Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Montana Land and Exploration, Inc.
Well Name/Number: ML&E SW Cherry Patch 14B-28
Location: SE SW Section 28 T33N R21E
County: Blaine, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time no, 2 to 3 days drilling time
Unusually deep drilling (high horsepower rig) no, 1412' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 1412' TD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water yes, closest live water is a stock pond about ¼ mile to the southeast. Nearby unnamed ephemeral drainage is 1/16 of a mile to the east of this location.
Water well contamination Yes, closest water wells 1/4 of a mile to the west, stock water, 256' and 133' domestic well.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: Set 270' surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production 4 ½" if successful will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 1.7' and small fill, up to 2.2', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 200'X199' location size required.
Damage to improvements none, appears to be grassland.
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access over existing county road. A short access off the county road of about ¼ mile will be built into this location. Cuttings will be buried in the unlined reserve pit. Drilling fluids will be land spread with surface owner approval or recycled to the next drilling location. Pit will be backfilled when dry. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences residence about ¼ mile to the south and ½ mile to the west of this location. Zurich, MT about 1.5 miles to the west.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 2 to 3 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: no concerns. Distance is sufficient to not be a problem with noise.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites Zurich Park about 1.5 miles to the northwest.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 1412' Eagle Formation of test. Replacement well for the SW Cherry Patch 14-28 well that was junked and abandoned.

Summary: Evaluation of Impacts and Cumulative effects

No, long term impacts expected. Some short term impacts will occur, but can be mitigated in time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: May 2, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Blaine County water wells
(subject discussed)
May 2, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Burlington Resources Oil & Gas Company
Well Name/Number: BR 24-27H 52
Location: SE SW Section 27 T25N R52E
County: Richland, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time 50-60 days drilling time
Unusually deep drilling (high horsepower rig) No, triple drilling rig for Leg No. 1 14,575' MD 9,010' TVD Leg No.2 14,262'MD 9,010'TVD
Possible H2S gas production slight
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns.

Water Quality

(possible concerns)
Salt/oil based mud use freshwater and freshwater mud system on surface.and oil based drilling fluids to production string casing depth and saltwater in the horizontal legs to TD.
High water table no
Surface drainage leads to live water yes, location next to unnamed ephemeral tributary to Duplisse Creek, an ephemeral drainage, adjacent to this location on the southwest edge. Duplisse Creek eventually drains to East Redwater Creek 3.5 miles to the southwest.
Water well contamination no, water wells within 1 mile of this location.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
X Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1120' of surface casing cemented to surface adequate to protect freshwater zones will stipulate to set additional surface casing to cover base of Fox Hills formation. Also, fresh water mud systems to be used on surface hole. Reserve pit liquids to be recycled or hauled to a commercial disposal. Solids will be allowed to dry, pit liner folded over the top of the solids,

spoil dirt to fill pit, top soil spread over pit area, and seeded to land owners specification.__

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings _none.__
High erosion potential _no, moderate cut, up to 11.0' and small fill, up to 6.9,' required._
Loss of soil productivity no, location will be restored after drilling if nonproductive. If productive unused portion of drillsite will be reclaimed._
Unusually large wellsite _Large, 270'X400' location size required._
Damage to improvements _Slight
Conflict with existing land use/values __Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: __using existing county road 201 and existing well trail access route to nearby producing well. Access off existing trail to this wellsite, approximately 2728' of new access will be built into this location. Reserve pit liquids to be recycled or hauled to a commercial disposal. Solids will be allowed to dry, pit liner folded over the top of the solids, spoil dirt to fill pit, top soil spread over pit area, and seeded to land owners specification. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _buildings 1 mile to the north and 1 mile to the northwest of wellsite._
Possibility of H2S _slight_
Size of rig/length of drilling time _Triple drilling rig 50 to 60 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
_X_ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: _____no concerns, proper BOP stack and surface casing should be able to control any problems that occurs.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None, identified
Proximity to recreation sites _None identified__
Creation of new access to wildlife habitat _no____
Conflict with game range/refuge management _no____
Threatened or endangered Species __no_____

Mitigation:

__ Avoidance (topographic tolerance/exception)
X Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
X Other: BLM
Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified
Mitigation
__ avoidance (topographic tolerance, location exception)
X other agency review (SHPO, DSL, federal agencies)
__ Other:
Comments: BLM will issue permit also since Federal minerals will be cut by the horizontal section of this well.

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: Second well in the spacing unit. no concerns

Remarks or Special Concerns for this site

Well is a 14,575' and 14,262', 2 legged horizontal Bakken formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected . Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: June 6, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Richland County water wells
(subject discussed)
June 6, 2006

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Primary Petroleum Corporation.
Well Name/Number: Primary Tiber 10-5
Location: NW SE Section 5 T29N R4E
County: Liberty, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time no, 2 to 3 days drilling time
Unusually deep drilling (high horsepower rig) no, 1280' TD
Possible H2S gas production no
n/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under rule 75-2-211.

Mitigation:
X Air quality permit (AQB review)
_ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 1280TD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system. Mainhole drilled with air and air/mist.
High water table no
Surface drainage leads to live water no, closest live water is Tiber Reservoir, about 3 miles to the north.
Water well contamination no
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 265'of surface casing cemented to surface adequate to protect freshwater zones and if productive 4 ½" casing to be run back to surface. Air and air/mist to be used to drill the mainhole.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no, crossing intermittent dry drainages. Access over county roads most of the way.
High erosion potential no, small cut, up to 4.9' and small fill, up to 2.1', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 200'X200' location size required.
Damage to improvements slight, appears to be CRP.
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads, Tiber Dam road. About 3/8 of a mile of new access road will be built into this location. Cuttings will be buried in the unlined reserve pit. Drilling fluids will be land spread with surface owner approval or recycled to the next drilling location. Pit will be backfilled when dry.no special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences None within 1 mile east of this location
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 2 to 3 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns. Distance is sufficient to not be a problem with noise.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites Tiber Dam about 7 miles east of this location.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 1280' Eagle Formation test northeast of Bear Paw Mountains

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated in a short time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: May 2, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Liberty

(subject discussed)

May 2, 2006

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Klabzuba Oil & Gas, Inc.
Well Name/Number: Robinson-Federal 3-12-25-18B
Location: NW SW Section 3 T25N R18E
County: Blaine, **MT; Field (or Wildcat)** WC

Air Quality

(possible concerns)
Long drilling time No, 4 to 5 days
Unusually deep drilling (high horsepower rig) No, small single drilling rig. TD 2700'
Possible H2S gas production No, Second White Specks test.
In/near Class I air quality area Not in a Class I air quality area.
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline infrastructure

Water Quality

(possible concerns)
Salt/oil based mud No, freshwater and freshwater mud system to be used.
High water table No, highwater table expected.
Surface drainage leads to live water Closest drainage is an unnamed tributary ephemeral drainage to Black Coulee, about ¼ mile to the south of this location. This tributary joins Black Coulee abut 4 miles to the southwest of this location.
Water well contamination None, no water wells nearby. Closest water well is about 1 mile to the north of this location.
Porous/permeable soils Soils gumbo very tight soils.
Class I stream drainage No, Class I stream drainages nearby.

Mitigation:
__ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: Adaquate surface casing to be set , 200'.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings No, streams to be crossed..

High erosion potential __No, small cut, up to 3.4' and no fill, required__
Loss of soil productivity __No, location will be reclaimed after drilling of well, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite __No, small drillsite, 200'X200'.__
Damage to improvements __slight___
Conflict with existing land use/values __Slight, if well is productive__

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: __Short access road to be build off main county road to access this location. _Pit will be unlined. Reserve pit fluids will be disposed of in a nearby stockpond with surface owner approval. Cuttings and mud solids will be buried in the unlined pit after pit fluids are removed and pit allowed to dry. No concerns._____

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences __Nearest residence is 1.25 miles to the west of wellsite
Possibility of H2S _None, all formations are sweet gas producers in area of review.
Size of rig/length of drilling time Small single derrick drilling rig/Short drilling time 4 to 5 days.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____
Comments: _____

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_None identified.
Proximity to recreation sites _Scenic Missouri, about 15 miles to the south and about 12 miles to the south and 6 miles to the east is the Upper Missouri River Breaks National Monument boundary.
Creation of new access to wildlife habitat _None__
Conflict with game range/refuge management _None__
Threatened or endangered Species _None_____

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____
Comments: __no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: Surface location is on private land.

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: No, impact expected from the dirlling of this well.

Remarks or Special Concerns for this site

No special concerns about this wellsite.

Summary: Evaluation of Impacts and Cumulative effects

No significant or long term impacts expected from the drilling of this well.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki Steven Sasaki

(title:) Chief Field Inspector

Date: June 02, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Blaine County water wells

(subject discussed)

June 02, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Primary Petroleum Corporation
Well Name/Number: Primary Tiber 11-9
Location: NE SW Section 9T29N R4E
County: Liberty, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time no, 2 to 3 days drilling time
Unusually deep drilling (high horsepower rig) no, 1280' TD
Possible H2S gas production no
n/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under rule 75-2-211.

Mitigation:
X Air quality permit (AQB review)
_ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 1190' TD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system. Mainhole drilled with air and air/mist.
High water table no
Surface drainage leads to live water no, Closest drainage is an ephemeral drainage, Timber Coulee about 3/8 of a mile to the southeast.
Water well contamination no
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 265'of surface casing cemented to surface adequate to protect freshwater zones and if productive 4 ½" casing to be run back to surface. Air and air/mist to be used to drill the mainhole.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential no, small cut, up to 0.9' and small fill, up to 3.8', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 200'X200' location size required.
Damage to improvements slight, appears to be cultivation.
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads, Tiber Dam road and existing two track trails. About 3/4 of a mile of new access road will be built into this location off the existing two track trails. Cuttings will be buried in the unlined reserve pit. Drilling fluids will be land spread with surface owner approval or recycled to the next drilling location. Pit will be backfilled when dry.no special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences None nearby, nearest residence is 1.25 miles to the northeast of this location
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 2 to 3 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns. Distance is sufficient to not be a problem with noise.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites Tiber Dam about 7 miles to the northeast of this location
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified
Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:
Comments: on private land

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: no concerns

Remarks or Special Concerns for this site

Well is a 1190' Bow Island Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated in a short time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: May 2, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)
Liberty
(subject discussed)
May 2, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Enerplus Resources(USA) Corporation
Well Name/Number: Brutus East-Lewis 3-4-H
Location: NW NW Section 3 T24 R57E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 30-40 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP, Bakken horizontal MD 16,243' TVD 10,385'
Possible H2S gas production slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string salt based and oil based drilling fluids. Horizontal section to be drilled with oil based drilling fluids. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, closest drainage is an ephemeral tributary drainage to North Hay Creek an ephemeral drainage about 3/8 of a mile to the northwest and ¼ mile to the north of this location at its closest point.
Water well contamination No, all water wells close by are shallower than 1900'.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1900'+/- surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, location has a moderate cut of up to 15.4' and a small fill of up to 2.5',

required.__
Loss of soil productivity _None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite __No, large well site 420'X300'
Damage to improvements __Slight
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: __Access will be over existing highways, 201 and existing county road About 1925' of new road access will be built. Cutting will be buried in the lined reserve pit. Pit fluids will either be recycled or hauled to a commercial disposal. No concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _closest residence is ½ mile to the west, ¾ of a mile to the east and the town of Girard is 1 1/4 miles to the west of this location.
Possibility of H2S _Slight__
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: __Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Distance sufficient to mitigate noise.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_None identified.
Proximity to recreation sites __None identified_____
Creation of new access to wildlife habitat _No____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No_____

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: __no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: ___Private surface_____

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _No concerns_____

Remarks or Special Concerns for this site

___No long term impacts expected. Some short term impacts will occur, but will be mitigated in time.
___Second well in this spacing unit

Summary: Evaluation of Impacts and Cumulative effects

TVD 10,385' MD 16,243' Bakken Formation horizontal well. .

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):___Steven Sasaki_____ Steven Sasaki
(title:)___Chief Field Inspector_____
Date:____June 8, 2006_____

Other Persons Contacted:

_____

_____

(Name and Agency)
__Montana Bureau of Mines and Geology, Groundwater Information Center website, Richland County water wells _____
(subject discussed)
_June 8, 2006_____
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Primary Petroleum Corporation
Well Name/Number: Primary Tiber 14-21
Location: SE SW Section 21 T29N R4E
County: Liberty, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time no, 2 to 3 days drilling time
Unusually deep drilling (high horsepower rig) no, 1125' TD
Possible H2S gas production no
n/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under rule 75-2-211.

Mitigation:
X Air quality permit (AQB review)
_ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 1125' TD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system. Mainhole drilled with air and air/mist.
High water table no
Surface drainage leads to live water no, closest drainage is Pondera Coulee a ephemeral drainage.
Water well contamination none nearby.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 265'of surface casing cemented to surface adequate to protect freshwater zones and if productive 4 ½" casing to be run back to surface. Air and air/mist to be used to drill the mainhole.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no, crossing intermittent dry drainages. Access over county roads most of the way.
High erosion potential no, small cut, up to 0.7' and small fill, up to 0.9', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 200'X200' location size required.
Damage to improvements slight, appears to be cultivated land.
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads, Tiber Dam road and existing two track trails. About 1/2 of a mile of new access road will be built into this location off the two track trail. Cuttings will be buried in the unlined reserve pit. Drilling fluids will be land spread with surface owner approval or recycled to the next drilling location. Pit will be backfilled when dry. no special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences None within 1 mile east of this location
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 2 to 3 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns. Distance is sufficient to not be a problem with noise.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites Tiber Dam about 4.5 miles to the northeast of this location.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 1125' Bow Island Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated in a short time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: May 2, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Liberty

(subject discussed)

May 2, 2006

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Enerplus Energy(USA) Corporation
Well Name/Number: Peabody-Bob 25-14-HID
Location SE SW Section 25 T24N R56E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 30-40 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP
Possible H2S gas production slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes, salt based and/or oil based drilling fluids to be used to drill the main hole.. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, closest ephemeral drainage is Lone Tree Creek ephemeral drainage ¼ of a mile to the northeast of this location.
Water well contamination None, all wells close by shallower than 2000'. Surface hole will be drilled with freshwater and freshwater mud.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 2000' is sufficient amount of surface casing to cover Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, small cut, up to 3.6' and small fill, up to 1.9', required..
Loss of soil productivity None, location to be restored after drilling well, if nonproductive. If productive unused portion of wellsite will be reclaimed.

Unusually large wellsite _No, large well site 420'X310'
Damage to improvements _Slight
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: _Access will be from an existing county gravel road, #131 and existing trails. Approximately, 195' of new access road will be built into this location._ Cutting will be buried in the lined reserve pit. Pit fluids will either be recycled or hauled to a commercial disposal.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _residence 3/4 mile to the south and 1.25 miles to the west of this location._____
Possibility of H2S _Slight__
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: _Adequate surface casing cemented to surface with working BOP stack should mitigate any problems.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_ None identified.
Proximity to recreation sites _None identified_____
Creation of new access to wildlife habitat _No_____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No_____

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: _no concerns

_____
_____
_____

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites _None identified_____

Mitigation
__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: __Private surface_____

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: _No concerns_____

Remarks or Special Concerns for this site

Second horizontal Bakken formation well in this spacing unit. No concerns.

Summary: Evaluation of Impacts and Cumulative effects

Horizontal Bakken formation well TVD 10,407' MD 14,692'. No long term impacts expected. Some short term impacts will occur. Existing horizontal Bakken well in the E/2 of this section., second well in this spacing unit.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):__Steven Sasaki__ Steven Sasaki
(title:)__Chief Field Inspector
Date:____June 8, 2006
Other Persons Contacted:

_____
_Montana Bureau of Mines and Geology GWIC website_____
(Name and Agency)
_Richland County waterwells
(subject discussed)
__June 8, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Kodiak Oil & Gas (USA) Inc.
Well Name/Number: Christensen Trust 14-9
Location: SE SW Section 9 T34N R57E
County: Sheridan, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 20-30 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 600 HP,7840'TVD Mission Canyon well.
Possible H2S gas production yes
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:

Comments: Associated gas to be flared or if a pipeline is run to a sweetening facility then it can be hooked up.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string, production hole, salt based drilling fluids. Surface casing freshwater, and freshwater mud system to be used.
High water table No
Surface drainage leads to live water none, no live water nearby. Nearest drainage is about 1/16 of a mile to the west of this location. It appears to be an unnamed ephemeral drainage which drains to a low land area to the south.
Water well contamination None, water wells in the area are 120' or shallower. Significantly shallower than the surface casing setting depth of 1500'.
Porous/permeable soils No, gumbo gravelly soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:

Comments: 1500' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None

High erosion potential _No, location will require a small cut of up to 6.7' and no fill , required.__
Loss of soil productivity _None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite _No, large well site 300'X400'
Damage to improvements _slight
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: _Will use existing county roads in the area except for a short access to the location off existing county road. About 466' of new access road will be built. Cuttings will be buried in the lined reserve pit. Drilling fluids and hydrocarbons will be removed to commercial disposal . Pi t will be allowed to dry after all fluids have been removed. The pit after drying will be backfilled.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _buildings 1 mile to southeast the northeast, 3/8 of a mile to the east and 1 mile to the northeast of this location.
Possibility of H2S _Yes__
Size of rig/length of drilling time Triple drilling rig 20 to 30 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: _Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Sufficient distance between location and buildings noise should not be a problem.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_None identified.
Proximity to recreation sites
Creation of new access to wildlife habitat _No____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No_____

Mitigation:
__ Avoidance (topographic tolerance/exception)
_X Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: __no concerns_

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: ___Surface location is private land._____

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _No concerns_____

Remarks or Special Concerns for this site

Summary: Evaluation of Impacts and Cumulative effects

__Short term impacts expected, no long term impacts anticipated.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):___Steven Sasaki_____

(title:)___Chief Field Inspector_____

Date:_May 4, 2006

Other Persons Contacted:

(Name and Agency)

__Montana Bureau of Mines and Geology, Groundwater Information Center GWIC website_____

(subject discussed)

__Sheridan County water wells

__May 4, 2006_____

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Enerplus Energy(USA) Corporation
Well Name/Number: Filk-Joseph 13-13-HID3
Location: SW SW Section 13 T25 R53E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 30-40 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP, Bakken horizontal MD 12,709' TVD 9,537'
Possible H2S gas production slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string salt based and oil based drilling fluids. Horizontal section to be drilled with oil based drilling fluids. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table Possible
Surface drainage leads to live water No, closest drainage is an ephemeral tributary drainage to West Charley Creek about 1/8 of a mile to the northwest of this location at its closest point.
Water well contamination No, all water wells close by are shallower than 1550'.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1550'+/- surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, location has a moderate cut of up to 21.6' and a small fill of up to 8.7', required.

Loss of soil productivity _None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite __No, large well site 420'X310'
Damage to improvements __Slight
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: __Access will be over existing county roads, #139. About 140' of new road access will be built. Cutting will be buried in the lined reserve pit. Pit fluids will either be recycled or hauled to a commercial disposal. No concerns. _____

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _closest residence is ¾ of a miles to the east of this location.
Possibility of H2S _Slight__
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: __Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Distance sufficient to mitigate noise.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_None identified.
Proximity to recreation sites __None identified _____
Creation of new access to wildlife habitat __No____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No_____

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: __no concerns

_____
_____
_____

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites __None identified _____

Mitigation

__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:
Comments: Private surface

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: No concerns

Remarks or Special Concerns for this site

TVD 9,537' MD 12,709' Bakken Formation horizontal well. Second well in this spacing unit No concerns

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but will be mitigated in time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: June 8, 2006

Other Persons Contacted:

(Name and Agency)
Montana Bureau of Mines and Geology, Groundwater Information Center website, Richland County water wells
(subject discussed)
June 8, 2006
(date)

If location was inspected before permit approval:
Inspection date:
Inspector:
Others present during inspection:

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Kodiak Oil & Gas (USA) Inc.
Well Name/Number: Christensen Trust 13-10
Location: SW SW Section 10 T34N R57E
County: Sheridan, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 20-30 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 600 HP,7820'TVD Mission Canyon well.
Possible H2S gas production yes
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:

Comments: Associated gas to be flared or if a pipeline is run to a sweetening facility then it can be hooked up.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string, production hole, salt based drilling fluids. Surface casing freshwater, and freshwater mud system to be used.
High water table No
Surface drainage leads to live water none, no live water nearby. Nearest drainage is about 1/16 of a mile to the south of this location. It appears to be an unnamed ephemeral drainage which drains to a low land area to the southeast.
Water well contamination None, water wells in the area are 120' or shallower. Significantly shallower than the surface casing setting depth of 1500'.
Porous/permeable soils No, gumbo gravelly soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:

Comments: 1500' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None

High erosion potential _No, location will require a moderate cut of up to 13.0' and moderate fill, up to 14.3', required.__
Loss of soil productivity _None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite _No, large well site 300'X400'
Damage to improvements _slight
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: _Will use existing county roads in the area except for a short access to the location off existing county road. About 638' of new access road will be built. Cuttings will be buried in the lined reserve pit. Drilling fluids and hydrocarbons will be removed to commercial disposal . Pi t will be allowed to dry after all fluids have been removed. The pit after drying will be backfilled.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _buildings 1 mile to south and 1/4 mile to the northwest of this location.
Possibility of H2S _Yes__
Size of rig/length of drilling time Triple drilling rig 20 to 30 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: _Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Sufficient distance between location and buildings noise should not be a problem.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_None identified.
Proximity to recreation sites
Creation of new access to wildlife habitat _No____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No _____

Mitigation:
__ Avoidance (topographic tolerance/exception)
_X Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: __no concerns_

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: ___Surface location is private land._____

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _No concerns_____

Remarks or Special Concerns for this site

Summary: Evaluation of Impacts and Cumulative effects

__Short term impacts expected, no long term impacts anticipated.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):___Steven Sasaki_____

(title:)___Chief Field Inspector_____

Date:_May 4, 2006

Other Persons Contacted:

(Name and Agency)

__Montana Bureau of Mines and Geology, Groundwater Information Center GWIC website_____

(subject discussed)

__Sheridan County water wells

__May 4, 2006_____

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Burlington Resources Oil & Gas Company
Well Name/Number: BR 21-21H 52
Location: NE NW Section 21 T25N R52E
County: Richland, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time 50-60 days drilling time
Unusually deep drilling (high horsepower rig) No, triple drilling rig for Leg No. 1 14,111' MD 8,890' TVD Leg No.2 14,400'MD 8,890'TVD
Possible H2S gas production slight
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns.

Water Quality

(possible concerns)
Salt/oil based mud use freshwater and freshwater mud system on surface.and oil based drilling fluids to production string casing depth and saltwater in the horizontal legs to TD.
High water table no
Surface drainage leads to live water No, location is close to Duplisse Creek, an ephemeral drainage, about 3/8 of a mile to the east of this location.. Duplisse Creek eventually drains to East Redwater Creek 3.5 miles to the southwest.
Water well contamination no, water wells within 1 mile of this location. Nearby water wells are less than 200' in depth.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
X Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1130' of surface casing cemented to surface adequate to protect freshwater zones will stipulate to set additional surface casing to cover base of Fox Hills formation. Also, fresh water mud systems to be used on surface hole. Reserve pit liquids to be recycled or hauled to a commercial disposal. Solids will be allowed to dry, pit liner folded over the top of the solids,

spoil dirt to fill pit, top soil spread over pit area, and seeded to land owners specification.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none.
High erosion potential no, moderate cut, up to 16.9' and moderate fill, up to 11.8,' required.
Loss of soil productivity no, location will be restored after drilling if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite Large, 270'X400' location size required.
Damage to improvements Slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: using existing county roads and existing well trail access route to nearby producing well. Access off existing trail to this wellsite, approximately 532' of new access will be built into this location. Reserve pit liquids to be recycled or hauled to a commercial disposal. Solids will be allowed to dry, pit liner folded over the top of the solids, spoil dirt to fill pit, top soil spread over pit area, and seeded to land owners specification. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences buildings 1.5 miles to the south and 1.5 miles to the southeast of the wellsite.
Possibility of H2S slight
Size of rig/length of drilling time Triple drilling rig 50 to 60 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
_X_ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns, proper BOP stack and surface casing should be able to control any problems that occurs.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None, identified
Proximity to recreation sites None identified
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
_X_ Other:_____
Comments: ___no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites __None identified_____
Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: __.

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: ____Second well in the spacing unit. No concerns

Remarks or Special Concerns for this site

__Well is a 14,111' and 14,400', 2 legged horizontal Bakken formation test.

Summary: Evaluation of Impacts and Cumulative effects

_No long term impacts expected . Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: June 21, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Richland County water wells
(subject discussed)
June 21, 2006

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Continental Resources, Inc.
Well Name/Number: Carda 2-28H
Location: SE SW Section 28 T25N R53E
County: Richland, **MT; Field (or Wildcat)** W/C (Bakken Horizontal)

Air Quality

(possible concerns)
Long drilling time no, 50 to 60 days drilling time.
Unusually deep drilling (high horsepower rig) no, 15,182'MD, 9,718' TVD and 14,707' MD, 9,569' TVD
Possible H2S gas production slight
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
x Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using triple rig to drill to 15,182'MD and 14,707' MD – 2 laterals

Water Quality

(possible concerns)
Salt/oil based mud yes, freshwater and freshwater mud system on surface hole and oil based saltwater mud system on mainhole. Saltwater for horizontal sections.
High water table No based upon topographic map.
Surface drainage leads to live water no, location above an ephemeral tributary to West Charlie Creek. the drainage is north and east of this location. Possible stock pond in drainage about 3/8 of a mile to the northeast of the location.
Water well contamination no, deepest water well nearby is 355' in depth or less. Surface hole will be drilled with freshwater and freshwater muds. Surface casing will be cemented to surface from a depth of 1300'.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
X Closed mud system
X Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1300' of surface casing cemented to surface adequate to protect freshwater zones. Remote reserve pit and closed mud system required.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no, crossing.
High erosion potential no, small cut, up to 4.3' and moderate fill, up to 15.8', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 500'X270' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will use existing county roads. Well access road will be used for part of the way into location. About 60' of new constructed road will be built into this location off the existing county road.. Drill cuttings will be disposed of in the lined reserve pit. Drilling fluids will be trucked to a commercial Class II disposal. Pit will be backfilled after remaining fluids have evaporated. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences 1.25 miles to the northeast and southeast. 1 mile to the southwest are residences.
Possibility of H2S slight
Size of rig/length of drilling time Triple drilling rig/short 50 to 60 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites none identified.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 9,718'TVD, 15,182' and 9,569' TVD, 14,707' MD, 2 legged Bakken Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term surface impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: May 4, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Richland County water wells
(subject discussed)
May 4, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _ _____
Others present during inspection:____ _____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Nance Petroleum Corporation
Well Name/Number: Simard Farms 4-22H
Location: NW NW Section 22 T22N R58E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 30-40 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP
Possible H2S gas production slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for H2S gas or sweet gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string salt based and oil based drilling fluids. Horizontal hole will be drilled with saltwater. Surface casing hole, freshwater, and freshwater mud system to be used.
High water table No
Surface drainage leads to live water No, closest drainage is an ephemeral drainage, Youngs Coulee about ½ mile to the northeast of this location
Water well contamination No problem anticipated all water wells less than 1800' nearby.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1800' surface casing will be drilled with freshwater and cemented back to surface. Well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, location will require a small cut of up to 2.1' and a small fill of up to 1.6', required.
Loss of soil productivity None, location to be restored after drilling well, if nonproductive. If productive

unused portion of drillsite will be reclaimed.
Unusually large wellsite No, large well site 400'X320'
Damage to improvements Slight.
Conflict with existing land use/values Slight

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county gravel roads. A short access off the existing well access for the Simard Farms 2-22H well will be built into this location.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences No residences within 1 mile of this location.
Possibility of H2S slight
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time.

Mitigation:

_X_ Proper BOP equipment
__ Topographic sound barriers
_X_ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Bakken formation completions generally does not have H2S associated with it.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites None identified
Creation of new access to wildlife habitat No
Conflict with game range/refuge management No
Threatened or endangered Species No

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: __Private surface_____

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: Second well in this spacing unit. No concerns_____

Remarks or Special Concerns for this site

Horizontal Bakken well 14,424'MD

Summary: Evaluation of Impacts and Cumulative effects

__ No long term impacts expected, some short term impacts will occur, but can be mitigated.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: June 21, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Richland County water wells
(subject discussed)
June 21, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Petro Hunt, LLC
Well Name/Number: BR 33B-4-3
Location: SE NW Section 33 T24N R54E
County: Richland, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time 30-40 days drilling time
Unusually deep drilling (high horsepower rig) No, triple drilling rig for 11,600' TD
Possible H2S gas production yes
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
_ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:

Comments: no special concerns, adequate surface casing 2000' to be set and cemented back to surface with proper BOP stack should mitigate any concerns. Triple rig to drill to 11,600'.

Water Quality

(possible concerns)
Salt/oil based mud use freshwater and freshwater mud system on surface.and oil based mud system from base of surface casing to TD.
High water table no
Surface drainage leads to live water no, closest drainage is an East Redwater Creek to the north of this location that drains to the northwest into Latka reservoir. The location is about 1/8 of a mile to the south of this drainage.
Water well contamination no, closest water well is about ¼ of a mile away. Deepest water well closed by is only 346' in depth, surface casing will be drilled with freshwater, casing set to 2000' and cemented back to surface.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
__ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
X Off-site disposal of solids/liquids (in approved facility)
__ Other:

Comments: 2000' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used on surface hole.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none.
High erosion potential no, moderate cut, up to 11.4' and moderate fill, up to 15.6', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite Large, 400'X350' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads. About 5/8 of a mile of new access will be built off the existing county road into this location. Reserve pit liquids to be disposed of at Land Tec #201 SWD. Solids will be allowed to dry, pit liner folded over the top of the solids, spoil dirt to fill pit, top soil spread over pit area, and seeded to land owners specification. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences residences about 1 mile to the southwest of this drillsite.
Possibility of H2S yes
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
_X_ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns, a residence about 1 mile from this wellsite. H2S safety company to setup alarms and train rig employees. Proper BOP stack and surface casing should be able to control any problems that occurs.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a
Proximity to recreation sites None identified.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____
Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified
Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: on private land

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: no concerns

Remarks or Special Concerns for this site

Well is a 11,600' Red River formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: May 4, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Richland County water wells

(subject discussed)
May 4, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: MRC LLC
Well Name/Number: Wallace 3-15
Location: NE NW Section 15 T37N R4E
County: Liberty **MT; Field (or Wildcat)** Whitlash

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2700' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:

Comments: Gas plant nearby. no special concerns – using small rig to drill to 2700'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water Yes, location is close to Bear Gulch drainage which has what appears to be a stock pond built in it, about 1/2 mile to the northwest of this location.
Water well contamination no, all water wells are 250' deep or shallower and about ¾ of a mile away from this location.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:

Comments: 250' of surface casing cemented to surface adequate to protect freshwater zones. Also, air/air mist and/or fresh water mud systems to be used. 5 ½" production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no, stream crossings

High erosion potential no, small cut, up to 9.4' and a small fill, up to 2.2', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 200'X200' location size required.
Damage to improvements slight, surface is grassland.
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county gravel roads, Flat Coulee road. Will utilize about 1/4 mile of existing well access road off the Flat Coulee road. Will construct about 2700' of new road into this location. Cuttings will be buried in the earthen reserve pit. Fluids will be allowed to evaporate. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Iverson Ranch is about 3/4 mile to the northwest and Wallace Ranch about ½ mile to the north of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns. Distance and topographical features should mitigate any noise issues.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites none identified
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

_ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: Private surface lands.

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: Additional development well in the Whitlash Field. no concerns

Remarks or Special Concerns for this site

Well is a 2700' Madison formation test. Well is in an existing oil and gas field, Whitlash Field.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki Steven Sasaki

(title:) Chief Field Inspector

Date: June 20, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Liberty County water wells
(subject discussed)
June 20, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection: _____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee-Fidelity/BR 11-28
Location: NW NW Section 28T10N R58E
County: Fallon, **MT; Field (or Wildcat)** Cedar Creek

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2000' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2000'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table No
Surface drainage leads to live water No, closest drainage is an unnamed ephemeral drainage to Cabin Creek, about 1/8 of a mile to the south of this location.
Water well contamination no, closest water well is at least ½ of a mile distant in any direction. Surface casing will be drilled with freshwater and cemented to surface. Production casing if run will be cemented to surface.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 5.8' and small fill, up to 2.5', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 120'X190' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight.

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation

__ Other Access will be over existing county roads and existing trails. A short amount of new access will be built into this location off an existing well access trail, about 1/4 of a mile. Cuttings and mud solids will be disposed of in the unlined drilling pits. Drilling fluids will be disposed of in a nearby private stock pond with surface owner approval or allowed to evaporate. Pits will then be allowed to dry and then will be backfilled. No special concerns

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Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Closest buildings, unknown if they are residences or oil production facilities, 1/4 mile to the southeast, 5/8 of a mile to the northe and 1.75 miles to the northeast of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:
Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:
Comments: No concerns.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

_X_ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: _____No concerns, private surface.

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _____Well is a development well in an existing gas field, Cedar Creek. No concerns.

Remarks or Special Concerns for this site

__Well is a 2000' Eagle Formation test.

Summary: Evaluation of Impacts and Cumulative effects

_____No long term impacts expected. Some short term impacts will occur, but can be mitigated in time

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki _____

(title:) Chief Field Inspector

Date: April 20, 2006

Other Persons Contacted:

_____

Montana Bureau of Mines and Geology, Groundwater Information Center

_____

(Name and Agency)

Water wells in Fallon County

_____

(subject discussed)

April 20, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: MRC LLC
Well Name/Number: J. Fey 12-24
Location: NW SW Section 24 T37N R2E
County: Toole **MT; Field (or Wildcat)** Fred and George Creek

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2720' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2720'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater, freshwater mud system
High water table no
Surface drainage leads to live water No, nearest drainage is an unnamed ephemeral tributary to Miners Coulee, about 1/8 of a mile to the south of this location.
Water well contamination no, all nearby water wells less than 450' deep. Closest water well is about 1 mile to the southeast of this well location. Surface hole will be drilled with freshwater muds to 450' and casing run and cemented to surface to protect groundwater.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 450' of surface casing cemented to surface adequate to protect freshwater zones. Also, air/air mist and/or fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no, stream crossings

High erosion potential no, moderate cut, up to 18.7' and small fill, up to 4.7', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 200'X200' location size required.
Damage to improvements slight, surface use is grassland..
Conflict with existing land use/values Slight

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will utilize existing county road, Miners Coulee and oil field roads. About 1/8 of a mile of new access road will be built into this location. Cuttings will be buried in the reserve pit. Fluids will be allowed to evaporate and then the pit will be backfilled. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences A. Fey Ranch is about 2.5 miles to the northeast and the J. Fey Ranch is about 1.5 miles to the southwest of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:

_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites none identified
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

_ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: Private surface lands.

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: Well is a development well in the Fred and George Creek oil field. No concerns

Remarks or Special Concerns for this site

Well is a 2720' Rierdon Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: June 20, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Toole County water wells

(subject discussed)

May 13, 2006

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: BR No. 13-21
Location: NW SW Section 21T10N R58E
County: Fallon, **MT; Field (or Wildcat)** Cedar Creek

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2000' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2000'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table No
Surface drainage leads to live water No, closest drainage is an unnamed ephemeral drainage to Cabin Creek, about ¼ of a mile north of this location. This unnamed ephemeral drainage appears to drain into a stock pond, about ¾ of a mile north of this location.
Water well contamination no, closest water well is at least 1/2 mile distant in any direction. Surface casing will be drilled with freshwater and cemented to surface. Production casing if run will be cemented to surface.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)

Steam crossings no
High erosion potential no, small cut, up to 2.5' and small fill, up to 1.0', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 120'X190' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation

__ Other Access will be over existing county roads and existing trails. A short amount of new access will be built into this location off an existing county road, about 1/8 of a mile. Cuttings and mud solids will be disposed of in the unlined drilling pits. Drilling fluids will be disposed of in a nearby private stock pond with surface owner approval or allowed to evaporate. Pits will then be allowed to dry and then will be backfilled. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Closest buildings, unknown if they are residences or oil production facilities, 3/8 of a mile to the north of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:
Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: Well is a development well in an existing gas field, Cedar Creek. No concerns.

Remarks or Special Concerns for this site

Well is a 2000' Eagle Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated in time

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: April 20, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Fallon County

(subject discussed)
April 20, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Devon Energy Production Company, LP
Well Name/Number: Ammen 19-10
Location: NW SE Section 19 T35N R26E
County: Blaine, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time no, 7 to 10 days drilling time
Unusually deep drilling (high horsepower rig) no, 3700' TVD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 3700 'TVD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water No, closest drainage is an unnamed ephemeral tributary to Little Jewel Coulee, about ¾ of a mile to the southwest of this location.
Water well contamination no, closest water well is about ¼ mile to the east, but only 52' deep. Surface casing will be drilled with freshwater and 300' of steel surface casing set. Should not create a problem with this water well.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 300' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. If productive production casing will be cemented to surface. Drilling fluids will be trucked to nearby stock pond and disposed of with surface owner approval.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential no, small cut, up to 5' and small fill, up to 8', required

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillisite will be reclaimed.
Unusually large wellsite no, 250'X250' location size required.
Damage to improvements slight
Conflict with existing land use/values slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads. About 3/8 of a mile of new access will be built into this location. Cuttings will be disposed of in the unlined earthen pits. Pit will be allowed to dry then backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences residences about 5/8 of a mile southwest and 1 mile to the east of this location
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 7 to 10 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites None identified
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: Private surface location.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: _Private surface location

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _____No concerns

Remarks or Special Concerns for this site

__Well is a 3700' Mowry Formation test

Summary: Evaluation of Impacts and Cumulative effects

__No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):_Steven Sasaki_____

(title:)_Chief Field Inspector_____

Date:__June 20, 2006_____

Other Persons Contacted:

_____

_Montana Bureau of Mines and Geology, GWIC website_____

(Name and Agency)

_Blaine County water wells_____

(subject discussed)

_June 20, 2006_____

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: BR No. 33-21
Location: NW SE Section 21T10N R58E
County: Fallon, **MT; Field (or Wildcat)** Cedar Creek

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2000' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2000'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table No
Surface drainage leads to live water No, closest drainage is an unnamed ephemeral drainage to Cabin Creek, about ¼ of a mile north of this location.
Water well contamination no, closest water well is at least 3/8 of a mile to the east of this location. The well is an unused stockwater well, depth unknown and casing unknown. Surface casing will be drilled with freshwater and cemented to surface. Production casing if run will be cemented to surface. All mud program will be with a freshwater base.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)

Steam crossings no
High erosion potential no, small cut, up to 3.3' and small fill, up to 1.9', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 120'X190' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation

__ Other Access will be over existing county roads and existing trails. A short amount of new access will be built into this location off an existing county road, about 1/8 of a mile. Cuttings and mud solids will be disposed of in the unlined drilling pits. Drilling fluids will be disposed of in a nearby private stock pond with surface owner approval or allowed to evaporate. Pits will then be allowed to dry and then will be backfilled. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Closest buildings, unknown if they are residences or oil production facilities, ½ of a mile to the northwest and ¾ of a mile to the northeast of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:
Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: Well is a development well in an existing gas field, Cedar Creek. No concerns.

Remarks or Special Concerns for this site

Well is a 2000' Eagle Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated in time

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: April 20, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Fallon County

(subject discussed)
April 20, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Klabzuba Oil & Gas, Inc.
Well Name/Number: Golie-Federal 24-8-30-15B
Location: SE NE Section 24 T30N R15E
County: Hill, **MT; Field (or Wildcat)** Tiger Ridge

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time
Unusually deep drilling (high horsepower rig) no, 2700' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2700'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water No, closest unnamed ephemeral tributary drainage to Beaver Creek, is about ½ mile to the east of this location.
Water well contamination no, nearest water wells over 1 mile from this location. In the event this well is successful casing will be run and cemented to surface.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 200' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, large cut, up to 31.2' and small fill, up to 8.7', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite no, 200'X200' location size required.
Damage to improvements Slight
Conflict with existing land use/values Slight

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access to location will be over existing county gravel roads and existing two track trails. A short 1/2 mile of new access will be built into this location. Drilling fluids will be trucked to a private stock pond for sealant with surface owner approval. Solids will be allowed to dry in the pits. Pit after drying will be backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences None nearby. Closest residence is 1 mile to the west of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:

_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites Beaver Creek County Park boundary is 2 miles east of this location.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: _____on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _____Development well in the Tiger Ridge gas field. No concerns

Remarks or Special Concerns for this site

__Well is a 2700' Second White Specks Formation test

Summary: Evaluation of Impacts and Cumulative effects

__No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki _____

(title:) Chief Field Inspector

Date: June 20, 2006

Other Persons Contacted:

(Name and Agency)

Montana Bureau of Mines and Geology Groundwater Information Center

(subject discussed)

Water wells in Hill County,

June 20, 2006

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: BR No. 44-7
Location: SW SE Section 7T10N R58E
County: Fallon, **MT; Field (or Wildcat)** Cedar Creek

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2000' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2000'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table No
Surface drainage leads to live water No, closest drainage is an unnamed ephemeral drainage to Cabin Creek, about ¼ of a mile southeast of this location.
Water well contamination no, closest water well is at least 1/2 mile distant in any direction. Surface casing will be drilled with freshwater and cemented to surface. Production casing if run will be cemented to surface.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 0.5' and small fill, up to 2.9', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 120'X190' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight, surface is grassland.

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation

__ Other Access will be over existing county roads and existing trails. A short amount of new access will be built into this location off an existing county road, about 1/8 of a mile. Cuttings and mud solids will be disposed of in the unlined drilling pits. Drilling fluids will be disposed of in a nearby private stock pond with surface owner approval or allowed to evaporate. Pits will then be allowed to dry and then will be backfilled. No special concerns

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Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Closest buildings, unknown if they are residences or oil production facilities, 3/8 of a mile to the south and ¾ of a mile to the northeast of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____
Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: Well is a development well in an existing gas field, Cedar Creek. No concerns.

Remarks or Special Concerns for this site

Well is a 2000' Eagle Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated in time

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: April 20, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Fallon County

(subject discussed)
April 20, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Klabzuba Oil & Gas, Inc.
Well Name/Number: Thiel 10-14-34-16
Location: SE SW Section 10T34N R16
County: Hill, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2700' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) n/a

Mitigation:
__ Air quality permit (AQB review)
_ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2700'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table No
Surface drainage leads to live water Red Rock Coulee ephemeral drainage is about 1000' to the west of this location.
Water well contamination no, closest water well is over 1 mile away and is shallower than 200'.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
_X_ Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 200' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 4.1' and moderate fill, up to 10.1', required.
Loss of soil productivity no, location will be restored after drilling
Unusually large wellsite no, 250'X250' location size required.

Damage to improvements no.
Conflict with existing land use/values Slight

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be along existing county road and existing trails. The last 1000' will be new access built. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences None, within 1 mile. Dirt landing strip 3 miles to the east of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:

X Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: No concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a Lake Thibadeau National Wildlife Refugee boundary 1 mile to the north of this location.
Proximity to recreation sites none
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 2700' Second White Specks Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: March 9, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Hill County water wells

(subject discussed)

March 9, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee-Fidelity/BR 42-28
Location: SE NE Section 28T10N R58E
County: Fallon, **MT; Field (or Wildcat)** Cedar Creek

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2000' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2000'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table No
Surface drainage leads to live water No, closest drainage is an unnamed ephemeral drainage to Cabin Creek, about 1/8 of a mile to the north of this location.
Water well contamination no, closest water well is at least 1 mile distant in any direction. Surface casing will be drilled with freshwater and cemented to surface. Production casing if run will be cemented to surface.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 6.6' and small fill, up to 5.5', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 120'X190' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight.

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation

__ Other Access will be over existing county roads and existing trails. A short amount of new access will be built into this location off an existing well access trail, about 3/8 of a mile. Cuttings and mud solids will be disposed of in the unlined drilling pits. Drilling fluids will be disposed of in a nearby private stock pond with surface owner approval or allowed to evaporate. Pits will then be allowed to dry and then will be backfilled. No special concerns

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Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Closest buildings, unknown if they are residences or oil production facilities, 1/2 mile to the west, 1.25 mile to the northwest and 1.75 miles to the north of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:
Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:
Comments: No concerns.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

_X_ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: _____No concerns, private surface.

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _____Well is a development well in an existing gas field, Cedar Creek. No concerns.

Remarks or Special Concerns for this site

__Well is a 2000' Eagle Formation test.

Summary: Evaluation of Impacts and Cumulative effects

_____No long term impacts expected. Some short term impacts will occur, but can be mitigated in time

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):_Steven Sasaki_____ Steven Sasaki

(title:)_Chief Field Inspector_____

Date:__April 20, 2006_____

Other Persons Contacted:

_____

Montana Bureau of Mines and Geology, Groundwater Information Center

_____

(Name and Agency)

Water wells in Fallon County

_____

(subject discussed)

_April 20, 2006_____

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Headinton Oil, Limited Partnership.
Well Name/Number: Cundiff 21X-28
Location: NE NW Section 28 T23N R57E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 40-50 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP
Possible H2S gas production Slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string salt based and oil based drilling fluids. Saltwater for the horizontal openhole section. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, closest drainage is an unnamed ephemeral tributary to South Fork Lone Tree Creek, about 1/8 of a mile to the southeast of this location.
Water well contamination No, closest water well is over ½ mile to the northeast and less than 200' in depth.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 2000' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, moderate cut, up to 13.6' and small fill, up to 8.6', required.

Loss of soil productivity _None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.. _
Unusually large wellsite _No, large well site 430'X300'
Damage to improvements _Slight.
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: _Access will be over existing county roads and existing trails. A short 1/8 mile of new access road will be built into this location off an existing access. Oil based muds will be recycled, cuttings will be disposed of in a lined pit. Pit will be backfilled and/or solidified with subsoil clays and backfilled. No concerns. _____

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _residence about ¾ mile to the east. _____
Possibility of H2S _Slight_
Size of rig/length of drilling time Triple drilling rig 40 to 50 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: _Adequate surface casing cemented to surface with working BOP stack should mitigate any problems.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_ None identified.
Proximity to recreation sites _None identified _____
Creation of new access to wildlife habitat _No____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No_____

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: _no concerns Private surface. _____

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites _None identified _____

Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: ___No concerns Private surface_____

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: No concerns_____

Remarks or Special Concerns for this site

Bakkern horizontal well 15,656' MD and 14,645' MD 10471' TVD. Second well in this spacing unit.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: June 20, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Richland County water wells
(subject discussed)
June 20, 2006

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: BR 32-15
Location: SW NE Section 15 T9N R58E
County: Fallon, **MT; Field (or Wildcat)** Cedar Creek

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2000' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
_ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2000'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water no, closest drainage is an unnamed ephemeral tributary drainage which drains into Cabin Creek about 3.5 miles to the north.
Water well contamination None, no water wells within ½ mile of this location.
Production casing if run will be cemented to surface. .
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 0.7' and small fill, up to 3.7', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 120'X190' location size required.
Damage to improvements Slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be along existing county roads.. A short access into location off existing roads or trails will be built, about ¼ mile of new access will be created. Drilling fluids will be hauled to a private stock reservoir with surface owner approval or allowed to dry in the earthen pits. Cuttings will be buried in the unlined earthen pits. Pits will restored after they have dried. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences residences about ½ mile to the northwest and southeast of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 2000' Eagle Formation test. This well is within an existing oil and gas field, Cedar Creek.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki Steven Sasaki

(title:) Chief Field Inspector

Date: June 16, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Fallon County

(subject discussed)

June 16, 2006

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Nance Petroleum Corporation
Well Name/Number: Larson 1-19H
Location: NENE Section 19 T23N R58E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 30-40 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP
Possible H2S gas production Yes
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string salt based and oil based drilling fluids. Surface casing hole, freshwater, and freshwater mud system to be used. Horizontal laterals will be drilled with brine water.
High water table No
Surface drainage leads to live water No, closest ephemeral tributary drainage to the North Fork of Lone Tree Creek, about 1/8 mile to the northeast of thislocation
Water well contamination No problem anticipated all water wells less than 1800' in depth.. All water wells at least ½ mile distance from this location.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: Recommend 1849' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential location will require a large cut of 29.6' and a moderate of fill of 14.1'.
Loss of soil productivity None, location to be restored after drilling well, if nonproductive. If productive

Unusually large wellsite __No, large well site 400'X320'
Damage to improvements __No, location to be restored after drilling.
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: __Access will be over existing county road. A short access from the county road into location will be built, about 500'. Cuttings will be buried in the lined reserve pit. Pit fluids will be hauled to a commercial disposal or drilling fluids will be recycled.___

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences ___Residence ½ mile to the west and 1.25 miles to the east of location._____
Possibility of H2S _slight__
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: __Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Bakken formation completions typically do not have H2S associated with it, but there are a few that do.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_ None identified.
Proximity to recreation sites __None identified_____
Creation of new access to wildlife habitat __No_____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No _____

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: __no concerns, existing access off county road.

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites __None identified_____

Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: __Private surface_____

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: _No concerns_____

Remarks or Special Concerns for this site

__Second well in this spacing unit.

Summary: Evaluation of Impacts and Cumulative effects

_Bakken horizontal well 14,430' MD. _No long term impacts expected, some short term impacts will occur, but can be mitigated.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):___Steven Sasaki
(title:)___Chief Field Inspector
Date:____May 16, 2005

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website.
(Name and Agency)
Richland County water wells
(subject discussed)
May 16, 2005
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Devon Energy Production Company, LP
Well Name/Number: Paulsen-DIR 15-9
Location: NE SE Section 15 T31N R18E
County: Blaine, **MT; Field (or Wildcat)** Tiger Ridge

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time
Unusually deep drilling (high horsepower rig) no, 2500' TVD 2750'TMD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:

Comments: no special concerns – using small rig to drill to 2500 'TVD 2750' TMD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water No, closest drainage is 1/8 mile to the west of this location, an unnamed ephemeral tributary drainage to Black Coulee.
Water well contamination no, closest water well is over 1 mile away.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:

Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential no, small cut, up to 9' and moderate fill, up to 12.0', required
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 220'X250' location size required.

Damage to improvements slight
Conflict with existing land use/values slight

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads and existing trails. About 1/8 mile of access trail will be built into this location. Cuttings will be disposed of in the unlined earthen pits. Drilling fluids will be trucked to nearby stock pond and disposed of with surface owner approval. Pit will be allowed to dry then backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences No residences within 1 mile of this location
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:

_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites None identified
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: Development well within an existing gas field, Tiger Ridge gas field. No concerns

Remarks or Special Concerns for this site

Well is a 2500' TVD 2750' TMD Eagle Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: April 3, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Hill County water wells

(subject discussed)

April 3, 2006

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Altamont Oil & Gas, Inc.
Well Name/Number: Boucher No. 21-2
Location: SW SW Section 21 T29N R5W
County: Pondera **MT; Field (or Wildcat)** Lake Frances Gas

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2250' TD
Possible H2S gas production no
n/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2250'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater, freshwater mud system, air, air mist.
High water table no
Surface drainage leads to live water No, location flat. Nearest ephemeral drainage is Miller Coulee ¾ mile to the south of location. Lake Frances is 1 ¼ miles to the north of location.
Water well contamination no, all water wells within 2 miles are shallower that 550'.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 550' of surface casing will be set and cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems or air to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no, stream crossings
High erosion potential no, small cut, up to 0.5' and small fill, up to 1.1', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be restore.
Unusually large wellsite no, 200'X200' location size required.
Damage to improvements Slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over exiting county roads with about 600' of new access will be built into this location. Drill cuttings will be buried in the unlined cuttings pit. Drilling fluids will be allowed to evaporate in the pits. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences None nearby. Closest buildings 3/4mile to the east and 1 mile to the west.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites Lake Frances 1.25 miles to the north of this loation.
Creation of new access to wildlife habitat none identified
Conflict with game range/refuge management none identified
Threatened or endangered Species none identified

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified__

Mitigation

__ avoidance (topographic tolerance, location exception)

_X_ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: __Private surface_____

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _____no concerns

Remarks or Special Concerns for this site

Well is a 2250' Bow Island Formation test in an established gas field, Lake Frances Gas Field. Original Boucher 21-1 gas well lost. This is a replacement well for the Boucher 21-1.

Summary: Evaluation of Impacts and Cumulative effects

No significant long term impacts expected in the drilling of this gas well. Some short term impacts will occur, but can be mitigated in time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: May 10, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website.

(Name and Agency)

Pondera County water wells.

(subject discussed)
May 10, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: EOG Resources, Inc.
Well Name/Number: Diamond 1-36
Location: C NW Section 36 T29N R56E
County: Roosevelt, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 20-30 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP
Possible H2S gas production yes
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under rule 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing gas pipelines in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string salt based and oil based drilling fluids. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, surface drainages nearby.
Water well contamination No, nearby water wells are all less than 300' depth. Surface casing will be set to 1,526' and cemented to surface.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1,526' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, requires a small cut, up to 8.9' and small fill, up to 1.0', required.

Loss of soil productivity _None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite _No, large well site 400'X300'
Damage to improvements _No, location to be restored after drilling, if nonproductive.
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: _Access will be over county roads and existing two track trails. A short access road of about 4993' will be constructed off county road. This includes upgrading of section line trail off the county road. _____

_____

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _residences 3/4 mile to the east and about 1 mile to the southeast of this location..
Possibility of H2S _Slight__
Size of rig/length of drilling time Triple drilling rig 20 to 30 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: _Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Noise should not be a problems, sufficient distance from residence to rig should mitigate this.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_None identified.
Proximity to recreation sites _None identified_____
Creation of new access to wildlife habitat _No____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No_____

Mitigation:
__ Avoidance (topographic tolerance/exception)
X Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: __Montana Trust Lands will do EA. Private surface and Trust Lands minerals

_____

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

_X other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: ___Private surface_ State of Montana Trust Lands minerals.

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _No concerns_____

Remarks or Special Concerns for this site

__Nisku formation test_____

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected from the drilling of this well. Some short term impacts will be apparent.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):___Steven Sasaki_____

(title:)___Chief Field Inspector_____

Date:____May 8, 2006

Other Persons Contacted:

_____

_____

(Name and Agency)

Montana Bureau of Mines and Geology, Groundwater Information Center website.

(subject discussed)

Water wells in Roosevelt County

(date)

May 8, 2006

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: J. Burns Brown Operating Company
Well Name/Number: Elias 1-34-18B
Location: NE NE Section 1 T34N R18E
County: Blaine, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time no, 12-14 days drilling time
Unusually deep drilling (high horsepower rig) no, 4200' TVD
Possible H2S gas production yes
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
_ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 4200 ' TVD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water yes, nearest ephemeral drainage is Hanson Coulee about 1/4 mile to the southt of this location. Some stock ponds in the bottom of this drainage straight to the south.
Water well contamination none, nearest water well is over 1 mile to the southeast of this location.
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential Small cut, up to 2' and smalle fill, up to 1', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite no, 250'X250' location size required.
Damage to improvements no.
Conflict with existing land use/values no

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Will use existing county roads and existing trails except 1 mile of new access will have to be built from the existing trail into this location. Cuttings will be buried in the earthen pits. Drilling fluids will be trucked to a nearby private stock pond with surface owner approval. Pit will be backfilled when dry. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences No residences within 1 mile of location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 12 to 14 days drilling time

Mitigation:

_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites not
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified

Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:
Comments:

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: no concerns

Remarks or Special Concerns for this site

Well is a 4200' TVD, Sawtooth Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: May 10, 2006

Other Persons Contacted:

(Name and Agency)
Montana Bureau of Mines and Geology, Groundwater Information Center website, Blaine County water wells.
(subject discussed)
May 10, 2006
(date)

If location was inspected before permit approval:
Inspection date:
Inspector:
Others present during inspection:

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Devon Energy Production Company, L.P.
Well Name/Number: O'Neil 33-12
Location: NW SW Section 33 T32N R17E
County: Hill, **MT; Field (or Wildcat)** Tiger Ridge

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time
Unusually deep drilling (high horsepower rig) no, 2500' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2500 '

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water no, closest drainage is Staten Coulee, 3/16 of a mile to the east and a tributary of Staten Coulee about 1/8 mile to the north of the location.
Water well contamination none, no water wells within 1 mile of this location.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
__ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential no, small cut, up to 7' and moderat fill, up to 12', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite no, 210'X250' location size required.
Damage to improvements slight
Conflict with existing land use/values no

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county road, Clear Creek Road and existing trails. About 1/2 of a mile of exist trail will be used to access this location . Cuttings will be disposed of in the unlined earthen pits. Pit will be allowed to dry then backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences about 1/2 of a mile to the northeast of this location. Town of Havre, about 9 miles to the northwest.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites none identified
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified

Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: _____ on private land

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: _____ no concerns Development well within an existing gas field, Tiger Ridge Gas Field.

Remarks or Special Concerns for this site

Well is a 2500' Eagle Formation test north side of Bear Paw Mountains

Summary: Evaluation of Impacts and Cumulative effects

No, long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: May 13, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Hill county water wells
(subject discussed)
May 13, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: J. Burns Brown Operating Company
Well Name/Number: Skoyen 7-34-19
Location: SE SW Section 7 T34N R19E
County: Blaine, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time no, 3-4 days drilling time
Unusually deep drilling (high horsepower rig) no, 1800' TVD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
_ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 1800 ' TVD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water no, nearest ephemeral drainage is Lodge Creek about ½ of a mile to the west of this location. Irrigation canal, Chinook irrigation, about 1/8 of a mile west of this location.
Water well contamination none, nearest water well is about 1/2 of a mile to the northwest of this location. Well is 209' in depth.
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential Small cut, up to 1' and small fill, up to 1', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite no, 250'X250' location size required.
Damage to improvements no.
Conflict with existing land use/values no

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Will use existing county roads except ½ mile of new access will have to be built from the existing county roadl into this location. Cuttings will be buried in the earthen pits. Drilling fluids will be trucked to a nearby private stock pond with surface owner approval. Pit will be backfilled when dry. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Buildings about 3/8 of a mile to the northwest of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:

_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) None identified.
Proximity to recreation sites none
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified

Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:
Comments: Private surface location.

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: no concerns

Remarks or Special Concerns for this site

Well is a 1800' TVD, Eagle Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: May 10, 2006

Other Persons Contacted:

(Name and Agency)
Montana Bureau of Mines and Geology, Groundwater Information Center website, Blaine County water wells.
(subject discussed)
May 10, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection: _____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Slawson Exploration Company, Inc.
Well Name/Number: Bayonet 1-34H
Location: NE NE Section 34 T24N R53E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 50-60 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP
Possible H2S gas production slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments:

Water Quality

(possible concerns)
Salt/oil based mud yes to long string salt based and oil based drilling fluids. Brine water for horizontal legs. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, wellsite is closed to a ephemeral tributary drainage to North Fork of Redwater Creek. About ¾ of a mile to the northwest of this location is what appears to be a stock pond.
Water well contamination No, nearby wells are all less than 200' in depth. Surface hole will be drilled with freshwater and surface casing will be cemented to surface.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1250' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, location will require small cut of 9.2' and moderate fill, up to 12.1', required.
Loss of soil productivity None, location to be restored after drilling well, if nonproductive. If productive

unused portion of drillsite will be reclaimed.. _
Unusually large wellsite _No, large well site 430'X300'
Damage to improvements _Slight
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: _Access will be over existing county roads and existing oilfield well access road. A short access road will be built into location off the existing trail, about 300'. Cuttings will be buried in the lined reserve pit. Drilling fluids will be recycled. Pit will be allowed to dry before being backfilled. No concerns. _____

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _No residences within 1 mile of this location_____
Possibility of H2S _Slight_
Size of rig/length of drilling time Triple drilling rig 50 to 60 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: _Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Distance sufficient to mitigate noise problems.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_None identified.
Proximity to recreation sites _None identified_____
Creation of new access to wildlife habitat _No_____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No_____

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: _no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites _None identified_____

Mitigation
__ avoidance (topographic tolerance, location exception)
_X other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: __State of Montana surface_____

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: _No concerns_____

Remarks or Special Concerns for this site

_3 legged Bakken horizontal well. Leg 1 TVD 9415', 13,901' MD Leg 2 TVD 9415', 15,088 MD Leg 3 TVD 9475' 13,765' MD

Summary: Evaluation of Impacts and Cumulative effects

__No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):__Steven Sasaki
(title:)__Chief Field Inspector
Date:____May 5, 2006
Other Persons Contacted:

(Name and Agency)
__Montana Bureau of Mines and Geology, Groundwater Information Center website.
(subject discussed)
__Water wells in Richland County
(date)
May 5, 2006
If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: J. Burns Brown Operating Company
Well Name/Number: Verploegen 2-34-15
Location: Lot 4 NW NW Section 2 T34N R15E
County: Hill, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time no, 3-4 days drilling time
Unusually deep drilling (high horsepower rig) no, 2400' TVD
Possible H2S gas production No
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
_ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2400 ' TVD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water yes, nearest unnamed ephemeral tributary drainage to Staton Coulee about 5/8 mile to the north of this location. Some stock ponds in the bottom of this drainage about2 miles to the southeast..
Water well contamination none, nearest water well is about ¾ of a mile to the northwest of this location.
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential Small cut, up to 2' and small fill, up to 1', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite no, 250'X250' location size required.
Damage to improvements no.
Conflict with existing land use/values no

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Will use existing county roads and existing trails except 200' of new access will have to be built from the existing trail into this location. Cuttings will be buried in the earthen pits. Drilling fluids will be trucked to a nearby private stock pond with surface owner approval. Pit will be backfilled when dry. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences Buildings about 1.5 miles to the southeast of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:

_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: no concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a Lake Thibadeau National Wildlife Refuge about 6 miles to the east of this location..
Proximity to recreation sites none
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: Private surface location.

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 2400' TVD, Niobrara Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: May 10, 2006

Other Persons Contacted:

(Name and Agency)

Montana Bureau of Mines and Geology, Groundwater Information Center website, Blaine County water wells.

(subject discussed)

May 10, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Devon Energy Production Company, LP
Well Name/Number: Boyce 13-12
Location: NW SW Section 13 T30N R15E
County: Hill, **MT; Field (or Wildcat)** Tiger Ridge

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time
Unusually deep drilling (high horsepower rig) no, 2500' TVD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2500 'TVD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water No, closest drainage is an unnamed ephemeral tributary drainage to Beaver Creek, 1/8 mile to the north of this location.
Water well contamination no, closest water well is over 1 mile away.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
__ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. If productive production casing will be cemented to surface. Drilling fluids will be trucked to nearby stock pond and disposed of with surface owner approval.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential no, small cut, up to 3' and small fill, up to 4', required
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite no, 250'X250' location size required.
Damage to improvements slight
Conflict with existing land use/values slight

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads and existing trails. About 1/4 of a mile of new access will be built into this location. Cuttings will be disposed of in the unlined earthen pits. Pit will be allowed to dry then backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences No residences with 1 mile of this location Small building about ½ mile to the south of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:

_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites None identified
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: Private surface location.

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified
Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:
Comments: Private surface location

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: Development well within an existing gas field, Tiger Ridge gas field. No concerns

Remarks or Special Concerns for this site

Well is a 2500' Eagle Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: May 13, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Hill County water wells
(subject discussed)
May 13, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Continental Resources, Inc
Well Name/Number: Timber Creek 1-16H
Location: NW SW Section 16 T25N R55E
County: Richland, **MT; Field (or Wildcat)** W/C (Bakken Horizonal)

Air Quality

(possible concerns)
Long drilling time no, 50 to 60 days drilling time.
Unusually deep drilling (high horsepower rig) no, 15,495'MD and 13, 884' MD
Possible H2S gas production slight
in/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
x Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using triple rig to drill to 15,495'MD and 13,884 MD – 2 laterals

Water Quality

(possible concerns)
Salt/oil based mud yes, freshwater and freshwater mud system on surface hole and oil based saltwater mud system on mainhole. Saltwater for horizontal sections.
High water table no
Surface drainage leads to live water no, location sits above Timber Creek an ephemeral drainage about an 1/16 of a mile to the south and west of this location.
Water well contamination no, water wells are at least ½ mile away or further, deepest water well nearby is 340' in depth. Surface hole will be drilled with freshwater and freshwater muds. Surface casing will be cemented to surface from 1450'.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1450' of surface casing cemented to surface adequate to protect freshwater zones.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no, crossing.

High erosion potential no, moderate cut, up to 13.1' and small fill, up to 8.4', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 500'X270' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Cuttings will be put in the lined reserve pit. Pit fluids will be hauled to a commercial disposal or recycled. Pit contents will be allowed to dry in the pit and then buried. Access will use existing county roads and existing oil field access road. Access road cross this location. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences None nearby
Possibility of H2S slight
Size of rig/length of drilling time Triple drilling rig/short 50 to 60 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
_X_ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: Montana Trust lands surface. They will do surface EA. no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

_X other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: Montana Trust Lands surface. They will do surface EA.

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 9,905'TVD, 15,495' MD and 9,023' TVD , 13,884' MC ,2 legged Bakken Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term surface impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki Steven Sasaki

(title:) Chief Field Inspector

Date: May 15, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)
Richland County water wells
(subject discussed)
May 15, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection: _____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Devon Energy Production Company, L.P.
Well Name/Number: Kafka 32-8
Location: SE NE Section 32 T32N R14E
County: Hill, **MT; Field (or Wildcat)** Tiger Ridge Field

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2500' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2500 '

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water Yes, closest live water is Big Sandy Creek, about 1/4 of a mile to the northwest of this location.
Water well contamination no, closest water well is 141' deep about 5/8 of a mile to the south of this location.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production longstring will be cemented back to the surface casing.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential no, small cut, up to 1' and small fill, up to 1', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 250'X250' location size required.
Damage to improvements Slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing highways and county roads. About 1200' of access road will be built into this location off the county road. Cuttings will be buried in the earthen pits. Drilling fluids will be offsite disposed of in a stock pond as sealant. Drilling pits will be allowed to dry and then backfilled. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences about 1/2 mile to the south of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites City of Havre Herron Park 4.5 miles to the northeast within the city limits of Havre, MT, Agricultural Experiment Station and Fort Assinniboine about 3 miles to the east of this location.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites Fort Assinniboine site 3 miles to the east.

Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:
Comments: location on private land

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: Well is a development well in an existing gas field, Tiger Ridge. No concerns

Remarks or Special Concerns for this site

Well is a 2500' Eagle Formation test north side of Bear Paw Mountains

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated in time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: March 17, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website.
(Name and Agency)
Hill County water wells.
(subject discussed)
March 17, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection: _____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Stone Energy Corporation
Well Name/Number: Oscar 1-35H
Location: SW SW Section 35 T23N R58E
County: Richland, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time 50-60 days drilling time
Unusually deep drilling (high horsepower rig) No, triple drilling rig for 3 Legged Bakken horizontal well 15,952' MD 10,377' TVD
Possible H2S gas production slight
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Gas plant available to take associated gas, no special concerns.

Water Quality

(possible concerns)
Salt/oil based mud use freshwater and freshwater mud system on surface, oil based drilling fluids for intermediate string and saltwater for horizontal legs.
High water table no
Surface drainage leads to live water no, closest drainage is an unnamed ephemeral tributary drainage to Lone Tree Creek, about ¼ mile to the north of this location. This drainage enters Lone Tree Creek about 2 miles to the northeast.
Water well contamination no, all water wells within ½ mile of this location are shallower than 1826'.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1826' of surface casing cemented to surface adequate to protect freshwater zones to cover base of Fox Hills formation. Also, fresh water mud systems to be used on surface hole.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none.

High erosion potential no, small cut, up to 4' and small fill required up to 3.4'.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite Large, 285'X400' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: using existing county roads. Short access off existing county road, approximately 246' of new road into this location. Reserve pit liquids to be recycled or hauled to a commercial disposal. Solids will be allowed to dry, pit liner folded over the top of the solids, spoil dirt to fill pit, top soil spread over pit area, and seeded to land owners specification. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences None nearby, buildings 3/8 of a mile to the west of this wellsite. Town of Sidney about 4 miles to the northeast of this location.
Possibility of H2S slight
Size of rig/length of drilling time Triple drilling rig 50 to 60 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
_X_ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns, proper BOP stack and surface casing should be able to control any problems that occurs.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None, identified
Proximity to recreation sites Vaux reservoir 1½ mile to the north and Sportsman's dam 2.5 miles to the north of this location.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified
Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:
Comments: _____

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: no concerns

Remarks or Special Concerns for this site

Well is a 15,952' horizontal Bakken formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected . Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: May 15, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Richland County water wells
(subject discussed)
May 15, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____

Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Devon Energy Production Company, L.P.
Well Name/Number: Walen 33-11
Location: NE SW Section 33 T32N R17E
County: Hill, **MT; Field (or Wildcat)** Tiger Ridge

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time
Unusually deep drilling (high horsepower rig) no, 2500' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2500 '

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water no, closest drainage is Staten Coulee and a tributary of Staten Coulee both about 1/8 mile to the west and east of the location.
Water well contamination none, no water wells within 1 mile of this location.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
__ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential no, small cut, up to 3' and small fill, up to 8', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 225'X225' location size required.

Damage to improvements slight
Conflict with existing land use/values no

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads, Clear Creek Road and existing trails. About 1/4 of a mile existing trail will be used to access this location. Cuttings will be disposed of in the unlined earthen pits. Pit will be allowed to dry then backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences about 3/8 of a mile to the north of this location. The town of Havre about 9 miles to the northwest.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:

_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites none identified
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified

__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: _____on private land

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: _____no concerns __Development well within an existing gas field, Tiger Ridge Gas Field.

Remarks or Special Concerns for this site

__Well is a 2500' Eagle Formation test north side of Bear Paw Mountains

Summary: Evaluation of Impacts and Cumulative effects

__No, long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: May 13, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Hill county water wells
(subject discussed)
May 13, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Enerplus Resources (USA) Corporation
Well Name/Number: Chainsaw-Edington No. 11-3-HID3
Location: NE NW Section 11 T24 R55E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 30-40 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP, Bakken horizontal TVD 9,959' MD 14,238'
Possible H2S gas production slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string salt based and oil based drilling fluids. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, nearest drainage is an unnamed ephemeral tributary to East Charlie Creek drainage, about 3/8 of a mile to the west of this location..
Water well contamination No, all water wells close by are shallower than 1500'.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1500'+/- surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, location has a small cut of 5.8' and a small fill, up to 9.8', required.

Loss of soil productivity _None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.. _
Unusually large wellsite _No, large well site 410'X310'
Damage to improvements _slight.
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: _Access is from county road #328 to an existing two track section line trail. About 100' of new access road will be built from two track trail in to the well location. Cuttings will be buried in the lined reserve pit. Drilling fluids will be recycled and/or hauled to a commercial Class II disposal. Pit will be squeezed with clay subsoils.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _closest residence is 1/2 of a mile to the northeast and ¾ of am mile south of this location.
Possibility of H2S _Slight_
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: _1500+ is adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Distance sufficient to mitigate noise.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_None identified.
Proximity to recreation sites _None identified
Creation of new access to wildlife habitat _No
Conflict with game range/refuge management _No
Threatened or endangered Species _No

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: _no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: __Private surface_____

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _No concerns_____

Remarks or Special Concerns for this site

__TVD 9,959' MD 14,238' Bakken Formation horizontal well

Summary: Evaluation of Impacts and Cumulative effects

_No long term impacts expected. Some short term impacts will occur. This is the second well in this spacing unit._____

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):__Steven Sasaki_____

(title:)__Chief Field Inspector_____

Date:____May 18, 2006

Other Persons Contacted:

_____

_____

(Name and Agency)

_Montana Bureau of Mines and Geology, Groundwater Information Center website, Richland County water wells_____

(subject discussed)

_May 18, 2006_____

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Coastal Petroleum Company
Well Name/Number: State 12-16
Location: NW Sw Section 16T37N R35E
County: Valley, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time no, 15 to 20 days drilling
Unusually deep drilling (high horsepower rig) no, 6010' TVD
Possible H2S gas production yes
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 6010' TVD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system on surface hole. Mainhole will be drilled with saltwater and saltwater mud system.
High water table no
Surface drainage leads to live water No, closest drainage is an unnamed ephemeral tributary to the East Fork of Crow Creek, about 1/8 of a mile east and west of this location.
Water well contamination none, no wells within 1 mile or more of this location.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 500' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential no, small cut, up to 8.6' and small fill, up to 9.5', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 160'X200' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads and existing two track trails. About 0.9 of a mile of new access will be built off an existing two track trail into this location. Cuttings will be buried in the lined reserve pit. Drilling fluids will be hauled to a commercial Class II disposal. Pit will be allowed to dry and backfilled with subsoils and clays. Finished with topsoil and seeded to surface owners specification. no special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences No residences within two miles or further from this location. .
Possibility of H2S yes
Size of rig/length of drilling time Medium to small triple drilling rig/short 15 to 20 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
_X_ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: State of Montana Trust Lands will do surface EA.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

_X other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: State of Montana Trust Lands. Trust Lands will do surface EA.

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 6010' Bakken formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: May 18, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Valley County water wells

(subject discussed)

May 18, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Enerplus Resources (USA) Corporation
Well Name/Number: Lone Tree-Bob-12-13-HLID3
Location SW SW Section 12 T23N R56E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 30-40 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP
Possible H2S gas production slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes, salt based and/or oil based drilling fluids to be used to drill the main hole.. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, closest ephemeral drainage is unnamed ephemeral tributary drainage to Lone Tree Creek, 1/8 of a mile to the east of this location.
Water well contamination No, closest water wells are very shallow in depth, less than 2000' in depth. Surface hole will be drilled with freshwater and freshwater muds.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 2000' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, small cut, up to 5.0' and small fill, up to 10.0', required..

Loss of soil productivity _None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite _No, large well site 450'X310'
Damage to improvements _slight
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: __Access to this location will be over existing county road, #128 . About 200' of new access road will be built into this location. Cuttings will be buried in the lined reserve pit. Drilling fluids will be recycled and/or hauled to a commercial Class II disposal. Pit will be squeezed with clay subsoils.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _residence ¾ of a mile to the west and 1 ¼ of a mile southeast of this location.
Possibility of H2S _Slight_
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: __Adequate surface casing cemented to surface with working BOP stack should mitigate any problems.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_None identified.
Proximity to recreation sites __None identified
Creation of new access to wildlife habitat _No
Conflict with game range/refuge management __No
Threatened or endangered Species _No

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: __no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: ___Private surface_____

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _No concerns_____

Remarks or Special Concerns for this site

_Horizontal Bakken formation well TVD 10,396' MD 15,920'. Second well to this spacing unit.

Summary: Evaluation of Impacts and Cumulative effects

_No long term impacts expected. Some short term surface impacts will occur. ._____

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):___Steven Sasaki_____ Steven Sasaki

(title:)___Chief Field Inspector_____

Date:____May 18, 2006_____

Other Persons Contacted:

_____

_Montana Bureau of Mines and Geology GWIC website_____

(Name and Agency)

_Richland County waterwells

(subject discussed)

__May 18, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Devon Louisiana Corporation
Well Name/Number: State No. 21-16
Location: SE SE Section 21 T32N R15E
County: Hill, **MT; Field (or Wildcat)** Tiger Ridge Field

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time
Unusually deep drilling (high horsepower rig) no, 2500' TD
Possible H2S gas production no
n/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
_ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2500 '

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table Possible
Surface drainage leads to live water no, unnamed tributary drainage to Beaver Creek, close to location about 1/8 of a mile to the east.
Water well contamination no
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing may not be enough. Surface lands have been developed for residential use. Deepest water well found on the GWIC database is 207'. Appears many residences close by with no water wells listed. Recommend setting 240' of surface casing and cement to surface to adequately protect freshwater zones. Also, fresh water mud systems to be used. Production longstring will be cemented back to the surface casing.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none

High erosion potential no, small cut, up to 1' and amall fill, up to 3', required.
Loss of soil productivity no, location will be restored after drilling
Unusually large wellsite no, 175'X250' location size required.
Damage to improvements slight
Conflict with existing land use/values slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads. A short access off existing county road is required, about 300'. Cuttings will be buried in the earthen pits. Drilling fluids will be offsite disposed of in a stock pond as sealant with surface owner approval. Drilling pits will be allowed to dry and then back filled. No concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences residential development close by, approximately 20 houses within ½ mile radius of this location
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites Herron Park nearby
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites Fort Assinniboine site approximately 1 mile to the southwest of this location.

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: Development gas well in the Tiger Ridge Field. No concerns

Remarks or Special Concerns for this site

Well is a 2500' Eagle Formation test north side of Bear Paw Mountains

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts will occur. Some short term impacts will occur, but can be mitigated in time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: April 27, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC Website.

(Name and Agency)

Water wells in Hill County
(subject discussed)
April 27, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection: _____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Enerplus Resources (USA) Corporation
Well Name/Number: Bullwinkle-Ardelle 4-3-H
Location: NE NW Section 4 T23N R57E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 30-40 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP, Bakken horizontal MD 14,946' 10,490' TVD
Possible H2S gas production slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string salt based and oil based drilling fluids. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, closes drainage is a ephemeral tributary drainage to Lone Tree Creek, about ¼ mile to the east of this location.
Water well contamination No, all water wells close by are shallower than 1980'.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1980'+/- surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, moderate cut, up to 11.4' and a moderate fill, up to 17.3', required.

Loss of soil productivity _None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.. __
Unusually large wellsite _No, large well site 420'X310'
Damage to improvements _slight
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: _Access will be over existing county roads and existing lease roads. A short access off the existing lease road into location will be built, about 50' in length. Cuttings will be buried in the lined reserve pit. Drilling fluids will be recycled and/or hauled to a commercial Class II disposal. Pit will be squeezed with clay subsoils. _____

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _closest residence is 3/4 of a mile to the northeast and 1.25 miles to the south of this location. _____
Possibility of H2S _Slight__
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: _Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Distance sufficient to mitigate noise.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_ None identified.
Proximity to recreation sites _None identified _____
Creation of new access to wildlife habitat _No_____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No _____

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: __no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: __Private surface_____

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _No concerns_____

Remarks or Special Concerns for this site

__Second well in this spacing unit.

Summary: Evaluation of Impacts and Cumulative effects

_TVD 10,490' MD 14,946' Bakken Formation horizontal well_____

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):__Steven Sasaki_____

(title:)__Chief Field Inspector_____

Date:____May 18, 2006_____

Other Persons Contacted:

_____

_____

(Name and Agency)

_Montana Bureau of Mines and Geology, Groundwater Information Center website, Richland County water wells_____

(subject discussed)

_May 18, 2006_____

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee-BR No. 2567
Location: NE SE Section 19T7N R60E
County: Fallon, **MT; Field (or Wildcat)** Cedar Creek

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2000' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2000'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table Possible
Surface drainage leads to live water Yes, water shed drainage for Lake Baker is ¼ mile to the north of this location.
Water well contamination none, closest water wells 1 mile to 1/1/4 miles to the west of this location.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
__ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 5.0' and small fill, up to 0.9', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 120'X190' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Using existing county road and will build a 1/8 mile of new trail to this location. Cuttings will be buried in the earthen reserve pit. Drilling fluids will be hauled to a nearby stock pond for disposal with surface owner approval or allowed to dry in the pit. Drilling pits will be allowed to dry before being backfilled. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Building nearby to the south, 1/2 of a mile, 1/2 mile to the west is the Baker municipal airport and the main town of Baker 1.25 miles to the northwest of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: Insure drilling rig has strobe light operational in the derrick. No concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites Lake Baker 1.5 miles to the northwest of this location.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: Development gas well within the Cedar Creek gas field. no concerns

Remarks or Special Concerns for this site

Well is a 2000' Eagle Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur. This well is being drilled in an existing gas field.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: April 20, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Fallon County

(subject discussed)

April 20, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Devon Energy Production Company, LP
Well Name/Number: Herdegen 2-11
Location: NE SW Section 15 T27N R19E
County: Blaine, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days
Unusually deep drilling (high horsepower rig) no, 2500' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2500 '

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water no, nearest drainage is an unnamed ephemeral tributary to Gap Creek, about 1/8 mile to the north and what appears to be a small stock pond in this drainage about 3/8 of a mile to the southeast of this location.
Water well contamination no, no water wells within 1 mile of this location.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none
High erosion potential No small cut, up to 8' and small fill, up to 4', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be restored.
Unusually large wellsite no, 250'X250' location size required.
Damage to improvements slight.
Conflict with existing land use/values no

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads and existing trails. About 1/4 of a mile of new access will be built into this location. Cuttings will be disposed of in the unlined earthen pits. Pit fluids will be trucked to a nearby stock pond for disposal with surface owner approval. Pit will be allowed to dry then backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences No residences within 1 mile of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites not
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 2500' Eagle Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated in time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: May 19, 2006

Other Persons Contacted:

(Name and Agency)

Montana Bureau of Mines and Geology, Groundwater Information Center website, Blaine County water wells.

(subject discussed)
May 19, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Sands Oil Company
Well Name/Number: Johnson 2-8
Location: NE NW Section 8T4N R61E
County: Fallon, **MT; Field (or Wildcat)** South Plevna

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 1975' TD
Possible H2S gas production None expect
n/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small sized rig to drill to 1975'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater gel polymer mud system.
High water table no
Surface drainage leads to live water None. Nearest drainage is an unnamed ephemeral drainage to Porcupine Creek
Water well contamination no, closest water well is ¾ of a mile to the southeast of this location and is 180' in depth. Distance sufficient to prevent contamination and production string if run will be cemented back to surface.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 3.1' and small fill, up to 0.5', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite no, 120'X190' location size required.
Damage to improvements slight.
Conflict with existing land use/values Slight

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Will use existing county roads and trails to within 0.25 of a mile of this location. Approximately 1/4of a mile of new access will be built into this location. Cuttings will be buried in the drilling and reserve pits. Drilling fluids will be allowed to dry in the pits. Pits will be backfilled when dry. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences None within 2 miles of this location.
Possibility of H2S None
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:

X Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)
__ Other:
Comments: on private land

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: no concerns

Remarks or Special Concerns for this site

Well is a 1975' Eagle Formation test

Summary: Evaluation of Impacts and Cumulative effects

No, long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: May 19, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Fallon County water wells
(subject discussed)
May 19, 2006
(date)

If location was inspected before permit approval:
Inspection date: May 15, 2006
Inspector: Hystad
Others present during inspection: None

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Ballard Petroleum Holdings LLC
Well Name/Number: Smith 31-30
Location: NW NE Section 30T29N R51E
County: Roosevelt, **MT; Field (or Wildcat)** East Popular Unit

Air Quality

(possible concerns)
Long drilling time no, 15 to 20 days drilling
Unusually deep drilling (high horsepower rig) no, 7400' TVD
Possible H2S gas production yes
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 7400' TVD

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system on surface hole. Mainhole will be drilled with oil based invert mud system.
High water table no
Surface drainage leads to live water No, closest drainage is an ephemeral Culbertson Creek, about 1/2 of a mile southwest of this location and the Popular River is about 1 mile to the southeast of this location..
Water well contamination none, all wells are at least ½ mile away and are shallower than 100' in depth. The surface casing on this well will be drilled to 1000' and casing cemented to surface.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1000' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none

High erosion potential no, small cut, up to 4.5' and small fill, up to 3.0', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 375'X375' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads. About 190' of new access will be built off an existing county road into this location. Cuttings will be buried in the lined reserve pit. Drilling fluids will be recycled or hauled to a commercial Class II disposal. Pit will be allowed to dry and backfilled with subsoils and clays. Finished with topsoil and seeded to surface owners specification. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences residences about 1/2 mile to the north, ½ mile to the southwest and ¾ of a mile to the southeast and south from this location. .
Possibility of H2S yes
Size of rig/length of drilling time Medium to small triple drilling rig/short 15 to 20 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
_X_ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: Road ROW on 1/4m Tribal. Private surface at location.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

_X other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: _Road ROW on 1/4m Tribal. Private surface location._____

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _____no concerns within the East Popular Unit oil field.

Remarks or Special Concerns for this site

__Well is a 7400' Nisku formation test

Summary: Evaluation of Impacts and Cumulative effects

__No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):_Steven Sasaki_____

(title:)_Chief Field Inspector_____

Date:__May 18, 2006_____

Other Persons Contacted:

_____

_Montana Bureau of Mines and Geology, GWIC website_____

(Name and Agency)

_Roosevelt County water wells___

_____

(subject discussed)
May 18, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Enerplus Resources (USA) Corporation
Well Name/Number: Olive-Volden 27-2-H
Location NW NE Section 27 T24N R56E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 40-50 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP
Possible H2S gas production slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes, salt based and/or oil based drilling fluids to be used to drill the main hole.. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, closest ephemeral tributary drainage to Three Buttes Creek ephemeral drainage 1/4 mile to the east and northeast of this location.
Water well contamination None, all wells close by shallower than 1925'. Surface hole will be drilled with freshwater and freshwater mud.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1925' is short, need about 1944' of surface casing to cover Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, moderate cut, up to 26.0' and moderatel fill up to 11.4', required..
Loss of soil productivity None, location to be restored after drilling well, if nonproductive. If productive unused portion of wellsite will be reclaimed.

Unusually large wellsite __No, large well site 450'X310'
Damage to improvements __No, location to be restored after drilling. If productive unused portion of wellsite will be reclaimed.
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: __Access will be over existing county roads, #134. About 359' of new access is proposed to be built to access this location from the county road.. Oil based muds will be recycled and cuttings will be buried in a lined pit. Any excess fluid left in the reserve pit will be hauled to a commercial

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences __residences 1 mile to the west and south of this location._____
Possibility of H2S _Slight__
Size of rig/length of drilling time Triple drilling rig 40 to 50 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: __Adequate surface casing cemented to surface with working BOP stack should mitigate any problems.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_None identified.
Proximity to recreation sites __None identified_____
Creation of new access to wildlife habitat __No_____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No_____

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: __no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites __None identified_____

Mitigation
__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)
__ Other:
Comments: Private surface

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: No concerns

Remarks or Special Concerns for this site

Second horizontal Bakken formation well in this spacing unit.

Summary: Evaluation of Impacts and Cumulative effects

Horizontal Bakken formation well TVD 10,352' MD 19,927'. No long term impacts expected. Some short term impacts will occur. Existing horizontal Bakken well in the W/2 of this section., second well in this spacing unit.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki Steven Sasaki
(title:) Chief Field Inspector
Date: May 19, 2006
Other Persons Contacted:

Montana Bureau of Mines and Geology GWIC website
(Name and Agency)
Richland County waterwells
(subject discussed)
May 19, 2006
(date)

If location was inspected before permit approval:
Inspection date:
Inspector:
Others present during inspection:

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Bill Barrett Corporation
Well Name/Number: Cyrus 44-30H
Location: SE SE Section 30 T30N R58E
County: Roosevelt, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 30-40 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP
Possible H2S gas production Yes, low concentrations.
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string oil based and salt based drilling fluids. Surface casing and hoi zontal hole, freshwater, and freshwater mud system to be used.
High water table No
Surface drainage leads to live water No, nearest drainage is East Shotgun Creek ephemeral drainage on the southeast edge of this location, about ¼ of a mile to the south..
Water well contamination No, no water wells within 1 mile of this location.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:

Comments: 1500' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, moderate cut of up to 17.0' and moderate fill of up to 27.1', required..
Loss of soil productivity None, location to be restored after drilling well, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite _No, large well site 290'X380'
Damage to improvements _No, location to be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: _Access will be over existing county roads and existing two track trails. About 607' of new access road will be built into this location. Cuttings will be buried in the lined reserve pit and either fly ashed or solibonded prior to pit closure. Pit fluids will be recycled or hauled to a commercial disposal. No concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _Residences ¾ of a mile to the northeast and 2 miles to the west of this location..
Possibility of H2S _Yes, low concentrations._
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: _Adequate surface casing cemented to surface with working BOP stack should mitigate any problems.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_ None identified.
Proximity to recreation sites _None identified
Creation of new access to wildlife habitat _No
Conflict with game range/refuge management _No
Threatened or endangered Species _No

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: _no concerns, existing access existing two track trails.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other: _____

Comments: Private surface

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: No concerns

Remarks or Special Concerns for this site

Horizontal Ratcliffe formation test 8,895' TVD 14,388' TMD

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but will be mitigated in time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: May 19, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center website

(Name and Agency)

Roosevelt County water wells

(subject discussed)

May 19, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Enerplus Resources (USA) Corporation
Well Name/Number: Fearless-Dynneson No. 24-2-H
Location: NW NE Section 24T24N R57E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 40-50 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP, Bakken horizontal MD 19,936' and 10,416' TVD.
Possible H2S gas production slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string salt based and oil based drilling fluids. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, closest ephemeral drainage is an unnamed ephemeral tributary drainage to First Hay Creek, about 1/8 of a mile northwest of this location.
Water well contamination No, all water wells close by are shallower than 2050'+/-. No wells closer than 1mile away.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 2050'+/- surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, location has a moderate, cut of 17.7' and moderate fill of up to 11.9', required.
Loss of soil productivity None, location to be restored after drilling well, if nonproductive. If productive

unused portion of drillsite will be reclaimed. __
Unusually large wellsite __No, large well site 450'X310'
Damage to improvements __Slight.
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: _Access will be over existing county roads, #343 and abandoned two track lease road. About 1455' of new access is proposed to be built to access this location from the abandoned lease road.. Oil based muds will be recycled and cuttings will be buried in a lined pit. Any excess fluid left in the reserve pit will be hauled to a commercial disposal. Pit will be allowed to dry and subsoil clays mixed with the cuttings. No concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences _No residences within 1 mile of this location. _____
Possibility of H2S _Slight__
Size of rig/length of drilling time Triple drilling rig 40 to 50 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: __Adequate surface casing cemented to surface with working BOP stack should mitigate any problems.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_ None identified.
Proximity to recreation sites __None identified_____
Creation of new access to wildlife habitat __No____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No_____

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: __no concerns

_____
_____
_____

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments: ___Private surface_____

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments:__Second Bakken horizontal development well in this section._____

Remarks or Special Concerns for this site

____Second well in the 1280 acre spacing unit, Section 24 and 25 T24N Rk57E. No concerns

Summary: Evaluation of Impacts and Cumulative effects

__TVD 10,416' MD 19,936' Bakken Formation horizontal well. No long term impacts expected, some short term impacts are expected with the drilling of this well._____

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):___Steven Sasaki_____

(title:)___Chief Field Inspector_____

Date:____May 19, 2006_____

Other Persons Contacted:

_____

_____

(Name and Agency)

__Montana Bureau of Mines and Geology, Groundwater Information Center website, Richland County water wells _____

(subject discussed)

__May 19, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Enerplus Resources (USA) Corporation
Well Name/Number: Leghorn-Clarence 32-14-H
Location: SE SW Section 32 T23N R58E
County: Richland, **MT; Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)
Long drilling time No, 30-40 days drilling time.
Unusually deep drilling (high horsepower rig) Triple derrick rig 900 HP
Possible H2S gas production slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
X Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: Existing pipeline for gas in the area.

Water Quality

(possible concerns)
Salt/oil based mud yes to long string salt based and oil based drilling fluids. Surface casing hole to be drilled with freshwater and freshwater mud.
High water table No
Surface drainage leads to live water No, closest drainages is an ephemeral tributary drainage to Lone Tree Creek, ¼ of a mile north of this location .
Water well contamination No, water wells close by. All water wells are shallower than 1850'.
Porous/permeable soils No, gumbo soils
Class I stream drainage No, Class I stream drainages.

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 1850' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings None
High erosion potential No, small cut, up to 1.8' and no fill, required.
Loss of soil productivity None, location to be restored after drilling well if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite __No, large well site 400'X310'
Damage to improvements __slight
Conflict with existing land use/values _Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: _Access will be over existing county roads, #124. About 49' of new access is proposed to be built to access this location from the county road.. Oil based muds will be recycled and cuttings will be buried in a lined pit. Any excess fluid left in the reserve pit will be hauled to a commercial

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences __residences about ½ mile to west and ¾ of a mile to the east and southeast of this location.
Possibility of H2S _Slight__
Size of rig/length of drilling time Triple drilling rig 30 to 40 days drilling time.

Mitigation:
_X Proper BOP equipment
__ Topographic sound barriers
_X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: __Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Distance sufficient to mitigate noise.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a_ None identified.
Proximity to recreation sites __None identified_____
Creation of new access to wildlife habitat __No____
Conflict with game range/refuge management ___No___
Threatened or endangered Species _No _____

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: __no concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites __None identified_____

Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: __Private surface_____

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: _No concerns_____

Remarks or Special Concerns for this site

__Second horizontal Bakken well in this spacing unit.

Summary: Evaluation of Impacts and Cumulative effects

__No, long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC):__Steven Sasaki_____
(title:)__Chief Field Inspector_____
Date:____May 19, 2006
Other Persons Contacted:

_____
_Montana Bureau of Mines and Geology, Groundwater Information Center website
(Name and Agency)
_Richland County water wells_____
(subject discussed)
_May 19, 2006_____
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee-BR 2645
Location: SE SESection 25 T9N R58E
County: Fallon, **MT; Field (or Wildcat)** Cedar Creek

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2000' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
_ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2000'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water no, closest drainage is an unnamed ephemeral tributary drainage which drains into Pennel Creek about 2.5 miles to the southwest. Due south in this ephemeral drainage is what appears to be a pond about 1/8 of a mile south of this location.
Water well contamination None, no water wells within 1 mile of this location.
Production casing if run will be cemented to surface. .
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no

High erosion potential no, small cut, up to 3.8' and small fill, up to 1.9', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 120'X190' location size required.
Damage to improvements Slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be along existing county roads and existing field well access roads. A short access into location off existing field road or trail will be built, about 1/2 mile of new access will be created. Drilling fluids will be hauled to a private stock reservoir with surface owner approval or allowed to dry in the earthen pits. Cuttings will be buried in the unlined earthen pits. Pits will restored after they have dried. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences No, residences within 1 mile of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 2000' Eagle Formation test. This well is within an existing oil and gas field, Cedar Creek.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: June 16, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Fallon County

(subject discussed)

June 16, 2006 _____
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee-BR 2647
Location: NE SW Section 31 T9N R59E
County: Fallon, **MT; Field (or Wildcat)** Cedar Creek

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2000' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2000'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water no, closest drainage is an unnamed tributary drainage to Pennel Creek about 1/8 of a mile to the southwest of this location. This unnamed drainage then drains to the southwest into Pennel Creek about 2 miles to the southwest.
Water well contamination None, no water wells within 1 mile Production casing if run will be cemented to surface. .
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no

High erosion potential no, small cut, up to 9.9' and small fill, up to 8.5', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 120'X190' location size required.
Damage to improvements Slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access off existing county roads and existing well trailst. A short 1/4 mile of new access road will have to be constructed into the location. Drilling fluids will be hauled to a private stock reservoir with surface owner approval or allowed to dry in the earthen pits. Cuttings will be buried in the unlined earthen pits. Pits will restored after they have dried. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences No residences within 1 mile of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: No concerns

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 2000' Eagle Formation test. A development well in the Cedar Creek gas field.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur. This well is within an existing oil and gas field, Cedar Creek.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: June 16, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Fallon County

(subject discussed)

June 16, 2006

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee-BR 2546
Location: NE NW Section 31 T9N R59E
County: Fallon, **MT; Field (or Wildcat)** Cedar Creek

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2000' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2000'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water no, closest drainage is an unnamed tributary drainage to Pennel Creek about 1/4 of a mile to the southwest of this location. This unnamed drainage then drains to the southwest into Pennel Creek about 2.5 miles to the southwest. In between is what appears to be a stock pond, about ½ mile to the northwest in this drainage.
Water well contamination None, no water wells within 1 mile Production casing if run will be cemented to surface. .
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)

Steam crossings no
High erosion potential no, moderate cut, up to 10.2' and small fill, up to 6.7', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 120'X190' location size required.
Damage to improvements Slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access off existing county roads and existing well trails. A short 18 mile of new access road will have to be constructed into the location. Drilling fluids will be hauled to a private stock reservoir with surface owner approval or allowed to dry in the earthen pits. Cuttings will be buried in the unlined earthen pits. Pits will restored after they have dried. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences No residences within 1 mile of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: No concerns

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 2000' Eagle Formation test. A development well in the Cedar Creek gas field.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur. This well is within an existing oil and gas field, Cedar Creek.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: June 16, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Fallon County

(subject discussed)
June 16, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: State No. BR 22-16
Location: SE NW Section 16 T10N R58E
County: Fallon, **MT; Field (or Wildcat)** Cedar Creek

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2000' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2000'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water no, Cabin Creek drainage to the northeast of the location about 1/4 of a mile.
Water well contamination None, no water wells within 1 mile of this location.
Production casing if run will be cemented to surface. .
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 2.4' and small fill, up to 0.1', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 120'X190' location size required.
Damage to improvements no
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access off existing county roads and existing well trails. A short 1/8 mile of new access road will have to be constructed into the location. Drilling fluids will be hauled to a private stock reservoir with surface owner approval or allowed to dry in the earthen pits. Cuttings. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Buildings to the southeast about ¾ of a mile and southwest of this location 1 mile, may be associated with production facilities and not residences..
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
_X_ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: Montana Trust Lands surface. Trust Lands will do surface EA.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

_X other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: Montana Trust Lands surface. Trust Lands will do surface EA.

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns Development well in the Cedar Creek gas field.

Remarks or Special Concerns for this site

Well is a 2000' Eagle Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term effects will occur. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: June 16, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Fallon County

(subject discussed)

June 16, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Fidelity Exploration and Production Company
Well Name/Number: Fee-Bidelity/BR No. BR 11-21
Location: NW NW Section 21T10N R58E
County: Fallon, **MT; Field (or Wildcat)** Cedar Creek

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2000' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2000'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water no, closest drainage is an ephemeral tributary drainage to Cabin Creek, about 1/8 of a mile to south of this location. What appears to be a stock pond lies in this tributary drainage about ½ mile to the northeast of this location.
Water well contamination None, closest water well is ¾ of a mile to the southeast of this location. Production casing if run will be cemented to surface. .
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no

High erosion potential no, small cut, up to 3.8' and small fill, up to 1.8', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 120'X190' location size required.
Damage to improvements Slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access off existing county roads and existing well trails. A short 1/2 mile of new access road will have to be constructed into the location. Drilling fluids will be hauled to a private stock reservoir with surface owner approval or allowed to dry in the earthen pits. Cuttings. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Buildings to the northeast about ¾ of a mile and about ¼ mile to the south of this location, may be associated with production facilities and not residences..
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites no
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: ___

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: _____

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns Development well in the Cedar Creek gas field.

Remarks or Special Concerns for this site

Well is a 2000' Eagle Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term effects will occur. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: June 16, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)

Water wells in Fallon County

(subject discussed)

June 16, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Klabzuba Oil & Gas, Inc.
Well Name/Number: Hanson-Federal 6-13-33-14
Location: SW SW Section6 T33N R14E
County: Hill, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time
Unusually deep drilling (high horsepower rig) no, 2700' TD
Possible H2S gas production no
n/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
__ Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other: Existing gas pipelines in the area.
Comments: no special concerns – using small rig to drill to 2700'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water yes, well location is 3/8 of a mile west of Fresno Reservoir.
Water well contamination no, nearest water well is over 1 mile away..
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
_X_ Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other: _____
Comments: 200' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 0.4' and smallfill, up to 2.2', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 200'X200' location size required.

Damage to improvements Slight.
Conflict with existing land use/values Slight

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access to location will be over existing county gravel roads to within 1 75 miles of this location. Drilling fluids will be trucked to a private stock pond for sealant with surface owner approval. Solids will be allowed to dry in the pits. Pit after drying will be backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences Residence about 1mile and 2 miles to the northeast. Fresno Reservoir picnic area and dam about 3.25 miles to the south of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:

_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: no concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites Fresno Reservoir 3/8 of a mile to the west of this location. Picnic and dam area about 3.25 miles to the south.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 2700' Second White Specks Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected from the drilling of this well. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: June 12, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology Groundwater Information Center

(Name and Agency)

Water wells in Hill County

(subject discussed)

June 12, 2006

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Noble Energy Inc.
Well Name/Number: Fee 2606 No. 2
Location: NW NE Section 26 T30N R36E
County: Valley, **MT; Field (or Wildcat)** Vandalia

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time.
Unusually deep drilling (high horsepower rig) no, 2400' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
_ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2400'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table No
Surface drainage leads to live water no, closest drainage is Buffalo Coulee ephemeral drainage, about 1/16 of a mile south of this location.
Water well contamination no, closest water well lies about a ¼ of a mile to the southwest of this location, but is only 110' in depth. Closest water well below 150', surface casing depth is about 3/8 of a mile to the north of this location.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings none.
High erosion potential no, small cut, up to 2.4' and small fill, up to 1.9', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 140'X200' location size required.
Damage to improvements Slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing county roads, Valleyview county road. About 1/8 of a mile of new access will be built into this location off the county road. Drilling fluids will be disposed of in a private stock pond of Mr. Bill Kuki or allowed to dry in the drilling and reserve pits. Pits will be restored after they are allowed to dry. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Closest residence is about 3/8 of a mile north of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites none identified
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:_____

Comments: no

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites __None identified_____

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:_____

Comments:_____

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: _____no concerns

Remarks or Special Concerns for this site

Well is a 2400' Phillips Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts expected. The drilling of this well is within the Vandalia gas field.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki _____

(title:) Chief Field Inspector

Date: June 12, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center website.

(Name and Agency)

Water wells in Valley County

(subject discussed)

June 12, 2006

(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Klabzuba Oil & Gas, Inc.
Well Name/Number: Reinowski-State 33-3-33-13B
Location: NE NW Section 33 T33N R13E
County: Hill, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time no, 3 to 4 days drilling time
Unusually deep drilling (high horsepower rig) no, 2700' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2700'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water no drainages nearby.
Water well contamination No water wells within 1 mile of this location.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 200' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. If productive 4 ½" production casing will be run and cemented to surface.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 3.8' and no fill, required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 200'X200' location size required.

Damage to improvements Slight.
Conflict with existing land use/values Slight

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access off existing existing county roads. About 800' new access will be created into the well location off existing county road. Cuttings will be buried in the unlined pits. Fluids and drilling muds will be hauled to a nearby stockwater pond to be used as sealant with surface owner approval. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences Farm buildings about 3/8 of a mile to the west, ¾ of a mile to the west and 1 mile to the southeast of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 3 to 4 days drilling time

Mitigation:

_X_ Proper BOP equipment
__ Topographic sound barriers
_X_ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: Proper BOP equipment should mitigate any problems

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a
Proximity to recreation sites 3.5 miles to the northeast is Fresno Reservoir
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: _____on private land

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: _____No concerns

Remarks or Special Concerns for this site

Well is a 2700' Second White Specks Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: June 9, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Hill County water wells
(subject discussed)
June 9, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: R&A Oil, Inc.
Well Name/Number: Bailee #1
Location: SE SE Section 18T11N R28E
County: Musselshell, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time no, 10 to 14 days drilling time.
Unusually deep drilling (high horsepower rig) no, 3550'TVD
Possible H2S gas production slight
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, if productive. DEQ required permit.

Mitigation:
X Air quality permit (AQB review)
___ Gas plants/pipelines available for sour gas
___ Special equipment/procedures requirements
___ Other:
Comments: no special concerns – using double rig to drill to 3550' TVD

Water Quality

(possible concerns)
Salt/oil based mud No, freshwater and freshwater mud system on surface hole and mainhole.
High water table no
Surface drainage leads to live water No, closest drainage is an unnamed ephemeral tributary drainage to Howard Coulee which is 1/16 of a mile to the east of this location.
Water well contamination no, nearest water well is over 1 mile to the west of this location. Surface casing will be set at 300'. Drilled with freshwater and freshwater muds. Surface casing will be run and cemented to surface from 300'.
Porous/permeable soils no, bentonitic sandy soils
Class I stream drainage no

Mitigation:
___ Lined reserve pit
X Adequate surface casing
___ Berms/dykes, re-routed drainage
___ Closed mud system
___ Off-site disposal of solids/liquids (in approved facility)
___ Other:
Comments: 300' of surface casing cemented to surface adequate to protect freshwater zones.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no, crossing.
High erosion potential No small cut, up to 0.8' and moderate fill, up to 11.5', required.
Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite no, 240'X200' location size required.
Damage to improvements slight
Conflict with existing land use/values Slight

Mitigation

__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Will use existing county road and existing two track trails. About 1/8 of a mile of new access road will be to access this location. Cuttings will be buried in the reserve pit. Drilling fluids will be allowed to dry in the pit. No special concern.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences No buildings or residences within 1 mile of this location.
Possibility of H2S No
Size of rig/length of drilling time double drilling rig/short 10 to 14 days drilling time

Mitigation:

_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites None identified
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: On private land. No concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:_____
Comments: _____ on private land

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: _____ no concerns

Remarks or Special Concerns for this site

Well is a 3550' TVD Tyler Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impact expected, some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: June 13, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Musselshell County water wells
(subject discussed)
June 13, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Klabzuba Oil & Gas, Inc.
Well Name/Number: Springer-Federal 32-6-34-14
Location: SE NW Section 32 T34N R14E
County: Hill, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time
Unusually deep drilling (high horsepower rig) no, 2700' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2700'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water yes, Browns Coulee ephemeral drainage leads directly to Fresno Reservoir, about 2 miles to the west of this location.
Water well contamination no, nearest water well is over 1 mile away. This drilling location should not effect this water well. In the event this well is successful casing will be run and cemented to surface.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 200' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 5.2't and small fill, up to 12.7', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, about 132'X208' location size required.
Damage to improvements Slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access to location will be over existing county gravel roads and existing two track trail. Drilling fluids will be trucked to a private stock pond for sealant with surface owner approval. Solids will be allowed to dry in the pits. Pit after drying will be backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Residence about ¾ of a mile to the southwest and 7/8 of a mile to the southeast of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:
X Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites Fresno Reservoir about 1.5 miles to the west.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 2700' Second White Specks Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki Steven Sasaki

(title:) Chief Field Inspector

Date: June 12, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Water wells in Hill County, 2/07/05
(subject discussed)
June 12, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Klabzuba Oil & Gas, Inc.
Well Name/Number: McSloy 11-13-33-14
Location: SW SW Section 11 T33N R14E
County: Hill, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time no, 4 to 5 days drilling time
Unusually deep drilling (high horsepower rig) no, 2700' TD
Possible H2S gas production no
In/near Class I air quality area no
Air quality permit for flaring/venting (if productive) Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:
Comments: no special concerns – using small rig to drill to 2700'

Water Quality

(possible concerns)
Salt/oil based mud no, freshwater and freshwater mud system.
High water table no
Surface drainage leads to live water yes, well location is close Davenport Coulee ephemeral drainage which then drains to Sherry Coulee ephemeral drainage and finally drains the Milk River, about 2.75 miles south of the well location.
Water well contamination no, nearest water wells over 1 mile from this location. In the event this well is successful casing will be run and cemented to surface.
Porous/permeable soils no, bentonite soils
Class I stream drainage no

Mitigation:
_ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:
Comments: 200' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings no
High erosion potential no, small cut, up to 0.4' and small fill, up to 0.6', required.

Loss of soil productivity no, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite no, 200'X200' location size required.
Damage to improvements Slight
Conflict with existing land use/values Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access to location will be over existing county gravel roads and existing two track trails. A short ¼ mile of new access will be built into this location. Drilling fluids will be trucked to a private stock pond for sealant with surface owner approval. Solids will be allowed to dry in the pits. Pit after drying will be backfilled. No special concerns.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences None nearby. Closest residence is 1 mile to the northwest of this location.
Possibility of H2S none
Size of rig/length of drilling time Small drilling rig/short 4 to 5 days drilling time

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: no concerns

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites Fresno Reservoir 4 miles to the west of this location.
Creation of new access to wildlife habitat no
Conflict with game range/refuge management no
Threatened or endangered Species no

Mitigation:
__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other: _____

Comments: no concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified

Mitigation

__ avoidance (topographic tolerance, location exception)

__ other agency review (SHPO, DSL, federal agencies)

__ Other:

Comments: on private land

Social/Economic

(possible concerns)

__ Substantial effect on tax base

__ Create demand for new governmental services

__ Population increase or relocation

Comments: no concerns

Remarks or Special Concerns for this site

Well is a 2700' Second White Specks Formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: June 12, 2006

Other Persons Contacted:

(Name and Agency)

Montana Bureau of Mines and Geology Groundwater Information Center

(subject discussed)
Water wells in Hill County,
June 12, 2006
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection:_____