CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	LUL-496-16
Proposed Implementation Date:	October 2016
Proponent:	Alta Vista Oil Corporation 3611 East Highway 14 Clearmont, WY
Location:	Section 16 – T9S-R41E (Common School Trust)
County:	Big Horn

I. TYPE AND PURPOSE OF ACTION

Alta Vista Oil Corporation (henceforth referred to as the proponent) has requested a Land Use License for road access through the state owned tract listed above. An existing gravel road that was previously used to access coal bed methane wells (which are now shut-in) would be used to access a proposed new well located to the south in Section 28. The proponent would make some improvements to the road to bring it to safety standards. The existing gravel road travels north-south through the section in the W½NE¼, W½SE¼ and a small portion of SE¼SW¼. See attached map.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

The proponent has submitted the proper documentation to request this project. The Southern Land Office staff have been notified of the project. Land Use Specialist, Jocee Hedrick, completed a site visit on September 15, 2016. All current lessees have been notified of the Land Use License application including grazing, oil & gas, coal and outfitter.

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

None

3. ALTERNATIVES CONSIDERED:

No Action Alternative: The proposed access would not occur. Current access with non-motorized recreational use, grazing leasing, outfitting and another land use license for access would continue.

Action Alternative: Montana Land & Exploration, Inc. would have permission to access and make improvements to the existing gravel road in Section 16.

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.

Most of Section 16 is composed of Wasatch Formation and a small portion of the northern area of the section is Tongue River Member of the Fort Union Formation. The Wasatch is up to 600 feet thick and consists of siltstone and sandstone which can be intermixed with shales, coal and clinker. The Tongue River Member can be up 700 feet thick and consists of sandstone, siltstone, mudstone, clay and coal beds.

Soil composition of Section 16 where the existing road is located, are loams and complexes. Web soil survey indicates these soils have severe erosion hazards, have a poor resistance to compaction, moderate to high restoration potential, and moderate to high rating for handling oil and gas vehicle traffic. Use of the existing gravel road would not further degrade any soils in this section.

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.

Surface and ground water quality would be maintained by keeping traffic on the existing road and excluding access off of the road. Deer Creek is located to the north and east of this section in sections 9, 10 & 15. This waterway would not be affected by traffic on the existing gravel road.

The Ground Water Information Center website indicates that there are 2 water wells in this section. These wells would not be affected by traffic on the existing gravel road.

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.

Pollutants and particulates may be increased during the project as a result of dust from equipment and vehicles used to travel along the gravel roads. If the proposed well is found to be economically viable, vehicle traffic would decrease to maintenance and production purposes only.

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.

Vegetative communities would not be affected by this project. The existing gravel road that would be used goes through Big Sagebrush Steppe, Great Plains Mixedgrass Prairie and Great Plains Ponderosa Pine Woodland and Savanna.

Native species found on the site include; Western Wheatgrass, Bluebunch Wheatgrass, Prairie Sandreed, Blue Grama, Needle & Thread, Green Needlegrass, Little Bluestem, Sandberg Bluegrass, Big Sagebrush, Fringed Sagewort, Rocky Mountain Juniper, and Broom Snakeweed. Cheatgrass was the only invasive species noted on the site.

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.

There may be minimal disruption to the wildlife in the area while the existing gravel road is used to access a proposed well. The scale and length of the project should not be enough to permanently disrupt wildlife species. Species in the area include antelope, mule deer, raptors and other birds, various rodents, rabbits, reptiles and others.

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.

A search was conducted using the Montana Natural Heritage Program database to identify point observations of species of concern in the section of the proposed activity. No species of concern have been documented in this section.

Section 16 is in the Greater Sage-Grouse general habitat area, and there is a documented, confirmed active sage grouse lek within two miles of the project. The proponent has applied to and been approved for this project from the Montana Sage Grouse Habitat Conservation Program. The recommendations for this project are as follows:

Activities will be prohibited from March 15 - July 15 within 2.0 miles of an actice sage grouse lek where breeding, nesting and early brood-rearing habitat is present.

Discretionary maintenance and production activity will not occur between the hours of 4:00-8:00a.m. and 7:00-10:00p.m. between March 15 – July 15.

New project noise level, either individual or cumulative, should not exceed 10 dBA (as measured by L50) above baseline noise at the perimeter of an active lek from 6:00p.m. to 8:00a.m. during the breeding season (March 1 - July 15).

Weed management is required within General Habitat for sage grouse. Reclamation of disturbed areas must include control of noxious weeds and invasive plant species, including cheatgrass (*Bromus tectorum*) and Japanese brome (*Bromus japonicas*).

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

TLMS search indicated that there are two cultural or paleontological resources in Section 16. Multiple surveys have been completed by telecommunications, coal development and oil and gas development companies. Lithic scatter and a cairn are documented in this section. Gravel road use would not impact these cultural sites.

Land Use Specialist, Jocee Hedrick, completed a site visit on Sept 15, 2016 and drove the existing gravel road. No other archeological resources were found near the road during the site visit.

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.

Aesthetics would be impacted by this project. There would be increased traffic through Section 16 to the proposed well site during drilling. If the proposed well produces economically viable amounts, there would be maintenance and production traffic through Section 16 to the well.

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.

None

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.

No human and health safety risks were identified as a result of the proposed project other than the typical occupational hazards that coincide with seismic survey operations.

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

The proposed project is not expected to alter current or future industrial, commercial, and agricultural activities and production.

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.

The proposed project would not create, move, or eliminate jobs.

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.

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.

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.

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.

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.

No impact.

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

No impact.

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

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.

The proponent has paid the $25 Land Use License application fee. The existing grazing lease on the State Sections listed above provide approximately $2,544, and the existing oil and gas lease provides $960 in rental fees, the existing coal lease provides $1,920 in rental fees and the outfitter license provides $2,198 in annual fees for a total of $7,622 in annual revenue from Section 16 that goes to Common Schools.

EA Checklist Prepared By:	**Name:**	Heidi Crum	**Date:**	9/26/16
	Title:	Mineral Resource Specialist		

V. FINDING

25. ALTERNATIVE SELECTED:

After reviewing the Environmental Assessment, I have selected the Action Alternative, to issue the Land Use License. I believe this alternative can be implemented in a manner that is consistent with the long-term sustainable natural resource management of the area and generate revenue for the common school trust.

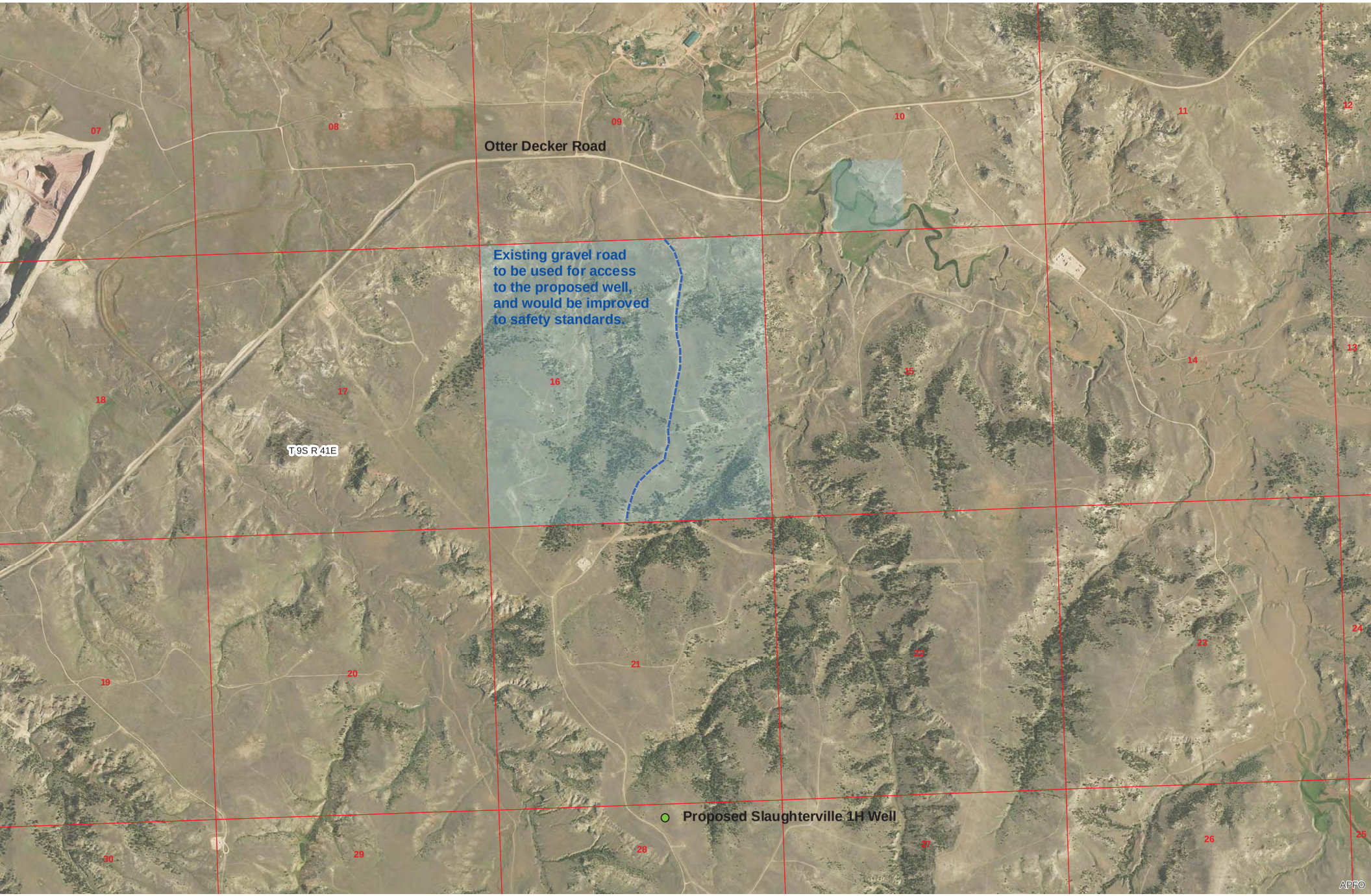
26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I conclude all identified potential impacts will be mitigated by utilizing the stipulations listed below and no significant impacts will occur as a result of implementing the selected alternative.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

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

EA Checklist Approved By:	**Name:**	Trevor Taylor		
	Title:	Petroleum Engineer		
Signature:	Trevor E Taylor		**Date:**	9/26/16


Otter Decker Road
Existing gravel road
to be used for access
to the proposed well,
and would be improved
to safety standards.
T 9S R 41E
Proposed Slaughterville 1H Well
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