The Fisher et al. revised manuscript examines the recovery of organic-associated iron oxides using synthetic ferrihydrite with co-precipitated model organics. The justification for the research is the potential of such complexes to enhance the burial of OC by diminishing organic matter mineralization though adsorption or co-precipitation. The title suggests that this paper could lead to a better tool for determining the pool of organic matter associated with Fe, when in fact the paper is about the efficiency of Fe oxide recovery. Much of the interest in these extractions originally stems from the soil extraction of Fe-bound phosphate (i.e. Chang and Jackson 1957), the lacustrine Fe-P work of JDH Williams and colleagues, trace metal associations (i.e. Tessier) and more recent work on Fe forms relative to sulfidization (i.e. Canfield) and marine phosphates (i.e. Ruttenberg). All such extractions, regardless of the Fe association of interest, are necessarily operationally defined. Iron phases other than the target phase can lead to over-estimation, poor recovery of target phases can be an issue (i.e. the topic of this paper), sediment handling (oxidation/drying) can lead to widely varying results, and for some associations, resorption to remaining sediments can decrease efficiencies. Low yields can be remedied by multiple extractions or changes in the strength of the extractant, but with a risk of increasing matrix effects on the final analysis or affecting non-target phases.

Multiple reviewers ahead of this review have provided the authors with a detailed evaluation of the papers merit's, numerous details on literature context, critique of the overall experimental and measurement scheme, and paper organization. In view of this, my critique focus on the revised product and its overall merit.

The use of model phases to assist development of an adequate test of the extraction, is a strong part of this effort – recognizing that the material used is a subset of the forms of iron and organic matter expected in the field. The recovery of poorly crystalline Fe oxides generally is much lower than crystalline forms, with effects on extractability. The lower extractability of OC-FeR at high Fe concentrations, relative to the lower Fe concentrations, is problematic for assessing reactive Fe oxides in Fe-enriched sediment horizons. Repeated extraction could be one solution?

Considering the value of this paper to the literature, its strength is primarily as a "cautionary tale", meaning that the geochemical practitioner examining Fe forms in Fe-rich sediments needs to be aware of the poorer yield from Fe with adsorbed or co-precipitated organic matter. In this regard, the manuscript is useful and in some cases, important. I'm in agreement with the abstract sentence: *While our study is not an all-inclusive method comparison and is not aimed at delivering the "perfect" extraction setup, our findings provide a collected summary of critical factors which influence the efficiency of the CBD extraction for OC-FeR.* The lack of a solution to these disappointing yields makes this paper perhaps less interesting than it might be. However, the observations of the limits of CDB extractions make it a useful and likely valuable contribution to our understanding of coastal sediment organic matter and Fe geochemistry.