Warrior Exploration & Production, LLC
P.O. Box 711
Barnsdall, OK 74002

Bureau of Indian Affairs

Osage Agency

Pawhuska, Oklahoma

Submitted by email to: osagecountyoilgaseis@bia.gov **and** mosby.halterman@bia.gov

Re: Comments on the Revised Draft of Osage Oil and Gas Environmental Impact Statement (Draft EIS)

Dear Sir or Madam,

Please consider the following comments regarding the above referenced draft EIS:

- **Reasonably Foreseeable Development Scenario**
  - Annual wells expected to increase…
  - Well spuds (future**) based on EIA price projections**:

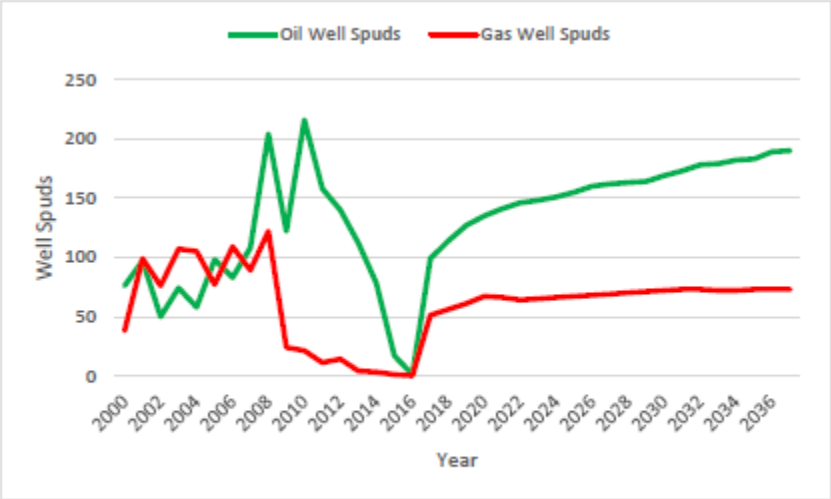


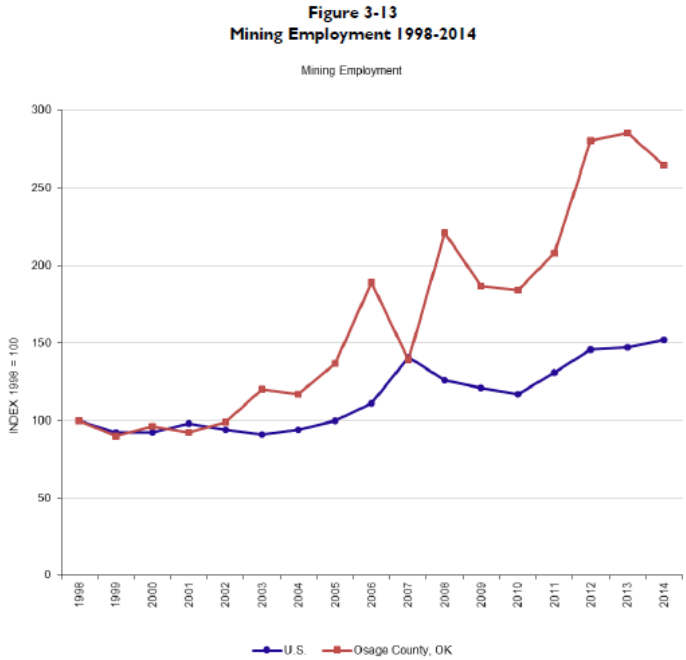
Figure 8. Actual Past and Potential Future Oil and Gas Well Spuds.

- **Comments:**
  - This Chart (Projection) estimates approximately 200 Wells for 2019? Check the actual number is much less.

- Erroneous assumption that 94 percent of future wells will be drilled where most wells have been drilled historically. (What kind of area was considered?) Much of the area that has not been drilled is due to lack of successful drilling in the past.
- **<u>Primary Issue which has impacted drilling is not price, but is</u>** related to Regulatory Burden and compliance, particularly compliance to the ESA – ABB. This correlates to the removal of 1.2 Acre Threshold by the FWS, and by coincidence the collapse in price. Price is coming back, but drilling is not.

- **American Burying Beetle**
  - "Activities associated with oil and gas development are likely to result in take of ABBs and to have adverse effects on their habitat."
- **Comments:**
  - At 2 Acres per well / 9,200 Acres (in 20 Years) out of 1.4 Million Acres. (.6%) Without any consideration of reclamation of old wells being plugged.
  - Biological Opinion states: "Anticipated habitat loss is relatively minor (less than one percent) considering that approximately 1,141,753 acres of ABB habitat exists within the ABB range in Osage County, Oklahoma. A maximum of 4,732 acres (0.41 percent) is expected to be impacted."
  - Also - "losses constitute a one-time or short-duration pulse effect to the ABB populations…..**<u>so they are unlikely to affect ABB populations long-term."</u>**
    - **<u>Yet this issue is having the largest impact on economic development of mineral estate.</u>**

- **Human Impact –**



  - **Figure 3-13** Source: US Census Bureau, as reported in Headwaters Economics 2017
  - **"**A downward trend has been observed since 2013 in Osage County, likely due to market conditions."

- **Comments:**
    - Biggest impact in Osage county has been since 2015, which is the last year included. Updated information would show a significant impact in mining employment which is really based on the regulatory environment associated with the BIA and USFWS and its significant impact on Osage Co.

- **Alternatives Presented (Comments):**
    - Since alternatives need to be considered in light of the assumptions made regarding project activity, etc., **<u>alternatives presented have been evaluated based on bad assumptions or incorrect forecasts. (Drilling Activity, etc.)</u>**
    - Of 4 Alternatives it would seem that only 2 can even really be considered…
    - Alter**native 3 & 4 should not be considered valid or reasonable alternatives, and should not be considered.:**
        - <u>Reduction of Osage Nation Mineral Estate.</u>
            - **Both alternatives 3 & 4 restrict or prohibit access to minerals** which belong to the Osage Nation. This goes against the purpose which is to maximize production of Oil & Gas Production, and does not seem reasonable to take away the Osage Nation's rights to their mineral assets, and the associated value that they represent to their shareholders/owners.
        - Producers, including Warrior Exploration & Production, have Leasehold located within propsed "no-drilling" areas. These leases have been purchased and developed at great expense based on the assumed value of undeveloped minerals which are present and available through drilling and completion of new wells. The development of those minerals is essential to achieve the planned returns expected when purchased or initially drilled. This includes the installation of infrastructure which would accommodate future drilling. Alternative 3 & 4, prohibit the ability for the lease owner to achieve development of minerals and the associated value which was anticipated when purchased, and when initially developed or drilled. How can those rights and values which are outlined within the lease contract be removed arbitrarily, and without sufficient justification.
    - **<u>Alternative 1</u>** – No Action – Leave things the way they are….
        - Although this alternative leaves in place the current regulatory burden (not necessarily solved by the EIS), it is the only reasonable alternative remaining considering Alternative 3 & 4 cannot be considered.
    - **<u>Alternative 2</u>** –is it still heavily impacted by ABB consultation issues? "lessees would be solely responsible for documenting compliance under Section 10 of the ESA"…?
        - Issues related to ABB and economic impact on development are not justified by the very low risk of species reduction.
- **Conditions of Approval –**
    - **12.** – Currently, earthen pits are utilized temporarily to capture fluids during air rotatory drilling which may include both fresh and salt water. At conclusion of drilling, these pits are emptied out, and then closed before completion of the well. COA 12. Seems to

prohibit any "temporary" storage of saltwater. This is not reasonable, and would add costs to drilling in Osage County that would further prohibit development in a cost sensitive, low reserve environment. It's not necessary given lack of evidence associated with any potential impact of temporary water in earthen pits during drilling.

- **28.** – Should not be considered. What noise levels **"may"** constitute "a public nuisance that is harmful to people or sensitive environmental receptors." Unknown requirements increase risk of investment and **reduce potential development of the mineral estate. Different noise levels are a nuisance to different people at different times.**

- **SUMMARY – This draft EIS fails to provide any reasonable alternatives to the current circumstances present in Osage County today relative to drilling, completing and working over oil and gas wells. It is not reasonable to impose "no-drill" zones and buffers that limit ability of the Osage Nation and it's lease owners to reasonably develop mineral reserve values that are vital to both parties. Limiting property rights without sufficient cause and justification, and without compensation.**

We appreciate your time and consideration with regard to these comments. More meaningful alternatives should be developed that are more balanced when considering both the environmental issues, and the development (both ability and cost) of the Osage mineral estate. The perceived "potential", or "possible" impact, which has not been sufficiently supported, should not overwhelm without sufficiency the rights of the parties which depend so greatly on the value represented by the mineral reserves.

Very Sincerely,

Robert T Knappe

Manager
Warrior Exploration & Production, LLC
P.O. Box 711
Barnsdall, OK 74002