

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR

GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

MASTER CARD

Record by D. ARONSON Source of data FILE Date 2/27/68 Map 1:63,360 COUNTY HWY.

State Iowa County (or town) MARION

Latitude: 411328 N Longitude: 0931435 Sequential number: 1

Lat-long accuracy: 2 T 74 S, R 21 E Sec 11, NE & NE & SW & S

Local well number: 07421W11CAA Other number: W-6217

Local use: 06217 53 CITY TI9 Owner of name: MELCHER TOWN TEST #19 (1953)

Owner or name: MELCHER IOWA Address: MELCHER, IOWA

Ownership: County, Fed Gov't, City, Corp or Co, Private, State Agency, Water Dist M

Use of Air cond, Bottling, Comm, Devater, Power, Fire, Dom, Irr, Mod, Ind, P S, Rec, WATER: (S) (T) (U) (V) (W) (X) (Y) (Z) P

Use of well: Anodo, Drain, Seismic, Heat Res, Obs, Oil-gas, Recharge, Test, Unused, Withdraw, Waste, Destroyed. (A) (D) (G) (H) (I) (J) (K) (L) (M) (N) (O) (P) (Q) (R) (S) (T) (U) (V) (W) (X) (Y) (Z) W

DATA AVAILABLE: Well data 1 Freq. W/L meas.: INVENTORY Field aquifer char. 0

Hyd. lab. data: 0

Qual. water data; type: COMPLETE

Freq. sampling: INTERMITTENT (10/28/53) Pumpage inventory: yes 0 no, period: 0

Aperture cards: 0

Log data: GEOLOGIST-DRILLER'S GD

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 92 ft Meas. rept DRILLER'S LOG accuracy 3

Depth casing: 82 ft Casing type: STEEL; Diam. 7 in

Finish: porous concrete, gravel w. (perf.), (screen), gravel w. horiz. gallery, end, open perf., screen, sd. pt., shored, open hole, other S

Method Drilled: air bored, cable, dug, hyd jetted, rot., air rot., percussion, rotary, air reverse trenching, driven, drive wash, other C

Date Drilled: AUG. 1953 Pump intake setting: 953 ft

Driller: ART BRUNERKOO Pella, Iowa

Lift (type): air, bucket, cont, jet, multiple, multiple, none, piston, rot, submerg, turb, other D Deep 0 Shallow 40

Power (type): diesel, elec, gas, gasoline, hand, gas, wind; H.P. 0 Trans. or meter no. 0

Descrip. MP LSD ft above LSD, Alt. MP 947

Alt. LSD: 947 Accuracy: ALTIMETER 7

Water Level: 35 ft above MP; 35 ft below LSD Accuracy: DRILLER'S LOG D

Date meas: AUG. 1953 Yield: 60 gpm Method determined 0

Drawdown: 35 ft Accuracy: 3 Pumping period 0 hrs

QUALITY OF WATER DATA: Iron 0.12 Sulfate 15.8 Chloride 7 Hard. 352

Sp. Conduct 713 K x 10⁶ Temp. 4 Date sampled 9/15/60 960

Taste, color, etc. 0

Well No. 074-21W-11CAA

Well No. 074-21W-11 CAA

Latitude-longitude 41.13.28^N 093.14.35.1
d m s d m s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD Physiographic Province: CENTRAL LOWLAND 12 Section: DISSECTED

TILL PLAIN E Drainage Basin: DES MOINES 25B Subbasin:

Topo of well site: (D) depression, stream channel, dunes, flat, hilltop, sink, swamp, (E) , (F) , (G) , (H) , (I) , (J) , (K) , (L) , (M) , (N) , (O) , (P) , (Q) , (R) , (S) , (T) , (U) , (V) , (W) , (X) , (Y) , (Z) , (aa) , (ab) , (ac) , (ad) , (ae) , (af) , (ag) , (ah) , (ai) , (aj) , (ak) , (al) , (am) , (an) , (ao) , (ap) , (aq) , (ar) , (as) , (at) , (au) , (av) , (aw) , (ax) , (ay) , (az) , (ba) , (bb) , (bc) , (bd) , (be) , (bf) , (bg) , (bh) , (bi) , (bj) , (bk) , (bl) , (bm) , (bn) , (bo) , (bp) , (bq) , (br) , (bs) , (bt) , (bu) , (bv) , (bw) , (bx) , (by) , (bz) , (ca) , (cb) , (cc) , (cd) , (ce) , (cf) , (cg) , (ch) , (ci) , (cj) , (ck) , (cl) , (cm) , (cn) , (co) , (cp) , (cq) , (cr) , (cs) , (ct) , (cu) , (cv) , (cw) , (cx) , (cy) , (cz) , (da) , (db) , (dc) , (dd) , (de) , (df) , (dg) , (dh) , (di) , (dj) , (dk) , (dl) , (dm) , (dn) , (do) , (dp) , (dq) , (dr) , (ds) , (dt) , (du) , (dv) , (dw) , (dx) , (dy) , (dz) , (ea) , (eb) , (ec) , (ed) , (ee) , (ef) , (eg) , (eh) , (ei) , (ej) , (ek) , (el) , (em) , (en) , (eo) , (ep) , (eq) , (er) , (es) , (et) , (eu) , (ev) , (ew) , (ex) , (ey) , (ez) , (fa) , (fb) , (fc) , (fd) , (fe) , (ff) , (fg) , (fh) , (fi) , (fj) , (fk) , (fl) , (fm) , (fn) , (fo) , (fp) , (fq) , (fr) , (fs) , (ft) , (fu) , (fv) , (fw) , (fx) , (fy) , (fz) , (ga) , (gb) , (gc) , (gd) , (ge) , (gf) , (gg) , (gh) , (gi) , (gj) , (gk) , (gl) , (gm) , (gn) , (go) , (gp) , (gq) , (gr) , (gs) , (gt) , (gu) , (gv) , (gw) , (gx) , (gy) , (gz) , (ha) , (hb) , (hc) , (hd) , (he) , (hf) , (hg) , (hh) , (hi) , (hj) , (hk) , (hl) , (hm) , (hn) , (ho) , (hp) , (hq) , (hr) , (hs) , (ht) , (hu) , (hv) , (hw) , (hx) , (hy) , (hz) , (ia) , (ib) , (ic) , (id) , (ie) , (if) , (ig) , (ih) , (ii) , (ij) , (ik) , (il) , (im) , (in) , (io) , (ip) , (iq) , (ir) , (is) , (it) , (iu) , (iv) , (iw) , (ix) , (iy) , (iz) , (ja) , (jb) , (jc) , (jd) , (je) , (jf) , (jg) , (jh) , (ji) , (jj) , (jk) , (jl) , (jm) , (jn) , (jo) , (jp) , (jq) , (jr) , (js) , (jt) , (ju) , (jv) , (jw) , (jx) , (jy) , (jz) , (ka) , (kb) , (kc) , (kd) , (ke) , (kf) , (kg) , (kh) , (ki) , (kj) , (kk) , (kl) , (km) , (kn) , (ko) , (kp) , (kq) , (kr) , (ks) , (kt) , (ku) , (kv) , (kw) , (kx) , (ky) , (kz) , (la) , (lb) , (lc) , (ld) , (le) , (lf) , (lg) , (lh) , (li) , (lj) , (lk) , (ll) , (lm) , (ln) , (lo) , (lp) , (lq) , (lr) , (ls) , (lt) , (lu) , (lv) , (lw) , (lx) , (ly) , (lz) , (ma) , (mb) , (mc) , (md) , (me) , (mf) , (mg) , (mh) , (mi) , (mj) , (mk) , (ml) , (mm) , (mn) , (mo) , (mp) , (mq) , (mr) , (ms) , (mt) , (mu) , (mv) , (mw) , (mx) , (my) , (mz) , (na) , (nb) , (nc) , (nd) , (ne) , (nf) , (ng) , (nh) , (ni) , (nj) , (nk) , (nl) , (nm) , (nn) , (no) , (np) , (nq) , (nr) , (ns) , (nt) , (nu) , (nv) , (nw) , (nx) , (ny) , (nz) , (oa) , (ob) , (oc) , (od) , (oe) , (of) , (og) , (oh) , (oi) , (oj) , (ok) , (ol) , (om) , (on) , (oo) , (op) , (oq) , (or) , (os) , (ot) , (ou) , (ov) , (ow) , (ox) , (oy) , (oz) , (pa) , (pb) , (pc) , (pd) , (pe) , (pf) , (pg) , (ph) , (pi) , (pj) , (pk) , (pl) , (pm) , (pn) , (po) , (pp) , (pq) , (pr) , (ps) , (pt) , (pu) , (pv) , (pw) , (px) , (py) , (pz) , (qa) , (qb) , (qc) , (qd) , (qe) , (qf) , (qg) , (qh) , (qi) , (qj) , (qk) , (ql) , (qm) , (qn) , (qo) , (qp) , (qq) , (qr) , (qs) , (qt) , (qu) , (qv) , (qw) , (qx) , (qy) , (qz) , (ra) , (rb) , (rc) , (rd) , (re) , (rf) , (rg) , (rh) , (ri) , (rj) , (rk) , (rl) , (rm) , (rn) , (ro) , (rp) , (rq) , (rr) , (rs) , (rt) , (ru) , (rv) , (rw) , (rx) , (ry) , (rz) , (sa) , (sb) , (sc) , (sd) , (se) , (sf) , (sg) , (sh) , (si) , (sj) , (sk) , (sl) , (sm) , (sn) , (so) , (sp) , (sq) , (sr) , (ss) , (st) , (su) , (sv) , (sw) , (sx) , (sy) , (sz) , (ta) , (tb) , (tc) , (td) , (te) , (tf) , (tg) , (th) , (ti) , (tj) , (tk) , (tl) , (tm) , (tn) , (to) , (tp) , (tq) , (tr) , (ts) , (tt) , (tu) , (tv) , (tw) , (tx) , (ty) , (tz) , (ua) , (ub) , (uc) , (ud) , (ue) , (uf) , (ug) , (uh) , (ui) , (uj) , (uk) , (ul) , (um) , (un) , (uo) , (up) , (uq) , (ur) , (us) , (ut) , (uu) , (uv) , (uw) , (ux) , (uy) , (uz) , (va) , (vb) , (vc) , (vd) , (ve) , (vf) , (vg) , (vh) , (vi) , (vj) , (vk) , (vl) , (vm) , (vn) , (vo) , (vp) , (vq) , (vr) , (vs) , (vt) , (vu) , (vv) , (vw) , (vx) , (vy) , (vz) , (wa) , (wb) , (wc) , (wd) , (we) , (wf) , (wg) , (wh) , (wi) , (wj) , (wk) , (wl) , (wm) , (wn) , (wo) , (wp) , (wq) , (wr) , (ws) , (wt) , (wu) , (wv) , (ww) , (wx) , (wy) , (wz) , (xa) , (xb) , (xc) , (xd) , (xe) , (xf) , (xg) , (xh) , (xi) , (xj) , (xk) , (xl) , (xm) , (xn) , (xo) , (xp) , (xq) , (xr) , (xs) , (xt) , (xu) , (xv) , (xw) , (xx) , (xy) , (xz) , (ya) , (yb) , (yc) , (yd) , (ye) , (yf) , (yg) , (yh) , (yi) , (yj) , (yk) , (yl) , (ym) , (yn) , (yo) , (yp) , (yq) , (yr) , (ys) , (yt) , (yu) , (yv) , (yw) , (yx) , (yy) , (yz) , (za) , (zb) , (zc) , (zd) , (ze) , (zf) , (zg) , (zh) , (zi) , (zj) , (zk) , (zl) , (zm) , (zn) , (zo) , (zp) , (zq) , (zr) , (zs) , (zt) , (zu) , (zv) , (zw) , (zx) , (zy) , (zz)

MAJOR AQUIFER: QUATERNARY, PLEIST Q1G GIX aquifer, formation, group

Lithology: SAND S Origin: GLACIAL 0 Aquifer Thickness: ft

Length of well open to: 10 ft Depth to top of: 59 ft

MINOR AQUIFER: aquifer, formation, group

Lithology: Origin: Aquifer Thickness: ft

Length of well open to: ft Depth to top of: ft

Intervals Screened: 82-92'

Depth to consolidated rock: ft Source of data:

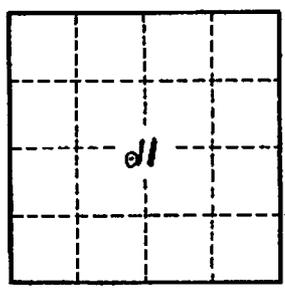
Depth to basement: ft Source of data:

Surficial material: NONCALC LOESS N1Q Infiltration characteristics: POOR 4

Coefficient Trans: gpd/ft Coefficient Storage:

Coefficient Perm: gpd/ft²; Spec cap: 1.71 gpm/ft; Number of geologic cards:

CASING:
82' OF 7" CSG. 0-82'
10' OF 12 SLOT SCREEN 82'-92'



Well No. 074-21W-11 CAA

Mason

May 14, 1954

Mr. Claude Rusark
Town of Melcher Waterworks
Melcher, Iowa

Dear Mr. Rusark:

We have completed the examination of well cuttings from
the Melcher Town Test No. 19, drilled by Mr. Arthur Bruinekool.

We are enclosing a copy of geologic log for your files.

Very truly yours,

H. G. Hershey

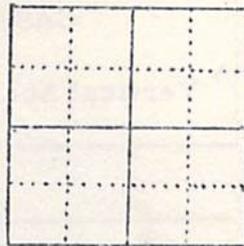
HGH:r
enclosure

074-21W-11CAA

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

W 6217

RECORD OF WELL



Location:

Town: Melcher (NE) (SW): County Marion E.

NE, NE, SE sec. 11 T. 74 N., R. 21 W. Twp.

Well name and number Melcher Town Test #9 (1953)

Owner _____ Address _____

Tenant _____ Address _____

Contractor Axt Bruinekool Address _____

Drillers " " _____

Drilling dates Aug. 1953

Well data:

Altitudes: Drilling curb _____ feet; Land surface 947' feet

Determined by _____

Topographic position _____

Total depth: Reported 92 feet, Measured _____ feet

Drilling method Cable

Hole and casing data 82' of 20 #7" O.D. pipe set at 82' with 10' of 6" screen slot size 12 attached and set at 92'. head packer at top of screen.

Original depth to water 35 ft. ^{above} below Date _____

Source of data _____

Sources of water: Principal 82-92'

Others _____

Production Data

Date _____
 Static water level 35
 Measuring point _____
 Pumping water level 70
 Yield (g. p. m.) 60
 Duration of pumping _____
 Specific capacity _____

Pump Data

Type pump _____ Column diameter and length _____
 Cylinder or bowls diameter and length _____
 Suction pipe _____ Airline _____
 Power _____ Production _____ g. p. m. for _____ hours per day
 Use of water _____

Dissolved constituents and properties (in parts per million except as indicated)

Date sampled _____
 Sampled by _____
 Silica (SiO₂) _____
 Iron (Fe) _____
 Manganese (Mn) _____
 Calcium (Ca) _____
 Magnesium (Mg) _____
 Potassium (K) _____
 Sodium (Na) _____
 Carbonate (CO₃) _____
 Bicarbonate (HCO₃) _____
 Sulfate (SO₄) _____
 Chloride (Cl) _____
 Fluoride (F) _____
 Nitrate (NO₃) _____
 Dissolved solids _____
 Hardness (as CaCO₃) _____
 Total _____
 Grains per gallon _____
 Noncarbonate _____
 Alkalinity (as CaCO₃) _____
 pH _____
 Specific conductance _____
 (micromhos at 25°C) _____
 Temperature (°F) _____
 Analysis No. _____

Well No. 6217 Laboratory Data EC 5-6
 Sample range 0-78 No. of samples 1720
 No. of dupls. and cond. 20 Good Washed range _____
 Samples prepared by Palensky, DeRana Date 11/5/53
 Logged by NORTHUP Date 4/9/54
 Correlations by NORTHUP Date 4/9/54

DRILLER'S NOTEBOOK

W 6212

WELL RECORD

DRILLER Art Buntzow

ADDRESS Pella

OWNER Town Well (1953)

ADDRESS Test #19

mecher

RETURN TO
IOWA GEOLOGICAL SURVEY
IOWA CITY, IOWA

WHEN RECORD IS COMPLETED PUT IN ENVELOPE AND MAIL TO

THE DIRECTOR

IOWA GEOLOGICAL SURVEY

IOWA CITY, IOWA

DRILLER'S NOTE

It is important that a driller's notebook, filled out as completely as possible, be sent to the Iowa Geological Survey at the completion of each hole. A number of drillers have found it convenient to string samples from a single well on a heavy wire and attach the log book to them. A hole has been punched in the log book for this purpose.

Sample sacks and log books will be furnished by the Geological Survey. A copy of the log book will be made and returned if desired by the driller.

SUGGESTIONS TO DRILLERS

1. Samples should be taken from each bed passed through, and never more than 5 feet apart, even in the same bed.

2. Samples should not be washed, except to remove excess drilling mud, as washed samples may give a wrong idea of the character of the bed.

3. Fill out the label on each sample bag with the name of the well and the depth interval which the sample represents.

4. Make frequent use of the "Description" column to explain the material being drilled.

5. Note depth and thickness of all water-bearing layers.

6. Note the quality of the water from each layer: as hard, soft, salty, alkaline, or sulphur bearing.

7. Note height to which water from each layer rises in well, and give flow or capacity in gallons per minute.

8. Fossils, such as oyster, clam, and other shells, are important and should be placed in bags with the material with which they are found and carefully labeled as to the depth from which they were obtained.

9. If you do not understand what is wanted, or desire information on any point, write to the Iowa Geological Survey, Iowa City, Iowa.

10. Samples may be boxed and sent to IOWA GEOLOGICAL SURVEY, IOWA CITY, IOWA, EXPRESS COLLECT.

The Iowa Geological Survey desires to assist and cooperate with owners and drillers in every way possible, and will be glad to answer questions and assist in the solution of problems at any time.

PB-18994 SP

WELL RECORD

	N	E	S	W
Well is located.....miles	S	and.....miles	S	from
	W		W	
<i>Wulker</i> in <i>Marion</i>				
(Nearest Town)				(County)
<i>NE NE 1/4 SW 1/4 Sec. 11 T. 74 R. 21</i>				
in the				
Owner <i>Town well</i> <i>W-111 (1953)</i>				
				<i>Test # 19</i>
Postoffice address				
Contractor <i>Art Berrington</i>				
Address <i>Bellevue</i>				
Driller <i>Art</i>				
Well begun....., 19.....;				
completed <i>August</i>, 19 <i>53</i>				
Rig used— <i>Circle</i> Rotary, Jet, or.....				
Depth of well..... <i>92</i>				(Feet)
Size of hole (note total amount of each size)..... <i>6</i>				
Main water supply at..... <i>82-92</i>				(Feet below surface)
Final water head.....				(Feet above or below surface)
Is well pumped?.....				
Yield				(Gallons per minute)
Water level when pumping.....				
Position of well.....				(Upland, valley, side hill, etc.)

Sample No.	DEPTH		THICKNESS
	From	To	
	0	5	
	5	10	
	10	15	
	15	20	
	20	25	
	25	30	
	30	35	
	35	40	
	40	45	
	45	50	
	50	55	
	55	59	
	59	65	
	65	70	
	70	75	
	75	80	
	80	85	

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
top soil
yellow clay
"
"
"
"
"
"
"
"
sandy c.
"
blue clay
"
sand
"
"
"
Basaltic
"

