

HYDRAULIC CONDITIONS

Well name: BLM-36

Well location: SE ¼ SE ¼ SE ¼ Sec. 33 T20S R3E B.C. elev.: 4638.62'

Depth to water (first noted in drilling): N.A. Depth to water table (SS): 492.31'
(following post-development recovery)

Formation at depth where water was first noted: N.A.

Borehole diameter: 17.5"-12.25" Total depth of borehole: 960'

Type of well: Retrofit Westbay® Well within a 4.5" OD stainless steel conventional well

Total depth of well: 885' (WB), 905' (conv.) Well diameter: 4.5" OD (ss), 1.5" OD (WB)

Packed Westbay® interval(s): 870'-850' ; 810'-790' ; 620'-600' ; 360'-340'.

Lithologic description of screened or packed interval(s): Dacite, altered quartz rhyodacite, highly altered rhyolite and rhyodacite, trachyte to clay-rich altered volcanics.

Pertinent observations and/or interpretations:

Low groundwater production and drilling with mud make detection of first water impossible at BLM-36. Based on data from adjacent wells in the mid-plume constriction area (MPCA), the aquifer is semi-confined. Groundwater typically rises by up to 20' when impermeable cemented alluvium at the base of the Santa Fe Group is breached.

Pressure profile summary (Westbay®):

Regional depth to water is approximately 303' bgs (based on pressure profile results from upper sampling zone. Three Hydrostratigraphic Units (HU's) were identified which correspond to three of the five HU's identified in former well BLM-33. At BLM-36, HU-2 is the uppermost unit that extends from the water table at 320' bgs to a depth of approximately 400' bgs. HU-1 shows piezometric levels of 300'-370' bgs. HU-3 is located between 400' and 600' bgs with piezometric levels of 420' to 480' bgs. Both units show close similarities to former well BLM-33.

In well BLM-36, HU-4 between 600' feet and 900' bgs shows piezometric levels of 450' to 500' bgs, which are significantly different from the original values observed for the same unit in well BLM-33. Equivalent levels for well BLM-33 were formerly between 320' to 350' bgs before IS-1 aquifer testing in December 1997 which heavily dewatered/depressurized the unit. Water levels within HU-4 measured within the IS-1 conventional well were 321' bgs prior to pumping (9/97), dropped to 501' bgs following pumping (1/98) and had recovered to only 496' bgs by 7/99. The anomalous low water levels for this unit indicated by the BLM-36 pressure profile is compatible with the dewatering/depressurization observed in adjacent wells.

Pertinent Information on conditions in surrounding wells:

(ie. potential comparisons) – See above.