MASTER CARD - A

9-26-69
RP 1-26-73

STATE	COUNTY	LATITUDE DEG.	LATITUDE MIN	LATITUDE SEC	LATITUDE N. or S	LONGITUDE DEG.	LONGITUDE MIN.	LONGITUDE SEC.	SEQ. NO.
1 2	3 4	5 6	7 8	9 10	11	12 13 14	15 16	17 18	19
19	64	42	11	20	N	093	00	30	1

WELL SCHEDULE

US GEOLOGICAL SURVEY

IOWA DISTRICT WRD

WELL NO. 085-19W-12 AC CO. Marshall

OWNER LISCOMB TOWN WELL (1949) ADDRESS Liscomb

DRILLER Shilhanek DATE DRLD 8-9-49

MAP

SOURCE OF DATA File

DESCRIPTION M. P. Lsd FEET (ABOVE) (BELOW) LSD

CONTINUED FROM ABOVE	ACCURACY	LOCAL WELL NUMBER T	R	E/W	SEC.	QUARTERS	LOCAL USE W-NUMBER	OPTIONAL	OWNER OR NAME	OWNERSHIP	WATER USE	WELL USE	WELL DATA	FREQ. W/L	FIELD CHAR.	HYD LAB.	QW-DATA	QW-FREQ.	PUMPAGE	APERTURE	LOG DATA	CARD DESIG.
	20	21 22 23	24 25	26	27 28	29 30 31 32 33 34	35 36 37 38 39	40 41 42 43 44 45 46 47 48 49 50 51	52 53 54 55 56 57 58 59 60 61 62 63 64 65 66	67	68	69	70	71	72	73	74	75	76	77	78 79	80
	3	085	19	W	12	AC	03795	/1/49 TØWN	LISCØMB	MP	W			Ø			CI				G	A

WELL-DESCRIPTION CARD - B

DUPLICATE CARD A CC 1-19	DEPTH OF WELL	ACCURACY	DEPTH CASED OR FIRST PERF.	DIAM. INCHES	WELL FINISH METH DRILLED	YEAR DRILLED	PUMP SETTING	METH. LIFT	DEEP SHALLOW	POWER	ALTITUDE OF LSD (FEET)	ACCURACY	WATER LEVEL (FEET)	ACCURACY	DATE MONTH	DATE YEAR	YIELD OF WELL (GPM)	METH. DET.	DRAW-DOWN (FEET)	ACCURACY	PUMPING PERIOD (HOURS)	QUALITY OF WATER IRON	SULF.	CHLOR	HARD	SP. COND.	TEMP	DATE SAMPLED	CARD DESIG.
	20 21 22 23	24	25 26 27 28	29 30	31	32 33 34 35	36 37 38	39	40	41	42 43 44 45 46	47	48 49 50 51	52	53 54	55	56 57 58 59 60	61	62 63 64	65	66 67 68	69	70	71	72	73	74 75 76	77 78 79	80
	27	3	110	8	P	94	9	D			1008	7	98	D	8	49	15		593										B

HYDROGEOLOGIC CARD - C

DUPLICATE CARD A CC 1-19	PHYSIOGRAPHY PROV.	PHYSIOGRAPHY SEC.	DRAINAGE BASIN	SUBBASIN	TOPO SETTING	MAJOR AQUIFER SYSTEM	SERIES USGS	SERIES IOS	UNIT	LITHOLOGY	ORIG.	THICKNESS	LENGTH WELL OPEN TO	DEPTH TO TOP OF	MINOR AQUIFER SYSTEM	SERIES USGS	SERIES IOS	UNIT	LITHOLOGY	ORIG.	THICKNESS	LENGTH WELL OPEN TO	DEPTH TO TOP OF	DEPTH TO CONSOLIDATED ROCK	SOURCE	DEPTH TO BASEMENT	SOURCE	SURF. MAT. LITHOLOGY	SURF. MAT. INFIL.	COEF. TRAN SIG FIG	COEF. TRAN X10	COEF. STOR. SIG FIG	COEF. STOR. X10	CARD DESIG.
	20 21	22	23 24 25	26	27	28	29	30	31	32 33	34	35 36 37	38 39 40	41 42 43	44	45	46	47	48 49	50	51 52 53	54 55 56	57 58 59	60 61 62 63	64	65 66 67 68	69	70 71	72	73 74	75	76 77	78	79	80
	12	E	25	D		M	1	K	X	L	6	128		150	M	1	Ø	B	QL	6	52		98	98	C			Q	2						C

CASING AND SCREEN (SIZE, TYPE, INTERVALS):

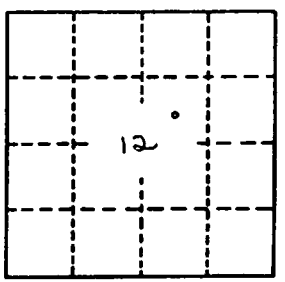
8" hole to ___';
6" to 278'
102'9" of 8" csg (0-102'9")
59'7" of 6" set w/ 3'6" overlap
perf at 110' and at 158'

CODED BY Mac NE DATE 7-26-74

PUNCHED BY Allaine DATE 9-20-74

VERIFIED BY DATE

SKETCH ON REVERSE: YES NO



WELL NO. 085-19W-12 AC

3795

pop 280 (1962)

Name Liscomb town well (1949)

Loc. SW NE 12-85-19, Marshall Co.

T.D. 278'

Drilled Shilhanek July-Aug 1949

Log W-3795 Jeffords

Casing 102'9" of 8" csg 0-102'9"; 59'7" of 6" pipe set with 3½' overlap, perf. at 110' and 158'

Prod. data

SWL 110' or 98' ??

PWL 157

Yield 15 gpm

18 GPM SUB PUMP SET AT 165'

S W/L - 90' - MID JULY 62

Water analysis. No. 1668 (1080) 4/9/59; No. 22566 (3379) 5/29/51

No. 2097 (3977) 1/31/63

88 users

Check SWL OK

R. Cobble to get meter readings

$\frac{.32}{163} = .20 \times 10^{-2}$

.32 Ap. cap

47 | 15.0 | 141 | 90

163 | .32000 | 326

1008 - 98 = 910 piez.

Elev. 1008'

Formation	Depth	Top	Base	Thick.
Burl.	98	910	858	52
Gil. City	150	858	833	25
Hampton	175	833	798	35
Maynes Crk.	210	798	758	40
Chapin	250	758	746	12
Pros. Hill	262	746	735	11
Maple Mill	273	735		

Info from R. Cobler 10/62
Liscomb pop 280 serves about 260

Domestic
90 users about 2 200 000 g/yr
School 297 000 "
2 497 000
Hotchery 72 000 "
Total 2 569 000 "

Domestic + school 2497000 "
or 6936 gpd
or 26.7 gpd/per.

273
98
175

27
260 | 7136
520
1936
1820
116

7136 gpd
360 | 2569000
2520
490
360
1300
1080
2200

WELL RECORD

Well is located.....miles N E W and.....miles N E W from

Liscomb in ....., (Nearest Town) (County)

in the ¼ ¼ Sec. T. R.

Owner..... Well No.....

Postoffice address .....

Contractor .....

Address .....

Driller .....

Well begun July 13, 19 49

completed Aug. 9, 19 49

Rig used—Cable, Rotary, Jet, or.....

Depth of well 278 (Feet)

Size of hole (note total amount of each size) 8" to 158 (hole)

6" to 278

Main water supply at 110' (Feet below surface)

Final water head 98' below (Feet above or below surface)

Is well pumped? yes

Yield 15 (Gallons per minute)

Water level when pumping 157'

Position of well..... (Upland, valley, side hill, etc.)

102' 9" of 8" Surf.

59' 7" of 6" ± 7½' top

Sample No.	DEPTH		THICKNESS
	From	To	
	0	34	
	34	65	
	65	70	
	70	85	
	85	98	
	98	110	
	110	140	
	140		
Perforated at 110' & 158'			

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
yel clay
bl clay
Sd
blu cl
yel clay
Bx & mud
"
hd Bx

Marshall Co.
Liscomb Pws
well folder

June 27, 1949

Mr. H. V. Pedersen
Supt. and General Manager
Marshalltown Water Works
Municipal Building
Marshalltown, Iowa

Dear Mr. Pedersen:

In your recent conversation with Mr. Jeffords, an interest was expressed in the probable geologic section to be encountered in a public-supply well at Liscomb. Accordingly, we have prepared a forecast to the top of the Maquoketa shale from data in the Geological Survey.

Assuming a starting altitude of about 975 feet, the anticipated section is as follows:

Formation and Description	Thickness (feet)	From (feet)	To (feet)
Pleistocene system (Drift - stony clay with some thin sand and gravel layers)	100	0	100
Mississippian system			
Hampton formation (Limestone and dolomite, cherty in lower part)	130	100	230
Maple Mill formation (shale, some dolomite)	140	230	370
Devonian system			
Lime Creek formation (dolomite and shale)	150	370	520
Cedar Valley-Wapsipinicon formations (Limestone and dolomite with gypsum in lower part)	420	520	940
Silurian system (Undifferentiated cherty dolomite)	90	940	1030
Ordovician system			
Maquoketa formation (shale)	250	1030	----

Seemingly, some farm wells in the vicinity of Liscomb obtain water from sand and gravel beds in the Pleistocene. These water-bearing strata, however, may not occur within the town area.

The Mississippian limestones and dolomites above the Maple Mill shale comprise a very promising source of water and a number of wells in Marshall County obtain more than 100 gallons a minute from these rocks. This water is moderately to quite hard, and it may contain important quantities of non-carbonate hardness.

If deeper drilling is necessary, some water having a fair quality may be encountered in the upper part of the Cedar Valley formation below the Maple Mill shale. Water in the Wapsipinicon formation probably is rather highly mineralized owing to the presence of the gypsum. Highly mineralized water occurs also in the Silurian cherty dolomites.

The available data indicate that Liscomb should be able to develop an adequate supply of water from the Mississippian limestones if suitable sand and gravel beds are lacking.

If we can be of additional assistance to you in this matter, please write us.

Very truly yours,

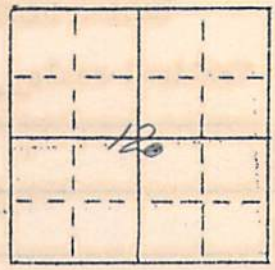
H. G. Hershey

HGH:RMJ:AEH

W-3795

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

RECORD OF WELL



Location:

Town: Liscomb (N E / S W): County Marshall

NWNWSE sec. 12 T 85 N., R. 19 W. Twp.

Well name and number Liscomb Town Well

Owner Town of Liscomb Address

Tenant Address

Contractor Shilhanek Address Tama, Iowa

Drillers Shilhanek

Drilling dates 7-13-49 to 8-9-49

Well data:
Elevations: Drilling curb 1008' feet; Land surface feet

Determined by

Topographic position upland

Total depth: Reported 278 feet, Measured feet

Drilling method Cable tool

Hole and casing data 8" hole from 0 to 158. 6" hole from 158' to 278'

102'9" of 8" casing from 0' to 102'9"

59'7" of 6" csg set with 3'6" overlap

Csg perf. at 110' & 158'

PJH - according to drillers notebook in IGS file SWL = 98' not 110'

Original depth to water 110' ft. below ~~above~~ /s Date

Original elevation of water level ft.; Source of data

Sources of water: Principal ; Others

Production data: Date 8-9-49

Static depth to water 98' Measuring point ls

Pumping level 157' at ls g.p.m.

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

WATER ANALYSES (in parts per million)

Date samples				
Sampled by				
Total solids				
Insoluble matter				
Alkalinity (Meo)				
Alkalinity (Phn)				
pH				
Fe_2O_3+ Mn_2O_3 +Al_2O_3				
Alkali as sodium				
Calcium				
Magnesium				
Iron (unfiltered)				
Manganese				
Nitrate				
Fluoride				
Chloride				
Sulfate				
Bicarbonate				
Hardness (ppm)				
Hardness (gpg)				

Remarks _____

Laboratory data: Sample storage location CF 5-10

Sample range 0-278 No. spls. 56 No. dupls. & cond. 54 Good

Spls. prepared by EMR+RPC Washed range 135-278 by EMR+RPC

Driller's log and cond. ✓

Insoluble residues: Prepared by _____ Studied by _____ Strip log _____

Microscopic study _____ strip log _____

Gen. log _____ Correl. by RMJ Sept 7, 1949

IOWA PRESS
CLIPPING BUREAU
Des Moines, Iowa

Times-Republican
Marshalltown, Iowa

AUG 30 1949

LEGAL NOTICES

NOTICE OF PUBLIC HEARING ON PLANS, SPECIFICATIONS AND FORM OF CONTRACTS FOR CONSTRUCTION OF A WATERWORKS DISTRIBUTION SYSTEM, AND A COMPLETE PUMPING AND PRESSURE TANK SYSTEM FOR THE TOWN OF LISCOMB, IOWA, FIXING TIME FOR HEARING OBJECTIONS THERETO AND NOTICE TO BIDDERS THEREON.

Notice is hereby given that the Council of the Town of Liscomb, Marshall County, Iowa, will meet at the town hall in said town on the 30th day of September, 1949, at 7:30 o'clock P.M., at which time it will hold a public hearing for the adoption of and consider objections to the proposed plans, specifications and form of contracts for improvements consisting generally of the following:

Section A.

Providing for a waterworks distribution system.

Such system to consist of approximately 130 feet of 6 inch pipe, 4250 feet of 4 inch pipe and 6645 feet of 2 inch pipe together with necessary fittings, valves, hydrants, joint materials and valve boxes.

Section B.

Providing for a complete pumping and pressure tank system.

Such system to consist of an electrically operated deep well turbine pump, an air pressure tank together with all the connecting pipe, valves and fittings, an air pressure volume control and water column; all the electrical wire, conduit, switch cutouts, fuses and protecting devices, start and stop push buttons and all other necessary appurtenances for a complete and satisfactory operating pumping and pressure tank unit.

All in accordance with plans, specifications, instructions to bidders and form of contracts now on file in the office of the town clerk, and to which reference is made herein for more complete and detail description of the improvements therein contemplated and to the terms and conditions thereof.

Notice to Bidders.

That on the same date and at the same place, immediately upon conclusion of the hearing referred to herein, the council of said town will remain in session and consider bids filed with the town clerk, on or before 7:30 o'clock P. M., on said date for the separate sections of the work provided for in said plans, specifications and form of contracts.

Contracts will be awarded seperately on the separate sections of the project as follows:

Section A.

Providing for a waterworks distribution system.

Such system to consist of approximately 130 feet of 6 inch pipe, 4250 feet of 4 inch pipe and 6645 feet of 2 inch pipe together with necessary fittings, valves, hydrants, joint materials and valve boxes.

For more detail reference is made to plans, specifications, instructions to bidders, form of contract, as are now filed, and which plans, specifications, instructions to bidders and form of contract, are by reference incorporated into and made a part of the contract awarded therefor, and the successful bidder will be held to a strict compliance with all plans, specifications, instructions to bidders, and terms and conditions of the contract awarded.

Section B.

Providing for a complete pumping and pressure tank system.

Such system to consist of an electrically operated deep well turbine pump, an air pressure tank together with all connecting pipe, valves and fittings, an air pressure volume control and water column, all the electrical wire, conduit, switch cutouts, fuses and protecting devices, start and stop push buttons and all other necessary appurtenances for a complete and satisfactory operating pumping and pressure tank unit.

For more detail as to the foregoing, reference is made to plans, specifications, instructions to bidders, form of contract, as are now filed, and which plans, specifications, instructions to bidders and form of contract, are by reference incorporated into and made a part of the contract awarded therefor, and the successful bidder will be held to a strict compliance with all plans, specifications, instructions to bidders, and terms and conditions of the contract awarded.

The contractor shall give bond in a sum equal to the contract price, in form supplied by the town, obligating the contractor and his bondsmen to the faithful performance of the contract and to guarantee the materials used, the equipment furnished and the improvement in good repair for a period of one year from date of acceptance by the town, and to punctually pay all laborers employed on said work and for all materials furnished the improvement.

Contracts will be let on each section of the improvement to the lowest responsible bidder, as determined by the council, upon recommendation of the engineer, that the equipment and materials to be furnished meet the plans and specifications called for. The Town reserves the right to reject any and all bids and readvertise if all bids are rejected.

Copies of the plans, specifications, and instructions to bidders are on file with the town clerk, Liscomb, Iowa, and with the engineer, H. V. Pedersen, Marshalltown, Iowa, and may be obtained upon depositing the sum of $10.00, which deposit will be refunded upon return of complete sets in good condition within ten days after an award of the contract or contracts has been made.

Work will be commenced upon the separate sections of this improvement and completed accordingly as is provided in the instructions to bidders.

Payment on the contract for Section "A" of the improvement will be made in full to the contractor, in cash from the proceeds of the sale of general obligation bonds of the Town of Liscomb, Iowa, and for Section "B" of the improvement, payment will be made in full to the contractor, in cash from the proceeds of the sale of Waterworks Revenue Bonds, or by delivery of Waterworks Bonds, payable as provided in and according to the provisions of Chapter 397, Code, 1946, upon final completion, inspection and acceptance of the improvements by the Town Council.

All bids will be opened by the Council in open council meeting at the time above fixed and the proposals for the separate sections of the improvement will be considered and contracts awarded at that time or at such subsequent time to which the council may adjourn.

Published by order of the Council of the Town of Liscomb, Iowa.

M. C. BARNES,
Town Clerk.

Marshall

IOWA PRESS
CLIPPING BUREAU
Des Moines, Iowa

Times-Republican
Marshalltown, Iowa

FEB 7 - 1950

Liscomb's Water Program Progresses

Liscomb — (Special) — Installation of water mains will begin March 15 or as soon after that date as weather is suitable, the town council was told Monday night. Representatives of the Pella Construction company said materials are on hand and offered to put in service connections when the mains are installed.

Homeowners who want the connections made are asked to notify Maurice Barnes, town clerk, or a member of the council. The well for the town water system has been dug and the tank is installed but the building to house it has not been completed because of the steel shortage.

Bonds to finance the improvement will be sold at the council's next meeting March 6. That will be the last regular meeting of the present council. No candidates have announced for the municipal election to be late in March.