

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	24N 2W sec.23 LHC Gravel Testing
Proposed Implementation Date:	Fall 2022
Proponent:	LHC, Inc
Location:	T24N-R2W-Sec 23 (Common Schools Trust)
	All
County:	Teton

I. TYPE AND PURPOSE OF ACTION

LHC, Inc. henceforth referred to as the proponent, has applied for a gravel test permit on Trust Lands on the above-referenced tract in Teton County. This project would utilize a backhoe to dig holes to a depth of approximately 20 feet. Testing and documenting would be performed by employees of Trust Lands and LHC, Inc.

If approved, the proponent would be issued a test permit to determine the gravel resource contained within the above-referenced tract. Gravel and dirt would be excavated from the ground and sub-surface. Topsoil would be saved, and the disturbance created would be reclaimed immediately upon completion of logging the test pit.

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 a permit to test for aggregate to the DNRC to explore gravel resources. The Conrad Unit has been notified. There is one surface lease on this tract, Ag & Grazing lease #10643 by Brett Debruycker and he has been notified of testing.

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

None known

3. ALTERNATIVES CONSIDERED:

No Action Alternative – No Action

Action Alternative – Grant the proponent the permit to conduct a test hole survey on State Trust Land.

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.

Site geology consists of alluvial and glacial till gravel deposits overlying the Marias River Formation consisting of beds of shale, bentonite, dolostone, and limestone.

There are ten soils found within section 23:

- Acel silty clay loam, 0 to 4 percent slopes
- Varney-Rothiema clay loams, 0 to 4 percent slopes

- Mego-not-Richey-Tanna clay loams, 2 to 8 percent slopes
- Sunburst-Neldore complex, 15 to 60 percent slopes
- Hillon-Kevin clay loams, 4 to 16 percent slopes
- Abor-Yawdim silty clay loams, 15 to 35 percent slopes
- Niart-Crago gravelly loams, 0 to 4 percent slopes
- Scobey-Kevin clay loams, 2 to 8 percent slopes
- Kobase-Ethridge clay loams, 4 to 8 percent slopes
- Mego-not-Kobase-Yadim complex, 8 to 15 percent slopes

These ten soils exhibit the following properties:

Shallow excavations – These soils range from very limited to somewhat limited ratings. These ratings are the properties that influence the ease of digging and resistance to sloughing.

K factor – Nine soils exhibit a low rating for soil-to-sheet and rill erosion from water. The Acel silty clay loam has a higher rating and accounts for 0.1 acres within the area of interest.

Soil compactibility risk – Nine soils have medium soil compactibility risk, while Acel silty clay loam has a high rating and accounts for 0.1 acres within the area of interest.

Wind erodibility group – Soils found in the project area exhibit a low risk to wind erosion.

Soil restoration potential – All ten soils have a high potential for soil restoration potential.

Soil rutting hazard – All soils have a severe rutting hazard rating.

Testing would be conducted in areas with mild topography and under mostly dry conditions. This should mitigate the risk of displacing, compacting, or otherwise impacting the soils beyond the direct areas of testing. The test pits will be reclaimed immediately upon digging.

Care would be taken to preserve the soil when digging the test holes by separating the soil from the underlying material. The soils are susceptible to weed infestation once replaced and will be monitored thereafter.

No Action Alternative – The current geology and soils in the project area would remain undisturbed, as they currently exist.

Action Alternative – The proponent would be granted a permit to test for gravel. Any disturbances for gravel testing in the area would be reclaimed immediately before moving on to the next test site.

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.

There is one ephemeral stream that runs through the west half of section 23 and a freshwater emergent wetland located in the NWNE quarter of section 23.

A search of the Montana Ground Water Information Center website found there is one stock water well within a one-half-mile radius of the project. This well is in neighboring SESW quarter section of section 24, this stock water well intercepts an intermittent spring at an elevation of 3880' ASL, showing a documented water static level of one foot below ground surface. Testing areas are approximately at an elevation of 3900' ASL to 4040' ASL.

No Action Alternative – No impact

Action Alternative – The proponent would be granted a permit to test for gravel. Groundwater is not expected to be encountered during testing. Testing would be required to abide by a 50-foot setback from any wetlands or

groundwater wells. There would be no anticipated impacts on the quality or quantity of the surface water or groundwater by implementing the action alternative.

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.

No Action Alternative – No impact

Action Alternative – Some dust particulates from traveling to the test sites and digging the test pits may affect air quality temporarily during gravel testing operations. There are no anticipated long-term effects on air quality.

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.

The proposed testing area within section 16 is covered by cultivated crops and Lowland Prairie Grassland system, comprising of western wheatgrass, thickspike wheatgrass, green needlegrass, blue grama, and needle and thread.

An inventory of the Montana Natural Heritage Program's Species of Concern database was conducted for the project area. The search yielded no vegetation species of concern.

No Action Alternative – No impact

Action Alternative – Vegetation communities would be affected by this project. The use of excavation equipment would temporarily damage some areas of the plant community. The vegetation would be compacted and excavated by gravel testing equipment. Damage to the plant community should be less impactful at this time of year since most species will be entering dormancy. Per the stipulations of the permit, the proponent would be responsible for the management and mitigation of invasive weeds in the testing area. The proponent will also be responsible for reseeding the affected areas with a native range mixture as suggested by the Conrad Unit office.

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.

This area provides habitat for a variety of big game, large and small mammals, raptors, and a variety of other birds.

No Action Alternative – No impact

Action Alternative – The proponent would be granted a permit to test for gravel and impacts to habitats are expected to be negligible. The size of the project area and length of the action alternative is not substantial enough to permanently disrupt wildlife in the area. Similar habitat and forage can be found throughout the surrounding area and could sustain the wildlife species temporarily. Grazing by domestic animals would continue.

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.

Section 23 of Township 24N, Range 2W lies within Grizzly Bear habitat. According to the Montana Natural Heritage Program, there have been no observations of species of concern within one-half-mile of the testing area.

No Action Alternative – No impact

Action Alternative – The proponent would be granted a permit to test for gravel. This activity may create a temporary disruption to the species of concern listed. Rangelands and croplands are abundant in the project vicinity and animals could utilize surrounding areas during the temporary disturbance with the ability to return to the site upon completion and reclamation of activities.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

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 results revealed that no cultural or paleontological resources have been identified in the APE, but it should be noted that Class III level inventory work has not been conducted there to date.

No Action Alternative – No impact

Action Alternative – The proponent would be granted a permit to test for gravel. Any resources can be avoided with backhoe trench excavation for gravel exploration and assessment work, the proposed project will result in *No Effect on Antiquities* as defined under the Montana State Antiquities Act.

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.

Testing operations would be located approximately 8.5 miles away from the community of Dutton. Gravel testing operations may be visible from Highway 221. The disturbances would be temporary and should not disrupt any motorists traveling on Highway 221.

No Action Alternative – No impact

Action Alternative – The proponent would be granted a permit to test for gravel. A minimal disturbance may occur during testing operations. However, there are no long-term effects on aesthetics anticipated.

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.

No Action Alternative – No impact

Action Alternative – Negligible impacts expected

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.

Testing would only occur upon State Trust Land. The referenced tract currently has an ag & grazing lease for the use of grazing and agricultural grain production under state lease #10643.

No Action Alternative – No Impact

Action Alternative – The action alternative would have negligible impact to the current ag and grazing operations occurring on the tract. The action alternative is not expected to affect any future activities on the tract or to have long-term negative cumulative effects.

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 Action Alternative – No impact

Action Alternative – Typical safety risks for laborers working with mechanized equipment would be present, but the potential risk would be minimal with proper safety efforts.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

The proponent would complete approximately six test holes, each equating to approximately 700-square feet in size. Topsoil and subsoil would be separated, a sample would be taken, and then the area would be reclaimed. Testing activities would be coordinated with the proponent, DNRC, and surface lessee. Gravel testing operations could lead to future development of the resource which could further alter grazing or agriculture on the tract. Future development of the resource would be evaluated under a separate MEPA document. This project is not expected to significantly impede the existing surface production of state lease #10643.

No Action Alternative – No impact

Action Alternative – Negligible impacts expected

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.

No Action Alternative – No impact

Action Alternative – This project would have no effect on creating, moving, or eliminating 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 Action Alternative – No impact

Action Alternative – Negligible impacts expected

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 Action Alternative – No impact

Action Alternative – Negligible impacts expected

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.

There are no known zoning or management plans overlying the project area.

No Action Alternative – No Impact

Action Alternative – Negligible impacts expected

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.

This tract has public access available. The project will occur during general rifle hunting season.

No Action Alternative – No Impact

Action Alternative – Impacts to hunting and other recreation forms would occur during testing operations. Noise and visual disturbances would occur for species in the area that sportsman may be targeting. The length of this project is not expected to permanently disrupt wildlife species. This site is not designated as a wilderness area.

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 Action Alternative – No impact

Action Alternative – No impacts expected

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No Action Alternative – No impact

Action Alternative – No impacts expected

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

No Action Alternative – No impact

Action Alternative – No impacts expected

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.

No Action Alternative – No impact

Action Alternative – The permit fee for the action alternative is \$25.00.

Future development of projects is not expected to be hindered by the requested action. The project is not expected to significantly impede the existing surface production of state leases #10643.

EA Checklist Prepared By:	Name: Thomas Palin	Date: November 14, 2022
	Title: Mineral Resource Specialist	
	Name: Michaela Hanson	Date: November 1, 2022
	Title: Land Use Specialist	

V. FINDING

25. ALTERNATIVE SELECTED:


Action Alternative – Grant the proponent the permit to conduct a test hole survey on State Trust Land.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

No significant impacts are expected. A temporary disturbance will occur as a result of the proposed actions, but it has been determined the effects will not be cumulative or significantly adverse. All identified potential impacts can be mitigated using common practices, which will be stipulated in the test permit. The proposed action satisfies the trust's fiduciary mandate while maintaining the long-term productivity of the land.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS More Detailed EA No Further Analysis

EA Checklist Approved By:	Name: Erik Eneboe	
	Title: Conrad Unit Manager	
Signature:		Date: November 14, 2022

LHC, Inc. Gravel testing 24N 2W Section 23

