Summary of major takeaways from ERG's final EIR:

SHORT VERSION (from Environmental Defence Center):

- The Project's Final Environmental Impact Report is inadequate and cannot be certified. It
 fails to accurately inform the public of the scope and magnitude of the Project and fails to
 identify many significant impacts that remain unknown and unmitigated.
- The Project will require millions of gallons of local freshwater for drilling, construction, and operations over its projected 40 year life, depleting the groundwater basin that provides local communities with water for drinking and agricultural operations.
- If approved, over 150 oil tanker trucks will transport oil between Kern and Santa Barbara counties on local roads and highways, each day, posing serious risks to public safety and degrading our roads.
- Spills of oil and wastewater will threaten water quality and destroy sensitive wildlife habitat
- Cyclic steam injection is a highly carbon-intensive method of oil extraction that will
 increase air emissions and contribute to climate change. We cannot achieve the 11-year
 mandate to reduce global carbon emissions if the County approves oil development that
 will last for at least 40 years.
- The project will impact 99 protected species that occur onsite, as well as wetlands, oak woodlands, grasslands, and coastal sage habitats which support threatened and endangered species.

Long Version:

DETAILED IMPACTS OF ERG PROPOSED PROJECT:

Project overview: The proposed Project would involve the development and operation of 233 new thermally enhanced (cyclic steaming) production wells:

- 10 new well pads and expansion of 91 existing pads
- All will use cyclic steam injection a process of superheating steam and pumping it underground to make sticky tar-like oil flow more easily
- To produce steam, the project will use 7 steam generators (3 existing, 4 which need to be constructed)
- It will require the expansion of 9 equipment areas
- It will include constructing a pipeline to bring gas to the site to produce the energy needed to power the generators
- Because this type of oil is thick and heavy it needs to mixed with lighter oil trucked in from Kern Country before it can be transported by pipeline to a refinery
- At full well buildout, proposed production would be 10,000 barrels of crude oil per day (bpd), blended.

Climate Change:

- ERG's final EIR reports that 250,000+ MtCO2e will be released per year due to this project alone, not even including the emissions of the oil being produced. Including the end use of the oil, GHG emissions from the project are 1.5 million MtCO2e. For comparison, the county's baseline emissions level (excluding cities) is 1.2 million CO2e.
 - NOTE MtCO2e is shorthand for "mega-tons of carbon dioxide equivalent". It
 accounts for both carbon dioxide (CO2), which is the most prevalent greenhouse
 gas, as well as other greenhouse gases (the 'equivalent', including gases like
 methane).
- However, the EIR only considers climate change to be a class 2 impact: in other words, an
 impact that is significant but that can be mitigated (reduced to zero significance). This makes
 a mockery of the climate science:
 - The most recent 2018 Intergovernmental Panel on Climate Change report gave the world 12 years to reduce global emissions by 45%-50%. (IPCC Summary for Policymakers 2018). Most of these reductions need to happen in already developed nations.
 - The International Energy Agency released a report stating that to stay within the IPCC's window, *no new fossil fuel infrastructure can be built out.*
- The proposed GHG mitigation methods tend to be in-county carbon offsets or participating in California's cap-and-trade system, both of which are highly flawed:
 - There is a wealth of evidence arguing that emissions trading, including California's emissions trading scheme, have little to no impact on emissions reduction because carbon credits are currently too cheaply valued, the cap is too high, and Industrial polluters have stockpiled millions of dollars worth of free credits that the state of California handed out for free as part of its emissions trading scheme. (See work by Dr. Kathy McAffee or Dr. Larry Lohmann about the failures of cap and trade schemes to reduce emissions)
- Santa Barbara county is supposed to be committed to reducing emissions, therefore it should not approve projects that would triple emissions.

Water Concerns:

- The EIR says that the potential contamination of groundwater may be impossible to mitigate.
 This threat to groundwater is considered a *class 1 impact* (class 1 = significant & unavoidable). The risks are posed both to human health and local businesses.
- Failure of correct cyclic steam flooding, well failure, surface spills, and chemicals used in the process could contaminate groundwater zones

Habitat Destruction:

- The EIR classifies impacts on biological resources as a class 1 impact.
- 1: Biological surveys conducted on sensitive species are outdated. Surveys were conducted between 2011-2014 and the elusive nature of the species being studied makes it likely that the data presented is not accurate with current conditions. Among these species are the endangered CA tiger salamander, the threatened CA red-legged frog, and special-status

- Western spadefoot. The CA red-legged frog is the CA state amphibian and is subjected to protection by state and federal laws.
- 2: Numbers for species such as the listed vernal pool fairy shrimp and CA tiger salamander may have been skewed because the studies were conducted during drought years. These species are known to employ life history survival strategies that include dormancy during drought years. Author suggests conducting another study during years with average, or above average, rainfall to get a more accurate representation of current numbers
- 3: Habitat fragmentation was not fully evaluated in the DEIR
- 4: Survey area was confined to 500 ft radius around project sites. This drastically limits the
 scope of the study and the effects of the project on local species. Species found in the area
 such as the spadefoot, CTS, and CRLF are known to disperse from their breeding ponds.
 Study also does not take into account likelihood of a spill affecting breeding ponds and
 habitat outside of the 500 ft radius.

Cumulative Impacts:

Reminder, ERG is one of three companies that is proposing to drill new oil wells. Based on the combined impact of the projects:

- Over their lifetime, the cumulative impact of all 3 projects and old oil development in the Cat Canyon would total 760,000+ metric tons of CO2 equivalent per year (that's nearly 1 million tons of GHGs per proposed new well per year). Cumulatively the 3 projects would at least triple Santa Barbara's GHG emissions.
- From ERG's EIR (Summary Report):
 - "In summary, cumulative oil development within Cat Canyon Oil Field and corresponding oil transport would result in a significant and unavoidable impact associated with an accidental oil, produced water, or other hazardous material spill that could have substantial and long- term effects on the biological and hydrological resources affected by the spill(s). Likewise, cumulative well development could result in significant temporary noise increases over ambient conditions at some of the sensitive receptors, especially those located near multiple cumulative project property boundaries."