This figure, appearing in [1], presents the spectrum of one of the earliest demonstrations of high harmonic generation (HHG), a coherent nonlinear optical process that enables the production of high-order harmonics of an input frequency. In this work, a high intensity pulsed infrared laser was focused onto a gas jet of Xe atoms, where the nonlinear interaction between the intense field and atoms resulted in the production of new frequencies of light that were odd integer multiples of the input light's frequency.

The figure attempts to convey the fact that a rich and structured spectrum containing new frequencies emerges from simply focusing a short and intense pulse of light onto a collection of atoms. This figure shows the spectrum of wavelengths produced via HHG in Xe gas and aims to illustrate three important features of an HHG spectrum: the output frequency comb only contains odd harmonics of the input frequency, the harmonics extend out to high orders that are well into the extreme ultraviolet (XUV) region of the electromagnetic spectrum, and the high-order cut-off in the harmonic spectrum is very sharp.

The figure conveys these three properties of a general HHG spectrum successfully: the odd harmonics present in the output frequency comb are nicely visible and labeled, the production of high-order harmonics well into the XUV is illustrated by the suitably chosen range of wavelengths to inspect, and the dramatic drop in harmonic signal at the cut-off is captured in the spectrum, where the amplitude of the adjacent harmonics near 60 nm shows a decrease by more than a factor of 5.

Also visible in the spectrum are the second order diffraction peaks of the output frequency comb. These second order peaks appear near 101, 112 and 125 nm and thus lie adjacent to some first order diffraction peaks. These second order peaks are left unlabeled in the figure and their nature is only made apparent in the caption. An improvement to the figure could be made by labeling these peaks as second order, which would remove ambiguity and allow the figure to be "stand-alone" by relying less on its caption to be understandable. Additionally, the figure lacks a simple title. A short but descriptive title indicating what the data is and a few of the relevant experimental parameters would also aid in creating a "stand-alone" figure.

The figure itself is quite minimal and in my opinion does not present any more information than it needs to - there are no unnecessary elements presented that do not contribute to the narrative behind the figure.

[1] Ferray, M., L'Huillier, A., Li, X. F., Lompre, L. A., Mainfray, G., & Manus, C. (1988). Multiple-harmonic conversion of 1064 nm radiation in rare gases. Journal of Physics B: Atomic, Molecular and Optical Physics, 21(3), L31.