CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Alta Vista Golden Monkey – 1H Well
Proposed Implementation Date:	2019
Proponent:	Alta Vista Oil Corporation
Location:	T11N-R34E-Sec 16 SESW
County:	Rosebud

I. TYPE AND PURPOSE OF ACTION

Alta Vista Oil Corporation (hereafter called proponent) has requested to construct an oil well, pad site, tank battery and access road on the section of Trust Land mentioned above. This oil well will be drilled into the Heath formation. The total disturbed area is expected to be 4.7 acres. The size of the pad that is to be constructed will be approximately 450'x450', or 4.65 acres. All pits will be constructed on cuts and will not be allowed on fills. Cuts and fills will range from 0.1 to 0.3 feet.

II. PROJECT DEVELOPMENT

The proponent has completed the proper applications to begin drilling and construction of the well site. The Eastern land office has completed a field evaluation of the site and surrounding area on December 20, 2018. The tract is currently unleased, so no surface damage agreement has been signed.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

DNRC Board of Oil and Gas

3. ALTERNATIVES CONSIDERED:

Alternative A- Allow the proponent to construct the well site and begin drilling. This alternative would continue the current land use of grazing, and mineral (Hydrocarbon) extraction, plus allow for increased revenue to the school trust through mineral royalties. All construction of this project will be reclaimed upon termination of the Oil & Gas Lease. All disturbed areas that are not part of the operation of this well will be reclaimed.

Alternative B- No Action.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Alternative A- Site is composed of mostly clay soils. Geologic features in the are comprised of gumbo flats. Erosion risks in this area are slight. Erosion observations show minimal sheet and rill evidence. The proponent will use the existing road to access the well pad. Some soil disturbance may occur at the drill site and pad through cutting and filling to level the pad. Any construction would be designed to reduce the amount of erosion on the site. Reclamation efforts would involve sloping the cuts to a natural contour, removal of scoria and reseeding the site to re-establish native range species and to prevent erosion.

Alternative B- No Impact.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:
Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Alternative A- Erosion risks during this project should be minimal. Any long-term erosion risks can be mitigated by reseeding disturbed areas to a native grass mixture prepared by the Eastern Land Office. The pit will be surrounded by a berm and its surface will be lined. Other control measures may also be utilized depending on the specific needs of the site.

Alternative B- No Impact

6. AIR QUALITY:
What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Alternative A- Pollutants and Particulates may be increased during the construction of the project. After the completion of the project pollutant and particulate levels should return to normal.

Alternative B- No Impact

7. VEGETATION COVER, QUANTITY AND QUALITY:
What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Alternative A- There could be disruption to some of the vegetation currently growing at the site. Current plant species include, but are not limited to, Western Wheatgrass (Agropyron smithii), Blue Grama (Bouteloua gracilis), Sandberg Bluegrass (*Poa secunda*), Prairie Junegrass (*Koeleria macrantha*), Big Sagebrush (*Artemesia tridentata*) and Cheatgrass (*Bromus tectorum*) and various other forbs and shrubs. No rare plant species were noted during the inspection. After the reclamation has taken place the site will be seeded back to native grass species.

Alternative B- No Impact

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

Alternative A- There could be minimal disruption to the wildlife that inhabit the area. The primary species in the area consist of antelope, mule deer, burrowing rodents, jack rabbits, raptors, migratory and prairie birds and others. The area of proposed development is located in an area of long-established oil and gas production.

Alternative B- No Impact

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Alternative A- A search of the Montana Natural Heritage Program Database shows one sensitive species that has been observed in the general project area: the black-tailed prairie dog (*Cynomys ludovicianus*). While this species may be present, no impact is expected due to this project. This project is located within Greater Sage Grouse Core Habitat and has been submitted to the Montana Sage Grouse Habitat Conservation Program as Project #3320 for review. Consultation from the project has since been received from the Program.

Alternative B- No Impact

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

Alternative A- A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that no cultural or paleontological resources have been identified in the APE, so additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

Alternative B- No Impact

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Alternative A- This will temporally change the appearance of the landscape. Noise levels may be increased during the project but will return to normal upon completion. This project not located near any population centers or areas of heavy traffic, so any aesthetic impact is expected to be minimal.

Alternative B- No Impact

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Alternative A-This project may have an effect on the amount of limited resources. The amount of oil available for recovery is currently unknown. It should have no effect on any of the nearest drilling operations.

Alternative B- No Impact

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

None

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Alternative A- There may be potential safety risks for laborers but the potential risk is minimal with proper safety efforts.

Alternative B- No Impact

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

Alternative A- It should have a positive effect on Industrial, Commercial Activities and Production in the area.

Alternative B- No Impact

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

Alternative A- This project has the potential to create jobs with further development possibilities.

Alternative B- No Impact

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Alternative A- Potential tax revenue is currently unknown at this time.

Alternative B- No Impact

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

Alternative A- Traffic may temporarily increase during construction but afterwards no additional traffic should be present beyond basic service and maintenance to the well pad and equipment.

Alternative B- No Impact

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Alternative A- No Impact

Alternative B- No Impact

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Alternative A- No Impact Expected

Alternative B- No Impact

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

Alternative A- No Impact Expected

Alternative B- No Impact

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

Alternative A- No Impact Expected

Alternative B- No Impact

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

Alternative A- No Impact Expected

Alternative B- No Impact

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Alternative A- This project should generate revenue for the school trust through mineral production royalties and rental payments. The exact amount of revenue that will be generated is currently unknown at this time.

Alternative B- No Impact

EA Checklist Prepared By:	**Name:**	Seth Urick	**Date:**	12-31-2018
	Title:	Land Use Specialist		

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative A

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The granting of the requested oil well permit upon state owned trust lands for the proposed Alta Vista Golden Monkey – 1H Well should not result in nor cause significant environmental impacts. The proposed action satisfies the trusts fiduciary mandate and ensures the long term productivity of the land. An environmental assessment checklist is the appropriate level of analysis for the proposed action

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

[ ]	EIS	[ ]	More Detailed EA	[X]	No Further Analysis

EA Checklist Approved By:	**Name:**	Scott Aye		
	Title:	Eastern Land Office; Lands Program Manager		
Signature:			**Date:**	12-31-2018