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ROUTINE PREPARATIONS OF RA 14 SOURCES

Date:

September 4th, 1947

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RaLa Production:

The following routine sources of RaLa have been prepared since March 1, 1947:

Date	Shipment No.	Milking	Yield	Disposition
3/10/47	23	1	610 c.	Group M-5 Shot #72
3/14/47	"	2	720 c.	" Shot #73
3/19/47	"	3	640 c.	" Shot #74
4/2/47	"	4	260 c.	" Static Test
4/9/47	24	1	482 c.	" Shot #75
4/16/47	"	2	650 c.	" Shot #76
4/24/47	" (aliquot part of main soup)		103 c.*	X-1 Group
5/5/47	25	1	2050 c.	Group M-5, Shot #77
5/13/47	"	2	1200 c.	" Shot #78
5/21/47	"	3	642 c.	" Shot #79
6/17/47	"	4	173 c.	" Shot #80
6/24-25/47	26	1	1390 c.	" Shot #81
7/2/47	"	2	1450 c.	" Shot #82
7/10/47	"	3	923 c.	" Shot #83
7/30/47	27	1	1190 c.	" Shot #84
8/6/47	"	2	740 c.	" Shot #85
8/13/47	"	3	897 c.	" Shot #86
8/27/47	28	1	1850 c.	" Shot #87

*RaBa - RaLa mixed source.

In addition the following point sources were prepared:

Date	Source - millicuries	Disposition
6/2/47	0.8 Ba + La	M-5 Static measurements
6/3/47	1.0 Ba + La	-do-
6/6/47	4.0 La	A-10 calibration
6/10/47	50. La	-do-
6/13/47	3.5 Ba + La	M-5 Static measurements
"	10. Ba + La	P-2 " "

During April and May of 1947 the temperature of the main soup was measured in the storage pot in an attempt to correlate the temperature of the solution with the activity. This information was necessary in deciding on the use of temperature - dependent processes such as the SrF_2 process. The following results were obtained with a remotely controlled platinum-resistance thermometer:

La Activity "curies"	"Soup" Temp.-(Room Temp.-20°C.)
440	27.0°C
510	32.°C
750	39.°C
890	40.°C
1650	49.°C

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