40974

16414352652

p.5

EQUIPMENT MANUAL

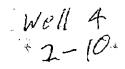
Municipal Well No. 4 Nashua, Iowa 1980

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SERVICE AND THE

(COUNTY DESCRIPTION

40974





WELL COMPANY INC.

WATER WELL DRILLING AND REPAIRING

P.O. BOX 268

DIAL 319-237-5341

FREDERICKSBURG, IOWA 50630

May 16, 1979

CITY OF NASHUA NASHUA, IOWA

WORK COMPLETED ON MUNICIPAL WELL #4

ITEM #1.	MOVE IN		\$ 500.00
ITEM #2.	DRILL 20-inch hole to 115 feet @ \$ 28.50 per foot	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	3,277.50
ITEM #3.	DRILL 12-inch hole 115 feet to 160 feet45 feet total @ \$ 20.00 per foot		900,00
ITEM #4.	20-inch diameter casing 42' & @ \$ 28.50 per foot	2"	1,210.76
ITEM #5.	12-inch diameter casing to 117 feet @ \$ 20.00 per foot		2,340.00
ITEM #6.	314 Sacks of Cement Grout @ \$ 9.00 Sack	per	2,826.00
ITEM #7.	INSTALL TEST PUMP LUMP SUM	وي وي من	675.00
ITEM #8.	TEST PUMP 4 hours @ \$ 50.00 per hour	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	200.00
ITEM #9.	PLUMBNESS AND ALLIGNMENT TEST		200.00
ITEM #10.	DISINFECTING WELL		100.00
TOTAL AMOU	INT DUE ON WORK COMPLETED		\$ 12,229.26

THANK YOU!

SHAWVER WELL COMPANY JOB REPORT

40974

_Well 4 3-10

	DATE: From 3-19 To 19 79
JOB NAME: NASHUA TOWN WELL	ADDRESS:
List formations in order such as topsoil clay, blueclay, shale, sandfine medium or coarse, limerock, sandstone, color of formations, etc.	CASING: 24½ ft. SIZE: 16 FROM: TO CASING: ft. SIZE: FROM: TO
O' TO 5' TOPSOIL	SHOES: WELL SEAL: HTH: 1b.
5' TO 40' CLAY	SCREEN SIZE: LENGTH:
40' TO 92' LIMEROCK SOFT	CEMENT: SACKS DEPTH GROUTED:
ТО	STATIC WATER LEVEL: ft.
ТО	PUMPING LEVEL: ft. @ GPM
то	MAINTENANCE SCHEDULE
то	DIESEL ENGINE
ТО	l. CHANGE OIL AND FILTERS MONTHLY.
	CONDITIONS PREVAIL.
70	- 3. CHECK RADIATOR COOLANT LEVEL ONCE A WEEK. 4. CHECK BATTERY WATER AND CABLES ONCE A WEEK.
	5. USE AMOCO 300 SERIES OIL IN CRANKCASE.
70	AIR COMPRESSORS
	1. CHANGE OIL AND FILTERS MONTHLY.
TO	2. USE ONLY THE FOLLOWING OIL IN AIR COMPESSORS:
	AMERICAN INDUSTRIAL #15 (SAE 10W) Below 32° AMERICAN INDUSTRIAL #31 (SAE 20W) 32°-60°
TO	AMERICAN INDUSTRIAL #51 (SAE 30W) 60° & UP 3. CONTINUALLY CHECK OIL PRESSURE GAUGE ON
'fo	AIR COMPRESSORS. 4. CLEAN DUST CUPS ON FILTERS AT LEAST ONCE A
	WEEK. IF DUSTY CONDITIONS PREVAIL, CHECK DAILY.
OTHER:	5. CLEAN AIR FILTERS MONTHLY. REPLACE IF NEED-
	HYDRAULIC
	1. DRAIN WATER FROM RESERVOIR TANK ON 2400
DRILLER: HENRY DAWSON	EACH MORNING BEFORE START UP. 2. CHANGE FILTERS (3) IN HYDRAULIC TANK EVERY 3 MONTHS. USE ONLY RYKON MV HYDRAULIC FLUID. 3. WHEN VACUUM GUAGE INDICATES YELLOW, IN LINE

EVERY THREE MONTHS.

p.8

SHAWVER WELL COMPANY JOB REPORT

Vell 4 4-10

16414352652

	DATE: From 3-20 To 19 79
JOB NAME: NASHUA TOWN WELL	ADDRESS:
List formations in order such as topsoil clay, blueclay, shale, sandfine medium or coarse, limerock, sandstone, color of formations, etc. 921 TO 1151 BROKEN LIMEROCK	CASING: 42 ² ft. SIZE: 20 FROM: TO CASING: ft. SIZE: FROM: TO SHOES: WELL SEAL: HTH: 1bs
TO STARTED 20-inch hole.	SCREEN SIZE: LENGTH:
TO REAMED TO 95 feet.	CEMENT: SACKS DEPTH GROUTED:
то	STATIC WATER LEVEL:ft.
то	PUMPING LEVEL: ft, @ GPM
TO	MAINTENANCE SCHEDULE
то	DIESEL ENCINE
то	1. CHANGE OIL AND FILTERS MONTHLY.
OT	 CLEAN AIR FILTER MONTHLY OR DAILY IF DUSTY CONDITIONS PREVAIL. CHECK RADIATOR CODLANT LEVEL ONCE A WEEK. CHECK BATTERY WATER AND CABLES ONCE A WEEK.
TО ТО	5. USE AMOCO 300 SERIES OIL IN CRANKCASE.
TO	AIR COMPRESSORS
TO	1. CHANGE OIL AND FILTERS MONTHLY. 2. USE ONLY THE FOLLOWING OIL IN AIR COMPESSORS: AMERICAN INDUSTRIAL #15 (SAE 10W) Below 32° AMERICAN INDUSTRIAL #31 (SAE 20W) 32°-60° AMERICAN INDUSTRIAL #51 (SAE 30W) 60° & UP 3. CONTINUALLY CHECK OIL PRESSURE GAUGE ON
то	AIR COMPRESSORS, 4. CLEAN DUST CUPS ON FILTERS AT LEAST ONCE A WEEK. IF DUSTY CONDITIONS PREVAIL, CHECK DAILY.
OTHER: PULLED 16-inch pipe & INSTALLED	5. CLEAN AIR FILTERS MONTHLY. REPLACE IF NEED-ED.
20-inch pipe.	HYDRAULIC
DRILLER: HENRY DAWSON	 DRAIN WATER FROM RESERVOIR TANK ON 2400 EACH MORNING BEFORE START UP. CHANGE FILTERS (3) IM HYDRAULIC TANK EVERY 3 MONTHS. USE ONLY RYKON MV HYDRAULIC FLUID. WHEN VACUUM GUAGE INDICATES YELLOW, IN LINE FILTERS MUST BE REPLACED. OTHERWISE REPLACE EVERY THREE MONTHS

p.9

SHAWVER WELL COMPANY JOB REPORT

Well 4 5-10

	DATE: From 3-21 To 19 79
JOB NAME: NASHUA TOWN WELL	ADDRESS:
List formations in order such as topsoil clay, blueclay, shale, sandfine medium or coarse, limerock, sandstone, color of formations, etc.	CASING: 117 ft. SIZE: 12 FROM: TO CASING: ft. SIZE: FROM: TO SHOES: WELL SEAL: HTH: 1bs
TO REAMED 20-inch hole to 115'.	
TO WELDed in 12-inch pipe.	SCREEN SIZE: LENGTH:
то	CEMENT: SACKS DEPTH GROUTED:
то	STATIC WATER LEVEL:ft.
то	PUMPING LEVEL:ft. @GPM
70	MAINTENANCE SCHEDULE
TO	DIESEL ENGINE
7'0	1. CHANGE OIL AND FILTERS MONTHLY 2. CLEAN AIR FILTER MONTHLY OR DAILY IF DUSTY
0	CONDITIONS PREVAIL 3. CHECK RADIATOR COOLANT LEVEL ONCE A WEEK.
то	4. CHECK BATTERY WATER AND CABLES ONCE A WEEK.
то	5. USE AMOCO 300 SERIES OIL IN CRANKCASE.
't'o	AIR COMPRESSORS
ТО	1. CHANGE OIL AND FILTERS MONTHLY. 2. USE ONLY THE FOLLOWING OIL IN AIR COMPES-
то	SORS: AMERICAN INDUSTRIAL #15 (SAE 10W) Below 32°
то	AMERICAN INDUSTRIAL #31 (SAE 20W) 32°-60° AMERICAN INDUSTRIAL #51 (SAE 30W) 60° & UP
T'0	3. CONTINUALLY CHECK OIL PRESSURE GAUGE ON
ro	AIR COMPRESSORS. 4. CLEAN DUST CUPS ON FILTERS AT LEAST ONCE A WEEK. IF DUSTY CONDITIONS PREVAIL, CHECK
OTHER:	DAILY. 5. CLEAN AIR FILTERS MONTHLY. REPLACE IF NEED-ED.
	HYDRAULIC
DRILLER: HENRY DAWSON	 DRAIN WATER FROM RESERVOIR TANK ON 2400 EACH MORNING BEFORE START UP. CHANGE FILTERS (3) IN HYDRAULIC TANK EVERY 3 MONTHS, USE ONLY RYKON MV HYDRAULIC FLUID. WHEN VACUUM GUAGE INDICATES YELLOW, IN LINE
	FILTERS MUST BE REPLACED. OTHERWISE REPLACE EVERY THREF PONTHS.

SHAWVER WELL COMPANY JOB REPORT

Well 4 6-10

	DATE: From 3-22 To 19 79
JOB NAME: NASHUA TOWN WELL	ADDRESS:
List formations in order such as topsoil clay, blueclay, shale, sandfine medium or coarse, limerock, sandstone, color of formations, etc. 115' TO 160' BROKEN LIMEROCK TO TO TO	CASING: ft. SIZE: FROM: TO CASING: ft. SIZE: FROM: TO SHOES: WELL SEAL: HTH: 1bs SCREEN SIZE: LENGTH: CEMENT: SACKS DEPTH GROUTED: STATIC WATER LEVEL: 53 ft. PUMPING LEVEL: ft. @ GPM
ТС	MA INTENANCE SCHEDULE
ТО	DIESEL ENGINE
TO TC TO TO TO	 CHANGE OIL AND FILTERS MONTHLY. CLEAN AIR FILTER MONTHLY OR DAILY IF DUSTY CONDITIONS PREVAIL. CHECK RADIATOR CODLANT LEVEL ONCE A WEEK. CHECK BATTERY WATER AND CABLES ONCE A WEEK. USE AMOCO 300 SERIES OIL IN CRANKCASE. AIR COMPRESSORS
T'0 T0	 CHANGE OIL AND FILTERS MONTHLY. USE ONLY THE FOLLOWING OIL IN AIR COMPESSORS:
TOTO	AMERICAN INDUSTRIAL #15 (SAE 10W) Below 32° AMERICAN INDUSTRIAL #31 (SAE 20W) 32°-60° AMERICAN INDUSTRIAL #51 (SAE 30W) 60° & UP 3. CONTINUALLY CHECK OIL PRESSURE GAUGE ON AIR COMPRESSORS. 4. CLEAN DUST CUPS ON FILTERS AT LEAST ONCE A WEEK. IF DUSTY CONDITIONS PREVAIL, CHECK
OTHER:	DAILY. 5. CLEAN AIR FILTERS MONTHLY. REPLACE IF NEED-ED.
DRILLER: HENRY DAWSON	HYDRAULIC 1. DRAIN WATER FROM RESERVOIR TANK ON 2400 EACH MORNING BEFORE START UP. 2. CHANGE FILTERS (3) IN HYDRAULIC TANK EVERY 3 MONTHS. USE ONLY RYKON MY HYDRAULIC FLUID. 3. WHEN VACUUM GUAGE INDICATES YELLOW, IN LINE FILTERS MUST BE REPLACED. OTHERWISE REPLACE EVERY THREF ONTHS.

SHAWVER WELL COMPANY JOB REPORT

Well	4
,	7-10

16414352652

•	DATE: From 3-27 To 19 79
JOB NAME: NASHUA TOWN WELL	ADDRESS:
List formations in order such as topsoil clay, blueclay, shale, sandfine medium or coarse, limerock, sandstone, color of formations, etc.	CASING: ft, SIZE: FROM: TO CASING: ft, SIZE: FROM: TO
	SHOES: WELL SEAL: HTH: 1bs
то	SCREEN SIZE: LENGTH:
ТО	CEMENT: 170 SACKS DEPTH GROUTED: 19'.
ТО	STATIC WATER LEVEL:ft.
TO	PUMPING LEVEL: ft. @ GPM
TO	MAINTENANCE SCHEDULE
то	DIESEL ENGINE
ТО	1. CHANGE OIL AND FILTERS MONTHLY.
ТО	- 2. CLEAN AIR FILTER MONTHLY OR DAILY IF DUSTY CONDITIONS PREVAIL.
ТО	- 3. CHECK RADIATOR COOLANT LEVEL ONCE A WEEK. 4. CHECK BATTERY WATER AND CABLES ONCE A WEEK.
ТО	5. USE AMOCO 300 SERIES OIL IN CRANKCASE.
TO	AIR COMPRESSORS
то	1. CHANGE OIL AND FILTERS MONTHLY. 2. USE ONLY THE FOLLOWING OIL IN AIR COMPESSORS: AMERICAN INDUSTRIAL #15 (SAE 10W) Below 32° AMERICAN INDUSTRIAL #31 (SAE 20W) 32°-60°
TO .	AMERICAN INDUSTRIAL #51 (SAE 30W) 60° & UP 3. CONTINUALLY CHECK OIL PRESSURE GAUGE ON AIR COMPRESSORS.
то	4. CLEAN DUST CUPS ON FILTERS AT LEAST ONCE A WEEK. IF DUSTY CONDITIONS PREVAIL, CHECK DAILY. 5. CLEAN AIR FILTERS MONTHLY. REPLACE IF NEED-
OTHER: 2 sacks of BENTONITE	ED.
	1. DRAIN WATER FROM RESERVOIR TANK ON 2400 EACH MORNING BEFORE START UP.
DRILLER: HENRY DAWSON	 CHANGE FILTERS (3) IM HYDRAULIC TANK EVERY 3 MONTHS. USE ONLY RYKON MV HYDRAULIC FLUID. WHEN VACUUM GUAGE INDICATES YELLOW, IN LINE "ILTERS MUST BE REPLACED. OTHERWISE REPLACE "ERY THREE "VTHS."

DRILLER: HENRY DAWSON

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2. CHANGE FILTERS (3) IN HYDRAULIC TANK EVERY 3 MONTHS. USE ONLY RYKON MV HYDRAULIC FLUID.

EVERY THERE MONTHS.

WHEN VACUUM GUAGE INDICATES YELLOW, IN LINE FILTERS MUST BE REPLACED. OTHERWISE REPLACE

SHAWVER WELL COMPANY JOB REPORT

	DATE: From 3-28 To 1979
JOB NAME: NASHUA TOWN WELL	ADDRESS:
List formations in order such as topsoil clay, blueclay, shale, sandfine medium or coarse, limerock, sandstone, color of formations, etc.	CASING:ft. SIZE:FROM:TO
TC	SHOES: WELL SEAL: HTH: 15 SCREEN SIZE: LENGTH:
TO	CEMENT: 102 SACKS DEPTH GROUTED: 54:
ТО	STATIC WATER LEVEL:ft.
TO	PUMPING LEVEL: ft. @ GPM
TO	MAINTENANCE SCHEDULE
ТО	
TO	DIESEL ENGINE
TO	1. CHANGE OIL AND FILTERS MONTHLY. 2. CLEAN AIR FILTER MONTHLY OR DAILY IF DUSTY
TO	CONDITIONS PREVAIL. 3. CHECK RADIATOR COOLANT LEVEL ONCE A WEEK.
07:	4. CHECK BATTERY WATER AND CABLES ONCE A WEEK.
TO	5. USE AMOCO 300 SERIES OIL IN CRANKCASE.
TO	AIR COMPRESSORS
то	 CHANGE OIL AND FILTERS MONTHLY. USE ONLY THE FOLLOWING OIL IN AIR COMPES-
TO	SORS: AMERICAN INDUSTRIAL #15 (SAE 10W) Below 32.0
	AMERICAN INDUSTRIAL #31 (SAE 20W) 32°-60° AMERICAN INDUSTRIAL #51 (SAE 30W) 60° & UP
TO	3. CONTINUALLY CHECK OIL PRESSURE GAUGE ON AIR COMPRESSORS.
0T0	4. CLEAN DUST CUPS ON FILTERS AT LEAST ONCE A
OTHER: TOTAL 73 FEET CEMENTED.	WEEK. IF DUSTY CONDITIONS PREVAIL, CHECK DAILY. 5. CLEAN AIR FILTERS MONTHLY. REPLACE IF NEED-ED.
	HYDRAULIC
	1. DRAIN WATER FROM RESERVOIR TANK ON 2400 EACH MORNING BEFORE START UP.

40974

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Well &

TEST PUMPING DATA

Municipal Well No. 4

Nashua, Iowa

(Test Pumping Done May 9, 1979)

Jack Delbridge, WHKS present for test pumping

Readings	Made	From]	Foot	Above	Ground
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Static	- 53'-0" down	3/27/79
Static	- 46'-6" down	11:00 A.M. 5/9/79
510 gpm	- 50° down	11:00 A.M.
608 gpm	- 5] down	11:10 A.M.
715 gpm	- 52'-3" down	11:25 A.M.
770 gpm	- 53'-5" down	11:40 A.M.
759 gpm	~ 53' down	11:55 A.M.
759 gpm	- 53'-2" down	1:00 P.M.
759 gpm	- 53'-2" down	3:00 P.M. (Terminated Pumping)
-	- 48°÷0" down	3:15 P.M. Recovery
-	- 471-8" down	3:30 P.M. Recovery .

120 C

Oct 29 12 02:29p Nashua City Halll 16414352652 p.14 WALLACE, HOLLS VU
KASTLER, SCHMIT CO.
216 South Broadway
ROCHESTER, MINNESOTA 55901
Phone 288-3923 1447UNG, LUWE SHEET NO. CALCULATED BY Well A As Shown 10 9 ිරි Drowdown, A. 5 4 _3 Design Points Data from test pumping of well 5/9/79 ζ Observed by Jack Doubridge, WHKS 0 100 200 : 400 500 Pumping Rate, gar Received - 10/29/2012