

## Sensitive Area Determination Checklist

Williams Production RMT Company – Valley		
<b>Person(s) conducting inspection</b>	Ashley Lane	Date: 9/24/2009
<b>Site Information</b>		
Location:	Proposed RWF 44-32 well pad	Time: 14:30
Site Activity:	None	
Personnel on-site:	None	
<b>Environmental Conditions</b>	Partly cloudy, calm, dry conditions	
Temperature (°F)	~70	

1. Will the pit of the proposed facility contain hydrocarbons and chlorides or other E&P wastes?

☒ Yes      ☐ No (*If no, this form does not need to be completed.*)

If yes, list pit type(s): Cuttings Trench

### SURFACE WATER

1. Are there any surface water features or SWSAs adjacent to or within the ¼ mile buffer zone?

☒ Yes      ☐ No (*If no, move to Groundwater section of this checklist.*)

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

Cache Creek, an irrigation pond utilized to store water for irrigation, associated ditch to transport the stored water, and one ephemeral drainage feature.

If yes, describe location relative to facility:

Cache Creek is west of the proposed location and the irrigation storage pond is south of the proposed location and blocks off the ephemeral drainage which would flow through the proposed location. The irrigation ditch is located near the southern edge of the quarter section.

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

☒ Yes      ☐ No (*If no, move to Groundwater section of this checklist.*)

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

If the pond and associated irrigation ditches were flowing water at the time of a release; there is the potential that surface water could be impacted if the release were to migrate offsite. It would most likely follow the irrigation ditch or ephemeral drainage which flows to the North.

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

☐ High      ☒ Low

## GROUNDWATER

1. Is the site of the proposed facility underlain by an unconfined aquifer?  
☒ Yes      ☐ No (*If no, this section does not need to be completed.*)
2. Is the hydraulic conductivity of the underlying soil or bedrock  $\geq 1.0 \times 10^{-7}$  cm/sec?  
☐ Yes (*If yes, this section does not need to be completed.*)      ☒ No
3. Is the proposed facility located within 1/8 mile of a domestic water well or 1/4 mile of a public water supply well?  
☒ Yes      ☐ No (*If no, this section does not need to be completed.*)
4. Is the proposed facility located within a 100 year floodplain?  
☐ Yes (*Sensitive Area*)      ☒ No (*If no, proceed to question #5.*)
5. Is the depth to groundwater known?  
☒ Yes      ☐ No (*If no, follow instructions provided in 5(b) of this section.*)
  - (a) If yes, could a potential release from the proposed facility reach groundwater?  
☐ Yes      ☒ No (*If no, this section does not need to be completed.*)  
If yes, model the hydro geologic conditions to determine if the potential to impact groundwater is high or low.
  - (b) If no:
    - (i) Drill a soil boring to determine depth to groundwater.
    - (ii) Evaluate subsurface data to determine if confining layers exist.
    - (iii) Model hydro geologic conditions to determine if the potential to impact groundwater is high or low.
6. Is the potential to impact ground water from a facility release high or low?  
☐ High      ☒ Low

### **Additional Comments:**


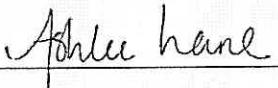
In regards to potential surface water impacts; if the storage pond south of the location and the associated irrigation ditches are not utilized or are diverted during drilling and completion activities then the potential impacts to surface water can be mitigated. Cache Creek makes a turn to the west just as it enters the SE quarter and any potential release from the pad would not affect the creek.

There are two permitted domestic water wells that are within 1/8 mile of the proposed facility. One is to the south of the proposed facility and based on the regional topography, the well would be up gradient and should not be affected by any drilling activities. The other well is directly

north of the proposed location. It was drilled to a depth of 200 feet and was dry which thus any potential impacts to this area would be minimal.

One additional note; All the distances to the above mentioned water wells are from the center of the quarter section since the pad has not yet been built. The closer the pad could be kept to the center of the quarter section the better. If it would be necessary to move the location for any reason it would be best if it was moved to the east or to the north since there is one permitted domestic water well just outside the 1/8 mile buffer zone to the west. This would be beneficial in reducing any potential impacts to this well.

If the above recommendations can be followed during construction, drilling, and completion of this well pad it can be designated as being in a non-sensitive area.

Inspector(s) Signature(s):  Date: 9/29/2009  
 Date: 9/29/2009