

## Ride-along Z data LOS 130, LOS 170 and LOS 330 for university collaborators

Opacity 18b shots z3285, 3286 and z3287

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Requesting unlimited release to:

### **West Virginia University collaborators:**

Mark Koepke (professor, advisor), Ted Lane (graduate student) and David Dunkum (graduate student).

### **University of Nevada, Reno collaborators:**

Roberto Mancini (professor, advisor), Dan Mayes (graduate student) and Kyle Swanson (graduate student)



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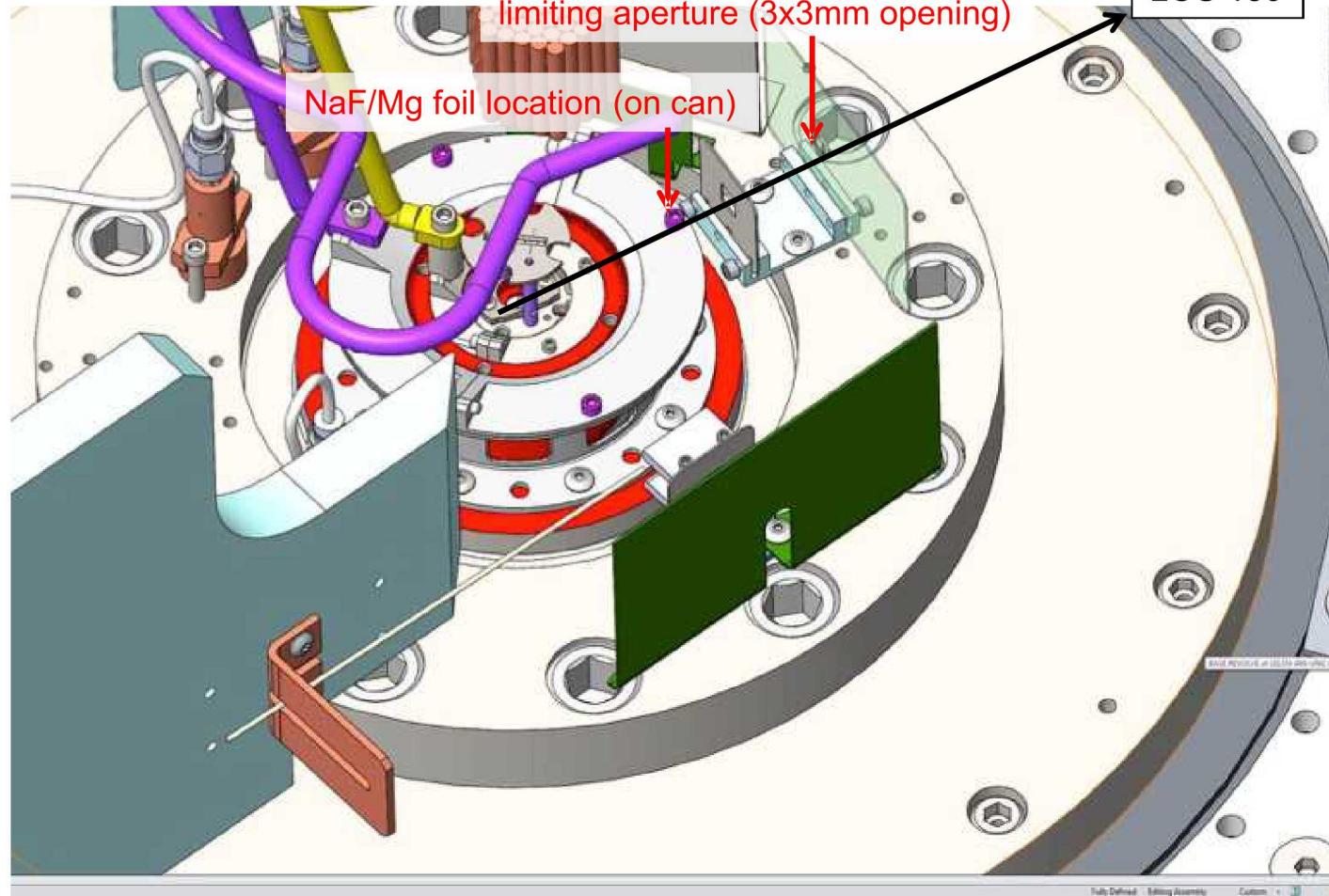
## Shot sequence:

Diagnostics	z3285 – targets	z3286 - targets	z3287 - targets
LOS 130 TIXTL RL and RR 2 KAP crystals, spectral range 6-15Å	NaF/Mg foil with 15µm CH tamping on each side placed on can.	NaF/Mg foil with 7µm CH tamping on each side placed on can.	not fielded
LOS 330 TREX A time resolved TREX B time integrated	Ne gas cell 60 Torr	Ne gas cell 60 Torr	Ne gas cell 60 Torr

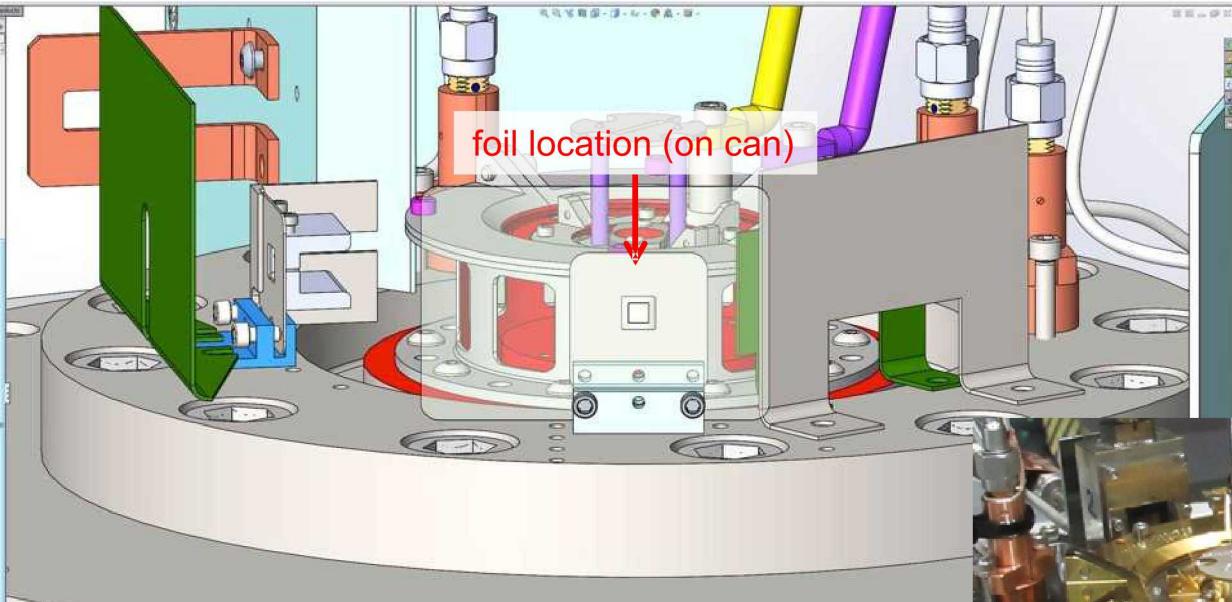
Each instrument record the x-ray emission from the Z-pinch dynamic hohlraum (ZPDH):

- LOS 130 TIXTLs instruments record the absorption of the pinch backlighter through an expanding NaF/Mg foil.
- LOS 330 TREX 6A & B: record time resolved and time integrated absorption spectra from a radiatively heated Ne gas.
- LOS 170 are MLM monochromatic and high-pass imagers, imaging the Z-pinch before and near stagnation.

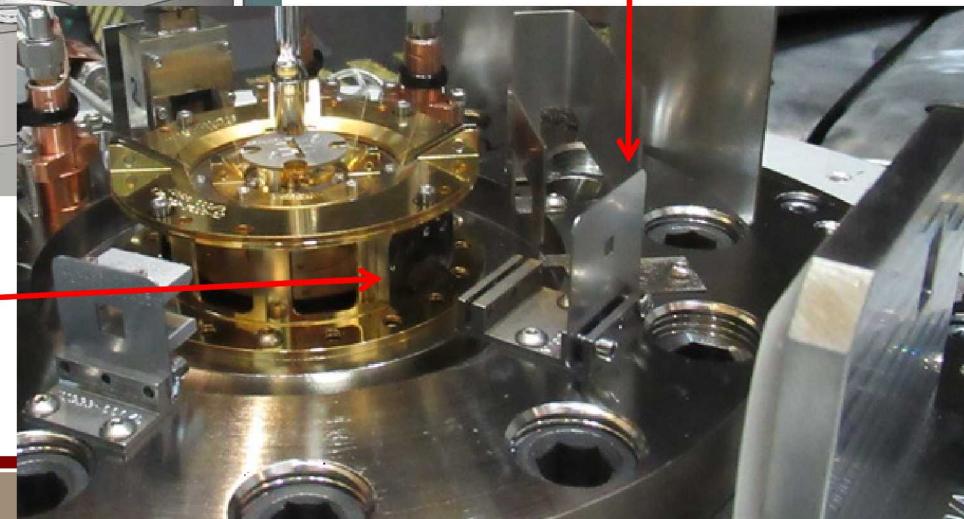
# Anode overview



# LOS 130, 12° LOS diagnostic view

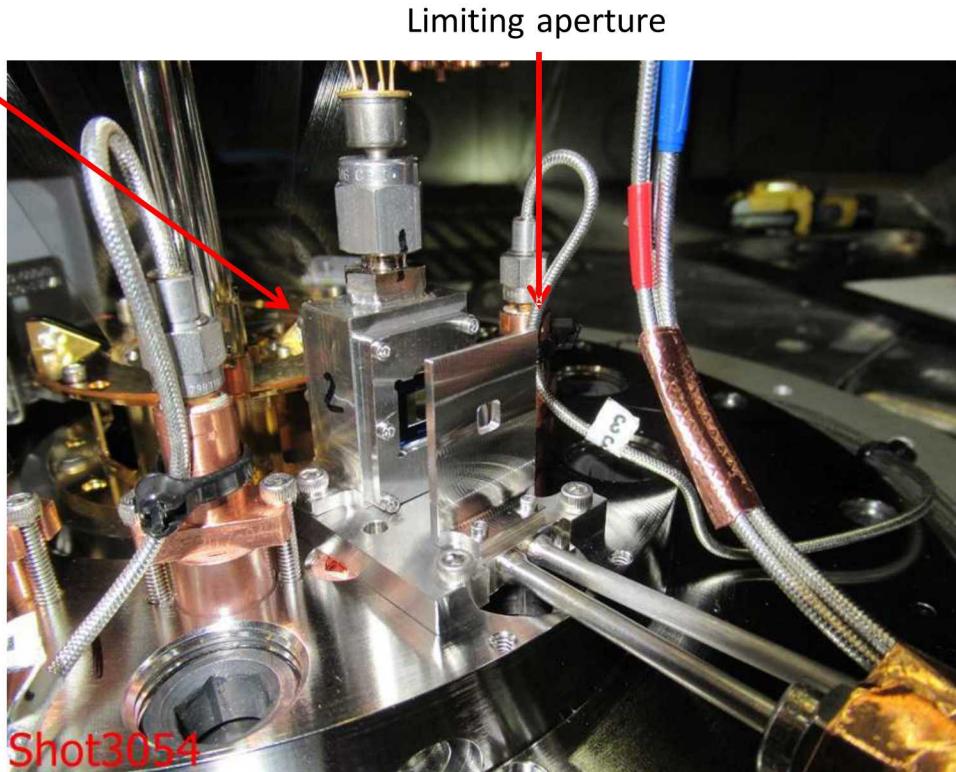
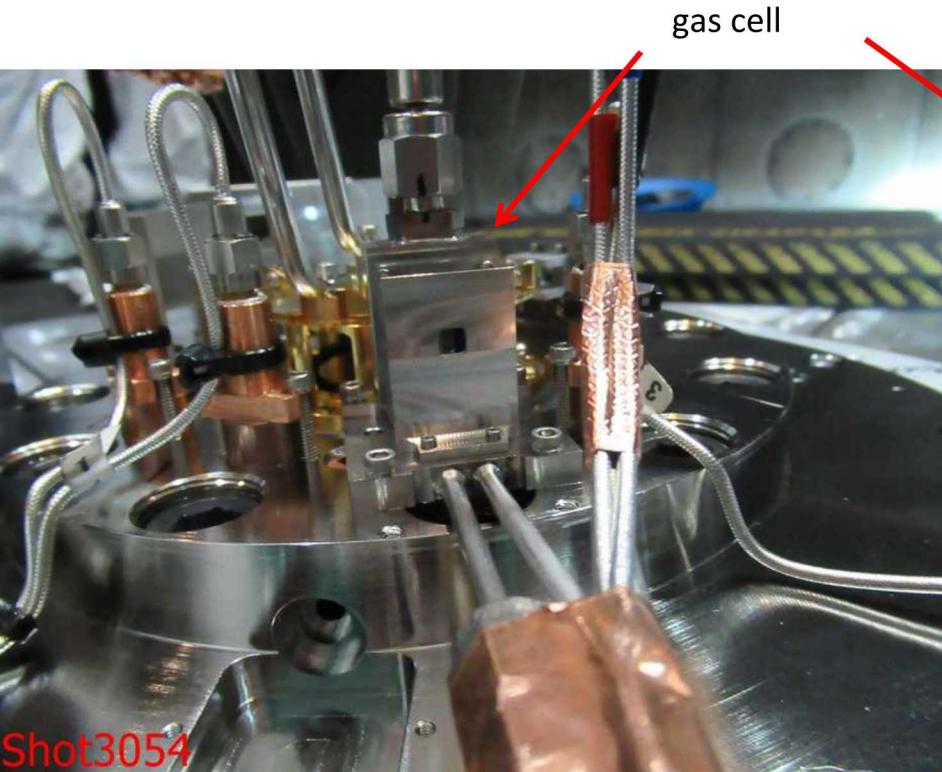


NaF/Mg foil on can  
before shot

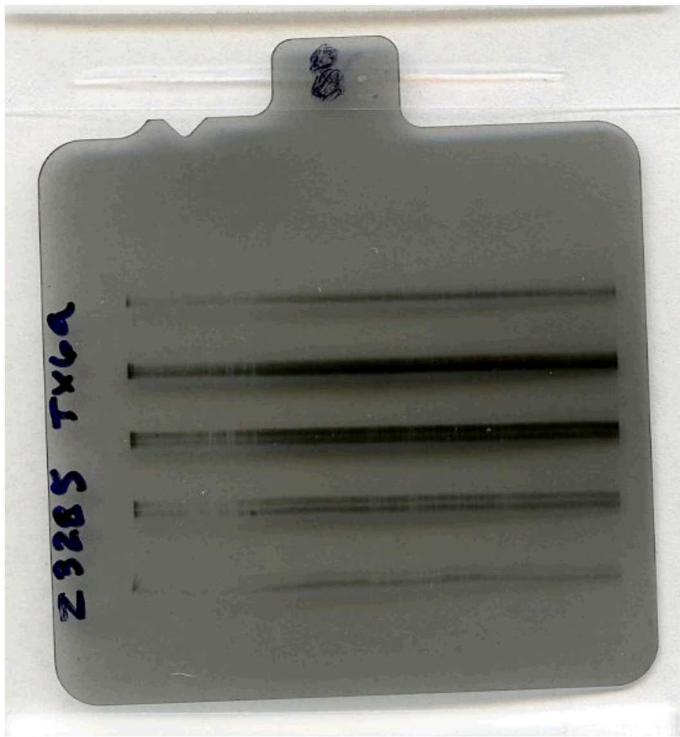


Limiting aperture

# LOS 330, Ne gas cell



z3285 – LOS330  
TREX6A – TREX6B



z3285 – LOS130

TIXTL AL

TIXTL AR



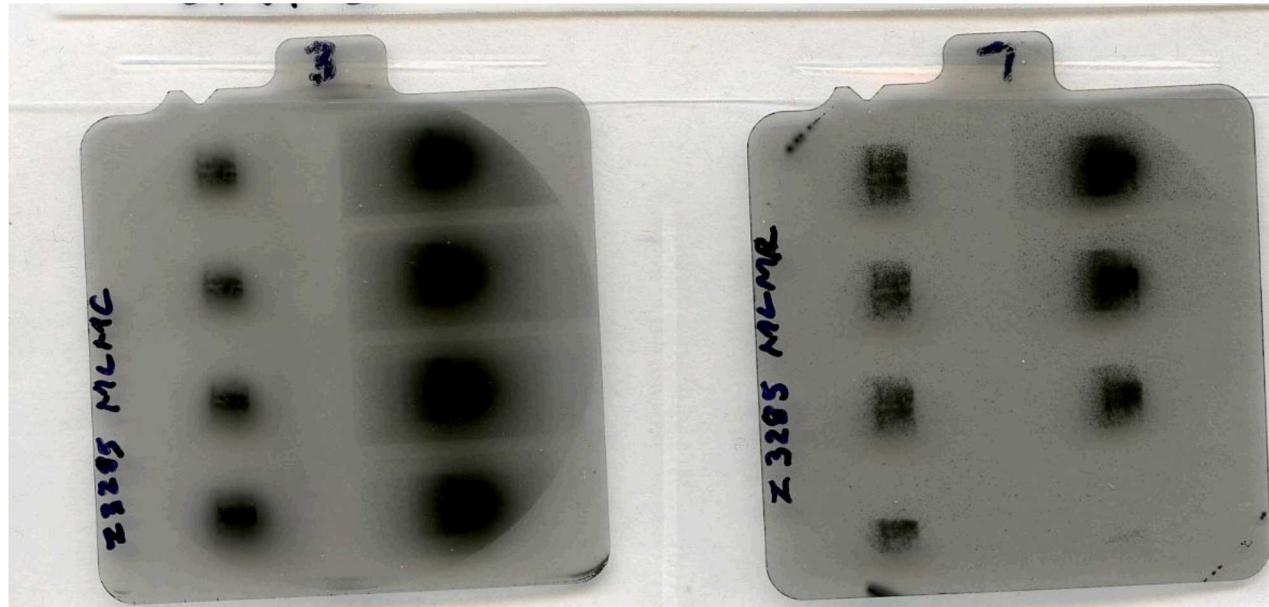
data lost  
filter malfunction

z3285 – LOS170

MLM L

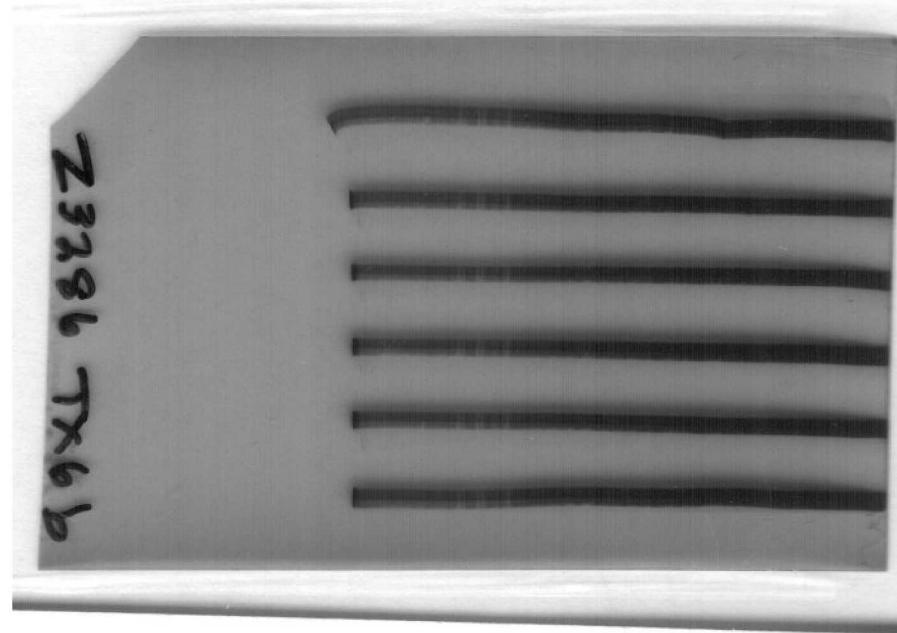
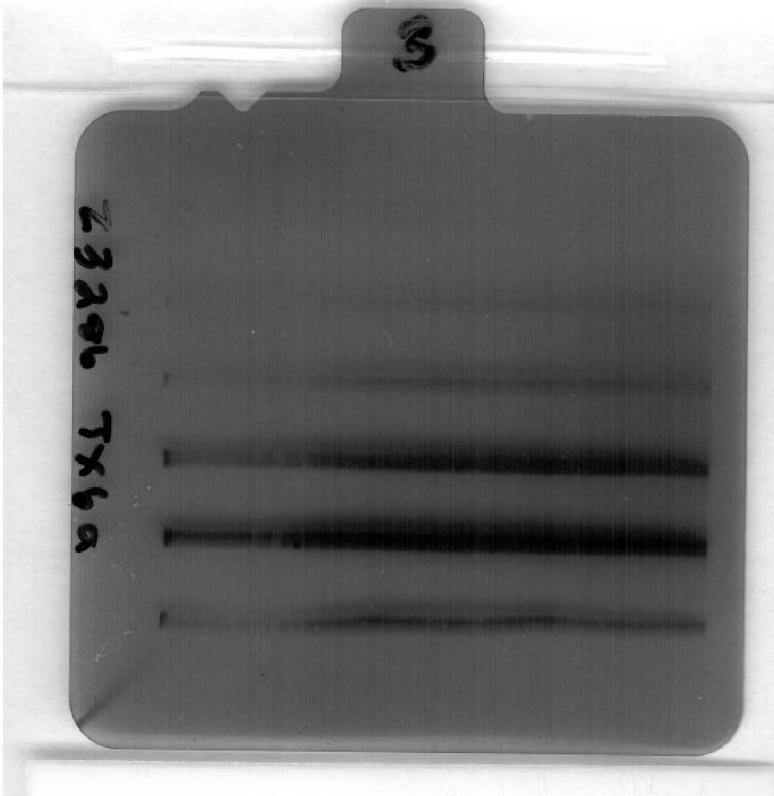
MLM C

MLM R



MLM L data was not taken since film was exposed to ambient light.

z3286 - LOS330  
TPYKA TPYKD



z3286 – LOS130

TIXTL AL

TIXTL AR



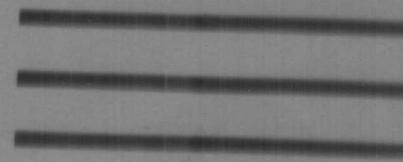
T134L

z3286



T134R

z3286

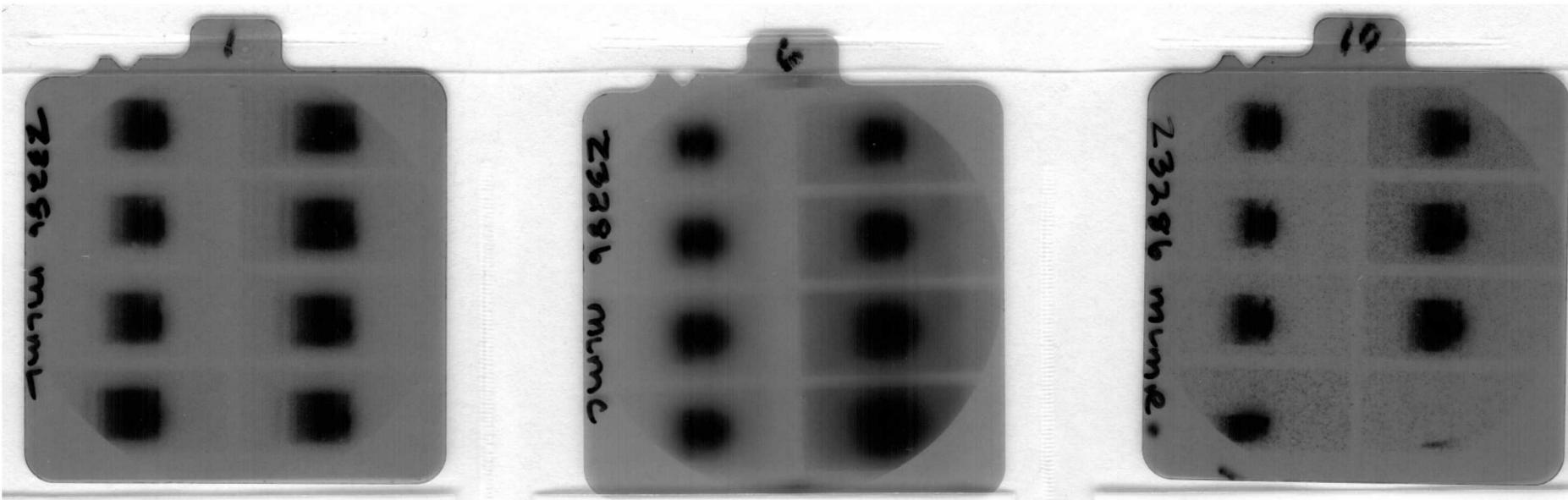


z3286 – LOS170

MLM L

MLM C

MLM R



z3287 – LOS330  
TREX6A – TREX6B



z3287 – LOS170

MLM L

MLM C

MLM R

