STATE ENGINEER
Salem, Oregon

16080
MARI.....

Well Record

GR- 1135

STATE WELL NO. 10/2W-7N(2)
COUNTY Marion
APPLICATION NO. GR- 1174

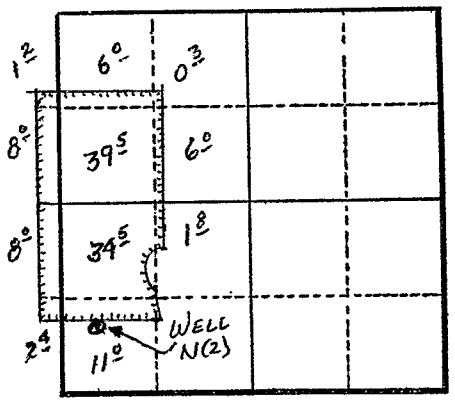
OWNER: S. Burton Fergusen
MAILING ADDRESS: Rt. 1, Box 207
CITY AND STATE: Jefferson, Oregon

LOCATION OF WELL: Owner's No.

SW ¼ SW ¼ Sec. 7 T. 10 ~~N~~ S., R. 2 ~~E~~ W., W.M.

Bearing and distance from section or subdivision corner 515' E. & 894' N. of SW cor. Sec. 7.

Altitude at well 250 ft.



Section 7

TYPE OF WELL: Drilled Date Constructed 1951
Depth drilled 26 ft. Depth cased 26 ft.

CASING RECORD:
10 inch

FINISH:
6 in. perforations ½ in. wide from 16 to 26 ft.

AQUIFERS:

WATER LEVEL:
6 ft. 3.68' (6-20-58)

PUMPING EQUIPMENT: Type F. M. 3 in. Cent. H.P. 30
Capacity 460 G.P.M.

WELL TESTS:
Drawdown ft. after hours G.P.M.
Drawdown ft. after hours G.P.M.

USE OF WATER Irrigation Temp. °F., 19
SOURCE OF INFORMATION G. R. Record
DRILLER or DIGGER Marion West
ADDITIONAL DATA:
Log Water Level Measurements ✓ Chemical Analysis Aquifer Test

REMARKS:

Log:		
	Sandy loam	0 to 6 ft.
	Gravel	6 to 26 ft.

Irrigation of 112.7 acres.

State Printing 89316

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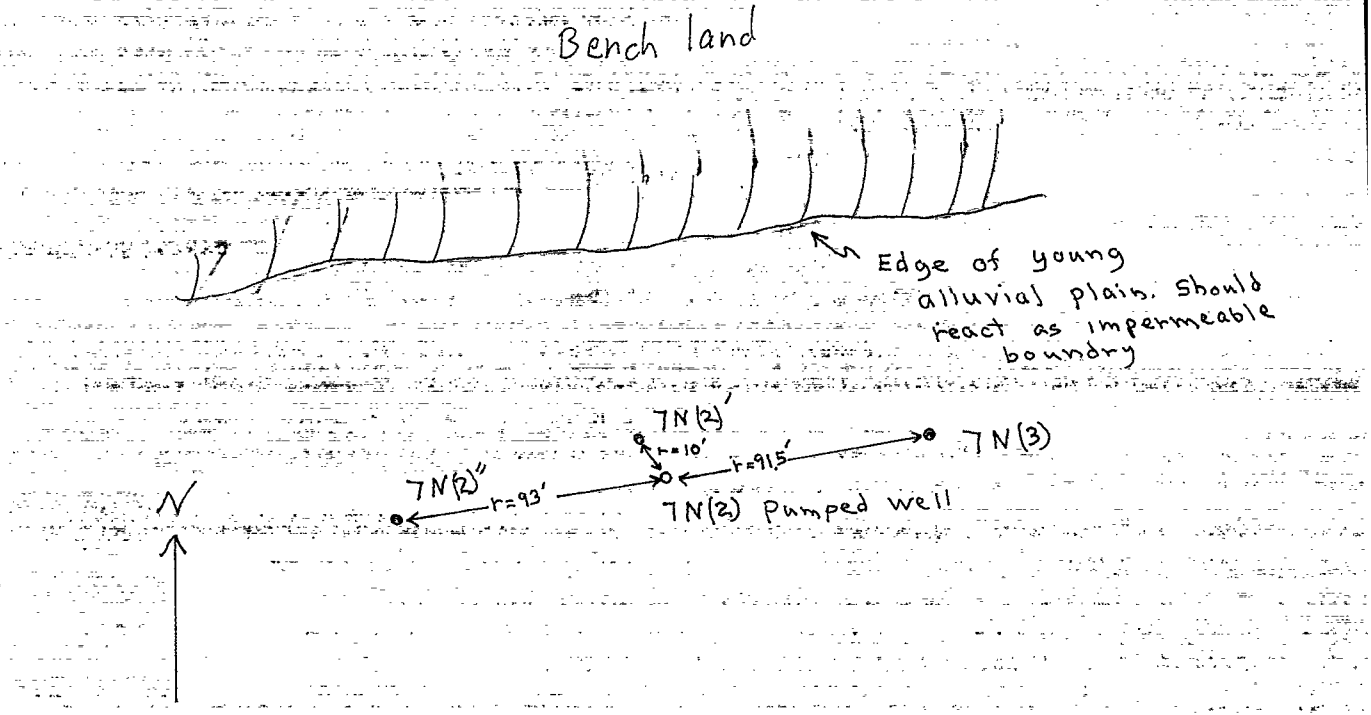
SALEM, OREGON

10/2W-7N(2)
MARION CO.



Sketch showing location of observation wells with respect to well 10/2W - 7N(2)

STATE ENGINEER
SALEM, OREGON

Well No. 10/2W - 7N(2)
County: MARION

AQUIFER TEST (Pumped Well)

Observation Well No. 10/2W - 7N(2) r = 0 (ft) r^2 =
Date of test 10/23/58 10/24/58 Average Q = 650 gpm S.W.L. 5.29
Pump on 8:30.5 AM 10/23/58 Pump off 8:30 AM 10/24/58 Hours Pumped 24
Match Points: s= r^2/t Wu u =

Time	Time since pumping started t_m (minutes)	Time since pumping started t_d (days)	Water Level (feet)	Drawdown (feet) (s)	r^2/t_d
	6	.00416	8.34	3.05	
	12	.00833	8.55	3.26	
	18	.0125	8.73	3.44	
	21	.0146	8.83	3.54	
	29	.0201	8.98	3.69	
	35	.0243	9.15	3.86	
	46	.0319	9.37	4.08	
	54	.0375	9.48	4.19	
	62	.0430	9.58	4.29	
	82	.0569	9.78	4.49	
	105	.0729	9.91	4.62	
	117	.0812	9.98	4.69	
	143	.0995	10.16	4.87	
	176	.122	10.22	4.93	
	199	.138	10.33	5.04	
	225	.156	10.38	5.09	
	243	.168	10 48	5.19	

Nonequilibrium formula:

$$T = \frac{114.6\ Q\ W(u)}{s}$$

$$S = \frac{u\ T}{1.87\ r^2/t}$$

Modified nonequilibrium formula:

$$T = \frac{264\ Q}{\Delta s}$$

$$S = \frac{0.3\ T\ t_o}{r^2}$$

T = _____ gpd/ft

S = _____

STATE ENGINEER
SALEM, OREGON

Well No. 10/2W-7N(2)
County: MARION

AQUIFER TEST

Observation Well 10/2W-7N(2)

Time	Time since pumping started t_m (minutes)	Time since pumping started t_d (days)	Water Level (feet)	Drawdown (feet)(s)	r^2/t_d
	305	.212	10.67	5.38	
	345	.240	10 78	5 49	
	405	.281	10 95	5 66	
	476	.330	11 17	5 88	
	509	.354	11 23	5 94	
	1432	996	1302	7 73	

STATE ENGINEER
SALEM, OREGON

Well No. 10/2W-7N(2)
County: MARION

AQUIFER TEST

Observation Well No. 10/2W-7N(2)' r = 10 (ft) r^2 = 100
Date of test 10-23-58, 10-24-58 Average Q = 650 gpm S.W.L. 4.77
Pump on 8:30.5 AM 10-23-58 Pump off 8:30 AM Hours Pumped 24
Match Points: s= _____ r^2/t _____ Wu _____ u = _____

Time	Time since pumping started t_m (minutes)	Time since pumping started t_d (days)	Water Level (feet)	Drawdown (feet) (s)	r^2/t_d
8:32.5 AM	2	.00139	6.35	1.58	6.6×10^4
8:34.5	4	.00278	6.75	1.98	3.31
8:35.5	5	.00347	6.73	1.96	2.65
8:38.5	8	.00556	6.95	2.18	1.66
8:40.5	10	.00694	7.02	2.25	1.32
8:41.5	11	.00763	7.05	2.28	1.21
8:44.5	14	.00972	7.20	2.43	9.5×10^3
8:47.5	17	.0118	7.25	2.48	7.8
8:50.5	20	.0139	7.33	2.56	6.6
8:52.5	22	.0153	7.40	2.63	6.0
8:57.5	27	.0187	7.52	2.75	4.9
9:04.5	34	.0236	7.70	2.93	3.89
9:09.5	39	.0271	7.79	3.02	3.39
9:15.5	45	.0313	7.90	3.13	2.94
9:22.5	52	.0361	8.02	3.25	2.54
9:31.5	61	.0424	8.13	3.36	2.17
9:51	81	.0561	8.33	3.56	1.64

Nonequilibrium formula:

$$T = \frac{114.6\ Q\ W(u)}{s}$$

$$S = \frac{u\ T}{1.87\ r^2/t}$$

Modified nonequilibrium formula:

$$T = \frac{264\ Q}{\Delta s}$$

$$S = \frac{0.3\ T\ t_o}{r^2}$$

T = _____ gpd/ft

S = _____

STATE ENGINEER
SALEM, OREGON

Well No. 10/2W-7N(2)
County: MARION

AQUIFER TEST

Observation Well 10/2W-7N(2)'

Time	Time since pumping started t_m (minutes)	Time since pumping started t_d (days)	Water Level (feet)	Drawdown (feet)(s)	r^2/t_d
10:14 AM	103	.0717	8.48	3.71	1.28×10^3
10:26	115	.0799	8.58	3.81	1.18
10:52	141	.0974	8.72	3.95	9.50×10^2
11:25	174	.123	8.84	4.07	7.5×10^2
11:47	196	.136	8.91	4.14	6.7
12:13PM	222	.154	8.98	4.21	5.99
12:33	242	.168	9.07	4.30	5.49
1:35	304	.211	9.27	4.50	4.36
2:13	342	.237	9.40	4.63	3.88
3:12	401	.278	9.60	4.83	3.31
4:25	474	.329	9.82	5.05	2.81
4:57	506	.351	9.89	5.12	2.62
8:27 AM	1436	.996	11.85	7.07	1.02×10^2

STATE ENGINEER
SALEM, OREGON

Well No. 10/2W-7N(2)
County: MARION

AQUIFER TEST

Observation Well No. 10/2W-7N(3) r = 91.5 (ft) r^2 = 8372
Date of test 10-23, & 10-24, 1958 Average Q = 650 gpm S.W.L. 5.34
Pump on 8:30.5.AM Pump off 8:30 AM Hours Pumped 24
Match Points: s= _____ r^2/t _____ Wu _____ u = _____

Time	Time since pumping started t_m (minutes)	Time since pumping started t_d (days)	Water Level (feet)	Drawdown (feet) (s)	r^2/t_d
8:31 AM	.5	.000347	5.76	.42	2.41×10^7
8:31.5	1.0	.000694	5.89	.55	1.20
8:32	1.5	.00104	5.99	.65	8.0×10^6
8:32.5	2.0	.00139	6.05	.71	6.0
8:33	2.5	.00174	6.09	.75	4.8
8:33.5	3.0	.00208	6.12	.78	4.0
8:34	3.5	.00243	6.15	.81	3.45
8:34.5	4.0	.00278	6.18	.84	3.02
8:35.5	5.0	.00347	6.22	.88	2.41
8:36.5	6.0	.00416	6.26	.92	2.02
8:37.5	7.0	.00486	6.29	.95	1.72
8:38.5	8.0	.00556	6.32	.98	1.52
8:40.5	10.0	.00694	6.37	1.03	1.21
8:43.5	13.0	.00902	6.43	1.09	9.3×10^5
8:46.5	16.0	.0111	6.48	1.14	7.6
8:50.5	20.0	.0139	6.54	1.20	6.0
8:55.5	25.0	.0174	6.61	1.27	4.8

Nonequilibrium formula:

$$T = \frac{114.6\ Q\ W(u)}{s}$$

$$S = \frac{u\ T}{1.87\ r^2/t}$$

Modified nonequilibrium formula:

$$T = \frac{264\ Q}{\Delta s}$$

$$S = \frac{0.3\ T\ t_o}{r^2}$$

T = _____ gpd/ft

S = _____

STATE ENGINEER
SALEM, OREGON

Well No. 10/2W-7 N(2)

County: MARION

AQUIFER TEST

Observation Well 10/2W-7 N(3)

Time	Time since pumping started t_m (minutes)	Time since pumping started t_d (days)	Water Level (feet)	Drawdown (feet)(s)	r^2/t_d
9:00.5	30	.0208	6.67	1.33	4.02×10^5
9:05.5	35	.0243	6.73	1.39	3.45
9:10.5	40	.0278	6.79	1.45	3.02
9:20.5	50	.0347	6.89	1.55	2.41
9:35.5	65	.0451	7.01	1.67	1.86
9:50.5	80	.0556	7.10	1.76	1.52
10:09	99	.0624	7.21	1.87	1.34
10:20	110	.0763	7.27	1.93	1.09
10:55	145	.101	7.42	2.08	8.3×10^4
11:22	172	.119	7.52	2.18	7.0
12:10 PM	220	.153	7.70	2.36	5.4
12:50	260	.181	7.85	2.51	4.6
1:40	310	.215	8.03	2.69	3.88
2:20	350	.243	8.17	2.83	3.45
3:20	410	.285	8.39	3.05	2.93
4:22	472	.328	8.62	3.28	2.55
6:00	570	396	8.96	3.62	2.11
7:00	630	.437	9.19	3.85	1.91
8:00	690	.479	9.41	4.07	1.75
9:00	~~750~~ 750	.521	9.59	4.25	1.60
10:00	810	.563	9.75	4.41	1.48

STATE ENGINEER
SALEM, OREGON

Well No. 10/2W-7N(2)

County: MARION

AQUIFER TEST

Observation Well 10/2W-7N(3)

Time	Time since pumping started t_m (minutes)	Time since pumping started t_d (days)	Water Level (feet)	Drawdown (feet)(s)	r^2/t_d
12:00 M	930	.646	10.05	4.71	1.29×10^4
2:00 AM	1050	.729	10.32	4.98	1.15
5:00 AM	1230	.854	10.67	5.33	9.8×10^3
8:00	1410	.979	11.02	5.68	8.6

STATE ENGINEER
SALEM, OREGON

Well No. 10/2W-7N(2)
County: MARION CO.

AQUIFER TEST

Observation Well No. 10/2W-7N(2)" r = 93 (ft) r^2 = 8,649
Date of test 10-23-58, 10-24-58 Average Q = 650 gpm S.W.L. 4.74
Pump on 8:30.5 AM 10-23-58 Pump off 8:30 AM 10-24-58 Hours Pumped 24
Match Points: s= _____ r^2/t _____ Wu _____ u = _____

Time	Time since pumping started t_m (minutes)	Time since pumping started t_d (days)	Water Level (feet)	Drawdown (feet) (s)	r^2/t_d
8:33.5 AM	3	.00208	6.09	1.35	
8:35.5	5	.00347	6.25	1.51	
8:37.5	7	.00486	6.35	1.61	
8:38.5	8	.00556	6.40	1.66	
8:40.5	10	.00694	6.48	1.74	
8:42.5	12	.00833	6.53	1.79	
8:44.5	14	.00972	6.58	1.84	
8:47.5	17	.0118	6.65	1.91	
8:48.5	18	.0125	6.70	1.96	
8:49.5	19	.0132	6.73	1.99	
8:53.5	23	.0160	6.78	2.04	
8:57.5	27	.0187	6.89	2.15	
9:09.5	39	.0271	7.09	2.35	
9:18.5	48	.0333	7.22	2.48	
9:25 5	55	.0382	7.30	2.56	
9:33	62	.0430	7.36	2.62	
9:47	76	0528	7.49	2.75	

Nonequilibrium formula:

$$T = \frac{114.6\ Q\ W(u)}{s}$$

$$S = \frac{u\ T}{1.87\ r^2/t}$$

Modified nonequilibrium formula:

$$T = \frac{264\ Q}{\Delta s}$$

$$S = \frac{0.3\ T\ t_o}{r^2}$$

T = _____ gpd/ft

S = _____

STATE ENGINEER
SALEM, OREGON

Well No. 10/2W-7N(2)

County: MARION

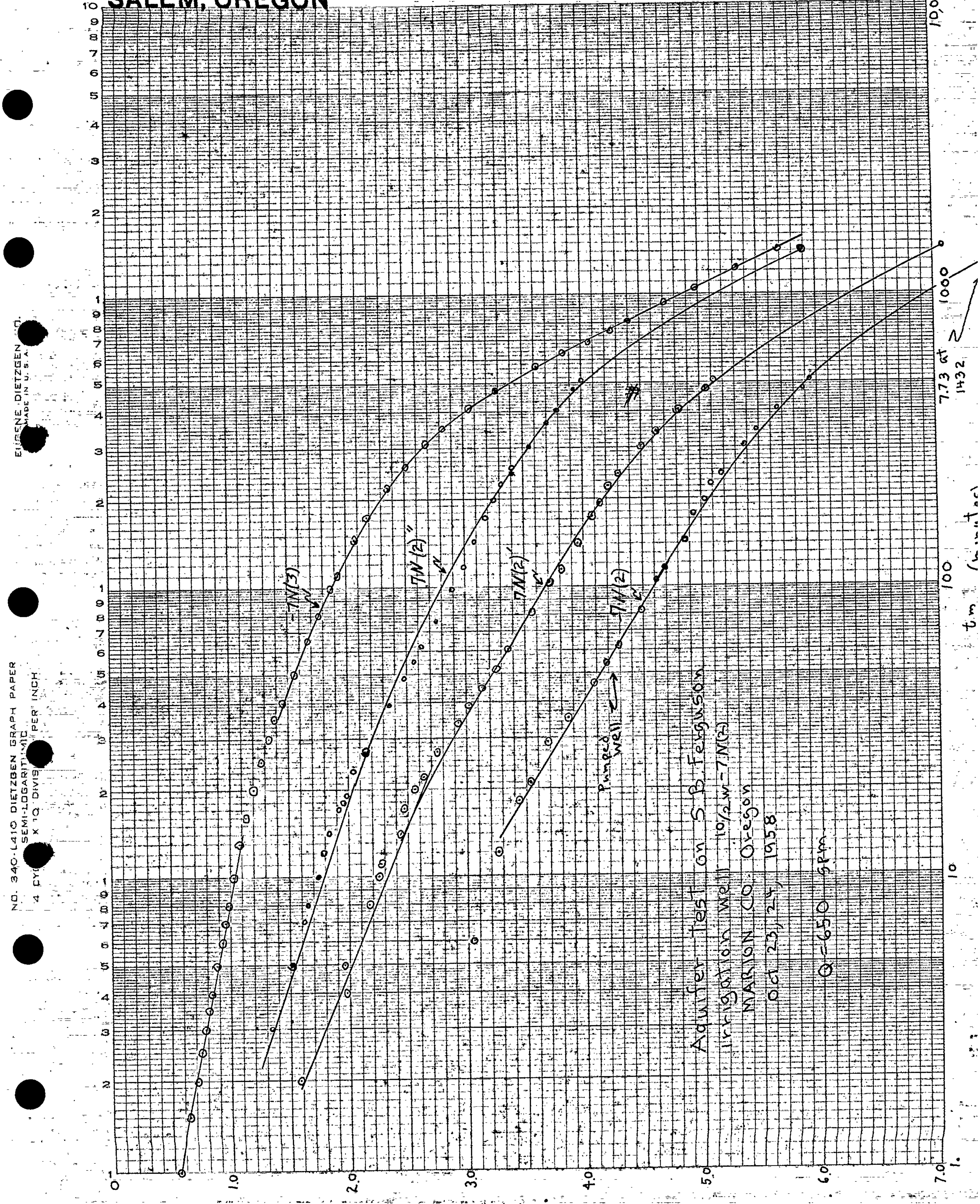
AQUIFER TEST

Observation Well 10/2W-7N(2)"

Time	Time since pumping started t_m (minutes)	Time since pumping started t_d (days)	Water Level (feet)	Drawdown (feet)(s)	r^2/t_d
10:09 AM	99	.0624	7.63	2.89	
10:27	117	.0812	7.73	2.99	
10:53	143	.0991	7.83	3.09	
11:23	173	.120	7.91	3.17	
11:47	197	.137	7.99	3.25	
12:14 PM	224	.156	8.06	3.32	
12:45	255	.178	8.15	3.41	
1:32	302	.210	8.29	3.55	
2:35	365	.254	8.44	3.70	
3:12	402	.278	8.52	3.78	
4:22	472	.328	8.67	3.93	
4:56	506	.351	8.74	4.00	
8:30 AM	1439	.999	10.15	5.41	

STATE ENGINEER
SALEM, OREGON

10/2W - 7N(2)
MARION CO.



STATE ENGINEER
Salem, Oregon

State Well No. 10/2W - ~~12 B~~ 6) 7N(3)

County MARION

Application No. .....

Water Level Record

OWNER: Ferguson OWNER'S NO. .....

Description of measuring point: Top of casing at L.S.D.

Date	Water Level Feet ~~(above)~~ (below) Land Surface	Remarks	Date	Water Level Feet ~~(above)~~ (below) Land Surface	Remarks
5-29-58	5.08	1:45 P.M.	6-16-58	4.53	
5-30-58	5.01	11:00 A.M. Recovering - See chart	6-17-58	4.52	
5-31-58	4.90	(Noon) Recovering - See chart	6-18-58	4.56	
6-1-58	4.82		6-19-58	4.64	
6-2-58	4.80		6-20-58	4.71	
6-3-58	4.80				
6-4-58	4.80				
6-5-58	4.80				
6-6-58	4.80				
6-7-58	4.80				
6-8-58	4.80				
6-9-58	4.78				
6-10-58	4.77				
6-11-58	4.72				
6-12-58	4.68				
6-13-58	4.64				
6-14-58	4.62				
6-15-58	4.58				

REMARKS: .....

State Printing 89314

Chart

Leupold & Stevens Instruments, Inc., Portland, Ore.

Level Recorder—Type E

10/2W — 7N (2)

MARION COUNTY

MAY 29-58 TO June 2-58

WATER LEVEL FEET BELOW TOP OF CASING AT LAND SURFACE

4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 5.60 5.70 5.80 5.90 6.00

6-2-58

6-1-58

5-31-58

5-30-58

5-29-58

Note recorder apparently set .08 off. Subtract .08 from measurements on this chart to obtain depth to water below measuring point at L.S.D.

WL 5.08

PRINTED IN

Level Recorder—Type E

Chart

10/2W - 7N (3)

MARION

Leupold & Stevens Instruments, Inc., Portland, Ore.

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