - NON FRIABLE
 K - KNOWN
 A - ASSUME
 ND - NON-DETECTED (<1% Asbestos Content)

TSI - THERMAL SYSTEM INSULATION
 SM - SURFACING MATERIAL
 MM - MISCELLANEOUS MATERIAL
 SF - SQUARE FEET
 LF - LINEAL FOOT

TABLE 2 (Continued)

ASBESTOS SAMPLE REPORT

PROJECT NAME: ALPENA WASTE WATER TREATMENT PLANT

PROJECT NUMBER: 33457.02

SAMPLE NAME & LOCATION	SA#	HA#	F/NF	K/A/ND	Class	Type of Asbestos	Percent
MUD COMPOUND INSULATION ON FIBERGLASS LINES FA-3	HA-303	3	F	K	TSI	Chrysotile	10%
MUD COMPOUND INSULATION ON FIBERGLASS LINES FA-4	HA-304	3	F	K	TSI	Chrysotile	2%
MUD COMPOUND INSULATION ON FIBERGLASS LINES FA-15	HA-305	3	F	K	TSI	Chrysotile	19%
MUD COMPOUND INSULATION ON FIBERGLASS LINES FA-18	HA-306	3	F	ND	TSI	-	-
12" X 12" FLOOR TILE, YELLOW W/BROWN FLECKS FA-6	HA-601	6	NF	K	MM	Chrysotile	2%
9" X 9" FLOOR TILE, RED W/BROWN FLECKS FA-6	HA-701	7	NF	K	MM	Chrysotile	10%
9" X 9" FLOOR TILE, BEIGE W/BROWN FLECKS FA-6	HA-801	8	NF	K	MM	Chrysotile	3%
12" X 12" FLOOR TILE, WHITE W/BROWN FLECKS FA-8	HA-901	9	NF	K	MM	Chrysotile	2%
2' X 2' CEILING TILE, WHITE W/GROOVES AND PINHOLES FA-8	HA-1001	10	F	ND	MM	-	-
BLOCK WINDOW CAULK FA-9	HA-1301	13	NF	K	MM	Chrysotile	3%
EXTERIOR PIPE COVERING	HA-1601	16	NF	ND	SM	-	-
TANK COVERING FA-3	HA-1701	17	F	K	TSI	Chrysotile	21%
TANK COVERING FA-3	HA-1702	17	F	K	TSI	Chrysotile	15%
TANK COVERING FA-3	HA-1703	17	F	K	TSI	Chrysotile	30%
FOAM TANK COVERING	HA-1801	18	NF	ND	SM	-	-

LEGEND

- | | |
|--|---------------------------------|
| F - FRIABLE | TSI - THERMAL SYSTEM INSULATION |
| NF - NON FRIABLE | SM - SURFACING MATERIAL |
| K - KNOWN | MM - MISCELLANEOUS MATERIAL |
| A - ASSUME | SF - SQUARE FEET |
| ND - NON-DETECTED (<1% Asbestos Content) | LF - LINEAL FOOT |



TECH

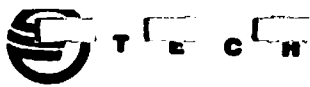
ASBESTOS INSPECTION FORMProject Name: ALPENA WASTE WATER TREATMENT PLANTProject Number: 33475.02Date: 2/16/99

Function Area No.	Homogeneous Area No.	Friable/ Non Friable	Material Type	Percent Damage	General/Local Damage	Potential For Disturbance	Vibration	Air Emission	Overall	Accessibility	Quantity	Usage	Comments
1	1	✓ F N	✓ TSI SM MM	✓ N D S	✓ L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	300	LF	ARACELL - PIPE INSULATION ON RED + BLUE LINES
1	2	✓ F N	✓ TSI SM MM	✓ N D S	✓ L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	106	JTS	MCI - ON ARACELL LINES
1	3	✓ F N	✓ TSI SM MM	✓ N D S	✓ L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	20	JTS	MCI - ON FIBERGLASS LINES
2	1	✓ F N	✓ TSI SM MM	✓ N D S	✓ L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	220	LF	ON RED + GREEN LINES.
2	2	✓ F N	✓ TSI SM MM	✓ N D S	✓ L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	40	JTS	
2	3	✓ F N	✓ TSI SM MM	✓ N D S	✓ L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	4	JTS	
3	1	✓ F N	✓ TSI SM MM	✓ N D S	✓ L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	390	LF	ON RED, BLUE, GREEN + GRAY LINES
3	2	✓ F N	✓ TSI SM MM	✓ N D S	✓ L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	110	JTS	
3	3	✓ F N	✓ TSI SM MM	✓ N D S	✓ L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	30	JTS	
4	1	✓ F N	✓ TSI SM MM	✓ N D S	✓ L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	90	LF	
4	2	✓ F N	✓ TSI SM MM	✓ N D S	✓ L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	320	JTS.	

LEGEND

TSI-THERMAL SYSTEM INSULATION
 SM-SURFACING MATERIAL
 MM-MISCELLANEOUS MATERIAL
 N-NO DAMAGE
 D-DAMAGE (1-10%)
 S-SIGNIFICANTLY DAMAGED (>10%)
 H-HIGH
 M-MEDIUM
 L-LOW

Inspector Name: MARTIN LALICK, RON ANTILLAAccreditation Number: 366-80-3325, 299-76-0968



ASBESTOS INSPECTION FORM

Project Name: ALPENA WASTE WATER TREATMENT PLANT

Project Number: 33475.02

Date: 2/16/99

Function Area No.	Homogeneous Area No.	Friable/ Non Friable	Material Type	Percent Damage	General/Local Damage	Potential For Disturbance	Vibration	Air Emission	Overall	Accessibility	Quantity	Units	Comments
4	3	✓ F N	✓ TSI SM MM	✓ N D S	✓ L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	26	JTS	
5	4	✓ F N	✓ TSI SM MM	✓ N D S	— L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	240	SF	FLOOR TILE UNDER CARPET
5	5	✓ F N	✓ TSI SM MM	✓ N D S	— L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	1	DR.	FIRE DOOR.
6	6	✓ F N	✓ TSI SM MM	✓ N D S	— L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	16	SF	12X12 FLOOR TILE YELLOW W/ BROWN FLECKS
6	7	✓ F N	✓ TSI SM MM	✓ N D S	— L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	2	SF	9X9 FLOOR TILE, RED W/ BROWN FLECKS
6	8	✓ F N	✓ TSI SM MM	✓ N D S	— L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	8	SF	9X9 FLOOR TILE, BEIGE W/ BROWN FLECKS
7	1	✓ F N	✓ TSI SM MM	✓ N D S	— L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	10	LF	
7	2	✓ F N	✓ TSI SM MM	✓ N D S	— L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	1	ST.	
7	5	✓ F N	✓ TSI SM MM	✓ N D S	— L O	✓ H M L	✓ H M L	✓ H M L	✓ H M L	✓ H M L	1	DR.	
8	5	— F N	— TSI SM MM	— N D S	— L O	— H M L	— H M L	— H M L	— H M L	— H M L	2	DRS.	
8	9	— F N	— TSI SM MM	— N D S	— L O	— H M L	— H M L	— H M L	— H M L	— H M L	504	SF	12 X 12 FLOOR TILE, WHITE W/ BROWN FLECKS

LEGEND

TSI-THERMAL SYSTEM INSULATION
 SM-SURFACING MATERIAL
 MM-MISCELLANEOUS MATERIAL
 N-NO DAMAGE
 D-DAMAGE (1-10%)
 S-SIGNIFICANTLY DAMAGED (>10%)
 H-HIGH
 M-MEDIUM
 L-LOW

Inspector Name: MARTIN LALICK, RON PARTILLA

Accreditation Number: 366-80-3325, 299-76-0968

ASBESTOS INSPECTION FORM

Project Name: ALPENA WASTE WATER TREATMENT PLANT

Project Number: 33475.02

Date: 2/16/99

Function Area No.	Homogeneous Area No.	Friable/ Non Friable	Material Type	Percent Damage	General/Local Damage	Potential For Disturbance	Vibration	Air Emission	Overall	Accessibility	Quantity	Units	Comments
8	10	✓ _F — _N	— TSI — SM ✓ MM	— _N — _D — _S	— _L — _L — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	440	SF	2x2 CEILING TILE, WHITE W/ GROUTS + PIN HOLES
8	11	✓ _F — _N	— TSI — SM ✓ MM	— _N — _D — _S	— _L — _L — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	144	SF	TRANSITE COUNTERTOPS
8	12	✓ _F — _N	— TSI — SM ✓ MM	— _N — _D — _S	— _L — _L — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	48	SF	TRANSITE PANELS IN FUME HOOD
9	3	✓ _F — _N	✓ TSI — SM — MM	— _N — _D — _S	— _L — _L — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	5	JTS.	
9	5	✓ _F — _N	— TSI — SM ✓ MM	— _N — _D — _S	— _L — _L — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	3	DAS	
9	13	✓ _F — _N	— TSI — SM ✓ MM	— _N — _D — _S	— _L — _L — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	54	SF	BLOCK WINDOW FRAME CAULK
10	3	✓ _F — _N	✓ TSI — SM — MM	— _N — _D — _S	— _L — _L — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	4	JTS.	
10	5	— _F — _N	— TSI — SM — MM	— _N — _D — _S	— _L — _L — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	3	DAS.	
11	1	✓ _F — _N	✓ TSI — SM — MM	— _N — _D — _S	— _L — _L — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	10	LF	
11	2	✓ _F — _N	✓ TSI — SM — MM	— _N — _D — _S	— _L — _L — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	1	JT	
11	5	— _F — _N	— TSI — SM ✓ MM	— _N — _D — _S	— _L — _L — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	— _H — _M — _L	2	DAS	

LEGEND

TSI-THERMAL SYSTEM INSULATION
 SM-SURFACING MATERIAL
 MM-MISCELLANEOUS MATERIAL
 N-NO DAMAGE
 D-DAMAGE (1-10%)
 S-SIGNIFICANTLY DAMAGED (>10%)
 H-HIGH
 M-MEDIUM
 L-LOW

Inspectors Name: MARTIN LALCK, RON PARTILLA

Accreditation Number: 366-80-3325, 299-76-0968



ASBESTOS INSPECTION FORM

Project Name: ALPONA WASTE WATER TREATMENT PLANT

Project Number: 33475.02

Date: 2/16/99

Function Area No.	Homogeneous Area No.	Friable/Non-Friable	Material Type	Percent Damaged	General/Local Damage	Potential For Disturbance	Vibration	Air Emission	Overall	Accessibility	Quantity	Units	Comments
11	3	✓ N	✓ TSI SM MM	✓ N D S	0 L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	1	JT	
12	1	✓ N	✓ TSI SM MM	✓ N D S	✓ L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	20	LF	
12	2	✓ N	✓ TSI SM MM	✓ N D S	✓ L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	2	JTS	
12	5	✓ N	✓ TSI SM MM	✓ N D S	0 L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	3	DAS	
12	14	✓ N	✓ TSI SM MM	✓ N D S	0 L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	10	LF	TRANSIRE PIPE ON 14" LINE
13	5	✓ N	✓ TSI SM MM	✓ N D S	0 L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	1	DR.	
14	3	✓ N	✓ TSI SM MM	✓ N D S	0 L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	6	JTS.	
14	5	✓ N	✓ TSI SM MM	✓ N D S	0 L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	1	DK.	
15	3	✓ N	✓ TSI SM MM	✓ N D S	0 L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	20	JTS.	
15	5	✓ N	✓ TSI SM MM	✓ N D S	0 L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	1	DR.	
16	0	✓ N	✓ TSI SM MM	✓ N D S	0 L	✓ N M L	✓ N M L	✓ N M L	✓ N M L	✓ N M L			NAD

LEGEND
 TSI-THERMAL SYSTEM INSULATION
 SM-SURFACING MATERIAL
 MM-MISCELLANEOUS MATERIAL
 N-NO DAMAGE
 D-DAMAGE (1-10%)
 S-SIGNIFICANTLY DAMAGED (>10%)
 H-HIGH
 M-MEDIUM
 L-LOW

Inspectors Name: MARTIN LAURET, RON PARTINIA

Accreditation Number: 36680-3525, 219-76-0968



EPA REGION 4

ASBESTOS INSPECTION FORM

Project Name: ALBANY WASTE WATER TREATMENT PLANT

Project Number: 33475.02

Date: 2/16/99

Function Area No.	Homogeneous Area No.	Friable/Non Friable	Material Type	Percent Damage	General/Local Damage	Potential For Disturbance	Vibration	Air Emission	Overall	Accessibility	Quantity	Units	Comments
17	0	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L			NAD
18	3	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input checked="" type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input checked="" type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input checked="" type="checkbox"/> 0 <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	22	STS	
18	5	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input checked="" type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input checked="" type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input checked="" type="checkbox"/> 0 <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	3	Des.	
19	3	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input checked="" type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input checked="" type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input checked="" type="checkbox"/> 0 <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	4	STS	
19	5	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input checked="" type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input checked="" type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input checked="" type="checkbox"/> 0 <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	1	DK.	
20	0	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L			NAD
21	5	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input checked="" type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input checked="" type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input checked="" type="checkbox"/> 0 <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	3	Des.	
22	15	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input checked="" type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input checked="" type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	200	SF	BUILT UP ROOF OVER OFFICE AREA
5. END OF FA-11	16	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input checked="" type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input checked="" type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input checked="" type="checkbox"/> 0 <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	-	-	EXTENSION PIPE COVERING
24	15	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input checked="" type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	1000	SF	BUILT UP ROOF OVER FILTER AREA
25	15	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input checked="" type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	800	SF	BUILT UP ROOF OVER GARAGE

LEGEND
 TSI-THERMAL SYSTEM INSULATION
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 MM-MISCELLANEOUS MATERIAL
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 S-SIGNIFICANTLY DAMAGED (>10%)
 H-HIGH
 M-MEDIUM
 L-LOW

Inspector Name: MARSHALL LALICK, ROY PRITCHARD

Accreditation Number: 366-80-3325, 219-76-0968



EPA

TSCA

ASBESTOS

ASBESTOS INSPECTION FORM

Project Name: ALPENA WASTE WATER TREATMENT PLANT

Project Number: 33475.02

Date: 2/10/99

Function Area No.	Homogeneous Area No.	Friable/Non-Friable	Material Type	Percent Damage	General/Local Damage	Potential For Disturbance	Vibration	Air Emission	Overal	Accessibility	Quantity	Units	Comments
3	17	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input checked="" type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input checked="" type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input checked="" type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	30	SF	TANK COVERING
-	18	<input checked="" type="checkbox"/> F <input type="checkbox"/> N	<input checked="" type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L			FOAM TANK COVERING
		<input type="checkbox"/> F <input type="checkbox"/> N	<input type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L			
		<input type="checkbox"/> F <input type="checkbox"/> N	<input type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L			
		<input type="checkbox"/> F <input type="checkbox"/> N	<input type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L			
		<input type="checkbox"/> F <input type="checkbox"/> N	<input type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L			
		<input type="checkbox"/> F <input type="checkbox"/> N	<input type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L			
		<input type="checkbox"/> F <input type="checkbox"/> N	<input type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L			
		<input type="checkbox"/> F <input type="checkbox"/> N	<input type="checkbox"/> TSI <input type="checkbox"/> SM <input type="checkbox"/> MM	<input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> S	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L			

LEGEND
 TSI-THERMAL SYSTEM INSULATION
 SM-SURFACING MATERIAL
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 N-NO DAMAGE
 D-DAMAGE (1-10%)
 S-SIGNIFICANTLY DAMAGED (>10%)
 H-HIGH
 M-MEDIUM
 L-LOW

Inspectors Name: MARTIN LAUCK, RIN PARTIOLA

Accreditation Number: 366-80-3325, 299-76-0968

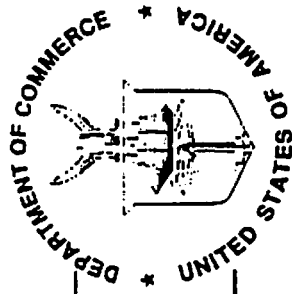
APPENDICES

APPENDIX A

Laboratory Qualifications

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]



ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation

RJ LEE GROUP, INC.
MONROEVILLE, PA

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

BULK ASBESTOS FIBER ANALYSIS

June 30, 1999

Effective through

A handwritten signature in black ink, appearing to read "John R. Lee", written over a horizontal line.

For the National Institute of Standards and Technology
NVLAP Lab Code: 101208-0

APPENDIX B

Inspector's Qualifications

State of Michigan
 Dept. of Consumer & Industry Services
 Martin H. Lalick, Jr.

has satisfactorily met or exceeded the requirements of Section 206
 of the Toxic Substance Control Act to be accredited as an

ASBESTOS MANAGEMENT PLANNER

Accreditation Number **366-80-3325**
 Expiration Date **07/10/99**

39204

D.S.R. 401-270 (4/77)
 Authority: P.A. 441 of 1978, as amended

State of Michigan
 Dept. of Consumer & Industry Services
 Martin H. Lalick, Jr.

has satisfactorily met or exceeded the requirements of Michigan Act 410,
 P.A. of 1979, to be accredited as an

ASBESTOS INSPECTOR

Accreditation Number **366-80-3325**
 Expiration Date **08/11/99**

16937

Training was conducted in accordance with the requirements of 40 CFR 763, (AHERA) Appendix C and Michigan Act 440, PA 1988

CERTIFICATE NO. BIR98060507

TILLOTSON ENVIRONMENTAL OCCUPATIONAL CONSULTING

presents this certificate to:

MARTIN H. LALICK, JR.

Dated:

JUNE 5, 1998

for successful completion of:

4-HOUR ASBESTOS BUILDING INSPECTOR REFRESHER TRAINING

EXPIRATION DATE: JUNE 5, 1999

Michael R. Tillotson

MICHAEL R. TILLOTSON, CIH, CHMM

16262 Chandler Rd. Suite 101
East Lansing, Michigan 48823
517-324-0500

WMI Environmental Services

A division of Wonder Makers, Inc.
P.O. Box 50209
Kalamazoo, MI 49005-0209

Certifies That

Martin Lalick

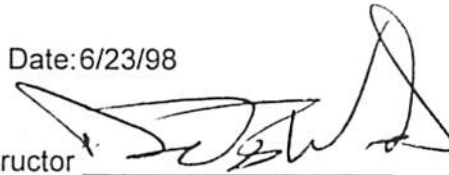
*Has attended a Class and Successfully Completed an
examination with a minimum score of 70%*

ASBESTOS MANAGEMENT PLANNER COURSE

Student Social Security #: 366-80-3325 Class date: 6/23/98 Examination Date: 6/23/98

Certificate #: MT98-3020 Expiration Date: 6/23/99

Instructor



*This course is in compliance with 40 CFR 763 (AHERA), NESHAP 40 CFR 61.145 © (8)
Michigan Act 440 of 1988.*

Ronald A. Partilla

ASBESTOS INSPECTOR

299-76-0968

06/18/99

16883

R. Partilla

CERTIFICATE NO. BIR98050805

TILLOTSON ENVIRONMENTAL OCCUPATIONAL CONSULTING

presents this certificate to:

RONALD A. PARTILLA

Dated:

MAY 8, 1998

for successful completion of:

4-HOUR ASBESTOS BUILDING INSPECTOR REFRESHER TRAINING

EXPIRATION DATE: MAY 8, 1999

MICHAEL R. TILLOTSON, CIH, CHMM

Michael R. Tillotson

16262 Chandler Rd. Suite 101
East Lansing, Michigan 48823
517-324-0500

APPENDIX C

Laboratory Results

Test Report

PLM Analysis Results / 33457.02

Project AOH902523

Sample Number / Sample Appearance	Client Sample Number	-----Asbestos-----							-----Nonasbestos-----					Run Date
		Chrysotile	Amosite	Crocidolite	Anthophyllite	Tremolite	Actinolite	Cellulose	Mineral Wool	Fibrous Glass	Synthetic Fibers	Other Fibers	NonFibrous Material	
2525987BHPL Red Paint/White Wrap/White Paper Insulation Layer Content: 10% Wrap-90 Cellulose 10 NFM 90% Paper-40 Chrysotile 40 Cellulose 20 NFM	WW-101	36 %	-	-	-	-	-	45 %	-	-	-	-	19 %	2/22/99 WHP Non Homogeneous
2525988BHPL Blue Paint/White Wrap/Gray Fibrous Insulation/Tan Paper Layer Content: 5% Wrap-90 Cellulose 10 NFM 10% 40 Chrysotile 40 Cellulose 20 NFM 85% 5 Chrysotile 93 Cellulose 2 NFM	WW-102	8 %	-	-	-	-	-	87 %	-	-	-	-	5 %	2/22/99 WHP Non Homogeneous
2525989BHPL Green Paint/White Paper Insulation	WW-103	40 %	-	-	-	-	-	40 %	-	-	-	-	20 %	2/22/99 WHP Homogeneous
2525990BHPL White Paper Insulation	WW-104	40 %	-	-	-	-	-	40 %	-	-	-	-	20 %	2/22/99 WHP Homogeneous
2525991BHPL Green Paint/Tan Paper Insulation/Black Paper Layer Content: 50% Tan Paper-10 Chrysotile 80 Cellulose 10 NFM 50% Black Paper-10 Chrysotile 80 Cellulose 10 NFM	WW-105	10 %	-	-	-	-	-	80 %	-	-	-	-	10 %	2/22/99 WHP Non Homogeneous
2525992BHPL Red Paint/White Wrap/White Paper Insulation Layer Content: 5% Wrap-90 Cellulose 10 NFM 95% Paper-Insulation 40 Chrysotile 40 Cellulose 20 NFM	WW-106	38 %	-	-	-	-	-	42 %	-	-	-	-	20 %	2/22/99 WHP Non Homogeneous
2525993BHPL Blue Paint/White Wrap/White Paper Insulation/Tan Paper Insulation Layer Content: 5% Wrap-90 Cellulose 10 NFM 40% White-40 Chrysotile 40 Cellulose 20 NFM 55% Tan-10 Chrysotile 80 Cellulose 10 NFM	WW-107	21 %	-	-	-	-	-	64 %	-	-	-	-	15 %	2/22/99 WHP Non Homogeneous
2525994BHPL Blue Paint/White Fibrous Insulation/Gray Fibrous Insulation Layer Content: 20% White-80 Chrysotile 20 NFM 80% Gray-10 Chrysotile 50 Mineral Wool 40 NFM	WW-201	24 %	-	-	-	-	-	-	40 %	-	-	-	36 %	2/22/99 WHP Non Homogeneous

Samples received on: Thursday, February 18, 1999

Authorized Signature



William H. Powers, Manager-Optical
Tuesday, February 23, 1999

Date

Phone (724) 325-1776
Fax (724) 733-1799

RJ Lee Group, Inc.
Headquarters

350 Hochberg Road
Monroeville, PA 15146

Test Report

PLM Analysis Results / 33457.02

Project AOH902523

-----Asbestos-----Nonasbestos-----

Sample Number / Sample Appearance	Client Sample Number	Chrysotile	Amosite	Crocidolite	Anthophyllite	Tremolite	Actinolite	Cellulose	Mineral Wool	Fibrous Glass	Synthetic Fibers	Other Fibers	NonFibrous Material	Run Date	Analyst
2525995BHPL Red Paint/White Wrap/White Fibrous Insulation/Gray Fibrous Insulation <i>Layer Content:</i> 5% Wrap-90 Cellulose 10 NFM 20% White-80 Chrysotile 20 NFM 75% Gray-10 Chrysotile 50 Mineral Wool 40 NFM	WW-202	24 %	-	-	-	-	-	5 %	38 %	-	-	-	33 %	2/22/99	WHP
2525996BHPL Green Paint/White Wrap/White Fibrous Insulation <i>Layer Content:</i> 5% Wrap-90 Cellulose 10 NFM 95% White-20 Chrysotile 80 NFM	WW-203	19 %	-	-	-	-	-	5 %	-	-	-	-	76 %	2/22/99	WHP
2525997BHPL Red Paint/White Wrap/White Fibrous Insulation/Gray Fibrous Insulation <i>Layer Content:</i> 5% Wrap-90 Cellulose 10 NFM 20% White-80 Chrysotile 20 NFM 75% Gray-10 Chrysotile 50 Mineral Wool 40 NFM	WW-204	24 %	-	-	-	-	-	5 %	38 %	-	-	-	33 %	2/22/99	WHP
2525998BHPL Green Paint/White Wrap/White Fibrous Insulation <i>Layer Content:</i> 5% Wrap-90 Cellulose 10 NFM 95% White-20 Chrysotile 40 Mineral Wool 40 NFM	WW-205	19 %	-	-	-	-	-	5 %	38 %	-	-	-	38 %	2/22/99	WHP
2525999BHPL Red Paint/White Wrap/White Fibrous Insulation/Gray Fibrous Insulation <i>Layer Content:</i> 5% Wrap-90 Cellulose 10 NFM 20% White-80 Chrysotile 20 NFM 75% Gray-10 Chrysotile 50 Mineral Wool 40 NFM	WW-206	24 %	-	-	-	-	-	5 %	38 %	-	-	-	33 %	2/22/99	WHP
2526000BHPL Blue Paint/White Wrap/White Fibrous Insulation <i>Layer Content:</i> 5% Wrap-90 Cellulose 10 NFM 95% White-20 Chrysotile 40 Mineral Wool 40 NFM	WW-207	19 %	-	-	-	-	-	5 %	38 %	-	-	-	38 %	2/22/99	WHP
2526001BHPL Blue Paint/White Wrap/White Fibrous Insulation <i>Layer Content:</i> 5% Wrap-90 Cellulose 10 NFM 95% White-20 Chrysotile 40 Mineral Wool 40 NFM	WW-301	19 %	-	-	-	-	-	5 %	38 %	-	-	-	38 %	2/22/99	WHP
2526002BHPL Blue Paint/White Wrap/White Fibrous Insulation <i>Layer Content:</i> 5% Wrap-90 Cellulose 10 NFM 95% White-50 Chrysotile 30 Mineral Wool 20 NFM	WW-302	48 %	-	-	-	-	-	5 %	30 %	-	-	-	17 %	2/22/99	WHP

Samples received on: Thursday, February 18, 1999

Authorized Signature William H. Powers

William H. Powers, Manager-Optical

Date

Tuesday, February 23, 1999

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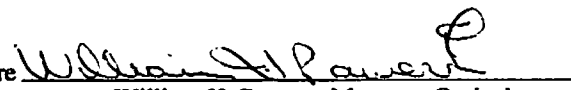
Test Report

PLM Analysis Results / 33457.02

Project AOH902523

Sample Number / Sample Appearance	Client Sample Number	-----Asbestos-----								-----Nonasbestos-----					Run Date
		Chrysotile	Amosite	Crocidolite	Anthophyllite	Tremolite	Actinolite	Cellulose	Mineral Wool	Fibrous Glass	Synthetic Fibers	Other Fibers	NonFibrous Material	Analyst	
2526003BHPL Red Paint/White Wrap/White Fibrous Insulation	WW-303	10 %	-	-	-	-	5 %	48 %	-	-	-	37 %	2/22/99		
<i>Layer Content:</i>	5% Wrap-90 Cellulose 10 NFM 95% White-10 Chrysotile 50 Mineral Wool 40 NFM	NFM: Clay, Carb											WHP		
													Non Homogeneous		
2526004BHPL Blue Paint/White Wrap/White Fibrous Insulation	WW-304	2 %	-	-	-	-	5 %	48 %	-	-	-	45 %	2/22/99		
<i>Layer Content:</i>	5% Wrap-90 Cellulose 10 NFM 95% White- 2 Chrysotile 50 Mineral Wool 48 NFM	NFM: Qtz, Binder, Opaq, Clay											WHP		
													Homogeneous		
2526005BHPL Blue Paint/White Wrap/White Fibrous Insulation	WW-305	19 %	-	-	-	-	5 %	38 %	-	-	-	38 %	2/22/99		
<i>Layer Content:</i>	5% Wrap-90 Cellulose 10 NFM 95% White-20 Chrysotile 40 Mineral Wool 40 NFM	NFM: Carb, Binder, Opaq											WHP		
													Non Homogeneous		
2526006BHPL White Paint/White Wrap/White Fibrous Insulation	WW-306	-	-	-	-	-	5 %	38 %	-	-	-	57 %	2/22/99		
<i>Layer Content:</i>	5% Wrap-90 Cellulose 10 NFM 95% White Insulation-40 Mineral Wool 60 NFM	NFM: Qtz, Carb, Opaq, Clay											WHP		
													Non Homogeneous		
2526007BHPL Cream Colored Floor Tile-No Mastic	WW-601	2 %	-	-	-	-	-	-	-	-	-	98 %	2/22/99		
													NFM: Binder, Opaq, Talc		
													Homogeneous		
2526008BHPL Red Floor Tile/Black Mastic	WW-701	10 %	-	-	-	-	-	-	-	-	-	90 %	2/22/99		
<i>Layer Content:</i>	2% Mastic-100 NFM 98% Tile-10 Chrysotile 90 NFM	NFM: Tar, Carb, Binder, Opaq, Vinyl											WHP		
													Non Homogeneous		
2526009BHPL Yellow Floor Tile/Black Mastic	WW-801	3 %	-	-	-	-	-	-	-	-	-	97 %	2/22/99		
<i>Layer Content:</i>	2% Mastic-100 NFM 98% Tile-3 Chrysotile 97 NFM	NFM: Tar, Carb, Binder, Opaq, Vinyl											WHP		
													Non Homogeneous		
2526010BHPL White Floor Tile/Yellow Mastic	WW-901	2 %	-	-	-	-	-	-	-	-	-	98 %	2/22/99		
<i>Layer Content:</i>	2% Mastic-100 NFM 98% Tile-3 Chrysotile 97 NFM	NFM: Carb, Binder, Opaq, Latex, Resin											WHP		
													Non Homogeneous		

Samples received on: Thursday, February 18, 1999

Authorized Signature 

William H. Powers, Manager-Optical

Date Tuesday, February 23, 1999

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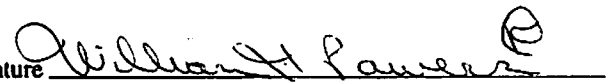
Test Report

PLM Analysis Results / 33457.02

Project AOH902523

Sample Number / Sample Appearance	Client Sample Number	-----Asbestos-----							-----Nonasbestos-----					Run Date
		Chrysotile	Amosite	Crocidolite	Anthophyllite	Tremolite	Actinolite	Cellulose	Mineral Wool	Fibrous Glass	Synthetic Fibers	Other Fibers	NonFibrous Material	
2526011BHPL Tan Fibrous Ceiling Tile/White Paint	WW-1001	-	-	-	-	-	-	40 %	40 %	-	-	-	20 %	2/22/99 WHP
													NFM: Per, Binder, Opaq	Homogeneous
2526012BHPL White Fibrous Material	WW-1301	3 %	-	-	-	-	-	-	-	-	-	-	97 %	2/22/99 WHP
													NFM: Carb, Binder, Opaq	Homogeneous
2526013BHPL Black Mastic	WW-1601	-	-	-	-	-	-	-	-	10 %	-	-	90 %	2/22/99 WHP
													NFM: Binder, Opaq, Resin	Homogeneous
2526014BHPL White Paint/White Fibrous Insulation/Yellow Fibers	WW-1701	21 %	-	-	-	-	-	-	62 %	-	-	-	17 %	2/22/99 WHP
													NFM: Clay, Carb, Binder, Opaq	Non Homogeneous
Layer Content: 70% White-50 Mineral Wool 30 Chrysotile 20 NFM 30% Yellow 90 Mineral Wool 10 NFM														
2526015BHPL White Paint/White Fibrous Insulation/Yellow Fibers	WW-1702	15 %	-	-	-	-	-	-	70 %	-	-	-	15 %	2/22/99 WHP
													NFM: Carb, Binder, Opaq, Clay	Non Homogeneous
Layer Content: 50% White-30 Chyrostile 20 NFM 50 Mineral Wool 50% Yellow-90 Mineral Wool 10 NMF														
2526016BHPL Gray Paint/White Fibrous Insulation	WW-1703	30 %	-	-	-	-	-	-	50 %	-	-	-	20 %	2/22/99 WHP
													NFM: Clay, Binder, Opaq	Homogeneous
2526017BHPL Gray Paint/White Styrofoam	WW-1801	-	-	-	-	-	-	-	-	-	-	-	100 %	2/22/99 WHP
													NFM: Binder, Opaq, Styrofoam	Homogeneous

Samples received on: Thursday, February 18, 1999

Authorized Signature 

William H. Powers, Manager-Optical

Date Tuesday, February 23, 1999

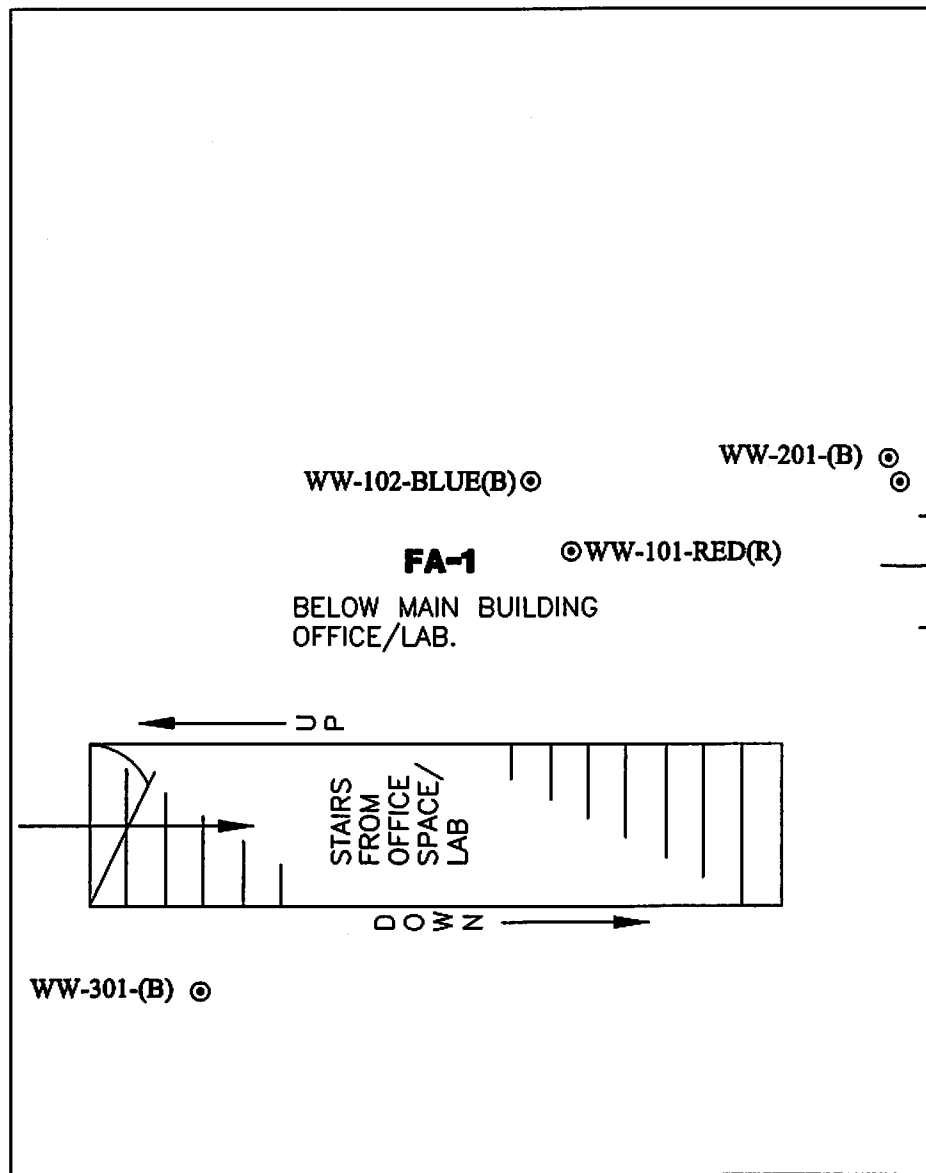
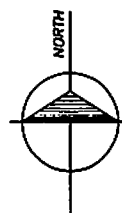
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APPENDIX D

Function Area and Sample Location Maps



WW-102-BLUE(B) ⊙

WW-201-(B) ⊙

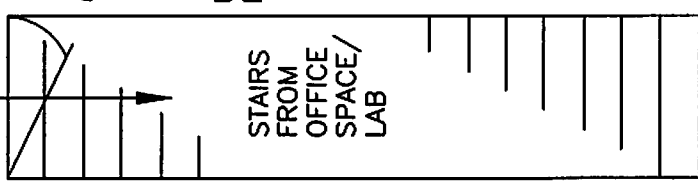
WW-202-(R) ⊙

FA-1 ⊙ WW-101-RED(R)

BELOW MAIN BUILDING OFFICE/LAB.

TO FA-2

UP



STAIRS FROM OFFICE SPACE/LAB

DOWN

WW-301-(B) ⊙

BASEMENT

N.T.S.

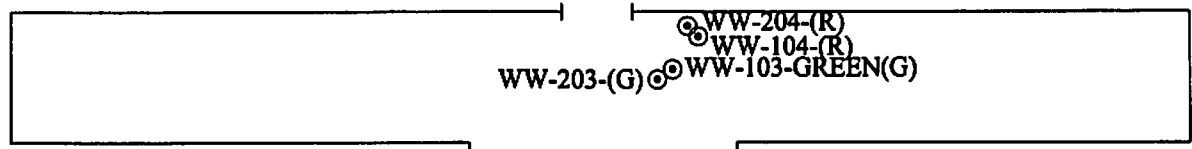
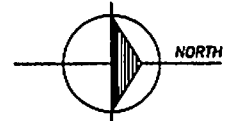
33475AS7
JAS031299

FIGURE 12

FUNCTION AREA &
SAMPLE LOCATION MAP

WASTEWATER TREATMENT PLANT
ALPENA, MICHIGAN

MARCH, 1999



FA-2



WEST BASEMENT
CORRIDOR
N.T.S.

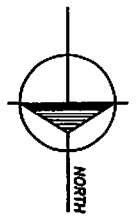
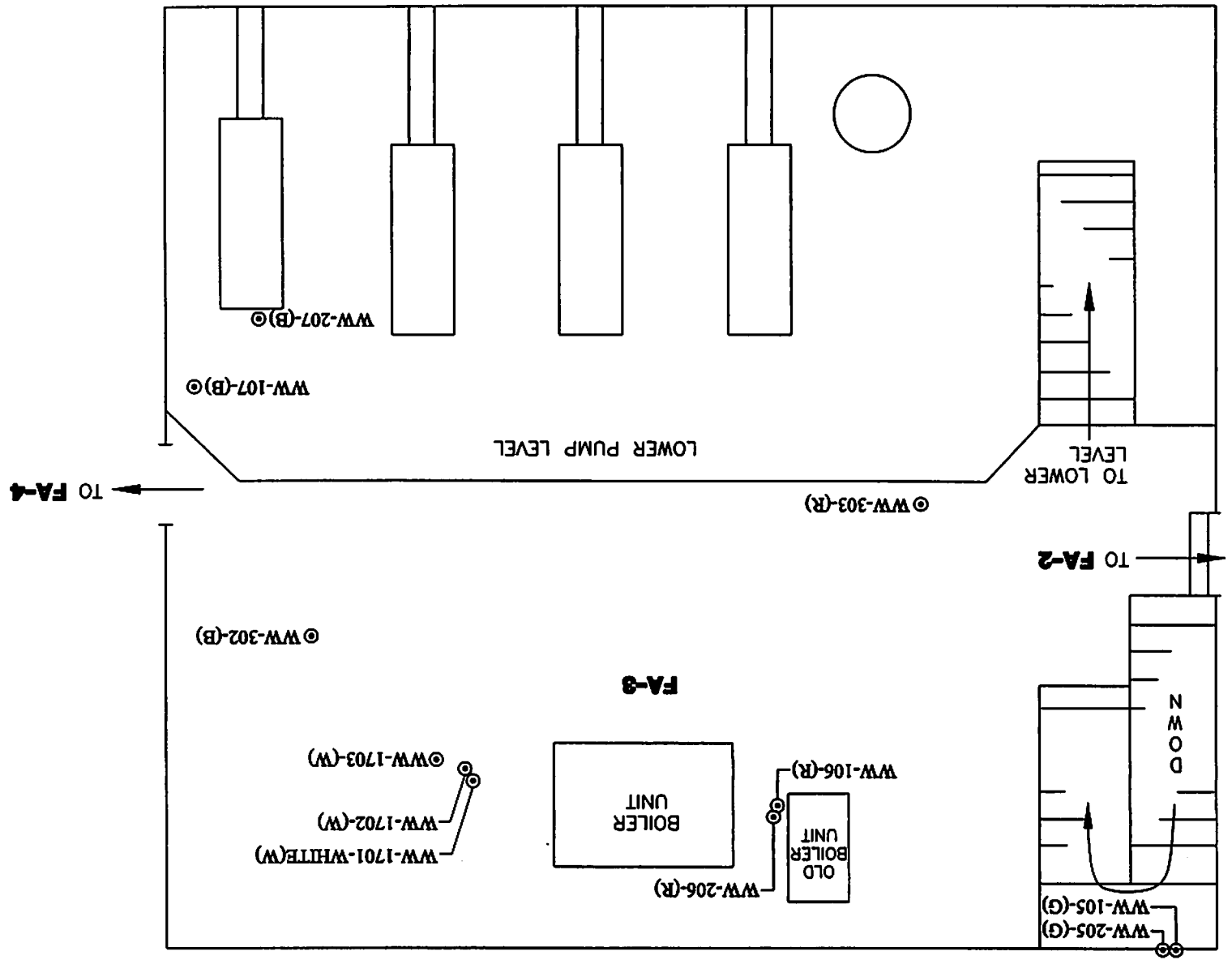
33475AS8
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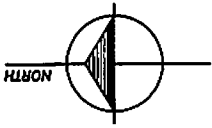
FIGURE 13
FUNCTION AREA &
SAMPLE LOCATION MAP
WASTEWATER TREATMENT PLANT
ALPENA, MICHIGAN
MARCH, 1999 33475.02

BASEMENT BOILER ROOM
N.T.S.

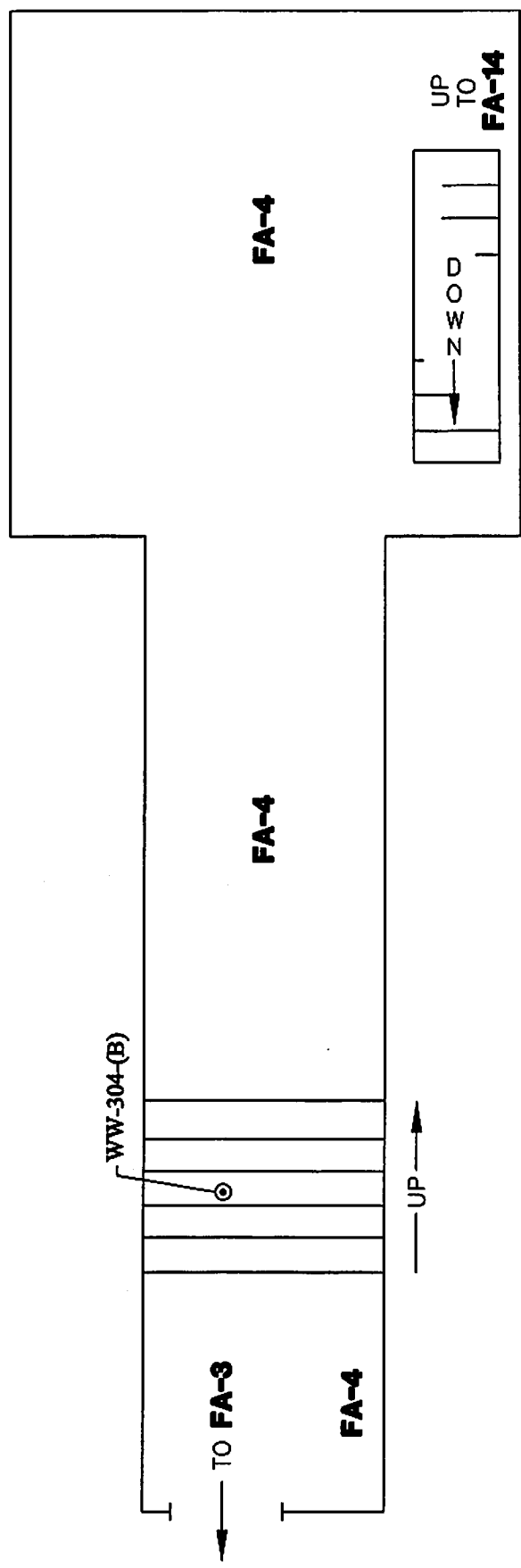
FIGURE 14
FUNCTION AREA &
SAMPLE LOCATION MAP
WASTEWATER TREATMENT PLANT
ALPENA, MICHIGAN
MARCH, 1999
33475.02

33475AS9
JAS031299





END OF BASEMENT →

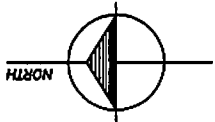


EAST BASEMENT CORRIDOR

N.T.S.

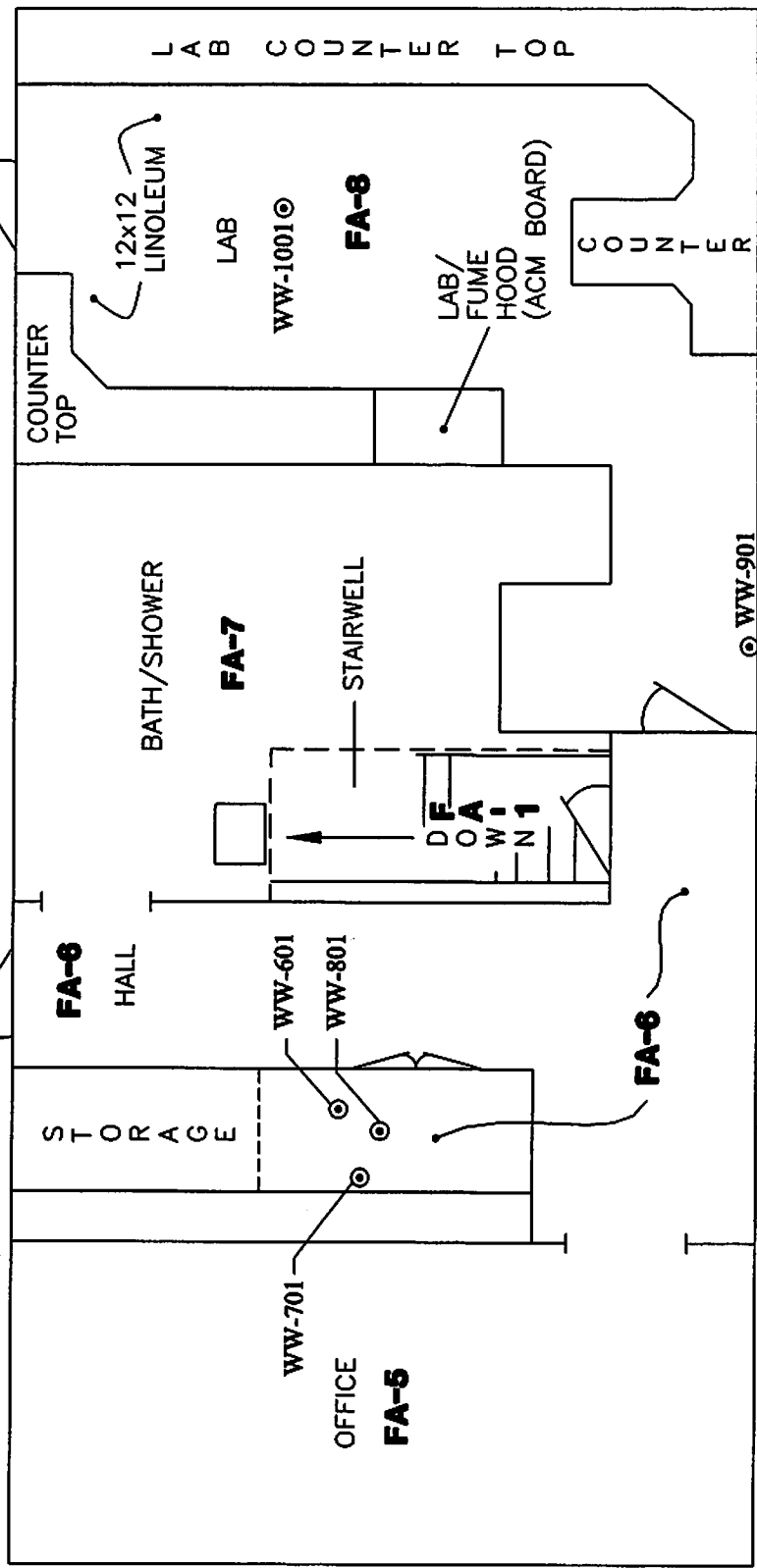
33475A10
JAS031299

FIGURE 15
FUNCTION AREA &
SAMPLE LOCATION MAP,
WASTEWATER TREATMENT PLANT
ALPENA, MICHIGAN
MARCH, 1999 33475.02



TO
FA-9

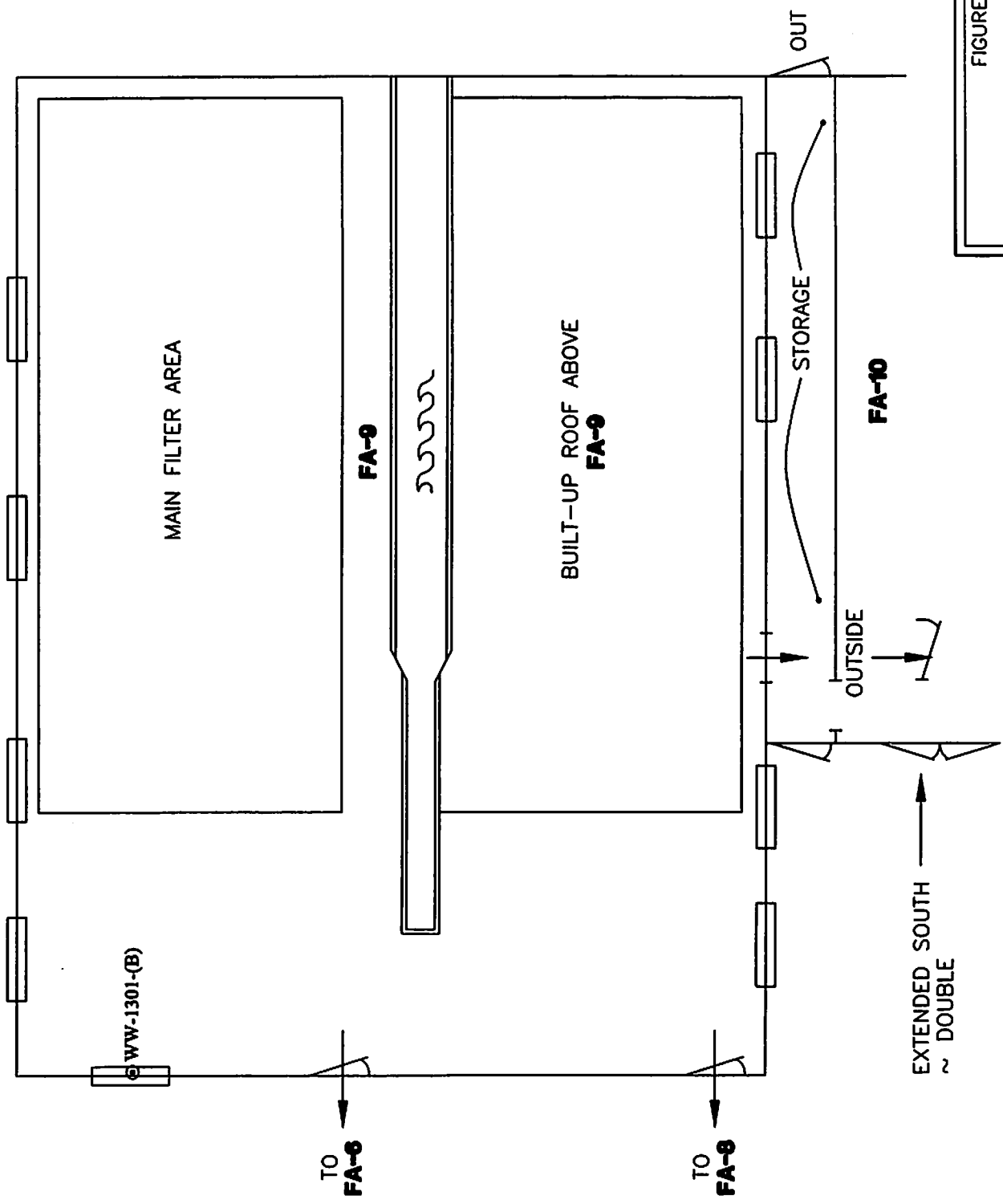
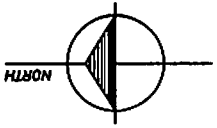
TO
FA-9



MAIN BUILDING
 (ADMIN./LAB.)
 N.T.S.

33475A11
 JAS031299

FIGURE 16
**FUNCTION AREA &
 SAMPLE LOCATION MAP**
 WASTEWATER TREATMENT PLANT
 ALPENA, MICHIGAN
 MARCH, 1999



33475A12
JAS031299

FIGURE 17

FUNCTION AREA & SAMPLE LOCATION MAP

WASTEWATER TREATMENT PLANT
ALPENA, MICHIGAN

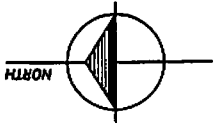
MARCH, 1999

33475.02

MAIN FILTER AREA

N.T.S.





33475A13
JAS031299

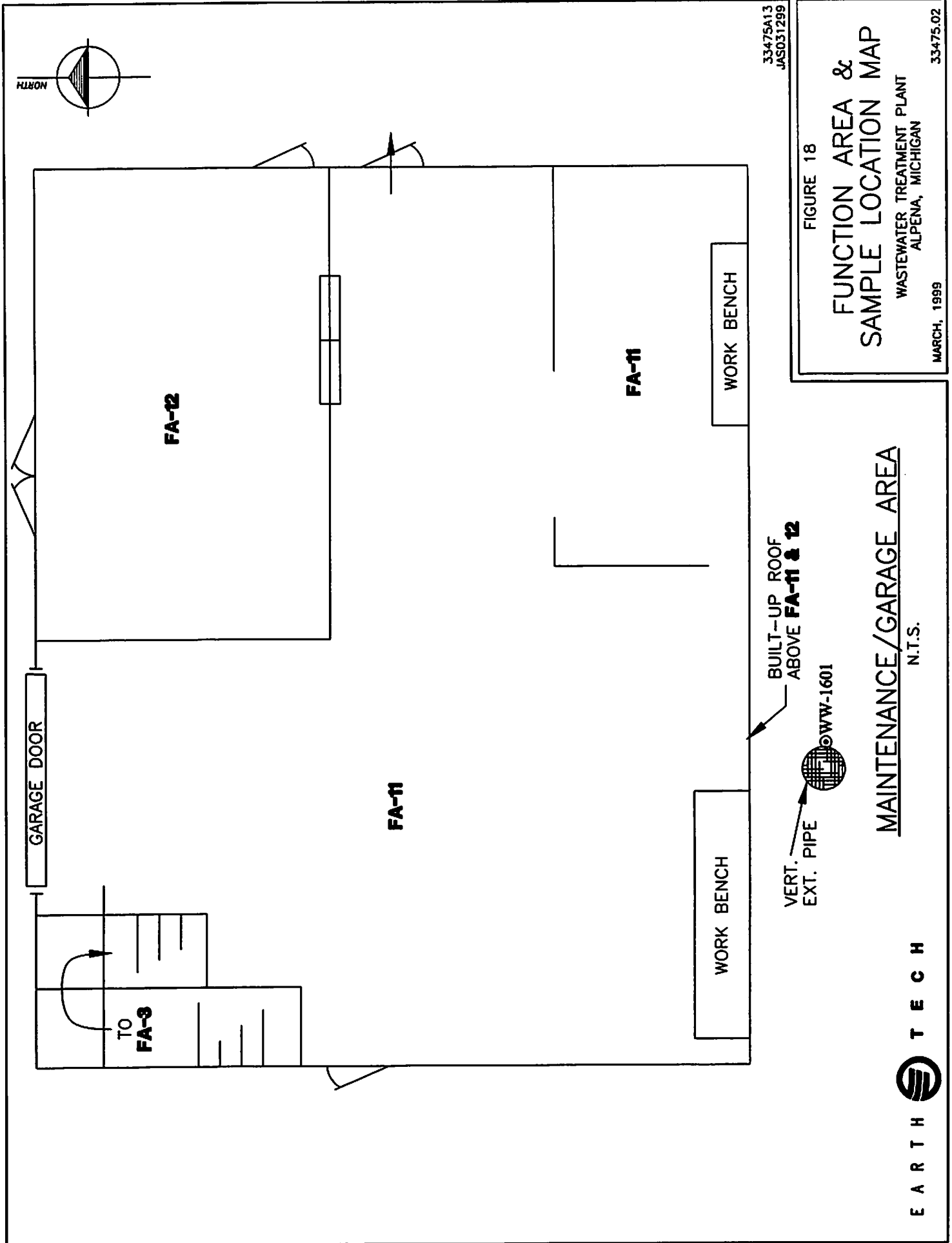
FIGURE 18

FUNCTION AREA & SAMPLE LOCATION MAP

WASTEWATER TREATMENT PLANT
ALPENA, MICHIGAN

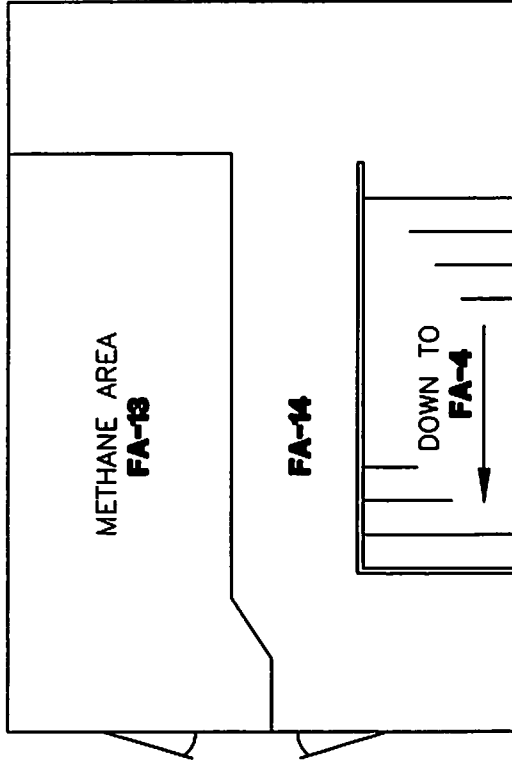
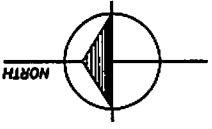
33475.02

MARCH, 1999



MAINTENANCE/GARAGE AREA

N.T.S.



UPPER LEVEL
(METHANE AREA)
N.T.S.

33475A14
JAS031289

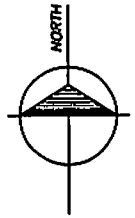
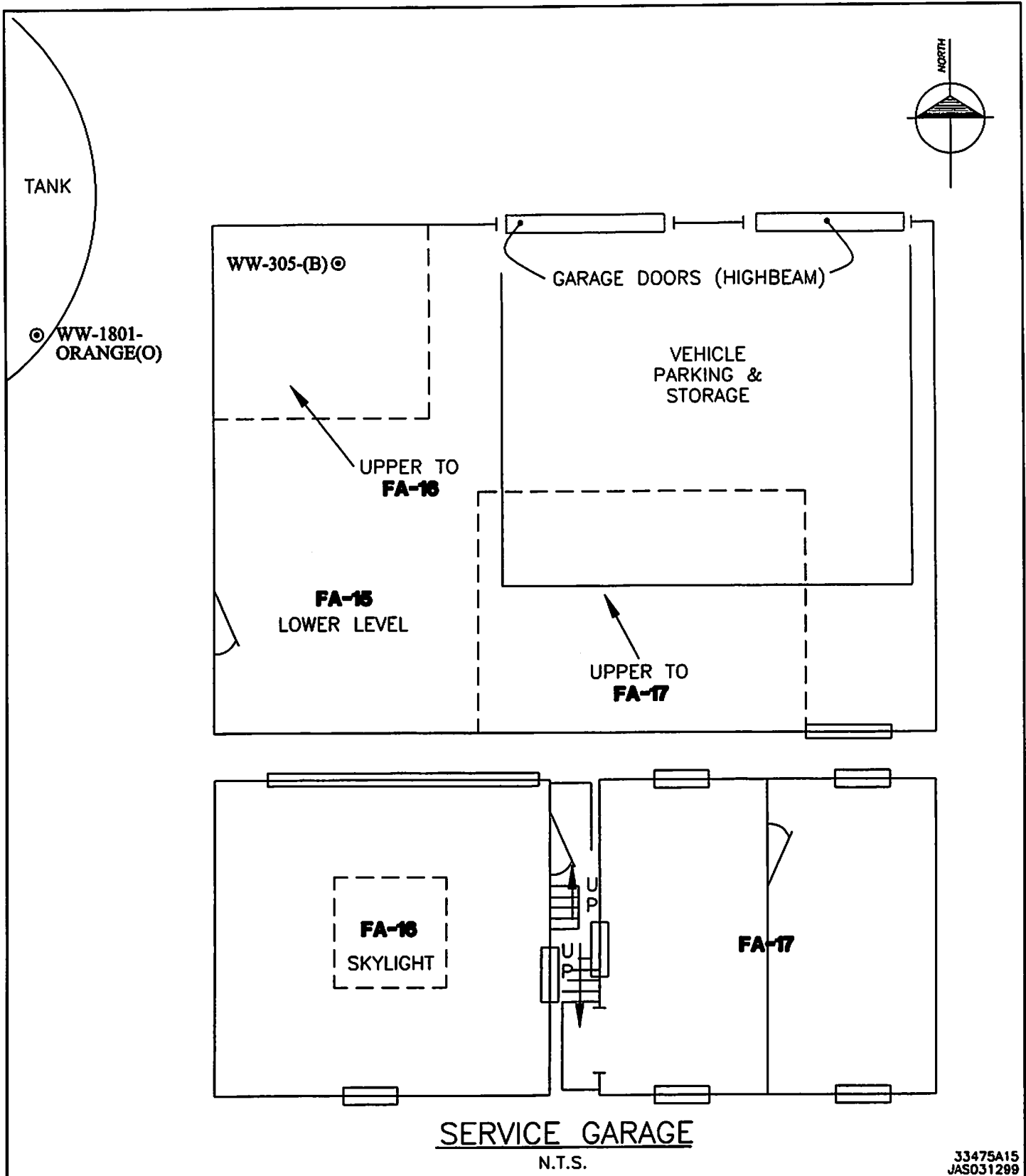
FIGURE 19

FUNCTION AREA & SAMPLE LOCATION MAP

WASTEWATER TREATMENT PLANT
ALPENA, MICHIGAN

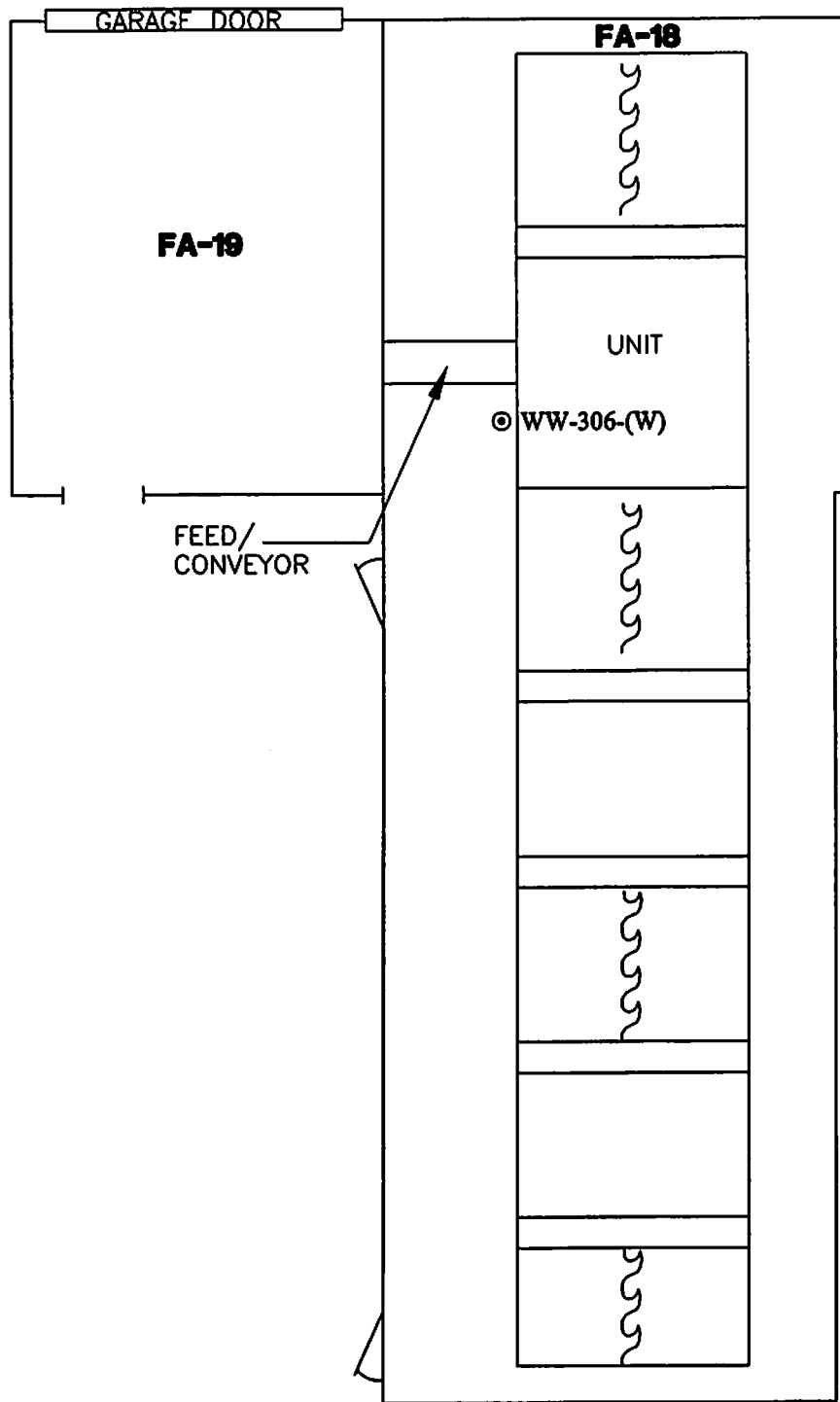
MARCH, 1999

33475.02



33475A15
JAS031299

FIGURE 20
**FUNCTION AREA &
 SAMPLE LOCATION MAP**
 WASTEWATER TREATMENT PLANT
 ALPENA, MICHIGAN
 MARCH, 1999 33475.02



FEED/CONVEYOR BUILDING

N.T.S.

33475A16
JAS031299

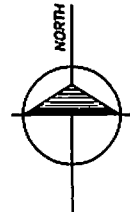
FIGURE 21

**FUNCTION AREA &
SAMPLE LOCATION MAP**

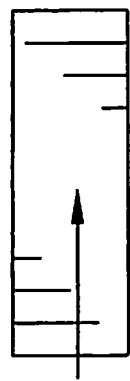
WASTEWATER TREATMENT PLANT
ALPENA, MICHIGAN

MARCH, 1999

33475.02



FA-20
PUMP/ELEC. ROOM



DOWN TO
FA-21

PUMP/ELEC. ROOM
(UPPER LEVEL)

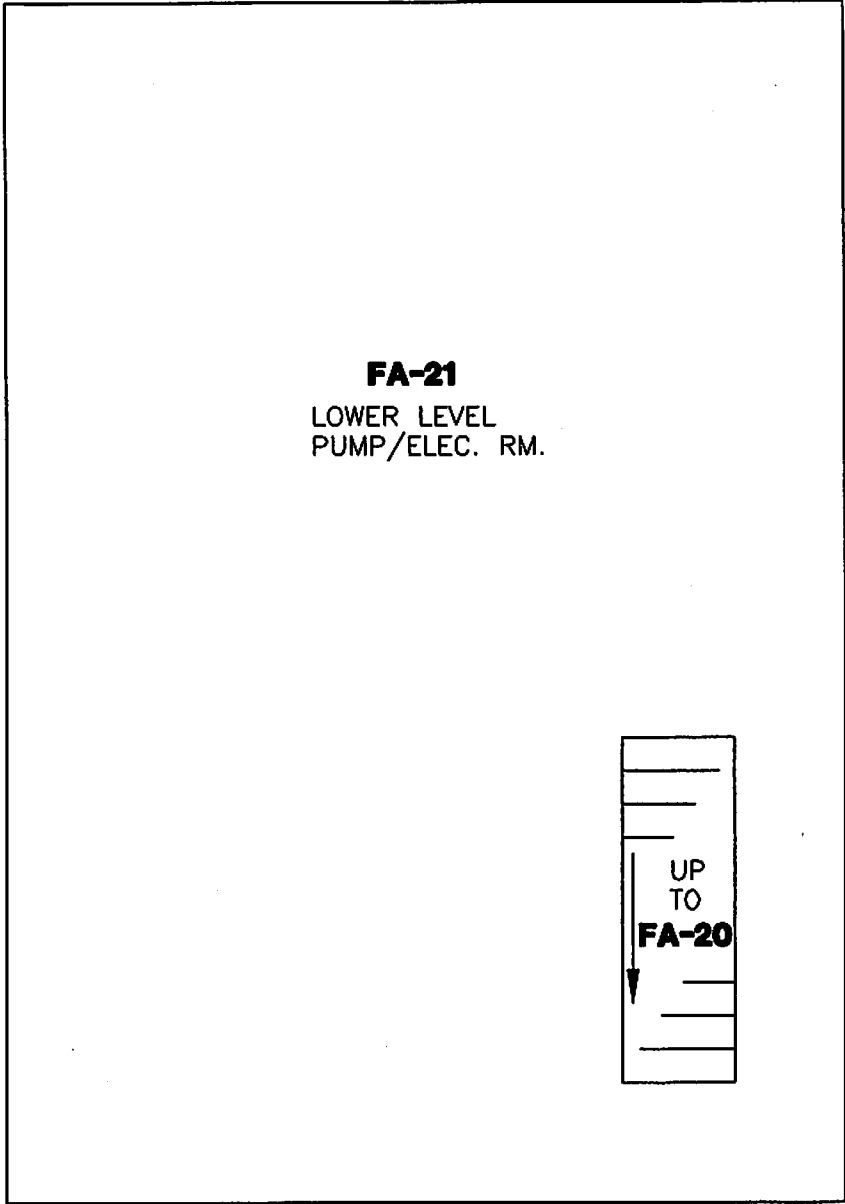
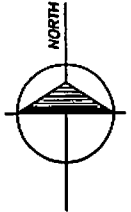
N.T.S.

33475A17
JAS031299

FIGURE 22
FUNCTION AREA &
SAMPLE LOCATION MAP

WASTEWATER TREATMENT PLANT
ALPENA, MICHIGAN

MARCH, 1999



FA-21
LOWER LEVEL
PUMP/ELEC. RM.



PUMP/ELEC. ROOM
(LOWER LEVEL)
N.T.S.

33475A18
JAS031299

FIGURE 23
**FUNCTION AREA &
SAMPLE LOCATION MAP**
WASTEWATER TREATMENT PLANT
ALPENA, MICHIGAN
MARCH, 1999 33475.02