

ON 1453

DRILLING CONTRACTOR \_\_\_\_\_ REG. NO. \_\_\_\_\_ WELL CONSTRUCTION PERMIT NO. \_\_\_\_\_

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: City of Jacksonville County: Onslow  
Highway 53 Quadrangle No. X 26 9  
 (Road, Community or Subdivision and Lot No.) 34 46 43 77 30 03

2. OWNER: City of Jacksonville

DRILLING LOG

3. ADDRESS: P.O. Box 128

DEPTH FROM TO FORMATION DESCRIPTION

4. TOPOGRAPHY: draw, valley, slope, hilltop, flat (circle one)

5. USE OF WELL: Monitoring DATE: June 8, 1984 0-4 ft. Gray silty sandy clay

6. DOES THIS WELL REPLACE AN EXISTING WELL? NO 4-14 ft. Gray fine-med. sand Mottled

7. TOTAL DEPTH: 25' RIG TYPE OR METHOD: mud 14-25 ft. Gray fine-med. sand

8. FORMATION SAMPLES COLLECTED: YES \_\_\_\_\_ NO X

9. CASING: Depth Inside Dia. Wall thick. type or weight/ft.

From +1 to 15 ft 2" Sch 40 PVC

10. GROUT: Depth Material Method

From 0- to 15 ft Type I

If additional space is needed, use back of form

11. SCREEN: Depth Dia. Type & Opening

From 15 to 25 ft 2" Slotted 0.01

LOCATION SKETCH (Show distance to numbered roads, or other map reference points)

12. GRAVEL: Depth Size Material

From 15 to 25 ft sand quartzitic

13. WATER ZONES (depth): 15-25 ft.

14. STATIC WATER LEVEL: 4.0 ft. <sup>above</sup> <sub>below</sub> top of casing Cam  
 Casing is 1.0 ft. above land surface ELEV: Cam

15. YIELD (gpm): N/A METHOD OF TESTING: \_\_\_\_\_

16. PUMPING WATER LEVEL: \_\_\_\_\_ ft.  
 after \_\_\_\_\_ hours at \_\_\_\_\_ gpm.

17. CHLORINATION: Type \_\_\_\_\_ Amount \_\_\_\_\_

18. WATER QUALITY: \_\_\_\_\_ TEMPERATURE (°F) \_\_\_\_\_

19. PERMANENT PUMP: Date Installed \_\_\_\_\_

Type \_\_\_\_\_ Capacity \_\_\_\_\_ (gpm) HP \_\_\_\_\_

Make \_\_\_\_\_ Intake Depth \_\_\_\_\_

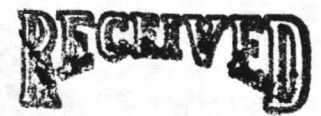
Airline Depth \_\_\_\_\_

20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENT'S RECOMMENDATIONS AND RECOMMENDATIONS? \_\_\_\_\_

21. REMARKS \_\_\_\_\_

I do hereby certify that this well was constructed in accordance with N.C. Well Construction Regulations and Standards and that this well record is true and exact.

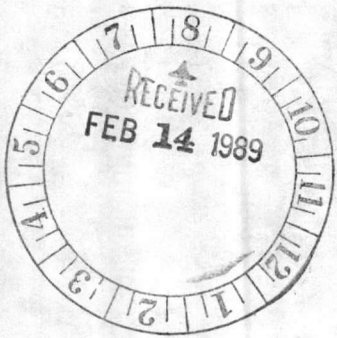
Sal S. [Signature] Aug 1 84  
 SIGNATURE OF CONTRACTOR OF AGENT DATE



AUG 21 1984

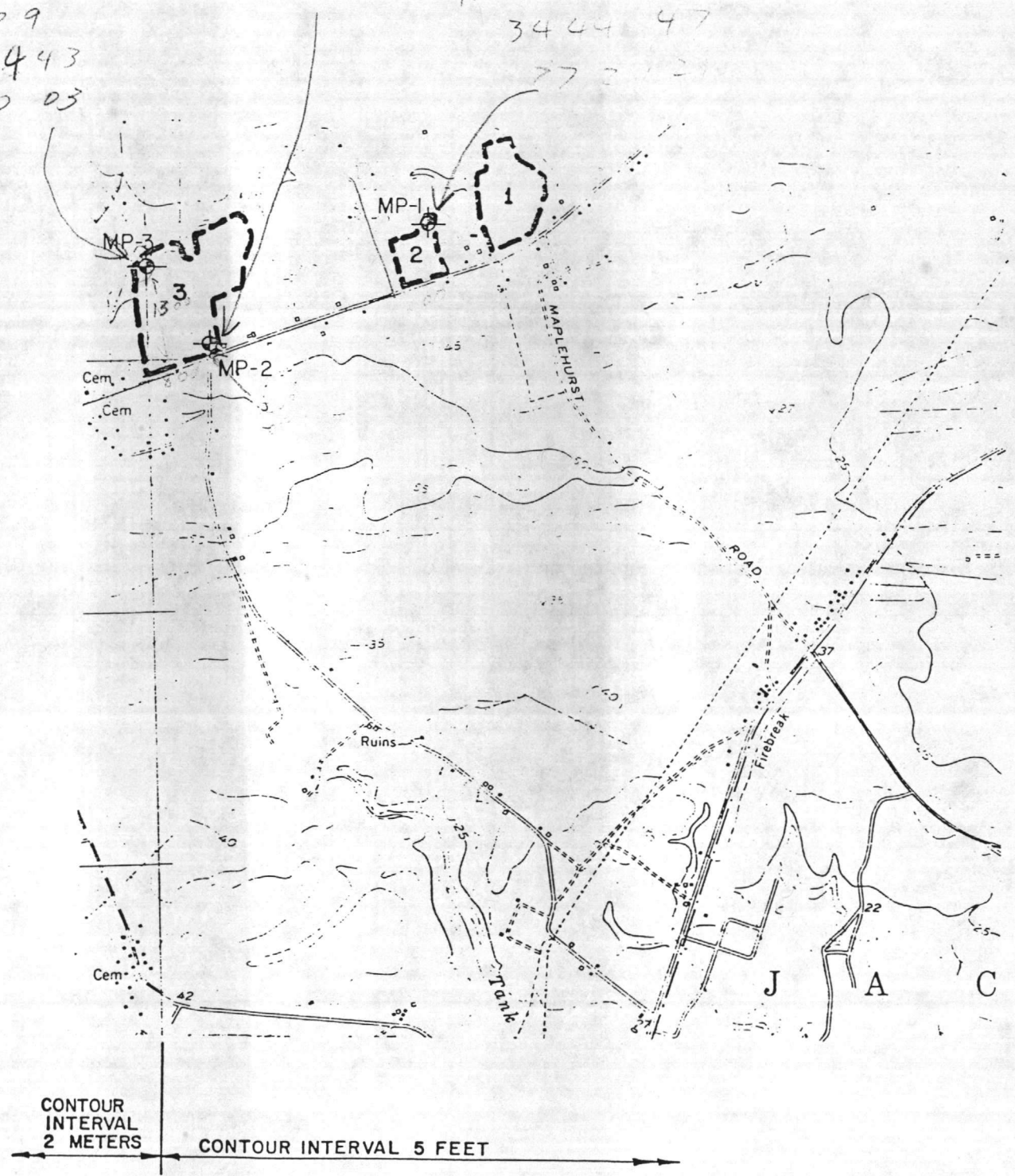
WILMINGTON REGIONAL OFFICE


DEM



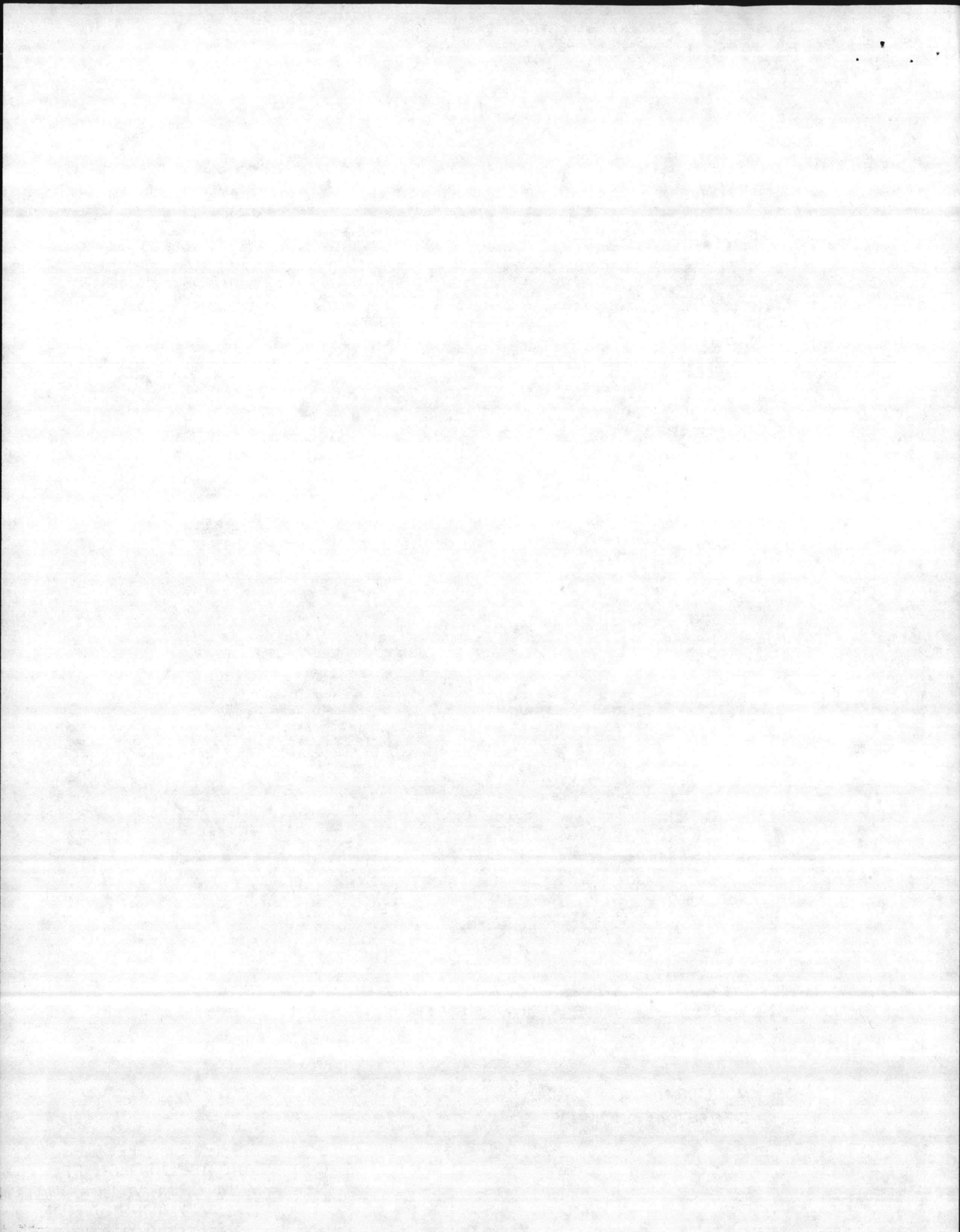
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77 29 55  
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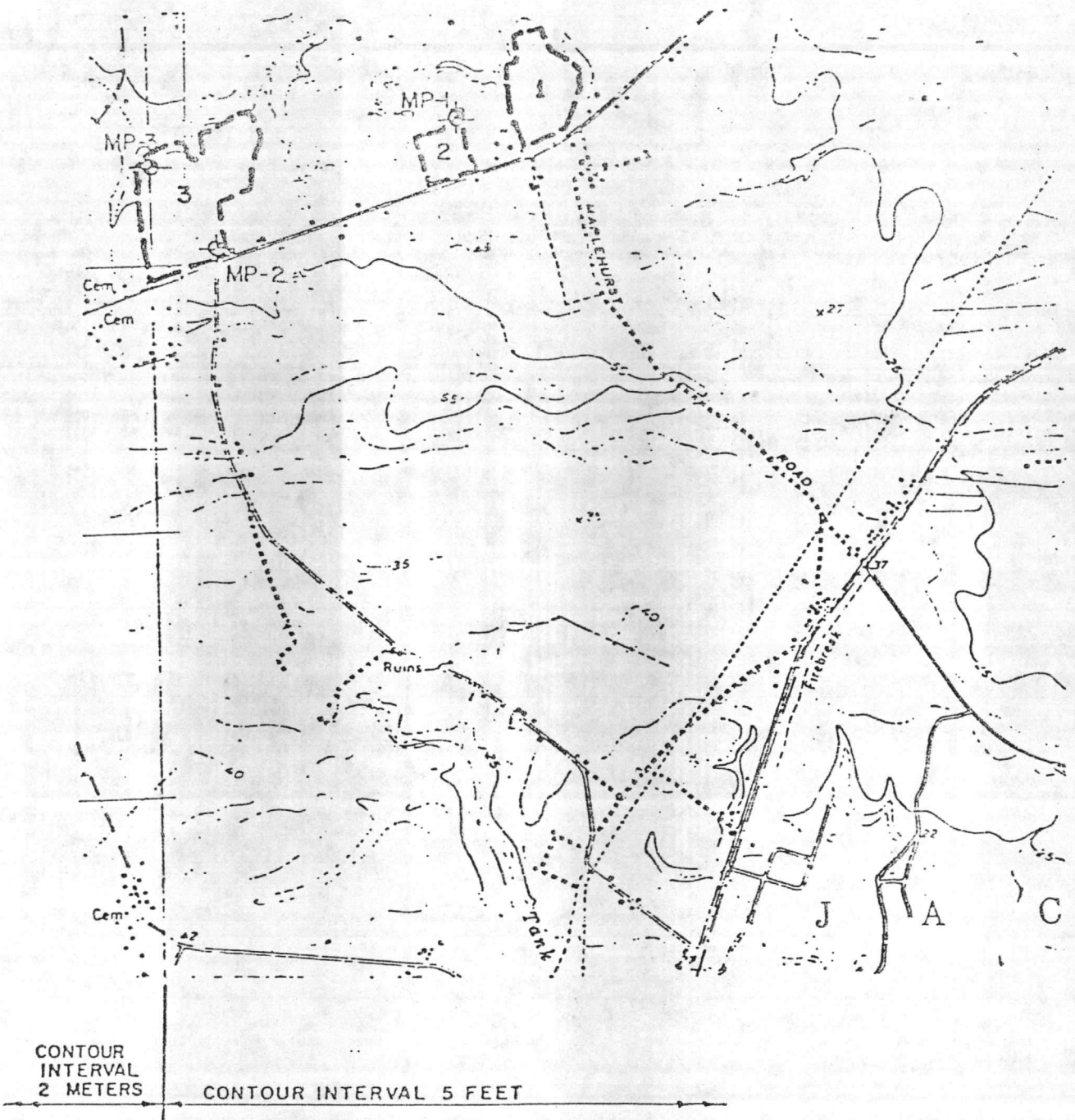


 MONITORING WELL  
 MP-1 IDENTIFICATION NUMBER

CITY OF JACKSONVILLE  
 LAND APPLICATION PROJECT  
 MONITORING WELL LOCATION  
 LAND APPLICATION  
 SITES 1, 2 AND 3



WELL LOCATION SITES



CONTOUR  
INTERVAL  
2 METERS

CONTOUR INTERVAL 5 FEET

WELL LOCATION MAP

MONITORING WELLS

CITY OF JACKSONVILLE, NORTH CAROLINA



**ATEC Associates, Inc.**  
of North Carolina

SCALE

N.T.S.

Drawn:

Checked: pf

Date: 2/6/84

Job No.  
35-41104

Dwg. No.  
2



DEPTH FT. DESCRIPTION ELEV. PENETRATION BLOWS PER FT. PER 6 INCHES REC.

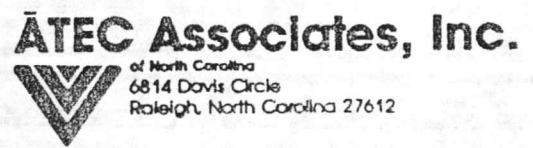
0 10 20 30 50

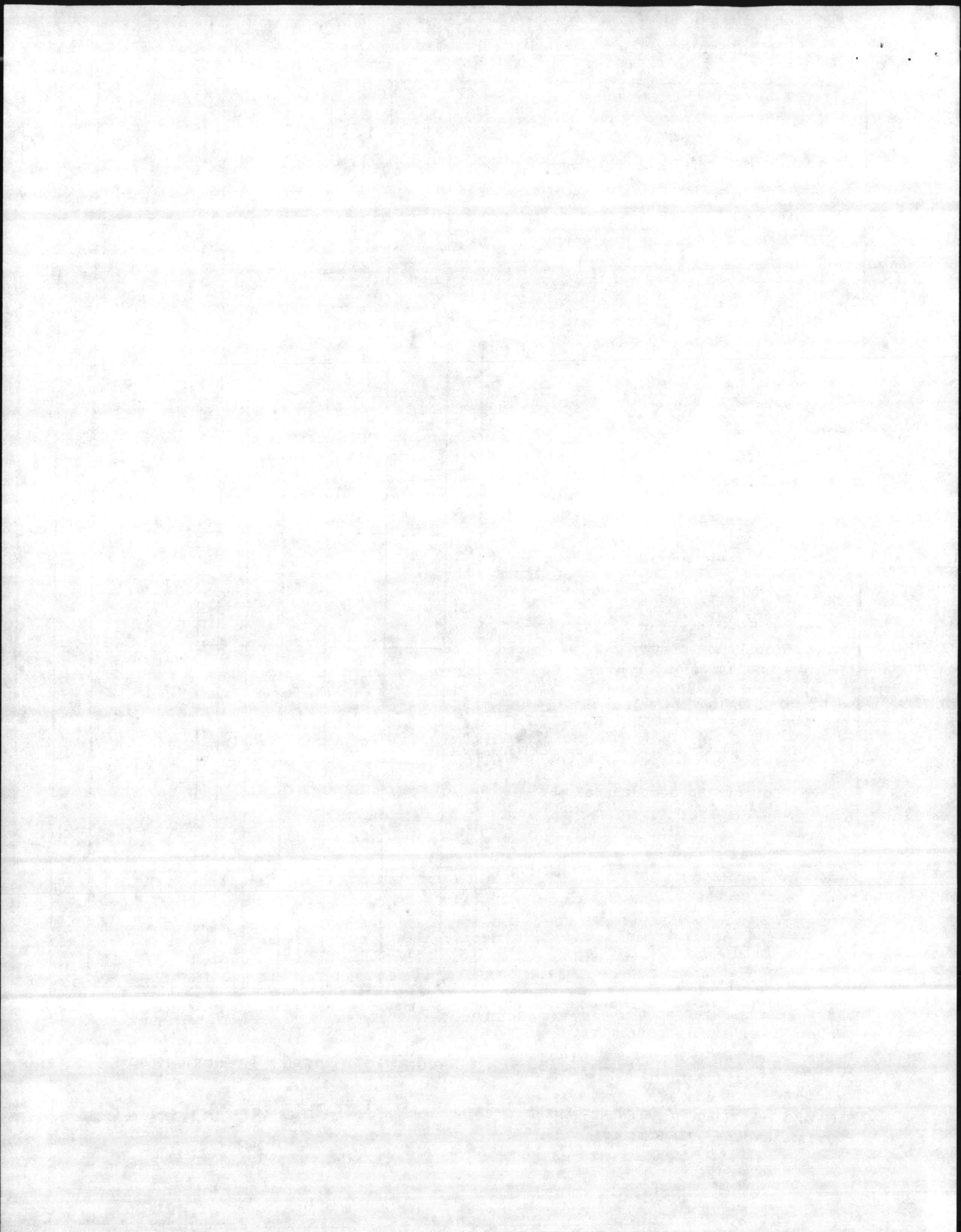
DEPTH FT.	DESCRIPTION	ELEV.	0	10	20	30	50	PER 6 INCHES	REC.
0	Brown fine sandy silty CLAY								
2.0	Light gray silty very fine SAND								
4.0	Orange and gray or brown clayey fine to medium SAND with cemented sand layers below 13+ feet.								
16.0	Gray silty fine to coarse SAND, trace shells and cemented sand.								
21.0	Gray silty clayey fine SAND								
24.0	Gray fine sandy silty CLAY, trace shells								
28.0	Gray silty, clayey fine to coarse SAND								
40.0	Auger Boring, No Samples Below 30 feet								

Boring Terminated at 40.0 feet.  
Water Level at 3.0 feet after 24 Hours.

JOB NO. 35-41104 DATE 2/1/84 PAGE 1 OF 1 BORING NO. MW-3

REFER TO THE ATTACHED REFERENCE SHEET FOR EXPLANATIONS AND SYMBOLS.







1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: Jacksonville County: Onslow  
Hwy. 53 Quadrangle No. \_\_\_\_\_  
(Road, Community or Subdivision and Lot No.)

2. OWNER: City of Jacksonville

DRILLING LOG

3. ADDRESS: \_\_\_\_\_

DEPTH FROM TO

FORMATION DESCRIPTION

4. TOPOGRAPHY: draw, valley, slope, hilltop (flat) (circle one)

5. USE OF WELL: Monitoring DATE: 2/1/84

SEE ATTACHED DATA

6. DOES THIS WELL REPLACE AN EXISTING WELL? No

MW-3

7. TOTAL DEPTH: 40' RIG TYPE OR METHOD: Rotary

8. FORMATION SAMPLES COLLECTED: YES XX NO

9. CASING: Depth Inside Wall thick. type  
Dia. or weight/ft. PVC  
From     to 30 ft 2" Sched 80

10. GROUT: Depth Material Method  
From 0 to 27 ft Cement Pump

If additional space is needed, use back of form

11. SCREEN: Depth Dia. Type & Opening  
From 30 to 40 ft 2" .0001 slotted

LOCATION SKETCH

(Show distance to numbered roads, or other map reference points)

SEE ATTACHED DATA

12. GRAVEL: Depth Size Material  
From 28 to 40 ft 3/8" Granite

13. WATER ZONES (depth): \_\_\_\_\_

14. STATIC WATER LEVEL: 3 ft. <sup>above</sup>/<sub>below</sub> top of casing  
Casing is 1.5 ft. above land surface ELEV: \_\_\_\_\_

15. YIELD (gpm): \_\_\_\_\_ METHOD OF TESTING: \_\_\_\_\_

16. PUMPING WATER LEVEL: \_\_\_\_\_ ft.  
after \_\_\_\_\_ hours at \_\_\_\_\_ gpm.

17. CHLORINATION: Type NO Amount \_\_\_\_\_

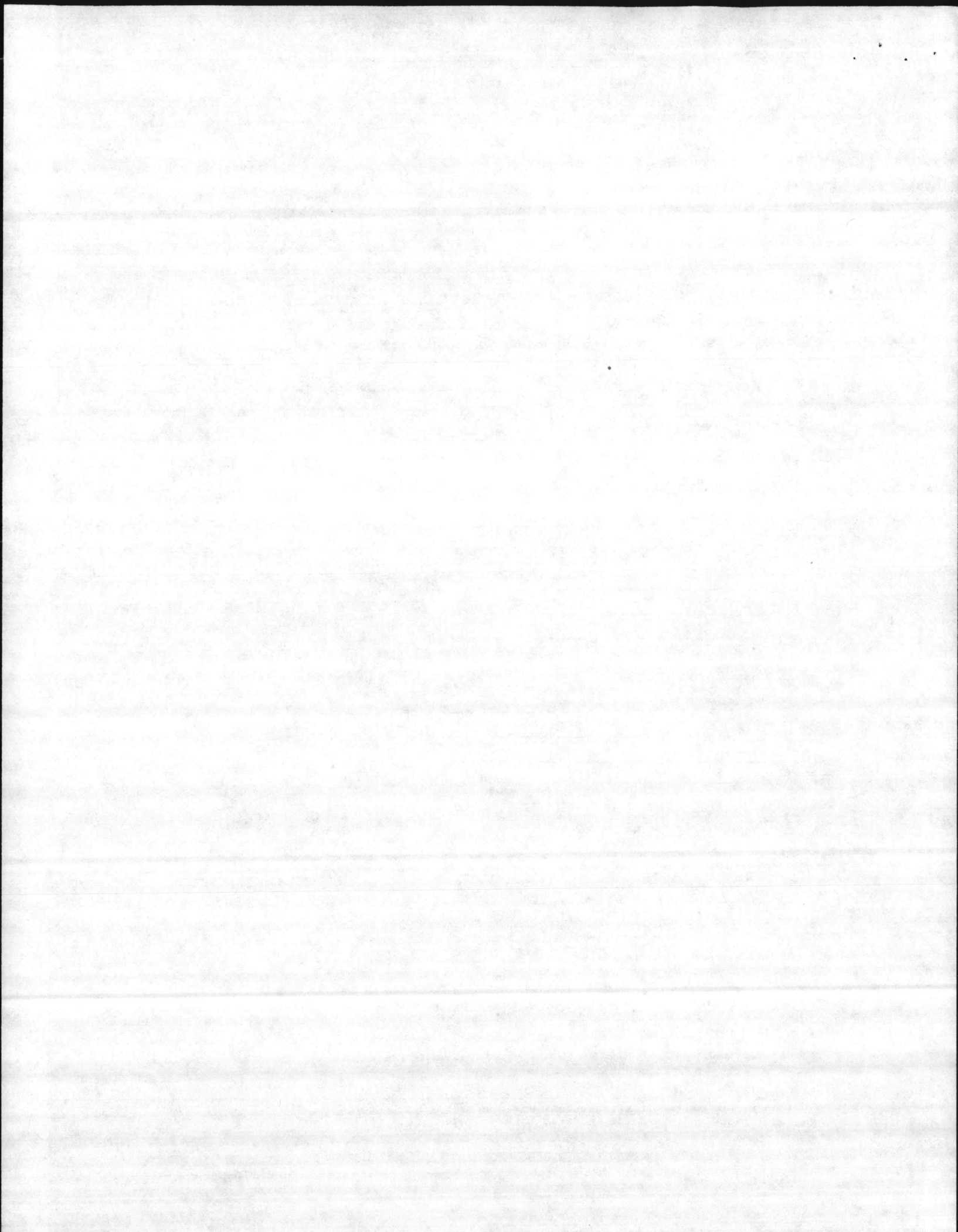
18. WATER QUALITY: NO TEMPERATURE (°F) \_\_\_\_\_

19. PERMANENT PUMP: Date Installed N/A  
Type \_\_\_\_\_ Capacity \_\_\_\_\_ (gpm) HP \_\_\_\_\_  
Make \_\_\_\_\_ Intake Depth \_\_\_\_\_  
Airline Depth \_\_\_\_\_

20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENTS REQUIREMENTS AND RECOMMENDATIONS? YES

21. REMARKS  
I do hereby certify that this well was constructed in accordance with N.C. Well Construction Regulations and Standards and that this well record is true and exact.

Ruth Witt 2-3-84  
SIGNATURE OF CONTRACTOR OF AGENT DATE



# TEST BORING RECORD

BLOWS

PER

6 INCHES

REC.

DEPTH

FT.

DESCRIPTION

ELEV.

● PENETRATION

BLOWS PER FT.

0

0

10

20

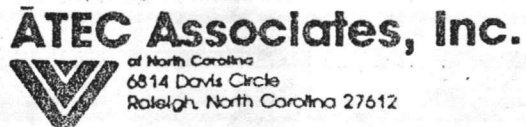
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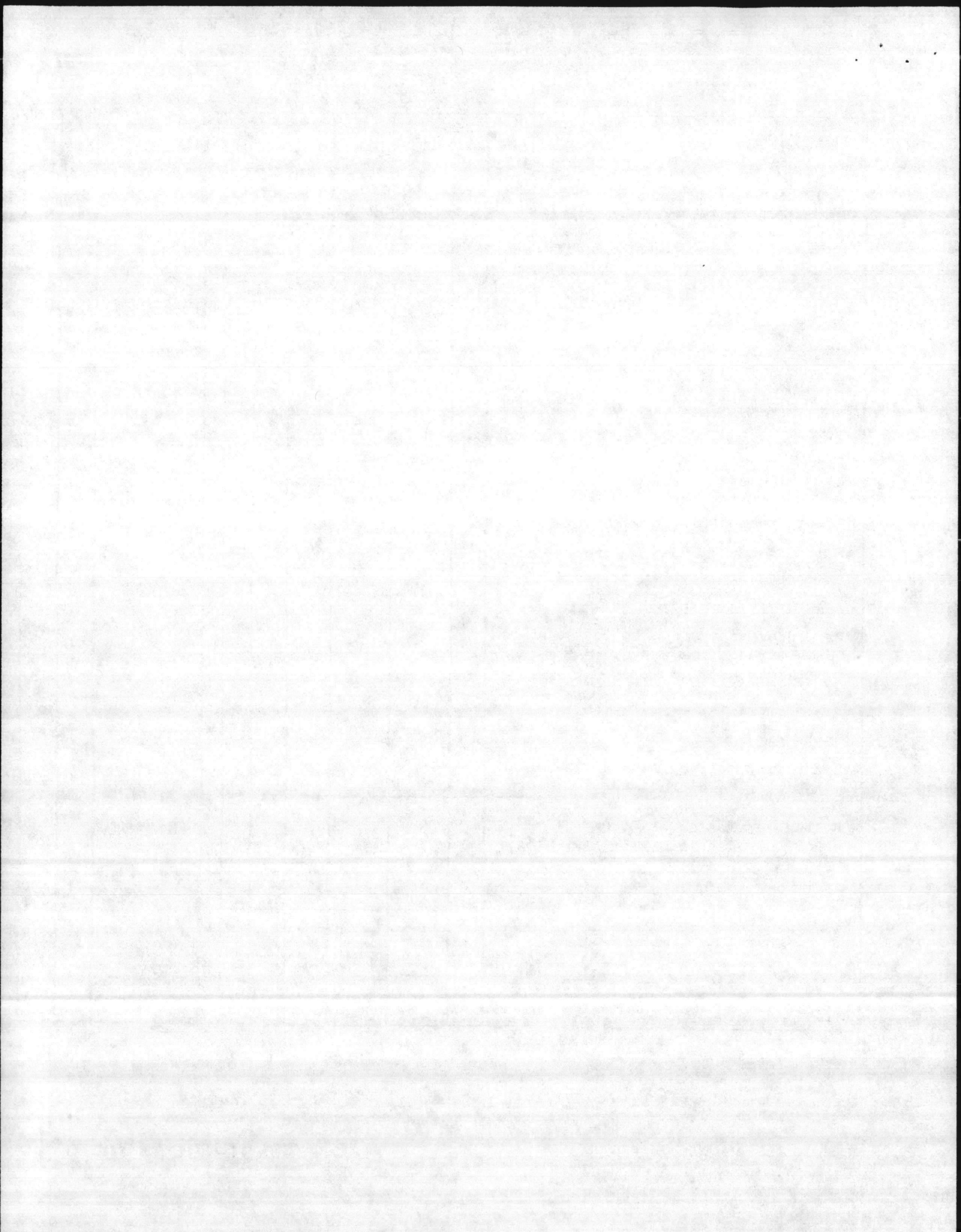
50

DEPTH FT.	DESCRIPTION	ELEV.	● PENETRATION BLOWS PER FT.					BLOWS PER 6 INCHES	REC.
			0	10	20	30	50		
0	Brown and tan silty fine SAND								
3.0	Gray and yellow fine sandy silty CLAY								
8.0	Dark gray with yellow slightly fine sandy CLAY								
18.0	Dark gray clayey fine to medium SAND								▽ =
22.0	Dark gray silty fine to coarse SAND, trace fine gravel								
28.0	Gray silty, clayey fine to coarse SAND with cemented sand								
30.0	Boring Terminated at 30.0 Feet Water Level at 15.0 Feet After 24 Hours								

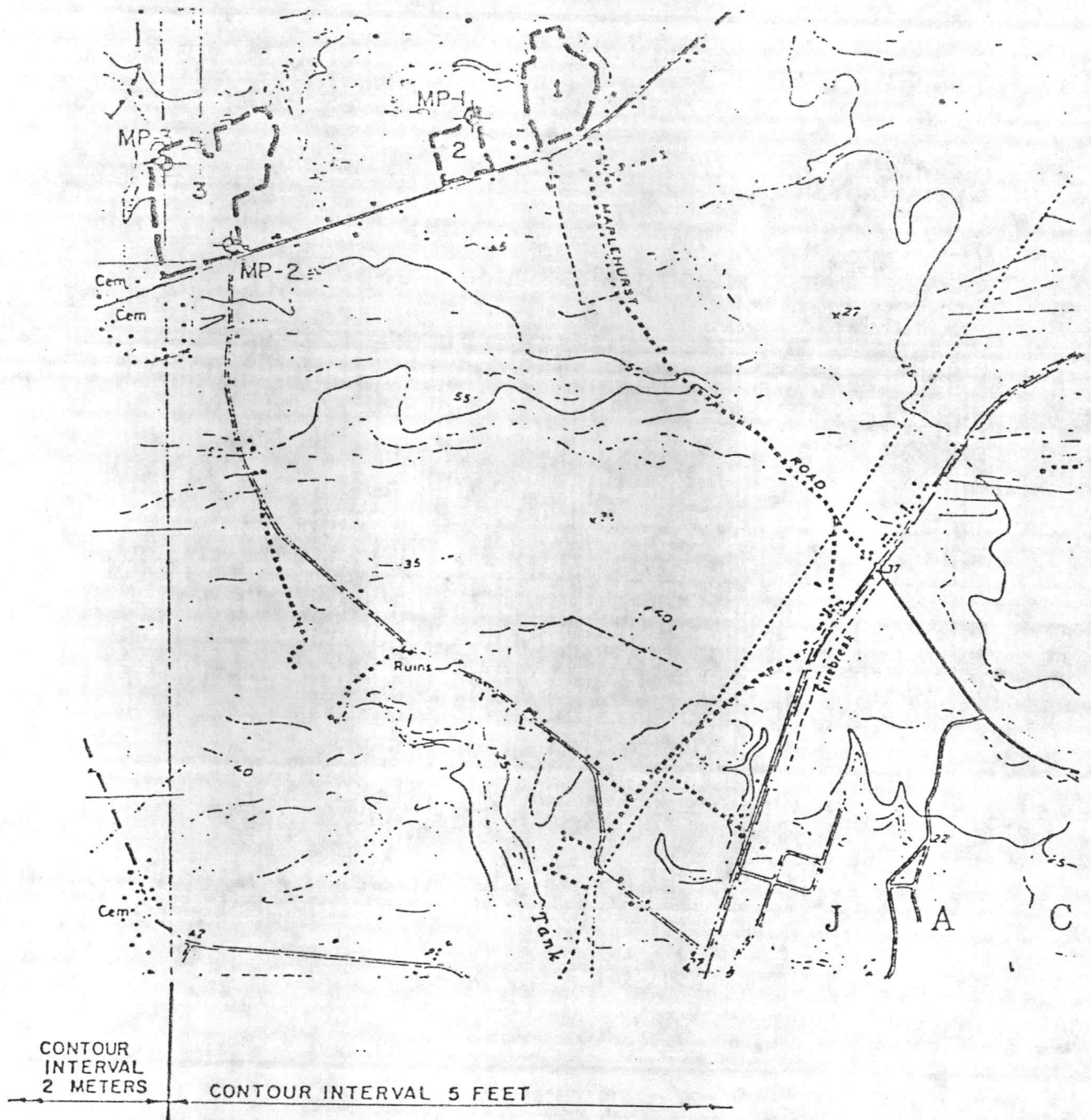
JOB NO. 35-41104    DATE 2/2/84    PAGE 1 OF 1    BORING NO. MW-2

REFER TO THE ATTACHED REFERENCE SHEET FOR EXPLANATIONS AND SYMBOLS.





WELL LOCATION SITES



CONTOUR  
INTERVAL  
2 METERS

CONTOUR INTERVAL 5 FEET

WELL LOCATION MAP

MONITORING WELLS

CITY OF JACKSONVILLE, NORTH CAROLINA



**ATEC Associates, Inc.**  
of North Carolina

SCALE

N.T.S.

Drawn:

Checked: pf

Date: 2/6/84

Job No.

35-41104

Dwg. No.

2



0N1440

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: Jacksonville County: Onslow

Hwy. 53 Quadrangle No. \_\_\_\_\_  
(Road, Community or Subdivision and Lot No.)

2. OWNER: City of Jacksonville

DRILLING LOG

3. ADDRESS: \_\_\_\_\_

DEPTH  
FROM TO

FORMATION DESCRIPTION

4. TOPOGRAPHY: draw, valley, slope, hilltop, flat (circle one)

5. USE OF WELL: Monitoring DATE: 2/2/84

SEE ATTACHED DATA

6. DOES THIS WELL REPLACE AN EXISTING WELL? No

MW-2

7. TOTAL DEPTH: 30' RIG TYPE OR METHOD: Rotary

8. FORMATION SAMPLES COLLECTED: YES XX NO

9. CASING: Depth Inside Wall thick. type  
Dia. or weight/ft. PVC

From \_\_\_\_\_ to 20 ft 2" Sched 80

10. GROUT: Depth Material Method

From 0 to 17 ft Cement Pump

If additional space is needed, use back of form

11. SCREEN: Depth Dia. Type & Opening

From 20 to 30 ft \_\_\_\_\_ .0001 Slotted

LOCATION SKETCH

(Show distance to numbered roads, or other map reference points)

SEE ATTACHED DATA

12. GRAVEL: Depth Size Material

From 18 to 30 ft 3/8" Granite

13. WATER ZONES (depth): \_\_\_\_\_

14. STATIC WATER LEVEL: 15 ft. above top of casing  
below

Casing is 1.5 ft. above land surface ELEV: \_\_\_\_\_

15. YIELD (gpm): \_\_\_\_\_ METHOD OF TESTING: \_\_\_\_\_

16. PUMPING WATER LEVEL: \_\_\_\_\_ ft.

after \_\_\_\_\_ hours at \_\_\_\_\_ gpm.

17. CHLORINATION: Type NO Amount \_\_\_\_\_

18. WATER QUALITY: NO TEMPERATURE (°F) \_\_\_\_\_

19. PERMANENT PUMP: Date Installed N/A

Type \_\_\_\_\_ Capacity \_\_\_\_\_ (gpm) HP \_\_\_\_\_

Make \_\_\_\_\_ Intake Depth \_\_\_\_\_

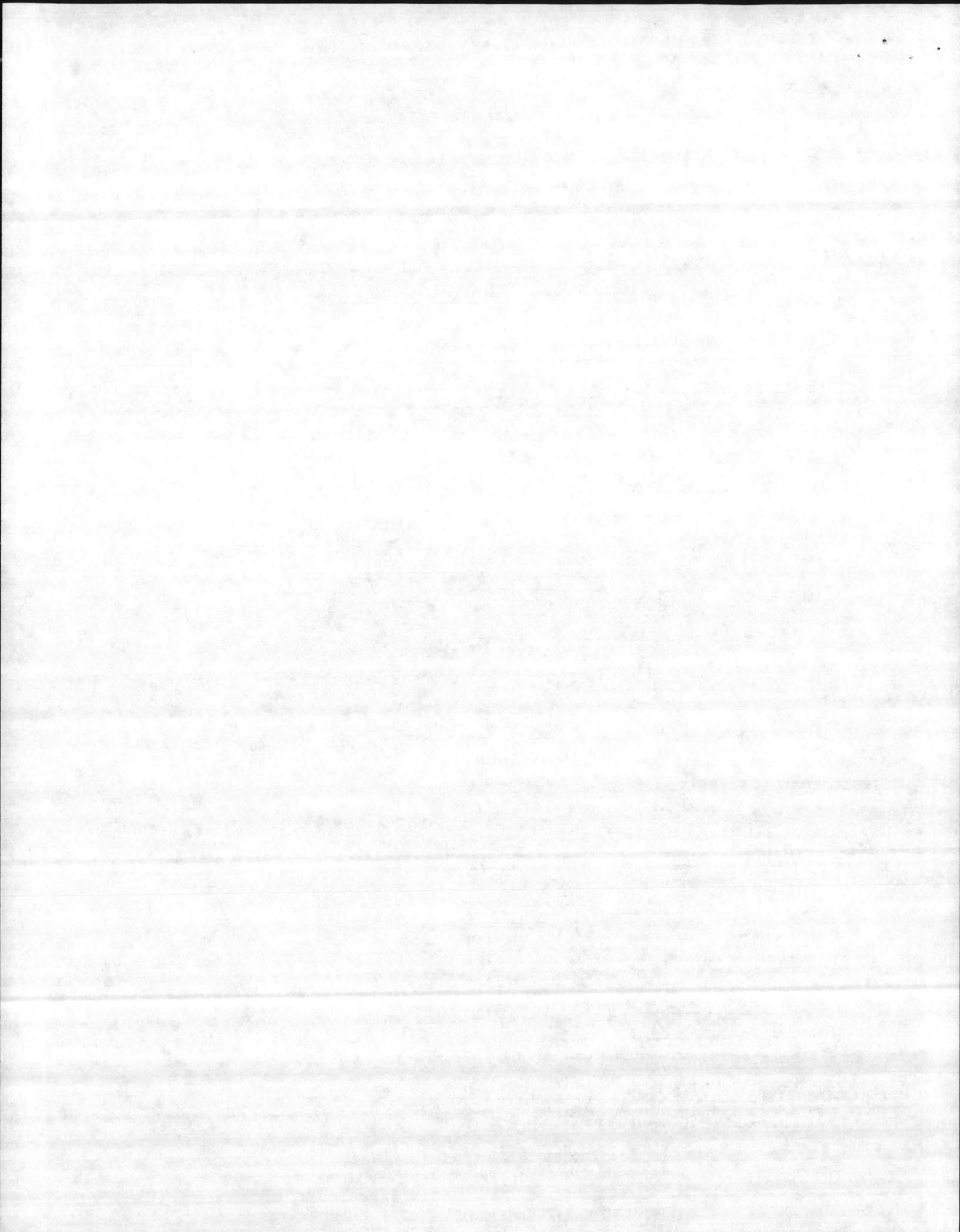
Airline Depth \_\_\_\_\_

20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENTS REQUIREMENTS AND RECOMMENDATIONS? YES

21. REMARKS \_\_\_\_\_

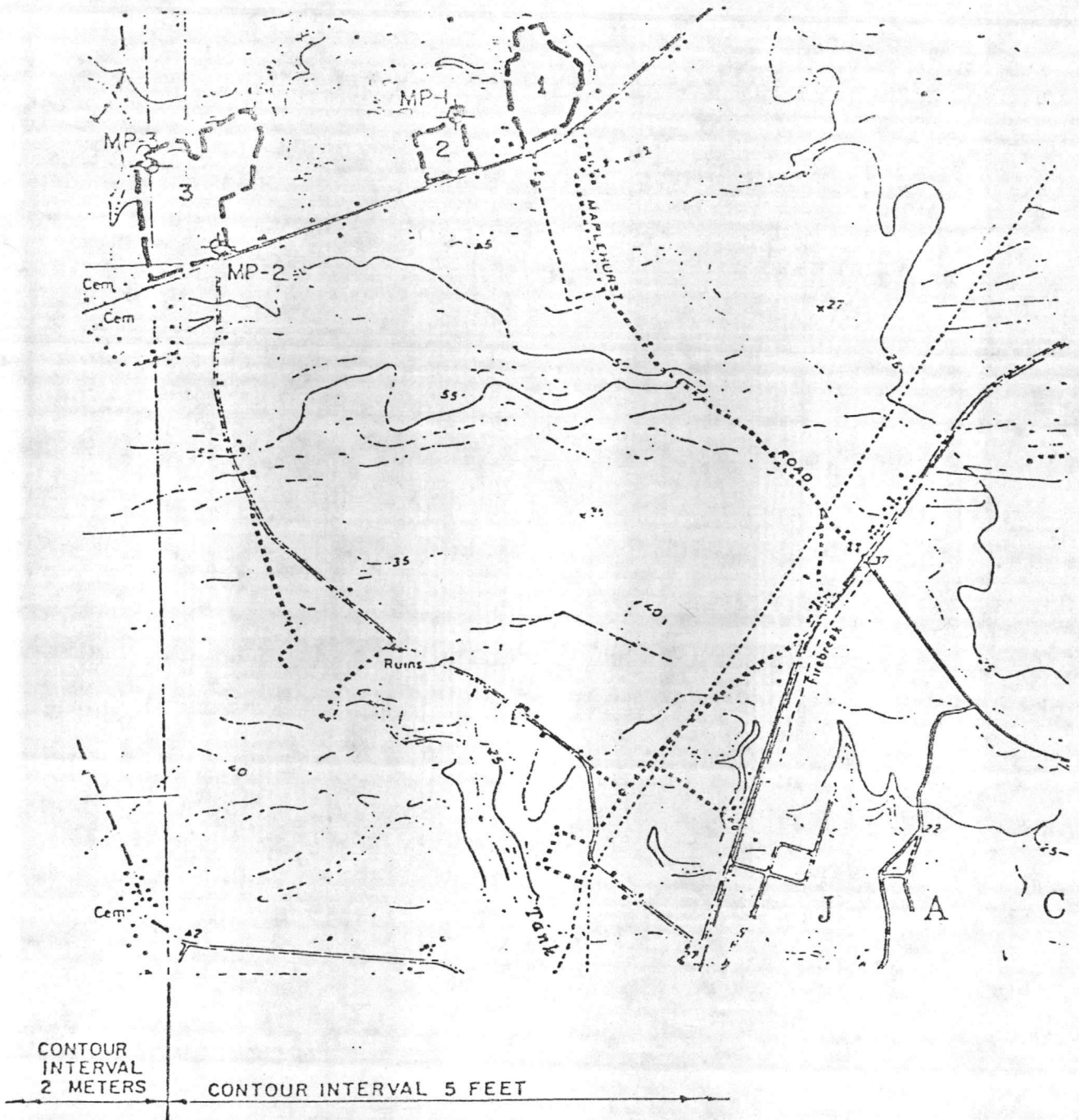
I do hereby certify that this well was constructed in accordance with N.C. Well Construction Regulations and Standards and that this well record is true and exact.

[Signature] 2-3-84  
SIGNATURE OF CONTRACTOR OR AGENT DATE





WELL LOCATION SITES



CONTOUR  
INTERVAL  
2 METERS

CONTOUR INTERVAL 5 FEET

WELL LOCATION MAP

MONITORING WELLS

CITY OF JACKSONVILLE, NORTH CAROLINA



**ATEC Associates, Inc.**  
of North Carolina

SCALE

N.T.S.

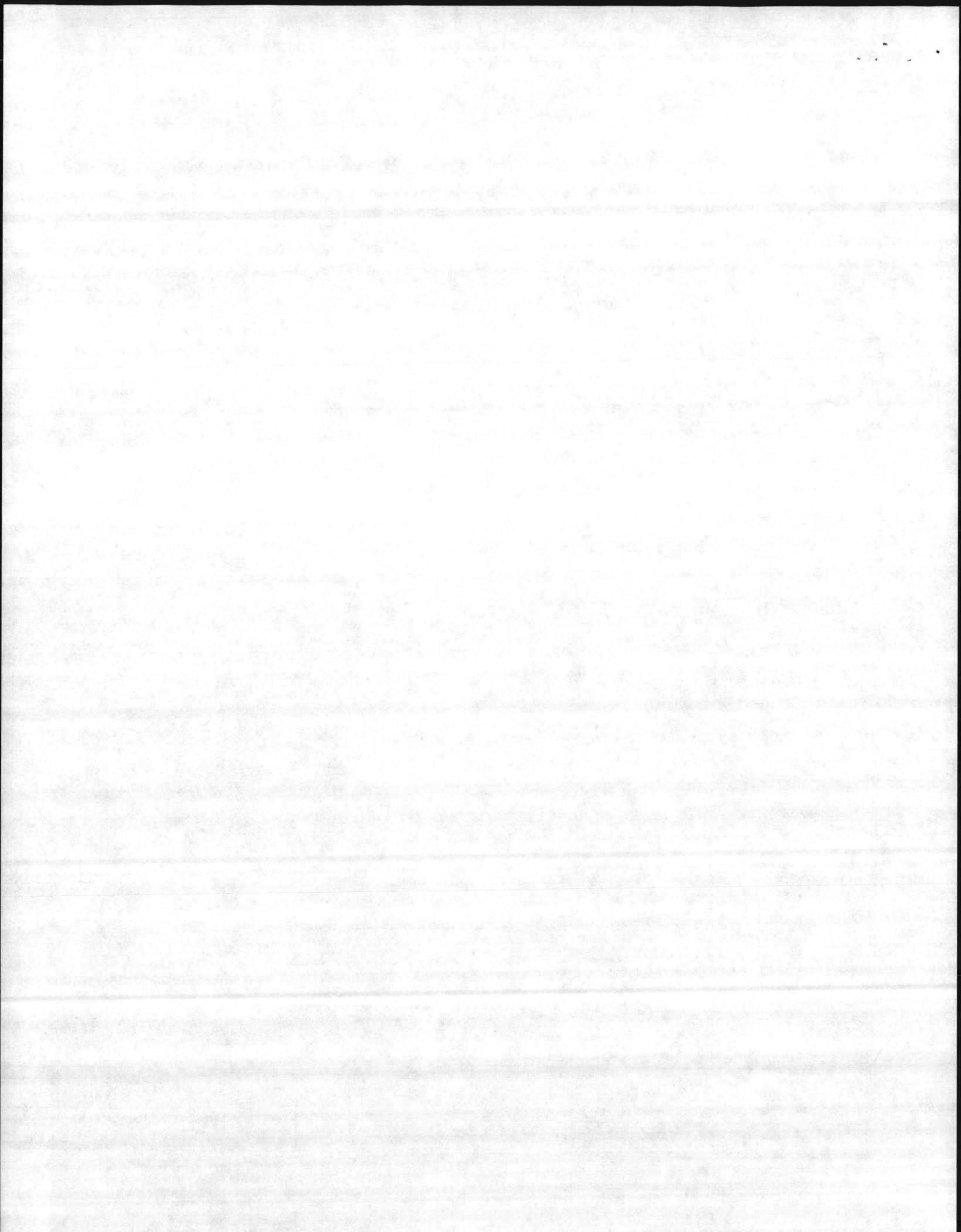
Drawn:

Checked: pf

Date: 2/6/84

Job No.  
35-41104

Dwg. No.  
2

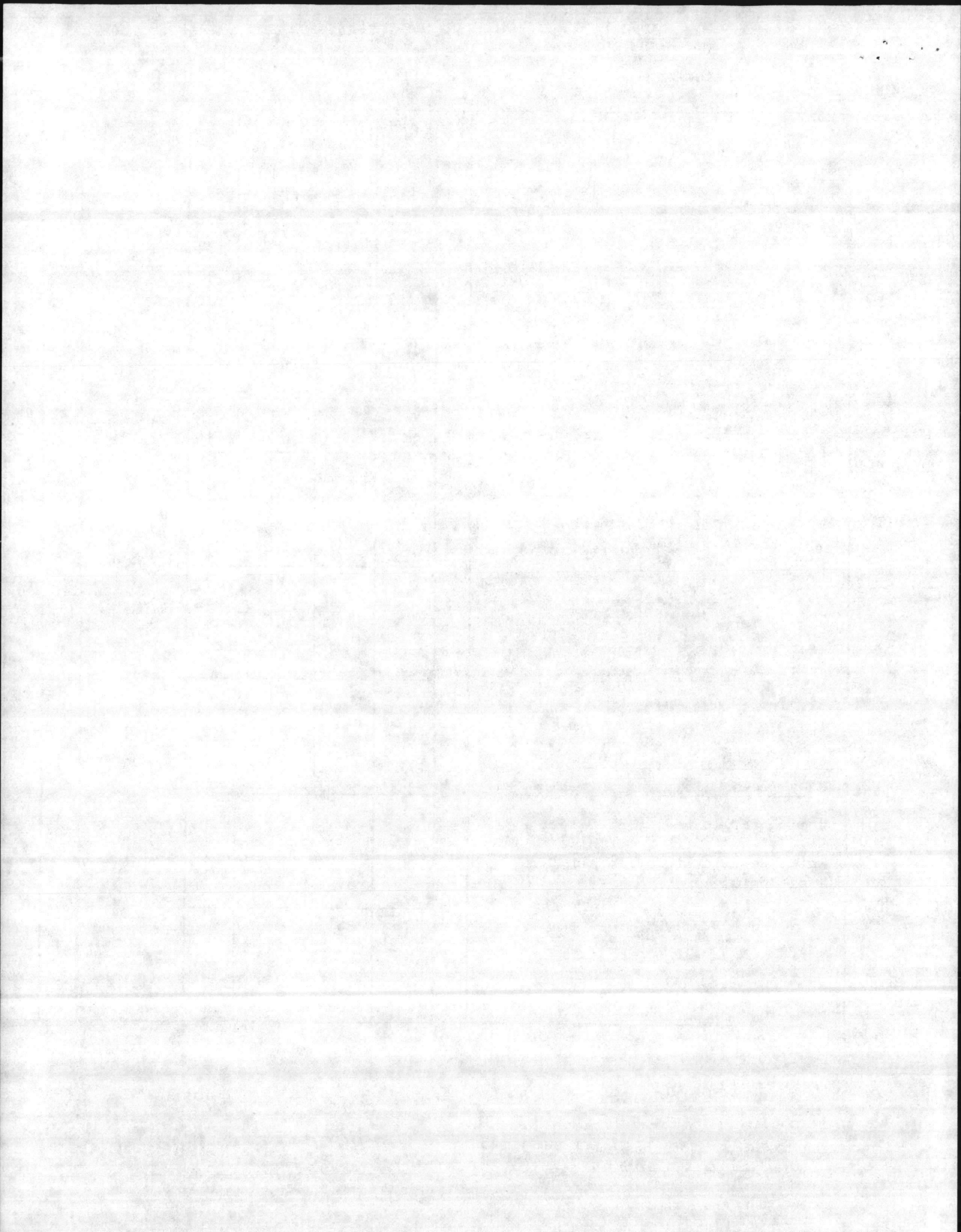


# TEST BORING RECORD

DEPTH FT.	DESCRIPTION	ELEV.	● PENETRATION BLOWS PER FT.					BLOWS PER 6 INCHES		REC.
			0	10	20	30	50			
0	Tan silty fine SAND									
3.0	Gray and yellow fine sandy silty CLAY									
8.0	Gray and yellow clayey fine SAND									
12.0	Gray slightly fine sandy very silty CLAY								▽	
17.0	Orange and tan silty fine to coarse SAND									
29.0										
30.0	Gray-green silty fine to medium SAND									
	Boring Terminated at 30.0 feet									
	Water Level at 12.6 feet at time of Boring									

JOB NO. 35-41104      DATE 2/3/84      PAGE 1 OF 1      BORING NO. MW-1

REFER TO THE ATTACHED REFERENCE SHEET FOR EXPLANATIONS AND SYMBOLS.



ON 1439

DRILLING CONTRACTOR ATEC Associates

REG. NO.

WELL CONSTRUCTION PERMIT NO.

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: Jacksonville

County: Onslow

Hwy 53

Quadrangle No. X 25c

(Road, Community or Subdivision and Lot No.)

DRILLING LOG 772921

2. OWNER: City of Jacksonville

3. ADDRESS:

4. TOPOGRAPHY: draw, valley, slope, hilltop (flat) (circle one)

DEPTH FROM TO

FORMATION DESCRIPTION

5. USE OF WELL: Monitoring DATE: 2/3/84

SEE ATTACHED DATA

6. DOES THIS WELL REPLACE AN EXISTING WELL? No

MW-1

7. TOTAL DEPTH: 30' RIG TYPE OR METHOD: Rotary

8. FORMATION SAMPLES COLLECTED: YES XX NO

9. CASING: Depth Inside Dia. Wall thick. type or weight/ft PVC

From to 20 ft 2" Sched. 80

10. GROUT: Depth Material Method

From 0 to 17 ft Cement Pump

If additional space is needed, use back of form

11. SCREEN: Depth Dia. Type & Opening

From 20 to 30 ft 2" .0001 Slotted

LOCATION SKETCH

(Show distance to numbered roads, or other map reference points)

12. GRAVEL: Depth Size Material

From 18 to 30 ft 3/8" Granite

SEE ATTACHED DATA

13. WATER ZONES (depth):

14. STATIC WATER LEVEL: 12.6ft. above/below top of casing

Casing is 1.5ft. above land surface ELEV:

15. YIELD (gpm): METHOD OF TESTING:

16. PUMPING WATER LEVEL: ft.

after hours at gpm.

17. CHLORINATION: Type NO Amount

18. WATER QUALITY: NO TEMPERATURE (°F)

19. PERMANENT PUMP: Date Installed N/A

Type Capacity (gpm) HP

Make Intake Depth

Airline Depth

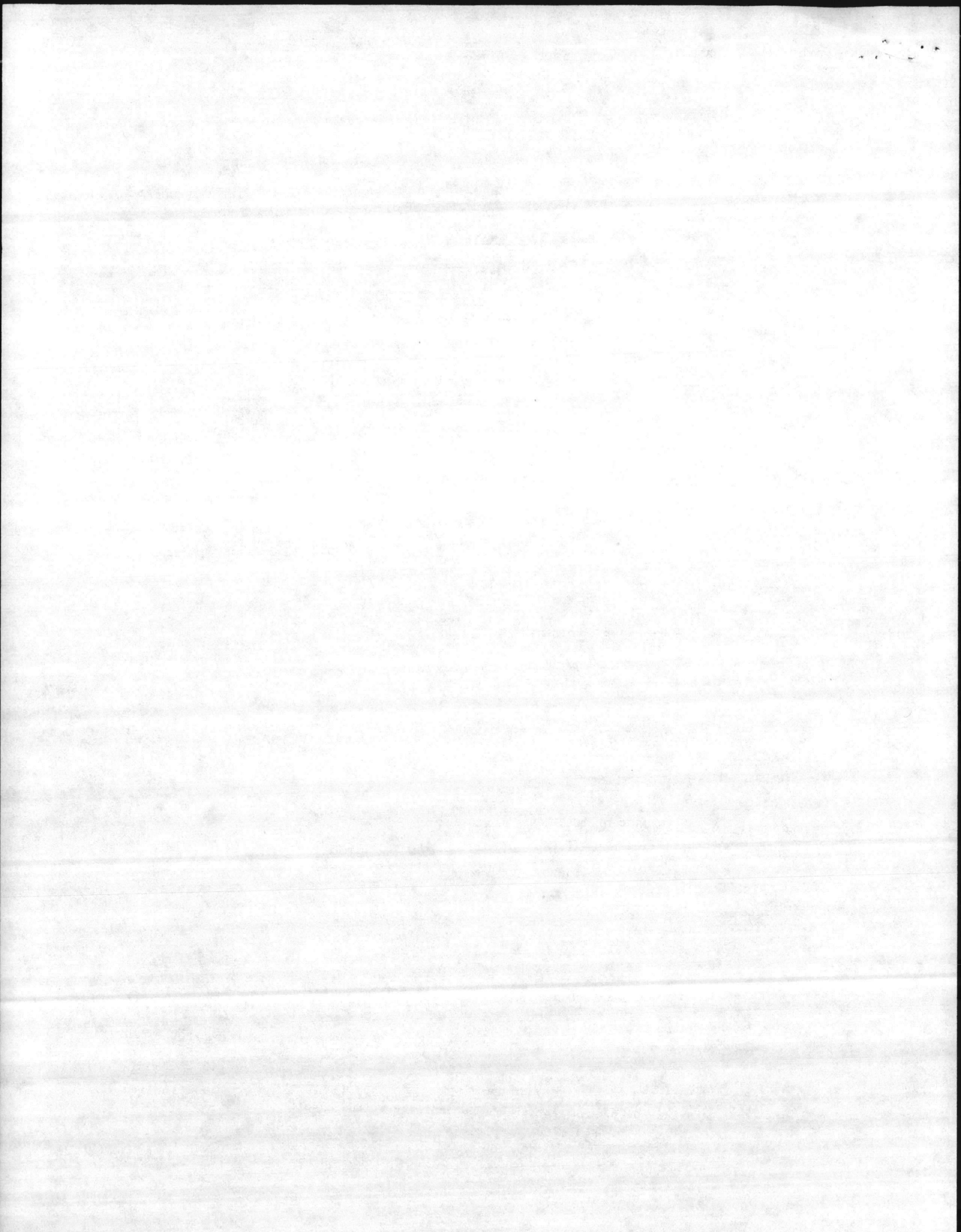
20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENTS REQUIREMENTS AND RECOMMENDATIONS? YES

21. REMARKS

I do hereby certify that this well was constructed in accordance with N.C. Well Construction Regulations and Standards and that this well record is true and exact.

SIGNATURE OF CONTRACTOR OF AGENT DATE 2-3-84

Submit original to Division of Environmental Management and copy to well owner



NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES & COMMUNITY DEVELOPMENT  
 DIVISION OF ENVIRONMENTAL MANAGEMENT, GROUNDWATER SECTION  
 P.O. BOX 27687 - RALEIGH, N.C. 27611

DN 14 55

WELL RECORD

DRILLING CONTRACTOR

REG. NO.

WELL CONSTRUCTION PERMIT NO.

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: City of Jacksonville  
Highway 53  
 (Road, Community or Subdivision and Lot No.)

County: Onslow

Quadrangle No. AZ

2. OWNER: City of Jacksonville

DRILLING LOG

3. ADDRESS: P.O. Box 128

DEPTH FROM TO

FORMATION DESCRIPTION

4. TOPOGRAPHY: draw, valley, slope, hilltop, flat (circle one)

5. USE OF WELL: Monitoring DATE: June 8, 1984 0-4 ft. Gray silty sandy clay

6. DOES THIS WELL REPLACE AN EXISTING WELL? no 4-14 ft. Gray fine-med. sand Mettl

7. TOTAL DEPTH: 25' RIG TYPE OR METHOD: mud 14-25 ft. Gray fine-med. sand

8. FORMATION SAMPLES COLLECTED: YES  NO

9. CASING: Depth Inside Wall thick. type  
 Dia. or weight/ft.

From +1 to 15 ft 2" Sch 40 PVC

10. GROUT: Depth Material Method

From 0- to 15 ft Type I

If additional space is needed, use back of form

11. SCREEN: Depth Dia. Type & Opening

From 15 to 25 ft 2" Slotted 0.01

LOCATION SKETCH

(Show distance to numbered roads, or other map reference points)

12. GRAVEL: Depth Size Material

From 15 to 25 ft sand quartzitic

13. WATER ZONES (depth): 15-25 ft.

14. STATIC WATER LEVEL: 4.0 ft. <sup>above</sup> <sub>below</sub> top of casing Com

Casing is 1 ft. above land surface ELEV: Com

15. YIELD (gpm): N/A METHOD OF TESTING: \_\_\_\_\_

16. PUMPING WATER LEVEL: \_\_\_\_\_ ft.

after \_\_\_\_\_ hours at \_\_\_\_\_ gpm.

17. CHLORINATION: Type \_\_\_\_\_ Amount \_\_\_\_\_

18. WATER QUALITY: \_\_\_\_\_ TEMPERATURE (°F) \_\_\_\_\_

19. PERMANENT PUMP: Date Installed \_\_\_\_\_

Type \_\_\_\_\_ Capacity \_\_\_\_\_ (gpm) HP \_\_\_\_\_

Make \_\_\_\_\_ Intake Depth \_\_\_\_\_

Airline Dept. \_\_\_\_\_

20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENT'S RECOMMENDATIONS AND RECOMMENDATIONS? \_\_\_\_\_

21. REMARKS

I do hereby certify that this well was constructed in accordance with N.C. Well Construction Regulations and Standards and that this well record is true and exact.

Ed S. [Signature]  
 SIGNATURE OF CONTRACTOR OF AGENT

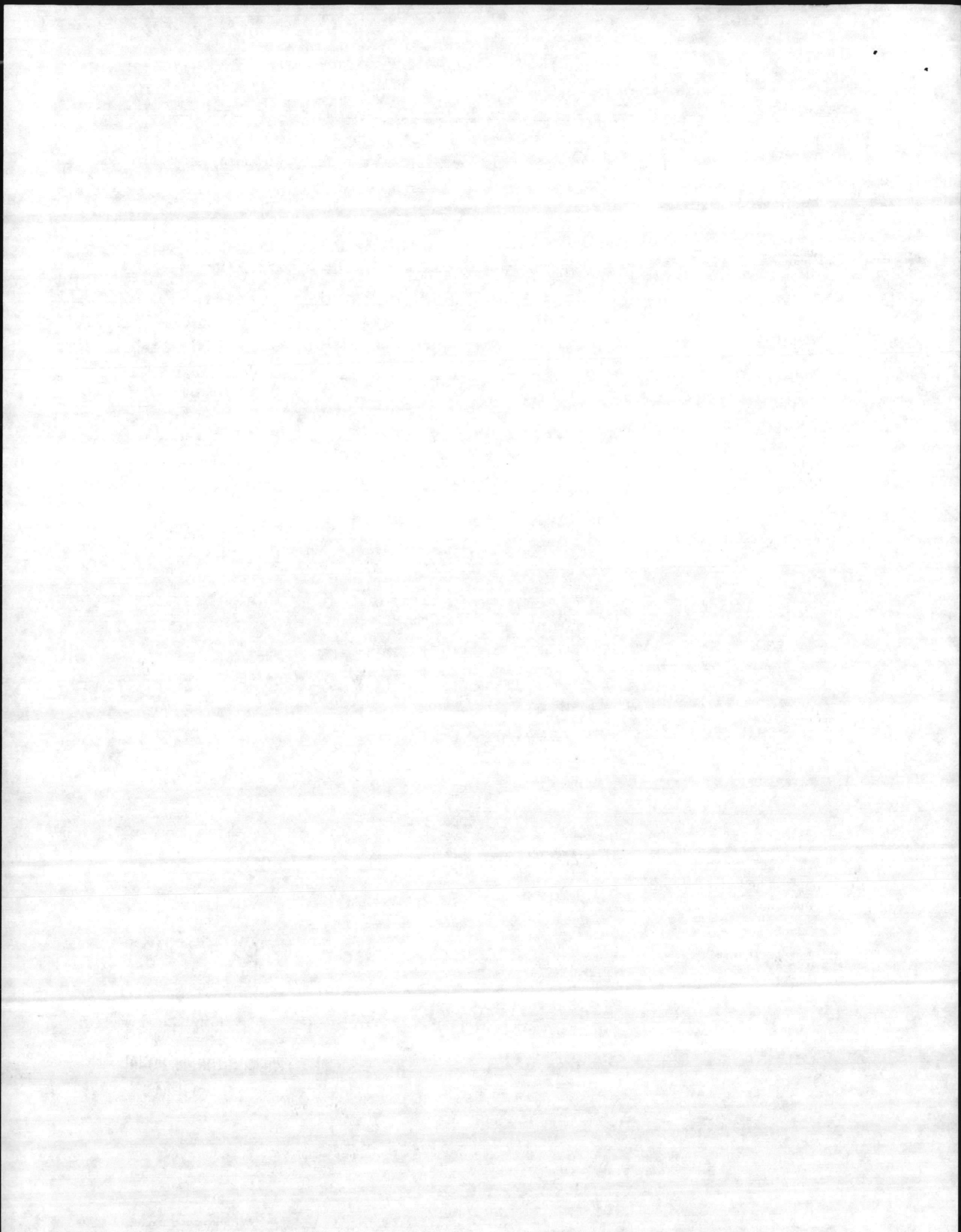
Aug 1 1984  
 DATE

RECEIVED

AUG 21 1984

WILMINGTON REGIONAL OFFICE

DEM





X 250

34 44-32

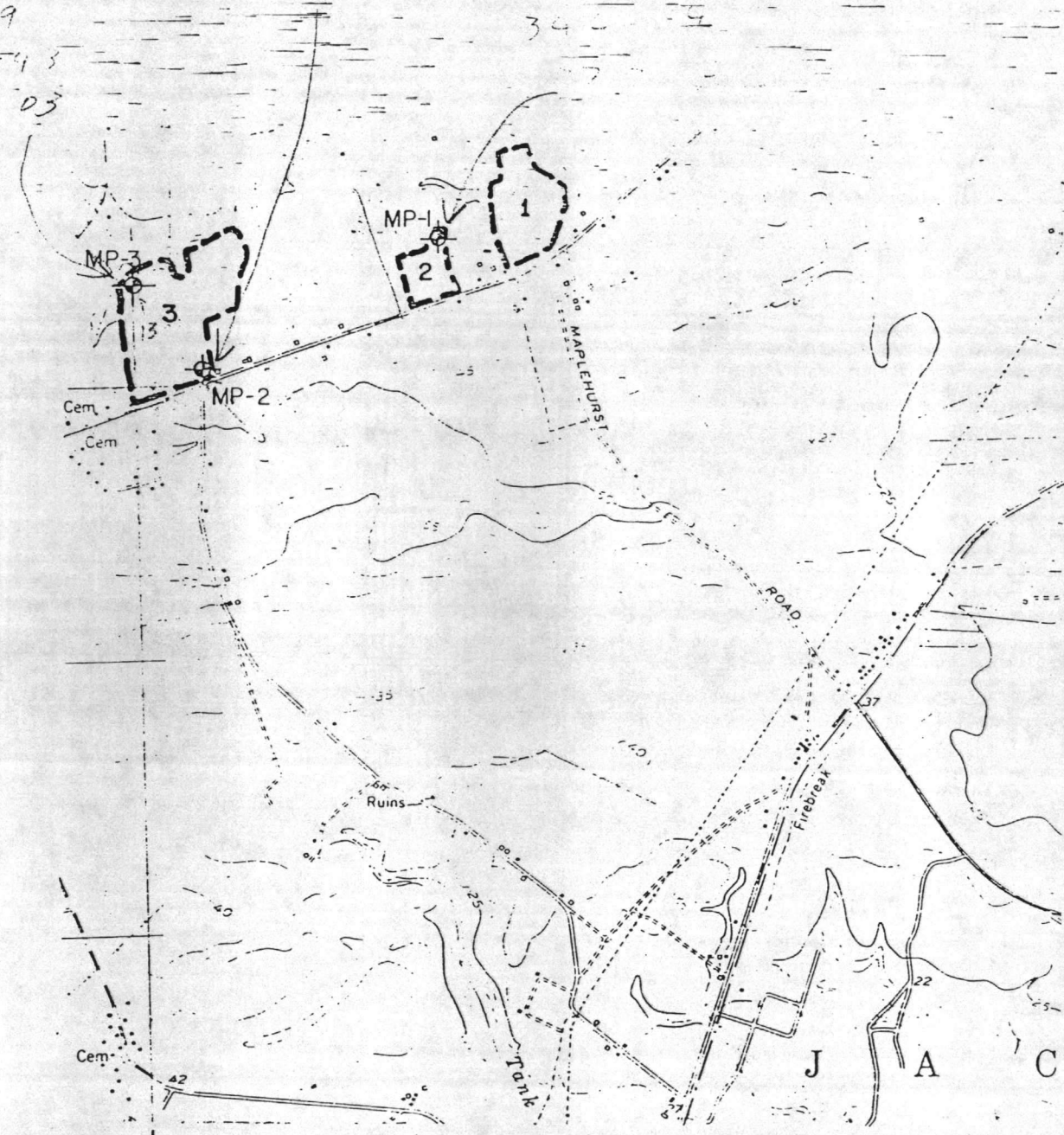
77 27-55

X 250

34

35 44 5

77 30 03



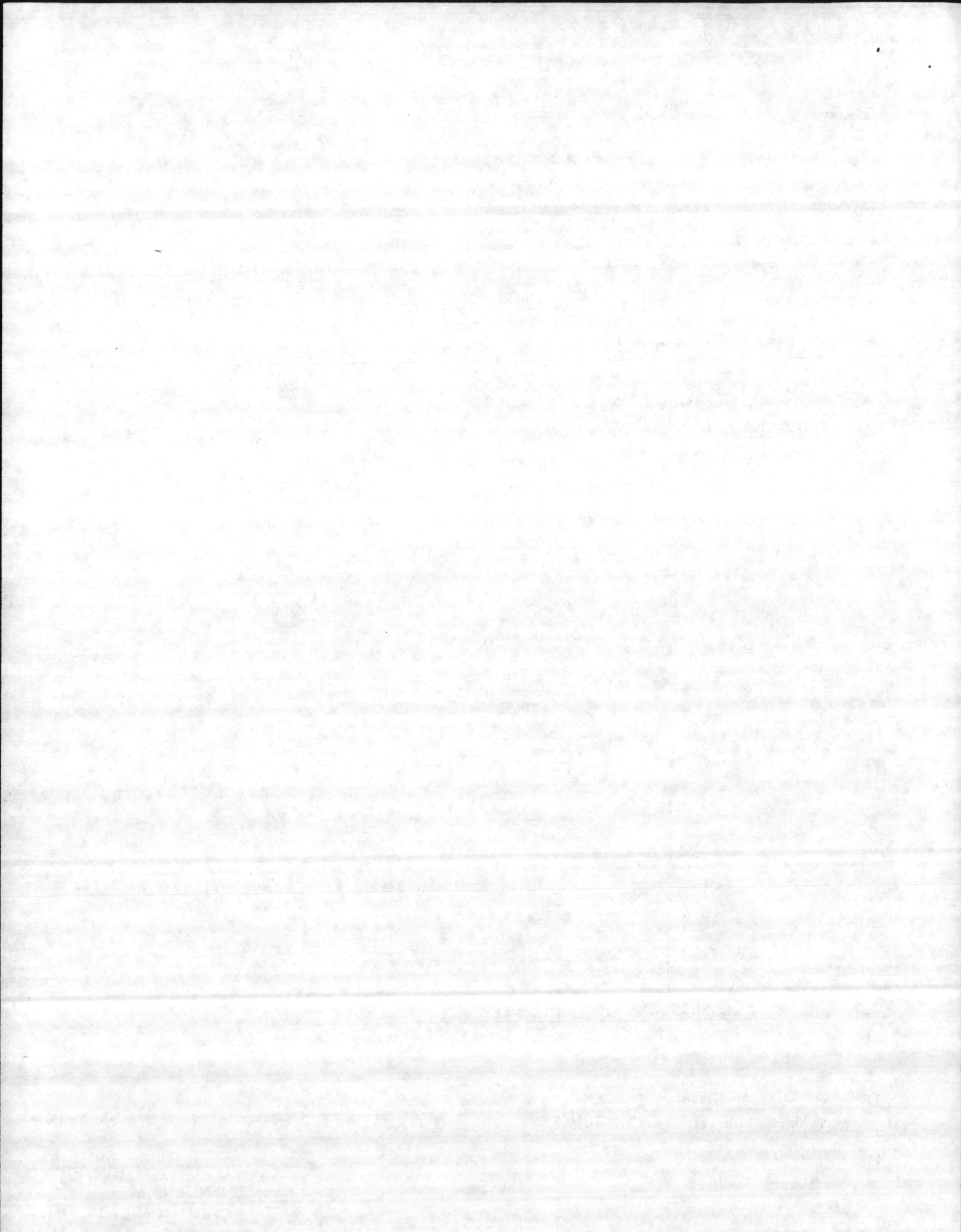
CONTOUR INTERVAL 2 METERS

CONTOUR INTERVAL 5 FEET

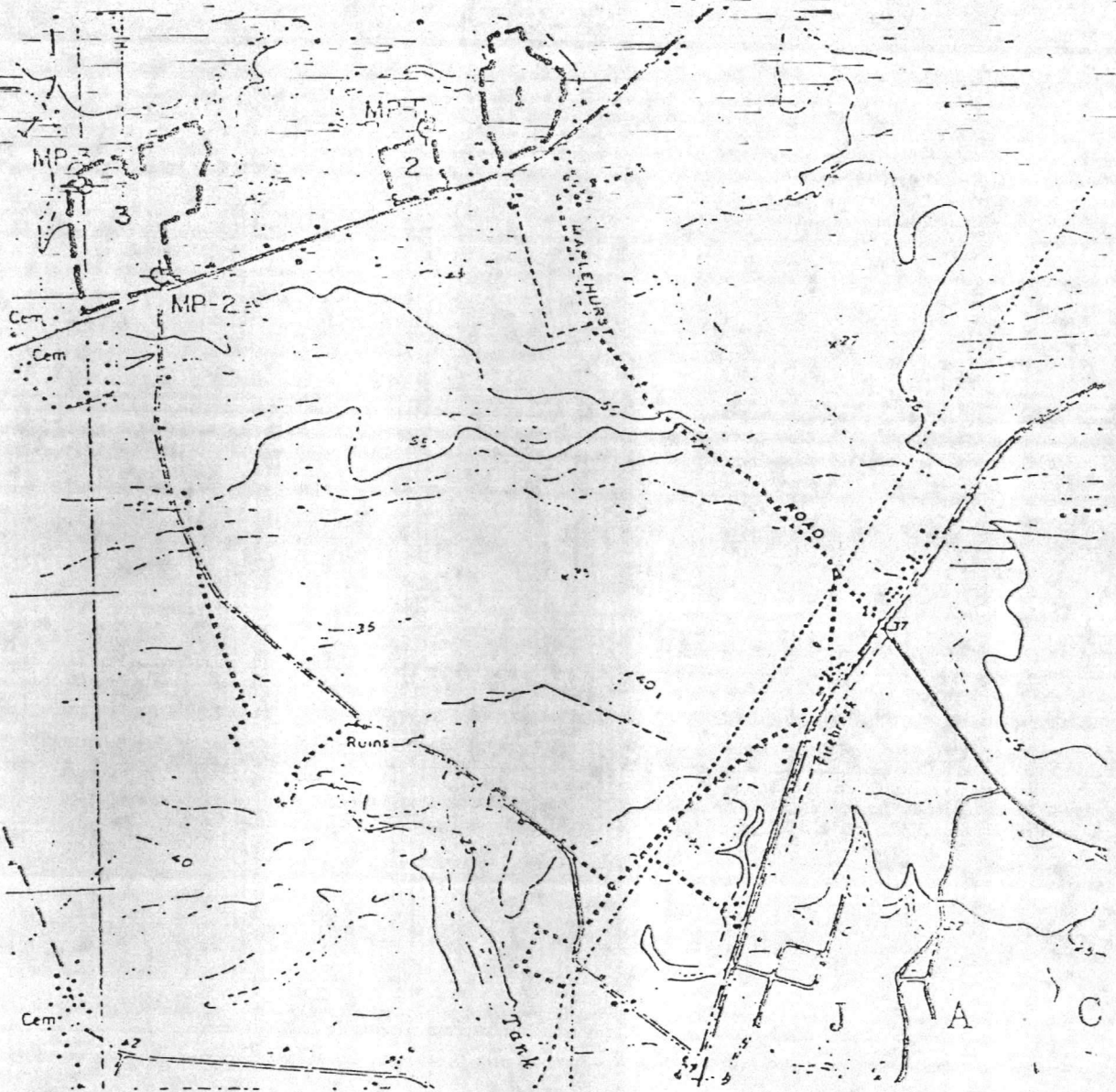
⊕ MONITORING WELL

MP-1 IDENTIFICATION NUMBER

CITY OF JACKSONVILLE  
 LAND APPLICATION PROJECT  
 MONITORING WELL LOCATION  
 LAND APPLICATION  
 SITES 1, 2 AND 3



# WELL LOCATION SITES



CONTOUR  
INTERVAL  
2 METERS

CONTOUR INTERVAL 5 FEET

WELL LOCATION MAP

MONITORING WELLS

CITY OF JACKSONVILLE, NORTH CAROLINA



**ATEC Associates, Inc.**  
of North Carolina

SCALE

N.T.S.

Drawn:

Checked: pf

Date: 2/6/84

Job No.

35-41104

Dwg. No.

2

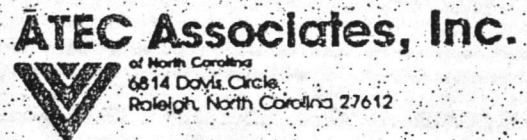


DEPTH FT.	DESCRIPTION	ELEV.	PENETRATION					PER 6 INCHES	REC.
			BLOWS	PER FT.	0	10	20		
0	Brown fine sandy silty CLAY								
2.0	Light gray silty very fine SAND								
4.0	Orange and gray or brown clayey fine to medium SAND with cemented sand layers below 13+ feet.								
16.0	Gray silty fine to coarse SAND, trace shells and cemented sand.								
21.0	Gray silty clayey fine SAND								
24.0	Gray fine sandy silty CLAY, trace shells								
28.0	Gray silty, clayey fine to coarse SAND								
40.0	Auger Boring, No Samples Below 30 feet								

Boring Terminated at 40.0 feet.  
 Water Level at 3.0 feet after 24 Hours.

JOB NO. 35-41104 DATE 2/1/84 PAGE 1 OF 1 BORING NO. MW-3

REFER TO THE ATTACHED REFERENCE SHEET  
 FOR EXPLANATIONS AND SYMBOLS.





1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: Jacksonville County: Onslow  
Hwy. 53 Quadrangle No. \_\_\_\_\_  
(Road, Community or Subdivision and Lot No.)

2. OWNER: City of Jacksonville

DRILLING LOG

3. ADDRESS: \_\_\_\_\_

DEPTH FROM TO

FORMATION DESCRIPTION

4. TOPOGRAPHY: draw, valley, slope, hilltop (flat (circle one))

5. USE OF WELL: Monitoring DATE: 2/1/84

SEE ATTACHED DATA

6. DOES THIS WELL REPLACE AN EXISTING WELL? No

MW-3

7. TOTAL DEPTH: 40' RIG TYPE OR METHOD: Rotary

8. FORMATION SAMPLES COLLECTED: YES XX NO

9. CASING: Depth Inside Wall thick. type  
Dia. or weight/ft. PVC

From     to 30 ft 2" Sched 80

10. GROUT: Depth Material Method

From 0 to 27 ft Cement Pump

If additional space is needed, use back of form

11. SCREEN: Depth Dia. Type & Opening

From 30 to 40 ft 2" .0001 slotted

LOCATION SKETCH

(Show distance to numbered roads, or other map reference points)

SEE ATTACHED DATA

12. GRAVEL: Depth Size Material

From 28 to 40 ft 3/8" Granite

13. WATER ZONES (depth): \_\_\_\_\_

14. STATIC WATER LEVEL: 3 ft, above top of casing

Casing is 1.5 ft. above land surface ELEV: \_\_\_\_\_

15. YIELD (gpm): \_\_\_\_\_ METHOD OF TESTING: \_\_\_\_\_

16. PUMPING WATER LEVEL: \_\_\_\_\_ ft.

after \_\_\_\_\_ hours at \_\_\_\_\_ gpm.

17. CHLORINATION: Type NO Amount \_\_\_\_\_

18. WATER QUALITY: NO TEMPERATURE (°F) \_\_\_\_\_

19. PERMANENT PUMP: Date Installed N/A

Type \_\_\_\_\_ Capacity \_\_\_\_\_ (gpm) HP \_\_\_\_\_

Make \_\_\_\_\_ Intake Depth \_\_\_\_\_

Airline Depth \_\_\_\_\_

20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENTS REQUIREMENTS AND RECOMMENDATIONS? YES

21. REMARKS

I do hereby certify that this well was constructed in accordance with N.C. Well Construction Regulations and Standards and that this well record is true and exact.

Ruth White 2-3-84  
SIGNATURE OF CONTRACTOR OR AGENT DATE





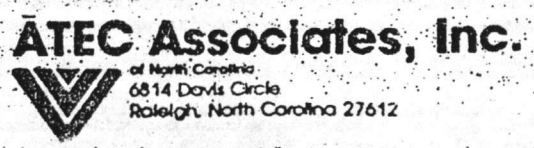
# TEST BORING RECORD

BLOWS  
PER  
6 INCHES REC.

DEPTH FT.	DESCRIPTION	ELEV.	● PENETRATION BLOWS PER FT.					REC.
		0	10	20	30	50		
0	Brown and tan silty fine SAND							
3.0	Gray and yellow fine sandy silty CLAY							
8.0	Dark gray with yellow slightly fine sandy CLAY							
18.0	Dark gray clayey fine to medium SAND						▽	
22.0	Dark gray silty fine to coarse SAND, trace fine gravel							
28.0	Gray silty, clayey fine to coarse SAND with cemented sand							
30.0	Boring Terminated at 30.0 Feet Water Level at 15.0 Feet After 24 Hours							

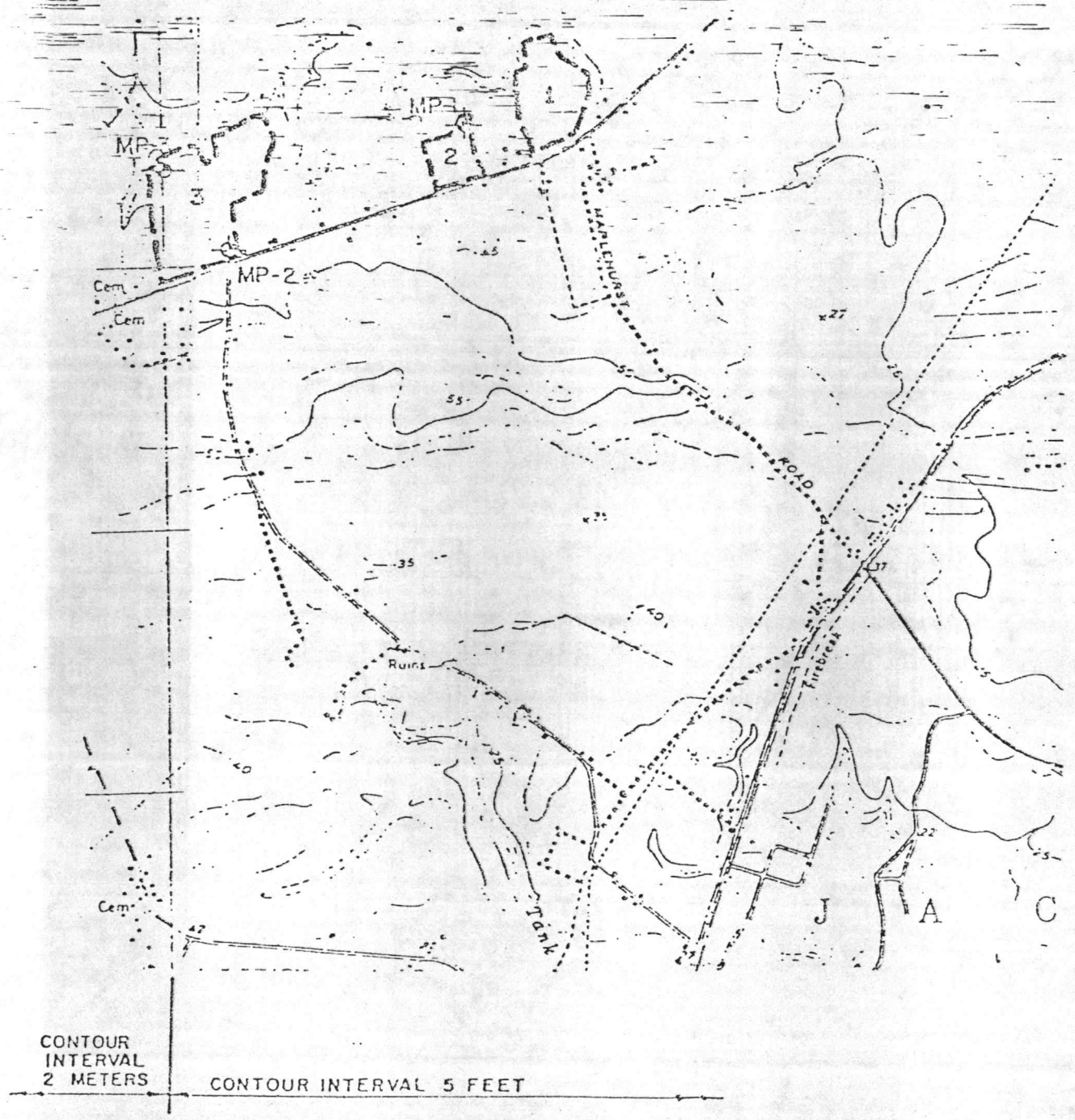
JOB NO. 35-41104    DATE 2/2/84    PAGE 1 OF 1    BORING NO. MW-2

REFER TO THE ATTACHED REFERENCE SHEET  
FOR EXPLANATIONS AND SYMBOLS.





WELL LOCATION SITES



CONTOUR  
INTERVAL  
2 METERS

CONTOUR INTERVAL 5 FEET

WELL LOCATION MAP

MONITORING WELLS

CITY OF JACKSONVILLE, NORTH CAROLINA



**ATEC Associates, Inc.**  
of North Carolina

SCALE

N.T.S.

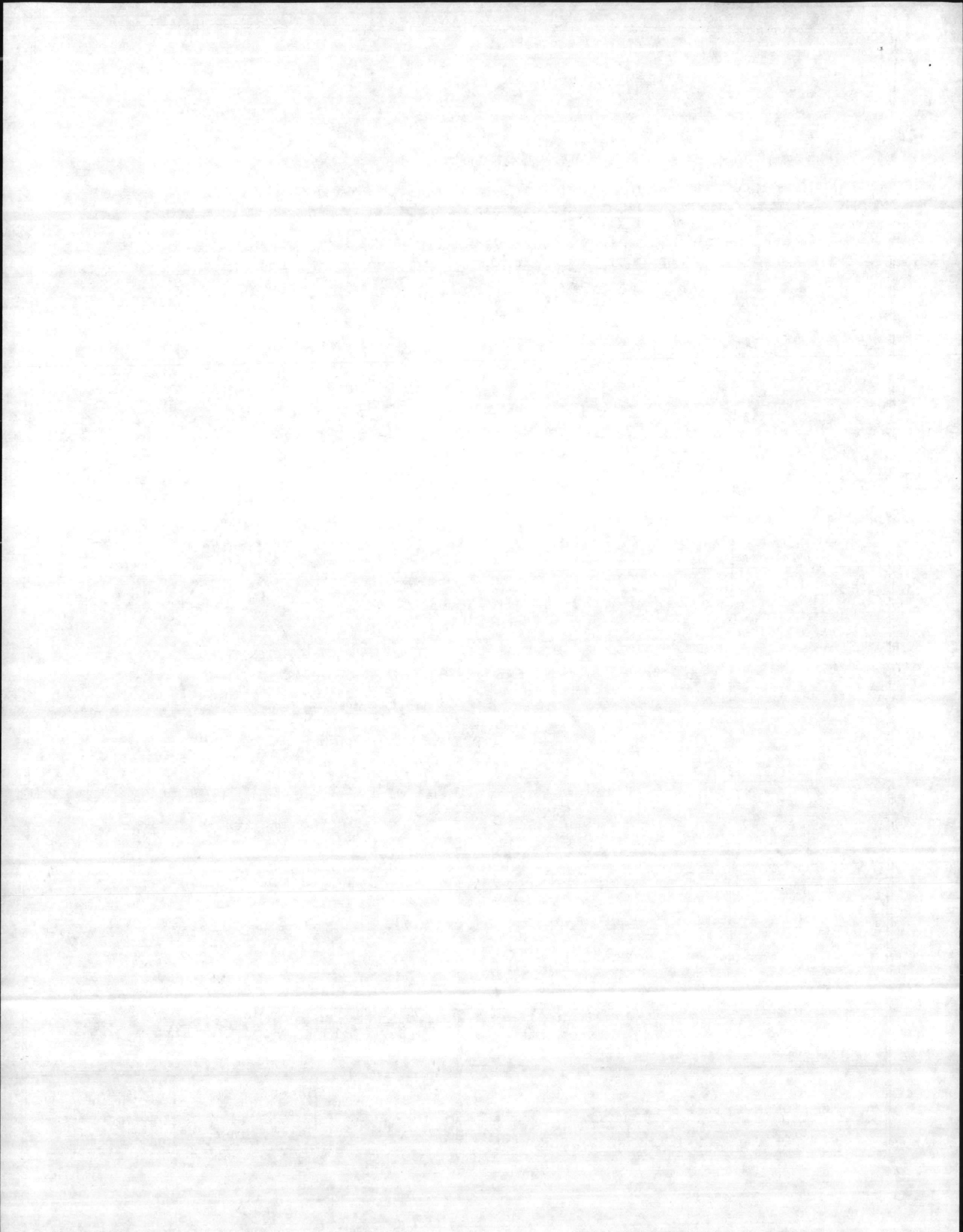
Drawn:

Checked: pf

Date: 2/6/84

Job No.  
35-41104

Dwg. No.  
2



0N1440

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: Jacksonville County: Onslow

Hwy. 53 Quadrangle No.

(Road, Community or Subdivision and Lot No.)

2. OWNER: City of Jacksonville

DRILLING LOG

3. ADDRESS:

DEPTH FROM TO FORMATION DESCRIPTION

4. TOPOGRAPHY: Draw, valley, slope, hilltop, flat (circle one)

5. USE OF WELL: Monitoring DATE: 2/2/84

SEE ATTACHED DATA

6. DOES THIS WELL REPLACE AN EXISTING WELL? No

MW-2

7. TOTAL DEPTH: 30' RIG TYPE OR METHOD: Rotary

8. FORMATION SAMPLES COLLECTED: YES XX NO

9. CASING: Depth Inside Dia. Wall thick. or weight/ft. type PVC Sched 80

10. GROUT: Depth Material Method From 0 to 17 ft Cement Pump

If additional space is needed, use back of form

11. SCREEN: Depth Dia. Type & Opening From 20 to 30 ft .0001 Slotted

LOCATION SKETCH (Show distance to numbered roads, or other map reference points)

SEE ATTACHED DATA

12. GRAVEL: Depth Size Material From 18 to 30 ft 3/8" Granite

13. WATER ZONES (depth):

14. STATIC WATER LEVEL: 15 ft. above/below top of casing Casing is 1.5 ft. above land surface ELEV:

15. YIELD (gpm): METHOD OF TESTING:

16. PUMPING WATER LEVEL: ft. after hours at gpm.

17. CHLORINATION: Type NO Amount

18. WATER QUALITY: NO TEMPERATURE (°F)

19. PERMANENT PUMP: Date Installed N/A Type Capacity (gpm) HP Make Intake Depth Airline Depth

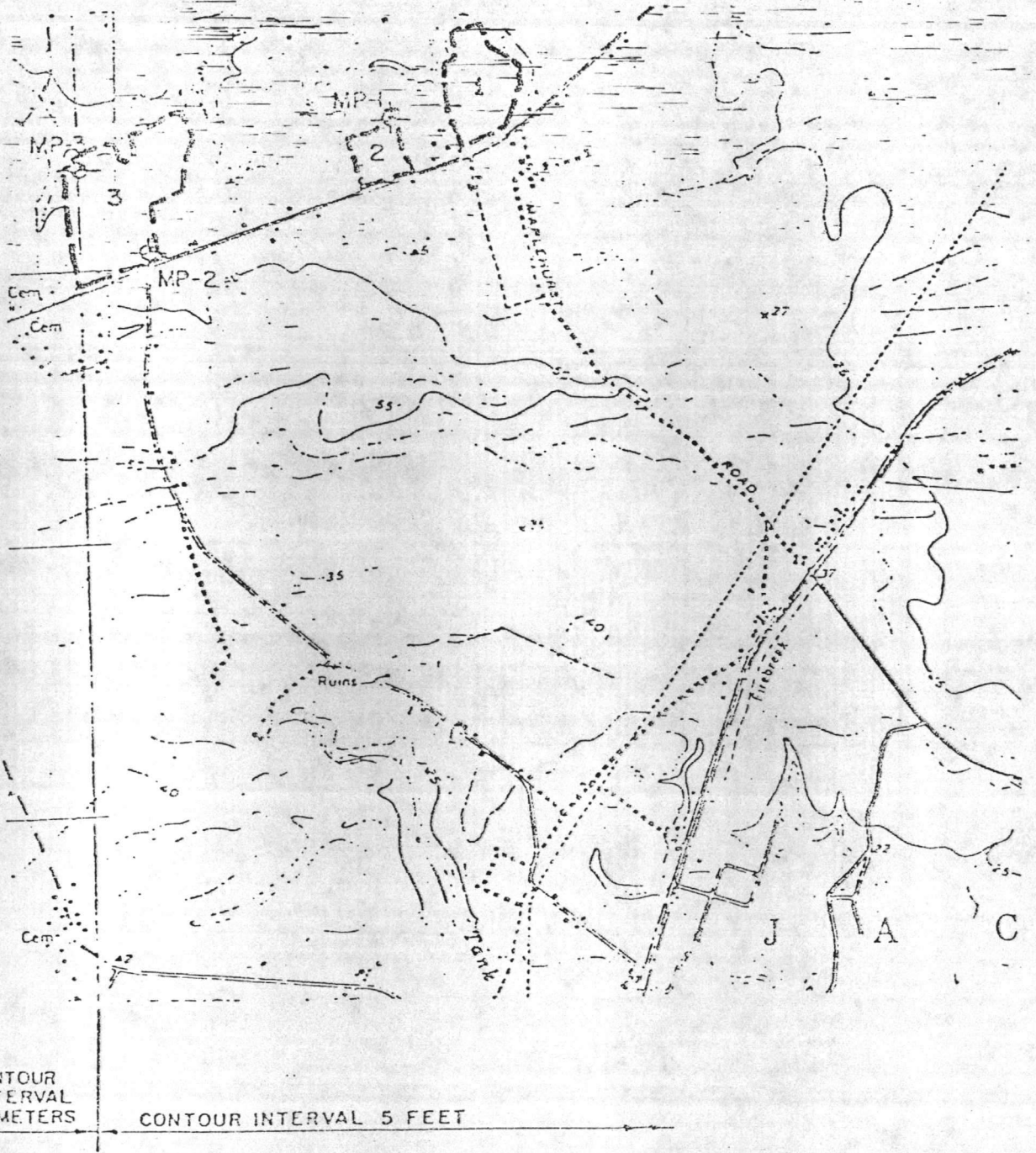
20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENT'S REQUIREMENTS AND RECOMMENDATIONS? YES

21. REMARKS I do hereby certify that this well was constructed in accordance with N.C. Well Construction Regulations and Standards and that this well record is true and exact.

SIGNATURE OF CONTRACTOR OR AGENT DATE 2-3-84



WELL LOCATION SITES



CONTOUR  
INTERVAL  
2 METERS

CONTOUR INTERVAL 5 FEET

WELL LOCATION MAP

MONITORING WELLS

CITY OF JACKSONVILLE, NORTH CAROLINA



**ATEC Associates, Inc.**  
of North Carolina

SCALE:

N.T.S.

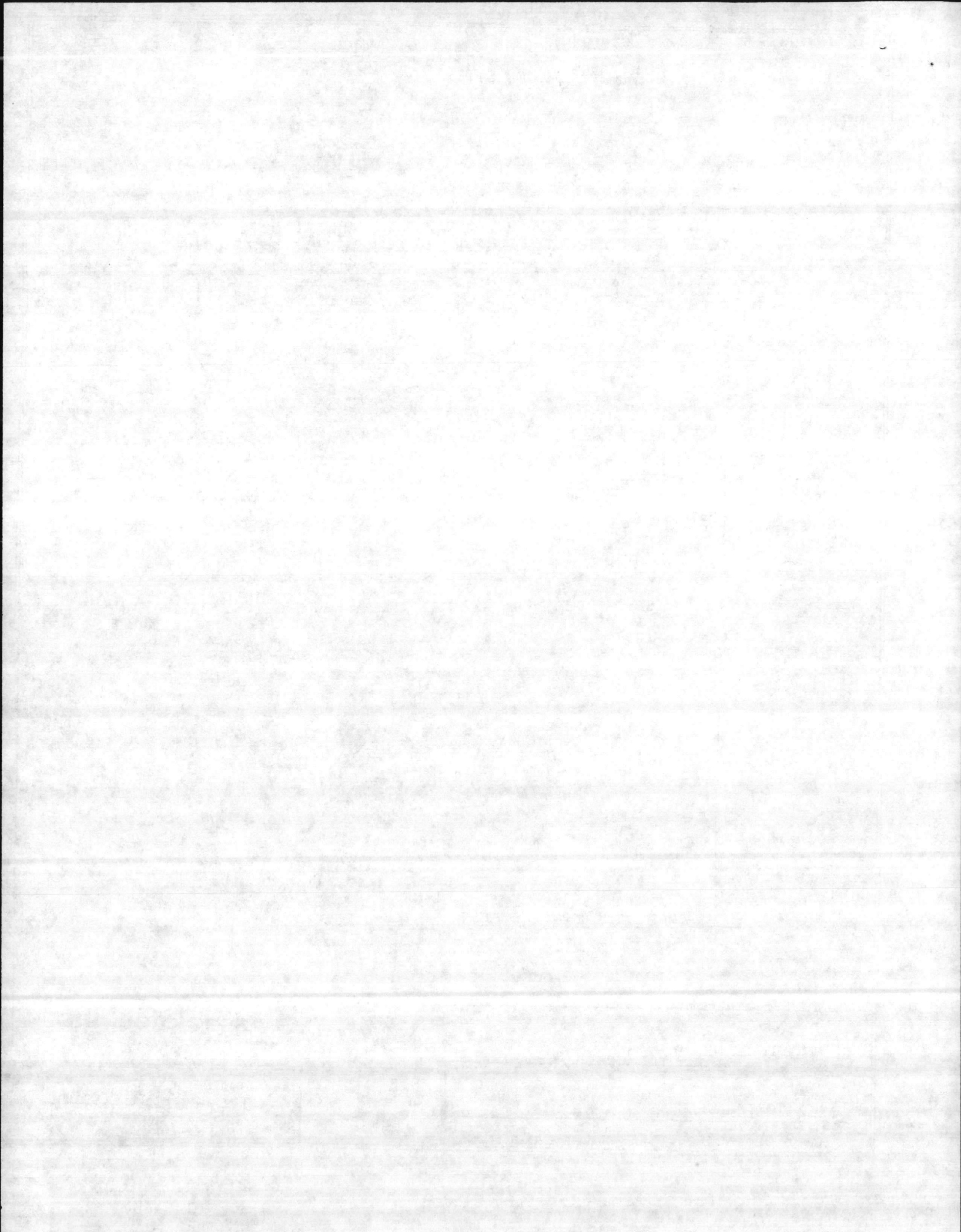
Drawn:

Checked: pf

Date: 2/6/84

Job No.  
35-41104

Dwg. No.  
2





# TEST BORING RECORD

BLOWS  
PER  
6 INCHES REC.

DEPTH FT.	DESCRIPTION	ELEV.	PENETRATION BLOWS PER FT.					REC.
			0	10	20	30	50	
0	Tan silty fine SAND							
3.0	Gray and yellow fine sandy silty CLAY							
8.0	Gray and yellow clayey fine SAND							
12.0	Gray slightly fine sandy very silty CLAY							▽
17.0	Orange and tan silty fine to coarse SAND							
29.0								
30.0	Gray-green silty fine to medium SAND							
	Boring Terminated at 30.0 feet							
	Water Level at 12.6 feet at time of Boring							

JOB NO. 35-41104      DATE 2/3/84      PAGE 1 OF 1      BORING NO. MW-1

REFER TO THE ATTACHED REFERENCE SHEET FOR EXPLANATIONS AND SYMBOLS

**ATEC Associates, Inc.**  
of North Carolina  
 6814 Davis Circle  
 Raleigh, North Carolina 27612



DRILLING CONTRACTOR ATEC Associates

REG. NO.

WELL CONSTRUCTION PERMIT NO.

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: Jacksonville  
Hwy 53  
(Road, Community or Subdivision and Lot No.)

County: Onslow

Quadrangle No. X 25c

344447  
DRILLING LOG 772921

2. OWNER: City of Jacksonville

3. ADDRESS:

4. TOPOGRAPHY: draw, valley, slope, hilltop (flat circle one)

DEPTH FROM TO

FORMATION DESCRIPTION

5. USE OF WELL: Monitoring DATE: 2/3/84

SEE ATTACHED DATA

6. DOES THIS WELL REPLACE AN EXISTING WELL? No

MW=1

7. TOTAL DEPTH: 30' RIG TYPE OR METHOD: Rotary

8. FORMATION SAMPLES COLLECTED: YES XX NO

9. CASING: Depth Inside Wall thick. type  
Dia. or weight/ft PVC

From to 20 ft 2" Sched. 80

10. GROUT: Depth Material Method

From 0 to 17 ft Cement Pump

If additional space is needed, use back of form

11. SCREEN: Depth Dia. Type & Opening

From 20 to 30 ft 2" .0001 Slotted

LOCATION SKETCH

(Show distance to numbered roads, or other map reference points)

12. GRAVEL: Depth Size Material

From 18 to 30 ft 3/8" Granite

SEE ATTACHED DATA

13. WATER ZONES (depth):

14. STATIC WATER LEVEL: 12.6ft <sup>above</sup>/<sub>below</sub> top of casing

Casing is 1.5ft above land surface ELEV: \_\_\_\_\_

15. YIELD (gpm): \_\_\_\_\_ METHOD OF TESTING: \_\_\_\_\_

16. PUMPING WATER LEVEL: \_\_\_\_\_ ft.

after \_\_\_\_\_ hours at \_\_\_\_\_ gpm.

17. CHLORINATION: Type NO Amount \_\_\_\_\_

18. WATER QUALITY: NO TEMPERATURE (°F) \_\_\_\_\_

19. PERMANENT PUMP: Date Installed N/A

Type \_\_\_\_\_ Capacity \_\_\_\_\_ (gpm) HP \_\_\_\_\_

Make \_\_\_\_\_ Intake Depth \_\_\_\_\_

Airline Depth \_\_\_\_\_

20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENTS REQUIREMENTS AND RECOMMENDATIONS? YES

21. REMARKS

I do hereby certify that this well was constructed in accordance with N.C. Well Construction Regulations and Standards and that this well record is true and exact.

[Signature] 2-3-84  
SIGNATURE OF CONTRACTOR OR AGENT DATE

Submit original to Division of Environmental Management and copy to well owner



NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES & COMMUNITY DEVELOPMENT

WELL RECORD

DIVISION OF ENVIRONMENTAL MANAGEMENT, GROUNDWATER SECTION

P.O. BOX 27687 - RALEIGH, N.C. 27611

DN 1450

DRILLING CONTRACTOR

REG. NO.

WELL CONSTRUCTION PERMIT NO.

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: City of Jacksonville County: Onslow

Highway 53

(Road, Community or Subdivision and Lot No.)

Quadrangle No. X 2

2. OWNER: City of Jacksonville

DRILLING LOG

3. ADDRESS: P.O. Box 128

DEPTH FROM TO

FORMATION DESCRIPTION

4. TOPOGRAPHY: draw, valley, slope, hilltop, flat (circle one)

5. USE OF WELL: Monitoring DATE: June 8, 1984 0-4 ft. Gray silty sandy clay

6. DOES THIS WELL REPLACE AN EXISTING WELL? no 4-14 ft. Gray fine-med. sand Mottl

7. TOTAL DEPTH: 25' RIG TYPE OR METHOD: mud 14-25 ft. Gray fine-med. sand

8. FORMATION SAMPLES COLLECTED: YES NO X

9. CASING: Depth Inside Dia. Wall thick. or weight/ft. type

From +1 to 15 ft 2" Sch 40 PVC

10. GROUT: Depth Material Method

From 0- to 15 ft Type I

If additional space is needed, use back of form

11. SCREEN: Depth Dia. Type & Opening

From 15 to 25 ft 2" Slotted 0.01

LOCATION SKETCH

(Show distance to numbered roads, or other map reference points)

12. GRAVEL: Depth Size Material

From 15 to 25 ft sand quartzitic

13. WATER ZONES (depth): 15-25 ft.

14. STATIC WATER LEVEL: 4.0 ft. <sup>above</sup> <sub>below</sub> top of casing cm

Casing is 1.0 ft. above land surface ELEV: cm

15. YIELD (gpm): N/A METHOD OF TESTING:

16. PUMPING WATER LEVEL: \_\_\_\_\_ ft.

after \_\_\_\_\_ hours at \_\_\_\_\_ gpm.

17. CHLORINATION: Type \_\_\_\_\_ Amount \_\_\_\_\_

18. WATER QUALITY: \_\_\_\_\_ TEMPERATURE (°F) \_\_\_\_\_

19. PERMANENT PUMP: Date Installed \_\_\_\_\_

Type \_\_\_\_\_ Capacity \_\_\_\_\_ (gpm) HP \_\_\_\_\_

Make \_\_\_\_\_ Intake Depth \_\_\_\_\_

Airline Dept. \_\_\_\_\_

20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENT'S REQUIREMENTS AND RECOMMENDATIONS? \_\_\_\_\_

21. REMARKS

I do hereby certify that this well was constructed in accordance with N.C. Well Construction Regulations and Standards and that this well record is true and exact.

Ted S. [Signature] Aug 1 84  
SIGNATURE OF CONTRACTOR OF AGENT DATE



AUG 21 1984

WILMINGTON REGIONAL OFFICE

DEM

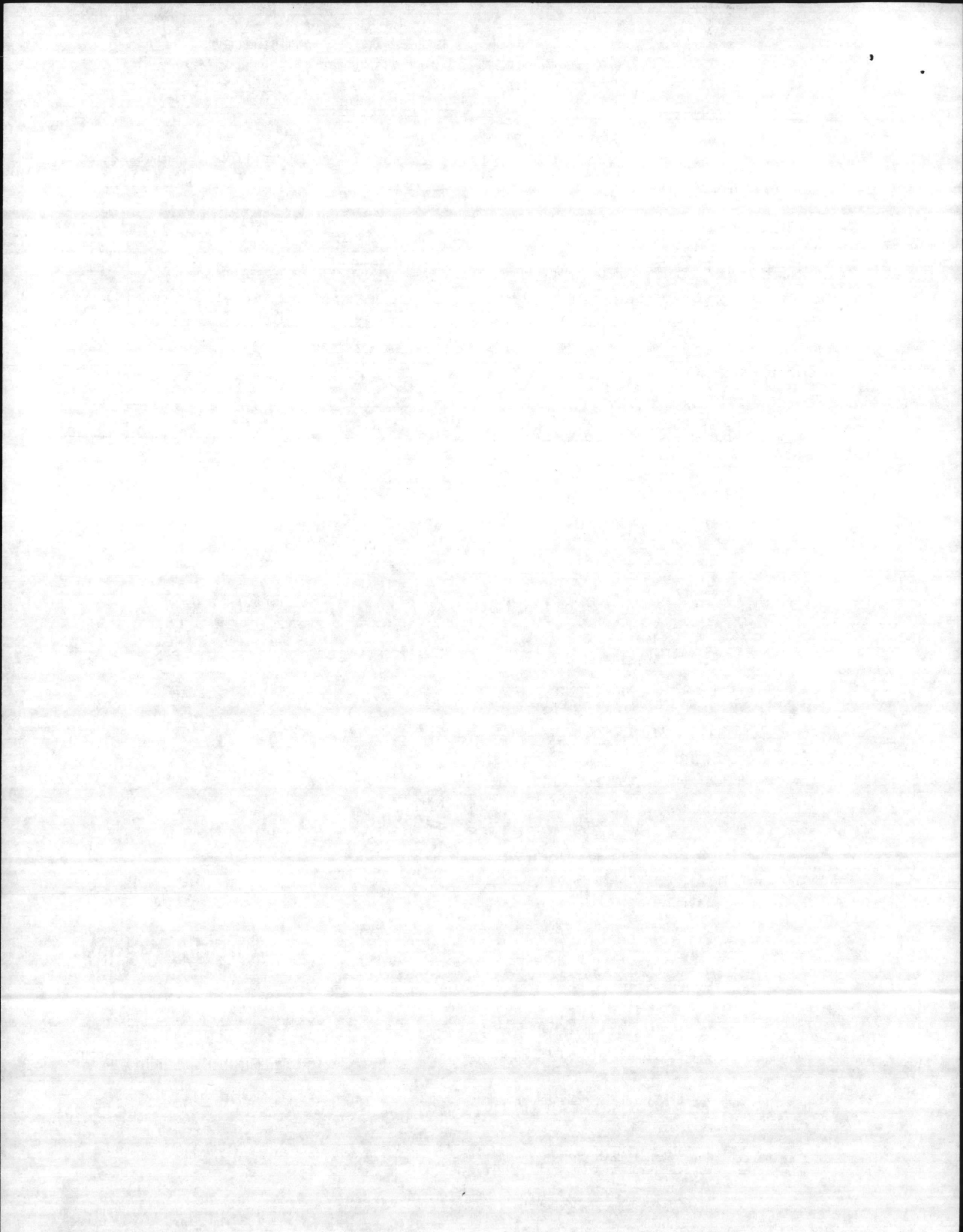


FIGURE 2

X 250

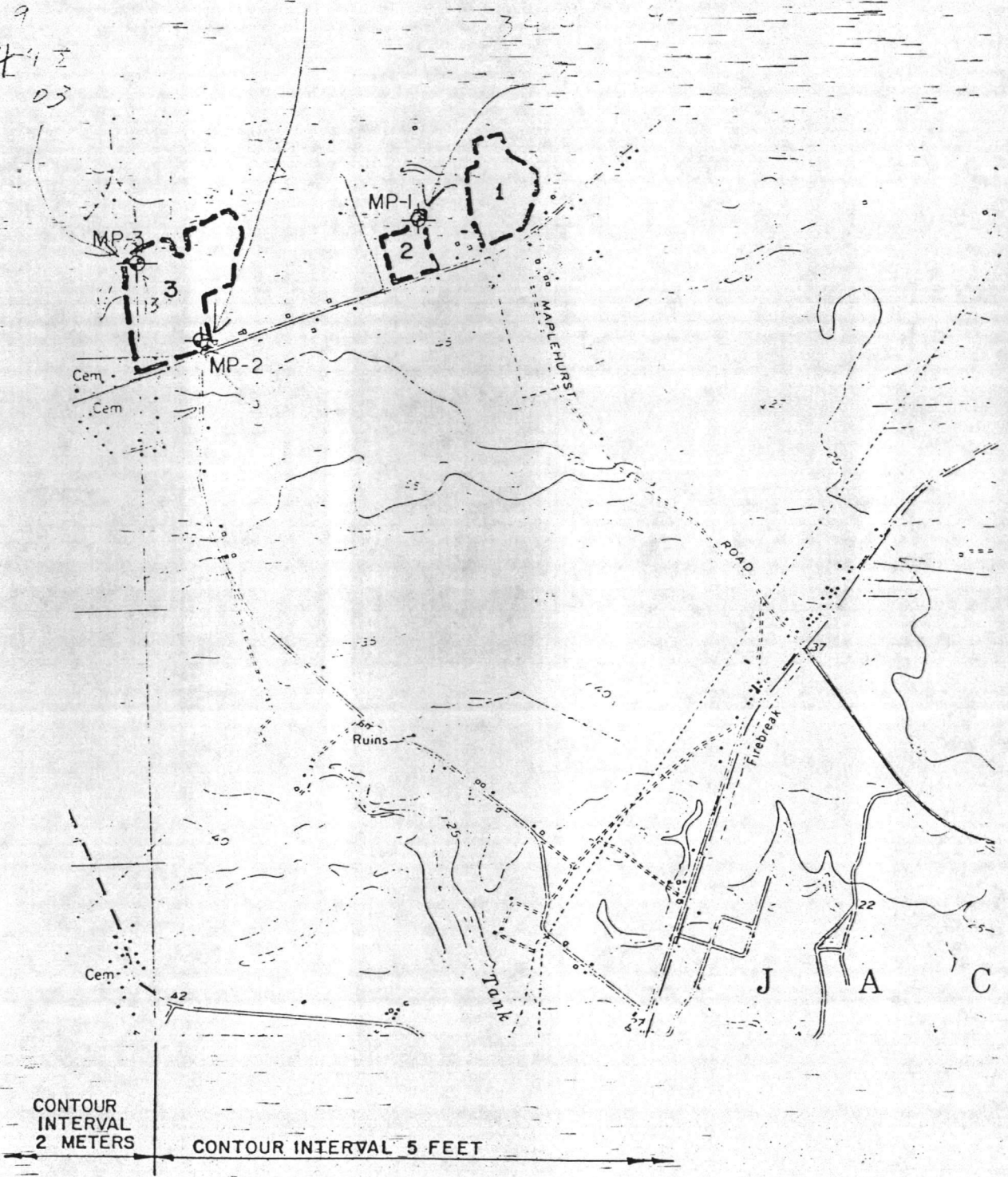
34 44 32

77 27 55

X = 9


34 44 32

77 30 03



CONTOUR INTERVAL 2 METERS

CONTOUR INTERVAL 5 FEET

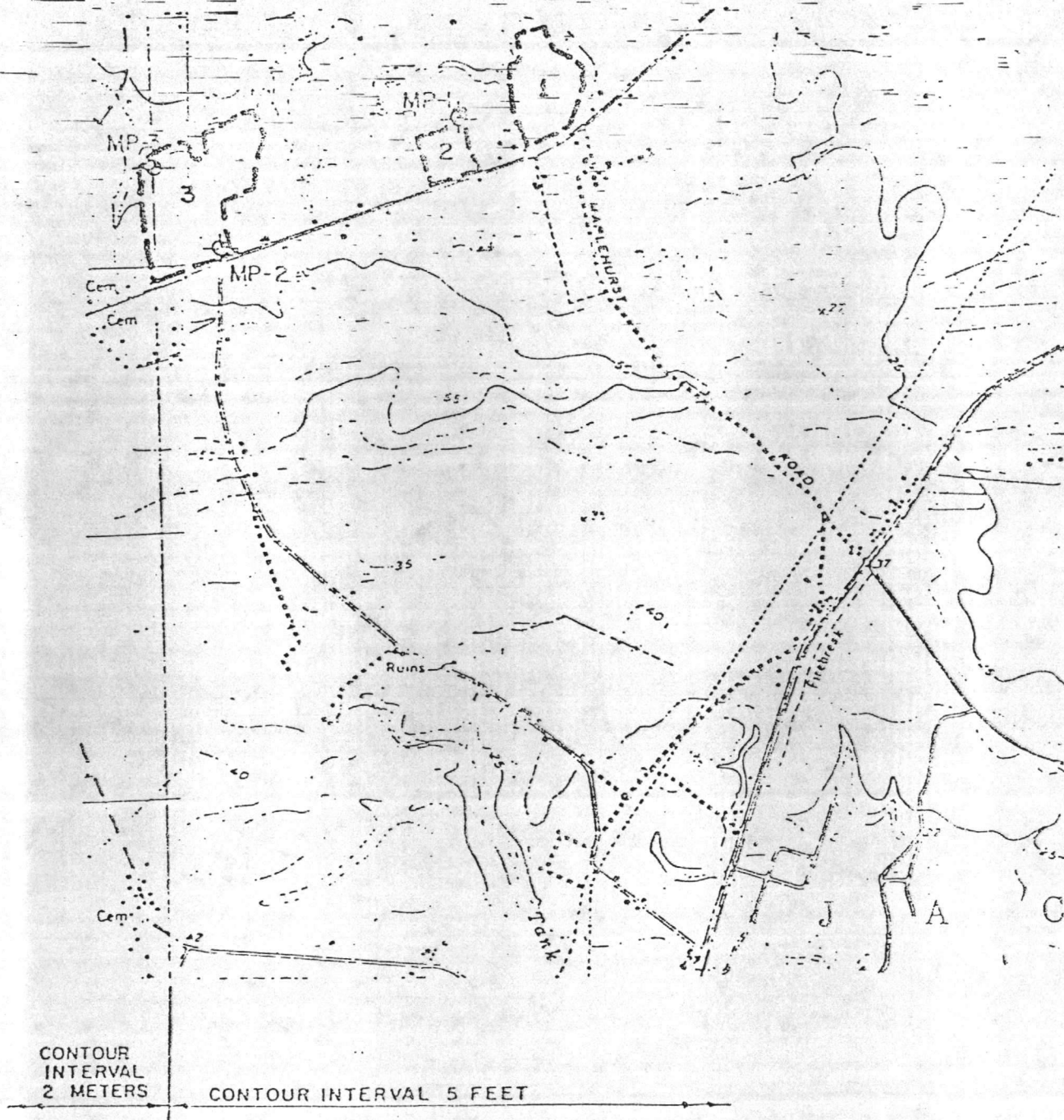
 MONITORING WELL  
 MP-1 IDENTIFICATION NUMBER

CITY OF JACKSONVILLE  
 LAND APPLICATION PROJECT  
 MONITORING WELL LOCATION  
 LAND APPLICATION  
 SITES 1, 2 AND 3





WELL LOCATION SITES



CONTOUR  
INTERVAL  
2 METERS

CONTOUR INTERVAL 5 FEET

WELL LOCATION MAP

MONITORING WELLS

CITY OF JACKSONVILLE, NORTH CAROLINA



**ATEC Associates, Inc.**  
of North Carolina

SCALE

N.T.S.

Drawn:

Checked: pf

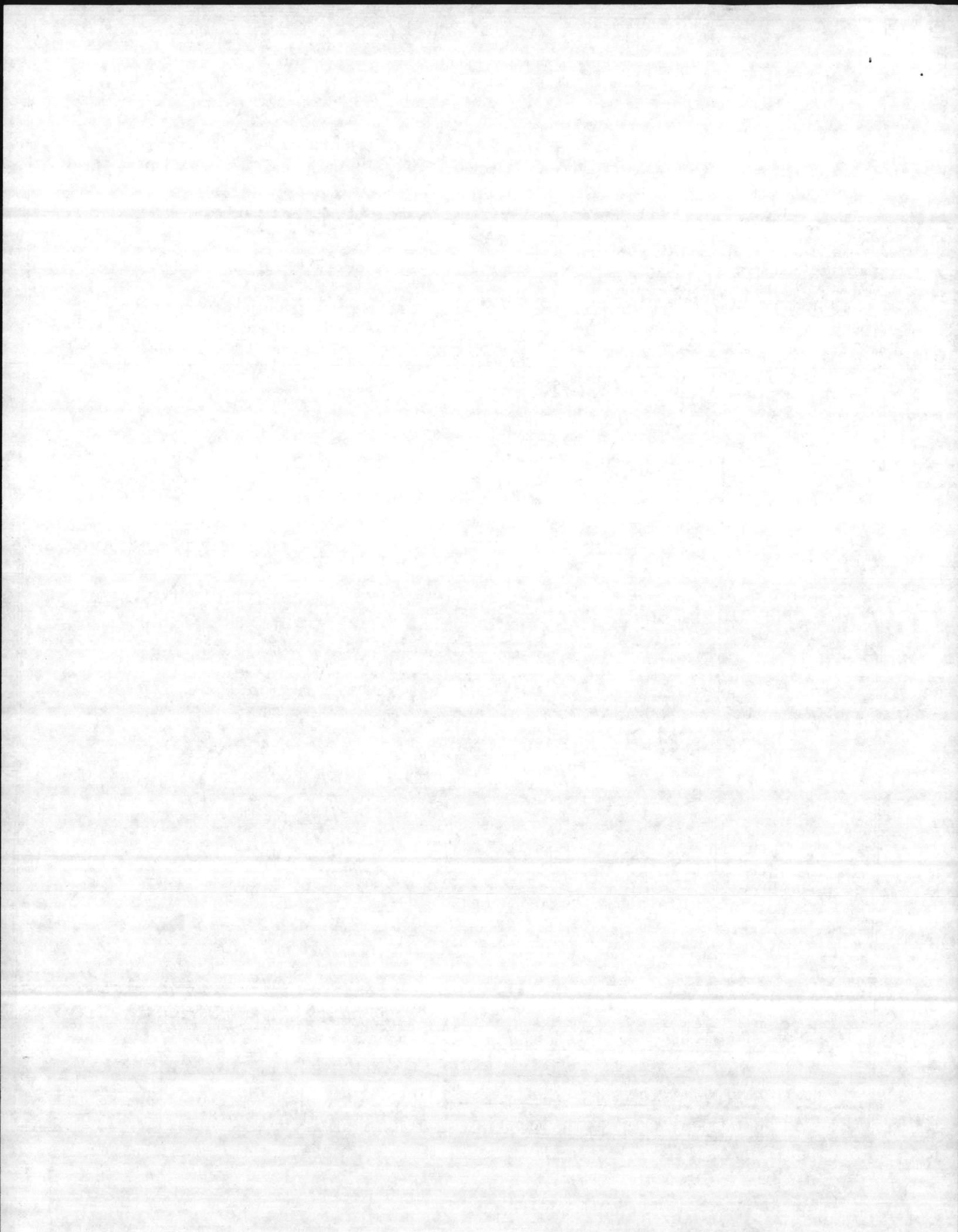
Date: 2/6/84

Job No.

35-41104

Dwg. No.

2

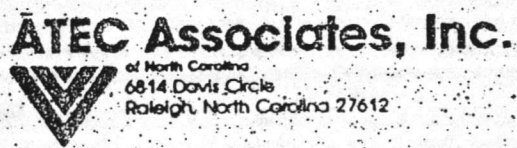


DEPTH FT.	DESCRIPTION	ELEV.	PENETRATION PER 6 INCHES					REC.											
			BLOWS	PER FT.	0	10	20		30	50									
0	Brown fine sandy silty CLAY																		
2.0	Light gray silty very fine SAND																		
4.0	Orange and gray or brown clayey fine to medium SAND with cemented sand layers below 13+ feet.																		
16.0	Gray silty fine to coarse SAND, trace shells and cemented sand.																		
21.0	Gray silty clayey fine SAND																		
24.0	Gray fine sandy silty CLAY, trace shells																		
28.0	Gray silty, clayey fine to coarse SAND																		
40.0	Auger Boring, No Samples Below 30 feet																		

Boring Terminated at 40.0 feet.  
 Water Level at 3.0 feet after 24 Hours.

JOB NO. 35-41104      DATE 2/1/84      PAGE 1 OF 1      BORING NO. MW-3

REFER TO THE ATTACHED REFERENCE SHEET  
 FOR EXPLANATIONS AND SYMBOLS.





## 1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: JacksonvilleCounty: OnslowHwy. 53

Quadrangle No. \_\_\_\_\_

(Road, Community or Subdivision and Lot No.)

2. OWNER: City of Jacksonville

## DRILLING LOG

3. ADDRESS: \_\_\_\_\_

DEPTH  
FROM \_\_\_\_\_ TO \_\_\_\_\_

FORMATION DESCRIPTION

4. TOPOGRAPHY: draw, valley, slope, hilltop (flat) (circle one)5. USE OF WELL: Monitoring DATE: 2/1/84

SEE ATTACHED DATA

6. DOES THIS WELL REPLACE AN EXISTING WELL? No

MW-3

7. TOTAL DEPTH: 40' RIG TYPE OR METHOD: Rotary8. FORMATION SAMPLES COLLECTED: YES XX NO9. CASING: Depth Inside Wall thick. type  
Dia. or weight/ft. PVCFrom \_\_\_\_\_ to 30 ft 2" Sched 80

10. GROUT: Depth Material Method

From 0 to 27 ft Cement Pump

If additional space is needed, use back of form

11. SCREEN: Depth Dia. Type &amp; Opening

From 30 to 40 ft 2" .0001 slotted

## LOCATION SKETCH

(Show distance to numbered roads, or other map reference points)

SEE ATTACHED DATA

12. GRAVEL: Depth Size Material

From 28 to 40 ft 3/8" Granite

13. WATER ZONES (depth): \_\_\_\_\_

14. STATIC WATER LEVEL: 3 ft. above below top of casingCasing is 1.5 ft. above land surface ELEV: \_\_\_\_\_

15. YIELD (gpm): \_\_\_\_\_ METHOD OF TESTING: \_\_\_\_\_

16. PUMPING WATER LEVEL: \_\_\_\_\_ ft.

after \_\_\_\_\_ hours at \_\_\_\_\_ gpm.

17. CHLORINATION: Type NO Amount \_\_\_\_\_18. WATER QUALITY: NO TEMPERATURE (°F) \_\_\_\_\_19. PERMANENT PUMP: Date Installed N/A

Type \_\_\_\_\_ Capacity \_\_\_\_\_ (gpm) HP \_\_\_\_\_

Make \_\_\_\_\_ Intake Depth \_\_\_\_\_

Airline Depth \_\_\_\_\_

20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENTS REQUIREMENTS AND RECOMMENDATIONS? YES

21. REMARKS

I do hereby certify that this well was constructed in accordance with N.C. Well Construction Regulations and Standards and that this well record is true and exact.

Reta Witt 2-3-84  
SIGNATURE OF CONTRACTOR OR AGENT DATE



# TEST BORING RECORD

BLOWS

PER

6 INCHES

REC.

DEPTH

FT.

DESCRIPTION

ELEV.

● PENETRATION

BLOWS PER FT.

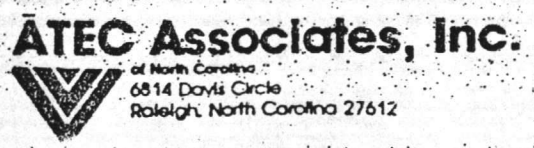
0

0      10      20      30      50

DEPTH FT.	DESCRIPTION	ELEV.	● PENETRATION BLOWS PER FT.					BLOWS PER 6 INCHES	REC.
			0	10	20	30	50		
0	Brown and tan silty fine SAND								
3.0	Gray and yellow fine sandy silty CLAY								
8.0	Dark gray with yellow slightly fine sandy CLAY								
18.0	Dark gray clayey fine to medium SAND								
22.0	Dark gray silty fine to coarse SAND, trace fine gravel								
28.0	Gray silty, clayey fine to coarse SAND with cemented sand								
30.0	Boring Terminated at 30.0 Feet Water Level at 15.0 Feet After 24 Hours								

JOB NO. 35-41104      DATE 2/2/84      PAGE 1 OF 1      BORING NO. MW-2

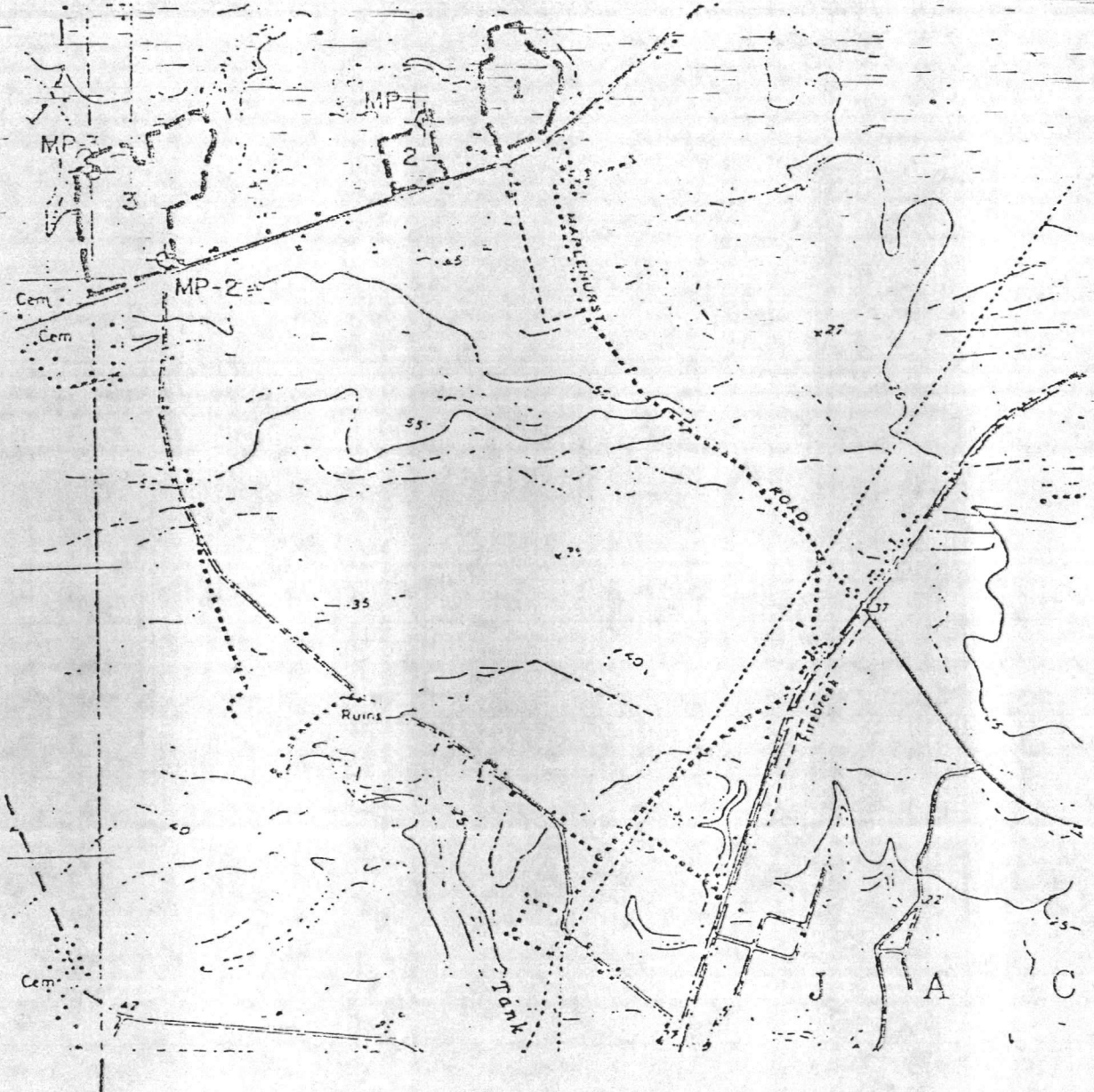
REFER TO THE ATTACHED REFERENCE SHEET  
FOR EXPLANATIONS AND SYMBOLS.







WELL LOCATION SITES



CONTOUR  
INTERVAL  
2 METERS

CONTOUR INTERVAL 5 FEET

WELL LOCATION MAP

MONITORING WELLS

CITY OF JACKSONVILLE, NORTH CAROLINA



**ATEC Associates, Inc.**  
of North Carolina

SCALE

N.T.S.

Drawn:

Checked: pf

Date: 2/6/84

Job No.

35-41104

Dwg. No.

2



1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: Jacksonville

County: Onslow

Hwy. 53

Quadrangle No. \_\_\_\_\_

(Road, Community or Subdivision and Lot No.)

2. OWNER: City of Jacksonville

DRILLING LOG

3. ADDRESS: \_\_\_\_\_

DEPTH FROM TO

FORMATION DESCRIPTION

4. TOPOGRAPHY: draw, valley, slope, hilltop, (flat) (circle one)

5. USE OF WELL: Monitoring DATE: 2/2/84

SEE ATTACHED DATA

6. DOES THIS WELL REPLACE AN EXISTING WELL? No

MW-2

7. TOTAL DEPTH: 30' RIG TYPE OR METHOD: Rotary

8. FORMATION SAMPLES COLLECTED: YES  NO

9. CASING: Depth Inside Wall thick. type  
Dia. or weight/ft. PVC

From \_\_\_\_\_ to 20 ft 2" Sched 80

10. GROUT: Depth Material Method

From 0 to 17 ft Cement Pump

If additional space is needed, use back of form

11. SCREEN: Depth Dia. Type & Opening

From 20 to 30 ft \_\_\_\_\_ .0001 Slotted

LOCATION SKETCH

(Show distance to numbered roads, or other map reference points)

SEE ATTACHED DATA

12. GRAVEL: Depth Size Material

From 18 to 30 ft 3/8" Granite

13. WATER ZONES (depth): \_\_\_\_\_

14. STATIC WATER LEVEL: 15 ft <sup>above</sup> <sub>below</sub> top of casing

Casing is 1.5 ft. above land surface ELEV: \_\_\_\_\_

15. YIELD (gpm): \_\_\_\_\_ METHOD OF TESTING: \_\_\_\_\_

16. PUMPING WATER LEVEL: \_\_\_\_\_ ft.

after \_\_\_\_\_ hours at \_\_\_\_\_ gpm.

17. CHLORINATION: Type NO Amount \_\_\_\_\_

18. WATER QUALITY: NO TEMPERATURE (°F) \_\_\_\_\_

19. PERMANENT PUMP: Date Installed N/A

Type \_\_\_\_\_ Capacity \_\_\_\_\_ (gpm) HP \_\_\_\_\_

Make \_\_\_\_\_ Intake Depth \_\_\_\_\_

Airline Depth \_\_\_\_\_

20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENT'S REQUIREMENTS AND RECOMMENDATIONS? YES

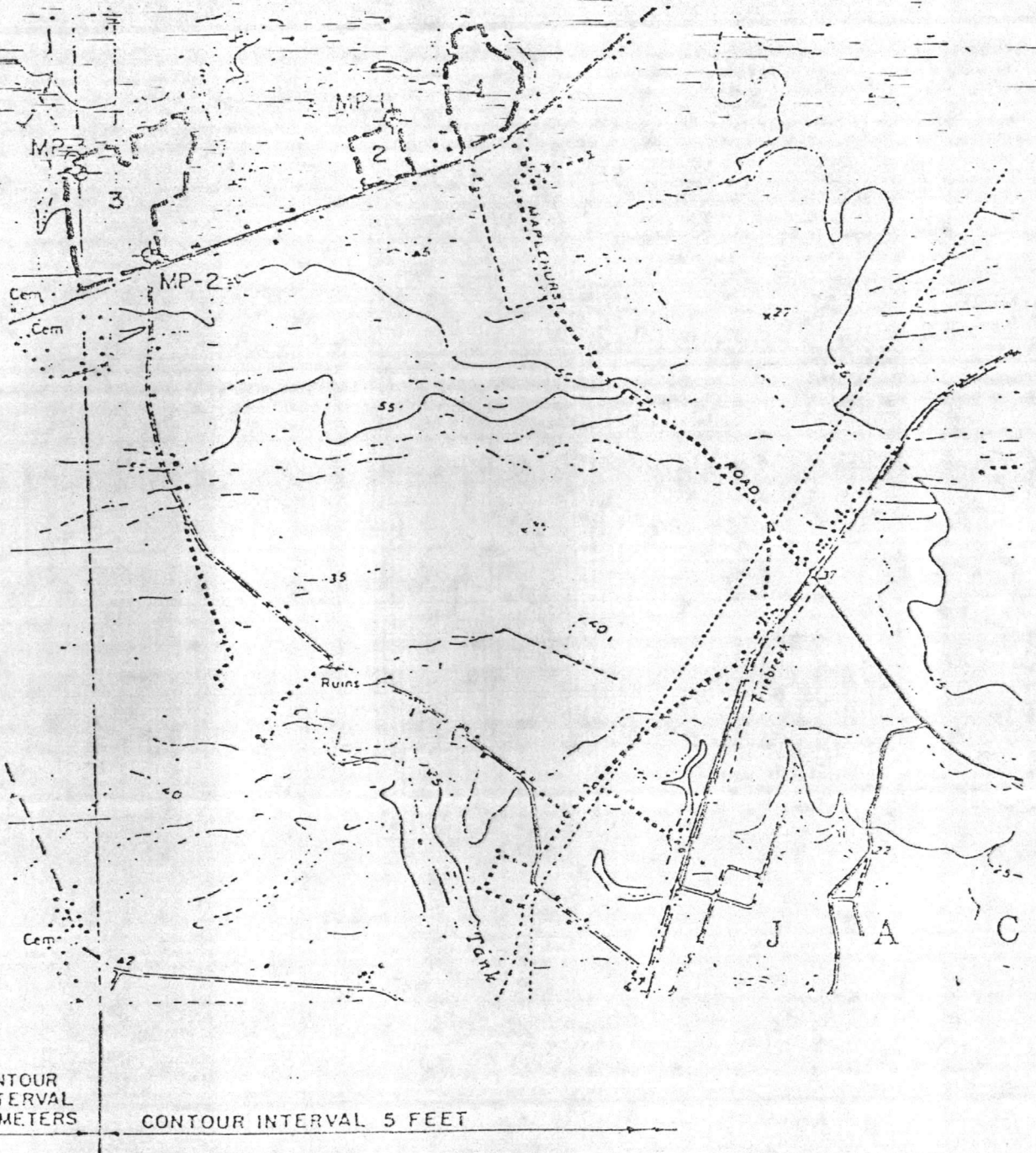
21. REMARKS

I do hereby certify that this well was constructed in accordance with N.C. Well Construction Regulations and Standards and that this well record is true and exact.

[Signature] 2-3-84  
SIGNATURE OF CONTRACTOR OR AGENT DATE



WELL LOCATION SITES



WELL LOCATION MAP

MONITORING WELLS

CITY OF JACKSONVILLE, NORTH CAROLINA



**ATEC Associates, Inc.**  
of North Carolina

SCALE

N.T.S.

Drawn:

Checked: pf

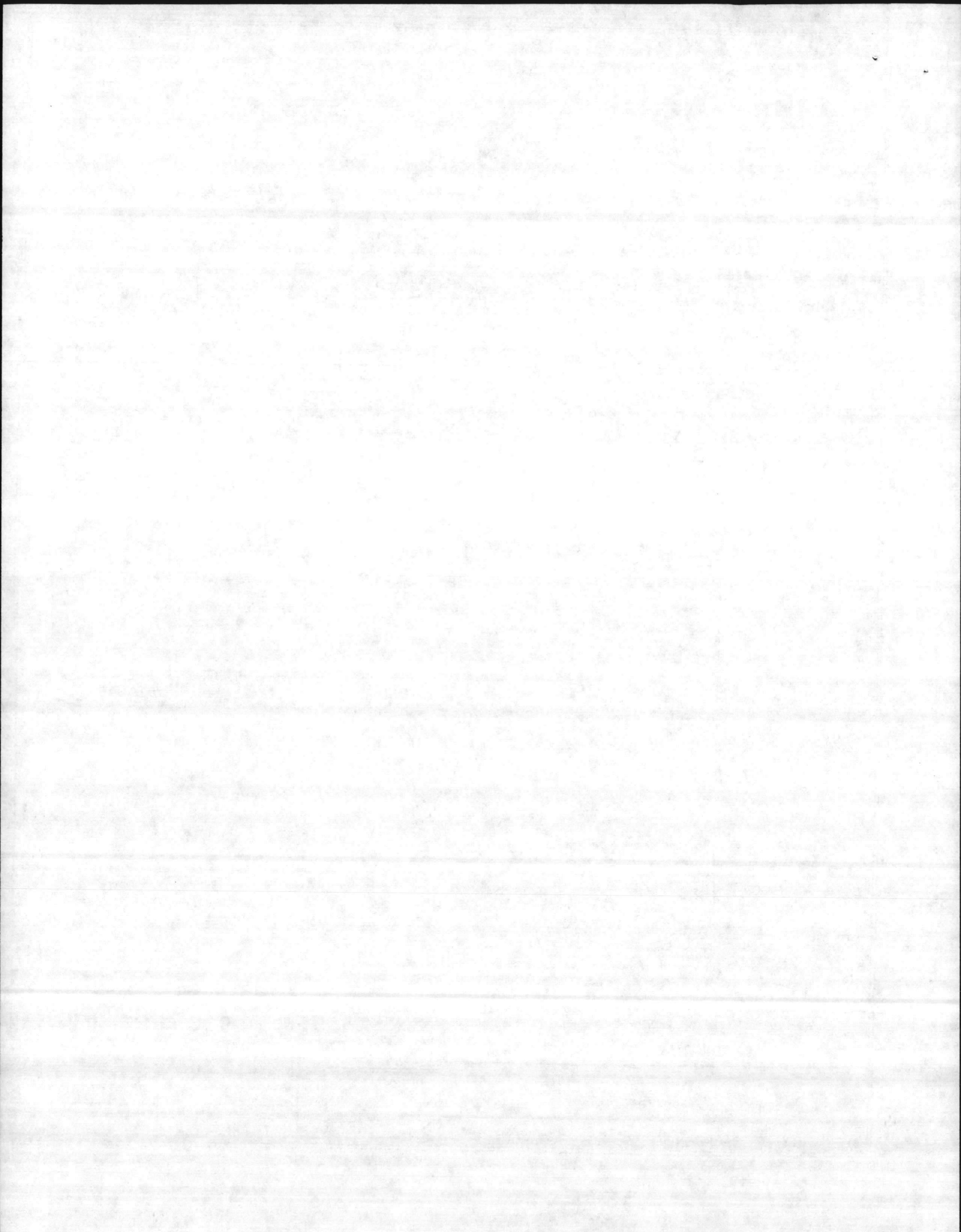
Date: 2/6/84

Job No.

35-41104

Dwg. No.

2



# TEST BORING RECORD

BLOWS  
PER  
6 INCHES REC.

DEPTH -FT.	DESCRIPTION	ELEV.	PENETRATION BLOWS PER FT.					REC.
			0	10	20	30	50	
0	Tan silty fine SAND							
3.0	Gray and yellow fine sandy silty CLAY							
8.0	Gray and yellow clayey fine SAND							
12.0	Gray slightly fine sandy very silty CLAY							▽
17.0	Orange and tan silty fine to coarse SAND							
29.0								
30.0	Gray-green silty fine to medium SAND							
	Boring Terminated at 30.0 feet							
	Water Level at 12.6 feet at time of Boring							

JOB NO. 35-41104      DATE 2/3/84      PAGE 1 OF 1      BORING NO. MW-1

REFER TO THE ATTACHED REFERENCE SHEET  
FOR EXPLANATIONS AND SYMBOLS:





DRILLING CONTRACTOR ATEC Associates

REG. NO.

WELL CONSTRUCTION PERMIT NO.

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: Jacksonville  
Hwy 53  
(Road, Community or Subdivision and Lot No.)

County: Onslow

Quadrangle No. X 25c

344447  
DRILLING LOG 772921

2. OWNER: City of Jacksonville

3. ADDRESS:

4. TOPOGRAPHY: draw, valley, slope, hilltop (flat) (circle one)

5. USE OF WELL: Monitoring DATE: 2/3/84

6. DOES THIS WELL REPLACE AN EXISTING WELL? No

7. TOTAL DEPTH: 30' RIG TYPE OR METHOD: Rotary

8. FORMATION SAMPLES COLLECTED: YES  NO

9. CASING: Depth Inside Wall thick. type  
Dia. or weight/ft PVC  
From to 20 ft 2" Sched. 80

10. GROUT: Depth Material Method  
From 0 to 17 ft Cement Pump

11. SCREEN: Depth Dia. Type & Opening  
From 20 to 30 ft 2" .0001 Slotted

12. GRAVEL: Depth Size Material  
From 18 to 30 ft 3/8" Granite

13. WATER ZONES (depth):

14. STATIC WATER LEVEL: 12.6ft <sup>above</sup> <sub>below</sub> top of casing  
Casing is 1.5ft. above land surface ELEV: \_\_\_\_\_

15. YIELD (gpm): \_\_\_\_\_ METHOD OF TESTING: \_\_\_\_\_

16. PUMPING WATER LEVEL: \_\_\_\_\_ ft.  
after \_\_\_\_\_ hours at \_\_\_\_\_ gpm.

17. CHLORINATION: Type NO Amount \_\_\_\_\_

18. WATER QUALITY: NO TEMPERATURE (°F) \_\_\_\_\_

19. PERMANENT PUMP: Date Installed N/A  
Type \_\_\_\_\_ Capacity \_\_\_\_\_ (gpm) HP  
Make \_\_\_\_\_ Intake Depth \_\_\_\_\_  
Airline Depth \_\_\_\_\_

20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENTS REQUIREMENTS AND RECOMMENDATIONS? YES

21. REMARKS  
I do hereby certify that this well was constructed in accordance with N.C. Well Construction Regulations and Standards and that this well record is true and exact.

[Signature] 2-3-84  
SIGNATURE OF CONTRACTOR OR AGENT DATE

Submit original to Division of Environmental Management and copy to well owner.

DEPTH FROM TO FORMATION DESCRIPTION

SEE ATTACHED DATA

MW-1

If additional space is needed, use back of form

LOCATION SKETCH

(Show distance to numbered roads, or other map reference points)

SEE ATTACHED DATA

