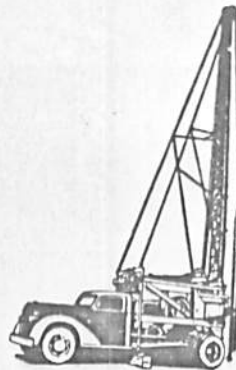


Location of new Mt. Vernon town well (1967)

SW NW NE 10-82N-5W,
(Franklin Twp.) Linn County~~SW~~ In Davis Park just west of
swimming pool and north of ball parks
in northeast part of Mt. Vernon

Inc.

PLIES



Address c/o Mr. D. B. Siggins, City Clerk.

Mount Vernon, Iowa. 52314

Tenant City Well No. 4

Address

Location In Davis Park, in the City of Mount Vernon,
in Franklin Township, Linn County, Iowa.

Started the Well September 25, 1967.

Finished the Well November 7, 1967

Total Depth 350 ft. Size of Well 12"

Static Water Level 18 ft.

Draw-down 243 feet, pumping 220 Gal. P.M.

82 feet of 12" I.D. inch pipe installed

35 feet of 20" O.D. inch casing installed

Driller A. K. Scott, for Hoeg & Ames, Inc.

Remarks Drilled 21" hole and set 35 ft. of 20" O.D.
pipe at 34 ft. Drilled 19 1/4" hole from 34 ft. to 80 ft.
Set 82 ft. of 12" I.D. pipe at 80 ft. and cement grouted
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pump and conducted another pumping test.



MEMBER

Phone 515 473-2707

HOEG & AMES, Inc.

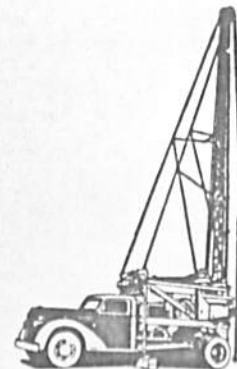
WELL CONTRACTORS

WELL SUPPLIES

☆☆☆

LINCOLN, IOWA

50652



CITY OF MOUNT VERNON, IOWA.

WELL NO. 4.

RECORD OF GEOLOGICAL FORMATIONS:

0'	to	5'	-	Soil and clay.
5'	to	19'	-	Yellow clay.
19'	to	28'	-	Blue clay.
28'	to	31'	-	Yellow clay, sand and gravel.
31'	to	70'	-	Yellow limestone.
70'	to	90'	-	Gray limestone.
90'	to	150'	-	Gray sandy limestone (hard).
150'	to	157'	-	Gray limestone.
157'	to	165'	-	Gray and brown limestone (broken)
165'	to	200'	-	Gray limestone (harder).
200'	to	210'	-	Gray limestone with a little chert.
210'	to	265'	-	Gray limestone.
265'	to	310'	-	Light Gray and Brown limestone.
310'	to	335'	-	Brown limestone and white chert.
335'	to	340'	-	Gray limestone.
340'	to	347'	-	Brown sandy limestone.
347'	to	350'	-	Shale.

Total Depth - 350 feet.

WELL PRODUCTION TEST DATA SHEET

Job MT. VERNON IOWA Date Tested Nov. 7-1967
 Location SAME Tested by HOEG & AMES INC.
 Diameter of Well 12" Pump Used TURBINE
 Depth of Well 350' Driver GASOLINE
 Length of Airline 280' Col. & Shaft 6" x 1 1/2" 296'
 Static W. L. 18' Bwls 9 1/2"
 Orifice Size 6" PIPE 4" ORFICE Mfr. PEERLESS

TIME	ORIFICE READING	GPM	PUMPING LEVEL	STATIC W.L.	DRAW-DOWN	REMARKS
9:00 A.M.				18		STARTED PUMP
9:15		?	135		117	VERY DIRTY, TOO
9:30		185	145		127	MUCH GAS FOR READING
9:45		175	148		130	GAS FROM ACID
10:00		175	151		133	
10:30		175	154		136	INCREASED RATE
11:00	11"	215	210		192	
11:30	11"	215	215		197	
12:00	10.5"	210	217		199	
12:30	10.5"	210	217		199	
1:00	10"	205	218		200	INCREASED RATE
1:30	11 1/2"	220	260		242	
2:00	11.5"	220	260		242	WATER CLEAR
2:30	11.5"	220	260		242	
3:00	11.5"	220	261		243	
3:30	11.5"	220	261		243	
4:00	11.5"	220	261		243	

UNITED STATES DEPARTMENT OF THE INTERIOR
 Geological Survey
 Water Resources Division

082-050-10 ABC
 SAK-SNX
 Mt Jerry Twp #4
 W-2008

Water Quality
 (ppm)

Card Q

State: 19 County: 59 Town: _____

Latitude: 415553N Longitude: 12451 Seq. No.: 1 Date: 1/21/67

Sampling Depth: 350 Type: 1 Kx10⁶: 2600 pH: 6.7 Temp. °F: _____

SiO₂: 14 Ca: 22 Mg: 136 Na: 5.9 K: 2.9

HCO₃: 381 CO₃: 0 SO₄: 25 Cl: 650 Source No.: 3 Q

Card R

Duplicate Columns 1-25 from Card Q

F: 6 NO₃: 1 PO₄: _____ B: _____ Al: _____ Fe: 7.0

Mn: 53 Cu: _____ Pb: _____ Zn: _____

Determined: 1730 Solids: _____ Ca, Mg: 1200 Hardness Non-Carb.: 978

Color: _____ No. R

Card S

Duplicate Columns 1-25 from Card Q

Br: _____ I: _____ Alk. as CaCO₃: 312 Free CO₂: _____ SAR: _____

RSC: _____ ABS: _____ _____

Alpha (pc/l): _____ Beta (pc/l): _____ Ra (pc/l): _____ U (ug/l): _____

No. 5
 80

Recorded by: 1001

Punched by: R D Wahi Date: _____

Published: _____

UNITED STATES DEPARTMENT OF THE INTERIOR
 Geological Survey
 Water Resources Division

082-050-10 ABC
 SAR-SNX
 Mt Vernon Town #4
 W-20008

Water Quality
 (ppm)

Card Q

State: 19 County: 57 Town: _____

Well No. 4155530 Latitude 11 Longitude 12451 Seq. No. 1 Date 12/1/70

Sampling Depth 350 Type 1 Kx10⁶ 530 pH 7.2 Temp. °F _____

SiO₂ 14 Ca 69 Mg 28 Na 60 K 11

HCO₃ 334 CO₃ 0 SO₄ 26 Cl 40 Source No. Q

Card R

Duplicate Columns 1-25 from Card Q

F 3 NO₃ 1 PO₄ 1 B 1 Al 1 Fe 46

Mn 05 Cu 1 Pb 01 Zn 03

Determined 323 Solids 50 Ca, Mg 288 Hardness Non-Carb. 14

Color 8 No. R

Card S

Duplicate Columns 1-25 from Card Q

Br 1 I 1 Alk. as CaCO₃ 274 Free CO₂ 1 SAR 1

RSC 1 ABS 1 1

Alpha (pc/l) 1 Beta (pc/l) 1 Ra (pc/l) 1 U (ug/l) 1

No. 5
 80

Recorded by: [Signature]

Punched by: _____ Date: _____

Published: _____

Location of new Mt. Vernon town well (1967)

SW NW NE 10-82N-5W,
(Franklin Twp.) Linn County

In Davis Park just west of
swimming pool and north of ball park
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HOEG & AMES, Inc.

WELL CONTRACTORS

WELL SUPPLIES

☆☆☆

LINCOLN, IOWA

50652



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 Orifice Size 6" PIPE 4" ORIFICE Mfr. PERLESS

TIME	ORIFICE READING	GPM	PUMPING LEVEL	STATIC W. L.	DRAW-DOWN	REMARKS
9:00 AM				18		STARTED PUMP
9:15		?	135		117	VERY DIRTY, FRO
9:30		185	145		127	MUCH GAS FOR READING
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1:00	10"	205	218		200	INCREASED RATE
1:30	11 1/2"	220	260		242	
2:00	11.5"	220	260		242	WATER CLEAR
2:30	11.5"	220	260		242	
3:00	11.5"	220	261		243	
3:30	11.5"	220	261		243	
4:00	11.5"	220	261		243	

WELL PRODUCTION TEST DATA SHEET

Job _____ Date Tested _____
 Location _____ Tested by _____
 Diameter of Well _____ Pump Used _____
 Depth of Well _____ Driver _____
 Length of Airline _____ Col. & Shaft _____
 Static W. L. _____ Bowls _____
 Orifice Size _____ Mfgr. _____

TIME	ORIFICE READING	GPM	PUMPING LEVEL	STATIC W. L.	DRAW-DOWN	REMARKS
4:30	11.5"	220	262	18	244	Collected water sample
4:30						STARTED TO SURGE
4:45						STOPPED SURGING
4:45	12"	225	280		262	INCREASED RATE
5:00	11.5"	220	280		262	SHUT PUMP OFF
This pumping test was conducted after the well was acidized						
How much acid used? How long?						
Under pressure?						