14.3
11.2
3.1

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Aquifer(s) Hosston Project No. _____ State Well No. 40-32-813
217 HSTN Field No./Owner's Well No. 1 County McLennan

1. Location: ___ ¼, ___ ¼, Section ___, Block ___, Survey _____, Lat. 31-31-02, Long. 97-04-13
8 miles SE of Waco

2. Owner: BRA - Treatment Plant Exp. Address: Waco, TX
Tenant (other): _____ Address: _____
Driller: J.L. Myers Address: 8325 Forney Rd, Dallas, TX 75227

3. Land Surface Elevation: 385 ft. above msl determined by USGS Topo

4. Drilled: 10/26 1983; Dug, Cable Tool, (Rotary), Air, ___

5. Depth: Rept. 2417 ft. Meas. _____ ft.

6. Borehole Completion: Open Hole, (Straight Wall), Underreamed, Gravel Packed

7. Pump: Mfr. Red Jacket Type Subm.
No. Stages ___, Bowls Diam. ___ in., Setting 620 ft.
Column Diam. 1½" in., Length Tailpipe 610 ft.

8. Motor: Mfr. Red Jacket Fuel Elect HP. 5

9. Yield: Flow ___ gpm, Pump ___ gpm, Meas., Rept., Est. ___ Date ___

10. Performance Test: Date ___ Length of Test ___ Made by ___
Static Level ___ ft. Pumping Level ___ ft. Drawdown ___ ft.
Production ___ gpm Specific Capacity ___ gpm/ft.

11. Quality: (Remarks on taste, odor, color, etc.) Pape Lab - Californ 11/2/83
Analyses
Date ___ Laboratory ___ TDS ___ Sp Cond ___
Date ___ Laboratory ___ TDS ___ Sp Cond ___

12. Other data available (as circled): Pumping Test, Power & Yield Test, (Drillers Log),
Formation Samples, (Geophysical Log(s)) _____ (type)

13. Water Level(s): 350 ft. rept. meas. 10-26 1983 above below _____ which is ___ ft. above below Land Surface
_____ ft. rept. meas. _____ 19__ above below _____ which is ___ ft. above below Land Surface

14. Use: Dom., Stock, (Public Supply), Ind., Irr., Observation, Other (Test Hole, Oil Test, etc.) ___

15. Recorded by: GLD Source of data: D.L. & Obs Sec 085088 Date: 8/15/86

16. Remarks: _____
E Log File in separate Folder

17. Location or Sketch:
See back of schedule & attached sheet

CASING, BLANK PIPE & WELL SCREEN Cemented From 0 ft. to 2410 ft.			
Diam. (in.)	Type	Setting (feet) From	to
5½	Steel	0	2410
5½	Gun Perf.	2330	2346
5½	"	2356	2374
5½	"	2380	2396

MAIN PUNCHED

E-Log

W/L Obs. Well W/Q Obs. Well
State Well No. 40-32-813

TWDB-0308 (Rev. 12-11-85)

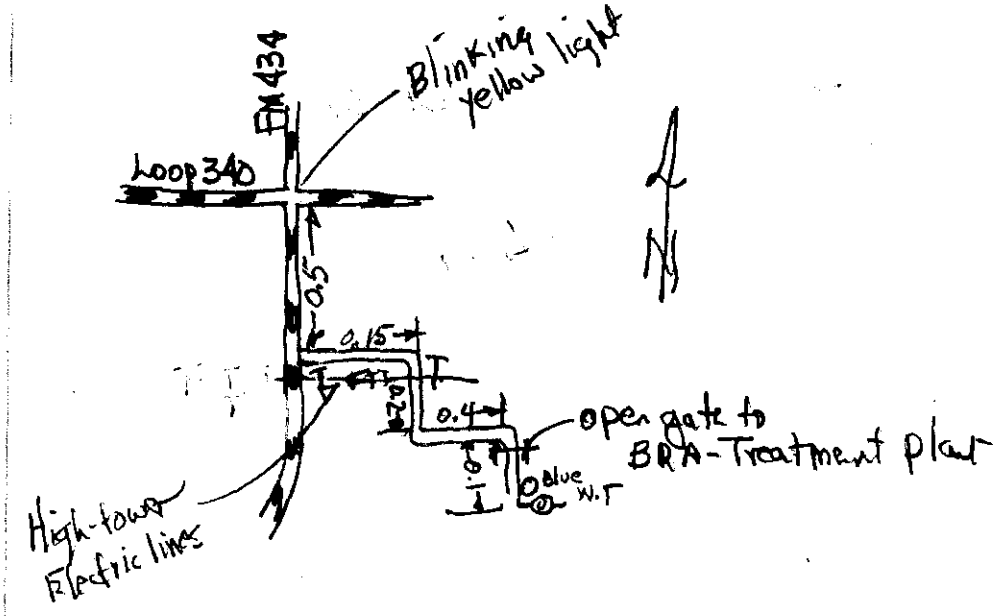
IN SYSTEM
11-2-88

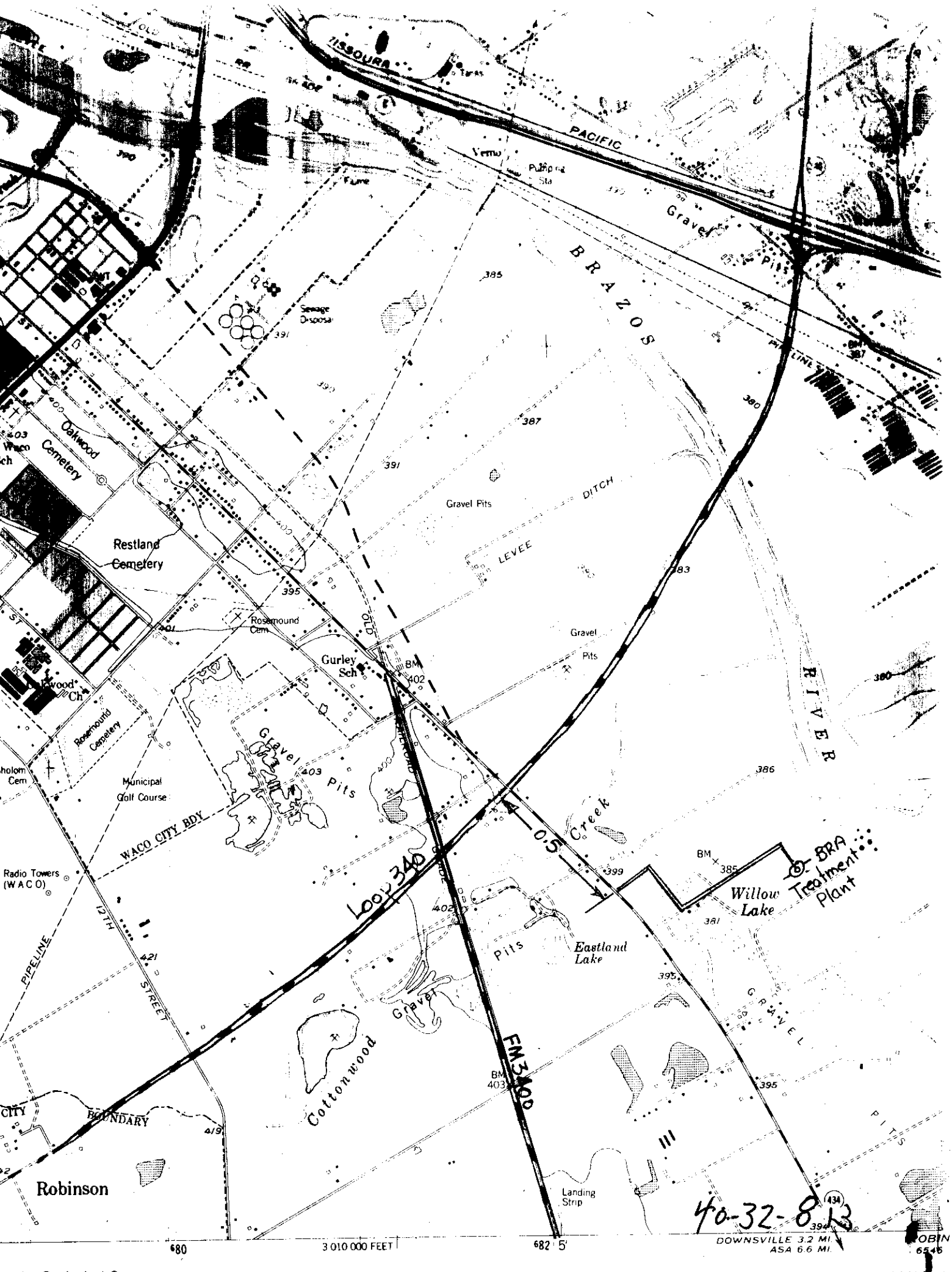
59.75
2.5
62.25

3.15
1.35
4.50

4.4
1.5
5.9

70
53
47





by the Geological Survey

Send original copy by certified mail to the Texas Department of Water Resources P. O. Box 13087 Austin, Texas 78711

State of Texas
WATER WELL REPORT

ATTENTION OWNER: *Confidentiality Privilege Notice on Reverse Side*

For TDWR use only
Well No. 40-40-20
Located on map yes
Received: C.F.S.

1) OWNER BRA - Treatment Plant Exp (Name) Address (Street or RFD) (City) (State) (Zip)

2) LOCATION OF WELL:
County McLennan _____ miles in _____ (N.E., S.W., etc.) direction from _____ (Town)

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 ☐ Public Supply
☐ Irrigation ☐ Test Well ☐ Other _____

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

6) WELL LOG:
Date drilled 10/26/83

DIAMETER OF HOLE

Dia. (in.)	From (ft.)	To (ft.)
	Surface	
See attached		

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			

CEMENTING DATA
Cemented from _____ ft. to _____ ft.
Method used _____
Cemented by _____ (Company or Individual)

RECEIVED
JAN 13 1984
DEPT. OF WATER RESOURCES

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

10) PACKERS: Type Depth
see attached

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

(Use reverse side if necessary)

13) WATER QUALITY:
Did you knowingly penetrate any strata which contained undesirable water? ☐ Yes ☐ No
If yes, submit "REPORT OF UNDESIRABLE WATER"
Type of water? _____ Depth of strata _____
Was a chemical analysis made? ☐ Yes ☐ No

12) WELL TESTS:
☐ Type Test: ☐ Pump ☐ Bailer ☐ Jatted ☐ 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.

NAME J. W. Dillard (Type or Print) Water Well Drillers Registration No. 265

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

(Signed) J. W. Dillard (Water Well Driller) J. L. Myers Company (Company Name)

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

40-32-813

TDWR-0392 (Rev. 1-12-79)

DEPARTMENT OF WATER RESOURCES COPY

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING PRIVILEGE OF CONFIDENTIALITY

The Water Well Drillers Board and the Department of Water Resources are concerned that some persons having water wells drilled may not be aware of the confidentiality privilege provision of Section 5 of the Water Well Drillers Act. Section 5, the Reporting of Well Logs, reads as follows:

> "Every registered water well driller drilling, deepening, or otherwise altering a water well within this State shall make and keep, or cause to be made and kept, a legible and accurate well log, and within sixty (60) days from the completion or cessation of drilling, deepening or otherwise altering such a water well, shall deliver or transmit by certified mail a copy of such well log to the Commission, and the owner thereof or the person having had such well drilled. The well log required herein shall at the request in writing to the Commission, by certified mail, by the owner or the person having such well drilled be held as confidential matter and not made of public record."

The last sentence specifies the means whereby you can, if you wish, assure that logs of your wells will be kept confidential. Please note that the term "Commission" in the above-quoted section and elsewhere in the Water Well Drillers Act now properly means the Texas Department of Water Resources (P. O. Box 13087; Austin, Texas 78711).

RECORD OF WELL AND PUMP
FOR

BRAZOS RIVER AUTHORITY
TREATMENT PLANT EXPANSION

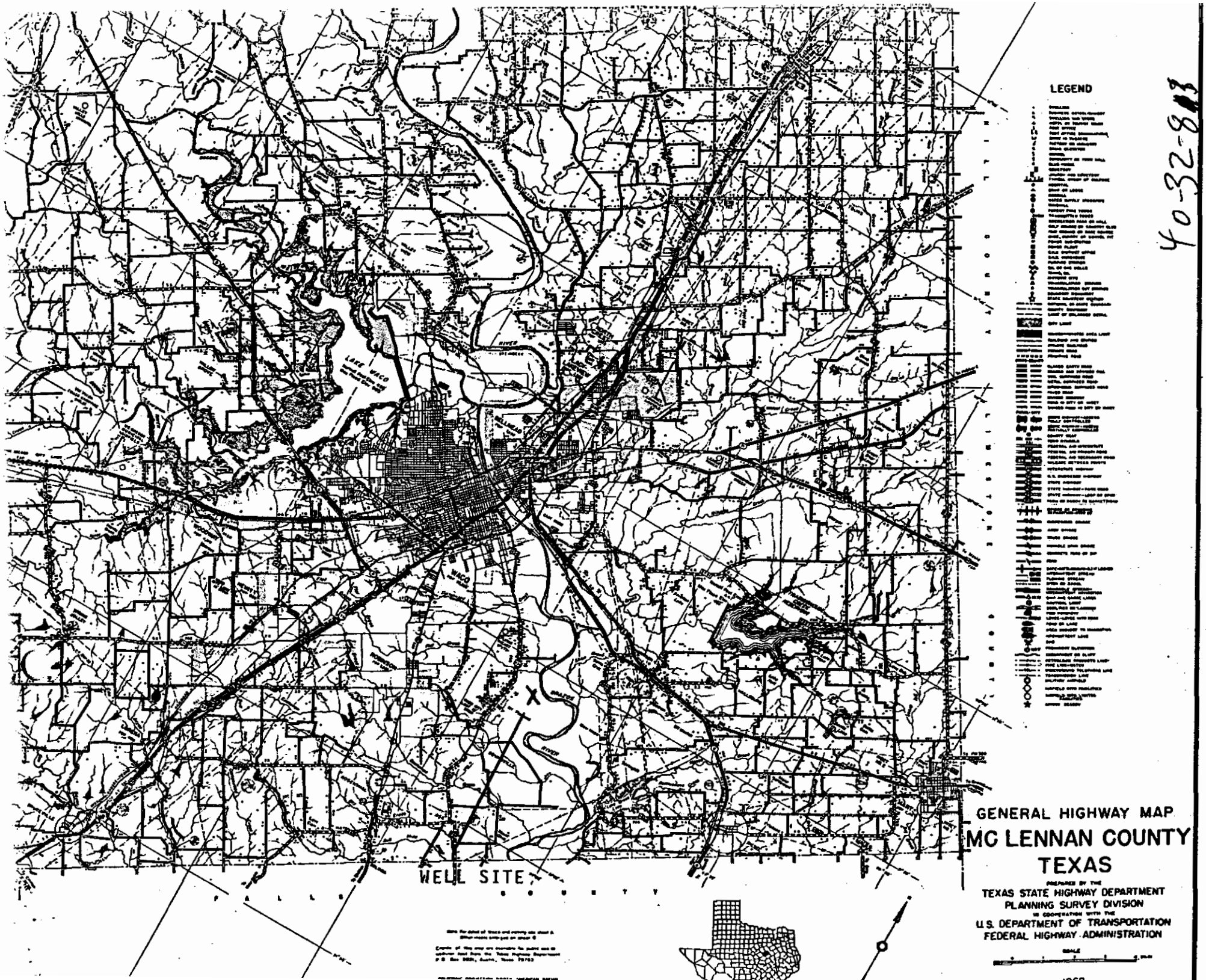
WELL NO. 1

DRILLED BY: J. L. MYERS COMPANY
8325 FORNEY ROAD
DALLAS, TEXAS 75227

(214) 388-7407

CONTRACTOR: CARROTHERS CONSTRUCTION COMPANY, INC.
P. O. BOX 269
PAOLA, KANSAS 66071-0269

40-32-803


LEGEND
WELL SITE
GENERAL HIGHWAY MAP
MC LENNAN COUNTY
TEXAS
PREPARED BY THE
TEXAS STATE HIGHWAY DEPARTMENT
PLANNING SURVEY DIVISION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
SCALE

40-32-813

DRILLER'S LOG

OWNER : BRAZOS RIVER AUTHORITY TREATMENT PLANT EXPANSION

LOCATION: WACO, TEXAS

DATE : OCTOBER 1983

DRILLERS: L. BERNARD, J. WAGONER

DEPTH OF STRATA From	To	EACH STRATUM Feet	DESCRIPTION
0	50	50	Sand and gravel
50	228	178	Shale
228	245	17	Shale and lime
245	299	54	Lime
299	489	190	Lime and chalk
489	535	46	Lime and chalk
535	728	193	Shale
728	756	28	Shale and lime strks
756	777	21	Gumbo shale
777	808	31	Hard shale
808	913	105	Lime and shale mixed
913	932	19	Lime and shale mixed
932	999	67	Lime
999	1025	26	Hard lime
1025	1053	28	Lime
1053	1099	46	Lime and shale
1099	1116	17	Shale mostly
1116	1257	141	Shale and lime
1257	1396	139	Lime and shale
1396	1431	35	Soft lime and lime strks
1431	1462	31	Soft lime
1462	1494	32	Limestone
1494	1605	111	Hard lime
1605	1615	10	Hard lime
1615	1681	66	Hard lime
1681	1712	31	Hard lime & soft limestone
1712	1912	200	Hard lime
1912	1978	66	Hard lime
1978	2006	28	Mixed lime and sand
2006	2023	17	Sand
2023	2030	7	Shale
2030	2051	21	Shale
2051	2064	13	Sand

40-32-803

BRAZOS RIVER AUTHORITY TREATMENT PLANT EXPANSION

DRILLER'S LOG (CONTINUED)

DEPTH OF STRATA From	To	EACH STRATUM Feet	DESCRIPTION
2064	2069	5	Gumbo shale
2069	2103	34	Hard sand, mixed shale
2103	2165	62	Hard sand, mixed shale
2165	2201	36	Hard sand, mixed shale
2201	2206	5	Mixed sand and shale
2206	2246	40	Sand, lime, red bed
2246	2261	15	Sand mostly
2261	2276	15	Red bed shale, mixed sand
2276	2280	4	Red bed shale, mixed sand
2280	2395	115	Hard sand and shale
2395	2411	16	Red bed
2411	2416	5	Lime

Total depth 2417 feet

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

40-32-813

MATERIAL SETTING

OWNER : BRAZOS RIVER AUTHORITY TREATMENT PLANT EXPANSION

LOCATION: WACO, TEXAS

DATE : OCTOBER 1983

FROM	TO	AMOUNT	DESCRIPTION
0	2410	2410	5-1/2" O.D. 15.5#/ft. 0.250 wall casing set and cemented. Cementing by Halliburton using 390 sacks of Class H cement with 8% gel added.

PERFORATIONS

2330	2346	16 shots
2356	2374	18 shots
2380	2396	16 shots

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

40-32-803

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
J. L. Myers Company			McLennan

5. Field Name (Wildcat or exactly as shown on RRC records)	6. API No.	7. Drilling Permit No.
	42-	

8. Lease Name	9. Rule 37 Case No.	10. Oil Lease/Gas ID No.	11. Well No.
Brazos River Authority			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			10-12-83			
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 ▶			390			
1st Slurry — Class ▶			H			
1st Slurry — Additives ▶			8% Gel,			
2nd Slurry — No. of sacks ▶						
2nd Slurry — Class ▶						
2nd Slurry — Additives ▶						
3rd Slurry — No. of sacks ▶						
3rd Slurry — Class ▶						
3rd Slurry — Additives ▶						
1st — 20. Slurry pumped: Volume (cu. ft.) ▶			749			
1st — Height (ft.) ▶			2965			
2nd — Volume (cu. ft.) ▶						
2nd — Height (ft.) ▶						
3rd — Volume (cu. ft.) ▶						
3rd — Height (ft.) ▶						
Total — Volume (cu. ft.) ▶			749			
Total — Height (ft.) ▶			2965			
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?			Yes			

22. Remarks

OVER ▶

40-32-803

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.

Bob Alford (Cementer) — Name and title of cementer's representative

Halliburton Services — Cementing Company

Bob Alford — Signature

Drawer U — Address

Palestine — City,

Texas — State,

75801 — Zip Code

214-729-2137 — Tel.: Area Code Number

Oct. 17, 1983 — 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.

POPE TESTING LABORATORIES, INC.
CONSULTING ANALYTICAL CHEMISTS
AND TESTING ENGINEERS

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

P. O. BOX 903
DALLAS, TEXAS
75221

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

TO J L Myers Company
Dallas, Tx

File No.

Date Rec'd 11-4-83

Report of Tests on Water

Received from You

Identification Marks Bra-~~Woods~~ Wacs 11-3-83

Coliform ---------- Negative

* * *

Remarks

LAB NO. 62568

POPE TESTING LABORATORIES, INC.

By Leon Hunter

F-50—40M

40-32-803

J. L. MYERS COMPANY

NEW PUMP INSTALLATION

Owner BRAZOS RIVER AUTHORITY TREATMENT PLANT EXPANSION

Well No. 1 Job No. 1116-83

Date Installed 10/27/83 Date Started

Pump: Make Red Jacket Size N28GC

Stages S/N JE278

Date/Code

Motor: Make Red Jacket Size

HP 5HP Volts 460 Amps 9.6

S/N 851-018-5 Code Other

Column: Size 1-1/2" Length 610'

Check Valves 1-1-1/4"

Pick up Nipple

Head: Size Discharge

Cable: Size #8 Length 620'

Airline: Size & type 1/4" Copper Length 612'

Starter: Make Size

Model No.

Fuse/CB

Heater

Time Delay

Water Level: Static Pumping level

GPM Time

Electrical: Voltage , ,

Amps , ,

Installer: Randy Gammons

Remarks:

40-32-803