

11:41 AM  
12/08/11  
Accrual Basis

**North San Saba Water Supply Corp.**  
**Balance Sheet**  
**As of November 30, 2011**

	<u>Nov 30, 11</u>
<b>ASSETS</b>	
<b>Current Assets</b>	
<b>Checking/Savings</b>	
<b>Arrowhead Bank</b>	<u>100,631.54</u>
<b>Total Checking/Savings</b>	<u>100,631.54</u>
<b>Other Current Assets</b>	
<b>Reserve Savings</b>	<u>39,533.49</u>
<b>Total Other Current Assets</b>	<u>39,533.49</u>
<b>Total Current Assets</b>	<u>140,165.03</u>
<b>Fixed Assets</b>	
<b>Buildings</b>	<u>1,021.00</u>
<b>Land</b>	<u>6,637.00</u>
<b>Office equipment</b>	<u>36,809.00</u>
<b>Pipeline system</b>	<u>717,121.00</u>
<b>Stand pipes</b>	<u>427,319.00</u>
<b>Wells and pumps</b>	<u>542,918.00</u>
<b>Total Fixed Assets</b>	<u>1,731,825.00</u>
<b>TOTAL ASSETS</b>	<u><u>1,871,990.03</u></u>
<b>LIABILITIES &amp; EQUITY</b>	
<b>Liabilities</b>	
<b>Current Liabilities</b>	
<b>Other Current Liabilities</b>	
<b>Accumulated depreciation</b>	<u>804,556.00</u>
<b>CNB note</b>	<u>-11.31</u>
<b>Payroll Liabilities</b>	<u>3,088.85</u>
<b>TCEQ Member Refund</b>	<u>26,074.02</u>
<b>Total Other Current Liabilities</b>	<u>833,707.56</u>
<b>Total Current Liabilities</b>	<u>833,707.56</u>
<b>Long Term Liabilities</b>	
<b>FMHA LOAN</b>	<u>389,808.45</u>
<b>Total Long Term Liabilities</b>	<u>389,808.45</u>
<b>Total Liabilities</b>	<u>1,223,516.01</u>
<b>Equity</b>	
<b>Opening Bal Equity</b>	<u>329,603.35</u>
<b>Unrestricted Net Assets</b>	<u>146,317.37</u>
<b>Net Income</b>	<u>172,553.30</u>
<b>Total Equity</b>	<u>648,474.02</u>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<u><u>1,871,990.03</u></u>

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**North San Saba Water Supply Corp.**  
**Balance Sheet**  
**As of November 30, 2011**

	<u>Nov 30, 11</u>
<b>ASSETS</b>	
Current Assets	
Checking/Savings	
Arrowhead Bank	100,631.54
Total Checking/Savings	100,631.54
Other Current Assets	
Reserve Savings	39,533.49
Total Other Current Assets	39,533.49
Total Current Assets	140,165.03
Fixed Assets	
Buildings	1,021.00
Land	6,637.00
Office equipment	36,809.00
Pipeline system	717,121.00
Stand pipes	427,319.00
Wells and pumps	542,918.00
Total Fixed Assets	1,731,825.00
<b>TOTAL ASSETS</b>	<u><b>1,871,990.03</b></u>
<b>LIABILITIES &amp; EQUITY</b>	
Liabilities	
Current Liabilities	
Other Current Liabilities	
Accumulated depreciation	804,556.00
CNB note	-11.31
Payroll Liabilities	3,088.85
TCEQ Member Refund	26,074.02
Total Other Current Liabilities	833,707.56
Total Current Liabilities	833,707.56
Long Term Liabilities	
FMHA LOAN	389,808.45
Total Long Term Liabilities	389,808.45
Total Liabilities	1,223,516.01
Equity	
Opening Bal Equity	329,603.35
Unrestricted Net Assets	146,317.37
Net Income	172,553.30
Total Equity	648,474.02
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<u><b>1,871,990.03</b></u>

1:36 PM

01/04/12

Accrual Basis

**North San Saba Water Supply Corp.**  
**Balance Sheet**  
**As of December 31, 2011**

	<u>Dec 31, 11</u>
<b>ASSETS</b>	
Current Assets	
Checking/Savings	
Arrowhead Bank	107,715.34
Total Checking/Savings	107,715.34
Other Current Assets	
Reserve Savings	39,524.80
Total Other Current Assets	39,524.80
Total Current Assets	147,240.14
Fixed Assets	
Buildings	1,021.00
Land	6,637.00
Office equipment	36,809.00
Pipeline system	717,121.00
Stand pipes	427,319.00
Wells and pumps	542,918.00
Total Fixed Assets	1,731,825.00
<b>TOTAL ASSETS</b>	<b><u>1,879,065.14</u></b>
<b>LIABILITIES &amp; EQUITY</b>	
Liabilities	
Current Liabilities	
Other Current Liabilities	
Accumulated depreciation	804,556.00
CNB note	-11.31
Payroll Liabilities	3,292.19
TCEQ Member Refund	19,840.17
Total Other Current Liabilities	827,677.05
Total Current Liabilities	827,677.05
Long Term Liabilities	
FMHA LOAN	388,272.91
Total Long Term Liabilities	388,272.91
Total Liabilities	1,215,949.96
Equity	
Opening Bal Equity	329,603.35
Unrestricted Net Assets	146,317.37
Net Income	187,194.46
Total Equity	663,115.18
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b><u>1,879,065.14</u></b>

10:44 AM

02/09/12

Accrual Basis

**North San Saba Water Supply Corp.****Balance Sheet**

As of January 31, 2012

	<u>Jan 31, 12</u>
<b>ASSETS</b>	
<b>Current Assets</b>	
<b>Checking/Savings</b>	
Arrowhead Bank	103,649.10
<b>Total Checking/Savings</b>	103,649.10
<b>Other Current Assets</b>	
Reserve Savings	39,526.48
<b>Total Other Current Assets</b>	39,526.48
<b>Total Current Assets</b>	143,175.58
<b>Fixed Assets</b>	
Buildings	1,021.00
Land	6,637.00
Office equipment	36,809.00
Pipeline system	717,121.00
Stand pipes	427,319.00
Wells and pumps	542,918.00
<b>Total Fixed Assets</b>	1,731,825.00
<b>TOTAL ASSETS</b>	<u><u>1,875,000.58</u></u>
<b>LIABILITIES &amp; EQUITY</b>	
<b>Liabilities</b>	
<b>Current Liabilities</b>	
Other Current Liabilities	
Accumulated depreciation	804,556.00
CNB note	-11.31
Payroll Liabilities	2,924.35
TCEQ Member Refund	13,121.63
<b>Total Other Current Liabilities</b>	820,590.67
<b>Total Current Liabilities</b>	820,590.67
<b>Long Term Liabilities</b>	
FMHA LOAN	388,272.91
<b>Total Long Term Liabilities</b>	388,272.91
<b>Total Liabilities</b>	1,208,863.58
<b>Equity</b>	
Opening Bal Equity	329,603.35
Unrestricted Net Assets	334,280.71
Net Income	2,252.94
<b>Total Equity</b>	666,137.00
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<u><u>1,875,000.58</u></u>

01/07/13  
Accrual Basis

**Balance Sheet**  
**As of December 31, 2012**

	<u>Dec 31, 12</u>
<b>ASSETS</b>	
<b>Current Assets</b>	
Checking/Savings	
Arrowhead Bank	127,122.80
Total Checking/Savings	127,122.80
Other Current Assets	
Reserve Savings	39,532.64
Total Other Current Assets	39,532.64
Total Current Assets	166,655.44
<b>Fixed Assets</b>	
Buildings	1,021.00
Land	6,637.00
Office equipment	36,809.00
Pipeline system	717,121.00
Stand pipes	427,319.00
Wells and pumps	542,918.00
Total Fixed Assets	1,731,825.00
<b>TOTAL ASSETS</b>	<u><b>1,898,480.44</b></u>
<b>LIABILITIES &amp; EQUITY</b>	
<b>Liabilities</b>	
Current Liabilities	
Other Current Liabilities	
Accumulated depreciation	804,556.00
CNB note	-11.31
Payroll Liabilities	5,651.25
TCEQ Member Refund	1,334.02
Texas Water Development Board	283,955.65
Total Other Current Liabilities	1,095,485.61
Total Current Liabilities	1,095,485.61
Long Term Liabilities	
FMHA LOAN	369,612.17
Total Long Term Liabilities	369,612.17
Total Liabilities	1,465,097.78
<b>Equity</b>	
Opening Bal Equity	19,603.35
Unrestricted Net Assets	333,977.19
Net Income	79,802.12
Total Equity	433,382.66
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<u><b>1,898,480.44</b></u>



9:50 AM  
01/07/14  
Accrual Basis

North San Saba Water Supply Corp.  
**Balance Sheet**  
As of December 31, 2013

	<u>Dec 31, 13</u>
<b>ASSETS</b>	
Current Assets	
Checking/Savings	
Arrowhead Bank	204,737.49
Total Checking/Savings	204,737.49
Other Current Assets	
Reserve 310	38,187.57
Reserve Savings	39,540.44
Total Other Current Assets	77,728.01
Total Current Assets	282,465.50
Fixed Assets	
Buildings	1,021.00
Equipment	925.52
Land	6,637.00
Office equipment	36,809.00
Pipeline system	717,121.00
Stand pipes	427,319.00
Wells and pumps	542,918.00
x-Accumulated depreciation	-804,556.00
Total Fixed Assets	928,194.52
<b>TOTAL ASSETS</b>	<u><u>1,210,660.02</u></u>
<b>LIABILITIES &amp; EQUITY</b>	
Liabilities	
Current Liabilities	
Other Current Liabilities	
Payroll Liabilities	9,347.85
TCEQ Member Refund	1,334.02
Texas Water Development Board	256,619.19
Total Other Current Liabilities	267,301.06
Total Current Liabilities	267,301.06
Long Term Liabilities	
FMHA LOAN	349,953.89
Total Long Term Liabilities	349,953.89
Total Liabilities	617,254.95
Equity	
Opening Bal Equity	61,688.50
Unrestricted Net Assets	413,779.31
Net Income	117,937.26
Total Equity	593,405.07
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<u><u>1,210,660.02</u></u>



Horn Exhibit 15

1	B	C	D	E	F	G	H	I	J	K
2	Example Water Bills			Declining Rate Structure						
3									Unit Cost	
4	Metered	Base	0-4000	4001-	8001 -	20,000	State	Monthly	Cost per	
5	Water	Rate	gal	8000 gal	20,000 gal	plus gal	Tax	Bill	1000 gal	
6	2000 gal	\$82	\$5.40				\$0.44	\$87.84	\$43.92	4.4
7	6,000 gal	\$82	\$10.80	\$10.14			\$0.51	\$103.45	\$17.24	
8	10,000 gal	\$82	\$10.80	\$20.28	\$14.18		\$0.64	\$127.90	\$12.79	
9	22,000 gal	\$82	\$10.80	\$20.28	\$85.08	\$18.92	\$1.09	\$218.17	\$9.92	23%
10	40,000 gal	\$82	\$10.80	\$20.28	\$85.08	\$189.20	\$1.94	\$389.30	\$9.73	
11										
12	Unit Cost Comparison									
13	Customer using <u>2000 gallons</u> will pay 4.4 times as much per 1000 as customer using <u>22,000 gallons</u>									
14										
15	Customer using <u>22,000</u> gallons will pay only <b>23%</b> of the unit cost of the <u>2000 gallons</u> of usage									
16										
17										
18										
19										
20										
										T.1

City Water  
To Shaw Bend  
To 500

MONTH	Previous Meter Read	Current Meter Read	WATER Produced	Previous Meter Read	Current Meter Read	Water Produced	Previous Meter Reading	Well Reading	Water Produced	PURCHASED Water	PROD & PURCH Water	TOTAL WATER	WATER SOLD	LOSS %
JAN	58271000	60587000	2316000	4972000	5914000	942000	5980000	935000	3390000	3258000	3597000	1000000	1594040	27.88
FEB	60587000	62977000	2390000	5914000	6110000	198000	6350000	1102000	167000	2598000	2753000	800000	1525980	22.78
MAR	62977000	64712000	1735000	6110000	6110000	0	1102000	1359000	257000	1736000	1992000	280000	1469030	13.85
APR	64712000	67278000	2568000	6110000	6110000	0	1359000	1359000	280000	2568000	2846000	1300000	1211440	11.78
MAY	67278000	68822000	2544000	6110000	6110000	1000	1359000	1452000	93000	2545000	2638000	600000	1654810	14.53
JUNE	68822000	71878000	2054000	6110000	6118000	8000	1452000	2401000	949000	2062000	3011000	500000	1846140	22.08
JULY	71878000	74150000	2274000	6118000	6118000	0	2401000	2801000	400000	2274000	2874000	200000	2189810	10.62
AUG	74150000	78752000	4602000	6118000	6158000	39000	2801000	3528000	725000	4641000	5368000	98000	4881950	6.30
SEPT	78752000	81592000	2840000	6158000	6650000	492000	3528000	3662000	136000	3332000	3468000	350000	2959810	4.56
OCT	81592000	84417000	2825000	6650000	7834000	1284000	3662000	3923000	281000	4108000	4370000	516000	3418320	9.95
NOV	84417000	86245000	1828000	7834000	9879000	2045000	3923000	4136000	213000	3673000	4086000	350000	3356510	9.29
DEC	86245000	87483000	1238000	9879000	12044000	2065000	4136000	4235000	99000	3303000	3402000	1,820,000	1271470	6.19
YEARLY RUNNING TOTAL			13605000			1147000			2085000	14752000	18637000	7652000	27457210	-108.5241433

NOTES: 2015

ALL AMOUNTS IN GALLONS

ALL METER READINGS TAKEN ON SAME DAY

Known water loss is a combination of Main line flushes and estimated water loss per leak.  
Unknown water loss is all water that can not be accounted for in anyway.

50,000 CL17 Meter

120,000 Flushing  
1,300,000 Cramer  
450,000 cr 117

1,920,000 Total



**Abstract**

Horn Exhibit 18

Cash Flow Projection --

North San Saba Water Supply Corporation  
Jan thru July - Actual Data

/ Actual Data in Black

Starting date  
Cash balance alert minimum

Jan-15  
100,000

Cash on hand (beginning of month)	Beginning	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Total
Water Sales	138,841	138,841	130,335	129,067	126,168	128,081	130,702	131,531	132,430	133,329	134,228	135,127	136,026	337,652
Late Fees		28,006	26,274	25,498	26,232	23,665	27,652	28,215						337,652
Membership Fees & Capital Fees														0
Interest, other income					2		4	100						100
Return Checks								3						9
Income Adjustment			57	102	6									0
TOTAL CASH RECEIPTS		28,006	26,331	25,600	26,240	23,665	27,656	28,318	30,122	31,222	32,322	33,422	34,522	165
Total cash available	138,841	166,847	156,666	154,667	152,408	151,746	111,558	108,919	111,452	103,873	103,907	97,948	93,378	337,926
<b>CASH PAID OUT</b>														
Advertising			113					105						318
Contract labor - Will Broyles		5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	66,000
Truck & Equipment Allowance						2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	16,000
Inspections		3,893												0
Insurance (other than health)		3,681	3,667	3,518	3,636	3,810	3,834	3,769						3,925
Membership Fees - Tx Rural Water Assoc.		385												44,597
Office Expense		254	80	115										385
Office Supplies			203		102		438							856
Payroll Expenses (Cindy Whitney)		1,682	1,640	1,640	1,679	1,640	1,639	1,633	1,640	1,640	1,640	1,640	1,640	12,677
Penalty - TCEQ (last pymt 10-27-15)		585	585	585	585	585	585	585	585	585	585	585	585	19,753
Postage		102	249	151	200	200	105	168						7,020
Professional Services		36	12	36	36	36	36	36						2,012
Rental - Chlorine Cyclinder														8,360
Rental - Post Office Box		163			-100									408
Rental - Safe Deposit Box		400	400	400	400	400	400	400	400	400	400	400	400	60
Repairs - Construction Project							2,402							78
Replacement Lines														4,800
Returned Check / Refund		1,737			125		8,107							12,402
State Water Fees - TCEQ								248						8,107
Supplies - Chlorine														373
Supplies - Parts		1,673	1,744	2,943	638	55		207						1,737
Supplies - Other		600		36			72	1,076						352
Utilities - Electricity		2,073	1,887	2,434	793	1,203	1,547	91						14,062
Utilities - Telephone		163	169	172	152	158	154	158						1,431
Water Purchased - City of San Saba		8,537	6,408	5,432	4,075	7,158	3,768	4,532						19,753
Water Analyzer - Chlorine				366										1,930
Water Testing		120			1,535	54	115							68,418
<b>SUBTOTAL</b>		31,694	22,657	23,408	19,356	30,981	23,117	21,984						962
Loan principal payment - FMI-A		1,739	1,746	1,888	1,761	1,813	1,777	1,828						3,587
Loan principal payment - TWDB \$310,000		2,348	2,356	2,363	2,370	2,377	2,384	2,391						308,963
Loan principal payment - TWDB \$335,000		500	500	500	500	500	500	500						21,479
Loan principal payment - Nelson Lewis														28,351
Capital purchases						31,833	1,839	1,846						500
To reserve acct (\$335,000 Loan until 12-31-														6,000
<b>TOTAL CASH PAID OUT</b>		340	340	340	340	340	340	340	340	340	340	340	340	44,839
Cash on hand (end of month)	138,841	27,599	28,499	24,327	67,844	29,957	25,889	38,001	30,368	36,381	34,992	30,313	413,702	

Repairs Construction Project - \$5,000 for evaluation of system & \$5,000 to replace bronze with stainless steel seats in valves  
Professional Services - Amount as per Actual

# **PROFIT & LOSS YTD Comparison** **December 2015**

	Dec 15	Jan -Dec 15
<b>Income</b>		
Capital Credit Refund	0.00	47.36
Capital fee	0.00	3,750.00
Copy Fees	0.00	2.10
Exp. Rebate	0.00	100.00
Income Adjustment	0.00	1,086.59
Interest	0.00	31.32
Loan Income	0.00	256,884.23
Membership fee	0.00	1,000.00
Returned check	0.00	80.63
Water Sales	32,780.30	363,177.72
<b>Total Income</b>	<b>32,780.30</b>	<b>626,159.95</b>
<b>Expense</b>		
Advertising	0.00	217.50
Construction Project	0.00	256,884.23
Contract labor	5,500.00	66,000.00
Deposit	0.00	100.00
Expense Rebate	0.00	1,286.27
Inspection	400.00	400.00
Insurance		
Insurance Bond	0.00	131.25
Insurance - Other	0.00	3,925.00
<b>Total Insurance</b>	<b>0.00</b>	<b>4,056.25</b>
Interest-	3,669.24	44,781.02
Labor	0.00	2,175.00
Loan	0.00	0.00
Meals	0.00	-70.40
Membership Dues	0.00	385.00
New Software	1,982.96	3,965.92
Office Expense	63.06	1,090.94
Office Supplies	231.51	1,841.72
Payroll Expenses	1,600.40	19,616.10
Penalty	0.00	7,265.00
Postage		
Certified mail	0.00	6.74
Postage - Other	252.00	2,573.86
<b>Total Postage</b>	<b>252.00</b>	<b>2,580.60</b>
Professional Services	75.00	14,305.00
Reconciliation Discrepancies	0.00	24.60
Refund	0.00	248.30
Rental		
Chlorine Cyclinder	36.00	615.00
Civic Center	0.00	62.50
Office Rental	400.00	4,800.00
P.O. Box Rent	0.00	68.00
<b>Total Rental</b>	<b>436.00</b>	<b>5,545.50</b>
Repairs	0.00	3,885.80
Returned Check	0.00	655.91
State Water Fees	638.55	2,375.99
Supplies		
Chlorine	0.00	207.00
Parts	2,811.90	17,427.19
Supplies - Other	0.00	235.00
<b>Total Supplies</b>	<b>2,811.90</b>	<b>17,869.19</b>
Truck & Equipment Allowance	2,000.00	16,000.00
Utilites		
Electricity	2,154.90	21,793.25
Telephone	146.73	1,916.78
Water	7,296.07	69,653.65
<b>Total Utilites</b>	<b>9,597.70</b>	<b>93,363.68</b>

2-14-16

This Agreement is entered into as of the 1 day of April, 2010, between North San Saba Water Supply Corporation ("the Company") and Will Royles ("the Contractor"). The Company and Contractor shall be collectively referred to as the "Parties".

1. **Independent Contractor.** Subject to the terms and conditions of this Agreement, the Company hereby engages the Contractor as an independent contractor to perform the services set forth herein, and the Contractor hereby accepts such engagement. The Parties are of the mutual understanding that Contractor is engaged in the business of providing services of the type described hereinbelow and holds itself, himself, or herself out as being fully capable of completing the following duties in a good and workmanlike manner. The Parties intend that the relationship between them created by this Agreement is that of a service recipient and an independent contractor, not that of an employer and employee. Contractor is not, and is not expected to become, economically dependent upon Company through this contractual relationship. The Parties fully intend and anticipate that Contractor shall be free to pursue additional and alternative business activities.

2. **Equipment, Tools, and Labor.** Although Company will provide supplies (i.e. repair parts, pipe, valves, meters, fittings, etc...), the Parties expressly agree and acknowledge that Company will not provide any tools, equipment, or fuel to be utilized by Contractor in the performance of his duties under this Agreement. Contractor affirmatively represents that he has, or will obtain at his sole cost and expense, all the tools, equipment, and fuel necessary to perform his duties as set forth herein, including the installation or repair of PVC water lines ranging from 2 inches to 8 inches in diameter and buried to a depth of 5 feet, and the maintenance of Company's towers and well sites. Contractor shall have the right to engage such individuals (hereafter "Contractor's Assistants") as Contractor deems appropriate to assist Contractor in performing the services called for under this Agreement and shall bear all legal responsibilities related to same. Contractor shall bear sole responsibility for compensation, taxes, and insurance related to any of Contractor's Assistants. Contractor will not condition payment of compensation to Contractor's Assistants on receipt of the payments from Company provided for in this Agreement. Contractor shall indemnify, hold harmless, and defend Company, its officers, directors, employees, and agents against all liability, costs and expenses arising from a claim by or against one of Contractor's Assistants.

3. **Licensure and Qualifications.** Contractor represents that he has a valid Texas Class D (or above) water operator's license, and that he will begin, or has already begun the process of upgrading that license to a Texas Class C water operator's license. In the event Contractor's license is not upgraded to a Texas Class C water operator's license on or before Sept 30 / 2011, then this Agreement or any subsequent extension hereof, shall be rendered null and void, and the Parties shall be released from their obligations under this Agreement.

4. **Duties.** The Contractor's duties shall include, but are not limited to the following:

- 1) Manage Company's water system operations and maintenance, including, but not limited to: well operations, water treatment plant operations, and the distribution system;

**Exhibit WB-1**

**Addendum to Independent Contractor Agreement**

This Agreement does amend the Independent Contractor Agreement ("the Agreement") between North San Saba Water Supply Corporation ("the Company") and Will Broyles ("the Contractor") dated April 1<sup>st</sup>, 2010.

All terms and conditions shall remain the same as the Agreement, with the exception of the compensation. The Company shall pay the Contractor \$5500.00 per month.

A truck/equipment allowance was added in the amount of \$2000.00 per month.  
The effective date of this Agreement is May 26, 2015. ←

IN WITNESS WHEREOF the undersigned have executed this Agreement as of the 26 day of May, 2015.

North San Saba Water Supply Corporation

By:

  
Kathy Gage - President

  
Will Broyles

01/07/16  
Accrual Basis

# Profit & Loss

December 2015

	Dec 15
Income	
Water Sales	32,780.30
Total Income	32,780.30
Expense	
Contract labor	5,500.00
Inspection	400.00
Interest-	3,669.24
New Software	1,982.96
Office Expense	63.06
Office Supplies	231.51
Payroll Expenses	1,600.40
Postage	252.00
Professional Services	75.00
Rental	
Chlorine Cylinder	36.00
Office Rental	400.00
Total Rental	436.00
State Water Fees	638.55
Supplies	
Parts	2,811.90
Total Supplies	2,811.90
Truck & Equipment Allowance	2,000.00
Utilities	
Electricity	2,154.90
Telephone	146.73
Water	7,296.07
Total Utilities	9,597.70
Water Analyzer	181.94
Water Testing	29.76
Total Expense	29,470.02
Net income	3,310.28

Horn Exhibit 23

11:18 AM  
02/04/16  
Accrual Basis

North San Saba Water Supply Corp.  
Profit & Loss  
January 2016

	Jan 16
Income	
Exp. Rebate	2,011.04
Water Sales	28,554.02
Total Income	30,565.06
Expense	
Contract labor	7,500.00
Insurance	4,248.00
Interest-	3,683.50
Membership Dues	368.75
New Software	1,982.96
Office Expense	51.95
Payroll Expenses	1,640.00
Postage	252.00
Rental	
Chlorine Cyclinder	36.00
Office Rental	400.00
Total Rental	436.00
Returned Check	95.15
State Water Fees	1,815.89
Supplies	
Parts	521.94
Total Supplies	521.94
Utilites	
Electricity	1,873.03
Telephone	143.68
Water	7,366.57
Total Utilites	9,383.28
Water Testing	0.00
Total Expense	31,979.42
Net Income	-1,414.36

*principal Amts*

TWDB	2441.99	-1414.36
		-4830.58
TWDB	500.00	-6244.94
Nelson Lewis	1859.09	
	4830.58	

1 for replacement of transmission lines; one in approximately 2007 on County Road  
2 124 and the other in 2012 for Highway 16 from FM 1480 to CR 111; FM 1480 to  
3 CR 110 and on FM 1480 starting .5 mile past CR 118 to Rabbit Creek. It is my  
4 understanding both were funded by grants. The County Road 124 project was not  
5 completed because the grant did not cover all the costs and NSSWSC ran out of  
6 funds.

7 On December 14, 2011 TCEQ did an inspection of NSSWSC system. The  
8 inspection resulted in ten violations, six of which were corrected and NSSWSC  
9 achieved compliance on March 28, 2012. NSSWSC did not have the money to  
10 correct the other violations. As a result TCEQ Assessed Administrative Penalties  
11 that required compliance and a monetary penalty of \$21,079 on May 1, 2012.  
12 NSSWSC signed an agreement with TCEQ to pay the penalty and achieve  
13 compliance on the remaining four issues. The penalty was paid with a \$604 initial  
14 payment followed by 35 monthly payments of \$585. This penalty was paid in full  
15 in September 2015. ←

16 Sealy Engineering, who had been working for NSSWSC for several years,  
17 was aware of the violations and was working on obtaining funding through the  
18 Texas Water Development Board (TWDB) "Drinking Water State Revolving  
19 Fund." A \$310,000 loan was given to NSSWSC on December 29, 2011 for  
20 planning, acquisition and design of the project. On February 28, 2013 NSSWSC  
21 was approved for additional funds from TWDB \$2,168,816 loan forgiveness (grant)  
22 and \$335,000 loan. These funds were not available to NSSWSC until November  
23 2013, at which time the engineer started the bid process, and the "construction



Bryan W. Shaw, Ph.D., *Chairman*  
Carlos Rubinstein, *Commissioner*  
Toby Baker, *Commissioner*  
Zak Covar, *Executive Director*



**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**  
*Protecting Texas by Reducing and Preventing Pollution*

October 24, 2012

**CERTIFIED MAIL**

Kathy Gage, President  
North San Saba Water Supply  
Corporation  
P.O. Box 598  
San Saba, Texas 76877-0598

*Effective Date*  
*Oct 27, 2012*

RE: North San Saba Water Supply Corporation  
TCEQ Docket No. 2012-0557-PWS-E; Registration No. 2060003  
Agreed Order Assessing Administrative Penalties and Requiring Certain Action

Enclosed is a copy of an order issued by the Commission.

Questions regarding the order should be directed to the Enforcement Coordinator or the Staff Attorney. If there are questions pertaining to the mailing of the order, then please contact Leslie Gann of the Texas Commission on Environmental Quality's Office of the Chief Clerk (MC 105) at (512) 239-3319.

Sincerely,

*Bridget C. Bohac*

Bridget C. Bohac  
Chief Clerk

BCB/lg

Enclosure

cc: Epifanio Villareal, Enforcement Coordinator, TCEQ Enforcement Division

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



THE STATE OF TEXAS  
COUNTY OF TRAVIS

I hereby certify that this is a true and correct copy of a  
Texas Commission on Environmental Quality document,  
which is filed in the permanent records of the Commission.  
Given under my hand and the seal of office on

*Bridget C. Bohac* OCT 24 2012

Bridget C. Bohac, Chief Clerk  
Texas Commission on Environmental Quality

IN THE MATTER OF AN  
ENFORCEMENT ACTION  
CONCERNING  
NORTH SAN SABA WATER SUPPLY  
CORPORATION  
RN101225613

§  
§  
§  
§  
§  
§

BEFORE THE  
  
TEXAS COMMISSION ON  
  
ENVIRONMENTAL QUALITY

**AGREED ORDER**  
**DOCKET NO. 2012-0557-PWS-E**

At its OCT 17 2012 agenda, the Texas Commission on Environmental Quality ("the Commission" or "TCEQ") considered this agreement of the parties, resolving an enforcement action regarding North San Saba Water Supply Corporation ("the Respondent") under the authority of TEX. HEALTH & SAFETY CODE ch. 341. The Executive Director of the TCEQ, through the Enforcement Division, and the Respondent presented this agreement to the Commission.

The Respondent understands that it has certain procedural rights at certain points in the enforcement process, including, but not limited to, the right to formal notice of violations, notice of an evidentiary hearing, the right to an evidentiary hearing, and a right to appeal. By entering into this Agreed Order, the Respondent agrees to waive all notice and procedural rights.

It is further understood and agreed that this Order represents the complete and fully-integrated settlement of the parties. The provisions of this Agreed Order are deemed severable and, if a court of competent jurisdiction or other appropriate authority deems any provision of this Agreed Order unenforceable, the remaining provisions shall be valid and enforceable. The duties and responsibilities imposed by this Agreed Order are binding upon the Respondent.

The Commission makes the following Findings of Fact and Conclusions of Law:

**I. FINDINGS OF FACT**

1. The Respondent owns and operates a public water supply at Farm-to-Market Road 500, north of San Saba, San Saba County, Texas (the "Facility") that has approximately 295 service connections and serves at least 25 people per day for at least 60 days per year.

North San Saba Water Supply Corporation

DOCKET NO: 2012-0557-PWS-E

Page 2

2. During an investigation conducted on December 14, 2011, TCEQ staff documented that the fence on the north side of Facility was measured to be 5 feet 4 inches in height. In addition, the barbed wire on the top of the fence was not secured.
3. During an investigation conducted on December 14, 2011, TCEQ staff documented that the opening on the top of the well casing on Well No. 1 was not properly sealed.
4. During an investigation conducted on December 14, 2011, TCEQ staff documented that the vent on the air release device on the east side of Highway 16, north of San Saba was not properly screened.
5. During an investigation conducted on December 14, 2011, TCEQ staff documented that the lower ventilation opening on the chlorine storage building at the Farm-to-Market Road 500 Facility was not properly screened.
6. During an investigation conducted on December 14, 2011, TCEQ staff documented that there was no small bottle of fresh ammonia solution available at the Farm-to-Market Road 500 Facility.
7. During an investigation conducted on December 14, 2011, TCEQ staff documented that the following records were not accessible for review: routine bacteriological sample result for June 2011, external tank inspection forms for all tanks and internal inspection for the pressure tank, calibration certificates for both well meters, and verification of American National Standards Institute/National Sanitation Foundation ("ANSI/NSF") Standard 60 for all chemical additives.
8. During an investigation conducted on December 14, 2011, TCEQ staff documented that the Respondent did not provide documentation showing that the Facility is maintaining internal procedures to notify the Executive Director ("ED") by a toll-free reporting phone number immediately following certain events that may negatively impact the production or delivery of safe and adequate drinking water.
9. During an investigation conducted on December 14, 2011, TCEQ staff documented the Respondent failed to provide an emergency power source, such as a back-up generator, which is required for a Facility that does not meet the elevated storage requirement and serves 250 or more service connections.
10. During an investigation conducted on December 14, 2011, TCEQ staff documented that with 295 service connections, the Facility must provide a minimum elevated storage tank capacity of 29,500 gallons. However, it was noted that the Facility currently provides 7,615 gallons of elevated storage tank capacity, which is a 74% deficiency.
11. During an investigation conducted on December 14, 2011, TCEQ staff documented that the Facility has 295 service connections and must provide a minimum service pump capacity of 590 gallons per minute ("gpm"). The Facility is currently providing 260 gpm, which is a 56% deficiency.

North San Saba Water Supply Corporation  
DOCKET NO. 2012-0557-PWS-E  
Page 3

12. The Respondent received notice of the violations on March 4, 2012.
13. The Executive Director recognizes that by March 28, 2012, the Respondent implemented the following measures at the Facility:
  - a. Rendered the fence on the north side of Farm-to-Market 500 intruder-resistant and repaired the barbed wire;
  - b. Sealed the opening on the top of the well casing on Well No. 1;
  - ~~c. Screened the vent on the air release device on the east side of Highway 16, north of San Saba with a 16-mesh or finer screening;~~
  - d. Screened the lower ventilation opening on the chlorine storage building at the Farm-to-Market Road 500 Facility;
  - e. Provided a small bottle of fresh ammonia solution that is readily accessible outside the chlorinator room at the Farm-to-Market Road 500 Facility;
  - f. Began maintaining internal procedures to notify the ED by a toll-free reporting phone number immediately of certain events if the event negatively impacts the production or delivery of safe and adequate drinking water; and
  - g. Compiled and began maintaining microbiological analysis records, results of tank inspections for all water storage and pressure maintenance facilities, and verification of ANSI/NSF Standard 60 for all chemical additives.

## II. CONCLUSIONS OF LAW

1. The Respondent is subject to the jurisdiction of the TCEQ pursuant to TEX. HEALTH & SAFETY CODE ch. 341 and the rules of the Commission.
2. As evidenced by Findings of Fact No. 2, the Respondent failed to enclose all well units and storage tanks with an intruder-resistant fence, in violation of 30 TEX. ADMIN. CODE §§ 290.41(c)(3)(O) and 290.43(e).
3. As evidenced by Findings of Fact No. 3, the Respondent failed to seal the wellhead with a gasket or sealing compound, in violation of 30 TEX. ADMIN. CODE § 290.41(c)(3)(K).
4. As evidenced by Findings of Fact No. 4, the Respondent failed to properly install an air release device in such a manner to preclude the possibility of submergence or the entrance of contaminants, in violation of 30 TEX. ADMIN. CODE § 290.44(d)(1).
5. As evidenced by Findings of Fact No. 5, the Respondent failed to provide adequate ventilation which includes high level and floor level screened vents for all enclosures in which chlorine gas is being stored or fed, in violation of 30 TEX. ADMIN. CODE § 290.42(e)(4)(c).

copy

6. As evidenced by Findings of Fact No. 6, the Respondent failed to provide a small bottle of fresh ammonia solution (or approved equal) for testing for chlorine leakage that is readily accessible outside the chlorinator room and immediately available to the operator in the event of an emergency, in violation of 30 TEX. ADMIN. CODE § 290.42(e)(4)(A).
7. As evidenced by Findings of Fact No. 7, the Respondent failed to provide Facility records to Commission personnel at the time of the investigation, in violation of 30 TEX. ADMIN. CODE § 290.46(f)(2), (f)(3)(B)(iv), (f)(3)(D)(i), and (f)(3)(D)(ii).
8. As evidenced by Findings of Fact No. 8, the Respondent failed to provide documentation showing that the Facility is maintaining internal procedures to notify the ED by a toll-free reporting phone number immediately following certain events that may negatively impact the production or delivery of safe and adequate drinking water, in violation of 30 TEX. ADMIN. CODE § 290.46(w).
9. As evidenced by Findings of Fact No. 9, the Respondent failed to provide emergency power that will deliver water at a rate of 0.35 gpm per connection in the event of the loss of normal power supply, in violation of 30 TEX. ADMIN. CODE § 290.45(b)(1)(D)(v) and TEX. HEALTH & SAFETY CODE § 341.0315(c).
10. As evidenced by Findings of Fact No. 10, the Respondent failed to provide an elevated storage tank capacity of 100 gallons per connection, in violation of 30 TEX. ADMIN. CODE § 290.45(b)(1)(D)(iv), TEX. HEALTH & SAFETY CODE § 341.0315(c), and TCEQ Agreed Order Docket No. 2009-0413-PWS-E, Ordering Provision 2.a.i.
11. As evidenced by Findings of Fact No. 11, the Respondent failed to provide two or more service pumps having a total capacity of 2.0 gpm per connection, in violation of 30 TEX. ADMIN. CODE § 290.45(b)(1)(D)(iii), TEX. HEALTH & SAFETY CODE § 341.0315(c), and TCEQ Agreed Order Docket No. 2009-0413-PWS-E, Ordering Provision 2.a.ii.
12. Pursuant to TEX. HEALTH & SAFETY CODE § 341.049, the Commission has the authority to assess an administrative penalty against the Respondent for violations of the Texas Water Code and the Texas Health and Safety Code within the Commission's jurisdiction; for violations of rules adopted under such statutes; or for violations of orders or permits issued under such statutes.
13. An administrative penalty in the amount of Twenty-One Thousand Seventy-Nine Dollars (\$21,079) is justified by the facts recited in this Agreed Order, and considered in light of the factors set forth in TEX. HEALTH & SAFETY CODE § 341.049(b). The Respondent has paid Six Hundred Four Dollars (\$604) of the administrative penalty. The remaining amount of Twenty Thousand Four Hundred Seventy-Five Dollars (\$20,475) of the administrative penalty shall be payable in 35 monthly payments of Five Hundred Eighty-Five (\$585) each. The next monthly payment shall be paid within 30 days after the effective date of this Agreed Order. The subsequent payments shall each be paid not later than 30 days following the due date of the previous payment until paid in full. If the Respondent fails to timely and satisfactorily comply with the payment requirements of this Agreed Order, the Executive Director may, at the Executive Director's option,

accelerate the maturity of the remaining installments, in which event the unpaid balance shall become immediately due and payable without demand or notice. In addition, the failure of the Respondent to meet the payment schedule of this Agreed Order constitutes the failure by the Respondent to timely and satisfactorily comply with all the terms of this Agreed Order.

### III. ORDERING PROVISIONS

NOW, THEREFORE, THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY ORDERS that:

1. The Respondent is assessed an administrative penalty in the amount of Twenty One Thousand Seventy-Nine Dollars (\$ 21,079) as set forth in Section II, Paragraph 13 above, for violations of TCEQ rules and state statutes. The payment of this administrative penalty and the Respondent's compliance with all the terms and conditions set forth in this Agreed Order completely resolve the violations set forth by this Agreed Order in this action. However, the Commission shall not be constrained in any manner from requiring corrective actions or penalties for other violations that are not raised here. Administrative penalty payments shall be made payable to "TCEQ" and shall be sent with the notation "Re: North San Saba Water Supply Corporation, Docket No. 2012-0557-PWS-E" to:

Financial Administration Division, Revenues Section  
 Attention: Cashier's Office, MC 214  
 Texas Commission on Environmental Quality  
 P.O. Box 13088  
 Austin, Texas 78711-3088

2. The Respondent shall undertake the following technical requirements:
  - a. Within 30 days after the effective date of this Agreed Order, provide calibration certificates for both well meters, in accordance with 30 TEX. ADMIN. CODE § 290.46; *Done see Letter - 12-8-12*
  - b. Within 45 days after the effective of this Agreed Order, submit written certification as described below in Ordering Provision 2.f, and include supporting documentation including photographs, receipts, and/or other records to demonstrate compliance with Ordering Provision 2.a.; *Done 12-8-12*
  - c. Within 180 days after the effective date of this Agreed Order, provide emergency power that will deliver water at a minimum of 0.35 gpm per connection, in accordance with 30 TEX. ADMIN. CODE § 290.45; *Done 12-6-12*
  - d. Within 195 days after the effective of this Agreed Order, submit written certification as described below in Ordering Provision 2.f, and include supporting documentation including photographs, receipts, and/or other records to demonstrate compliance with Ordering Provision 2.c.;

*April 2012*

- Off of -  
Oct 27,  
2015
- e. Within 730 days after the effective of this Agreed Order:
    - i. Provide an elevated storage tank capacity of 100 gallons per connection, in accordance with 30 TEX. ADMIN. CODE § 290.45; and
    - ii. Provide two or more service pumps having a total capacity of 2.0 gpm per connection, in accordance with 30 TEX. ADMIN. CODE § 290.45.
  - f. Within 745 days after the effective date of this Agreed Order, submit written certification as described below, and include detailed supporting documentation including photographs, receipts, and/or other records to demonstrate compliance with Ordering Provision 2.e. The certification shall be notarized by a State of Texas Notary Public and include the following certification language:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

The certification shall be submitted to:

Order Compliance Team  
Enforcement Division, MC 149A  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087

with a copy to:

Water Section Manager  
Waco Regional Office  
Texas Commission on Environmental Quality  
6801 Sanger Avenue, Suite 2500  
Waco, Texas 76710-7826

- 3. The provisions of this Agreed Order shall apply to and be binding upon the Respondent. The Respondent is ordered to give notice of the Agreed Order to personnel who maintain day-to-day control over the Facility operations referenced in this Agreed Order.
  - 4. The Executive Director may grant an extension of any deadline in this Agreed Order or in any plan, report, or other document submitted pursuant to this Agreed Order, upon a written and substantiated showing of good cause. All requests for extensions by the Respondent shall be made in writing to the Executive Director. Extensions are not effective until the Respondent receives written approval from the Executive Director.
- copy


The determination of what constitutes good cause rests solely with the Executive Director.

5. The Executive Director may refer this matter to the Office of the Attorney General of the State of Texas ("OAG") for further enforcement proceedings without notice to the Respondent if the Executive Director determines that the Respondent has not complied with one or more of the terms or conditions in this Agreed Order.
  6. This Agreed Order shall terminate five years from its effective date or upon compliance with all the terms and conditions set forth in this Agreed Order, whichever is later.
  7. This Agreed Order, issued by the Commission, shall not be admissible against the Respondent in a civil proceeding, unless the proceeding is brought by the OAG to: (1) enforce the terms of this Agreed Order; or (2) pursue violations of a statute within the Commission's jurisdiction, or of a rule adopted or an order or permit issued by the Commission under such a statute.
  8. This Agreed Order may be executed in separate and multiple counterparts, which together shall constitute a single instrument. Any page of this Agreed Order may be copied, scanned, digitized, converted to electronic portable document format ("pdf"), or otherwise reproduced and may be transmitted by digital or electronic transmission, including but not limited to facsimile transmission and electronic mail. Any signature affixed to this Agreed Order shall constitute an original signature for all purposes and may be used, filed, substituted, or issued for any purpose for which an original signature could be used. The term "signature" shall include manual signatures and true and accurate reproductions of manual signatures created, executed, endorsed, adopted, or authorized by the person or persons to whom the signatures are attributable. Signatures may be copied or reproduced digitally, electronically, by photocopying, engraving, imprinting, lithographing, electronic mail, facsimile transmission, stamping, or any other means or process which the Executive Director deems acceptable. In this paragraph exclusively, the terms "electronic transmission", "owner", "person", "writing", and "written" shall have the meanings assigned to them under TEX. BUS. ORG. CODE § 1.002.
  9. The Chief Clerk shall provide a copy of this Agreed Order to each of the parties. By law, the effective date of this Agreed Order is the third day after the mailing date, as provided by 30 TEX. ADMIN. CODE § 70.10(b) and TEX. GOV'T CODE § 2001.142.
- copy 8



SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

  
For the Commission

  
For the Executive Director

9/4/12  
Date

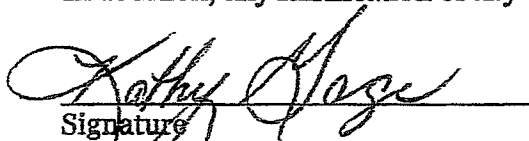
I, the undersigned, have read and understand the attached Agreed Order in the matter of North San Saba Water Supply Corporation. I am authorized to agree to the attached Agreed Order on behalf of North San Saba Water Supply Corporation, and do agree to the specified terms and conditions. I further acknowledge that the TCEQ, in accepting payment for the penalty amount, is materially relying on such representation.

I understand that by entering into this Agreed Order, North San Saba Water Supply Corporation waives certain procedural rights, including, but not limited to, the right to formal notice of violations addressed by this Agreed Order, notice of an evidentiary hearing, the right to an evidentiary hearing, and the right to appeal. I agree to the terms of the Agreed Order in lieu of an evidentiary hearing. This Agreed Order constitutes full and final adjudication by the Commission of the violations set forth in this Agreed Order.

I also understand that failure to comply with the Ordering Provisions, if any, in this order and/or failure to timely pay the penalty amount, may result in:

- A negative impact on compliance history;
- Greater scrutiny of any permit applications submitted;
- Referral of this case to the Attorney General's Office for contempt, injunctive relief, additional penalties, and/or attorney fees, or to a collection agency;
- Increased penalties in any future enforcement actions;
- Automatic referral to the Attorney General's Office of any future enforcement actions; and
- TCEQ seeking other relief as authorized by law.

In addition, any falsification of any compliance documents may result in criminal prosecution.

  
Signature

6-27-2012  
Date

KATHY GAGE  
Name (Printed or typed)  
Authorized Representative of  
North San Saba Water Supply Corporation

PRESIDENT  
Title

**Instructions:** Send the original, signed Agreed Order with penalty payment to the Financial Administration Division, Revenues Section at the address in Section III, Paragraph 1 of this Agreed Order.

April 4, 2016

Roger Whatley, President  
North San Saba WSC  
P. O. Box 598  
San Saba, TX 76877

Dear Mr. Whatley,

Under the Texas Public Information Act, § 552.001 to 552.353, I am requesting an opportunity to inspect or obtain copies of public records consisting of the procedure, including calculations, used to arrive at numbers entered as "Known Water Loss/Flush" as found in the Water Report prepared for North San Saba Water Supply Corporation.

If there are any the public fees for copying these records, please inform me if the cost will exceed \$15.00. However, I would also like to request a waiver of all fees in that the disclosure of the requested information is in the public interest and will contribute significantly to the public's understanding of the rate change process.

The Texas Public Information Act requires that you "promptly produce" the requested records unless, within 10 days, you have sought an Attorney General's Opinion. If you expect a significant delay in responding to this request, please, please contact me with information about when I might expect the copies.

If you deny any or all of this request, please cite each specific exemption you feel justifies the refusal to release the information and notify me of the appeal procedures available to me under the law.

I shall look forward to hearing from you promptly, as specified in the law. Thank you for your cooperation.

Sincerely,



Barbara Horn  
7255 County Road 124  
San Saba, TX 76877

*Horn Exhibit 27*

**North San Saba Water Supply Corporation  
P. O. Box 598  
San Saba, Texas 76877  
325-372-5348**

April 6, 2016

Barbara Horn, Member NSSWSC  
7255 County Road 124  
San Saba, Texas 76877

RE: Your Letter Dated April, 4. 2016

Dear Barbara,

At most monthly meetings when Will Broyles is in attendance, he has produced a Water Report for the previous month. He has taken questions from the Board as well as from members in attendance, at various times when there were questions.

The specific question that you ask has been answered before, by Will Broyles, in a regular monthly NSSWSC Board Meeting, perhaps twice in the past 6 months. However, and to be as accurate as I could be in this reply, I have taken time to go to town and meet with Will, and get specific answers so that I could refresh my own memory be sure of my reply. Here is a listing of all the measured numbers and calculated numbers in that spreadsheet with methodology and calculations given:

**City Water to Shaw Bend (a meter at Stingy Lane)**

Previous Meter Read

Current Meter Read

**Water Produced = the difference in these two readings = A**

**City Water to 500 (another meter at Stingy Lane)**

Previous Meter Read

Current Meter Read

**Water Produced = the difference in these two readings = B**

**FM500 Well (a meter at FM500)**

Previous Meter Read

Current Meter Read

**Water Produced = the difference in these two readings = C**

**Water Purchased = A + B**

**Total Water Prod & Purch = A + B + C = D**

*Horn Exhibit 28*

**Known Water Loss/Flush** – This is a quantity determined by Will Broyles any time he goes to repair a leak in the field. He will perform a determination of the rate of a given water leakage by a metered observation, where he essentially excavates down to the leaking pipe and uses a 5gallon bucket to catch the leaking water. By measuring the time it takes to fill the bucket, he can calculate the leak rate = (5gallons)/(time measured). Then he estimates the length of time that the pipe has been leaking. Since our last system upgrade (new pipes, pumps, and monitoring equipments) and particularly because of the much-improved system-stability along with the remote monitoring "Supervisory Control And Data Acquisition" (SCADA) system, he can much more accurately detect individual event-irregularities and know more precisely than ever before, the length of time a given water leak has been leaking. The same basic methodology is used with an intended loss (a flush). Then,

**Known Water Loss/Flush** = the summation of all [(leak rates) x (leak times)] = E

**Water Sold** = the summation of all members metered water usage for the month = F

**Unknown Water Loss %** =  $((D - (E + F))/D) \times 100\%$

I hope this has been responsive to your request for information.

Sincerely,

*Roger Alan Whatley*  
Roger Alan Whatley  
President, NSSWSC

terns of unauthorized consumption are chronic and widespread. Such policies could include service discontinuance and criminal judgments.

### 5.3

#### REAL LOSSES

All water utilities incur leakage losses; only the amount varies. Leaks and most visible main breaks occur for a variety of reasons, including poor installation workmanship or materials, corrosion, external forces, environmental extremes, and other causes. Leakage is always occurring, and only grows worse if left unchecked. Therefore, all water utilities should provide system maintenance and upkeep functions that include appropriate components of leakage management: active leakage control, timely quality repair, water main rehabilitation, and pressure management.

### 5.4

#### ACTIVE LEAKAGE CONTROL

Active leakage control is defined as any water utility program that proactively seeks nonvisible leakage. The most typical functions of active leakage control are routine leak detection surveys and the use of minimum hour flow measurement in District Metered Areas or pressure zones. District Metered Areas are zones or metered areas created within the distribution system to isolate flow to monitor water loss. Large meters are installed on the main lines, and with the aid of "radio read" or similar automated meter technology, the utility is able to compare customer usage to the actual main line flow meter. Although this effort will not pinpoint leaks, it will aid utilities in locating high loss sections so they can begin leak detection surveys with more accuracy.

Leaks and water main breaks that surface and are visible are defined as "reported" since they usually come to the water utility's attention by a report from a customer, police, or other citizen. Most water utilities are effective in addressing

reported leaks since these events represent emergency or nuisance conditions. These leaks are addressed quickly so the duration of the leak event is short and volume of water lost is relatively small, even if the leak is spraying at a high rate of flow. Unfortunately, many water utilities respond only to reported leaks and operate no active leakage control programs to identify and control unreported leaks. Unreported leaks usually account for the majority of annual real loss volumes in most water utilities because they are numerous and run undetected for long periods of time. All water utilities should operate an active leakage control program, even if this involves conducting a leak detection survey once every several years. Utilities with extensive and/or aging water distribution systems should operate an ongoing program, with constant leak detection and possible use of District Metered Areas to monitor flows closely and respond to new leakage shortly after it arises. Even for systems that have a good active leakage control program, it is likely that a portion of the leakage will go undetected and, thus, unreported. This volume and the background leakage are collectively labeled "unreported loss" in the Water Audit Worksheet. The top-down Water Audit Method (Appendix 1.1) quantifies unreported loss as a "catch-all" component, meaning that this volume of real losses is the quantity that remains after authorized consumption, apparent losses, and reported leakage have been subtracted from the system input volume.

#### 5.4.1

##### *Timely, Quality Leak Repair Policies and Functions*

This practice appears to be straightforward: once a leak or break is known to the water utility, respond quickly and make the repair. This function, however, can be more complicated than it seems. On some occasions, utilities use a "band-aid" repair approach that does not identify the underlying cause

# Millersview-Doole WSC

			<u>Yearly 168 hr./</u>
Vincent Bednar	12-2011	Field Hand	\$14.55 \$ 29,333
Rebecca Bowen	7-2015	Meter Reader & (Plant Operator)	\$10.50 \$ 21,168
Wade Halfmann	3-2015	Field Hand	\$10.50 \$ 21,168
Karon McNaley	7-2013	Accounts & (Plant Operator)	\$11.25 \$ 22,680
Raymond Meek	5-2015	Plant Operator	\$10.50 \$ 21,168
Curtis Shipmen	1-2016	Field Hand	\$10.50 \$ 21,168
Tonya Williams	8-2012	Billing	\$11.50 \$ 23,184
Marcus Wright	6-2014	Field Hand	\$12.25 \$ 24,696

**Barbara Horn**

**SUBSCRIBED AND SWORN TO** this 27<sup>th</sup> day of April, 2016



M. B. Hardy

**Notary Public in and for**

**The State of Texas**

**Respectfully submitted,**

Barbara Horn  
Barbara Horn, *Pro se*