## Risk Assessment San Juan 29-6 # 16A

Depth to Groundwater >100'
Distance to Water Source >1000'
Distance to Surface Water >1000'

TPH Limit (ppm) 5000

On September 22, 1998 Cimarron Environmental Services was notified by Phillips Petroleum Company of a production tank spill located at Township 29 N, Range 6 W, Section 32, Quad D. The spill site was visited and it was determined that excavation was necessary.

On September 23, 1998 Cimarron Environmental Services performed a clean-up on the spill area. Stained soils were excavated to a depth of 13 feet (extent of backhoe). Field headspace was monitored on all walls and the bottom of the excavated area. A soil sample from the center bottom at 13 feet was sent to IML for 8015 GRO/DRO analysis. The sample at 13 feet provided a Total Petroleum Hydrocarbons (TPH) concentration of 10,567 parts per million (ppm), and a Headspace concentration of 86 ppm. The excavated area was backfilled with clean soil immediately following the removal of soils and production equipment was reset.

Based on the results of the initial excavation, it was deemed necessary to determine the vertical extent of the spill. A risk assessment was performed May 14, 1999 by Cimarron Environmental Services. Due to the proximity of surface equipment and spill migration during initial excavation, a bore hole was established approximately 10 feet northeast of the spill area. Bedrock refusal was encountered at 18 feet. A sample from this depth provided a TPH concentration of 7.4 parts per million (ppm) and a Headspace concentration of Non-Detect.

Landfarm sampling was provided by Cimarron Environmental Services on April 14, 1999. Two 5-point samples were extracted and analyzed. Results of sample 1 provided a TPH concentration of 100 parts per million (ppm) and a Headspace concentration of 78 ppm.

Having determined lateral and vertical extent as well as achieving action levels below NMOCD and BLM requirements, this area should be considered to have reached "final closure". Phillips Petroleum has removed and remediated all soils to the extent practical. By filling the excavation, the driving force created by additional fluids will be eliminated. Based on this information and the physical location of the original spill, there is little to no risk to human health or environment.

