

# ALTON WELL & CONCRETE company inc.

1340

Box F  
Alton, Iowa 51003  
(712) 756-8818

## WELL INFORMATION

CONTRACT Southwest Orange City  
1992 Orange City Water Improvements DATE May 28, 1992

WELL NUMBER SW09. 1 AT TEST HOLE NUMBER S.W.O.C. 1 DATE OF WELL COMPLETION May 7, 1992

WELL LOCATION Sioux Cty. Sherman Twp. Sect. 35, NW $\frac{1}{4}$ , NW $\frac{1}{4}$ , NW $\frac{1}{4}$

DRILLER Larry Merriman - Larry Vande Brake

	<u>DIAMETER</u>	<u>LENGTH</u>	<u>WALL THICKNESS</u> <u>OR GAUGE:</u>	<u>MATERIAL</u>	<u>TYPE</u>	<u>SIZE SLOT</u> <u>OPENINGS</u>
WELL CASING	<u>8"</u>	<u>361</u>	<u>Sch. 40</u>	<u>Black pipe</u>	<u>welded</u>	<u>none</u>
WELL CASING	<u>5"</u>	<u>20'-7</u>	<u>Sch. 10</u>	<u>Stainless</u>	<u>threaded</u>	<u>none</u>
SCREEN	<u>5"</u>	<u>4'-10</u> <u>97'-6</u>	<u>std.</u>	<u>steel</u> <u>Stainless</u>	<u>threaded</u>	<u>.020</u>
SCREEN: BRAND	<u>Johnson</u>		FITTINGS <u>threaded</u>			
BOTTOM	<u>S.S. Plate bottom</u>		DEPTH SCREEN SET <u>354'-6 to 452'</u>			
GRAVEL PACK: SIZE	<u>#00 Muscatine</u>		QUANTITY USED <u>2300 lbs.</u>			
DEPTHS GRAVEL PACK SET	<u>335' to 457</u>		INSTALLATION METHOD <u>tremie pipe</u>			

	<u>TYPE OF GROUT</u>	<u>DEPTHS PLACED</u>
GRAVEL PACK: SIZE	<u>neat cement</u>	<u>0 - 360'</u>

BORE HOLE DIAMETER 13 $\frac{1}{2}$ " DRILLING METHOD mud rotary

DEPTH OF WELL FROM NATURAL GROUND LEVEL 457'

WELL HEAD COMPLETION TYPE 1 $\frac{1}{2}$ ' above ground level and capped

WELL HEAD EXTENTION ABOVE GROUND 1 $\frac{1}{2}$ '

FINAL DEPTH OF WELL FROM TOP OF WELL HEAD TO BOTTOM 358 $\frac{1}{2}$ '

ADDITIONAL COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



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#33110

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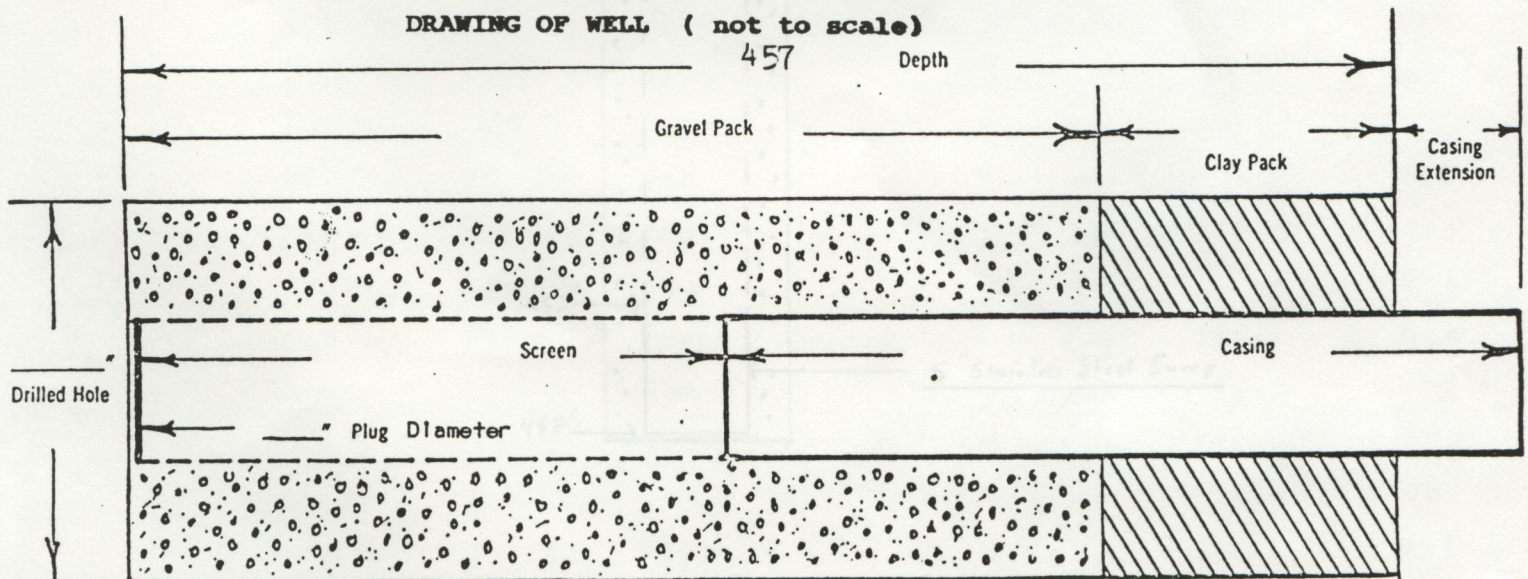
CONTRACT Southwest Orange City, 1992

WELL NUMBER S.W.O.C. 1

### LOG OF WELL FROM GROUND LEVEL

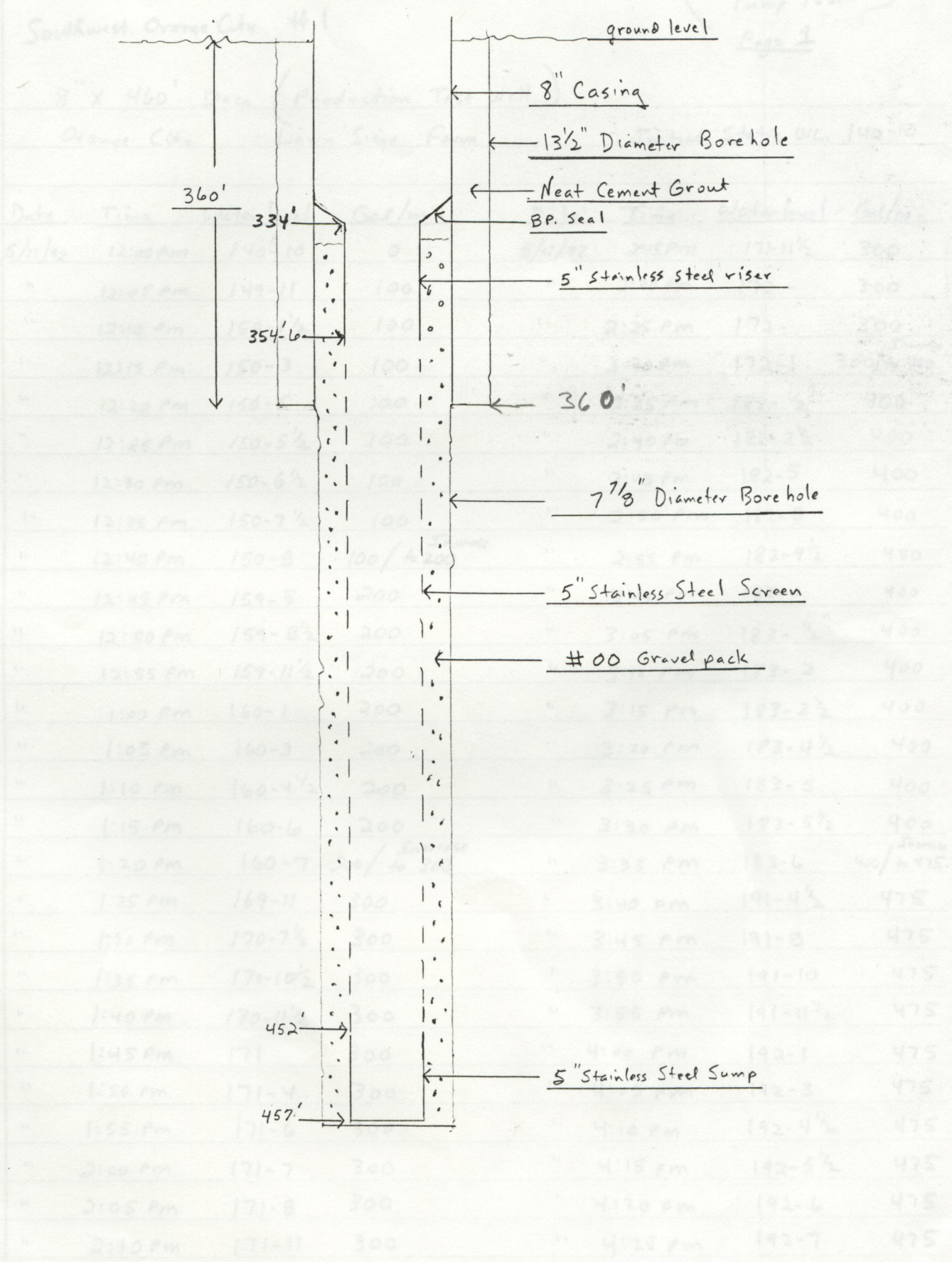
<u>FEET</u>		<u>FEET</u>	<u>FORMATION</u>
0		3	top soil
3	TO	22	yellow sandy clay
22		62	sandy blue clay
62	TO	96	sand
96		101	sandy gray clay
101	TO	108	sandy
108		203	sandy gray clay
203	TO	210	sand
210	TO	220	blue & gray clay
220	TO	240	dark gray clay
240	TO	260	sandy gray clay
260	TO	294	sand stone
294	TO	308	shale with sandstone streaks
308	TO	314	sandstone
314	TO	336	shale with sandstone streaks
336	TO	457	sandstone

DRAWING OF WELL (not to scale)





DRAWING OF WELL ( not to scale )





WELL CONSTRUCTION REPORT  
SAMPLE TRACKING FORM

WNUMBER: 33110 DATE RECEIVED 07/01/92  
OWNER: ORANGE CITY, CITY OF {S.W.O.C. #1 (PROD.)}  
LOCATION: SIOUX COUNTY, IOWA T94N R45W SECTION 35 BBB  
LATITUDE: 425524 LONGITUDE: 960802 LL ACC: B  
ELEVATION: 1340 ELEV ACC: QUAD NAME: MAURICE {F05}  
TOTAL DEPTH: 457 BEDROCK DEPTH: 260 AQUIFER: Bedrock ABANDONED:  
TYPE SAMPLE(S): chip STRAT DATA: 9 GEOPHYSICAL DATA: No  
WELL TYPE: Municipal PUMP TEST: Yes WATER ANALYSIS:  
DRILLER: ALTON WELL & CONCRETE CO. DRILL DATE: 05/07/92 DRILL METHOD: Rotary  
STRIPLOG BY/GEOLOGIST: STRIPLOG DATE/STUDY DATE: / / MIRCOFILMED:  
REMARKS: OBSERVATION WELL W#33011 LOCATED 100' S OF THIS WELL.

HYDROLOGIC INFORMATION

MAIN WATER TOP: MAIN WATER BOTTOM:  
SWL: 141 (ft) YIELD: 475 (gpm) PUMPING LEVEL: 196 (ft)

CASING SCHEDULE

NUMBER OF CASING STRINGS: 2

(1) DIAM: 8.00 (in) TYPE: STEEL DEPTH TOP: -1.5 (ft) DEPTH BTM: (ft) AMT: 361.0 (ft)  
 (2) DIAM: 5.00 (in) TYPE: STEEL DEPTH TOP: (ft) DEPTH BOT: 354.5 (ft) AMT: 20.5 (ft)

GROUT SCHEDULE

NUMBER OF GROUT STRINGS: 1

(1) GROUT TYPE: CEMNT GROUT TOP: (ft) GROUT BOTTOM: 360 (ft)

SCREEN SCHEDULE

NUMBER OF SCREENS: 1

PACKED: Yes

(1) DIAM: 5.00 (in) SLOT: 0.020 (in) DEPTH TOP: 354.5 (ft) DEPTH BOTTOM: 452.0 (ft) AMT: 98 (ft)



SAMPLE TRACKING FORM

SAMPLE LOCATION

NUMBER SAMPLES: 43 INTERVAL: (ft) NUM BOXES: 1  
SAMPLE TOP: (ft) SAMPLE BOTTOM: 457 (ft) WASH TOP: (ft) WASH BOTTOM: (ft)  
GAPS: 200-203  
CHIP SAMPLE STORAGE: OD2-788 CUT DATE: 07/01/92

ELEVATION: 1340  
INITIAL DEPTH: 457  
TYPE SAMPLE(S): chip  
WELL TYPE: Municipal  
DRILLER: ALTON WELL & CONCRETE CO.  
SERIFLOP BY/GEOLOGIST:  
REMARKS: OBSERVATION WELL INSTALLED LOCATED 100' S OF TRAIL WELL.

HYDROLOGIC INFORMATION

DEEP WATER TOP: SHL: 141 (ft)  
MAIN WATER BOTTOM: YIELD: 475 (gpm)  
PUMPING DEPTH: 796 (ft)

CASING SCHEDULE

NUMBER OF CASING STRINGS: 2  
(1) DIA: 8.00 (in) TYPE: STEEL DEPTH TOP: -1.5 (ft) DEPTH BOTTOM: 354.0 (ft) AMT: 352.5 (ft)  
(2) DIA: 5.90 (in) TYPE: STEEL DEPTH TOP: (ft) DEPTH BOTTOM: 354.0 (ft) AMT: 20.5 (ft)

GROUT SCHEDULE

NUMBER OF GROUT STRINGS: 1  
(1) GROUT TYPE: CEMENT GROUT TOP: (ft) GROUT BOTTOM: 350 (ft)

SCREEN SCHEDULE

NUMBER OF SCREENS: 1  
(1) DIA: 5.90 (in) SLOT: 0.020 (in) DEPTH TOP: 354.5 (ft) DEPTH BOTTOM: 452.0 (ft) AMT: 90 (ft)