

Sensitive Area Determination Checklist  
SG Interests I, Ltd.

Person(s) conducting inspection	Catherine Dickert	01/19/2012
Site Information		
Location:	Federal 11-90-24 #3 Well	Time: Desk review following 10/17/11 field visit
Type of Facility:	Natural gas well	
Environmental Conditions	Mostly sunny, cool	
Temperature	≈60°F	

Has the proposed, new or existing location been designated as a sensitive area?

Yes X No \_\_\_\_\_

**SURFACE WATER**

- 1) Are there any surface water features or SWSAs adjacent to or within ¼ mile of the proposed/new facility?

Yes X No \_\_\_\_\_

If yes, list type of surface water feature(s), i.e. rivers, creeks, streams, seeps, springs, wetlands:

There is a stock pond approximately 210' from the well head. This stock pond will most likely be removed during pad construction and replaced at a different location according to landowner direction. There are also two wetland areas associated with drainages within ¼ mile of the well. The wetland to the northwest of the well is down gradient of the project. Could a potential release from the facility reach surface water features?

Yes X No \_\_\_\_\_

If yes, describe the pathway a release from the facility would likely follow to determine if the potential to impact surface water is high or low.

A large release from the facility has the potential to reach a down-gradient wetland or pond. The potential to impact surface water is low because the drainage pattern from the well to nearby surface waters leads to a drainage just beyond the quarter-mile radius. The stock pond may have higher potential for impacts depending on where it is moved to. The stock pond may or may not be reconstructed on an existing drainage.

- 2) Is the potential to impact surface waters from a facility release high or low?

High \_\_\_\_\_ Low X

**GROUNDWATER**

- 1) Will the proposed/new or existing facility have any pits that will contain hydrocarbons and chlorides or other E&P wastes?

Yes X No \_\_\_\_\_

If yes, list the pit types(s): Drilling pits that will be lined and temporary.

- 2) Is the hydraulic conductivity of the underlying soil or geologic material  $\leq 1.0 \times 10^{-7}$  cm/sec?

Yes \_\_\_\_\_ No X (Fughes loam Ksat value is moderately low or moderately high.)

- 3) Is the proposed facility located within 1/8 mile of domestic water well or 1/4 mile of a public water supply well which would use the same aquifer?

Yes \_\_\_\_\_

No X

The nearest well permitted in the area is approximately 1/2 mile away (monitoring well, #33875). The nearest domestic water well is #119253. It is 0.6 miles away.

- 4) Is the proposed facility located within a 100-year floodplain?

Yes \_\_\_\_\_

No X

- 5) Is the depth to groundwater known?

Yes \_\_\_\_\_ (If yes, follow instructions provided in 6(a) of this section.)

No X (If no, follow instructions provided in 6(b) of this section.)

- (a) If yes, could a potential release from the proposed facility reach groundwater?

Yes \_\_\_\_\_ If yes, explain:

No \_\_\_\_\_

- (b) If no: (i) Evaluate surrounding soils, topography, and vegetation which may suggest the presence of shallow groundwater. (ii) Gather information from surrounding well data in order to determine a depth to groundwater, i.e. State Engineer's Office.

There are no water wells in close vicinity to the project. Water wells in the area range in depth from 35' to 350'. The estimated depth the ground water in this area is 50-100' based on depth to groundwater measured in other projects in the vicinity.

- 6) Is the potential to impact groundwater from the facility in the event of a release high or low?

High \_\_\_\_\_

Low X

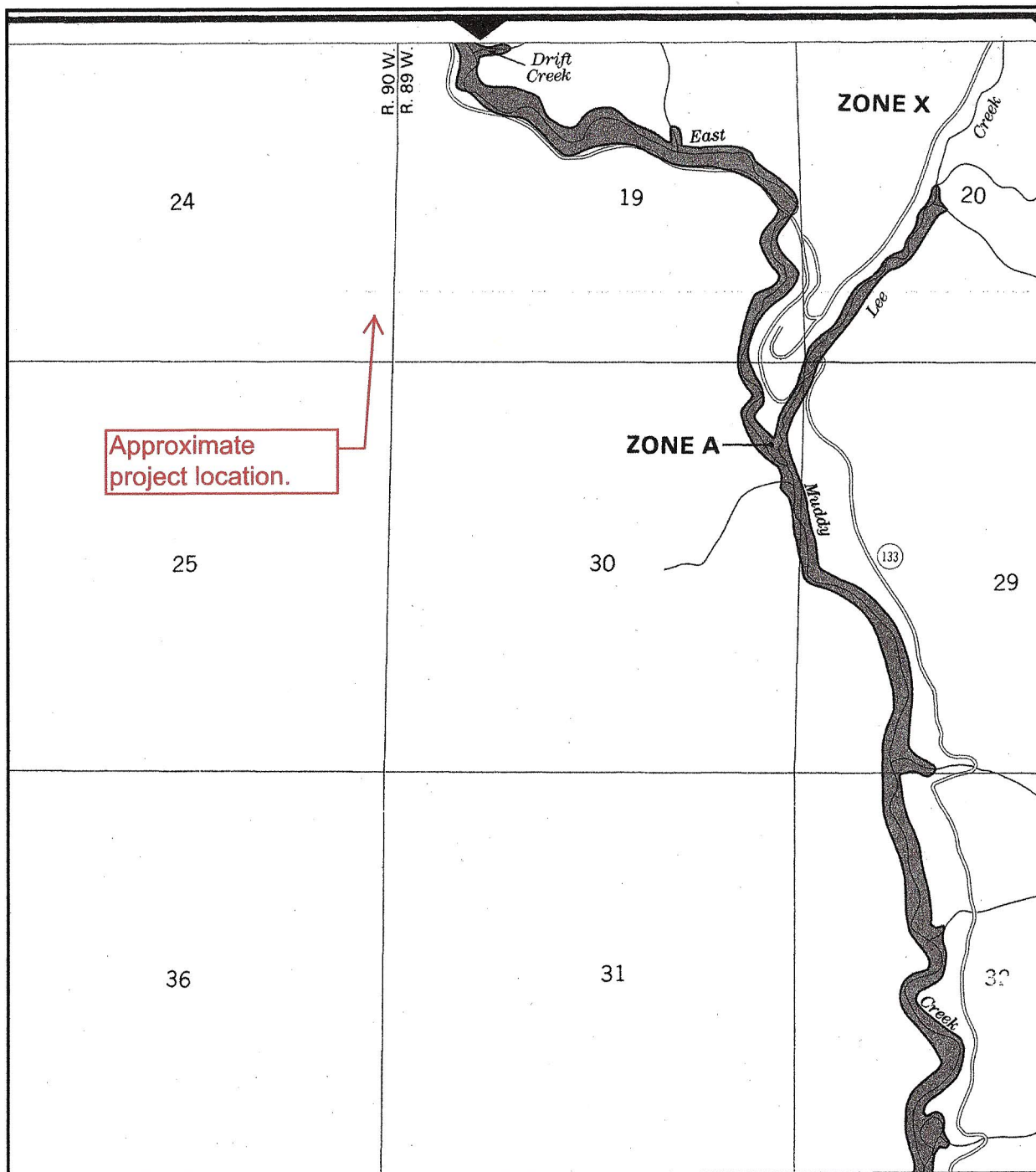
The drilling pits will be lined to prevent contact between pit contents and groundwater. They will be removed and backfilled following the drilling operations.

**Additional Comments:** Spills during operations must be stopped and cleaned up immediately to prevent migration of that material toward the groundwater. Secondary containment of any fluids stored on site during operations will prevent leaks from containers from reaching surface or ground waters.

Signature

Catherine Doherty

Date: January 19, 2012



APPROXIMATE SCALE IN FEET

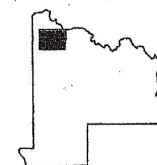
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NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
FLOOD INSURANCE RATE MAP

GUNNISON  
COUNTY,  
COLORADO  
(UNINCORPORATED AREAS)

PANEL 125 OF 975  
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION  
COMMUNITY-PANEL NUMBER  
080078 0125 B

EFFECTIVE DATE:  
SEPTEMBER 29, 1989



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)