

J.R. (BOB) JOHNSON DRILLING & SUPPLY CO.

105 Humble Avenue Phone L. 2-9931  
San Antonio 4, Texas

January 10, 1949

Mr. W.D. Masterson  
City Water Board  
P.O. Box 2449  
San Antonio 6, Texas

RENUMBERED DURING 1963 to WELL No. 2

Logue of Artesia Road ~~Well # 1~~ *Renumbered to Well # 2*

0 - 10 ft.	Soil
10 - 25 ft.	Coliche
25 - 38 ft.	Gravel
38 - 52 ft.	Yellow Clay
52 - 158 ft.	Navarro
158 - 170 ft.	Green Oil Sand
170 - 460 ft.	Navarro
460 - 616 ft.	Taylor
616 - 734 ft.	Austin Chalk, contains loss of returns
734 - 760 ft.	Eagle Ford Shale
760 - 822 ft.	Buda Lime
822 - 892 ft.	Del Rio Clay
892 - 1000 ft.	Edwards Lime
Total Depth @ 1000 ft.	Crevises at 906 to 911.ft.; 916-918 ft.; 936-942; 945-947 ft.; 968-971 ft.; 978-991 ft.

Set 898 ft. of 24" OD, 128#, N-80 Seamless Pipe. Cemented same with  
1031 sacks of Cement. Returns on cement 800 sacks.

Well Flowing.

Drilling Time: December 13, 1948 to January 10, 1949

J.R. Johnson Drilling & Supply Co.

By S/ J.R. Johnson, Owner.

*File  
in  
Artesia well # 2*

MEMORANDUM

TO: File

FROM: Jim Voss

SUBJECT: Plugging Artesia Well No. 2

25 February 1969

21 February 1969

2:00 p.m. Ran air test on well to determine if casing was leaking. Water started flowing through cracks in floor and around well. Maintenance crews were summoned to bring pumps. Called Halliburton to send a pump truck. Ordered 225 bris. of liquid drilling mud from Day-Night Vacuum Truck Co., Beeville, Texas.

9:30 p.m. Pumped 75 bris. of mud into well. This stopped flow. Decided to pull pump from well.

22 February 1969

3:30 a.m. Started pulling pump. During pulling operation 20 bris. of mud was added to well. Pump was out of hole by 7:00 a.m. A 24-inch flange with a 3-inch flanged opening was bolted to top of well.

10:15 a.m. Pumped 190 sacks of cement (4% calcium chloride), followed with 280 bris. of water.

1:15 p.m. Well was static. Plumbed well and found top of plug at 918'. This indicated plug was 20' below casing. Decided to insert 890' of 2-inch tubing into well and pump 200 sacks of cement. This would give a 50' cement plug inside of casing.

Well remained static from 1:15 p.m. to 10:00 p.m.

10:10 p.m. Finished inserting 887' of 2-inch tubing into well. Well started flowing.

10:15 p.m. Pumped 200 sacks of cement (4% calcium chloride). This stopped flow. Began to remove 2-inch tubing from well.

11:15 p.m. Well began to flow. Lacked 15 joints having tubing removed from well. Finished removing tubing.

Memorandum to File  
25 February 1969  
Page 2

23 February 1969

2:00 a.m. Pumped 75 brls. of mud into well. This stopped flow. Found top of mud at 37' and static.

7:00 a.m. to  
9:30 a.m. Pumped 200 sacks of cement (4% calcium chloride) in 25 sack batches, approximately 20 minutes apart. Found cement level at 112'. It was decided to hold plug here.

1:00 p.m. Plumbed well and found cement at 108'.

24 February 1969

10:00 a.m. Plumbed well and found hard cement at 101'.

Well is plugged from 101' to 180' and from 908' to 1000'.

Jim Voss  
Chief Water Quality Inspector

F-110

INTER-OFFICE MEMORANDUM

3 March 1969

TO: Mr. W. G. Frederick - Purchasing and Contracting Officer  
FROM: Mr. H.H. Harlos - Production  
SUBJECT: Artesia Station - Well No. 2

Some months ago it was determined that an excessive amount of water was being pumped by the sump pumps in Artesia Station No. 1. At that time the Mechanical Maintenance Supervisor made a series of tests by shutting down various valves in the discharge headers and mains leaving the station, these had no bearing on the amount of water being pumped.

On 18 February the distribution crews were requested to dig a hole south of the station so that it could be determined which way the water was flowing adjacent to the building. It was determined that the water was coming from the building. A. C. Zoeller immediately contacted me and I met him at the station. Upon observing the situation I felt that possibly the well casing on well No. 2 was leaking. I recalled that during the drought years, approximately 1952, a 40 foot caisson was installed at the north side of the pump station adjacent to well No. 2. The caisson was approximately 8 to 10 feet in diameter, a 40 foot steel pipe was placed into the caisson with an elbow toward the well with approximately 10 feet of pipe running through a tunnel. I recall that the well was mudded down and the welders cut a hole in the casing and welded the 10 foot piece of pipe onto the well casing, a pump was then installed in the 40 foot pipe thereby pumping the water instead of taking direct flow into the suction header in the building.

As the water table dropped, nearing the elevation of the welded connection, the piping was rearranged in the building with the pump being installed in the well inside the building, thereby allowing the pump to be set to a lower depth. When the water level dropped below the welded connection the 40 foot steel pipe was removed. A blind flange was placed on the 10 foot pipe through the tunnel and the entire hole filled with ready-mixed concrete. When it was determined that the water seemed to be coming up around the well I immediately surmised that the possible settling of the well casing had broken the weld at this point thereby releasing water up the outside of the casing. There was 30 to 35 feet of head on the well at this time.

It was decided to obtain an air compressor and pump air through the pump discharge, forcing the water down in the well to see if air and water could come up through the cracks in the floor, thereby assuring us that the well casing was leaking. When this was done on 21 February, at approximately 2 p.m., the air started coming up through the floor and the water started flowing more rapidly to a point that we had to obtain distribution department pumps and manpower to hold the water down to keep from swamping the electrical switchgear, motors and control equipment in the station.

INTER-OFFICE MEMORANDUM

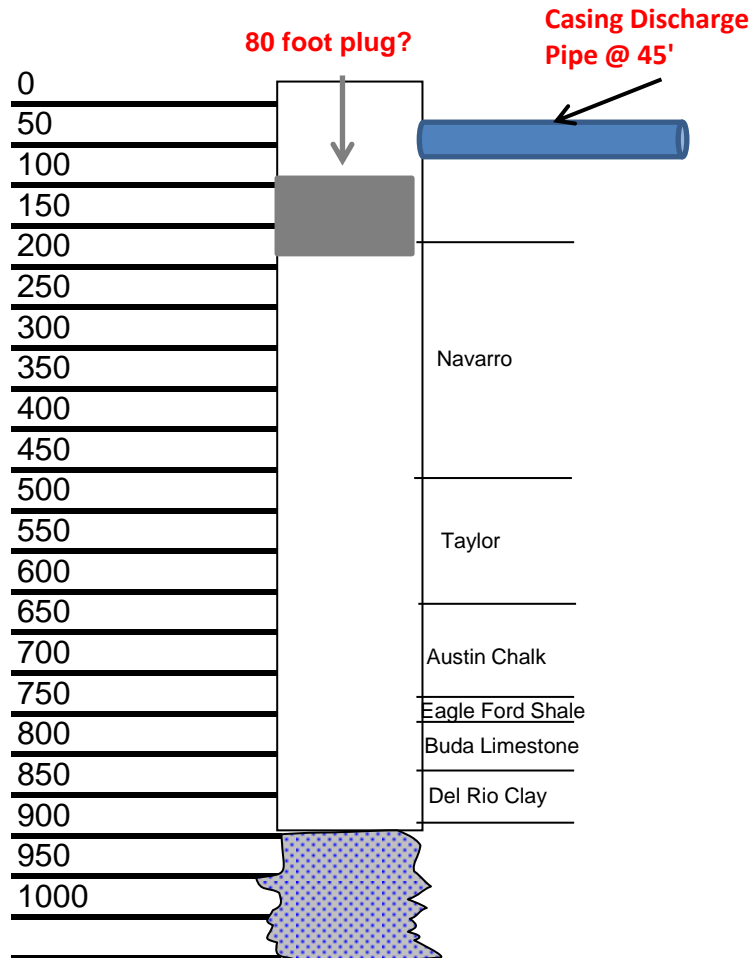
3 March 1969

TO: Mr. W. G. Frederick - Purchasing and Contracting Officer  
SUBJECT: Artesia Station - Well No. 2

There was only one thing left for us to do and that was to contact the Halliburton Company to mud down the well, using a heavy material to keep the well from flowing. This was approved by Mr. Toler. The process used was to pump a heavy mud on top of the water thereby forcing the water down to a point that the pump in the well could be removed. After this was completed it was necessary to pump neat cement on top of the mud in order to keep the well from flowing until such time a decision could be made as to what to do with the well.

*H. H. Harlos*  
H. H. Harlos

**Notes from 1969 memo for Artesia Well # 2**



2/21/1969

1 - Pumped 75 brls. mud stopped flow

2/22/1969

2 - Pump was pulled / pumped 20 brls of mud

3 - Pumped 190 sacks of cement follow with 280 brls of water

4- Top of plug at 918 feet

5 - 890 feet if 2-inch tubing was set into well and pumped 200 sacks of cement estimated 50 foot plug up into casing

6 - Pumped and additional 200 sacks of cement

7 - well remained static for 9 hours

8 - Well started flowing

2/23/1969

9 - 75 brls of mud pump into well flow stoped

10 - Pumped 200 sacks of cement

2/24/1969

11 - Taged cement at 101 feet below land surface

**PURCHASE ORDER**  
**CITY WATER BOARD**

PURCHASE ORDER No. **60577**

P. O. BOX 2449  
SAN ANTONIO, TEXAS 78206

Reg. No. • Crane Supply Company 2640  
9 P. O. Box 2509  
Acct. No. San Antonio, Texas 78206  
33-22 Attn: Mr. Bill Martin

DATE: **3-3-69**

**CONDITIONS OF ORDER**

- Purchase Order Number:** Vendor must show Purchase Order Number on all packages, shipping papers, invoices and related correspondence.
- Ship Via:**
- Papers:** Send invoices in triplicate and original bill of lading to: City Water Board,  
Accounts Payable Section  
P. O. BOX 2449  
San Antonio, Texas 78206
- Prices:** Do not ship if prices are higher than specified in your quotation dated:  
Notify us at once.
- Taxes:** Prices shall not include Federal or State Taxes. Our State Sales Tax Account No. is 311326-3.

PLEASE SHIP THE FOLLOWING MERCHANDISE SUBJECT TO 

Ship To:


(Artesia - well No. 2)

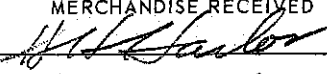
Delivery Date: **ASAP** Terms:

**NOTE:** The City Water Board will not be responsible for any goods delivered without a Purchase Order.

STOCK NO.	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	AMOUNT
			Furnish manpower and equipment to remove our pump from well No. 2, Artesia Station. Furnish manpower and crew to set tubing for cementing. Move pump to our Mission Warehouse 26 hours @ \$18.00 per hour		468.00

*Job Completed  
23 Feb 1969*

**CITY WATER BOARD**  
By   
PURCHASING AGENT  
REQUISITIONING DEPARTMENT

MERCHANDISE RECEIVED  
By   
DATE RECEIVED **6 March 69**

PURCHASE ORDER

PURCHASE ORDER No. 60485

CITY WATER BOARD

P. O. BOX 2449

SAN ANTONIO, TEXAS 78206

Reg. No. 7  
Acct. No. 33-22  
Da-Nite Vacuum Trucks, Inc.  
P. O. Box 548  
Beaville, Texas 78102

DATE: 3-3-69

CONDITIONS OF ORDER

1. Purchase Order Number: Vendor must show Purchase Order Number on all packages, shipping papers, invoices and related correspondence.
2. Ship Via:
3. Papers: Send Invoices in triplicate and original bill of lading to: City Water Board, Accounts Payable Section, P. O. BOX 2449, San Antonio, Texas 78206
4. Prices: Do not ship if prices are higher than specified in your quotation dated: Notify us at once.
5. Taxes: Prices shall not include Federal or State Taxes. Our State Sales Tax Account No. is 311326-3.

PLEASE SHIP THE FOLLOWING MERCHANDISE SUBJECT TO



Ship To:

(Artesia - Well No. 2)

Delivery Date: ASAP

Terms:

NOTE: The City Water Board will not be responsible for any goods delivered without a Purchase Order.

STOCK NO.	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	AMOUNT
			Furnish necessary mud and materials to mud down our well (225# of 10.5# mud - 1-120 barrel truck standby for 36 hours).	3.65/barrel	821.25
				20.00	720.00
					<u>1,541.25</u>

*Job complete  
23 Feb 1969*

CITY WATER BOARD

By

PURCHASING AGENT

REQUISITIONING DEPARTMENT

MERCHANDISE RECEIVED

By

DATE RECEIVED

*W. H. Taylor*  
6 March 69



**PURCHASE ORDER**  
**CITY WATER BOARD**

**PURCHASE ORDER No. 60576**

P. O. BOX 2449  
SAN ANTONIO, TEXAS 78206

Reg. No. **8**  
Acct. No. **33-22**  
**Haskin Pump Service 4385**  
**1114 S. Alamo Street**  
**San Antonio, Texas 78210**

DATE: **3-3-69**

PLEASE SHIP THE FOLLOWING MERCHANDISE SUBJECT TO 

Ship To:

**(Artesia - Well No. 2)**

Delivery Date: **ASAP**

Terms:

**NOTE:** The City Water Board will not be responsible for any goods delivered without a Purchase Order.

**CONDITIONS OF ORDER**

1. **Purchase Order Number:** Vendor must show Purchase Order Number on all packages, shipping papers, invoices and related correspondence.
2. **Ship Via:**
3. **Papers:** Send invoices in triplicate and original bill of lading to: City Water Board,  
Accounts Payable Section  
P. O. BOX 2449  
San Antonio, Texas 78206
4. **Prices:** Do not ship if prices are higher than specified in your quotation dated:  
Notify us at once.
5. **Taxes:** Prices shall not include Federal or State Taxes. Our State Sales Tax Account No. is 311326-3.

STOCK NO.	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	AMOUNT
			Rental of 600 ft 2" tubing @ 5¢ per foot		30.00

*Job Complete  
23 Feb 1969*

**CITY WATER BOARD**

By   
PURCHASING AGENT

By   
DATE RECEIVED **6 March 69**

REQUISITIONING DEPARTMENT

**PURCHASE ORDER**  
**CITY WATER BOARD**

**PURCHASE ORDER No. 60481**

P. O. BOX 2449  
SAN ANTONIO, TEXAS 78206

Reg. No. 5  
Acct. No. 33-22  
**Halliburton Company**  
**Pleasanton,**  
**Texas 78064**

DATE: **3-3-69**

PLEASE SHIP THE FOLLOWING MERCHANDISE SUBJECT TO



Ship To:

**(Artesia - well No. 2)**

Delivery Date: **ASAP**

Terms:

**NOTE:** The City Water Board will not be responsible for any goods delivered without a Purchase Order.

**CONDITIONS OF ORDER**

1. **Purchase Order Number:** Vendor must show Purchase Order Number on all packages, shipping papers, invoices and related correspondence.
2. **Ship Via:**
3. **Papers:** Send invoices in triplicate and original bill of lading to: City Water Board,  
Accounts Payable Section  
P. O. BOX 2449  
San Antonio, Texas 78206
4. **Prices:** Do not ship if prices are higher than specified in your quotation dated:  
Notify us at once.
5. **Taxes:** Prices shall not include Federal or State Taxes. Our State Sales Tax Account No. is 311326-3.

STOCK NO.	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	AMOUNT
			<b>Furnish necessary equipment, materials, and labor to mud down our well No. 2 - Artesia Pump Station. Mud furnished by Da-Nite Vacuum Truck.</b>		<b>\$2,658.04</b>

*Job completed  
Feb 23, 1969*

**CITY WATER BOARD**

By \_\_\_\_\_  
PURCHASING AGENT

**REQUISITIONING DEPARTMENT**

MERCHANDISE RECEIVED  
By \_\_\_\_\_  
DATE RECEIVED **6 March 69**



Purchase Order No.  
60485

CITY WATER BOARD  
Purchase Requisition

Vendor: ~~Wegway Truck~~  
~~Beckwith Truck Company~~

Quotations

Requisition No. 7  
Account No. 33 - 22

Department Production  
Division Artesia - Well No. 2  
Section:  
Deliver To:  
Date Required: 2-21-69

Weg-way Truck  
Box 156  
Beville, Tx  
Charlottesville, Tex

EMERGENCY

ACCOUNT NUMBER	Quantity	Item(s)	Unit Price	Total					
		Furnish necessary mud and materials to							
		mud down our well.							
		Mud		821.25					
		Stand by Time 36 Hrs/20' =		720.00					
			$\frac{24.00}{720.00}$						
			720.00						
				1541.25					

Department Head

Approved, Budget Division

MEMORANDUM TO FILE

4 March 1969

SUBJECT: Emergency Action  
Artesia Pump Station No. 1

*well # 2*

Small amounts of water had been observed coming from a crack in the concrete wall of pump pit #2 located inside the Artesia Pump Station No. 1. Upon tracking the water down it was determined that the water was coming from a possible rupture in the well casing for well #2. This was verified by the use of compressed air on 21 February 1969.

After a second check at approximately 2:00 p.m. the rupture had increased to the extent that water was flowing in under the floor of the pump station and coming up through the floor joints. The extent of water flowing was such that had it continued it would have flooded the entire pump station which included electrical switch gear, motor, and control equipment.

Due to the rapid increase in water flowing it became apparent that emergency action must be taken to temporarily plug the well so as to stop the flow of water. In view of this, I authorized emergency procurement action as follows:

Haliburton, Inc. Pleasanton, Texas	cementing and mudding services including labor and equipment	\$2,658.04
Da-Nite Vacuum Trucks, Inc.	mud and transportation equipment	1,541.25
Crane Supply, Inc.	pulling well pump	468.00
Haskin Pump Service	rental of tubing	<u>30.00</u>
	Total	\$4,697.29

The work for the above crews was initiated at approximately 8:00 p.m. Friday, 21 February, and was completed at approximately 12 noon Sunday, 23 February.



Richard G. Toler  
Manager, Operations Branch

INTER-OFFICE MEMORANDUM

25 January 1971

TO: Mr. Richard G. Toler - Manager, Operations Branch  
FROM: Mr. O. A. Brynie  
COPY TO: Mr. Hugh R. Anderson  
SUBJECT: Well No. 2 - Artesia Station

It is recommended that this well continue to be abandoned and no efforts be made to restore it to operating condition. Specifications should be prepared and ready for advertisement, when the water table permits, to properly plug this well in accordance with established procedures. Basis for this recommendation is outlined below:

1. Well was temporarily plugged on 22 February 1969 due to failure of casing.
2. Well is located inside the building of Artesia No. 1 station. Due to its location, reworking of this well would be difficult and costly. Existing H.S. pumping equipment and switchgear is endangered by having this well in this location.
3. Master Plan includes two additional wells for Artesia Station. The well field development is planned to be centered around Artesia No. 2 station in lieu of Artesia No. 1. The reservoir and primary electrical substation at Artesia No. 2 provides the nucleus of this well field.
4. Artesia No. 1 station in the Master Plan is to be maintained in present status, to retain the 18.4 MGD H.S. pumping capacity plus the availability of small H.S. pumping units. The value of this station will lose its significance as Artesia No. 2 approaches 66 MGD capacity. Additional expenditures of Artesia No. 1 should be weighed carefully.

*O. A. Brynie*

O. A. Brynie, P.E.  
Director of Production

*C. STANLEY*  
*W. S. 2*

INTER-OFFICE MEMORANDUM

14 June 1971

TO: Mr. Osmund A. Brynie - Director of Production  
FROM: H. H. Harlos  
SUBJECT: Artesia Station Well No. 2

On 23 February 1969 a temporary plug was placed in this well because of leaking well casing. The temporary plug was to be replaced with a permanent plug at the time the water table permitted. The water table is now at 627.21 feet which will allow the drilling out of the temporary plug and the installation of a permanent plug. I recommend that some action be taken at this time before the water table rises.

  
H. H. Harlos

INTER-OFFICE MEMORANDUM

18 June 1971

TO: Mr. Hugh R. Anderson - Director of Engineering  
FROM: Osmund A. Brynie  
COPY TO: Mr. Richard G. Toler  
SUBJECT: Artesia Well No. 2 - Permanent Plugging Requirements

On 23 February 1969 a temporary plug was placed in this well. Based upon Mr. Voss' memorandum to file, dated 25 February 1969, it is assumed that this well is plugged with cement from 101' to 180' and from 908' to 1000' with heavy mud in between. The top of this plug has been checked on a couple of occasions and has been found to be intact at the same position as originally placed.

This plug has withheld the artesian pressure of this well through two seasons of high water level with no evidence of leaking or plug movement, therefore this temporary plug satisfactorily meets our operational requirements and the only additional work suggested would be to pour ready-mix on top of the plug to ground survey for added assurance.

Request your review of this well condition and the placement of these plugs and determined compliance with existing policies concerning proper plugging procedures. If it is determined that a permanent plug is required to meet existing policies, please provide your recommendations as to urgency and appropriate programming.

Osmund A. Brynie  
Director of Production