

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Drilling of oil well State 16-12H	Proposed Implementation Date: Summer of 2012
Proponent: TAQA North USA, Incorporated, 7400 East Caley Avenue, Suite 200, Centennial, Colorado 80111	
<p>Type and Purpose of Action: The applicant proposes to drill an exploratory oil well on deeded land with State of Montana mineral ownership. The oil well is identified as State 16-12H under Oil & Gas Lease No. OG-39084-09. The access road will be located starting at existing oil well and tank battery and proceed due north one-quarter mile to this well drilling site. This type of access is the shortest route to the well site location and will not require the oil well driller to place culverts or other water flow through devices in the section line road. The road will be kept to a minimum width suitable for heavy equipment and semi-trailer rigs. The drill pad will be 3.95 acres in size according to Interstate Engineering Incorporated survey of staked well site. The drilling rig will be a rotary table double derrick rig, drilling a single lateral horizontal into the Bakken formation.</p>	
Location: NW4SW4, Section 16 Township 37 North Range. 56 East	County: Sheridan

I. PROJECT DEVELOPMENT

<p>1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.</p>	<p>TAQA North USA Incorporated contacted the Department of Natural Resources and Conservation, Helena Office, Minerals Management Bureau. Linda Angeloni Mineral Resource Specialist, Minerals Management Bureau contacted the Glasgow Unit Office to request the Environmental Assessment of the well drilling. TAQA North USA Incorporated has applied for a permit to construct a well pad and access road and drill an exploratory oil well on deeded land with State of Montana minerals.</p>
<p>2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:</p>	<p>The other agencies that would have jurisdiction for this type of project would be the Montana Board of Oil and Gas Conservation, 2535 St Johns Avenue, Billings Montana 59102.</p>
<p>3. ALTERNATIVES CONSIDERED:</p>	<p>Action Alternative: Grant a permit to TAQA North USA Incorporated to drill an exploratory oil well on deeded land. .</p> <p>No Action Alternative: Deny a permit to TAQA North USA Incorporated to drill an exploratory oil well on deeded land.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	POTENTIAL IMPACTS
<p>4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compatible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>The soils on this tract of land are sandy to sandy loams common to this type of environment in northeaster Montana.</p> <p>Action Alternative: The soils on the drill pad will be disturbed. The topsoil will be stockpiled on the edges of the oil well pad and used during the reclamation process. The Glasgow Unit Office will develop an extensive reclamation plan that will replace topsoil on all disturbed areas. The road location on deeded land will cross fairly flat terrain and there is no expected soil loss to occur from runoff. The access road will be located on the section line of tract to allow for the shortest distance from an existing oil well to the well drilling site. The soil types that will be disturbed by this project are sandy to sandy loams.</p> <p>No Action Alternative: This alternative will have no impacts to the soil types on the State land.</p>
<p>5. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>This tract of land has a prairie pothole located 150 yards due southeast of the well pad site.</p> <p>Action Alternative: This type of project on State land will not impact the water quality, quantity and distribution. There are no surface water resources located on the proposed well drilling site. There are no minor or major drainages on or near site that would provide areas of concern for surface water runoff erosion. Human water drinking sources are located over one mile away from project location.</p> <p>No Action Alternative: This alternative will have no impacts to the water quality, quantity and distribution.</p>
<p>6. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>Tract will have extensive heavy equipment moving dirt on the well pad site that causes dirt to become airborne during the well pad construction.</p> <p>Action Alternative: This type of project on the State land will have minimal impacts to the air quality. The large diesel engines used for the well drilling process will cause some pollutants to be become airborne at the well drilling site. The immediate well drilling pad site will be impacted by the air borne pollutants. There will also be some dirt particulate to become air borne during the construction of the well pad site. The air borne dirt particulate will remain in the vicinity of the well pad area.</p>

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	<p>No Action Alternative: There would be no impacts to the air quality on the State land under this alternative.</p>
<p>7. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>The well pad area contains smooth brome grass and alfalfa plant species.</p> <p>Action Alternative: The area of impact has smooth brome grass and alfalfa vegetation. The project area is currently used for livestock grazing and dryland hay production. The surface topsoil will be restored upon well abandonment, through the reclamation plan developed by Glasgow Unit Office for this specific tract of land. The topsoil will be re-spread over the re-contoured and re-shaped well pad site. Smooth brome grass and alfalfa will be seeded on the well pad site.</p> <p>No Action Alternative: There would be no impacts to the native rangeland vegetation under this alternative.</p>
<p>8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>The area is used by waterfowl as a prairie pothole is located 150 yards southeast of the well pad.</p> <p>Action Alternative: The project area and the surrounding state and deeded land contain habitat and nesting environments for waterfowl specifically, and for wildlife, upland birds and song birds. The project area is not large and expected impacts will be no impacts to minimal impacts to habitat resources on this tract of land. The impacts to the waterfowl, wildlife, upland birds and song birds; is not dependent on the 3.95 acres associated with the well pad. It is possible that a waterfowl nest maybe destroyed during well pad construction. The Montana Natural Heritage Program lists the following species of concern: Bairds Sparrow, Sparques’s pipit, Black Tern, Bobolink, Whooping crane. The on-site inspection of the project site showed a Gadwell duck nest on the edge of site. The duck nest will possibly be destroyed by well pad construction if hatch has not occurred.</p> <p>No Action Alternative: There will be no impacts to the wildlife habitat types associated with the State land under this alternative.</p>
<p>9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern?</p>	<p>The environment is a native/tame grass rangeland, conservation reserve program acreage and dryland agriculture in a prairie pothole ecosystem.</p> <p>Action Alternative: The area of impact contains no known unique, endangered, fragile or limited environmental resources. The on site inspection of the project area showed that the nearest wetlands area is located one-hundred yards southeast of well pad site. The construction of the well pad will cause waterfowl and other wildlife to avoid the prairie pothole and the surrounding area.</p>

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	<p>No Action Alternative: There will be no impacts to the environmental resources of the State land under this alternative.</p>
<p>10. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>This tract of land was altered when it was broken up and reseeded to smooth brome and alfalfa. The land breaking would have altered all surface historical or archaeological sites.</p> <p>Action Alternative: The deeded land was inspected for historical or archaeological sites by Randy Dirkson, Land Use Specialist for the Glasgow Unit Office of the Department of Natural Resources and Conservation. Mr. Dirkson found no evidence of historical or archaeological sites on the drill pad area. Previous disturbances of the soil surface by production of small grain/grass alfalfa hay crops greatly reduced the possibility of finding historic or archaeological sites on this tract of land.</p> <p>No Action Alternative: There would be no impacts to the historical or archaeological sites under this alternative.</p>
<p>11. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>The project area is located one and one-half miles from a county road and will not be visible to the general public.</p> <p>Action Alternative: This type of project on this specific tract of land will have minimal impacts to the aesthetics of the deeded land. The project area is located in a rural area consisting of dryland agriculture for small grain crops, dryland hay production and tame and native grass land for livestock grazing. The nearest homesite to the project area is one and one half mile north of the project site. The nearest town site to the project area is Westby, which is located fourteen to eighteen miles southeast of the project area.</p> <p>No Action Alternative: There would be no impacts to the aesthetics under this alternative.</p>
<p>12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?</p>	<p>The project will be located on 3.95 acres of land that is currently producing tame grass and alfalfa for hay and grazing purposes.</p> <p>Action Alternative: This type of project on this specific tract of land will place no demands on the environmental resources of land, water, air or energy. The current use for this tract of land that the project will be located on is hay production and livestock grazing. There are large expanses of land with similar attributes on all of the surrounding lands.</p> <p>No Action Alternative: Under this alternative there will be no demands on environmental resources of land, water, air or energy.</p>

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<p>13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract?</p>	<p>There are other oil well activities occurring south of the proposed project area.</p> <p>Action Alternative: This type of project on this specific tract of land will not impact other studies, plans or projects that the land owner or surrounding land owners may have in place on their deeded land. The project will have minimal impacts to the dryland agriculture and livestock grazing activities occurring on the surrounding State and deeded lands.</p> <p>No Action Alternative: There would be no impacts to other environmental documents pertinent to the State land under this alternative.</p>
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III. IMPACTS ON THE HUMAN POPULATION

RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>14. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>The project will employ highly skilled labor force for the drilling of the exploratory oil well.</p> <p>Action Alternative: This type of project on this tract of deeded land has various human health and safety risks. The risks are understood by the employer and employee as occupational hazards in oil well pad construction and oil well drilling. The impacts will be mitigated by the use of a skilled professional work force with experience in drilling oil wells. The project will have no impacts on human health or safety on lands that surround the project area.</p> <p>No Action Alternative: There would be no impacts to human health or safety risks under this alternative.</p>
<p>15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>The project area will be a small portion of the smooth brome/alfalfa field. The land owner will still have ample acreage for hay production and livestock grazing on hay aftermath.</p> <p>Action Alternative: The project will have minimal impact to the current use. The project will have no impacts to the surrounding dryland agriculture and livestock grazing activities. The project will have no impacts to the surface owner's activities on the deeded land surrounding the project area. The surface activities are dryland hay production and grazing of cropland aftermath when the hay has been harvested.</p> <p>No Action Alternative: There would be no impacts to industrial, commercial and agricultural activities under this alternative.</p>

<p>16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>The project will be creating/job continuation for the construction of the well pad and oil well drilling.</p> <p>Action Alternative: The project will have no impacts on the quality and quantity and distribution of employment. Jobs for this project are on going with companies that will be used for the well pad construction and well drilling process.</p> <p>No Action There would be no impacts to quantity and distribution of employment under this alternative.</p>
<p>17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p>It is assumed that a successful oil well will increase the local and state tax base.</p> <p>Action Alternative: The project may or may not have impacts on the local and state tax base and tax revenues. Should the oil well drilling project be successful, there may be tax revenues that the writer of this document is not aware of.</p> <p>No Action Alternative: There would be no impacts to local or state tax base under this alternative.</p>
<p>18. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p>	<p>The project may create additional road traffic on county roads in the area. The increased traffic may require county road crews to spend additional time on road maintenance.</p> <p>Action Alternative: The project will place no demands for government services. If the oil well is successful there may be future additional traffic on county roads. The additional traffic would be from tanker trucks that would remove the oil from the State land. There would also be additional well site traffic from company repair personnel who inspect oil wells on a daily basis.</p> <p>No Action Alternative: There would be no demand for government services under this alternative.</p>
<p>19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>Taqua Oil Company is following all county and state plans for this type of project to occur on this tract of land.</p> <p>Action Alternative: The project will not impact locally adopted environmental plans and goals. If the oil well drilling project is successful and oil pumping occurs on the State land. Well site management would be handled by the Montana Board of Oil and Gas. The Montana Department of Natural Resources and Conservation, Oil & Gas Division management plan would address well production and maintenance of the well site facilities.</p> <p>No Action Alternative: There would be no impacts to the locally adopted plans or goals under this project.</p>

<p>20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?</p>	<p>There are no wilderness areas or areas of critical environmental concern near the project site.</p> <p>Action Alternative: The area of impact has some recreational values such as hunting upland bird, waterfowl and bird/waterfowl watching. The project is short term and there will be no impacts to the recreational values associated with this tract of land. If the oil well drilling project is successful, there would be some minor impacts to the future hunting activities on a small portion of this tract of land. This impact to recreational hunting would primarily be located on the NW4SW4, the location of the oil well.</p> <p>No Action Alternative: There would be no impacts to recreational activities under this alternative.</p>
<p>21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>The surface land owners home and building site is located over one mile north of project area.</p> <p>Action Alternative: The project will not impact the density and distribution of population and housing. Housing for the well drilling crews will be provided by the well drilling company on site or at the nearest town site.</p> <p>No Action Alternative: There would be no impacts to density and distribution under this alternative.</p>
<p>22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>The tradition life style of the local community is rural agricultural lifestyles. The project will not impact this lifestyle.</p> <p>Action Alternative: The project will not disrupt the traditional lifestyles of the local community. The project is located in a rural area that is not associated with a large population of people. The project will not impact local farm or ranch lifestyles associated with this area.</p> <p>No Action Alternative: There would be no impacts to the traditional lifestyles under this alternative.</p>
<p>23. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>The cultural uniqueness of this area and the surrounding area is dryland agriculture, with some scattered livestock grazing. The project will have very minimal impacts to rhis type of rural culture.</p> <p>Action Alternative: The project will not impact the cultural uniqueness and diversity of the area. The project will not impact surrounding native and tame grass rangeland habitats or dryland agricultural activities associated with this area of Sheridan County.</p> <p>No Action Alternative: There would be no impacts to the cultural, uniqueness and diversity under this alternative.</p>

