

## ENVIRONMENTAL ASSESSMENT

### On an Application for an OPENCUT MINING PERMIT

The Montana Department of Environmental Quality (DEQ) prepared this Environmental Assessment (EA) in accordance with requirements of the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose, and analyze the impacts of a proposed action. This document may disclose impacts that have no legislatively required mitigation measures, or over which there is no regulatory authority.

The state law that regulates gravel mining operations in Montana is the Opencut Mining Act. This law and the rules adopted thereunder place operational guidance and limitations on a project during its lifetime, and provide for the reclamation of land affected by opencut mining operations.

Local governments and other state agencies may have authority over different resources and activities under their regulations. Approval or denial of this Opencut Application will be based on a determination of whether or not the proposed operation complies with the Opencut Mining Act and the rules adopted thereunder. The DEQ approval of this application would not relieve the operator from the obligation to comply with any other applicable federal, state, or county statutes, regulations, or ordinances. The operator is responsible for obtaining any other permits, licenses, approvals, etc. that are required for any part of the proposed operation.

**APPLICANT:** Schellinger Sand & Gravel, Inc.

**COUNTY:** Teton

**SITE NAME:** Peebles

**DATE:** August 2010

**LOCATION:** Section 27, T25 N, R7 W

**PROPOSAL:** Schellinger Sand & Gravel, Inc. proposes to mine, crush, and screen approximately 300,000 cubic yards of gravel from a 33.9 acre site located approximately 15 miles northwest of Choteau on Teton Canyon Rd. A temporary asphalt plant will be set up during the summer of 2011. A reclamation bond would be held by DEQ to ensure that final reclamation of the site to pasture, and seasonal stock ponds and wildlife ponds would be completed by 2013. This application contains all items required by the Opencut Mining Act and its implementing rules. Proponent commits to properly conducting opencut operations and would be legally bound by the permit.

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b>	<p>The site is located on pasture land with 0-4% slopes at the base of the Rocky Mountain Front on what appears to be a stream terrace. The soil consists of an average of 3" gravelly sandy loam soil. This area receives approximately 12" of precipitation per year.</p> <p><i>Impacts:</i> An irreversible and irretrievable removal of gravel from the site would occur. A small impact to the quantity and quality of soils from salvaging, stockpiling, and resoiling activities also would occur, but this would not impair the capacity of the soils to support full reclamation. There are no unusual topographic, geologic, soil, or special reclamation considerations that would prevent reclamation success.</p>
<b>2. WATER QUALITY, QUANTITY AND DISTRIBUTION</b>	<p>An irrigation ditch is located approximately 200 feet to the east of the proposed permit boundary. The ditch runs intermittently throughout the summer irrigation season. The Teton River is located approximately 2,000 feet to the south of the proposed permit boundary. There are no wells located within 1,000 feet of the permit boundary. The estimated maximum depth of mining is 12 feet from the</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
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	<p>ground surface and the estimated depth of the water table ranges from 7 to 15 feet from the ground surface. Therefore, the proposed ponds will be dry for a large portion of the year. An estimated maximum of 20,000 gallons of water per day will be used for crushing and dust abatement. This water will be obtained from the groundwater exposed by mining activities.</p> <p><i>Impacts:</i> The proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources.</p> <p><i>Cumulative:</i> Cumulative impacts by the proposed action on resources would be negligible.</p>
3. AIR QUALITY	<p>Air quality standards are based upon the Clean Air Act of Montana and pursuant rules and are administered by the DEQ Air Resources Management Bureau (ARMB). Its program is approved by the Environmental Protection Agency (EPA). These rules and standards are designed to be protective of human health and the environment.</p> <p>Air quality permits would be required on the processing equipment before installment. Machinery, such as generators, crushers and asphalt plants, are individually permitted for allowable emissions. Best Available Control Technology (BACT) is the usual standard applied.</p> <p>Fugitive dust is that which blows off the pit floor, stockpiles, gravel roads, farm fields, etc. It is considered to be a nuisance but not harmful to health.</p> <p><i>Impacts:</i> Air quality standards as set by the federal government and enforced by the ARMB would allow minimal detrimental air impacts.</p>
4. VEGETATION COVER, QUANTITY AND QUALITY	<p>The vegetation at the site consists of low-lying scrub brush and forbs including potentilla, yarrow, blanket flower, vetch, buckwheat, and juniper.</p> <p><i>Impacts:</i> No long term detrimental impacts to the vegetation would occur.</p>
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	<p>Although the area is used primarily for pasture, it also supports populations of deer, rodents, song birds, coyotes, foxes, grizzly bears, raptors, insects and various other animal species. Population numbers for these species are not known.</p> <p><i>Impacts:</i> The proposed mine is expected to temporarily displace some individual species and it is likely that the site would be re-inhabited following reclamation to similar habitat.</p>
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:	<p>The Montana Natural Heritage Program (MNHP) lists the following eight species of concern in the vicinity of the site:</p> <p><b>Long-billed Curlew</b> (<i>Numenius americanus</i>) is a large North American shorebird. Adults have a very long bill curved downwards, a long neck and small head. The bird usually feeds in flocks, with food consisting of crabs and various other small invertebrates.</p> <p><b>Alder Flycatcher</b> (<i>Empidonax alnorum</i>) is a small species within the flycatcher family. Thirteen to seventeen centimeters in length, with a wingspan of approximately 21 cm, the Alder Flycatcher has dull greenish-olive upperparts with a similarly colored, but darker, crown. Habitat use is similar to that of the Willow Flycatcher and includes willow thickets, red osier dogwood, or birch along the edges of wetlands, streams, lakes, and forests.</p>

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	<p><b>Sprague's pipit</b> (<i>Anthus Spragueii</i>) is a sparrow-sized bird. Its summer range includes the eastern three-quarters of the state. It arrives in Montana in early May and breeds shortly thereafter. Fall migration begins at the end of August. This bird prefers native, medium to intermediate height prairie and, in a shortgrass prairie landscape, can often be found in areas with taller grasses.</p> <p><b>Brewer's sparrow</b> (<i>Spizella breweri</i>) is a songbird strongly associated with sagebrush over most of its range. In summer it is found across Montana. This species migrates to the Southwestern U.S. and Northern Mexico for winter. Brewer's sparrows are closely associated with sagebrush, preferring dense stands broken up with grassy areas.</p> <p><b>McCown's longspur</b> (<i>Calcarius mccownii</i>) is a medium-sized sparrow. The eastern three-quarters of Montana make up a portion of its summer range. McCown's longspur spends its winters from Nebraska and Colorado southward. It is found in shortgrass prairies, native grasslands, pastures, and agricultural areas.</p> <p><b>Chestnut-collared longspur</b> (<i>Calcarius ornatus</i>) is a small, sparrow-like songbird. The eastern two-thirds of Montana, east of the rocky mountain front, make up a portion of its summer range. Species winters from Colorado and Kansas south to Texas and northern Mexico. Dry elevated prairies and short-grass plains are its preferred habitats.</p> <p><b>Bobolink</b> (<i>Dolichonyx oryzivorus</i>) is a small new world blackbird and the only member of the genus <i>Dolichonyx</i>. These birds migrate to Argentina, Bolivia and Paraguay. Bobolinks forage near the ground, and mainly eat seeds and insects. They prefer tall prairie grass and other open areas with dense grass, but can also be found in hay fields.</p> <p><b>Grizzly Bear</b> (<i>Ursus arctos</i>) has a massive head with a prominent nose, rounded inconspicuous ears, small eyes, short tail a large, powerful body, and a noticeable hump above the shoulders. No true migration occurs, although Grizzly Bears often exhibit discrete elevational movements from spring to fall, following seasonal food availability. In Montana, Grizzly Bears primarily use meadows, seeps, riparian zones, mixed shrub fields, closed timber, open timber, sidehill parks, snow chutes, and alpine slabrock habitats. Grizzly Bears are opportunistic and adaptable omnivores.</p> <p><i>Impacts:</i> None of the listed species have been found on this site. However, because grizzly bears have been known to migrate across this area, the Federal Highway Administration will potentially be imposing restrictions on operations from November 2010 to July 2011.</p>
<b>7. HISTORICAL AND ARCHAEOLOGICAL SITES</b>	<p>The Montana State Historic Preservation Office (SHPO) was notified of the application. It reported that one site has been discovered previously on this property. A pedestrian survey of the area by DEQ personnel did not reveal any artifacts or signs of occupation. No signs were evident at depth in the previously disturbed pasture area. Therefore, a cultural resource inventory is not recommended by SHPO at this time.</p> <p><i>Impacts:</i> If during operations resources were to be discovered, activities would be temporarily moved to another area or halted until SHPO was contacted and the importance of the resources was determined.</p>

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
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<b>8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY</b>	<i>Impacts:</i> Negligible impacts to land, water, air, or energy would occur.

<b>IMPACTS ON THE HUMAN POPULATION</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</b>	This site is not zoned.
<b>10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING</b>	The area surrounding the proposed pit is sparsely populated and consists mainly of pasture land. <i>Impact:</i> This pit is being sited in this area because of the location of the resource, and to provide materials for a road maintenance project on Teton Canyon Road.
<b>11. AESTHETICS</b>	There are no nearby residents. The proposed hours of operation are Monday through Saturday, 6 am to midnight. These hours will have minimal impact given the remoteness of the location and low population density in the surrounding area.
<b>12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT</b>	<i>Impacts:</i> New employment opportunities would be limited. This is a relatively small operation.
<b>13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION</b>	<i>Impacts:</i> The acreage listed in the application would be taken out of pastureland use and put into industrial/commercial use. Upon completion of mining, the land would be reclaimed back to pastureland with seasonal stock ponds and wildlife ponds.
<b>14. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME</b>	Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, etc., from the companies, employees, or landowners benefitting from this operation. Following reclamation, it is assumed the tax base would revert to pre-mine levels
<b>15. DEMAND FOR GOVERNMENT SERVICES</b>	Limited oversight by DEQ Opencut Program personnel would be conducted in concert with other area activity when in the vicinity.
<b>16. HUMAN HEALTH AND SAFETY</b>	Any industrial activity will increase the opportunities for accidental injury. There are agencies that require specific safety measures are in place. If followed there is no reason to believe that significant safety issues would be present.
<b>17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</b>	This activity would not inhibit the use of the identified resources.
<b>18. NATIVE CULTURAL CONCERNS</b>	<i>Impacts:</i> None Identified.

**19. Alternatives Considered:**

- A. Denial Alternative: The Department would deny an application that does not comply with the Act and Rules. No impacts to the natural or human environment would occur.
- B. Approval Alternative: The Department would approve an application that complies with the Act and Rules. Impacts of this application are addressed in the body of the EA.

**20. Public Involvement, Agencies, Groups or Individuals contacted:** Montana State Historic Preservation Office, Montana Natural Heritage Program, MT DNRC, Federal Highway Administration.

**21. Other Governmental Agencies which May Have Overlapping or Sole Jurisdiction include, but may not be limited to:** Teton County Commission or County Planning Department (zoning), Teton County Weed Control Board, Teton Cooperative Canal Company, MSHA and OSHA (worker safety), DEQ ARMB (air quality) and Water Protection Bureau (groundwater and surface water discharge; stormwater), DNRC (water rights), and MDT (road access).

**22. Regulatory Impact on Private Property:** The analysis done in response to the Private Property Assessment Act indicates no impact. The Department does not plan to deny the application or impose conditions that would restrict the use of private property so as to constitute a taking.

**23. Magnitude and Significance of Potential Impacts:** This proposal is not likely to create impacts of significance due to mitigation, restrictions, and oversight mandated by the Opencut Mining Act and pursuant rules and the Montana Clean Air Act.

**24. Recommendation for Further Environmental Analysis:** [ ] EIS [ X ] No Further Analysis

EA Prepared By: Kenley Stone Opencut Mining Program Environmental Specialist  
Name Title

EA Reviewed By: Chris Cronin Opencut Mining Program Supervisor  
Name Title

## PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PPAA?

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deprive the owner of all economically viable uses of the property?
	X	4. Does the action deny a fundamental attribute of ownership?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 5a and 5b and continue with question 6.)
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property?
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? (If the answer is NO, skip questions 7a-7c)
		7a. Is the impact of government action direct, peculiar, and significant?
		7b. Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
		7c. Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.

**SCHELLINGER SAND AND GRAVEL, INC.  
PEEBLES SITE  
SECTION 27. T25N, R7W  
TETON COUNTY  
8/9/10**

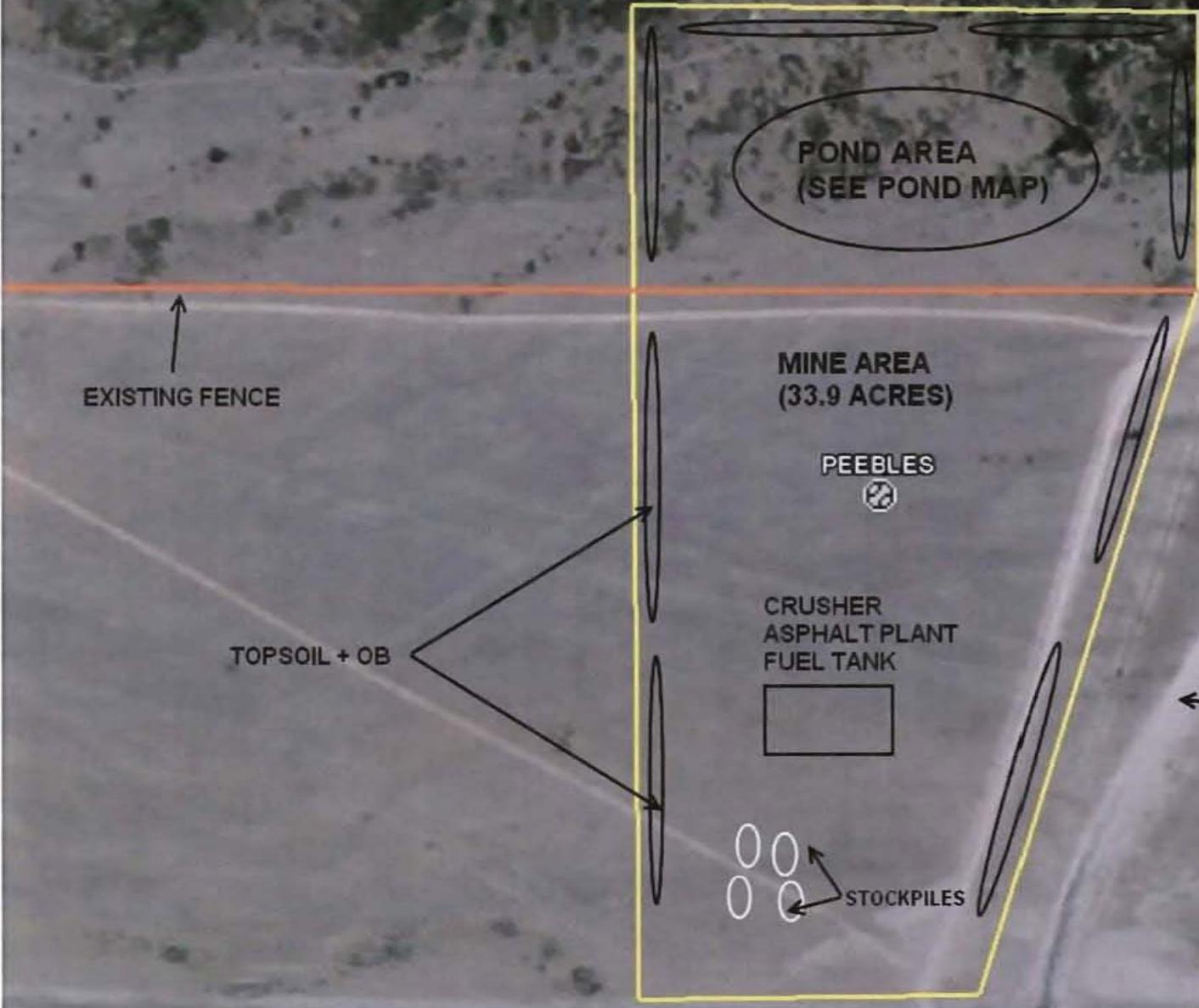
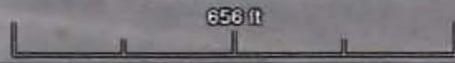


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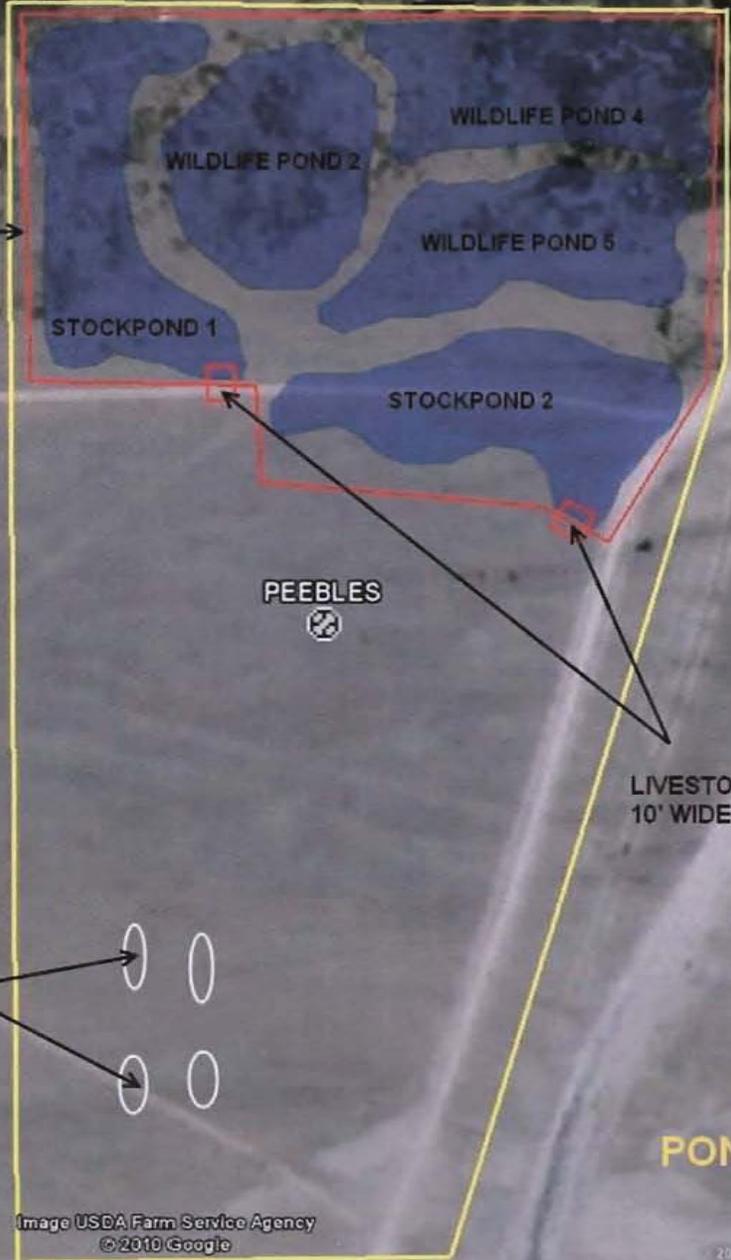
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Imagery Date: Jun 23, 2009

lat 47.887647° lon -112.484309° elev 0 ft

**SCHELLINGER SAND AND GRAVEL, INC.**  
**PEEBLES SITE**  
**SECTION 27, T25N, R7W**  
**TETON COUNTY**  
8/9/10

FENCE AROUND POND AREA  
TO LIMIT LIVESTOCK ACCESS



PEEBLES

LANDOWNER  
STOCKPILES

LIVESTOCK  
10' WIDE, 5'

POND

Image USDA Farm Service Agency  
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lat 47.687445° lon -112.484273° elev 0 ft

Imagery Date: Jun 23, 2009

2009  
Teton  
Eye