Please use black ink.
Send original copy by certified mail to the Texas Water Commission P.O. Box 13087 Austin, Texas 78711

State of Texas
WELL REPORT

ATTENTION OWNER: *Confidentiality Privilege Notice on Reverse Side*

Texas Water Well Drillers Board
P. O. Box 13087
Austin, Texas 78711

1) **OWNER** City of Waco (Name) Address P. O. Box 2570 Waco, TX 76702-2570 (Street or RFD) (City) (State) (Zip)

2) **LOCATION OF WELL:**
County McLennan miles in _____ (N.E., S.W., etc.) direction from Waco (Town)
Cottonwood Creek Golf Course Well

Driller must complete the legal description to the right with distance and direction from two intersecting section or survey lines, or he must locate and identify the well on an official Quarter- or Half-Scale Texas County General Highway Map and attach the map to this form.

☐ **Legal description:**
Section No. _____ Block No. _____ Township _____
Abstract No. _____ Survey Name _____
Distance and direction from two intersecting section or survey lines _____
XX See attached map.

3) **TYPE OF WORK** (Check):
☒ New Well ☐ Deepening ☐ Reconditioning ☐ Plugging

4) **PROPOSED USE** (Check):
☐ Domestic ☐ Industrial ☐ Monitor ☒ Public Supply ☐ Irrigation ☐ Test Well ☐ Injection ☐ De-Watering

5) **DRILLING METHOD** (Check):
☐ Driven ☒ Mud Rotary ☐ Air Hammer ☐ Jetted ☐ Bored ☐ Air Rotary ☐ Cable Tool ☐ Other _____

6) **WELL LOG:**
Date Drilling: Started 6/ 1990 Completed _____ 19__

DIAMETER OF HOLE Dia. (in.)	From (ft.)	To (ft.)
	Surface	

From (ft.)	To (ft.)	Description and color of formation material
see attached		

7) **BOREHOLE COMPLETION:**
☐ Open Hole ☐ Straight Wall ☐ Underreamed
☐ Gravel Packed ☐ Other _____
If Gravel Packed give interval . . . from _____ ft. to _____ ft.

8) **CASING, BLANK PIPE, AND WELL SCREEN DATA:**

Dia. (in.)	New or Used	Steel, Plastic, etc. Perf., Slotted, etc. Screen Mgf., if commercial	Setting (ft.) From	Setting (ft.) To	Gage Casing Screen
		see attached			

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TEXAS WATER COMMISSION

9) **CEMENTING DATA** (Rule 287.44(1))
Cemented from _____ ft. to _____ ft. No. of Sacks Used _____
_____ ft. to _____ ft. No. of Sacks Used _____
Method used _____
Cemented by _____

10) **SURFACE COMPLETION**
☒ Specified Surface Slab Installed [Rule 287.44(2)(A)]
☐ Pitless Adapter Used [Rule 287.44(3)(B)]
☐ Approved Alternative Procedure Used [Rule 287.71]

11) **WATER LEVEL:**
Static level _____ ft. below land surface Date _____
Artesian flow _____ gpm. Date _____

12) **PACKERS:** Type Depth

13) **TYPE PUMP:**
☐ Turbine ☐ Jet ☐ Submersible ☐ Cylinder
☐ Other _____
Depth to pump bowls, cylinder, jet, etc., _____ ft.

(Use reverse side if necessary)

15) **WATER QUALITY:**
Did the drilling penetrate any strata which contained undesirable constituents? ☐ Yes ☒ No
If yes, submit "REPORT OF UNDESIRABLE WATER"
Type of water? _____ Depth of strata _____
Was a chemical analysis made? ☐ Yes ☐ No

14) **WELL TESTS:**
Type Test: ☑ Pump ☐ Bailer ☐ Jetted ☐ Estimated
Yield: _____ gpm with _____ ft. drawdown after _____ hrs.

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief. I understand that failure to complete items 1 thru 15 will result in the log(s) being returned for completion and resubmittal.

COMPANY NAME J. L. Myers Company (Type or Print) Well Driller's License No. 265

ADDRESS 8325 Forney Road (Street or RFD) Dallas (City) TX (State) 75227 (Zip)

(Signed) Joe W. Dillard (Licensed Well Driller) (Signed) _____ (Registered Driller Trainee)

Please attach electric log, chemical analysis, and other pertinent information, if available.

For TWC use only
Well No. 40-31-8
Located on map _____

WWD-012 (Rev. 07/15/88) TEXAS WATER COMMISSION COPY

40-31-805 X

Texas Water Development Board
Well Schedule

State Well No. 40 31 806 **Previous Well No.** _____ **County** McLennan 309

River Basin Brazos 12 **Zone** 3 **Lat.** 31 30 10 **Long.** 097 10 03 **Source of Coord.** 1

Owner's Well No. _____ **Location** ____ 1/4, ____ 1/4, **Section** ____, **Block** ____, **Survey** ____

Owner Cottonwood Creek Golf Course **Driller** J. L. Myers Co.

Address _____ **Tenant/Oper.** _____

Date Drilled 06 00 1990 **Depth** 2041 **Source of Depth Datum** D **Altitude** 525 **Source of Alt. Datum** M

Aquifer Hosston 217HSTN **Well Type** W **User** _____

Well Construction **Const. Method** Rotary H **Casing Material** Steel S

Completion Perf. P **Screen Material** steel S

Lift Data **Pump Mfr.** _____ **Type** Subm S **No. Stages** _____

Bowls Diam. _____ in. **Setting** _____ ft. **Column Diam.** _____ in.

Motor Mfr. _____ **Fuel or Power** Elec E **Horsepower** _____

Yield **Flow** _____ GPM **Pump** _____ GPM **Meas.,Rept.,Est.** _____ **Date** _____

Performance Test **Date** _____ **Length of Test** _____ **Production** _____ GPM

Static Level ____ ft. **Pumping Level** ____ ft. **Drawdown** ____ ft. **Sp.Cap.** ____ GPM/ft.

Quality (Remarks _____

Water Use **Primary** Irr I **Secondary** _____ **Tertiary** _____

Other Data Available **Water Level** N **Water Quality** Y **Logs** DER **Other Data** _____

Water Levels

	Date	Meas.

Casing or Blank Pipe (C)
Well Screen or Slotted Zone (S)
Open Hole (O)
Cemented from 0 to 203'

	Diam. (in.)	Setting (feet) From	To
1	C 24	0	40
2	C 11	0	1840
3	S 11	1840	1916
4	C 11	1916	1926
5	S 11	1926	1985
6	C 11	1985	1998
7	S 11	1998	2010
8	C 11	2010	2031
9	O	2031	2041
10			
11			
12			
13			
14			
15			
16			

(20 max)

Recorded By F. Bilberry **Date Record Collected or Updated** 01 15 1992 **Reporting Agency** 01

Remarks

Aquifer Hosston

Well No. 40-31-805

92-0023
9/9/91

POPE *Testing* LABORATORIES, Inc.

CONSULTING ANALYTICAL CHEMISTS
AND TESTING ENGINEERS

P. O. BOX 903
DALLAS, TEXAS 75221
(214) 742-8491

FOODS, FEEDS, DAIRY PRODS.
WATER, MISCL. ANALYSES
COTTON SEED PRODUCTS
PACKING HOUSE PRODUCTS
FERTILIZERS

OFFICIAL CHEMISTS
WEIGHERS AND INSPECTORS
NATL. COTTONSEED PRODUCTS ASS'N.
REFEREE CHEMISTS
AMERICAN OIL CHEMISTS SOCIETY

Date Rec'd 6-18-90

To: J.L. Myers Company
Dallas, TX

Report of Tests on Water

Identification Marks: City of Waco Cottonwood Creek Golf Course
Well #1 Sampled 6-16-90 after 36 hours pumping

Values reported are for minerals in solution

	Parts Per Million
Calcium	3.2
Magnesium	0.9
Iron	0.12
Manganese	0.0
Sodium	246.8
Carbonate	12.0
Bicarbonate	414.8
Sulphate	106.7
Chloride	54.7
Fluoride	1.0
Nitrate	0.0
Phenolphthalein Alkalinity as $CaCO_3$	10.0
Total Alkalinity as $CaCO_3$	360.0
Total Hardness as $CaCO_3$	11.6
Dissolved Residue (TS) Calculated	840.2
Specific Conductance Micromhos/cm	1000
pH	8.3

POPE TESTING LABORATORIES, Inc.

By Leon Hunter

Lab. No. 95562

F-158-1M

40-31-805

DRILLER'S LOG

OWNER : CITY OF WACO, COTTONWOOD CREEK GOLF COURSE

LOCATION: EAST OF BEVERLY DRIVE AND NORTH OF HIGHWAY 6
IN GOLF COURSE, WACO, MCLENNAN COUNTY, TEXAS

DATE : MAY 1990

DRILLERS: L. BERNARD, J. WAGONER

DEPTH OF STRATA From	To	EACH STRATUM Feet	DESCRIPTION
0	4	4	Top soil
4	16	12	Clay
16	130	114	Chalk rock
130	196	66	Chalky lime & shale
196	481	285	Shale
481	519	38	Lime mix, shale
519	546	27	Shale
546	573	27	Lime & shale
573	665	92	Lime
665	723	58	Hard lime
723	877	154	Lime
877	953	76	Lime & shale strks
953	1062	109	Shale strks, mix lime
1062	1142	80	Hard lime & shale strks
1142	1177	35	Sandy lime
1177	1227	50	Mix sand
1227	1236	9	Sandy lime
1236	1277	41	Lime & shale strks
1277	1366	89	Sand, chert lime mix
1366	1388	22	Hard lime
1388	1494	106	Hard sandy lime
1494	1595	101	Hard lime
1595	1703	108	Lime
1703	1709	6	Sandy lime
1709	1764	55	Red & white chert sand
1764	1774	10	Sand & chert
1774	1795	21	Hard sandy lime & shale
1795	1817	22	Shale & sand
1817	1860	43	Red bed
1860	1888	28	Red bed & sand
1888	1920	32	Sandy shale
1920	1938	18	Sand, shale - lignite
1938	1960	22	Sand
1960	1995	35	Hard sand
1995	2016	21	Mix sand, red bed
2016	2024	8	Yellow & white chert
2024	2032	8	Sand, red bed mixed
2032	2041	9	Shale, red bed

40-31-805

MATERIAL SETTING

OWNER : CITY OF WACO, COTTONWOOD CREEK GOLF COURSE

LOCATION: EAST OF BEVERLY DRIVE AND NORTH OF HIGHWAY 6 IN GOLF COURSE, WACO, MCLENNAN COUNTY, TEXAS

DATE : JUNE 1990

FROM	TO	AMOUNT	DESCRIPTION
0	40	40	24"OD steel surface pipe cemented in place
+2	2031	2033	10-3/4" 40.5#/ft .365"PE casing with float shoe and centralizers. Cement by Halliburton iwth 890 sacks 50/50 Poz "A" and 6% gel
1840	1916	76	Perforated with 83 1/2" perforations
1926	1985	59	Perforated with 70 1/2" perforations
1998	2010	12	Perforated with 16 1/2" perforations

J. L. MYERS COMPANY
8325 FORNEY ROAD
DALLAS, TX 75227

40-31-805

Cementer: Fill in shaded areas.
Operator: Fill in other items.

Form W-15
Cementing Report
Rev. 4/1/83
483-045

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

1. Operator's Name (As shown on Form P-5, Organization Report)	2. RRC Operator No.	3. RRC District No.	4. County of Well Site
CITY OF WACO, COTTONWOOD CREEK			MCLENNAN
5. Field Name (Wildcat or exactly as shown on RRC records) GOLF COURSE		**6. API No.** 42-	**7. Drilling Permit No.**
8. Lease Name J. L. MYERS COMPANY	**9. Rule 37 Case No.**	**10. Oil Lease/Gas ID No.**	**11. Well No.** 1

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date				6-1-90			
13. •Drilled hole size							
•Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)							
15. Top of liner (ft.)							
16. Setting depth (ft.)							
17. Number of centralizers used							
18. Hrs. waiting on cement before drill-out							
1st Slurry	19. API cement used: No. of sacks ▶			890			
	Class ▶			Std. 50/50 Poz			
	Additives ▶			6% Gel			
2nd Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
3rd Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1st	20. Slurry pumped: Volume (cu. ft.) ▶			1370			
	Height (ft.) ▶			2462			
2nd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
3rd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶			1370			
	Height (ft.) ▶			2462			
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?				Yes			

22. Remarks

Circulated 30 barrels cement.

* "Standard" cement which is comparable to API Class A cement and meets the requirements of RRC Rule 13.

OVER ▶

40-31-805

CEMENTING TO PLUG AND ABANDON	PLUG # 1	PLUG # 2	PLUG # 3	PLUG # 4	PLUG # 5	PLUG # 6	PLUG # 7	PLUG # 8
23. Cementing date								
24. Size of hole or pipe plugged (in.)								
25. Depth to bottom of tubing or drill pipe (ft.)								
26. Sacks of cement used (each plug)								
27. Slurry volume pumped (cu. ft.)								
28. Calculated top of plug (ft.)								
29. Measured top of plug, if tagged (ft.)								
30. Slurry wt. (lbs/gal)								
31. Type cement								

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

Terry Blackmon, Cementer — Name and title of cementer's representative

Halliburton Services — Cementing Company

Signature

P. O. Box 4400 — Address

Palestine, Texas — City,

75802 — State, Zip Code

214/729-2137 — Tel.: Area Code Number

6-6-90 — Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Typed or printed name of operator's representative

Title

Signature

Address

City,

State, Zip Code

Tel.: Area Code Number

Date: mo. day yr.

Instructions to Form W-15, Cementing Report

IMPORTANT: Operators and cementing companies must comply with the requirements of the Commission's Statewide Rules 8 (Water Protection), 13 (Casing, Cementing, Drilling, and Completion), and 14 (Well Plugging). For **offshore** operations, see the requirements of Rule 13 (c).

A. **What to file.** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form. Form W-15 should be filed with the following:

- An initial oil or gas completion report, **Form W-2 or G-1**, as required by Statewide or special field rules;
- Form W-4, Application for Multiple Completion, if the well is a multiple parallel casing completion; and
- Form W-3, Plugging Record, unless the W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form **W-15, in addition to Form W-3, to show any casing cemented in the hole.**

B. **Where to file.** The appropriate Commission District Office for the county in which the well is located.

C. **Surface casing.** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Texas Department of Water Resources, Austin. Before drilling a well in any field or area in which no field rules are in effect or in which surface casing requirements are not specified in the applicable rules, an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.

D. **Centralizers.** Surface casing must be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In nondeviated holes, a centralizer must be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers must meet API specifications.

E. **Exceptions and alternative casing programs.** The District Director may grant an exception to the requirements of Statewide Rule 13. In a written application, an operator must state the reason for the requested exception and outline an alternate program for casing and cementing through the protection depth for strata containing usable-quality water. The District Director may approve, modify, or reject a proposed program. **An operator must obtain approval of any exception before beginning casing and cementing operations.**

F. **Intermediate and production casing.** For specific technical requirements, operators should consult Statewide Rule 13 (b) (3) and (4).

G. **Plugging and abandoning.** Cement plugs must be placed in the wellbore as required by Statewide Rule 14. The District Director may require additional cement plugs. For onshore or inland wells, a 10-foot cement plug must be placed in the top of the well, and the casing must be cut off three feet below the ground surface. All cement plugs, except the top plug, must have sufficient slurry volume to fill 100 feet of hole, plus ten percent for each 1,000 feet of depth from the ground surface to the bottom of the plug.

To plug and abandon a well, operators must use only cementers approved by the Director of Field Operations. Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

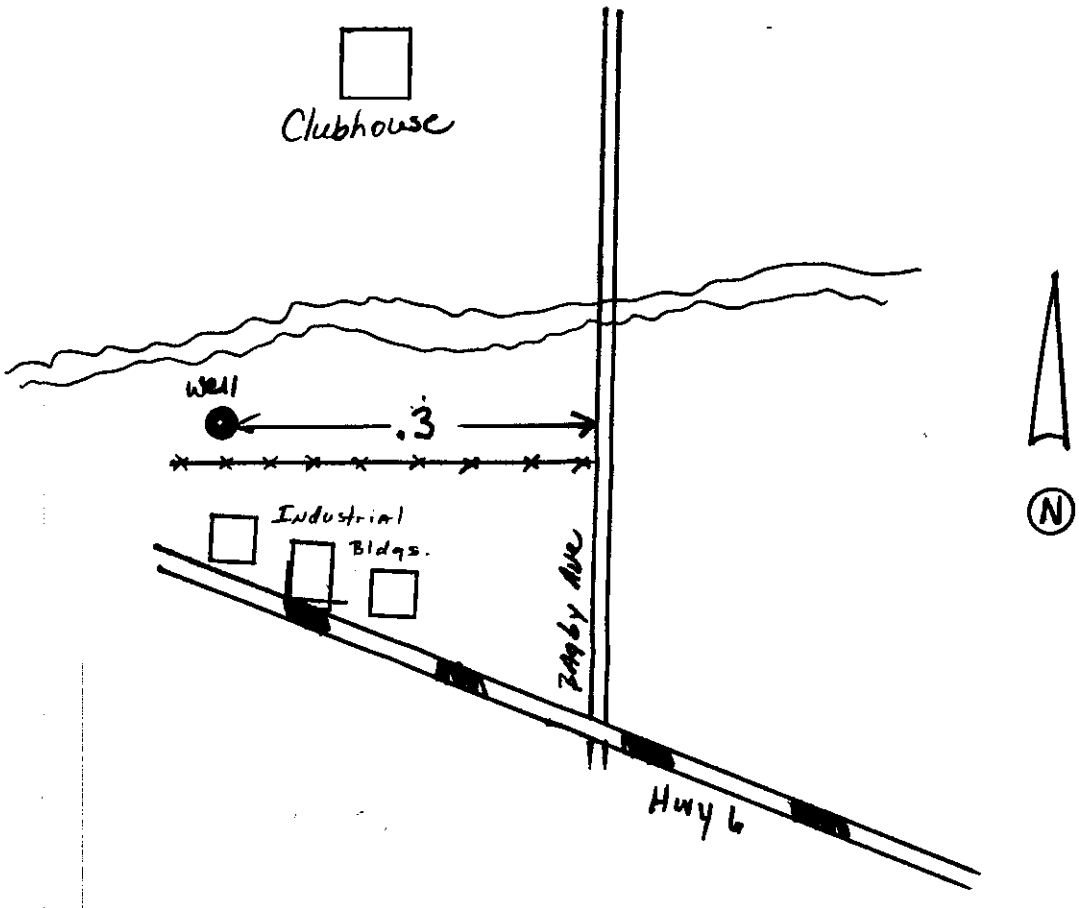
40-31-805

TEXAS DEPARTMENT OF WATER RESOURCES

BY_____ DATE _____ DIVISION _____ SHEET NO. _____ OF _____

CHKD _____ DATE _____ JOB NAME _____

_____ JOB NO. _____ PROG. CODE _____



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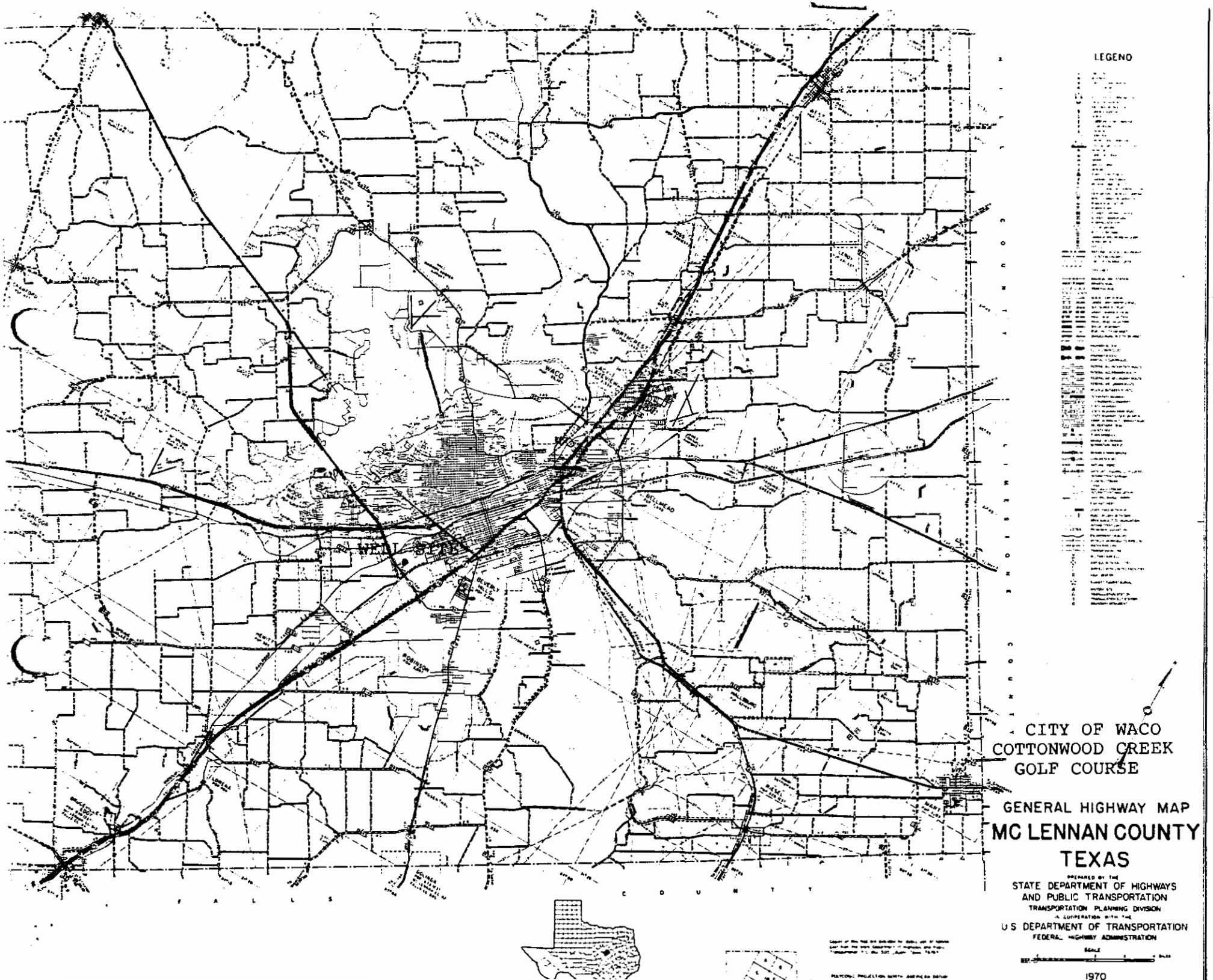
LEGEND
CITY OF WACO
COTTONWOOD CREEK
GOLF COURSE
GENERAL HIGHWAY MAP
MC LENNAN COUNTY
TEXAS
PREPARED BY THE
STATE DEPARTMENT OF HIGHWAYS
AND PUBLIC TRANSPORTATION
TRANSPORTATION PLANNING DIVISION
IN COOPERATION WITH THE
U S DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
SCALE
1970
WACO
WEST END
F A L L S
C O U N T Y

40-31-805