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Pinedale Anticline Production Area Annual Meeting

April 2021

Introduction

Jonah Energy has been operating in Development Area 5 (DA-5) and Potential Development Area 5 (PDA-5) in the PAPA since June 2017.

<u>Socioeconomics:</u>

- DA-5 and PDA-5 areas are staffed with ~102 employees based at the Pinedale WY Jonah Energy Field Office and supported by ~68 employees in the Denver CO Corporate Office.
- Future staffing needs will be assessed based on well count, consolidation/construction projects, etc.

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10-Year Forecast Summary

2020: Drilling and Completions Activities in PAPA:

- Rebel 331-01-500H was drilled from existing pad in the Jonah Field with final bottom hole in the PAPA Field.

2021: Drilling and Completions Activities in PAPA:

- Four new wells planned

2022 – 2030: Drilling and Completions Activities in PAPA

- Plan to drill 8 wells per year. New wells will be drilled from existing pads and 4 new pads.

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Air Quality - Emission Reductions

Current Practices:

- Leak Detection and Repair (LDAR): Jonah Energy conducts LDAR inspections using handheld and/or a drone-mounted FLIR camera at all DA5 Central Delivery Points (Production Facilities) at least once a quarter, with some locations inspected on a monthly basis.
- Antelope 6-4 tank battery is connected to line power and has electric heat trace system which further reduces air emissions.
- Produced water from the Rainbow area top producing wells are piped to the NFX Water Treatment Facility, reducing transportation related emissions.

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Air Quality - Emission Reductions (continued)

- Evaluating additional consolidations which will reduce permitted emission sources.
- In 2020, reduced emission by replacing uncontrolled produced water tanks with ones that are controlled by routing vapors to existing enclosed combustors on location at 8 Central Delivery Points (Production Facilities) in the Rainbow and Antelope units in DA5.
- Utilize drilling rigs with lower emission technologies, e.g., Tier 2 diesel with Selective Catalytic Reduction (SCR), or natural gas rigs with non-selective catalytic reduction (NSCR) units/ oxidation catalysts.

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Air Quality – Emissions Reductions (continued)

Future Planning:

- New wells will be drilled on existing pads when possible to limit construction-related emissions.

- New wells will be tied into existing production equipment when possible to limit the amount of new emissions generating equipment in the field.

- Production equipment from future wells drilled in DA-5 will be tied into the existing Liquid Gathering System to reduce truck traffic and associated air emissions.

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Groundwater

- 2020: No drilling or completions occurred that required fresh water. Disposed of 248,885 barrels of produced water from 35 producing wells into disposal wells.
- 2021: Four new wells planned that will require fresh water for completions.
- Groundwater Monitoring: Jonah Energy follows the PAPA Groundwater Pollution Prevention, Monitoring and Response Action Plan required by the Record of Decision (ROD).
  - Shared participation with Ultra Resources and Pinedale Energy Partners (contractor proposals, plans, reports).
  - Annual meeting for results review, planning, etc. with BLM, WDEQ, WOGCC and other stakeholders.

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Reclamation

- 26 existing pad locations. 1 new pad planned for 2021.
- Reclamation plan adjusted every year to address dynamic nature of pads, growth, weather, etc.
- Monitoring:
  - All locations qualitatively monitored annually. Future reclamation actions recommended based on monitoring results.
  - Locations quantitatively monitored as required by ROD. Results include collecting species lists, basal cover, shrub/forb density and frequency.
  - Spatial and vegetation data will be maintained/updated as needed and downloaded to Pinedale Anticline Data Management System (PADMS) yearly.
  - Photos are taken within the reclamation and reference area for a visual comparison.

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Reclamation (continued)

- Seeding mix meets ROD requirements for grass, forb and shrub list and secondary forb and shrub list
- Weed control actions include:
  - Bare ground herbicide and/or noxious weed herbicide as necessary.
  - Multipronged, aggressive Cheatgrass control:
    - » Focus on prevention with robust seed mix screening and selection process.
    - » Control through chemical and mechanical techniques.
- Current Surface Disturbance: ~483 total acres:
  - Current reclaimed area: 403 acres.
  - Un-reclaimed area: 80 acres.
  - New disturbance in 2020: 15 acres.

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Questions and Contact Information

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