Site Specific Erosion/Re-vegetation plans
70 Ranch 5-63 (Multi-well Pad)
5/10/12

- Clay used for plating and drill site stabilization would be incorporated into the sandy soils to create a seedbed that is less prone to wind and water erosion than the prevalent sandy soils alone. The clay will improve the seedbed in terms of both future operational impacts as well as water retention for re-vegetation. Sandy areas that are not blended with this clay/sand process will be protected in this interim stage by spraying with a soil tackifier and in the interim a cover crop seed mix.

- Depending on the season of the year, a cover crop such as winter wheat, rye, sterile millet, oats or another annual cover crop will be established for a cover crop to further protect the location from erosion, weed control and to improve the organic matter of the seedbed.

- In the spring or fall, the cover crop will be mowed and the chosen native seed mix will be sown into the cover crop stubble.

- Storm-water control Best Management Practices (BMPs) will be employed to prevent erosion and sediment transport from the site by either precipitation run-on, run-off, or by wind transport. A compacted site precipitation control /containment berm will be properly engineered and constructed around the entire pad perimeter. The control/containment berm will be engineered and constructed to sufficient height and breadth to accommodate and prevent both precipitation run-on from adjacent lands as well as to prevent run-off of precipitation that directly contacts the pad and accumulates or would normally migrate off the pad site.

- Any accumulation of precipitation waters that threatens to breach the pad storm-water containment berm from run-on or run-off will be collected and placed into appropriate waste water containment for recycling or proper disposal. Because of the fine silt/sand grain size composition and gradation of the site surficial materials present at this location, the potential for wind-borne transport of fine-grained materials across or off the site ranks in the moderate to high category relative to a majority of nearby areas. Due to this moderate to high potential for wind-borne transport of materials, soil tackifier or cohesive binding solution amendment will be applied to the surficial materials directly after completion of the pad construction and will be re-applied on an as-needed basis in case surficial materials become dislodged through equipment movement or for other reasons onsite or due to higher than normal wind velocities.