

**Table II
Evaluation of Oliver
Groundwater Quality Ambient Network**

| Network Name : | | OLIVER | | | | |
|---------------------------------|---|---|--|--------------------------------------|---|---|
| Aquifer Numbers: | | 254 1A (Oliver) , 255 1A(Oliver north) | | | | |
| Monitored Since: | | March 5, 1985 | | | | |
| Footprint Area: | | 19.2 km ² and 10.7 km ² | | | | |
| Number of Obs wells: | | 14 wells at 14 sites | | | | |
| Number wells in WRA: | | 691 | | | | |
| Aquifer Classification: | | 254 IA (rank 16), 255 1A (rank 15) | | | | |
| Parameters ≥ GCDWQ: | | Uranium, NO3 | | | | |
| Contaminants of Concern: | | Uranium, NO3, K, NO2 | | | | |
| Network Objective | | Measurement Criteria | Current Status | Evidence of Change | Response Options | Comments |
| 1 | Spatial and Depth Coverage | a. background well(s) | - good spatial coverage | - no evidence of geothermal | - no response/change | |
| | | b. coverage in areas of suspected impacts | | - no significant land use change | - add well(s) to the south of Oliver | |
| | | c. coverage of all indicated spatial mode areas | | | | |
| | | d. coverage of hydraulically isolated formations | | | | |
| 2 | Suite of Chemistry Parameters and Lab Methods | a. indicator parameters capable of identifying existing/potential threats | - insufficient parameters to verify charge balance | | - no response/change | |
| | | b. ability for anion/cation balance | - HCO3 not regularly included | | - sample for complete suite in all parameters annually | |
| | | c. continuity of historical parameters | - background for some parameters is modal | | - monitor WTN 21867 more closely | |
| | | d. consistent suite of parameters | | | | |
| | | e. new parameters reflect emerging lab methods and recs. by Kohut (2009) | | | | |
| | | f. surrogate monitoring methods | | | | |
| 3 | Sampling Frequency for Network + Wells of Importance | a. consistency in suite of parameters | - paramters not consistent | - sample frequency is not consistent | - no response/change | |
| | | b. duration frequency for primary and secondary priority wells | - no seasonal sampling | | - sample more consistently | |
| | | c. sampling for seasonal variation | | | - could sample less frequently in background wells at north end | |
| 4 | Field Methods QA/QC Data Validation | a. field sampling + handling protocols | - some outliers identified, | | - no response/change | |
| | | b. QA/QC lab results | As variable likely result of | | - adherence to field protocols | |
| | | c. cation/anion balance | sampling methods | | - EMS results reviewed quickly so that sample re-testing still possible | |
| | | d. QA/QC data entered in EMS | | | | |
| | | e. identify statistical outliers | | | | |
| 5 | Spatial and Temporal Analysis and Reporting | a. visual outliers and spatial/temporal trends | - some upward trends exist | - upward trend in NO2 and K | - no response/change | - nitrogen and uranium are above GCDWQ and close attention is required in WTN 21867 and WTN 83010/83011 |
| | | b. | | | - regular analysis/vaildation to identify outliers/trends | |
| | | | | | - communicate with planners | |
| | | | | | - communicate with water users | |
| | | | | | - communicate with planners | |