

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Nance Petroleum Corporation.
Well Name/Number: Porter 10-43-06-06CK
Location: SE NW Section 6 T10S R43E
County: Big Horn, 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, 1150' TD
Possible H2S gas production no
n/near Class I air quality area no
Air quality permit for flaring/venting (if productive) no

Mitigation:

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

Comments: wells flaring methane gas temporarily during initial stages of production. Flaring of commercial quantities of gas is prohibited.

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, unnamed tributary ephemeral drainage to Waddle Creek next to this location.
Water well contamination no, closest water well is about 1/4 of a mile to the northeast of this location. Depth of this well is unknown. This exploratory well will have 120' of surface hole drilled with freshwater, cased with steel casing and cemented back to surface. The production hole will be drilled with freshwater and freshwater mud to a depth of 1150'. Production casing will be set to 1140' and cemented back to surface.
Porous/permeable soils localized
Class I stream drainage no

Mitigation:

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

Comments: will use fresh water, native clay mud. Water/mud be allowed to evaporate in the reserve pit and then backfilled. Exploration well may not produce until included in development POD.

Soils/Vegetation/Land Use

(possible concerns)

Steam crossings no
High erosion potential no, no cut or fill required. Rig is self leveling.
Loss of soil productivity no
Unusually large wellsite no, 120'X80' location size required.
Damage to improvements no
Conflict with existing land use/values no

Mitigation

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

Comments: Access will be over existing county roads and existing dirt trails
No special concerns for this site. Very small location and pit area. Truck mounted rig
does not require much location preparation.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences Closest residence is 1/4 to 3/8 of a mile 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:

- Proper BOP equipment
- Topographic sound barriers
- H2S contingency and/or evacuation plan
- Special equipment/procedures requirements
- Other: Diverter to be used instead of a BOP.

Comments: no special concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a None identified.
Proximity to recreation sites none in the immediate area
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: location on fee surface

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: Exploration test well targeted Anderson, Canyon and Cook coal beds at 1150'. Well may not produce until included in an approved Plan of Development, therefore no social or economic impacts are likely—cumulative effects on socio-economics of the region are described in 2003 Statewide EIS.

Remarks or Special Concerns for this site

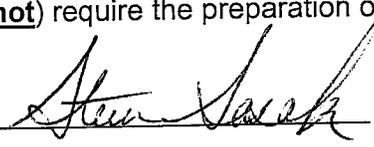
Well is a shallow coal bed methane test. Wells are drilled with a small rig and casing set to total depth and the target coals perforated and stimulated with water. Seven inch casing is cemented surface. Partial de-watering is expected to reduce pressure and release methane gas to the cleat system; this partial de-watering is expected to reduce, but not eliminate water in the coal aquifer. The water quality in the coal bed aquifer wells is variable—this test well will provide water quality data for the tested interval.

Summary: Evaluation of Impacts and Cumulative effects

Relatively minor impacts associated with this well, which cannot produce until included in an approved POD. Well is an exploratory coalbed methane test well. No impacts are expected which differs significantly from those described in the EIS.

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: January 9, 2006

Other Persons Contacted:

Montana Bureau of Mines and Geology, Groundwater Information Center

(Name and Agency)
Water wells in Big Horn County

(subject discussed)

January 9, 2006

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____