

## Sensitive Area Determination Checklist

Williams Production RMT Company – Highlands		
<b>Person(s) Conducting Field Inspection</b>	Ashlee Lane	8/16/10
	<i>Biologist</i>	
<b>Site Information</b>		
Location:	RGU 23-35-198	Time: 1400
Type of Facility:	Existing well pad	
<b>Environmental Conditions</b>	Thunderstorms wet conditions	
Temperature (°F)	60°	

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

Yes       No

### SURFACE WATER

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

Yes       No

If yes, list type of surface water feature(s), i.e. rivers, creeks, streams, seeps, springs, wetlands: There is one unnamed ephemeral drainage.

If yes, describe location relative to facility: The unnamed ephemeral drainage is located 1,095 feet northwest of the existing facility.

2. Could a potential release from the facility reach surface water features?

Yes       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 potential release, if it were to migrate off the facility, would tend to congregate in the relatively flat lying areas adjacent to and in the immediate vicinity of the facility.

3. Is the potential to impact surface water from a facility release high or low?

High       Low

## GROUNDWATER

1. Will the proposed/new or existing facility have any pits which will contain hydrocarbons and chlorides or other E&P wastes?  
 Yes       No  
If yes, List the pit type(s): Drilling pit.
  
2. Is the site of the proposed facility underlain by an unconfined aquifer or recharge zone?  
 Yes       No
  
3. Is the hydraulic conductivity of the underlying soil or geologic material  $\leq 1.0 \times 10^{-7}$  cm/sec?  
 Yes for the underlying bedrock       No for the thin layer of sandy loam
  
4. Is the proposed facility located within 1/8 mile of a domestic water well or 1/4 mile of a public water supply well which would use the same aquifer?  
 Yes       No
  
5. Is the proposed facility located within a 100 year floodplain?  
 Yes (*Sensitive Area*)       No (*If no, proceed to question #6.*)
  
6. Is the depth to groundwater known?  
 Yes (*If yes, follow instructions provided in 6(a) of this section.*)  
 No (*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       No  
If yes, explain:
  
  - (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 Engineers Office.
  
7. Is the potential to impact ground water from the facility in the event of a release high or low?  
 High       Low

**Additional Comments:**

The existing well pad resides in a relatively flat location which gently slopes to the south. There are a few existing pipeline corridors in the area immediately adjacent to the existing well pad to the north and southeast. These existing pipeline corridors have been re-vegetated and would act as a vegetative filter/buffer for the existing facility. There are Best Management Practices (BMPs) currently in place consisting of a containment berm and diversion ditch around the perimeter of the facility. These BMPs should be monitored and maintained during the drilling and completion activities and when the facility goes into production to ensure site containment in the event of a release. As stated in the surface water section of this SAD, the only surface water feature identified during the site investigation was an unnamed ephemeral drainage located 1,095 feet to the northwest of the existing facility. A potential release, if it were to migrate off the facility, would tend to congregate in the relatively flat and low lying areas adjacent to and in the immediate vicinity of the facility. Therefore it is not anticipated that a potential release would impact any surface water features.

The vegetation in the area consists of Piñon/Juniper woodland along with sage brush. There were no field indicators which indicated the presence of shallow ground water. The closest water well data from the State Engineer's office is from a monitoring well approximately 3,530 north of the facility. It has a known depth to water of 147 feet. The well is also located approximately 80 feet lower than the existing facility. Therefore it is not anticipated that ground water would be impacted from a potential release on or off the facility.

Based on the data collected from the site investigation and desktop review, this facility can be designated as being in a non-sensitive area.

Inspector Signature(s):  Date: 8/19/2010  
Mark E. Mumby, *Project Manager/RPG*  
HRL Compliance Solutions, Inc.

 Date: 8/18/2010  
Ashlee Lane, *Biologist*  
HRL Compliance Solutions, Inc.