

E06007 run2, Counts in the ^{207}Tl states, with grease

DATE: Sept. 9, 2007

Counts are calculated assuming a target of ^{208}Pb of thickness 0.5mm. The target normal angle is 15° with respect to the beam, facing the proton spectrometer. $50\text{ }\mu\text{m}$ of grease is assumed between each of the 0.15mm diamond foils and the lead. The beam current is $100\text{ }\mu\text{A}$ and the run times are as given in the proposal. Kinematics 01 is listed for completeness but is not expected to be useful due to the large background from the hydrogen in the grease at $p_{\text{miss}} = 0$.

| kin | time(hr) | g.s | 0.351 MeV | 1.348 MeV | 1.683 MeV | 3.470 MeV |
|-----|----------|-------|-----------|-----------|-----------|-----------|
| 01 | 1 | 47556 | 17790 | 264 | 20528 | 363 |
| 02 | 5.5 | 35103 | 99968 | 50243 | 114035 | 30977 |
| 03 | 4.5 | 25348 | 78437 | 14803 | 84787 | 11206 |
| 04 | 5.9 | 11791 | 26792 | 178916 | 43098 | 32463 |
| 05 | 4.1 | 3532 | 9681 | 49089 | 11154 | 15597 |
| 06 | 11.5 | 2051 | 3383 | 14682 | 4657 | 1575 |
| 07 | 8.5 | 964 | 1447 | 6488 | 2354 | 756 |
| 08 | 20 | 288 | 394 | 1500 | 636 | 134 |
| 09 | 30 | 407 | 380 | 1498 | 769 | 122 |
| 10 | 24 | 33 | 40 | 137 | 72 | 10 |
| 11 | 24 | 30 | 34 | 128 | 74 | 10 |