

Note: Well was developed by air while drilling in Jordan - a new technique of ↓

VARNER WELL & PUMP CO.
DUBUQUE, IOWA

This is the final
24-hr test

WELL TEST DATA SHEET

Job Indianola, Iowa

Location #11 Well

Dia. of well 18"

Depth of well 2435'

Length of airline 355'

Non-pumping level 188' *airline reading*

Orifice size 10" x 8½" Purdue University Orifice

Date tested June 17, 1976

Tested by Shive-Hattery, Varner, & State Geological Survey

Pump used: Driver 16V71 GMC with 3-4 Gear

Column and shaft 8" x 1½"---355'

Bowls 5-stage, 14 LA

Manufacturer Peerless

Serial No. None

TIME	PIZOMETER READING (IN.)	G. P. M.	AIR GAUGE READING (FEET)	Direct PUMPING LEVEL reading gauge	DRAWDOWN	DISCH. PRESSURE		TOTAL PUMPING HEAD	TEMP.	REMARKS
						LBS.	FEET			
Pump on	0	0		gauge	0		0			START OF TEST
4:00 PM										
4:01	5½"	800		215'	27'					Water temp. 79.7 deg.
4:02	5½"	800		224'	36'					
4:03	5½"	800		226'	38'					
4:03-½	5½"	800		225'	37'					
4:04	5½"	800		213'	25'					
4:04-½	5½"	800		212'	24'					
4:05	5½"	800		211'	23'					
4:06	5½"	800		209'	21'					
4:08	5½"	800		208'	20'					
4:09	5½"	800		208'	20'					
4:10	5½"	800		208'	20'					
4:15	5½"	800		208'	20'					
4:17	5½"	800		208'	20'					
4:30	5½"	800		209'	21'					
SHUT DOWN FOR VALVE REPAIR										
5:17	8"	1000		225'	37'					
5:20	8"	1000		209'	21'					
5:24	8"	1000		211'	23'					
5:28	8"	1000		211'	23'					
5:35	8"	1000		208'	20'					
5:40	8"	1000		208'	20'					
5:45	8"	1000		208'	20'					
5:55	8"	1000		208'	20'					
6:05	8"	1000		208'	20'					

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Non-pumping level 188'

Manufacturer Peerless

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Serial No. None

TIME	PIZOMETER READING (IN)	G. P. M.	AIR GAUGE READING (FEET)	Direct Reading Level reading gauge	DRAWDOWN	DISCH. PRESSURE		TOTAL PUMPING HEAD	TEMP.	REMARKS
						LBS.	FEET			
	0	0			0					START OF TEST
6:20	8"	1000		208'	20'					Water Clear
6:30		SHUT DOWN VALVE TROUBLE----REMOVE VALVE								
6:35	11 1/2"	1200		212'	20'					
6:37	11 1/2"	1200		212'	20'					
6:39	11 1/2"	1200		212'	20'					
6:40	11 1/2"	1200		212'	20'					
6:45	11 1/2"	1200		213'	20'					
6:52	11 1/2"	1200		214'	20'					
6:58	11 1/2"	1200		214'	20'					
7:05	11 1/2"	1200		215'	20'					
7:10	11 1/2"	1200		215'	20'					
7:15	11 1/2"	1200		215'	20'					
7:23	11 1/2"	1200		215'	20'					
7:30	11 1/2"	1200		215'	20'					
7:45	11 1/2"	1200		215'	20'					
8:00	11 1/2"	1200		215'	20'					
8:15	11 1/2"	1200		215'	20'					
8:30	11 1/2"	1200		215'	20'					
8:40	18"	1500		227'	20'					
8:45	18"	1500		227'	45'					
9:00	18"	1500		228'	45'					
9:25	18"	1500		228'	45'					
9:30	18"	1500		228'	40'					
9:45	18"	1500		229'	40'					
10:00	18"	1500		229'	40'					

WELL TEST DATA SHEET

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Length of airline 355'

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Non-pumping level 188'

Manufacturer Peerless

Orifice size 10" x 8 1/2" Purdue University Orifice

Serial No. None

TIME	PIZOMETER READING (IN.)	G. P. M.	AIR GAUGE READING (FEET)	Direct PUMPING LEVEL reading gauge	DRAWDOWN	DISCH. PRESSURE		TOTAL PUMPING HEAD	TEMP.	REMARKS
						LIBS.	FEET			
	0	0			0		0			START OF TEST
10:30	18"	1500		229'	41'					
11:00	18"	1500		230'	42'					
11:30	18"	1500		230'	42'					
12:00 AM	18"	1500		230'	42'					
12:30	18"	1500		230'	42'					
1:00	18"	1500		230'	42'					
1:30	18"	1500		230.5'	42'					
2:00	18"	1500		230.5'	42'					
2:30	18"	1500		231'	43'					
3:00	18"	1500		232'	44'					
3:30	18"	1500		233'	45'					
4:00	18"	1500		233'	45'					
4:30	18"	1500		233'	45'					
5:00	18"	1500		233'	45'					
5:30	18"	1500		233'	45'					
6:00	18"	1500		233'	45'					
6:30	18"	1500		233'	45'					
7:00	18"	1500		233'	45'					
7:30	18"	1500		234'	46'					
8:00	18"	1500		233'	45'					Collected Samples
8:30	18"	1500		234'	46'					
8:55	18"	1500		236'	48'					
8:57	29"	1900		251'	63'					
9:00	28"	1850		252'	64'					
9:05	28"	1850		252'	64'					

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Serial No. None

TIME	PIZOMETER READING (IN.)	G. P. M.	AIR GAUGE READING (FEET)	Direct - PUMPING LEVEL reading gauge	DRAWDOWN	DISCH. PRESSURE		TOTAL PUMPING HEAD	TEMP.	REMARKS
						LBS	FEET			
	0	0			0					START OF TEST
9:10	28"	1850		252'	64'					
9:15	28"	1850		252'	64'					
9:30	28"	1850		252'	64'					
10:00	28"	1850		252'	64'					
10:30	28"	1850		253'	65'					
11:00	28"	1850		254'	66'					
11:30	28"	1850		253'	65'					
12:00 PM	28"	1875		254'	66'					
12:30	28"	1875		254'	66'					
1:00	28"	1875		255'	67'					
1:30	28"	1875		255'	67'					
2:00	28"	1875		255'	67'					
2:30	28"	1850		255'	67'					
3:00	28"	1850		255'	67'					
3:30	28"	1850		255'	67'					
4:00	28"	1850		254'	66'					
4:30	28"	1850		255'	67'					
5:00	28"	1850		255'	67'					
5:30	28"	1850		255'	67'					
6:00	28"	1850		255'	67'					
6:30	28"	1850		255'	67'					= sp. cap. 27.6 gpm/ft. (PSH 6/24)
6:31	0	0		209'						
6:32				206'						
6:33				202'						
6:34				200'						

VARNER WELL & PUMP CO.
DUBUQUE, IOWA

WELL TEST DATA SHEET

*This test is
not considered
reliable*

Job Indianola, Iowa

Date tested June 2, 1976

Location Well #11

Tested by Varner Well & Pump Co.

Dia. of well 18" x 12 $\frac{1}{4}$ "

Pump used: Driver (1671) GMC Detroit Diesel

Depth of well 2435'

Column and shaft 8" x 1 $\frac{1}{2}$ "

Length of airline 495'

Bowls 9 stage

Non-pumping level 262'

Manufacturer Peerless

Orifice size 10" x 6 $\frac{1}{2}$ "

Serial No. N/A

TIME	PIZOMETER READING (IN.)	G. P. M.	AIR GAUGE READING (FEET)	PUMPING LEVEL	DRAWDOWN	DISCH. PRESSURE		TOTAL PUMPING HEAD	TEMP.	REMARKS
						LBS.	FEET			
8:15	0	0			0		0			START OF TEST
8:16	50"		185	310	48					
8:17	37"	1000	195	300	38					
8:18	37"	1000	195	300	38					
8:19	37"	1000	195	300	38					
8:20	37"	1000	195	300	38					
8:25	37"	1000	194	301	39					
8:30	37"	1000	194	301	39					
8:35	31"	920	194	301	39					
8:40	37"	1000	190	305	43					
8:45	38"	1020	194	301	39					
8:50	37"	1000	194	301	39					
8:55	37 $\frac{1}{2}$ "	1000+	193	302	40					
9:00	37 $\frac{1}{2}$ "	1000+	193	302	40					
9:05	37 $\frac{1}{2}$ "	1000+	193	302	40					
9:10	37 $\frac{1}{2}$ "	1000+	193	302	40					
9:15	37 $\frac{1}{2}$ "	1000+	193	302	40					
9:30	37 $\frac{1}{2}$ "	1000+	193	302	40					
9:45	37"	1000	194	301	39					
10:00	37"	1000	194	301	39					
10:15	37"	1000	194	301	39					
10:45	37"	1000	194	301	39					
11:15	37"	1000	194	301	39					
11:45	37"	1000	194	301	39					
12:15	37"	1000	194	301	39					Increase GPM
12:45	45"	1100	190	305	43					

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Serial No. N/A

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						LBS.	FEET			
	○	○			○		○			START OF TEST
12:16	45"	1100		305	43'					
12:30	45"	1100		305	43'					
12:45	45"	1100	190'	305	43'					
1:15	45"	1100	189'	306	44'					Increase GPM
1:17	60"	1270	182'	313	51'					
1:30	60"	1270	182'	314	52'					
1:45	60"	1270	182'	314	52'					Decrease GPM
1:46	45"	1100	187'	308	46'					
1:50	68"	1380	179'	316	54'					
2:00	68"	1380	179'	316	54'					
2:15	68"	1380	179'	316	54'					
END PUMPING TEST #1										
RECOVERY TEST:										
2:18			210'							
2:19			211'							
2:20			210'							
2:21			210'							
2:22			210'							
2:27			211'							
2:32			211'							
2:37			211'							
2:42			211'							
2:47			211'							
2:52			211'							

