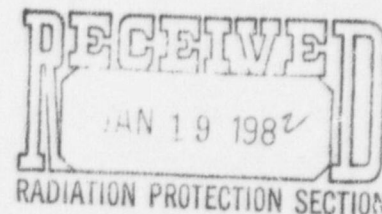




KERR-McGEE NUCLEAR CORPORATION

POST OFFICE BOX 218 • GRANTS, NEW MEXICO 87020

January 15, 1982



Mr. G. W. Stewart
Radiation Protection Bureau
Environmental Improvement Division
P. O. Box 968
Santa Fe, New Mexico 87503

Dear Mr. Stewart:

Enclosed is our tails report for the fourth quarter of 1981.

Respectfully,

KERR-McGEE NUCLEAR CORPORATION

Jerry Patterson

JP:hc

Encl osure

9803260181 811231
PDR ADOCK 04008905
C PDR

TAILINGS REPORT

4th Quarter, 19 81

INPUT TO PONDS

	<u>Tons</u>	<u>Acre Ft.</u>
Solids to Ponds:	528,305	--
Mill Solution to Ponds:	645,957	475.5
Water to Ponds:	39,424	29.0
Total Liquid	685,381	504.5

STATUS OF PONDS

<u>Pond No.</u>	<u>Evaporation Area Acres</u>	<u>Average Depth Feet</u>	<u>Solution Volume Acre Feet</u>
1	48.4	1.6	77.4
2	32.3	1.3	42.0
3	12.8	1.6	20.3
4	Dry	--	---
5	Dry	---	---
6	Dry	---	---
7	10.4	4.3	44.8
8	27.4	7.4	201.7
9	23.6	1.3	29.7
10	1.5	0.6	0.9
11	28.3	4.29	121.4
12	22.4	2.47	55.3
13	16.8	3.94	66.2
14	20.8	3.63	75.5
15	24.1	5.44	131.1
16	19.5	5.23	102.0
17	19.5	3.45	67.3
18	27.2	0.78	21.2
19	34.8	3.84	133.6
20	29.0	3.55	103.0
21	21.0	2.5	52.5
TOTAL	419.8	4.2	1765.7

POND ELEVATIONS

<u>Pond No.</u>	<u>Elevation, Ft.</u>	<u>Elevation Change, Ft.</u>
1	<u>7010.73</u>	<u>+ 2.13</u>
2	<u>6984.00</u>	<u>+ 0.22</u>
3	<u>6923.16</u>	<u>+ 0.23</u>
4	<u>Dry</u>	<u>--</u>
5	<u>Dry</u>	<u>--</u>
6	<u>Dry</u>	<u>--</u>
7	<u>6994.63</u>	<u>- 0.80</u>
8	<u>7015.60</u>	<u>- 0.96</u>
9	<u>6919.56</u>	<u>+ 0.72</u>
10	<u>6908.82</u>	<u>+ 0.24</u>
11	<u>6936.29</u>	<u>+ 0.91</u>
12	<u>6926.47</u>	<u>- 0.60</u>
13	<u>6921.74</u>	<u>- 0.63</u>
14	<u>6915.13</u>	<u>+ 0.36</u>
15	<u>6908.44</u>	<u>+ 4.70</u>
16	<u>6901.13</u>	<u>+ 1.3</u>
17	<u>6893.75</u>	<u>- 0.29</u>
18	<u>6887.78</u>	<u>- 0.61</u>
19	<u>6883.04</u>	<u>- 0.34</u>
20	<u>6876.95</u>	<u>- 0.37</u>
21	<u>6899.2</u>	<u>- 0.35</u>

RELATIVE EVAPORATION RATE

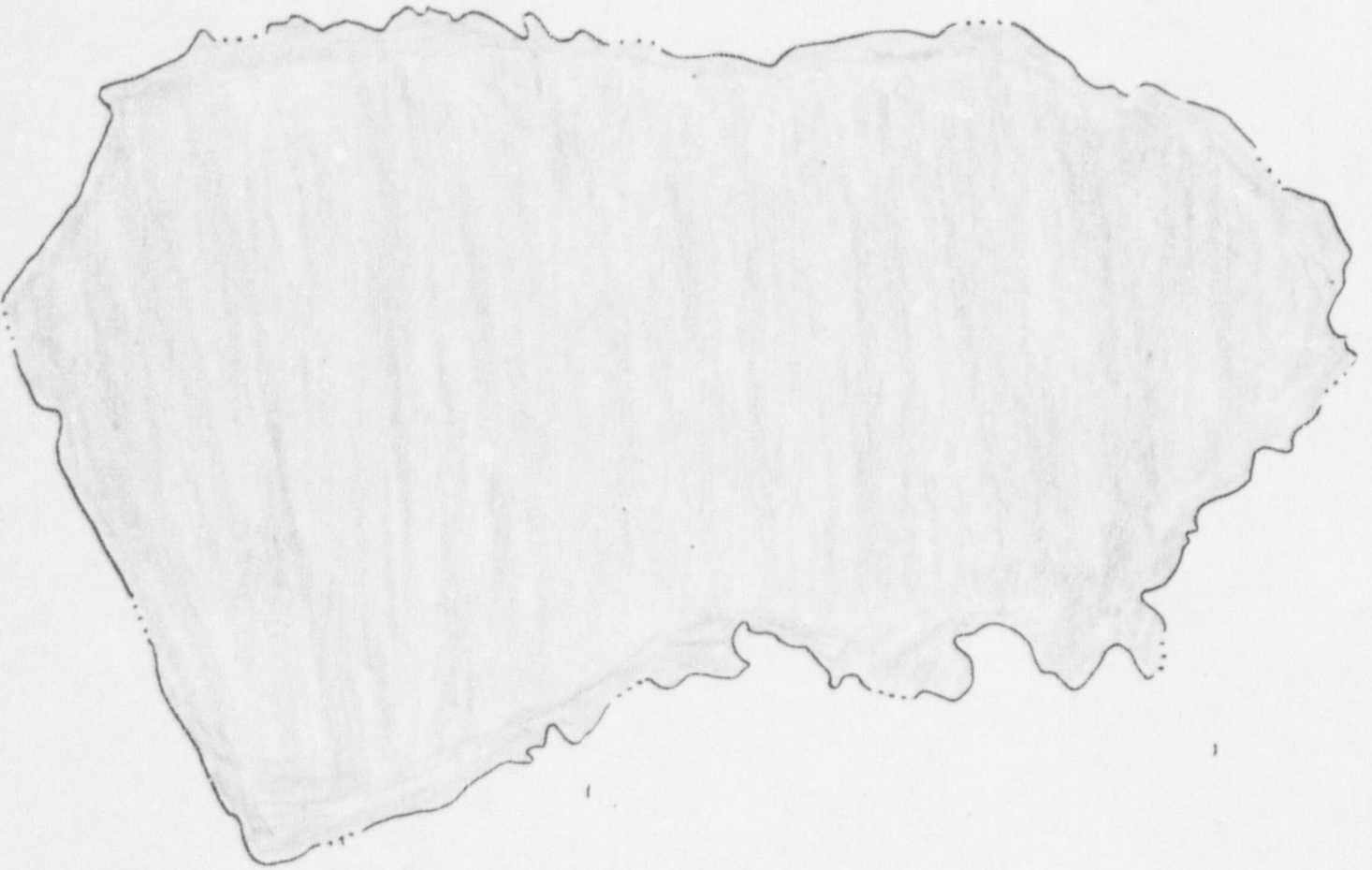
Evaporation	<u>8.7"</u>
Precipitation	<u>2.7"</u>
Relative Evaporation	<u>6.0"</u>

OBSERVATION WELLS - WATER ELEVATION

<u>Well</u>	<u>Collar Elevations</u>	<u>Elevation - Ft.</u>	<u>Change - Ft.</u>
A-1	6920.7	<u>6914.2</u>	<u>+ 0.32</u>
B-2	6923.4	<u>6918.9</u>	<u>+ 0.30</u>
C-3	6927.8	<u>6919.8</u>	<u>+ 1.72</u>
D-4	6929.4	<u>6918.0</u>	<u>+ 1.01</u>
E-5	6923.2	<u>6916.7</u>	<u>+ 0.38</u>
44	6922.5	<u>6817.9</u>	<u>+ 0.40</u>

OBSERVATION WELLS - SOLUTION ASSAYS

<u>Well</u>	<u>U, mg/l</u>	<u>Cl, mg/l</u>	<u>TDS, mg/l</u>	<u>pH</u>	<u>Radium, pCi/l</u>
A-1	<u>.19</u>	<u>3760</u>	<u>16470</u>	<u>6.21</u>	<u>6.7</u>
B-2	<u>.19</u>	<u>3770</u>	<u>10040</u>	<u>4.38</u>	<u>10.1</u>
C-3	<u>.19</u>	<u>3240</u>	<u>12870</u>	<u>4.63</u>	<u>11.4</u>
D-4	<u>.19</u>	<u>2700</u>	<u>8170</u>	<u>4.55</u>	<u>23.6</u>
E-5	<u>.19</u>	<u>2140</u>	<u>9390</u>	<u>7.16</u>	<u>6.3</u>
44	<u>.11</u>	<u>80</u>	<u>1720</u>	<u>8.03</u>	<u>4.5</u>
Decant Pond	<u>9.75</u>	<u>2000</u>	<u>40520</u>	<u>1.24</u>	<u>8170</u>



KERR-MCGEE NUCLEAR - POND #1

Solution Elevation 7010.73
Average Depth 1.6 Ft.

Solution Area 48.4 Acres
Solution Volume 77.4 Acre Ft.

Date 1/6/82



KERR-MCGEE NUCLEAR - POND #2

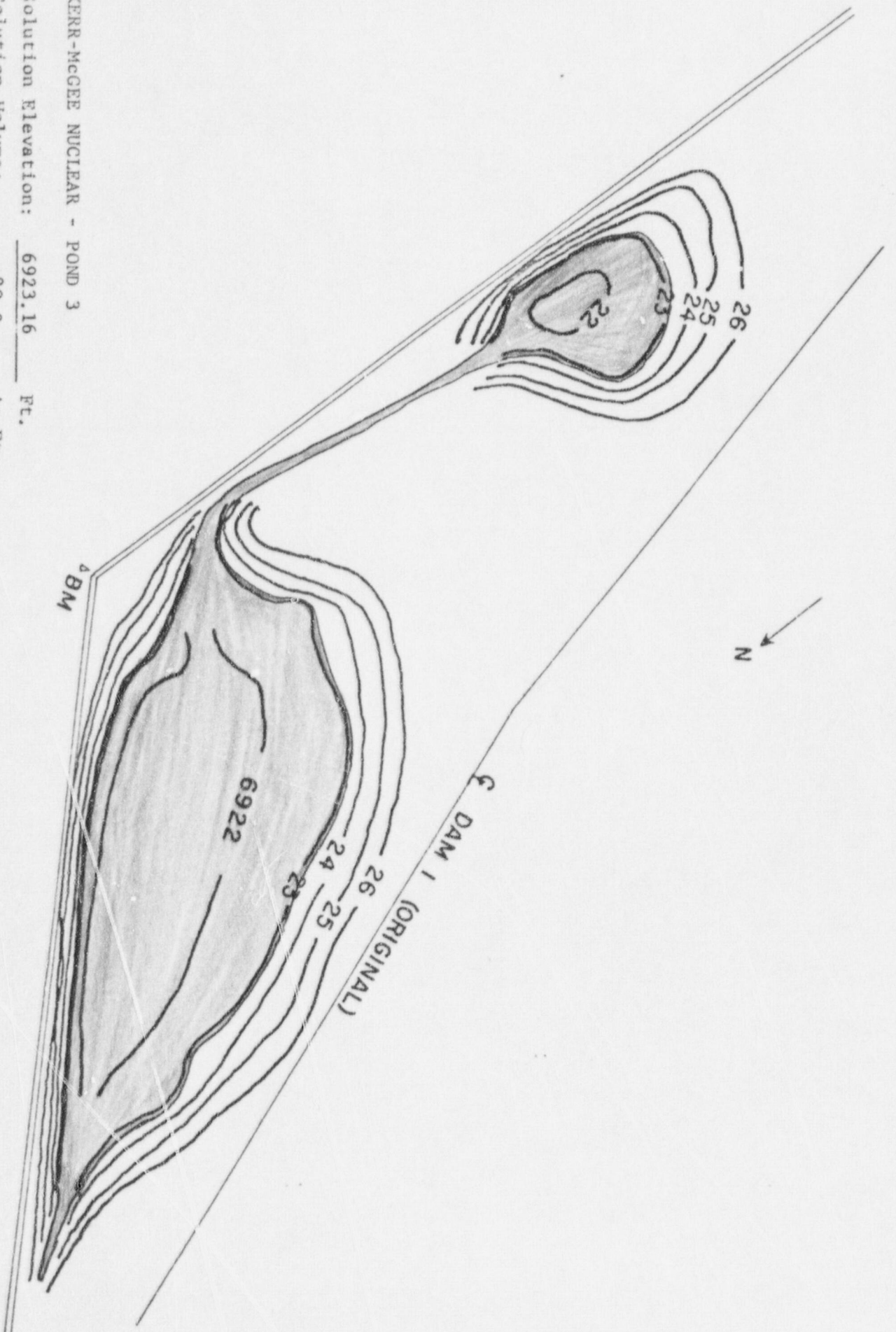
Solution Elevation	<u>6984.00</u>
Average Depth	<u>1.3 Ft.</u>
Solution Area	<u>32.3 Acres</u>
Solution Volume	<u>42.0 Acre Ft.</u>

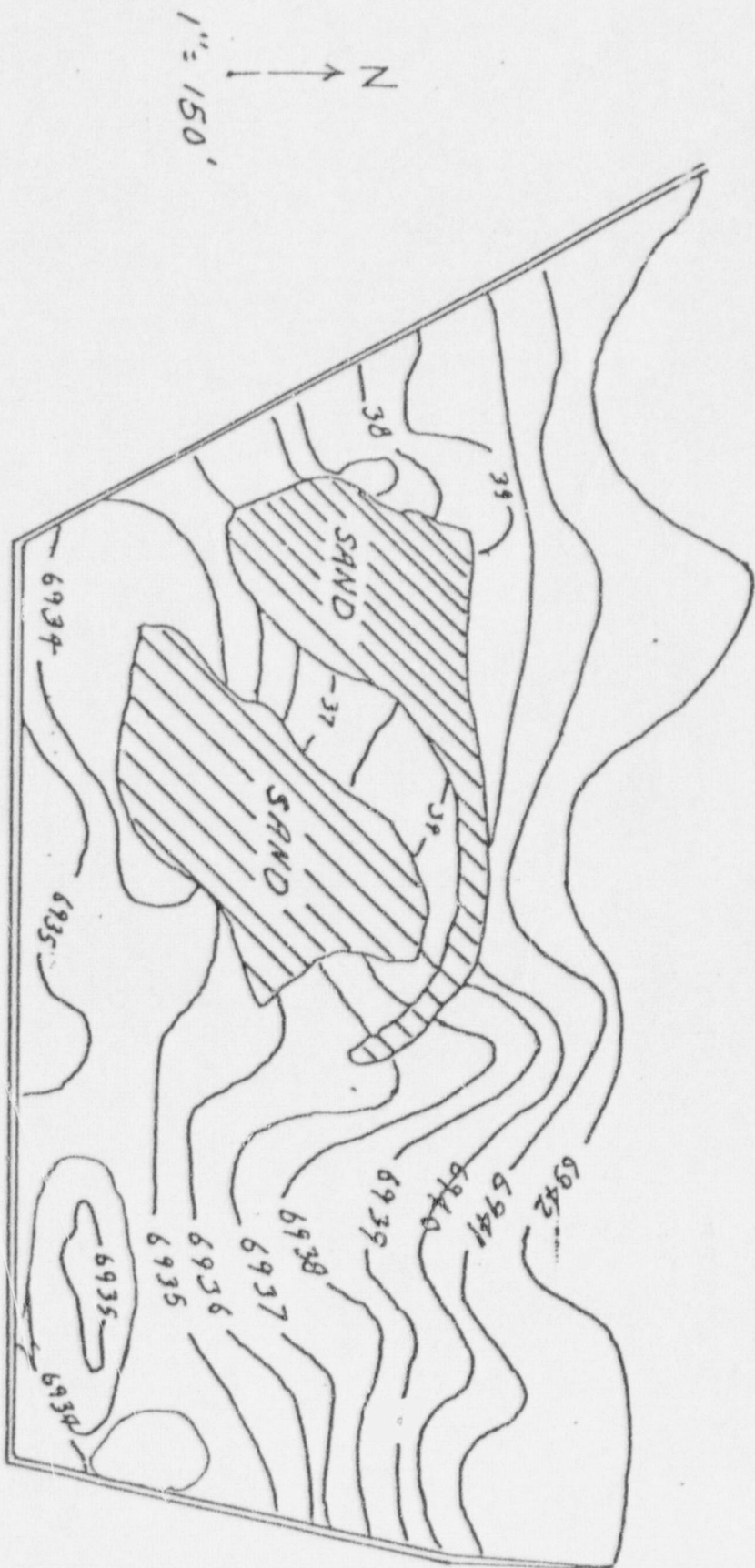
Date 1/6/82

KERR-MCGEE NUCLEAR - POND 3

Solution Elevation:	6923.16	Ft.
Solution Volume:	20.3	Ac.Ft.
Evaporation Area:	12.8	Ac.

Date: 1/6/82





KERR-MCGEE NUCLEAR CORP. Pond No. 4

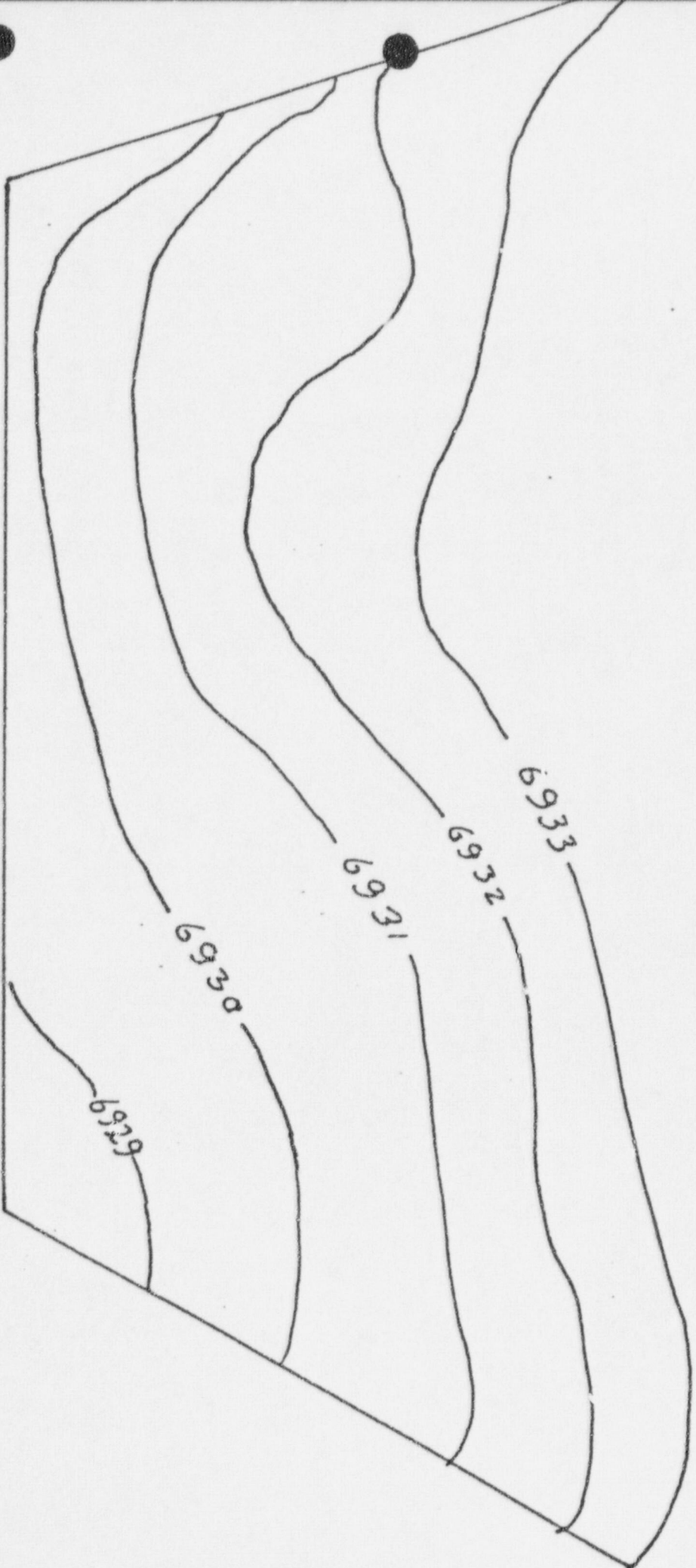
Solution Elevation: DRY

Average Depth:

Solution Area Acres

Solution Volume: Acre Ft.

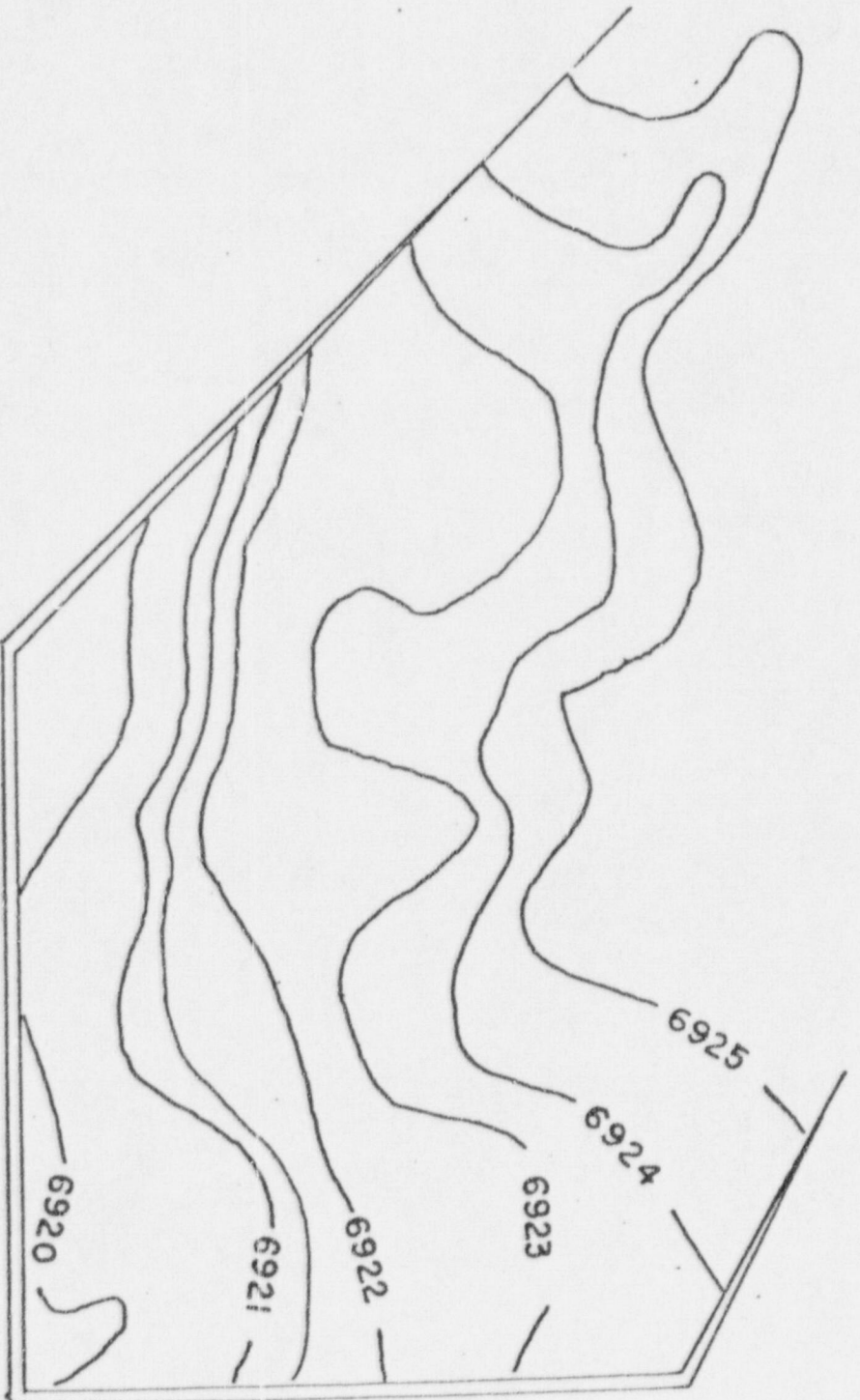
Date:



Cum.

KERR-MCGEE NUCLEAR POND 5

Solution Elevation	_____	DRY	_____
Average Depth	_____	Ft.	_____
Solution Area	_____	Acres	_____
Solution Volume	_____	Acres/Feet	_____
Date	_____		



KERR-MCGEE NUCLEAR CORPORATION POND NO. 6

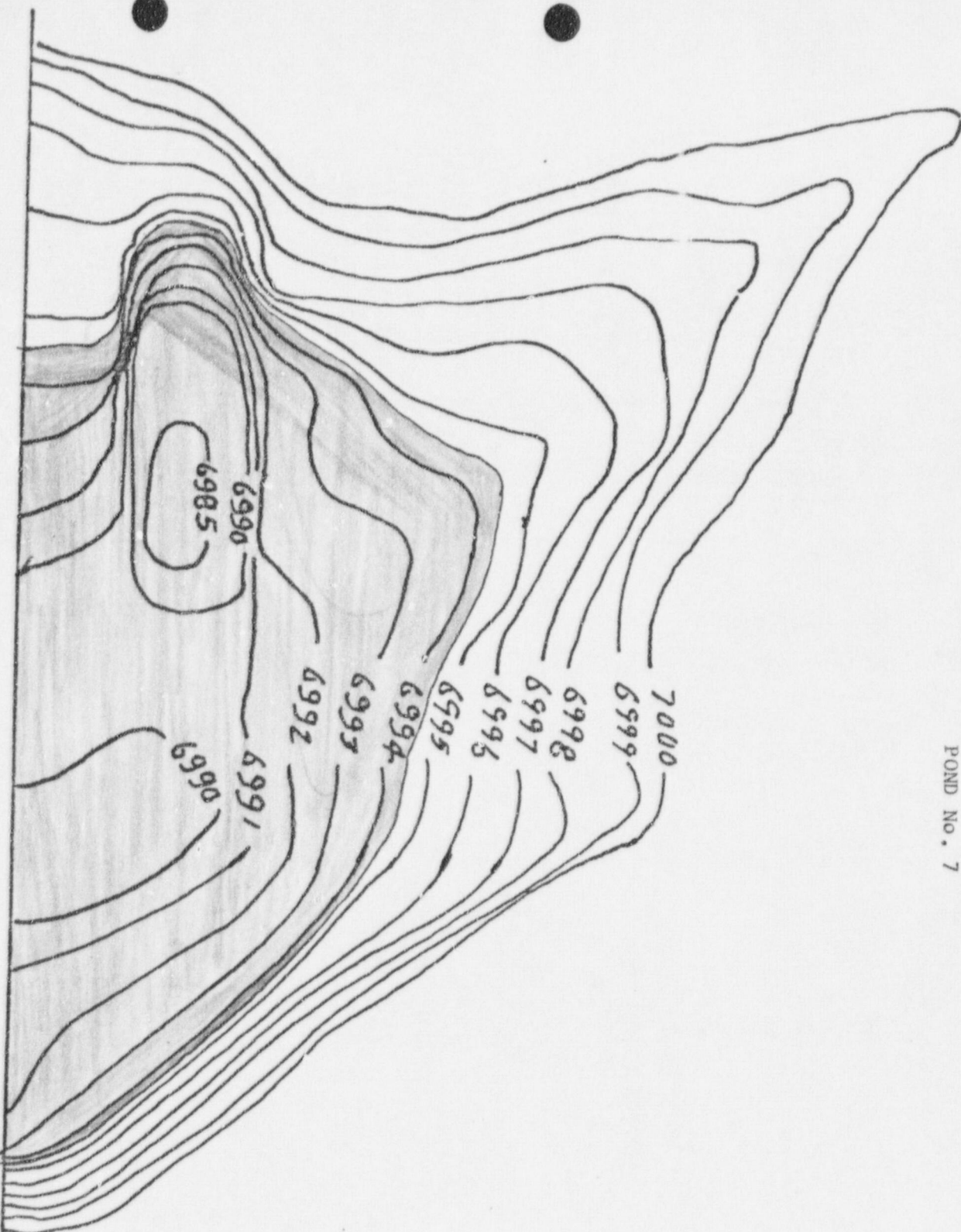
Solution Elevation _____ DRY

Average Depth _____ Ft.

Solution Area _____ Acres

Solution Volume _____ Acre Ft.

Date _____



KERR-McGEE NUCLEAR - POND 7

Solution Elevation	6994.63	
Average Depth	4.3	Ft.
Solution Area	10.4	Acres
Solution Volume	44.8	Acres/Ft.
Date	1/6/82	



KERR-MCGEE NUCLEAR - POND NO. 8

Solution Elevation 7015.60

Average Depth 7.4 Ft.

Solution Area 27.4 Acres

Solution Volume 201.7 Acre Feet

Date 1/6/82