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EO 12065: N/A
TAGS: MNDC, PARM, TGEN, NZ
SUBJECT: SITREP VIII: GNZ RULES OUT EVIDENCE OF SOUTHERN
HEMISPHERE NUCLEAR EXPLOSION

REF: WELLINGTON 6275

1. DR. B. J. O'BRIEN, DIRECTOR OF THE NZ INSTITUTE OF
NUCLEAR SCIENCES, RELEASED THE FOLLOWING PRESS STATEMENT
AT 1600 HOURS, NOVEMBER 23, 1979.

2. QUOTE -- MEASUREMENT OF RADIOACTIVE FALLOUT AT
GRACEFIELD, LOWER HUTT

NEW MEASUREMENTS MADE AT THE INSTITUTE OF NUCLEAR
SCIENCES ON THE ORIGINAL RAIN WATER SAMPLE, AND ALSO
ON A LARGER 150-LITRE RAIN WATER SAMPLE COLLECTED UP
TO THE 8TH NOVEMBER, DO NOT CONFIRM OUR EARLIER RESULTS.
WE CAN NOW DEFINITELY SAY THAT WITHIN THE LIMITS OF
DETECTION AVAILABLE WITH THE NEW SAMPLE, THERE IS NO
BARIUM-140 OR PRASEODYMIUM-143 PRESENT IN THE SAMPLE.
THE LIMIT OF DETECTION WITH THE LARGE SAMPLE IS ABOUT
ONE-THOUSANDTH OF A PICO-CURIE PER LITRE. THE FINAL
CONCLUSION OF EXTENSIVE MEASUREMENTS ON BOTH THESE

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SAMPLES IS THAT THERE IS NO EVIDENCE OF FRESH RADIO-
ACTIVE FALLOUT DURING THE PAST THREE MONTHS.

MEASUREMENTS HAVE INDICATED THAT THE ORIGINAL SAMPLES WERE
CONTAMINATED WITH OTHER RADIONUCLIDES. THE ORIGINAL
LANTHANUM SAMPLE DID NOT DECAY TO ZERO, AND THE ORIGINAL
PRASEODYMIUM SAMPLE DID NOT APPEAR TO DECAY AT ALL, WHICH
INDICATES THAT THERE WAS LONGER-LIVED RADIOACTIVITY
PRESENT. WE ARE STILL NOT CERTAIN WHAT THIS RADIOACTIVITY
IS, BUT WITHIN OUR LIMITS OF DETECTION, IT DOES NOT EMIT
ANY GAMMA RAYS. THERE MAY HAVE BEEN SOME NEUTRAL
RADIOACTIVE CONTAMINATION, BUT WE HAVE NO DEFINITE PROOF
OF THIS AT PRESENT. WE WILL ATTEMPT TO DETERMINE THE
IDENTITY OF THESE CONTAMINANT RADIONUCLIDES BY BETA-RAY
SPECTROSCOPY DURING THE NEXT FEW WEEKS. DETERMINATION
OF THE DECAY RATES OF THE CONTAMINANTS WILL ALSO BE
MADE, BUT THIS MAY TAKE UP TO A YEAR TO ACCOMPLISH.
HOWEVER, THESE FINDINGS WILL NOT ALTER THE ABOVE
CONCLUSIONS. END QUOTE.
MARTINDELL

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