

11333/1
NREAD
FEB 08 1988

Mr. Wallace E. Venrick
Water Supply Branch
Division of Health Services
Post Office Box 2091
Raleigh, North Carolina 27602-2091

Dear Mr. Venrick:

Enclosures (1), (2) and (3) are the Trihalomethane analysis of the Hadnot Point (HP) Water Treatment Plant, ID Number 04-67-041, the Marine Corps Air Station (MCAS) New River Water Treatment Plant, ID Number 04-67-042 and the Holcomb Blvd (HB) Water Treatment Plant, ID Number 04-67-043. All samples were collected by the Environmental Chemistry and Microbiology Section personnel and analyzed by Industrial and Environmental Analysts, Inc.

Point of contact in this matter is Ms. Elizabeth Betz, phone (919) 451-5977.

Sincerely,

JULIAN I. WOOTEN
Director, Natural Resources Division
By direction of the Commanding General

Encls:

- (1) TTHM Analysis for HP
- (2) TTHM Analysis for MCAS
- (3) TTHM Analysis for HB

Copy to:
LANTDIV

Blind copy to:
AC/S FAC
EC&MS (2)
→ BMO (Util Dir)

14-00000-1000

TRIHALOMETHANE ANALYSIS

LABORATORY ID#: 3 7 7 2 0
 WATER SYSTEM ID#: 04-67-041 COUNTY: Onslow
 NAME OF SYSTEM: Hadnot Point
 TYPE OF SAMPLE: (D=Distribution, E=Entry, M=Maximum, S=Special)
 COLLECTED ON: DATE: 12/15/87 (MM/DD/YY) TIME: 15:35 PM (HH:MM XM)
 LOCATION WHERE COLLECTED: FC-530
 COLLECTED BY: Environmental Chemistry & Microbiology Sect. LOCATION/SOURCE CODE:

MAIL RESULTS TO:

Commanding General MCB
Camp Lejeune, NC 28542
Attn: AC/S Facilities (NREAD)

TELEPHONE # (919) 451-5977

TYPE OF SUPPLY:

- COMMUNITY
- NTNC
- NON-COMMUNITY
- PRIVATE

WATER SOURCE(S):

- GROUND
- SURFACE
- PURCHASED

CONTAM CODE	NAME	METHOD CODE	RESULTS	ALLOW. LIMITS
041	CHLOROFORM, mg/l	215	0.011	0.100
042	BROMOFORM, mg/l	215	<0.001	0.100
043	BROMODICHLOROMETHANE, mg/l	215	0.007	0.100
044	CHLORODIBROMOMETHANE, mg/l	215	0.004	0.100
050	TOTAL TRIHALOMETHANES, mg/l	215	0.022	0.100

TYPE TREATMENT:

- NONE
- CHLORINATED
- FLUORIDATED
- FILTERED
- ALUM
- LIME
- SODA ASH
- CAUSTIC
- WATER SOFTENER
- POTASSIUM PERMANGANATE
- PHOSPHATE, IRON CONTROL
- PHOSPHATE, MANG. CONTROL
- PHOSPHATE, CORR. CONTROL
- OTHER

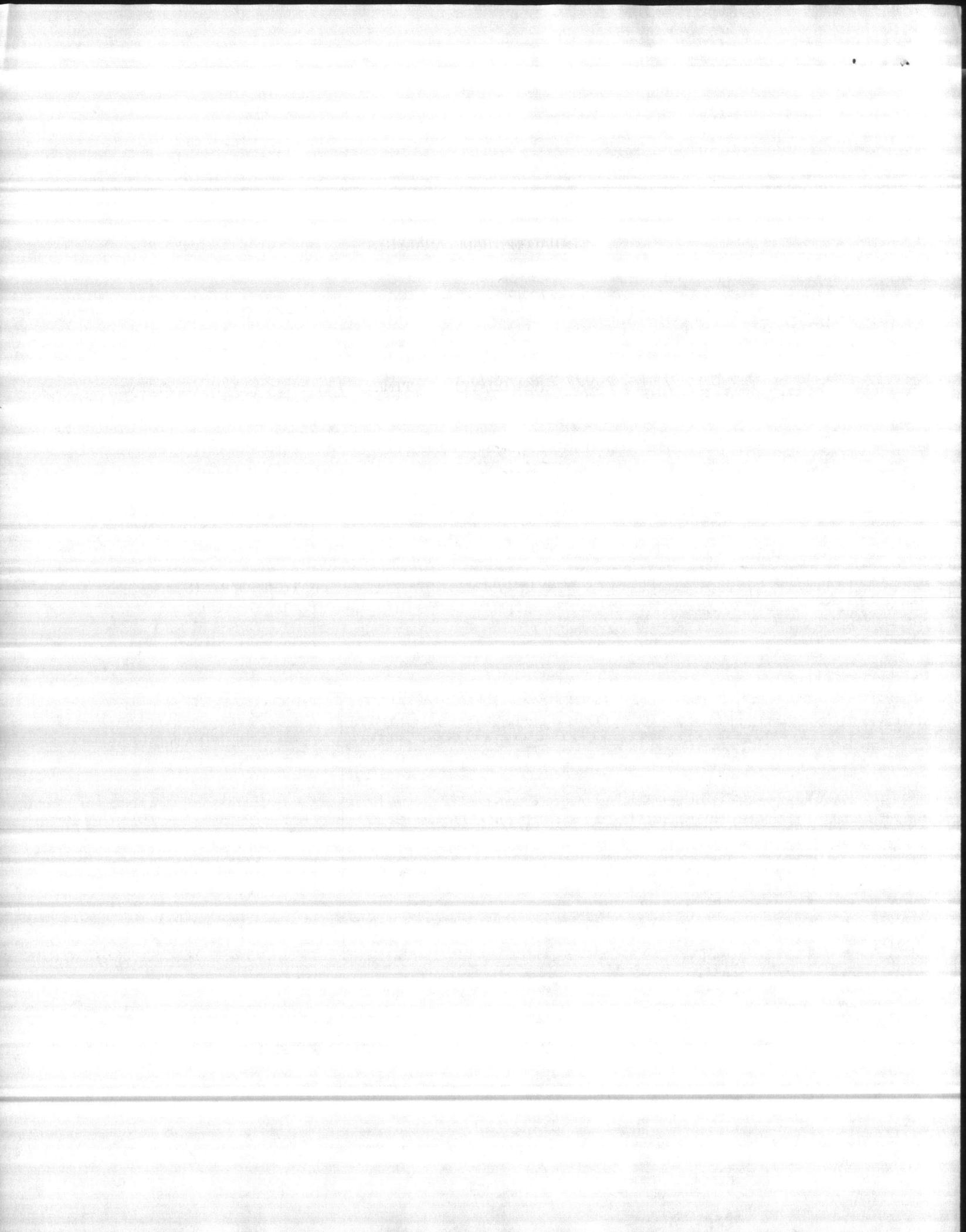
SAMPLE UNSATISFACTORY ()

RESAMPLE REQUESTED ()

DATE ANALYSES BEGUN: 12/13/87

DATE ANALYSES COMPLETED: 12/15/87

CERTIFIED BY: JLK



TRIHALOMETHANE ANALYSIS

LABORATORY ID#: 37720

WATER SYSTEM ID#: 04-67-042 COUNTY: Onslow

NAME OF SYSTEM: Marine Corps Air Station

TYPE OF SAMPLE: D (D=Distribution, E=Entry, M=Maximum, S=Special)

COLLECTED ON: DATE: 12/15/87 (MM/DD/YY) TIME: 12:02 PM (HH:MM XM)

LOCATION WHERE COLLECTED: AS-110 Water Plant

COLLECTED BY: Environmental Chemistry & Microbiology Sect LOCATION/SOURCE CODE: _____

MAIL RESULTS TO:

Commanding General, MCB
Camp LeJeune, NC 28542
Attn: AC/S Facilities (NREAD)
 TELEPHONE # (919) 451-5977

TYPE OF SUPPLY:

- COMMUNITY
- NTNC
- NON-COMMUNITY
- PRIVATE

WATER SOURCE(S):

- GROUND
- SURFACE
- PURCHASED

CONTAM CODE	NAME	METHOD CODE	RESULTS	ALLOW. LIMITS
941	CHLOROFORM, mg/l	215	0.003	0.100
942	BROMOFORM, mg/l	215	0.020	0.100
943	BROMODICHLOROMETHANE, mg/l	215	0.007	0.100
944	CHLORODIBROMOMETHANE, mg/l	215	0.019	0.100
950	TOTAL TRIHALOMETHANES, mg/l	215	0.049	0.100

TYPE TREATMENT:

- NONE
- CHLORINATED
- FLUORIDATED
- FILTERED
- ALUM
- LIME
- SODA ASH
- CAUSTIC
- WATER SOFTENER
- POTASSIUM PERMANGANATE
- PHOSPHATE, IRON CONTROL
- PHOSPHATE, MANG. CONTROL
- PHOSPHATE, CORR. CONTROL
- OTHER _____

SAMPLE UNSATISFACTORY ()

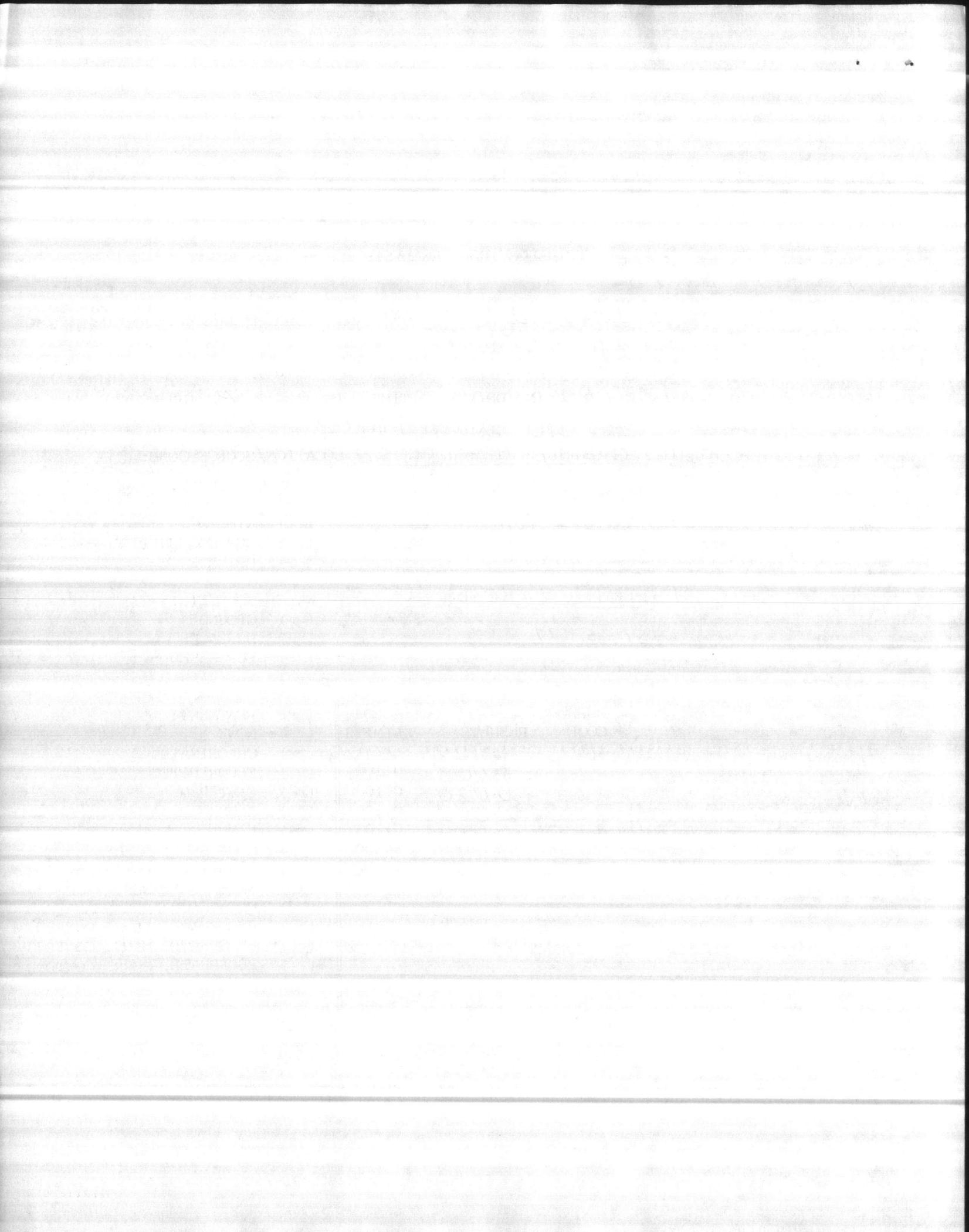
RESAMPLE REQUESTED ()

DATE ANALYSES BEGUN: 12/31/87

DATE ANALYSES COMPLETED: 12/31/87

CERTIFIED BY: JK

REMARKS:



TRIHALOMETHANE ANALYSIS

LABORATORY ID#: 37720

WATER SYSTEM ID#: 04-67-042 COUNTY: Onslow

NAME OF SYSTEM: Marine Corp Air Station

TYPE OF SAMPLE: D (D=Distribution, E=Entry, M=Maximum, S=Special)

COLLECTED ON: DATE: 12/15/87 (MM/DD/YY) TIME: 10:40 AM (HH:MM XM)

LOCATION WHERE COLLECTED: AS-2800

COLLECTED BY: Environmental Chemistry & Microbiology Sect. LOCATION/SOURCE CODE: _____

MAIL RESULTS TO:

Commanding General, MCB
Camp LeJeune, NC 28542
Attn: AC/S Facilities (NREAO)
 TELEPHONE # (919) 451-5977

TYPE OF SUPPLY:

- COMMUNITY
- NTNC
- NON-COMMUNITY
- PRIVATE

WATER SOURCE(S):

- GROUND
- SURFACE
- PURCHASED

CONTAM CODE	NAME	METHOD CODE	RESULTS	ALLOW. LIMITS
****	*****	*****	***.*****	*****
2941	CHLOROFORM, mg/l	215	0.005	0.100
2942	BROMOFORM, mg/l	215	0.033	0.100
2943	BROMODICHLOROMETHANE, mg/l	215	0.015	0.100
2944	CHLORODIBROMOMETHANE, mg/l	215	0.037	0.100
2950	TOTAL TRIHALOMETHANES, mg/l	215	0.090	0.100

TYPE TREATMENT:

- NONE
- CHLORINATED
- FLUORIDATED
- FILTERED
- ALUM
- LIME
- SODA ASH
- CAUSTIC
- WATER SOFTENER
- POTASSIUM PERMANGANATE
- PHOSPHATE, IRON CONTROL
- PHOSPHATE, MANG. CONTROL
- PHOSPHATE, CORR. CONTROL
- OTHER _____

SAMPLE UNSATISFACTORY ()

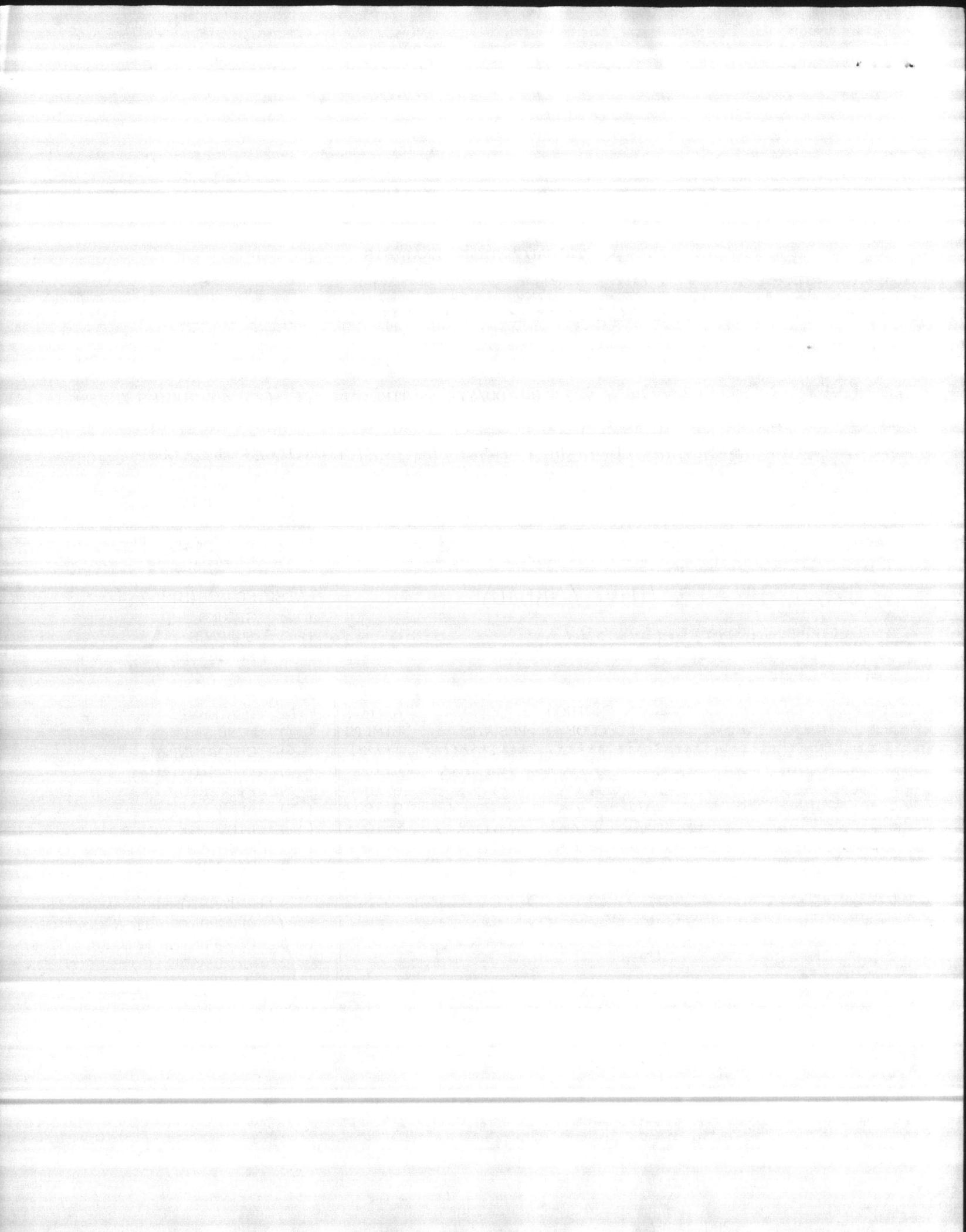
RESAMPLE REQUESTED ()

DATE ANALYSES BEGUN: 12/31/87

DATE ANALYSES COMPLETED: 12/31/87

COMMENTS:

CERTIFIED BY: JLK



TRIHALOMETHANE ANALYSIS

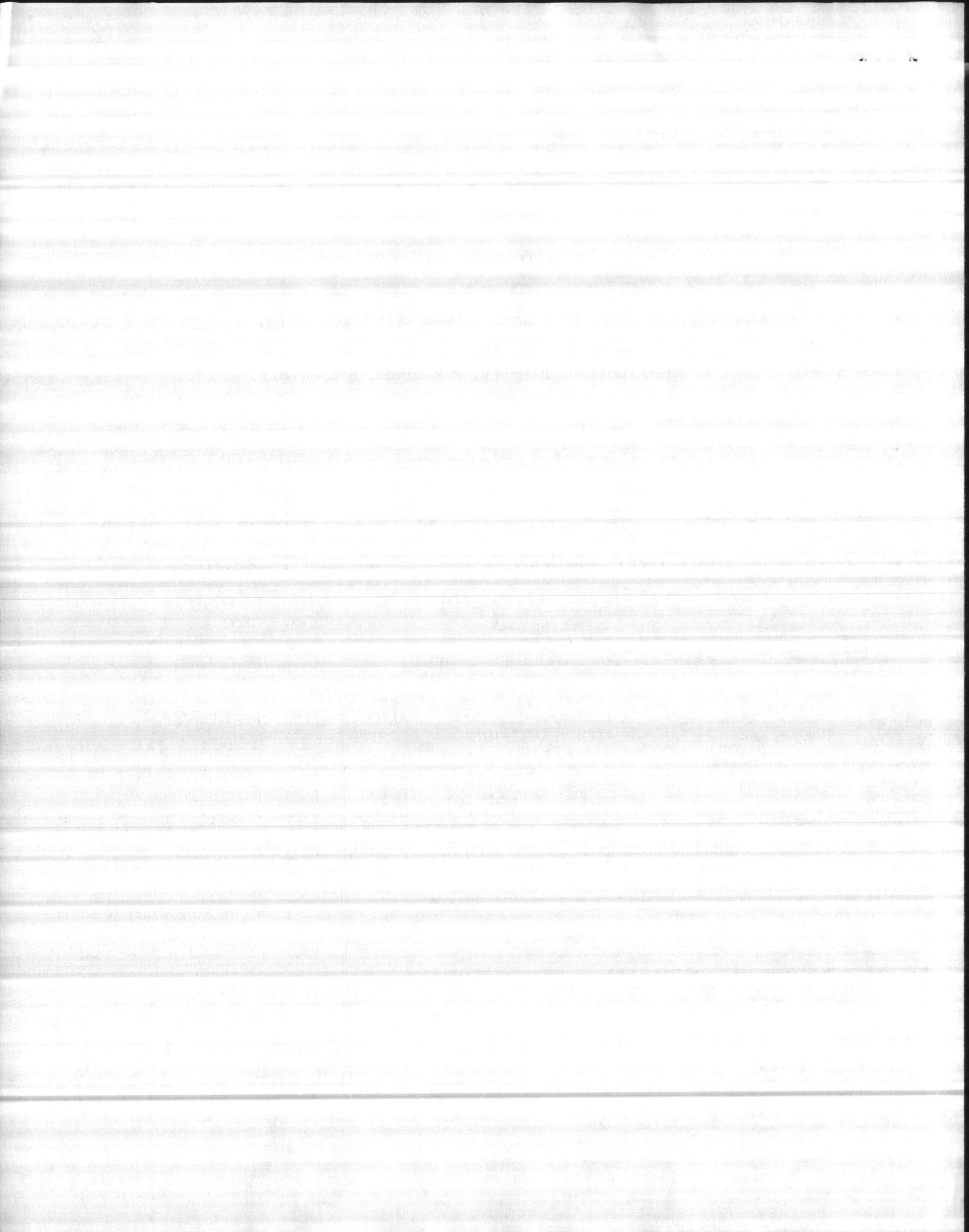
LABORATORY ID#: 37720
 WATER SYSTEM ID#: 04-67-042 COUNTY: Onslow
 NAME OF SYSTEM: Marine Corp Air Station
 TYPE OF SAMPLE: D (D=Distribution, E=Entry, M=Maximum, S=Special)
 COLLECTED ON: DATE: 12/15/87 (MM/DD/YY) TIME: 13:35 P M (HH:MM XM)
 LOCATION WHERE COLLECTED: G-520
 COLLECTED BY: Environmental Chemistry & Microbiology Sect LOCATION/SOURCE CODE: _____

MAIL RESULTS TO:
Commanding General, MCB
Camp LeJeune, NC 28542
Attn: ACS Facilities (NREAD)
 TELEPHONE # (919) 451-5977

TYPE OF SUPPLY:
 COMMUNITY
 NTNC
 NON-COMMUNITY
 PRIVATE
 WATER SOURCE(S):
 GROUND
 SURFACE
 PURCHASED

CONTAMINANT CODE	NAME	METHOD CODE	RESULTS	ALLOW. LIMITS	TYPE TREATMENT:
941	CHLOROFORM, mg/l	215	0.011	0.100	<input checked="" type="checkbox"/> CHLORINATED
942	BROMOFORM, mg/l	215	0.033	0.100	<input checked="" type="checkbox"/> FLUORIDATED
943	BROMODICHLOROMETHANE, mg/l	215	0.017	0.100	<input checked="" type="checkbox"/> FILTERED
944	CHLORODIBROMOMETHANE, mg/l	215	0.038	0.100	<input type="checkbox"/> ALUM
950	TOTAL TRIHALOMETHANES, mg/l	215	0.099	0.100	<input checked="" type="checkbox"/> LIME
					<input type="checkbox"/> SODA ASH
					<input type="checkbox"/> CAUSTIC
					<input checked="" type="checkbox"/> WATER SOFTENER
					<input type="checkbox"/> POTASSIUM PERMANGANATE
					<input type="checkbox"/> PHOSPHATE, IRON CONTROL
					<input type="checkbox"/> PHOSPHATE, MANG. CONTROL
					<input type="checkbox"/> PHOSPHATE, CORR. CONTROL
					<input type="checkbox"/> OTHER _____

SAMPLE UNSATISFACTORY () RESAMPLE REQUESTED ()
 TYPE ANALYSES BEGUN: 12/31/87 DATE ANALYSES COMPLETED: 12/31/87
 PREPARED BY: _____ CERTIFIED BY: JLK



TRICHALOMETHANE ANALYSIS

LABORATORY ID#: 37720

WATER SYSTEM ID#: 04-67-042 COUNTY: Onslow

NAME OF SYSTEM: Marine Corp Air Station

TYPE OF SAMPLE: D (D=Distribution, E=Entry, M=Maximum, S=Special)

COLLECTED ON: DATE: 12/15/87 (MM/DD/YY) TIME: 11:20 AM (HH:MM XM)

LOCATION WHERE COLLECTED: AS-710

COLLECTED BY: Environmental Chemistry & Microbiology Sect. LOCATION/SOURCE CODE: _____

MAIL RESULTS TO:

Commanding General, MCB
Camp LeJeune, NC 28542
Attn: AC/S Facilities (NREAD)

TELEPHONE # (919) 451-5977

TYPE OF SUPPLY:

- COMMUNITY
- NTNC
- NON-COMMUNITY
- PRIVATE

WATER SOURCE(S):

- GROUND
- SURFACE
- PURCHASED

CONTAM CODE	NAME	METHOD CODE	RESULTS	ALLOW. LIMITS
****	*****	*****	***.*****	*****
2941	CHLOROFORM, mg/l	<u>215</u>	<u>0.009</u>	0.100
2942	BROMOFORM, mg/l	<u>215</u>	<u>0.037</u>	0.100
2943	BROMODICHLOROMETHANE, mg/l	<u>215</u>	<u>0.014</u>	0.100
2944	CHLORODIBROMOMETHANE, mg/l	<u>215</u>	<u>0.037</u>	0.100
2950	TOTAL TRIHALOMETHANES, mg/l	<u>215</u>	<u>0.097</u>	0.100

TYPE TREATMENT:

- NONE
- CHLORINATED
- FLUORIDATED
- FILTERED
- ALUM
- LIME
- SODA ASH
- CAUSTIC
- WATER SOFTENER
- POTASSIUM PERMANGANATE
- PHOSPHATE, IRON CONTROL
- PHOSPHATE, MANG. CONTROL
- PHOSPHATE, CORR. CONTROL
- OTHER _____

SAMPLE UNSATISFACTORY ()

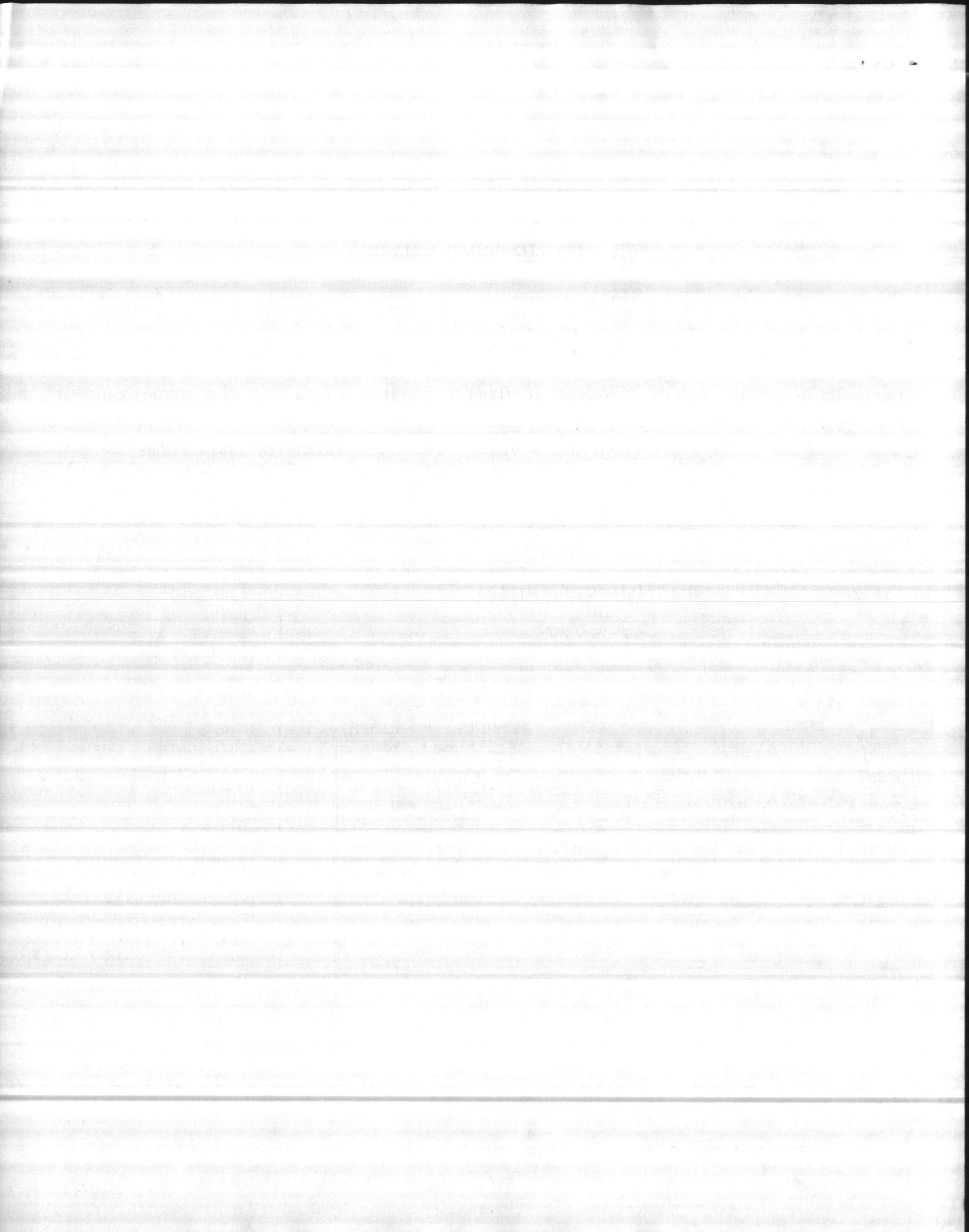
RESAMPLE REQUESTED ()

DATE ANALYSES BEGUN: 12/31/87

DATE ANALYSES COMPLETED: 12/31/87

COMMENTS:

CERTIFIED BY: JJK



TRIHALOMETHANE ANALYSIS

LABORATORY ID#: 37720
 WATER SYSTEM ID#: 04-67-042 COUNTY: Onslow
 NAME OF SYSTEM: Marine Corps Air Station
 TYPE OF SAMPLE: D (D=Distribution, E=Entry, M=Maximum, S=Special)
 COLLECTED ON: DATE: 12/15/87 (MM/DD/YY) TIME: 13:00 PM (HH:MM XM)
 LOCATION WHERE COLLECTED: AS-4025
 COLLECTED BY: Environmental Chemistry & Microbiology Section LOCATION/SOURCE CODE: _____

MAIL RESULTS TO:

Commanding General, MCB
Camp LeJeune, NC 28542
Attn: AC/S Facilities (NREAD)
 TELEPHONE # (919) 451-5977

TYPE OF SUPPLY:

- COMMUNITY
- NTNC
- NON-COMMUNITY
- PRIVATE

WATER SOURCE(S):

- GROUND
- SURFACE
- PURCHASED

CONTAMINANT CODE	NAME	METHOD CODE	RESULTS	ALLOW. LIMITS
941	CHLOROFORM, mg/l	215	0.005	0.100
942	BROMOFORM, mg/l	215	0.040	0.100
943	BROMODICHLOROMETHANE, mg/l	215	0.015	0.100
944	CHLORODIBROMOMETHANE, mg/l	215	0.040	0.100
950	TOTAL TRIHALOMETHANES, mg/l	215	0.100	0.100

TYPE TREATMENT:

- NONE
- CHLORINATED
- FLUORIDATED
- FILTERED
- ALUM
- LIME
- SODA ASH
- CAUSTIC
- WATER SOFTENER
- POTASSIUM PERMANGANATE
- PHOSPHATE, IRON CONTROL
- PHOSPHATE, MANG. CONTROL
- PHOSPHATE, CORR. CONTROL
- OTHER _____

SAMPLE UNSATISFACTORY ()

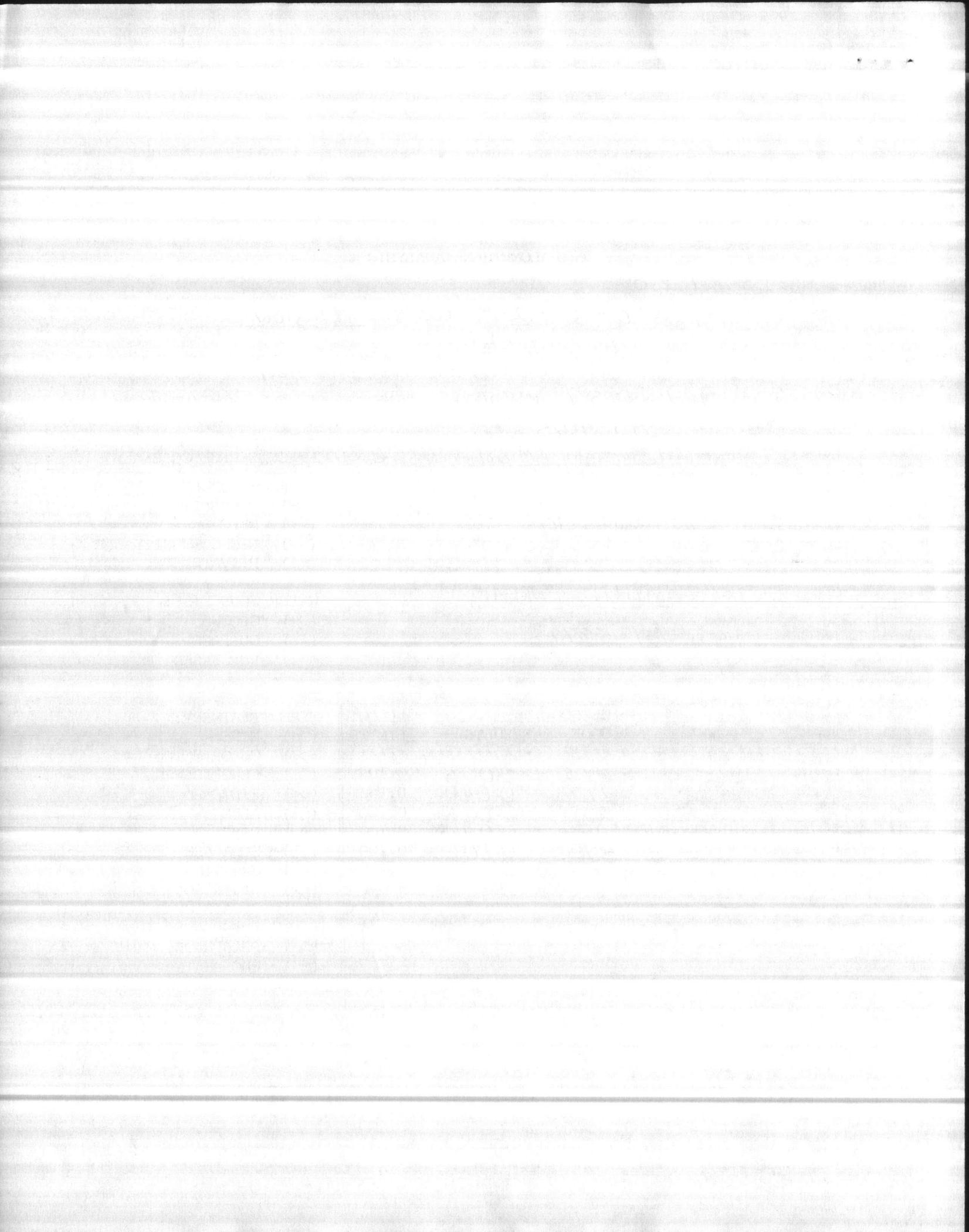
RESAMPLE REQUESTED ()

DATE ANALYSES BEGUN: 12/31/87

DATE ANALYSES COMPLETED: 12/31/87

CERTIFIED BY: JK

REMARKS:



TRIHALOMETHANE ANALYSIS

LABORATORY ID#: 31720
 WATER SYSTEM ID#: 04-67-043 COUNTY: Onslow
 NAME OF SYSTEM: Holcomb Blvd.
 TYPE OF SAMPLE: D (D=Distribution, E=Entry, M=Maximum, S=Special)
 COLLECTED ON: DATE: 12/15/87 (MM/DD/YY) TIME: 09:30 AM (HH:MM XM)
 LOCATION WHERE COLLECTED: HB-670 Water Plant
 COLLECTED BY: Environmental Chemistry & Microbiology LOCATION/SOURCE CODE: _____

MAIL RESULTS TO: _____
Commanding General, MCB
Camp LeJeune, NC 28542
Attn: AC/S Facilities (NREAD)
 TELEPHONE # (919) 451-5977

TYPE OF SUPPLY:
 COMMUNITY
 NINC
 NON-COMMUNITY
 PRIVATE
 WATER SOURCE(S):
 GROUND
 SURFACE
 PURCHASED

CONTAMINANT CODE	NAME	METHOD CODE	RESULTS	ALLOW. LIMITS
341	CHLOROFORM, mg/l	215	0.011	0.100
342	BROMOFORM, mg/l	215	< 0.001	0.100
343	BROMODICHLOROMETHANE, mg/l	215	0.008	0.100
344	CHLORODIBROMOMETHANE, mg/l	215	0.005	0.100
350	TOTAL TRIHALOMETHANES, mg/l	215	0.024	0.100

TYPE TREATMENT:
 NONE
 CHLORINATED
 FLUORIDATED
 FILTERED
 ALUM
 LIME
 SODA ASH
 CAUSTIC
 WATER SOFTENER
 POTASSIUM PERMANGANATE
 PHOSPHATE, IRON CONTROL
 PHOSPHATE, MANG. CONTROL
 PHOSPHATE, CORR. CONTROL
 OTHER _____

SAMPLE UNSATISFACTORY () RESAMPLE REQUESTED ()
 TYPE ANALYSES BEGUN: 12/31/87 DATE ANALYSES COMPLETED: 12/31/87
 COMMENTS: _____ CERTIFIED BY: [Signature]

INSTRUCTIONS

- 1) THE CLIENT IS RESPONSIBLE FOR COMPLETING ALL INFORMATION ABOVE THE DOUBLE LINE. Failure to complete all the information may result in rejection of the samples. Use a typewriter or a ball point pen. Please write legibly if a typewriter is not available.
- 2) The samples must be collected in bottles supplied by this laboratory. There is a preservative in the bottles so do not rinse out the bottles.
- 3) Let the water run from the tap for five (5) minutes. Fill the sample vials slowly to over-flowing in a manner that prevents air bubbles from passing through the sample. Place the teflon portion of the cap on the vial and screw the black ring tightly down. There should be no air bubbles in the vial. If air bubbles exist, open the vial and add a few drops of water, seal again. Shake vigorously.
- 4) Collect samples from the distribution system. These may be at random locations, but twenty-five percent (at least one) must be taken which represents maximum residence time in the system. This sample should be marked "M" for "Maximum." The other distribution samples should be marked "D" for "Distribution."
- 5) Forward all samples to the laboratory immediately after collection.
- 6) After the samples are analyzed, regulations require that the laboratory mail the results of all compliance samples to the Division of Health Services. A copy will be sent to the client, and this copy shall be retained by the client for at least ten (10) years.
- 6) If the form should be returned to the client marked "Sample Unsatisfactory," this means another sample will have to be collected. The COMMENTS section on front of the form will give the reason.

TYPES OF SAMPLES

- Distribution: A sample collected in the distribution system from a location representing average conditions.
- Entry: A sample collected at the entry point into the distribution system.
- Maximum: A sample collected from a point in the distribution system which represents the maximum residence time.
- Special: A sample collected for special purposes and is not required for compliance monitoring.

