

IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey

W-2305

RECORD OF WELL

Location:

Town: Clinton (NE)
(SW) : County Clinton

NE 1/4 SW 1/4 SE 1/4 sec. 22 T 81 N., R. 6 E. Camanche Twp.

Well name and number E.I. DuPont de Nemours & Co. No 3

Owner E.I. DuPont de Nemours & Co. Address Clinton, Iowa

Tenant _____ Address _____

Contractor Varner Well Drilling Co. Inc. Address 905 Dubuque Bldg.
Dubuque, Iowa

Drillers Messrs. Reedy,

Drilling dates March - July, 1946

Well data:

Elevations: Drilling curb 588.0 feet; Land surface 586 feet

Drillers use top of 24" casing as measuring point

Determined by Levels from DuPont
terrace

Topographic position Valley of Mississippi River

Total depth: Reported 1975 feet, Measured _____ feet

Drilling method Cable tool

Hole and casing data 30' of 24" pipe from 0 to 30' 8"

260' of 20-inch pipe from 0 to 260' with shoe & inside collar attached at bottom

Pipe cemented in from bottom to top

79' 7" of 16-inch pipe set in 19-inch hole from 711' to 791'

Open 19-inch hole from 399' to 711' & open 15 1/4-inch hole from 791' to 1951'

Original depth to water 62.45 ft. ^{above} curb Date _____

Original elevation of water level _____ ft.; Source of data _____

Sources of water: Principal Cambrian 1210 - 1951; Others _____

Production data:

Date July 22, 1946

Non-pumping

Static depth to water 62.45Measuring point top 24" pipePumping level 92.01at 2560

g.p.m. after 35 hrs. 40 min.

Specific capacity _____ g.p.m. per ft. drawdown; Temperature 62 °F.

Pump data: Type pump _____ Column Dia. _____ Length _____

Cylinder or bowls: Dia. _____ Length _____ Suction pipe _____

Power _____ Airline _____

Estimated rate of production: _____ g.p.m. for _____ hrs. a day

Use of water Industrial

WATER ANALYSES (in parts per million)

Date samples	<u>July 22, 1946</u>			
Sampled by	<u>Halc. i. Parker</u>			
Total solids	<u>107</u>			
Insoluble matter	<u>11</u>			
Alkalinity (Meo)	<u>258</u>			
Alkalinity (Phn)	<u>0</u>			
pH	<u>7/27/46 7.7</u>			
Fe ₂ O ₃ + Mn ₂ O ₃ + Al ₂ O ₃	<u>6</u>			
Alkali as sodium	<u>60</u>			
Calcium	<u>68</u>			
Magnesium	<u>19</u>			
Iron (unfiltered)	<u>0.1</u>			
Manganese	<u>0.0</u>			
Nitrate	<u>1.8</u>			
Fluoride	<u>0.6</u>			
Chloride	<u>42</u>			
Sulfate	<u>65</u>			
Bicarbonate	<u>315</u>			
Hardness (ppm)	<u>218</u>			
Hardness (gpg)	<u>17.5</u>			
Remarks				

Laboratory data:

Sample storage location _____

Sample range 0-1975No. spls. 392No. dupls. & cond. 392 900dSpls. prepared by SP, DG, E, PH

Washed range _____

by D.G, SP, E, PH

Driller's log and cond. _____

Insoluble residues: Prepared by _____

Studied by _____

Strip log _____

Microscopic study 0-1975M.C.P.strip log July 1946 MCP

Gen. log _____

Correl. by M.C. Parker

Varner Well Drilling Company

Telephone 3691

INCORPORATED

P. O. Box 237

Turbine Pumps

Turbine Pump Service

905 American Trust Bldg.

DUBUQUE, IOWA,

Re: E. I. DuPont Co. - Well #3
Clinton, Iowa

DATE STARTED 2-12-46

DATE COMPLETED 7-20-46

DEPTH 1960'

DIAMETERS: 24" top to 30' 8"; 179' 4" of 23" hole from 30' 8" to 210'; 582' of 19" hole from 210' to 792'; 1168' of 15 1/2" hole from 792' to 1973

CASING: 30' 8" of 24" pipe with drive shoe set in rock; 260' 7 1/2" of 20" casing with shoe in 23" hole and 19" hole from top to 260'; pipe cemented in from surface to 260'; 79' 7" of 16" liner set in 19" hole with shoes top & bottom, top at 711', bottom at 791'.

STRATA RECORD:

From	To	Thickness	Description of Beds
Top	22	22	Drift
22	110	88	Brown lime
110	166	56	Gray lime
166	241	75	Blue & gray shale
241	250	9	Gray lime
250	253	3	Blue gray lime & shale
253	324	71	Blue gray shale
324	385	61	Gray brown lime & shale
385	428	43	Gray & brown lime
428	509	81	Brown lime
509	534	25	Gray brown lime
534	627	93	Gray lime & chert
627	654	27	Red brown lime
654	662	8	Brown & gray lime
662	730	68	Gray lime
730	740	10	Blue shale
740	787	47	Gray sandstone
787	988	201	Gray lime
988	1096	108	Gray lime & dolomite
1096	1115	19	Gray dolomite
1115	1119	4	Gray lime & dolomite
1119	1178	59	Gray lime
1178	1205	27	Gray dolomite
1205	1249	44	Gray lime & dolomite
1249	1339	90	Brown & gray lime
1339	1357	18	Pink sandy lime
1357	1398	41	Dark gray lime & dolomite
1398	1410	12	Blue lime & pink conglomerate
1410	1490	80	Blue green sandy shale

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905 American Trust Bldg.

DUBUQUE, IOWA,

E. I. DuPont Co. - Well #3 (cont'd)

From	To	Thickness	Description of Beds
1490	1502	12	Red marl
1502	1513	11	Red sand
1513	1516	3	Pink sand & dolomite
1516	1568	52	Gray sand & dolomite
1568	1622	54	Gray sand
1622	1633	11	Dark gray shale
1633	1658	25	Gray sandy shale
1658	1683	25	Red sandy shale
1683	1772	89	Gray sandy shale, some lime
1772	1808	36	Gray & red marl
1808	1820	12	Gray sand
1820	1843	23	Dolomite
1843	1859	16	Gray sand
1859	1891	32	Dolomite
1891	1960	69	White sand

STATIC WATER LEVELS:

Top	to	66	None
66	to	119	16'
119	to	126	12
126	to	140	11
140	to	150	10
150	to	172	11
172	to	988	9
988	to	1008	10
1008	to	1022	9
1022	to	1241	10
1241	to	1303	70
1303	to	1513	58
1513	to	1520	53
1520	to	1897	58
1897	to	1960	59'6"