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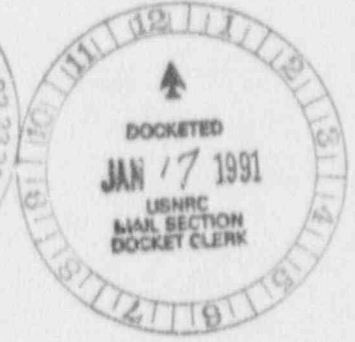
40-6659

PETROTOMICS COMPANY

P.O. BOX 8509, SHIRLEY BASIN, WY 82615 * TELEPHONE: (307) 234-9441

January 15, 1991

Mr. Ramon Hall
Licensing Branch 1
U.S. Nuclear Regulatory Commission
Uranium Recovery Field Office, RIV
P.O. Box 25325
Denver, CO 80225



Reference: License Condition 47C
Source Materials License SUA-551

Dear Sir:

The additional drilling program for corrective action proposed in our submittal of June 14, 1990, discussed with Ms. Cynthia Corbett, was completed in November, 1990. Submitted herewith are five copies of the drilling and evaluation report.

Four five-inch cased wells were completed; 61-SC, 62-SC, 63-SC and 64-SC. Based on pump test results, we propose to install pumps in wells 62-SC, 63-SC and 64-SC for collection. Discharge will be directed to the evaporation ponds.

Our check in the amount of \$150.00 for the application fee for this submittal was transmitted with our submittal of June 14, 1990.

Please contact us if you have any questions:

Sincerely,

R. A. Juday
R. A. Juday
Supervisor

9102120319 910115
PDR ADOCK 04006659
C PDR

DESIGNATED ORIGINAL

Certified By *Mary C. Hood*

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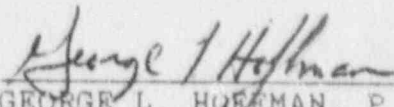
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UPPER WIND RIVER WELLS
DRILLING AND EVALUATION
FALL 1990

FOR:
PETROTOMICS COMPANY

BY:
HYDRO-ENGINEERING

NOVEMBER 1990



GEORGE L. HOFFMAN, P.E.
HYDROLOGIST

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1.0 INTRODUCTION

Hydro-Engineering (HYDRO) supervised the selection, drilling and completion of four new Upper Wind River wells in October of 1990. These wells were added to increase the collection rate from the Upper Wind River aquifer in a band from well 42SC to between wells 49SC and 58SC. A 5 inch diameter well for collection was drilled near well 5SC.

The well construction and lithologic data of the new Upper Wind River wells are presented in Section 2.0 of this report. A section on transmitting properties of the aquifer and expected long-term yields from the new wells concludes the report.

Three of the new Upper wells yield reasonable collection rates while the other well's yield is marginal for continuous pumping. Wells 61SC, 62SC, 63SC and 64SC are expected to yield 0.5, 2.7, 10 and 1.7 gpm for a long period of time. Well 61SC is not recommended to be used as a collection well due to its low yield. Pumps are recommended to be put in wells 62SC, 63SC and 64SC and to be initially pumped at the estimated long-term rates.

2.0 WELL CONSTRUCTION AND LITHOLOGY

Three new Upper Wind River wells were drilled in a band from well 42SC to between well 49SC and 58SC. A new well was also completed near well 5SC. Table 2-1 gives the completion details for the four new Upper Wind River wells. Figure 2-1 presents the location of the four new Upper Wind River wells, 61SC, 62SC, 63SC and 64SC and the eleven test holes not selected for completion, 61S2, 61S3, 62S2, 62S3, 63S1, 63S2, 63S3, 63S4, 63S5, 63S6 and 64S1. Fifteen test holes were drilled in selecting the best locations for the new wells. Three of these test holes were located near well 5SC, the three inch diameter well which indicated a reasonable yield. The western test hole was selected as the better test hole for the completion of a 5 inch well. The third test hole drilled for completion of well 62SC was selected for the five inch diameter well. The base of the Upper Wind River sand at well 62SC and test holes 62S2 and 62S3 was observed at 67, 60 and 64 feet respectively. The Upper Wind River sand at well 62SC and test hole 62S3 was not oxidized while the sand at test hole 62S2 was oxidized.

Six test holes were drilled prior to the selecting of test hole 63SC for the completion of the third 5 inch diameter well. The sand at this location produced a reasonable rate of water at this site and therefore was selected for completion.

The fourth five inch diameter well (64SC) was completed to the south of the desired band and south of well 63SC after the drilling of one test hole. This well also indicated that a fair rate of

water could be produced from this area. The base of the Upper Wind River sand was 31 feet below land surface at this location.

TABLE 2-1. BASIC WELL DATA FOR THE NORTHERN UPPER WIND RIVER WELLS.

WELL NAME	MP (ft)	MP ELEV. (ft-msl)	DIAM. (in)	TOTAL DEPTH (ft-mp)	PERF. INTERVAL (ft-lsd)	ELEV. TO BASE OF UPPER SAND (ft-msl)	DEPTH TO WATER (ft-mp)	W.L. ELEV. (ft-msl)	SEAL INTERVAL (ft-lsd)
61SC	1.4	7051.6	5	58.8	42-57	7000	44.50	7007.1	34-37
62SC	1.7	7066.0	5	72.7	51-71	6997	63.79	7002.2	43-46
63SC	1.5	7047.0	5	59.9	53-58	6988	48.64	6998.4	40-43
64SC	1.6	7035.5	5	35.9	20-34	7003	29.71	7005.8	16-18

NOTE: MP = Measuring Point
 MSL = Mean Sea Level
 LSD = Land Surface Datum
 FT = Feet
 IN = Inches
 W.L. = Water Level

TABLE 2-2. LITHOLOGIC LOG FOR WELL 61SC AND TEST HOLES.

LITHOLOGIC LOG FOR: 61SC

10/30/90

DEPTH FT-LSD	DESCRIPTION
0-5	TAN AND GREEN CLAY
5-10	SILTY VERY FINE TO COARSE SAND
10-20	GREEN CLAY
20-25	GREEN CLAY WITH LITTLE SAND
25-35	VERY FINE SAND AND SILT, GOLD
35-40	TAN VERY FINE SAND
40-45	FINE TO COARSE SAND
45-50	FINE TO VERY COARSE SAND, LITTLE GRAVEL
50-55	TAN AND GREEN CLAY WITH LITTLE SAND
55-60	GREEN TO BLUE SILTY CLAY

LITHOLOGIC LOG FOR: 61S2 (TEST HOLE)

10/30/90

DEPTH FT-LSD	DESCRIPTION
0-20	TAN CLAY
20-25	TAN SILTY CLAY, LITTLE BLUE
25-30	GOLD SILT AND VERY FINE SAND
30-40	TAN VERY FINE SAND
40-45	VERY FINE TO COARSE SAND
45-55	VERY FINE TO VERY COARSE SAND
55-60	BLUE CLAY

LITHOLOGIC LOG FOR: 61S3 (TEST HOLE)

10/30/90

DEPTH FT-LSD	DESCRIPTION
0-20	TAN CLAY
20-25	TAN AND WHITE CLAY
25-30	TAN AND BLUE SILT
30-40	TAN VERY FINE SAND
40-45	TAN VERY FINE TO MEDIUM SAND
45-50	TAN VERY FINE AND VERY COARSE SAND
50-55	TAN AND BLUE SANDY CLAY
55-60	BLUE CLAY

TABLE 2-3. LITHOLOGIC LOG FOR WELL 62SC AND TEST HOLES.

LITHOLOGIC LOG FOR: 62SC

10/30/90

DEPTH FT-LSD	DESCRIPTION
0-25	TAN CLAY
25-30	VERY FINE TO COARSE SAND WITH SOME CLAY, TAN
30-40	TAN SANDY CLAY
40-45	BLUE SILTY CLAY
45-50	BLUE VERY FINE SAND
50-60	VERY FINE TO COARSE SAND, BLUE
60-67	VERY FINE TO VERY COARSE SAND WITH LITTLE VERY FINE GRAVEL
67-72	BLUE CLAY

LITHOLOGIC LOG FOR: 62S2

10/30/90

DEPTH FT-LSD	DESCRIPTION
0-15	TAN CLAY
15-20	CLAY WITH LITTLE SAND
20-25	SAND AND CLAY
25-30	TAN CLAY WITH LITTLE SAND
30-40	BLUE SILTY CLAY
40-45	GOLD VERY FINE SAND AND SILT
45-55	TAN VERY FINE TO MEDIUM SAND
55-60	TAN VERY FINE TO COARSE SAND
60-65	BLUE CLAY

LITHOLOGIC LOG FOR: 62S3

10/30/90

110' NORTH APPROXIMATELY 3' HIGHER

DEPTH FT-LSD	DESCRIPTION
0-5	BROWN CLAY
5-20	TAN CLAY
20-25	TAN SILTY CLAY
25-30	BROWN SAND WITH CLAY
30-35	BROWN SANDY CLAY
35-40	BLUE CLAY
40-45	BLUE CLAY AND SAND
45-50	VERY FINE BLUE CLAY
50-64	GREY VERY FINE TO MEDIUM SAND
64-70	BLUE CLAY

TABLE 2-4. LITHOLOGIC LOG FOR WELL 63SC AND TEST HOLES.

LITHOLOGIC LOG FOR: 63SC

10/31/90

DEPTH FT-LSD	DESCRIPTION
0-5	BROWN CLAY
5-10	TAN VERY FINE SAND
10-15	SAME WITH SOME TAN CLAY
15-20	TAN VERY FINE SAND
20-35	TAN VERY FINE TO MEDIUM SAND
35-40	TAN VERY FINE TO MEDIUM SAND
40-54	TAN VERY FINE TO VERY COARSE SAND
54-60	BLUE CLAY

LITHOLOGIC LOG FOR: 63S1

10/31/90

DEPTH FT-LSD	DESCRIPTION
0-10	TAN CLAY
10-15	DARK BROWN CLAY
15-25	TAN CLAY
25-30	BROWN CLAY
30-40	TAN CLAY
40-45	DARK GREY CLAY
45-60	BLUE CLAY
60-65	BLUE SILTY CLAY
65-70	BLUE SILT AND VERY FINE SAND
70-75	BLUE VERY FINE SAND
75-80	SAME WITH SOME COARSE SAND
80-90	VERY FINE TO COARSE SAND, BLUE
90-100	BLUE CLAY

LITHOLOGIC LOG FOR: 63S2

10/31/90

DEPTH FT-LSD	DESCRIPTION
0-5	TAN CLAY
5-10	GOLD CLAY
10-20	TAN CLAY
20-35	LIGHT BROWN CLAY
35-40	BROWN AND BLACK CLAY
40-45	TAN CLAY, DAMP
45-50	BLUE CLAY
50-60	BLUE SILTY CLAY
60-65	BLUE VERY FINE TO MEDIUM SAND
65-70	SAME WITH SOME CLAY
70-77	BLUE CLAY

TABLE 2-4. LITHOLOGIC LOG FOR 63SC AND TEST HOLES (continued).

LITHOLOGIC LOG FOR: 63S3

10/31/90

DEPTH FT-LSD	DESCRIPTION
0-5	BROWN CLAY
5-10	TAN CLAY, LITTLE GRAVEL
10-20	TAN AND BROWN CLAY
20-25	GOLD VERY FINE TO COARSE SAND WITH SOME CLAY
25-30	BROWN CLAY, MOIST
30-35	BLUE CLAY
35-40	BLUE SANDY SILT
40-50	BLUE VERY FINE SAND
50-58	VERY FINE TO MEDIUM BLUE SAND
58-60	BLUE SAND

LITHOLOGIC LOG FOR: 63S4

10/31/90

DEPTH FT-LSD	DESCRIPTION
0-5	BROWN AND RED CLAY
5-25	TAN CLAY
25-30	TAN AND WHITE CLAY
30-35	TAN SILTY CLAY
35-45	TAN VERY FINE SAND
45-50	TAN VERY FINE TO MEDIUM SAND
50-56	TAN VERY FINE TO VERY COARSE SAND
56-60	BLUE CLAY PRODUCED SOME WATER

LITHOLOGIC LOG FOR: 63S5

10/31/90

DEPTH FT-LSD	DESCRIPTION
0-5	OLIVE CLAY
5-10	VERY FINE TO VERY COARSE SAND AND TAN CLAY
10-20	TAN CLAY
20-25	TAN CLAY WITH CALCITE LENSE
25-40	TAN VERY FINE SAND
40-45	TAN VERY FINE TO MEDIUM SAND, LITTLE VERY COARSE
45-56	TAN VERY FINE TO VERY COARSE SAND WITH LITTLE CLAY
56-60	BLUE CLAY

TABLE 2-4. LITHOLOGIC LOG FOR WELL 63SC AND TEST HOLES (continued).

LITHOLOGIC LOG FOR: 63S6

10/31/90

DEPTH FT-LSD	DESCRIPTION
0-5	GOLD AND BROWN CLAY
5-10	VERY FINE TAN SAND
10-20	VERY FINE TO COARSE SAND, TAN
20-25	TAN CLAY
25-30	BLUE SILTY CLAY
30-40	BLUE CLAY
40-45	VERY FINE TAN SAND
45-53	VERY FINE TO COARSE SAND, TAN WITH LITTLE GRAVEL AND CLAY
53-	BLUE CLAY

TABLE 2-5. LITHOLOGIC LOG FOR WELL 64SC AND TEST HOLES.

LITHOLOGIC LOG FOR: 64SC

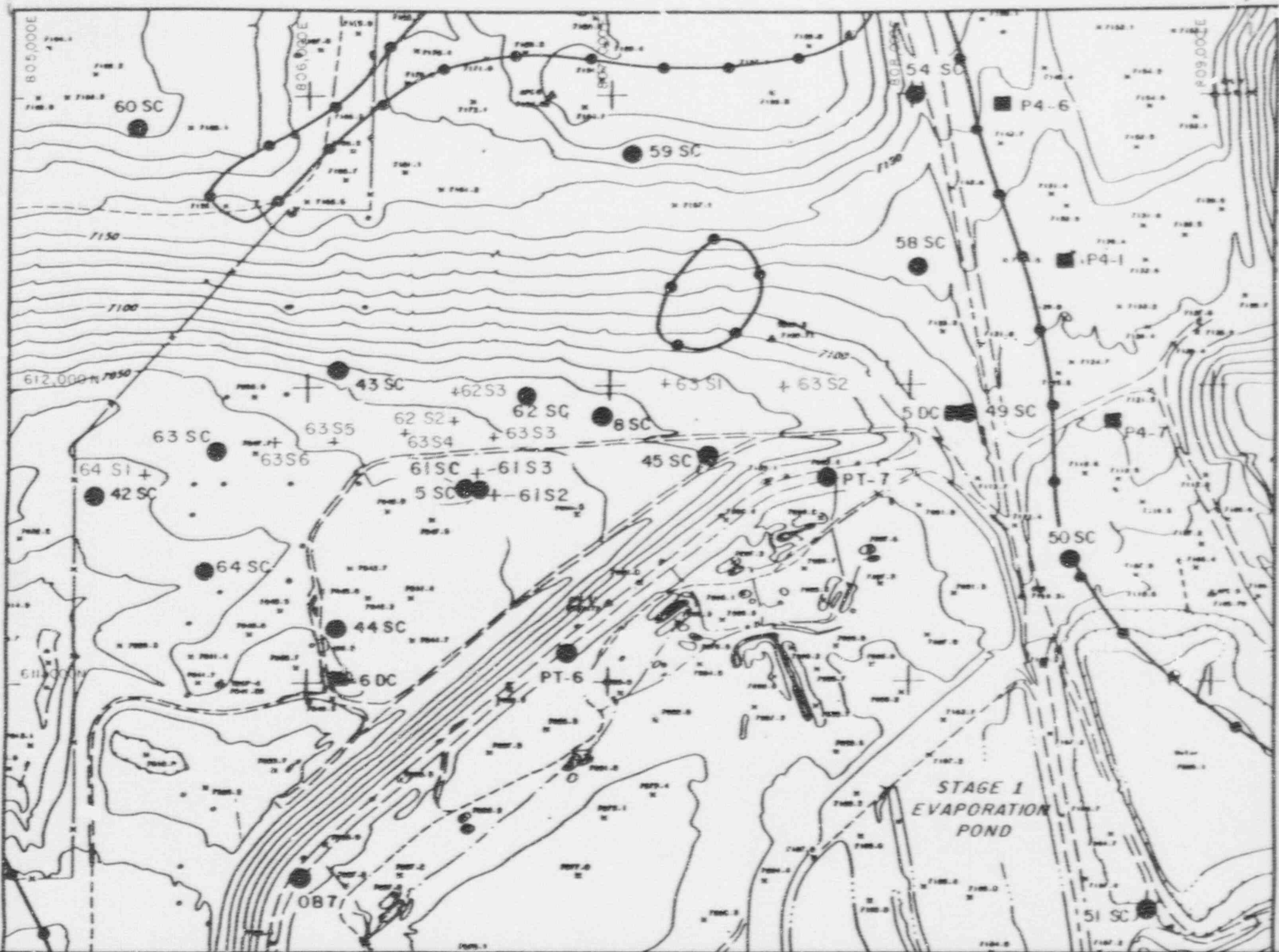
10/31/90

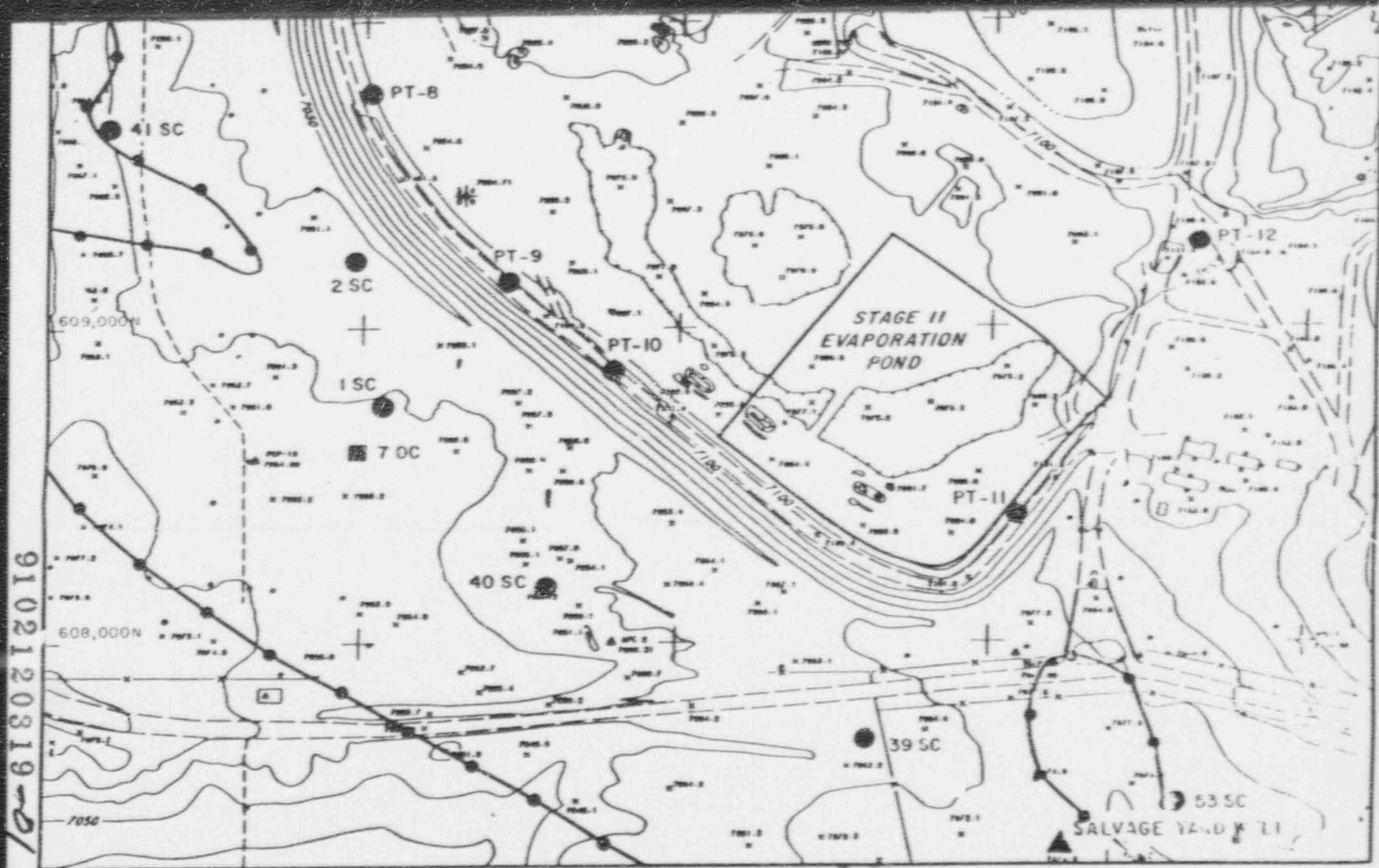
DEPTH FT-LSD	DESCRIPTION
0-10	BROWN CLAY
10-15	VERY FINE TO COARSE SAND, TAN
15-20	SAME EXCEPT COARSER
20-25	TAN VERY FINE SAND
25-31	TAN VERY FINE SAND
31-36	BLUE CLAY

LITHOLOGIC LOG FOR: 6431

10/31/90

DEPTH FT-LSD	DESCRIPTION
0-10	TAN SANDY CLAY
10-15	TAN VERY FINE SAND, WITH SOME COARSE SAND
15-20	BROWN CLAY
20-25	TAN SILTY CLAY
25-30	GOLD VERY FINE SAND
30-35	TAN VERY FINE TO MEDIUM SAND
35-41	TAN VERY FINE TO VERY COARSE SAND
41-42	BLUE CLAY





9102120319

LEGEND :

- 61 SC NEW UPPER WIND RIVER WELL
- + TEST HOLE



Scale: 1"=400'

Also Available On Aperture Card

SI APERTURE CARD

2-10

3.0 AQUIFER TESTS AND WELL YIELDS

Each of the new Upper Wind River wells were pump tested to define the expected yield and aquifer properties. The calculated transmissivities and permeabilities are initially presented, followed by the estimated long-term yield of these wells.

3.1 TRANSMISSIVITIES AND PERMEABILITIES

Well 61SC was pumped at an average rate of 1.4 gpm for 461 minutes. Table 3-1 presents the drawdown and pumping data for well 61SC while Figure 3-1 presents the semi-log plot of the drawdown data. The straight line fit yields a transmissivity of 171 gal/day/ft. The yield of well 61SC was gradually declining at the end of this test due to the thinning of the saturated thickness. This transmissivity and a saturated thickness of seven feet indicates that the permeability is 3.3 ft/day. Well 5EC was observed for drawdown during the pumping of the 61SC test. This observation well is 29 feet from pumping well 61SC and Table 3-2 shows that no drawdown was observed in this observation well.

Well 62SC was pumped at 0.94 gpm for nine minutes and 1.8 gpm for the last 48 minutes of this test (see Table 3-3). Figure 3-2 shows that the later drawdown data indicates that the transmissivity at this site is 990 gal/day/ft. The Upper Wind River is only five feet thick at this site which yields a permeability of 26 ft/day.

The saturated thickness at well 63SC is approximately seven feet but this well is more productive due to a higher transmitting

ability at this site. Table 3-4 and Figure 3-3 presents the results of the pump test on this well. Well 63SC was pumped at an average rate of 7.4 gpm for 122 minutes. This figure shows that the Upper Sand is more transmissive at this site with a transmissivity much higher at 6970 gal/day/ft and a permeability of 130 ft/day.

Table 3-5 presents the pumping data for well 64SC. The pumping level was quickly pulled to the pump intake and pumping water levels were not able to be obtained. Recovery data was measured after the pump was turned off to obtain a transmissivity for this aquifer. A transmissivity of 2240 gal/day/ft was obtained from the recovery plot which results in a an average permeability of 100 ft/day for the 3 feet of Upper Sand.

3.2 PREDICTED MAXIMUM WELL YIELDS

The maximum well yield for the Upper Wind River wells were estimated from an estimated 7 day specific capacity (discharge/drawdown) and the maximum maintainable drawdown. The drawdown in well 61SC was approximately 6.1 feet at 100 minutes (0.07 days) and estimated to be 10.5 feet (6.1+2 times 2.2) at seven days. This yields a specific capacity of 0.13 gpm/ft which multiplied times maximum drawdown of 4 feet gives the maximum yield of 0.5 gpm.

The seven day specific capacity for well 62SC is estimated to be 0.69 gpm/ft. A maximum yield of 2.7 gpm is indicated from a long-term drawdown of 4 feet. The specific apacity of well 63SC

is estimated to be 2.17 gpm/ft at seven days. A maximum drawdown of five feet and this specific capacity indicates that well 63SC can yield 10 gpm for a long period of time. The long-term yield for well 64SC is estimated to be 1.7 gpm from an estimated seven day specific capacity of 0.86 gpm/ft and a drawdown of two feet. This yield is less than the rate during the pump test because the yield during the test was at the bottom of the aquifer which should cause the yield to decline with time.

TABLE 3-1. AQUIFER-TEST DATA FOR PUMPING WELL 813C.

DATE	TIME	TIME SINCE PUMPING STARTED (t, min)	TIME SINCE PUMPING STOPPED (t, min)	t/t'	WATER LEVEL (ft below MP)	DRAWDOWN (ft)	DISCHARGE (gpm)	WATER TEMPERATURE (deg C)	CONDUCTIVITY (umhos/cm @ 25 deg C)	pH (units)
4R1030	1521	--	--	--	46.52	--	--	--	--	--
	1527	PUMP ON								
	1528	--	--	--	49.98	--	--	--	--	--
	1529	--	--	--	51.56	--	--	--	--	--
	1530	--	--	--	53.66	--	--	--	--	--
	1535	OUT OF WATER								
	1536	PUMP OFF								
	1617	PUMP ON								
	1620	--	--	--	--	--	2.1	--	--	--
	1622	--	--	--	49.61	--	--	--	--	--
	1624	--	--	--	49.85	--	--	--	--	--
	1625	--	--	--	--	--	1.9	--	--	--
	1627	--	--	--	50.17	--	--	--	--	--
	1634	--	--	--	--	--	1.5	--	--	--
	1639	--	--	--	50.75	--	--	--	--	--
	1656	--	--	--	--	--	1.6	--	--	--
	1658	PUMP OFF								
	4R1031	822	--	--	--	44.50	--	--	--	--
829		PUMP ON								
830		1	--	--	47.46	2.96	--	--	--	--
831		2	--	--	47.96	3.46	--	--	--	--
832		3	--	--	48.01	3.51	--	--	--	--
833		4	--	--	48.36	3.86	--	--	--	--
834		5	--	--	48.58	4.08	1.6	--	--	--
835		6	--	--	48.73	4.23	--	--	--	--
836		7	--	--	48.89	4.39	--	--	--	--
837		8	--	--	48.97	4.47	--	--	--	--
838		9	--	--	49.06	4.56	--	--	--	--
839		10	--	--	49.14	4.64	--	--	--	--
841		12	--	--	49.39	4.89	--	--	--	--
846		17	--	--	49.47	4.97	--	--	--	--
850		21	--	--	49.60	5.10	1.5	--	--	--
856		27	--	--	49.71	5.21	--	--	--	--
858		29	--	--	--	--	--	12.2	14230	3.6
900		31	--	--	49.75	5.25	--	--	--	--
905		36	--	--	49.83	5.33	--	--	--	--
909		40	--	--	49.94	5.44	--	--	--	--
913		44	--	--	49.99	5.49	--	--	--	--
916		47	--	--	50.04	5.54	--	--	--	--
918		49	--	--	--	--	1.5	--	--	--
920		51	--	--	--	--	--	12.8	15450	3.4
924		55	--	--	50.11	5.61	--	--	--	--
950		81	--	--	50.40	5.90	--	--	--	--
954		85	--	--	--	--	1.5	--	--	--
956	87	--	--	--	--	--	12.8	15750	3.2	

TABLE 3-1. AQUIFER-TEST DATA FOR PUMPING WELL 615C (CONTINUED).

DATE	TIME	TIME	TIME	t/t'	WATER LEVEL (ft below MP)	DRAWDOWN (ft)	DISCHARGE (gpm)	WATER TEMPERATURE (deg C)	CONDUCTIVITY (μ hos/cm @ 25 deg C)	pH (units)
		SINCE PUMPING STARTED (t,min)	SINCE PUMPING STOPPED (t',min)							
	957	86	--	--	50.44	5.94	--	--	--	--
	1000	91	--	--	50.53	6.03	--	--	--	--
	1053	144	--	--	51.03	6.53	--	--	--	--
	1056	147	--	--	--	--	1.4	--	--	--
	1187	158	--	--	51.06	6.56	--	--	--	--
	1225	236	--	--	51.52	7.02	--	--	--	--
	1551	442	--	--	51.63	7.13	--	--	--	--
	1555	445	--	--	--	--	1.3	--	--	--
	1558	449	--	--	--	--	--	13.3	16290	2.7
	1605	SAMPLE COLLECTED								
	1618	PUMP OFF								

TABLE 3-2. AQUIFER-TEST DATA FOR OBSERVATION WELL SSC.

DATE	TIME	TIME SINCE PUMPING STARTED (t, min)	TIME SINCE PUMPING STOPPED (t', min)	t/t'	WATER LEVEL (ft below MP)	DRAWDOWN (FT)
901030	1519	--	--	--	46.40	--
	1642	--	--	--	46.43	--
	1655	--	--	--	46.45	--
901031	016	--	--	--	45.93	--
	032	3	--	--	46.41	0.48
	035	6	--	--	46.40	0.47
	040	11	--	--	46.40	0.47
	077	22	--	--	46.40	0.47
	057	28	--	--	46.40	0.47
	082	33	--	--	46.40	0.47
	090	41	--	--	46.40	0.47
	0925	56	--	--	46.50	0.47
	0955	86	--	--	46.40	0.47
	1054	115	--	--	46.40	0.47
	1225	236	--	--	46.40	0.47
	1554	445	--	--	46.41	0.48

TABLE 3-3. AQUIFER-TEST DATA FOR PUMPING WELL 62SC.

DATE	TIME	TIME SINCE PUMPING STARTED (t, min)	TIME SINCE PUMPING STOPPED (t', min)	t/t'	WATER LEVEL (ft below MP)	DRAWDOWN (ft)	DISCHARGE (gpm)	WATER TEMPERATURE (deg C)	CONDUCTIVITY (umhos/cm @ 25 deg C)	pH (units)
	1630	0	--	--	63.79	0.00	--	--	--	--
	1632	2	--	--	64.03	0.24	--	--	--	--
	1633	3	--	--	64.32	0.53	--	--	--	--
	1634	4	--	--	64.40	0.61	--	--	--	--
	1635	5	--	--	64.37	0.58	--	--	--	--
	1636	6	--	--	64.39	0.60	--	--	--	--
	1637	7	--	--	64.40	0.61	--	--	--	--
	1637.5	7.5	--	--	--	--	0.94	--	--	--
	1638	8	--	--	64.41	0.62	--	--	--	--
	16	INCREASED DISCHARGE								
	1637.5	9.5	--	--	64.59	0.80	--	--	--	--
	1640	10	--	--	64.64	0.85	--	--	--	--
	1641	11	--	--	64.52	0.73	--	--	--	--
	1641.5	INCREASED DISCHARGE								
	1642	12	--	--	64.70	0.99	--	--	--	--
	1643	13	--	--	64.90	1.11	--	--	--	--
	1644	14	--	--	64.95	1.16	1.8	--	--	--
	1645	15	--	--	64.96	1.17	--	--	--	--
	1646	16	--	--	64.95	1.16	--	--	--	--
	1647	17	--	--	64.96	1.17	--	--	--	--
	1653	23	--	--	65.02	1.23	--	--	--	--
	1657	27	--	--	65.05	1.26	--	--	--	--
	1700	30	--	--	--	--	--	12.0	8340	3.0
	1701	31	--	--	65.08	1.29	--	--	--	--
	1707	37	--	--	--	--	--	11.1	10830	3.0
	1709	38	--	--	65.13	1.34	--	--	--	--
	1709.5	38.5	--	--	--	--	1.7	--	--	--
	1710	45	--	--	--	--	--	11.7	10800	3.0
	1720	SAMPLE TAKEN								
	1725	55	--	--	65.21	1.42	--	--	--	--
	1730	PUMP OFF								

TABLE 3-4. AQUIFER-TEST DATA FOR PUMPING WELL 635C.

DATE	TIME	TIME SINCE PUMPING STARTED (t,min)	TIME SINCE PUMPING STOPPED (t',min)	t/t'	WATER LEVEL (ft below MP)	DRAWDOWN (ft)	DISCHARGE (gpm)	WATER TEMPERATURE (deg C)	CONDUCTIVITY (μ hos/cm @ 25 deg C)	pH (units)
901114	730	--	--	--	48.64	--	--	--	--	--
	731	TD= 59.9								
	740	PUMP ON								
	749	1	--	--	51.51	2.87	--	--	--	--
	750	2	--	--	51.24	2.60	--	--	--	--
	751	3	--	--	51.16	2.52	6.9	--	--	--
	752	4	--	--	51.19	2.55	--	--	--	--
	753	--	--	--	51.21	2.57	--	--	--	--
	754	--	--	--	51.24	2.60	7.1	--	--	--
	755	7	--	--	51.26	2.62	--	--	--	--
	756	8	--	--	51.26	2.64	--	--	--	--
	757	9	--	--	51.28	2.64	7.4	--	--	--
	758	10	--	--	51.27	2.63	--	--	--	--
	800	12	--	--	51.29	2.65	7.5	--	--	--
	804	16	--	--	--	--	--	10.8	10630	3.4
	805	17	--	--	51.31	2.67	--	--	--	--
	810	22	--	--	51.32	2.68	--	--	--	--
	815	27	--	--	51.30	2.66	--	--	--	--
	820	32	--	--	51.33	2.69	--	--	--	--
	824	36	--	--	51.34	2.70	--	--	--	--
	825	37	--	--	--	--	--	9.0	11260	2.8
	828	40	--	--	--	--	7.5	--	--	--
	830	42	--	--	51.34	2.70	--	--	--	--
	835	47	--	--	51.35	2.71	--	--	--	--
	839	51	--	--	51.37	2.73	--	--	--	--
	842	54	--	--	--	--	7.5	--	--	--
	845	57	--	--	51.37	2.73	--	--	--	--
	850	62	--	--	51.39	2.75	--	--	--	--
	851	63	--	--	--	--	7.4	--	--	--
	855	67	--	--	51.40	2.76	--	--	--	--
	856	68	--	--	--	--	--	9.0	11260	2.7
	900	72	--	--	51.41	2.77	--	--	--	--
	905	77	--	--	51.42	2.78	--	--	--	--
	910	82	--	--	51.42	2.78	--	--	--	--
	911	83	--	--	--	--	7.3	--	--	--
	914	86	--	--	51.43	2.79	--	--	--	--
	917	89	--	--	51.42	2.78	--	--	--	--
	920	92	--	--	51.44	2.80	--	--	--	--
	925	97	--	--	--	--	7.5	--	--	--
	926	98	--	--	--	--	--	9.0	11260	2.5
	927	99	--	--	51.45	2.81	--	--	--	--
	930	102	--	--	51.46	2.82	--	--	--	--
	935	107	--	--	51.47	2.83	--	--	--	--
	936	108	--	--	--	--	7.4	--	--	--
	940	112	--	--	--	--	--	9.0	11260	2.5
	945	SAMPLE COLLECTED								
	950	PUMP OFF								

TABLE 3-5. AQUIFER-TEST DATA FOR PUMPING WELL 64SC.

DATE	TIME	TIME	TIME	t/t'	WATER LEVEL (ft below MP)	DRAWDOWN (ft)	DISCHARGE (gpm)	WATER TEMPERATURE (deg C)	CONDUCTIVITY (uohms/cm @ 25 deg C)	pH (units)
		SINCE PUMPING STARTED (t,min)	SINCE PUMPING STOPPED (t',min)							
701114	958	--	--	--	29.71	--	--	--	--	--
	959	TD = 35.9								
	1010	PUMP ON								
	1011	1	--	--	33.12	3.41	--	--	--	--
	1012	CAN'T GET ETAPE TO READ								
	1013	VALVE CLOSED SLIGHTLY								
	1014	CAN'T GET READING								
	1015	5	--	--	--	--	4.8	--	--	--
	1030	20	--	--	--	--	3.8	--	--	--
	1033	23	--	--	--	--	--	9.6	11230	3.2
	1034	CAN'T GET ETAPE TO WATER								
	1104	54	--	--	--	--	3.9	--	--	--
	1105	55	--	--	--	--	--	10.0	11400	2.7
	1120	70	--	--	--	--	3.9	--	--	--
	1123	73	--	--	--	--	--	10.1	11100	2.7
	1140	90	--	--	--	--	3.9	--	--	--
	1143	93	--	--	--	--	--	10.4	10600	2.6
	1145	SAMPLE COLLECTED								
	1150	PUMP OFF								
	1151	101	1	101	31.50	1.79				
	1152	102	2	51.0	30.80	1.09				
	1153	103	3	34.3	30.57	0.86				
	1154	104	4	26.0	30.35	0.64				
	1155	105	5	21.0	30.23	0.52				
	1156	106	6	17.7	30.17	0.46				
	1157	107	7	15.3	30.13	0.42				
	1158	108	8	13.5	30.10	0.39				
	1159	109	9	12.1	30.08	0.37				
	1200	110	10	11.0	30.07	0.36				
	1203	113	13	8.69	30.02	0.31				
	1207	117	17	6.88	29.96	0.25				
	1211	121	21	5.76	29.93	0.22				
	1215	125	25	5.00	29.90	0.19				
	1219	129	29	4.45	29.88	0.17				
	1223	133	33	4.03	29.88	0.17				

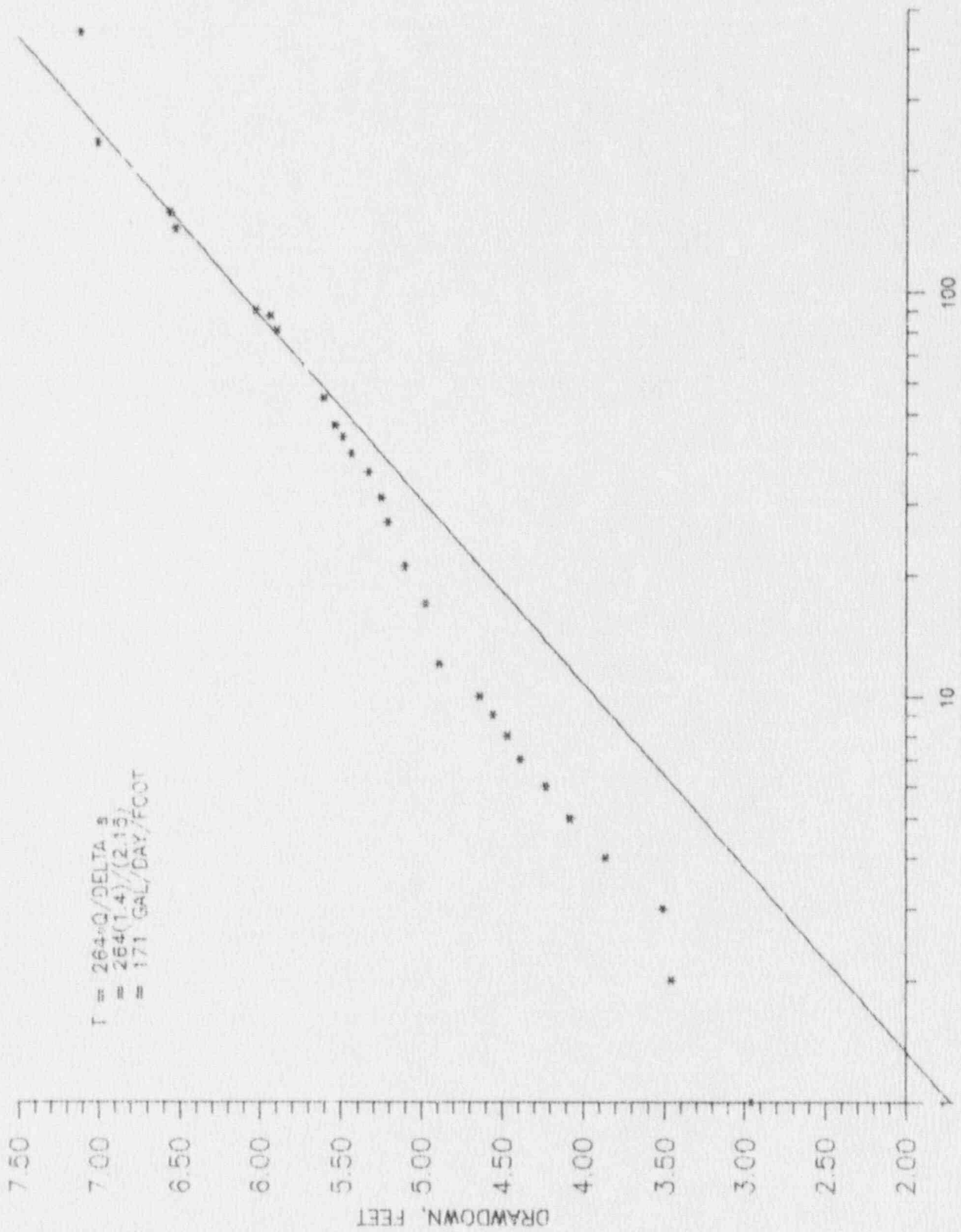


FIGURE 3-1. DRAWDOWN IN PUMPING WELL 61SC.

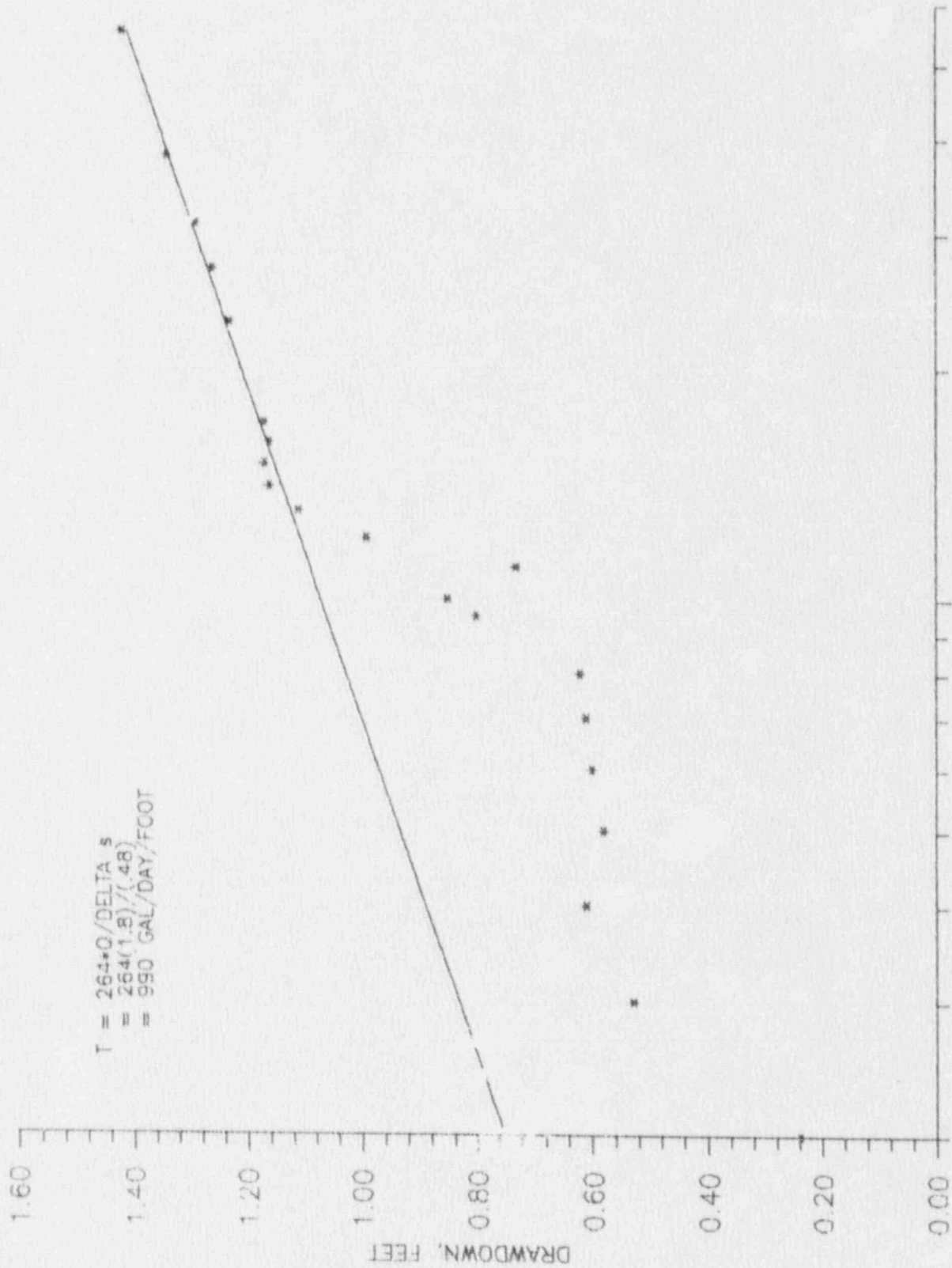


FIGURE 3-2. DRAWDOWN IN PUMPING WELL 62SC.

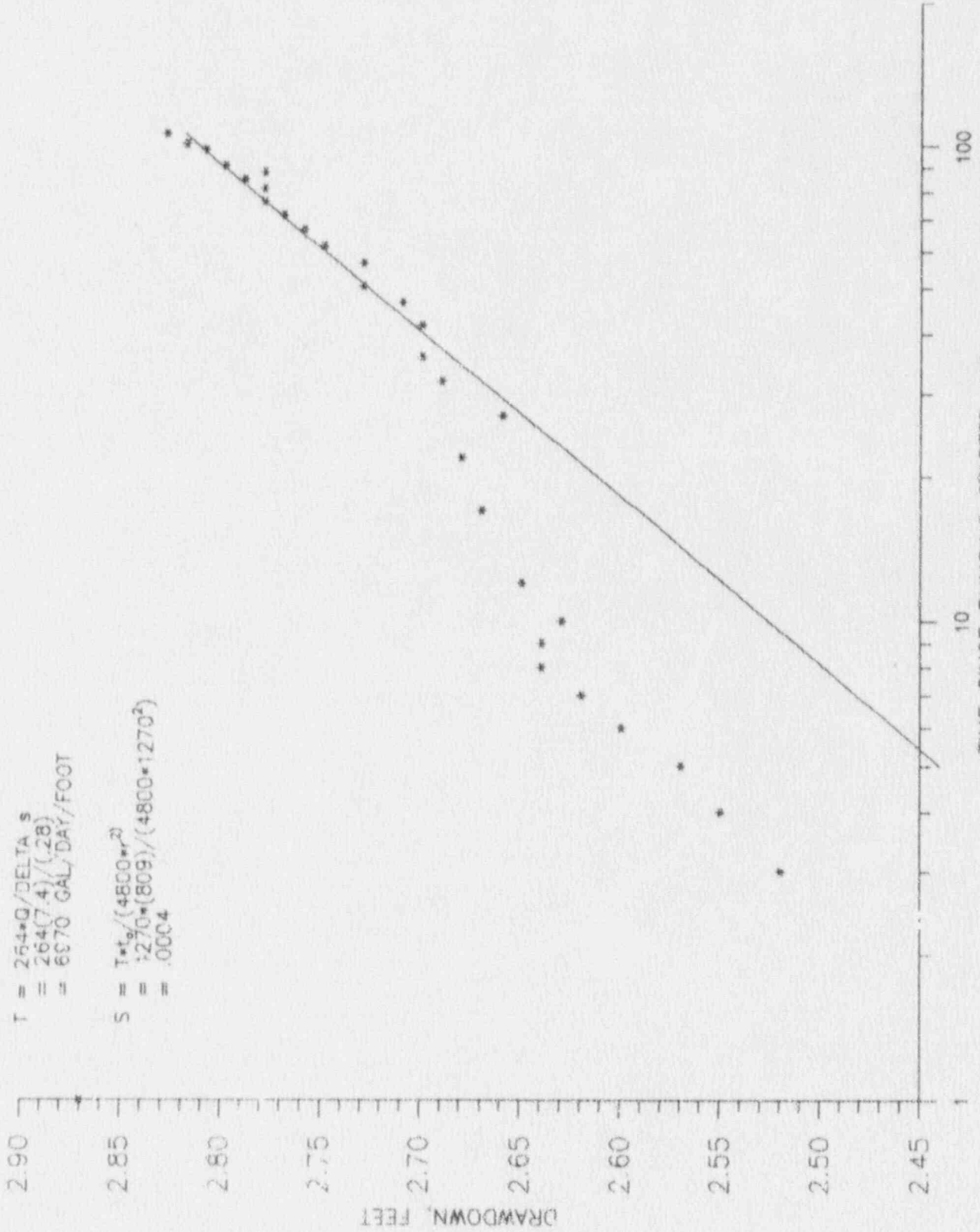


FIGURE 3-3. DRAWDOWN IN PUMPING WELL 63SC.

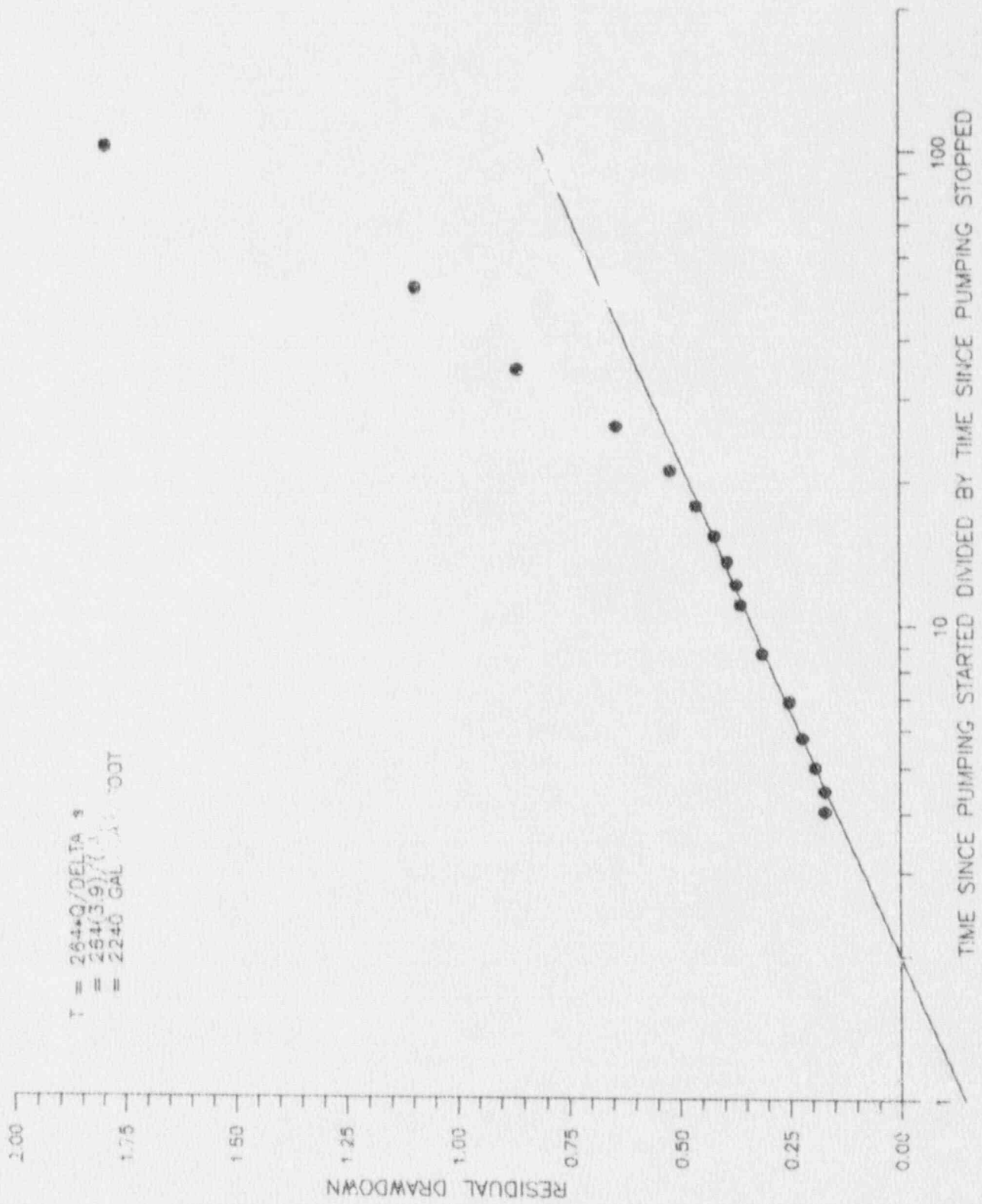


FIGURE 3-4. RECOVERY IN PUMPING WELL 64SC.