Todd Water Injection Station
(AP090)

Source Area Excavation

The source area (mass) will be excavated to a depth of approximately ten (10) feet below ground surface (bgs). The approximate excavation will measure 50 feet by 50 feet. The excavation will be backfilled with clean soil to a depth of four (4) feet bgs, a 40 mil plastic liner will be placed in the excavation and subsequently, the excavation will be brought to grade.

Well Documentation

The New Mexico Office of the State Engineer does not necessarily consider this suspected artificial groundwater associated with this site as "pubic water" of the Causey-Lingo Water Basin. The groundwater at this site is separated from the "public water" of the Causey-Lingo Water Basin by a clay aquitard observed in the area to be approximately 40 feet in thickness. This aquitard has been observed to prevent the downward migration of chloride impacted groundwater.

Apex TITAN, Inc. (Apex) will evaluate the availability of a water supply within a 0.5 mile radius of the extent of known contamination for Todd Water Injection Station property. Apex will confirm the database results by conducting a walking survey within a 500-foot radius of the extent of known contamination.

Groundwater Evaluation

Apex will utilize the Texas Commission on Environmental Quality (TCEQ) RG-366, TRRP-8 Guidance Document entitled "Groundwater Classification" to evaluate the well yield across the property. The direct yield test will be conducted utilizing Method 2c as detailed in TRRP-8. Method 2c is a constant discharge test conducted on low recharge wells by pumping at a discharge rate of 0.1 gallons per minute to determine if the well can sustain a rate which would produce 150 gallons per day.

Apex will utilize the Method 2C *Well Yield by Constant Discharge (0.1 gpm) Test* on monitoring well MW-4, MW-6 or MW-9 to further evaluate the groundwater classification at the site. During the last gauging event (March 10/11, 2015) monitoring wells MW-4, MW-6 and MW-9 had a water column in the wells that would yield recovery data (>15 feet of water). Monitoring well MW-7 was dry. Monitoring wells MW-1, MW-2, MW-3, MW-5, MW-8, MW-10 and MW-11 measured less than 16 feet of water.

The test will be conducted by pumping continuously at a discharge rate equivalent to 0.1 gallons per minute, or 150 gallons per day. Test is complete when a total water volume of 150 gallons has been produced, when test well water level falls to bottom of well (no re-equilibrium), or when test duration reaches 8 hours, whichever comes first. For Method 2c well yield measurements, Apex will provide information on the test well, test procedures, all field data, the calculations used to reduce the data and the results of each calculation.