

CHECKLIST ENVIRONMENTAL ASSESSMENT	
Project Name: Drilling of oil well State 1-36-25H	Proposed Implementation Date: Summer of 2012
Proponent: G3 Operating LLC, 475 17 th Street, Denver, Colorado 80202	
Type and Purpose of Action: The applicant proposes to drill an exploratory oil well on State of Montana lands. The oil well is identified as State 1-36-25H under Oil & Gas Lease No. OG-39859-10. The access road will be located next the well site and is a county road that will boarder the well pad. This type of access is the shortest route to the well site location and will require the oil well driller to place culverts or other water flow through devices in the barrow pit next to the county road. The drill pad will be 4.25 acres in size according to Uintah Engineering and Land Surveying survey plat of staked well site. Attached to this document are copies of photos taking on-site showing well pad site. The drilling rig will be a rotary table double derrick rig, drilling a single lateral horizontal into the Bakken formation.	
Location: SW4SW4, Section 36 Township 29 North Range. 57 East	County: Roosevelt

I. PROJECT DEVELOPMENT	
1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.	G3 Operating LLC contacted the Department of Natural Resources and Conservation, Helena Office, Minerals Management Bureau. Julie David Mineral Leasing Section, Minerals Management Bureau contacted the Glasgow Unit Office to request the Environmental Assessment of the well drilling. G3 Operating LLC has applied for a permit to construct a well pad and access road and drill an exploratory oil well on State of Montana lands.
2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	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.
3. ALTERNATIVES CONSIDERED:	Action Alternative: Grant a permit to G3 Operating LLC to drill an exploratory oil well on State of Montana lands. No Action Alternative: Deny a permit to G3 Operating LLC to drill an exploratory oil well on State of Montana lands.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS
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?	The soils on this tract of land are silty to clay loams common to this type of environment in northeaster Montana. 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

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

	<p>replace topsoil on all disturbed areas. The access road location is an existing county road next to well pad site. The soil types that will be disturbed by this project are silty to clay 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 no surface water resources near 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 half 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> <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 native grass and forb plant species.</p> <p>Action Alternative: The area of impact has a variety of native grass and forb vegetation. The project area is currently used for livestock grazing. 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. Native grass species 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>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Is there substantial use of the area by important wildlife,
birds or fish?

The area is used by song birds for nesting.

Action Alternative: The project area and the surrounding state land contain habitat and nesting environments for song birds specifically, and for wildlife and upland 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 song birds, wildlife and upland birds, is not dependent on the 4.25 acres associated with the well pad. It is possible that a song bird nest maybe destroyed during well pad construction. The Montana Natural Heritage Program lists the following species of concern: Bairds Sparrow, Sparques' pipit, Black Tern, Bobolink, Whooping crane. The on-site inspection of the project site showed no song bird or upland bird nest. Montana Fish Wildlife & Parks made the following comments on this project: "Thank you for the opportunity to provide public comment on the proposed well site location on DNRC lands in Roosevelt County at the above described location. An onsite visit and review of the well site location has been conducted by MFWP. This well site is located on a piece of very healthy native rangeland, with little to no crested wheatgrass present. This parcel offers ideal habitat for Sharp-tail grouse, native song birds (including the Sprague's pipit which was heard during our visit), as well other nongame species that thrive in a prairie habitat for raptors. Not knowing the size of the size of the proposed footprint, but using the survey stakes that have already been placed as a guide, it appears that a large slope of the hillside will need to be leveled to accommodate a well pad. Assuming the footprint will be 10-15 acres after roads, tanks and pits are established, our assessment is that habitat integrity of this entire DNRC parcel will likely be affected. This site is relatively small in size when compared to the larger landscape; however it represents what is considered to be a dwindling habitat type in an area that will surely see continued pressure from development and exploration in the future. It is because of the above reasons that our assessment is that this oil well pad would impact wildlife and wildlife habitat on that tract of native prairie, If this well were to be placed it would be important to consider the following standard stipulations and place increased importance on pre-development surveys for Sharp-tail grouse. *Rocky outcrops-all disturbances limited to a minimum of 200m from rocky outcrops. *Caves or cave-like structures-all disturbances be limited to a minimum of 100m from caves or cave-like structures. * Raptor nests-all disturbances should be limited to minimum of 1000m from nests. *Large intact parcels of native or introduced grassland-Restricting surface occupancy to previously disturbed areas or edges of grassland blocks. No surface use during the grassland songbird-nesting season (April 1 – July 15) Pre-development surveys fro sharp-tail-grouse leks. If lek(s) are found, no surface use within 2

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

miles of the lek during spring lek, nesting and brood-rearing seasons (March 1 – June 15). * Wildlife winter range – No surface use from December 1 – June 15)* Wildlife winter range – No surface use from December 1 to March 31. The parcel located at T29N R57E S36 contains sharp-tail grouse habitat. *MFWP recommends that: the above standard stipulation recommendation should apply to native or introduced grasslands. Pre-development surveys should be conducted for sharp-tail grouse lek, and surface use prohibited during the spring lek, nesting and brood-rearing seasons (March 1- June 15). Thank you for the opportunity of comment on this matter. Mark Sullivan, Regional Wildlife Biologist, Montana Fish Wildlife & Parks

No Action Alternative: There will be no impacts to the wildlife habitat types associated with the State land under this alternative.

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?

The environment is a native rangeland ecosystem at the project area. The surrounding area has dryland agriculture and conservation reserve program acreage.

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 over one mile from the well pad site. The construction of the well pad will cause song birds and upland birds to avoid the well pad site and the surrounding area.

No Action Alternative: There will be no impacts to the environmental resources of the State land under this alternative.

10. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?

This tract of State land has some stone circles and rock cairns.

Action Alternative: The State land was inspected by Ethnoscience Incorporated, archeologist for historical or archaeological sites, The written report from Ethnoscience Incorporated described the following: “Conclusion and Recommendation: Ethnoscience inventoried 24 acres of land administered by the Montana Department of Natural Resources and Conservation in the southwest of Section 36 Twp. 29N Rge. 57E Roosevelt County, Montana. One stone ring site was identified within the inventory area. The location of the well pad and access road will not directly impact the site. A 54 foot buffer between the pad and site will minimize the potential for secondary impacts. Ethnoscience recommends no additional cultural resource work is necessary for this project”,

No Action Alternative: There would be no impacts to the

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

historical or archaeological sites under this alternative.

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?

The project area is located next to a county road and will be visible to the general public.

Action Alternative: This type of project on this specific tract of State land will have minimal impacts to the aesthetics of the land. The project area is located in a rural setting consisting of native rangeland and dryland agriculture for small grain crops. The rangeland supports various types of livestock and the dryland agriculture acreage produces small grains and pulse crops. The nearest homesite to the project area is one half mile south of the project site. The nearest town site to the project area is Bainville, which is located four miles southeast of the project area.

No Action Alternative: There would be no impacts to the aesthetics under this alternative.

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?

The project will be located on 4.25 acres of land that is currently producing native rangeland for livestock grazing purposes.

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 for livestock grazing. There are large expanses of land with similar attributes on all of the surrounding lands.

No Action Alternative: Under this alternative there will be no demands on environmental resources of land, water, air or energy.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract?

There are other oil well activities occurring south of the proposed project area.

Action Alternative: This type of project on this specific tract of land will not impact other studies, plans or projects that the Montana Department of Natural Resources & Conservation has occurring on this tract of State land. The project will also have no type of specific impacts to the surrounding land owners who may have in place studies, plans or projects 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.

No Action Alternative: There would be no impacts to other environmental documents pertinent to the State land under this alternative.

III. IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
14. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	<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 State 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>
15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	<p>The project area will be a small portion of the native rangeland resource. The State land lessee will still have ample acreage for livestock grazing.</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 lessee's activities on the State land surrounding the project area. The surface activities are livestock grazing of the native rangeland resource.</p> <p>No Action Alternative: There would be no impacts to industrial, commercial and agricultural activities under this alternative.</p>
16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	<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>
17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	<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</p>

	state tax base under this alternative.
<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>G3 Operating LLC is following all county and state plans for this type of project to occur on State of Montana 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 birds and bird 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 SW4SW4, 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 closest inhabited area is a farm/ranch building area located one half mile south of the 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</p>

	<p>site or at the nearest town site or man camp 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 and livestock grazing. The project will have very minimal impacts to this 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 Roosevelt County.</p> <p>No Action Alternative: There would be no impacts to the cultural, uniqueness and diversity under this alternative.</p>
<p>24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</p>	<p>The project may increase the economics of the local area through this type of project.</p> <p>Action Alternative: The project will benefit the applicant for the production and sale of oil. The project will also provide additional revenue to the School Trust from oil well production royalties.</p> <p>No Action Alternative: There would be no impacts to the social and economic circumstances under this alternative.</p>

EA Checklist Prepared By: \S\ Date:

Randy Dirkson

Land Use Specialist

