

SECTION 6

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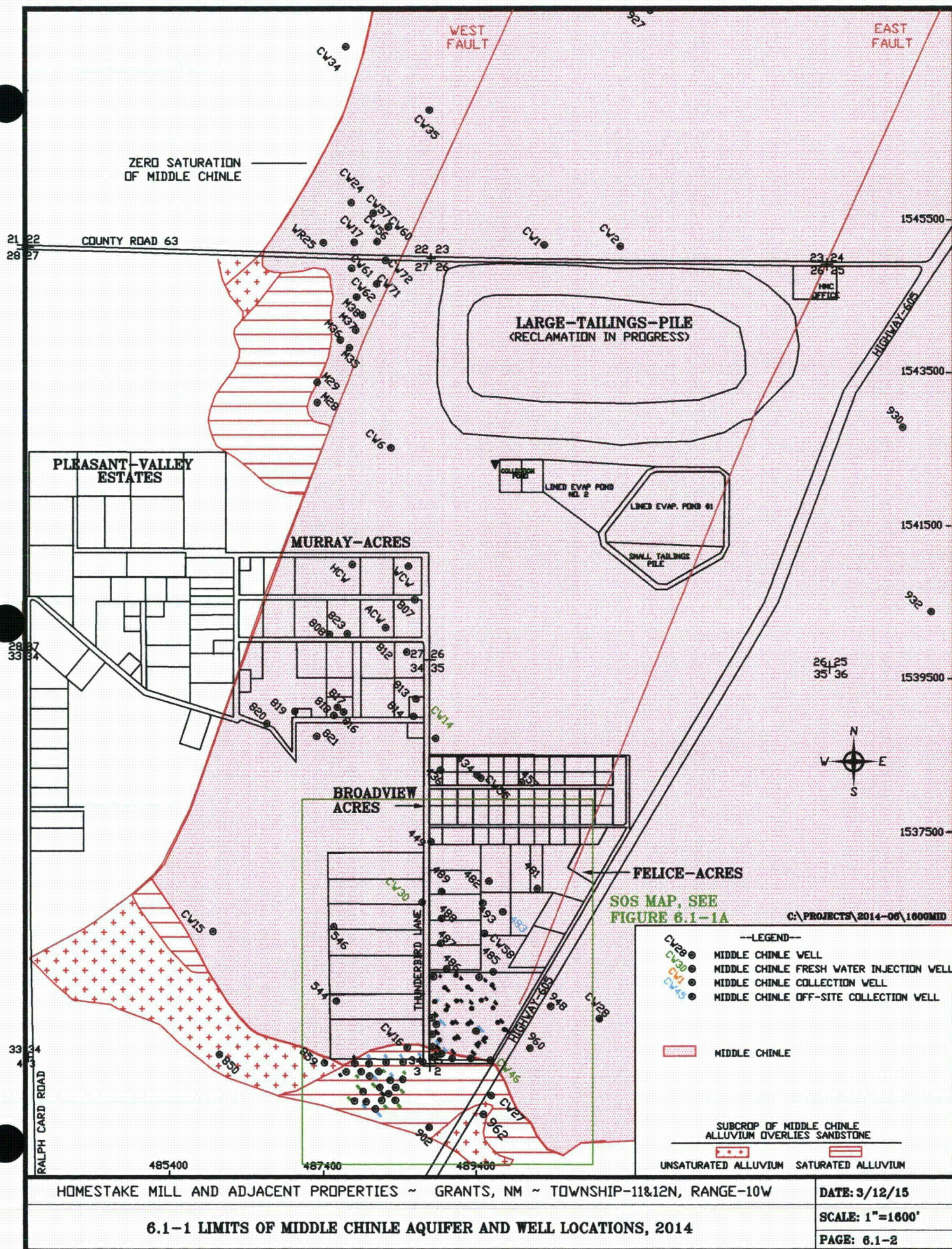
6.0 MIDDLE CHINLE AQUIFER MONITORING

6.1 MIDDLE CHINLE WELL COMPLETION AND LOCATION

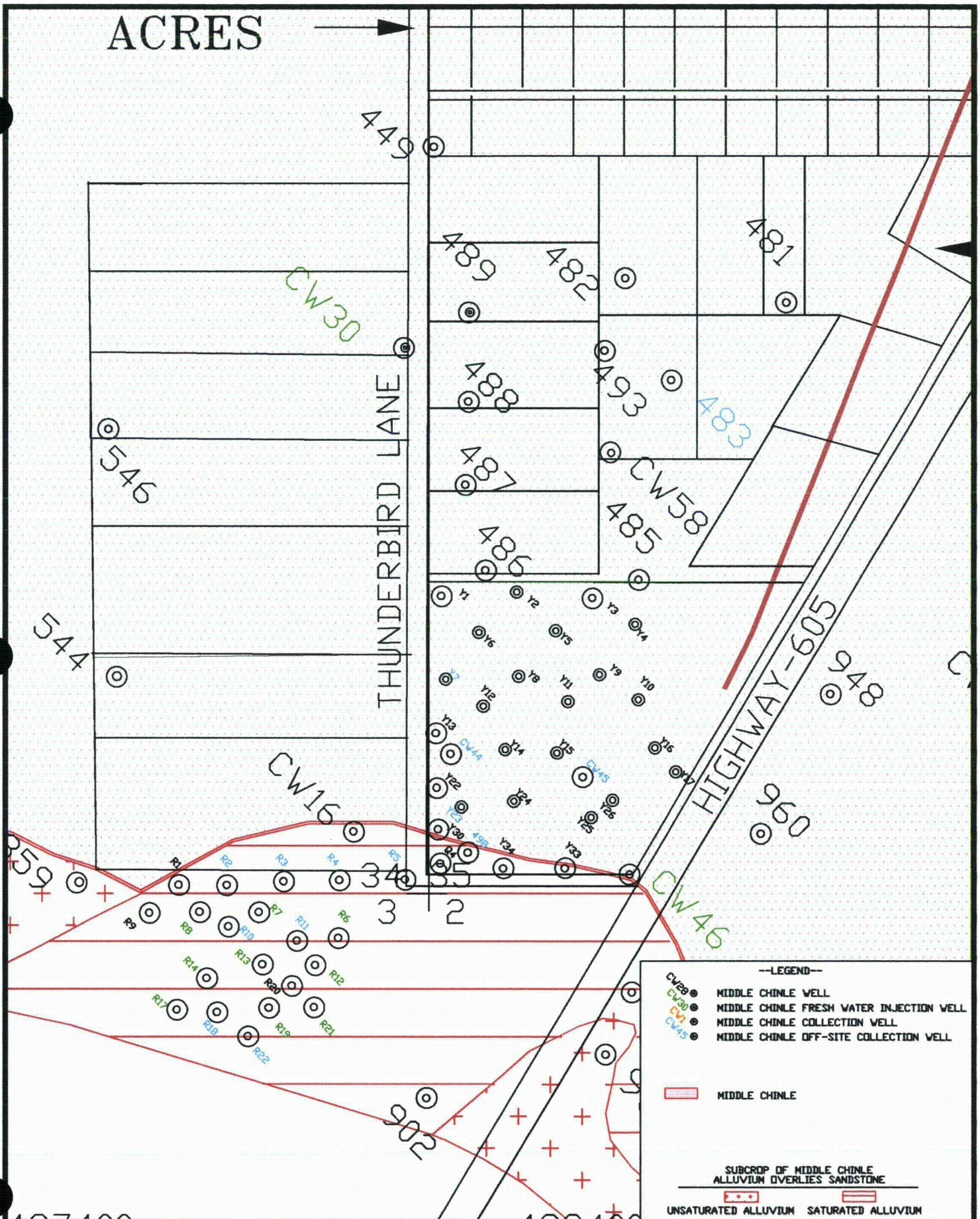
Tables 5.1-1 through 5.1-4 (previous section) present the Middle Chinle well data along with other Chinle aquifer wells. Figures 6.1-1 and 6.1-1A show the locations of the Middle Chinle wells and areas where the Middle Chinle aquifer exists at the Grants Project. Figure 6.1-1A was added to show the closely spaced wells that have been added in south Felice Acres and the northeast portion of Section 3. The area where the alluvium is saturated and has direct contact with the Middle Chinle sandstone is very important with respect to transfer of water between these two aquifers and is shown with the red horizontal cross hatch pattern. The area where the Middle Chinle subcrops against alluvium that is not saturated is shown by the red plus (+) pattern.

The Middle Chinle aquifer also exists east of the extension of the East Fault (shown as a red pattern area on Figure 6.1-1) with an alluvium-Middle Chinle subcrop zone on the south side of this area. A limited area of Middle Chinle aquifer exists west of the West Fault. All three of these areas in the Middle Chinle aquifer act as separate ground water systems, except that there is some connection between two of the three areas of the Middle Chinle near the south end of the East Fault in the southwest corner of Section 35. Twenty seven additional Middle Chinle wells were drilled in 2014 in Felice Acres and to the west of the LTP to further define conditions in these areas.

Wells CW14, CW30 and CW46 were used for fresh-water injection in 2014. Middle Chinle wells 483, 498, CW44, CW45, R2, R3, R4, R5, R10, R11, R18, R22, Y7 and Y23 were used as South collection wells in 2014 for injection into the LTP and testing of the zeolite. Well CW28 was not used as a source for fresh water injection in 2014.



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DATE: 2/24/15

6.1-1A. LIMITS OF MIDDLE CHINLE AQUIFER AND WELL LOCATIONS, SOS, 2014

SCALE: 1"=500'

PAGE: 6.1-3

6.2 MIDDLE CHINLE WATER LEVELS

Water levels in Homestake's Upper, Middle and Lower Chinle wells are presented in Appendix A. Fall 2014 water-level elevation contours for the Middle Chinle aquifer are presented on Figure 6.2-1. The hydraulic gradient in the Middle Chinle aquifer is steeper in its alluvial subcrop area in the southern portion of Felice Acres near wells 498, CW45 and CW46. Pumping of Middle Chinle South Collection wells Y7 and Y23 developed a depression in the Middle Chinle water surface that extends nearly 500 feet to the northeast and southwest of well Y7. This depression intercepts flow in the Middle Chinle that flowing in this portion of South Felice Acres. A steep gradient was developed to the southeast of collection well Y7 due to changes in transmissivity in this area. This increase in gradient is due to an influx of water to the Middle Chinle aquifer from the alluvial aquifer. The red arrows on Figure 6.2-1 show the direction of ground water flow in the Middle Chinle aquifer. Flow on the east side of the East Fault is mainly toward well CW28 near the East Fault.

Ground water flow west of the West Fault in the Middle Chinle aquifer is mainly to the southwest, and it discharges into the alluvial aquifer. This prevents the alluvial aquifer from affecting the water quality of the Middle Chinle aquifer on the west side of the West Fault. This Middle Chinle water flows from up-gradient of the site into the area west of the LTP. The alluvial injection in the northern portion of Section 27 has temporarily reversed the gradient near wells CW17 and CW24 in 2006 through 2014. This has allowed some movement to the north until the water level elevation is increased in this area above those near wells CW17 and WR25. The remainder of the Middle Chinle aquifer is recharged by the alluvial aquifer south of Felice Acres.

The injection of fresh water into wells CW14 (north of Broadview Acres) and CW30 (west of Felice Acres) has created ground water mounds in their respective areas. These mounds cause the ground water to flow both north and south from these two wells. The head in the Middle Chinle aquifer on each side of the two faults is significantly different than the head between the two faults, which demonstrates that the ground water is not readily connected on each side of these faults.

Figure 6.2-2 shows the locations of the Middle Chinle wells that are used to monitor water-level changes with time. The colors and symbols used on this figure are the same as those used on the water-level elevation time plots. Figure 6.2-3 presents the water-level elevation changes versus time in Middle Chinle wells 493, 859, CW15, CW28, CW45, and CW58. The

water levels are higher in Middle Chinle well CW45 than they are farther north in well 493. The pumping of Middle Chinle South collection wells CW45, Y7 and Y23 in late 2014 caused the water levels in these wells to gradually decline.

The water-level plots for the Middle Chinle wells located west of the West Fault and wells CW2 and ACW are presented on Figure 6.2-4. Water levels have been gradually increasing in the Middle Chinle aquifer west of the West Fault. Water levels rose in Middle well CW2 in 2014 due to ceasing pumping of this well in 2013 but declined a small amount due to the South Felice pumping. Water levels have increased in well ACW as a result of ceasing pumping of wells CW1 and CW2. As expected, water levels west of the West Fault have not responded to the pumping of water from wells CW1 and CW2 situated east of the West Fault or from the pumping of the South Felice Acres wells.

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6231 DATA
6500 CONTOUR AND LABEL
MIDDLE CHINLE FLOW

SUBCROP OF MIDDLE CHINLE
ALLUVIUM OVERLIES SANDSTONE

UNSATURATED ALLUVIUM SATURATED ALLUVIUM

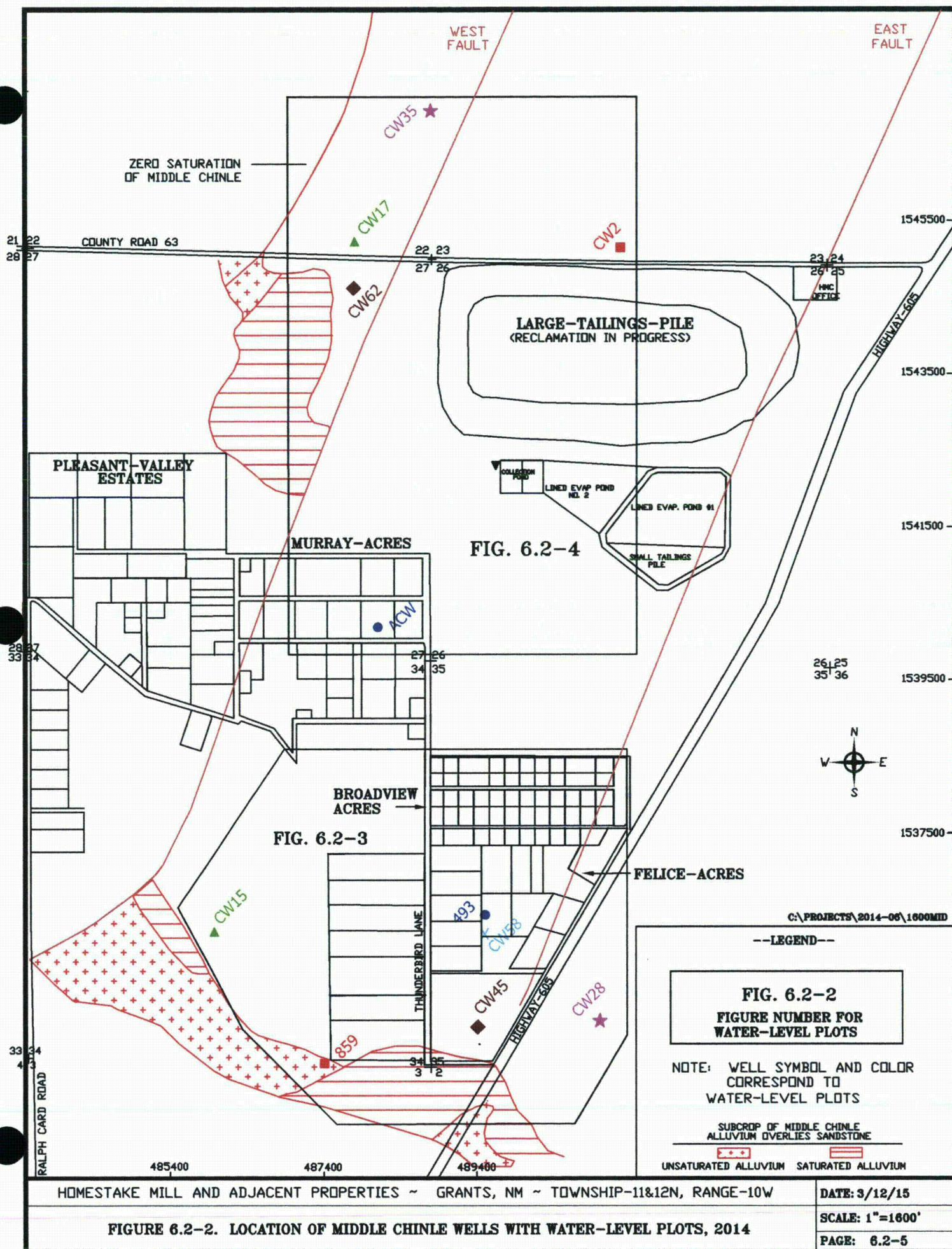
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DATE: 3/12/15

FIGURE 6.2-1A. WATER-LEVEL ELEVATIONS OF THE MIDDLE CHINLE AQUIFER, FALL 2014, SOS, FT-MSL

SCALE: 1"=500'

PAGE: 6.2-4



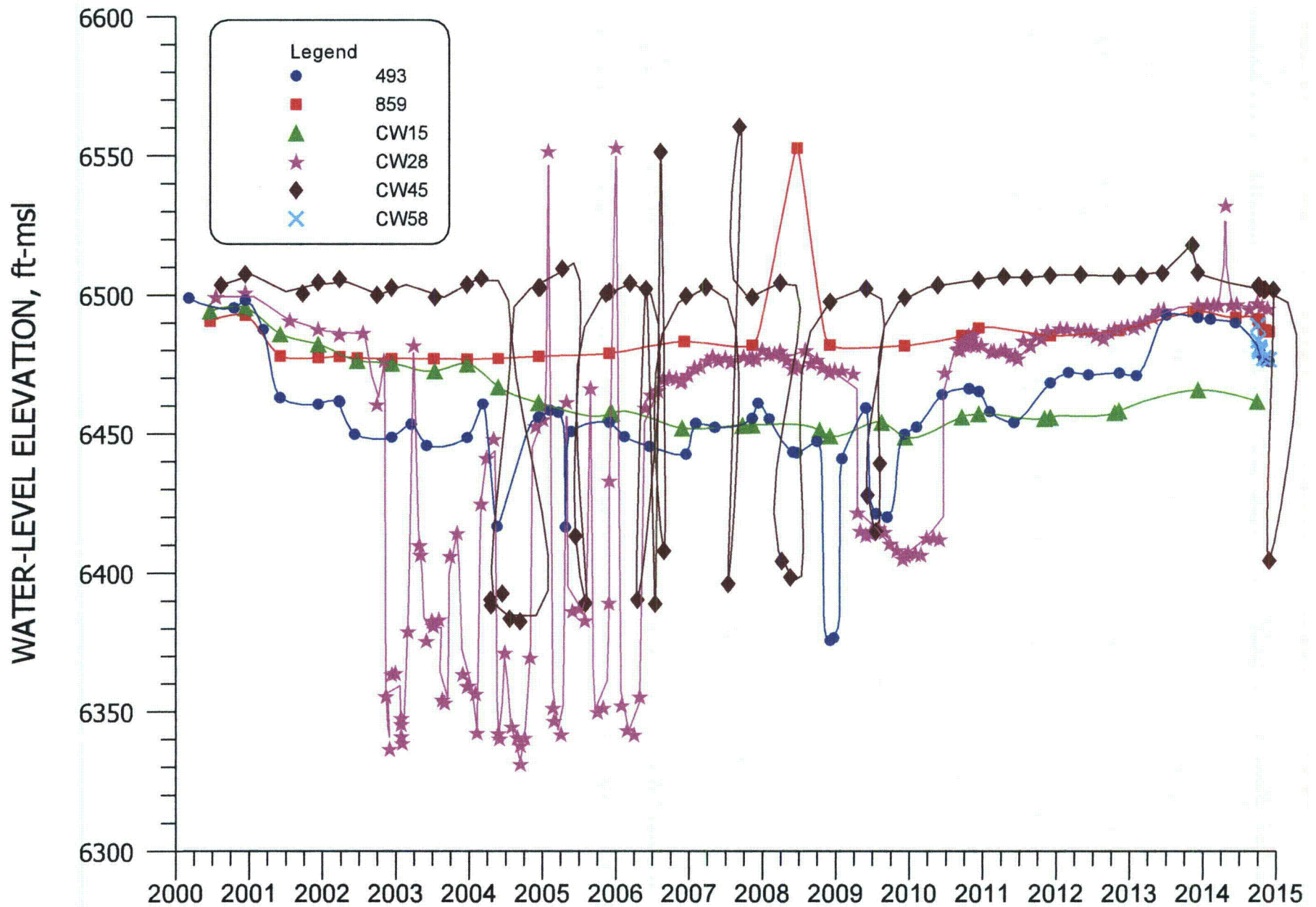


FIGURE 6.2-3. WATER-LEVEL ELEVATION FOR WELLS 493, 859, CW15, CW28, CW45, AND CW58

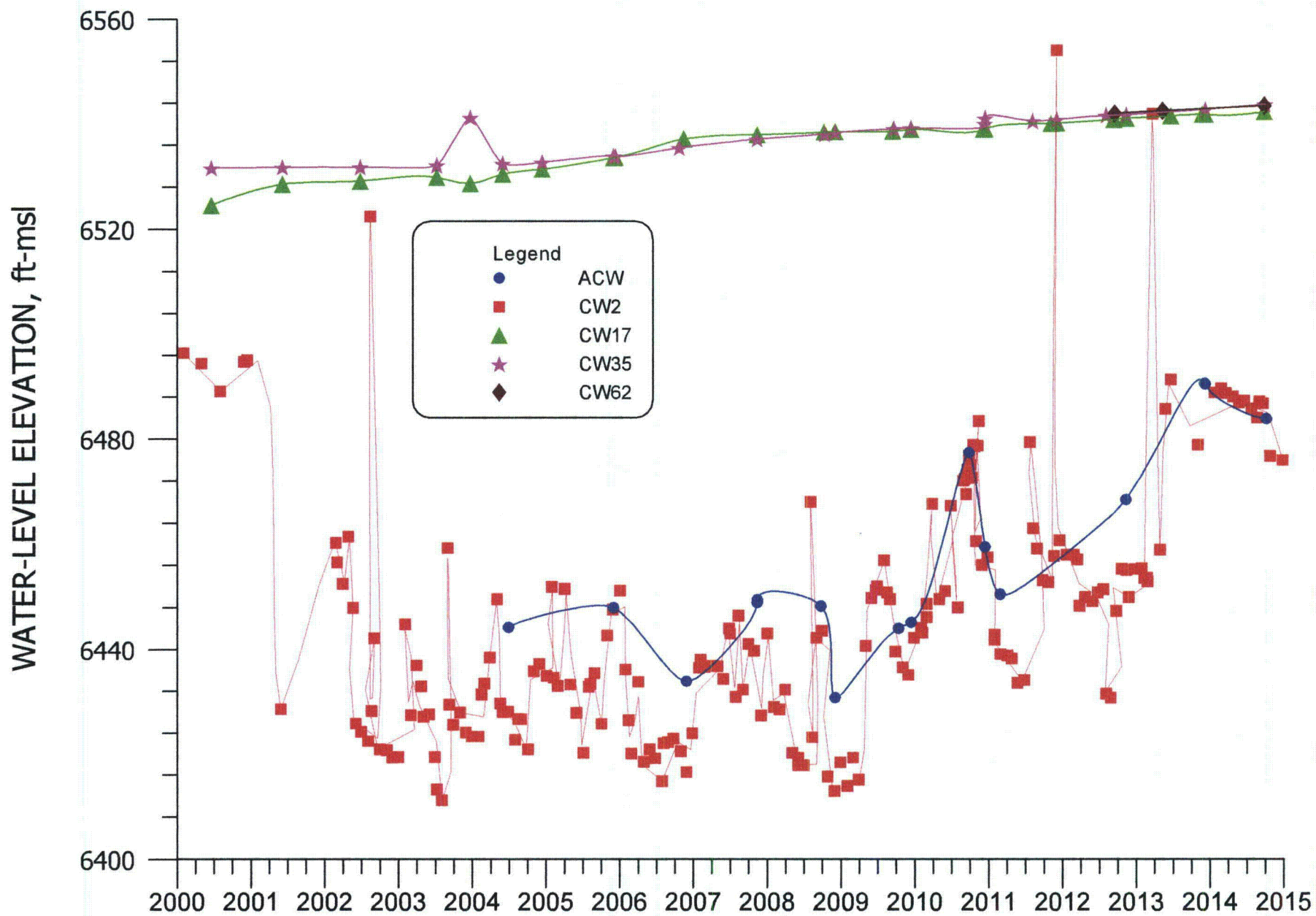


FIGURE 6.2-4. WATER-LEVEL ELEVATION FOR WELLS ACW, CW2, CW17, CW35, AND CW62

6.3 MIDDLE CHINLE WATER QUALITY

The water-quality data for Homestake's Middle Chinle aquifer is presented with that of the other Chinle aquifer wells in Tables B.5-1 and B.5-2 of Appendix B. The Chinle aquifer water-quality results for subdivision wells are also presented in these tables. The basic well data for the Middle Chinle aquifer wells is presented in Tables 5.1-1 through 5.1-4 in the Upper Chinle aquifer monitoring section (Section 5). Several Middle Chinle wells drilled in 2014 that were sampled for water quality to further define the concentration contours in southern Felice Acres and west of the LTP and the West Fault.

The area of water-quality concern in the Middle Chinle aquifer exists in the western portion of Broadview Acres and Felice Acres. All sulfate concentrations are within the site standard except for the concentrations from wells CW62, CW71, CW72 and WR25, located in the mixing zone west of the West Fault where concentrations were natural until alluvial water has moved into this area. Uranium concentrations are above site standards in western Broadview Acres and Felice Acres and west of the West Fault. Selenium concentrations also exceed the site standard in two Felice Acres area wells and six wells west of the West Fault. The only significant molybdenum concentrations identified in the Middle Chinle aquifer are at wells CW17, CW56, CW61, CW62, CW71, CW72, M28, M35, M36 and M37.

6.3.1 SULFATE - MIDDLE CHINLE

Figures 6.3-1 and 6.3-1A present sulfate concentration contours for the Middle Chinle aquifer for 2014 and shows that the Middle Chinle sulfate concentrations range from 459 to a high of 2200 mg/l. Sulfate site standard concentrations are given in the legend of Figures 6.3-1 and 6.3-1A. Figure 6.3-1A presents sulfate concentrations of the Middle Chinle wells in south Felice Acres and the R collection wells in the northeast portion of Section 3. All mixing-zone sulfate concentrations in the Middle Chinle aquifer are below the site standard of 1750 mg/l except for values in wells CW62, CW71, CW72 and WR25. Sulfate concentrations in these wells, which are located west of the West Fault have been recently affected by the alluvial water. The sulfates were naturally occurring in this area, until the increase in the head of the alluvial water in the subcrop area caused the alluvial water to flow into the Middle Chinle. Sulfate concentrations in the non-mixing zone of the Middle Chinle are within the natural background

range and meet the site standards. The sulfate concentrations for the new R wells drilled in 2013 in the northeast portion of Section 3 and the Y wells in south Felice Acres are posted on Figures 6.3-1A at a scale of 1" = 500'.

Figure 6.3-2 shows the locations of the Middle Chinle wells for which time concentration plots were developed for this report. The sulfate figure number is shown in the group area to define the figure number for each group of wells. Two groups of wells for the Middle Chinle aquifer are presented. The colors and symbols on Figure 6.3-2 correspond to those used in the concentration time plots.

Figure 6.3-3 presents sulfate concentrations for the mixing zone Middle Chinle wells 498, 859, CW17, CW44, CW45 and CW62. Fairly stable sulfate concentrations were observed in 2014 in wells CW44 and CW45. The higher sulfate concentrations in well CW17 are due to alluvial water moving into the Middle Chinle from the subcrop area. Sulfate levels in CW17 have declined for the last seven years.

Figure 6.3-4 presents the sulfate concentrations for non-mixing zone Middle Chinle wells 493, ACW, CW2, and CW55, located between the two faults, and well CW28, which is located east of the East Fault. Data presented on this plot demonstrate that sulfate concentrations have been fairly steady over time in these wells except for a decline in well ACW in 2014.

6.3.2 TOTAL DISSOLVED SOLIDS - MIDDLE CHINLE

Total dissolved solids (TDS) and sulfate are used to define changes in major constituents at the Grants Project site. Figures 6.3-5 and 6.3-5A present contours of TDS concentrations for the Middle Chinle aquifer during 2014 and shows that all values are below 2000 mg/l near the alluvial subcrop area in the southern portion of the map (see Figure 6.3-5A for posting of new Y wells in south Felice Acres and the R collection wells in the northeast portion of Section 3). Four wells west of the West Fault exceed the TDS site standard.

Background data for the Middle Chinle aquifer were used to determine TDS site standards of 3140 and 1560 mg/l for the mixing and non-mixing zones, respectively. All of the TDS values measured in Middle Chinle aquifer water were less than these values in 2014, except for wells CW62, CW71, CW72 and WR25, located in the mixing zone, and wells 482, 483, 493, ACW and CW55 in the non-mixing zone.

Plots of TDS concentrations for Middle Chinle wells 498, 859, CW17, CW44, CW45 and CW62 are presented in Figure 6.3-6. The TDS concentrations have been fairly steady over the last few years in these wells, except for a gradual decline in well CW17. The recent sulfate concentrations in well CW62 are higher and also show a gradual decline. Figure 6.3-7 presents TDS concentration-time plots for non-mixing zone Middle Chinle wells 493, ACW, CW2, CW28 and CW55. Analysis of this data indicates stable TDS concentrations in water collected from these wells in 2014.

6.3.3 CHLORIDE - MIDDLE CHINLE

Figures 6.3-8 and 6.3-8A present chloride concentrations in the Middle Chinle aquifer during 2014, and observed concentrations varied from roughly 81 to 265 mg/l. None of the concentrations exceeded the site standard of 250 mg/l for the mixing and non-mixing zones of the Middle Chinle aquifer except for four values west of the West Fault. Therefore, in general chloride concentrations are not useful for defining the degree of, or the need for, restoration of the Middle Chinle aquifer.

Time plots of chloride concentration are presented on Figure 6.3-9 for Middle Chinle wells 498, 859, CW17, CW44, CW45 and CW62. Chloride concentrations increased in Middle Chinle well CW17 in 2006 through 2009 and were fairly steady in 2010 through 2014. Concentrations were fairly steady in the remainder of the wells except for a gradual decline in 2014 in well CW45.

A second set of chloride concentration plots for the Middle Chinle aquifer is presented in Figure 6.3-10. Data plotted on this figure shows fairly steady 2014 concentrations, except for an increase in wells ACW and CW2. Small changes in well CW2 are deemed to be within natural variation in the Middle Chinle aquifer. The large increase in chloride concentrations in well ACW in 2011, 2012 and 2014 is not supported by changes in sulfate and TDS.

6.3.4 URANIUM - MIDDLE CHINLE

Uranium is an important constituent in the Middle Chinle aquifer due to the presence of elevated concentrations in the aquifer in western Broadview Acres and in the southern and western portions of Felice Acres. These elevated concentrations are a result of alluvial recharge to the Middle Chinle aquifer in this area. Water in the saturated portion of the alluvial aquifer flows across a subcrop of the Middle Chinle aquifer just south of Felice Acres, and alluvial ground water has entered the Middle Chinle aquifer in this area. Figures 6.3-11 and 6.3-11A present contours of uranium concentrations in the Middle Chinle aquifer during 2014. An area of concentrations greater than the mixing-zone site standard exists in the western portion of Felice Acres and the northeast portion of Section 3 (see Figure 6.3-11A). The blowup of South Felice Acres and the northeast portion of Section 3 in Figure 6.3-11A presents the uranium posting of the new Y wells and the R collection wells in this area. Uranium concentrations in the Middle Chinle aquifer, west of the West Fault, northwest of the LTP, naturally exceed 0.18 mg/l but values in several wells have increased above this level from the movement of alluvial water in the subcrop to these wells. Flow in the Middle Chinle aquifer west of the West Fault moves from the area near well CW35 toward the subcrop area to the south. Uranium concentrations exceed 0.07 mg/l (non-mixing zone site standard) in an area of the Middle Chinle aquifer at wells 482, 483 and 493 in Felice Acres and Broadview Acres well CW55.

Figure 6.3-12 presents uranium concentration plots versus time for Middle Chinle wells 498, 859, CW17, CW44, CW45 and CW62 (see Figure 6.3-2 for well locations). The 2014 uranium concentrations shown on this plot are fairly steady with and an overall decreasing trend in wells CW17, CW44 and CW45. Additional monitoring of these wells with time will better define this collection-induced trend.

The uranium concentration plots for the Middle Chinle wells in the non-mixing zone are presented on Figure 6.3-13. Uranium concentrations were small in wells ACW, CW2, CW28 and CW55 in 2014. The uranium concentration in well 493 has overall increased for several years through 2010 and then variable but steady in 2011 through 2014 (see Figure 6.3-13). The large increase in well CW2 in 2013 is not supported by the uranium concentrations before and after this measurement.

6.3.5 SELENIUM - MIDDLE CHINLE

None of the Middle Chinle wells in the mixing zone contained water with selenium concentrations exceeding the 0.14 mg/l site standard in 2014, except for five wells west of the West Fault (see Figures 6.3-14 and 6.3-14A). The higher selenium concentrations in these wells are caused by movement of alluvial water in the subcrop area to these wells. None of the new wells in southern Felice Acres or the northeast portion of Section 3 (see Figure 6.3-14A for the posted values) contain water with elevated selenium concentrations. The selenium concentration in the non-mixing zone wells 481 and 493 currently exceeds the site standard of 0.07 mg/l. This area of elevated concentration has resulted from recharge to the Middle Chinle aquifer from the alluvium in the subcrop area just south of Felice Acres. Flow in the Middle Chinle aquifer in this locale is toward the north causing chemical constituents introduced into the Middle Chinle from the alluvium in the subcrop area to move to the north. Analysis of background selenium concentrations in the mixing and non-mixing zones resulted in setting site standards of 0.14 and 0.07 mg/l, respectively (see legend of Figures 6.3-14 and 6.3-14A).

Selenium concentrations somewhat greater than 0.3 mg/l have been measured in Middle Chinle wells west of the West Fault. The higher selenium concentrations observed in these wells are due to alluvial water flowing into this area of the Middle Chinle aquifer in 2006 through 2014. All other selenium concentrations in the Middle Chinle aquifer beyond these areas are low values.

Selenium concentrations with time for the mixing zone Middle Chinle wells 498, 859, CW17, CW44, CW45 and CW62 are presented in Figure 6.3-15. Overall steady selenium concentrations have been observed in these wells in 2014 except the decrease in wells CW17 and CW62. The observed higher concentrations in wells CW17 and CW62 are believed to be a short term result of the alluvial injection near the subcrop with the Middle Chinle.

Figure 6.3-16 presents the selenium concentrations for Middle Chinle wells in the non-mixing zone. Selenium concentrations in well CW2, which is located north of the LTP, have varied over the past few years, but their values are small. The connection between the alluvial aquifer and the Middle Chinle aquifer south of Felice Acres is the cause for the elevated concentrations in well 493 and selenium increased in this well in 2014. The injection of fresh

water into Middle Chinle wells CW14, CW30 and CW46 and the collection from Middle Chinle wells in South Felice Acres should cause these elevated concentrations to decrease.

6.3.6 MOLYBDENUM - MIDDLE CHINLE

The 2014 molybdenum concentrations in the Middle Chinle aquifer are presented on Figures 6.3-17 and 6.3-17A. None of the molybdenum concentrations for 2014 exceed the site standard of 0.10 mg/l except for several wells west of the West Fault. Some restoration of molybdenum in these wells will be needed.

Figure 6.3-18 presents the molybdenum concentrations with time for Middle Chinle wells 498, 859, CW17, CW44, CW45 and CW62, while Figure 6.3-19 presents the molybdenum concentrations with time for wells 493, ACW, CW2, CW28 and CW55. These plots show that the concentration in each of these wells has been low for 2014 except for elevated and declining concentrations in wells CW17 and CW62. The increase in molybdenum concentrations in wells CW17 and CW62 will require some restoration of this constituent in the Middle Chinle aquifer in this area.

6.3.7 NITRATE - MIDDLE CHINLE

Nitrate concentrations have always been low in the Middle Chinle aquifer and therefore are not routinely monitored. However, nitrate concentrations were measured in all of the Middle Chinle aquifer wells in 2003 and in a number of the wells in 2014. Figure 6.3-20 presents the nitrate concentrations in the Middle Chinle aquifer and shows that the only notable levels of nitrate in the Middle Chinle aquifer are west of the West Fault. Nitrate concentrations are less than 15 mg/l, the mixing zone site standard, in all of the Middle Chinle wells west of West Fault except wells CW61 and CW62. Due to the change in flow direction in the Middle Chinle aquifer west of the West Fault since 2006, alluvial water has entered this portion of the Middle Chinle. The concentrations were naturally occurring prior to 2006. A small amount of nitrate restoration is needed in the Middle Chinle west of the West Fault. This constituent does not require a site standard for the non-mixing zone of the Middle Chinle aquifer.

6.3.8 RADIUM-226 AND RADIUM-228 - MIDDLE CHINLE

Radium concentrations in the Middle Chinle aquifer have always been low, showing that these two parameters are not important relative to the restoration of the Middle Chinle aquifer. All of the radium-226 and radium-228 values measured in 2014 were less than detection or very small. Radium-226 and radium-228 are not important parameters relative to the Middle Chinle aquifer and a site standard is not warranted and has not been set for these two constituents.

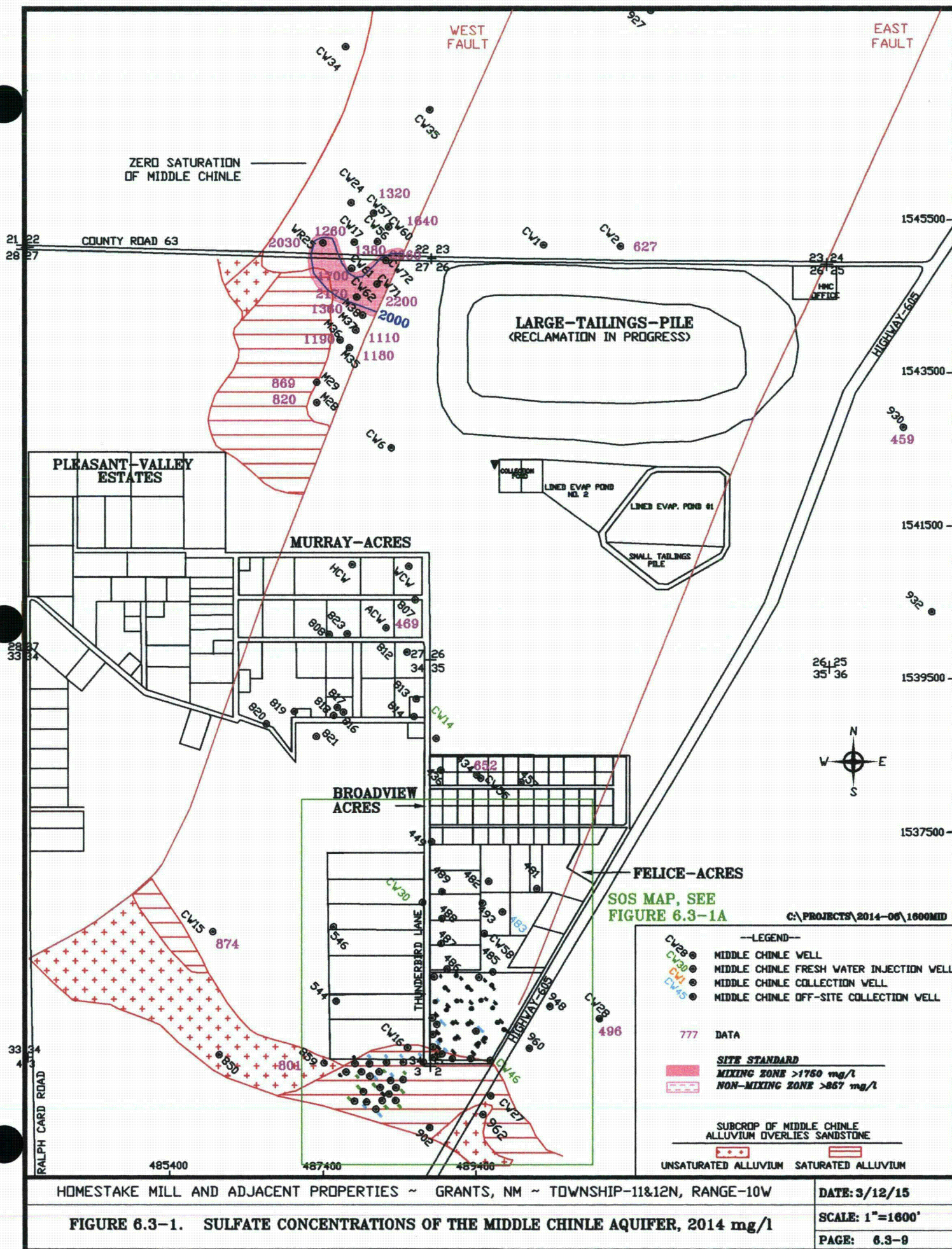
6.3.9 VANADIUM - MIDDLE CHINLE

Vanadium concentrations in the Middle Chinle aquifer have always been low. Previous monitoring of vanadium in the Middle Chinle aquifer has demonstrated that vanadium is not a significant parameter in this aquifer. Monitoring of vanadium for the Middle Chinle should be eliminated, because only a few low values have previously been detected in the alluvial aquifer near the tailings piles. All of the 2014 vanadium measurements for the Middle Chinle aquifer are low levels near the detection limit. These values are consistent with values observed previously and, therefore, reinforce the conclusion that continued monitoring of vanadium concentrations in the Middle Chinle aquifer should not be required. A site standard for vanadium has therefore not been set for the Middle Chinle aquifer.

6.3.10 THORIUM-230 - MIDDLE CHINLE

Thorium-230 concentrations are not significant in the alluvial aquifer outside of the Large Tailings Pile. Therefore, the Middle Chinle aquifer does not have the potential for containing significant thorium concentrations from the tailings seepage. Thorium-230 is, therefore, not a significant parameter in the Middle Chinle aquifer and should be eliminated from future monitoring in the Middle Chinle aquifer. Thorium-230 concentrations were measured in all wells sampled from Middle Chinle wells in 2003, and all of these values were less than detection. All of the thorium-230 values measured in 2014 were very small. These thorium-230 levels are consistent with concentrations previously measured in the Middle Chinle aquifer,

which shows that thorium-230 is not an important parameter in the Middle Chinle aquifer and thus a site standard has not been set.



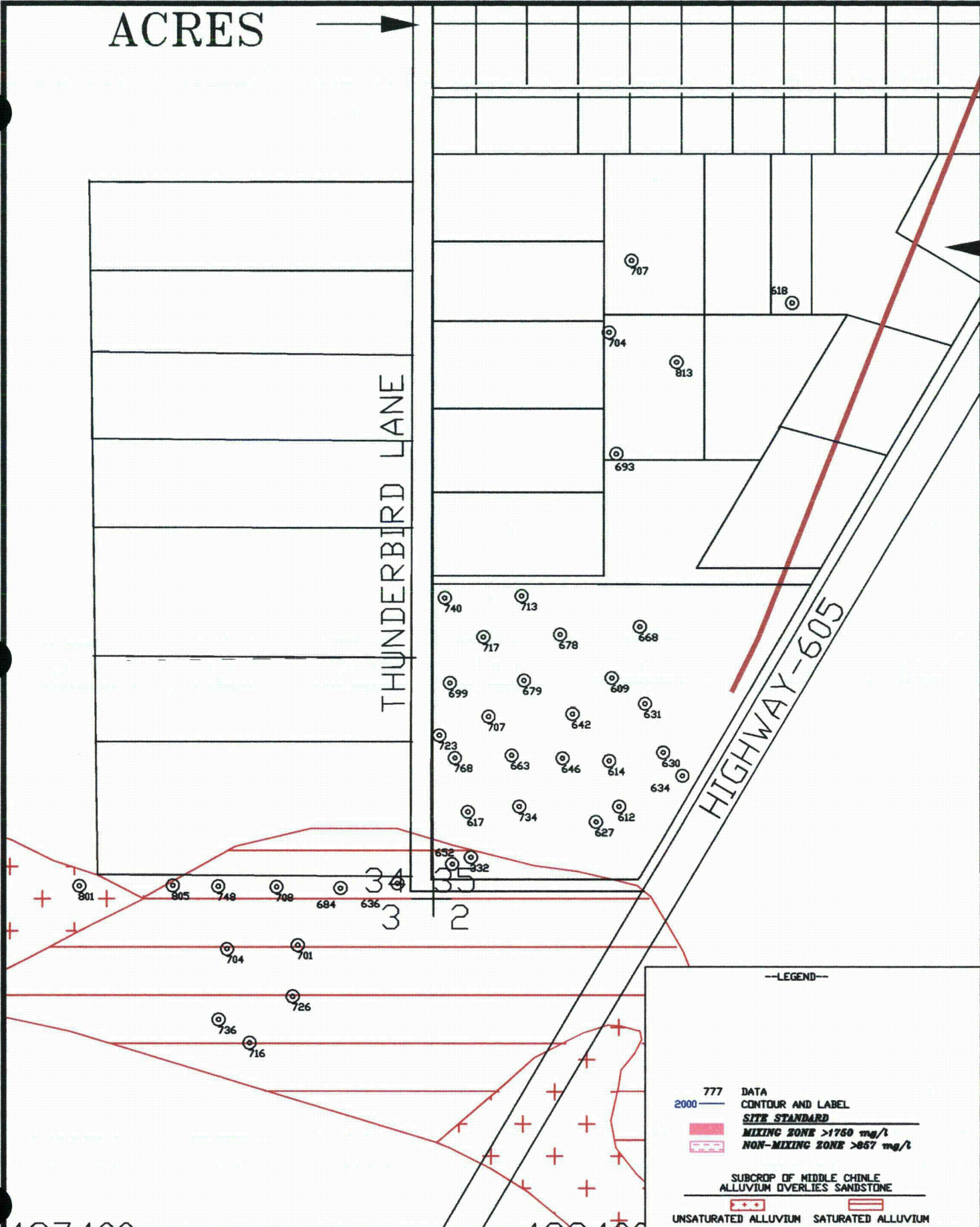
HOMESTEAK MILL AND ADJACENT PROPERTIES ~ GRANTS, NM ~ TOWNSHIP-11&12N, RANGE-10W

FIGURE 6.3-1. SULFATE CONCENTRATIONS OF THE MIDDLE CHINLE AQUIFER, 2014 mg/l

ACRES

THUNDERBIRD LANE

HIGHWAY-605



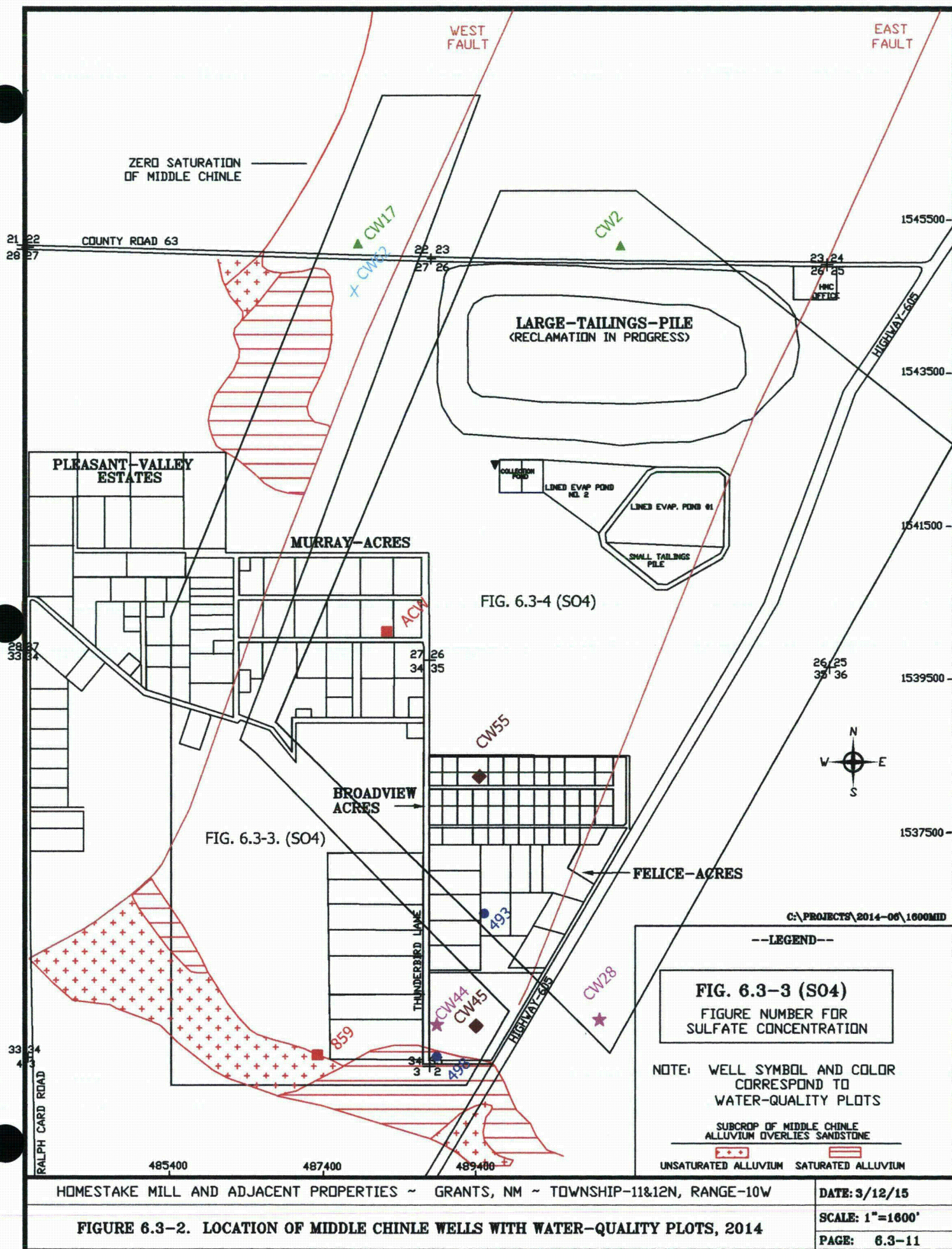
HOMESTEAK MILL AND ADJACENT PROPERTIES ~ GRANTS, NM ~ TOWNSHIP-11&12N, RANGE-10W

DATE: 3/12/15

FIGURE 6.3-1A. SULFATE CONCENTRATIONS OF THE MIDDLE CHINLE AQUIFER, 2014, SOS, mg/l

SCALE: 1"=500'

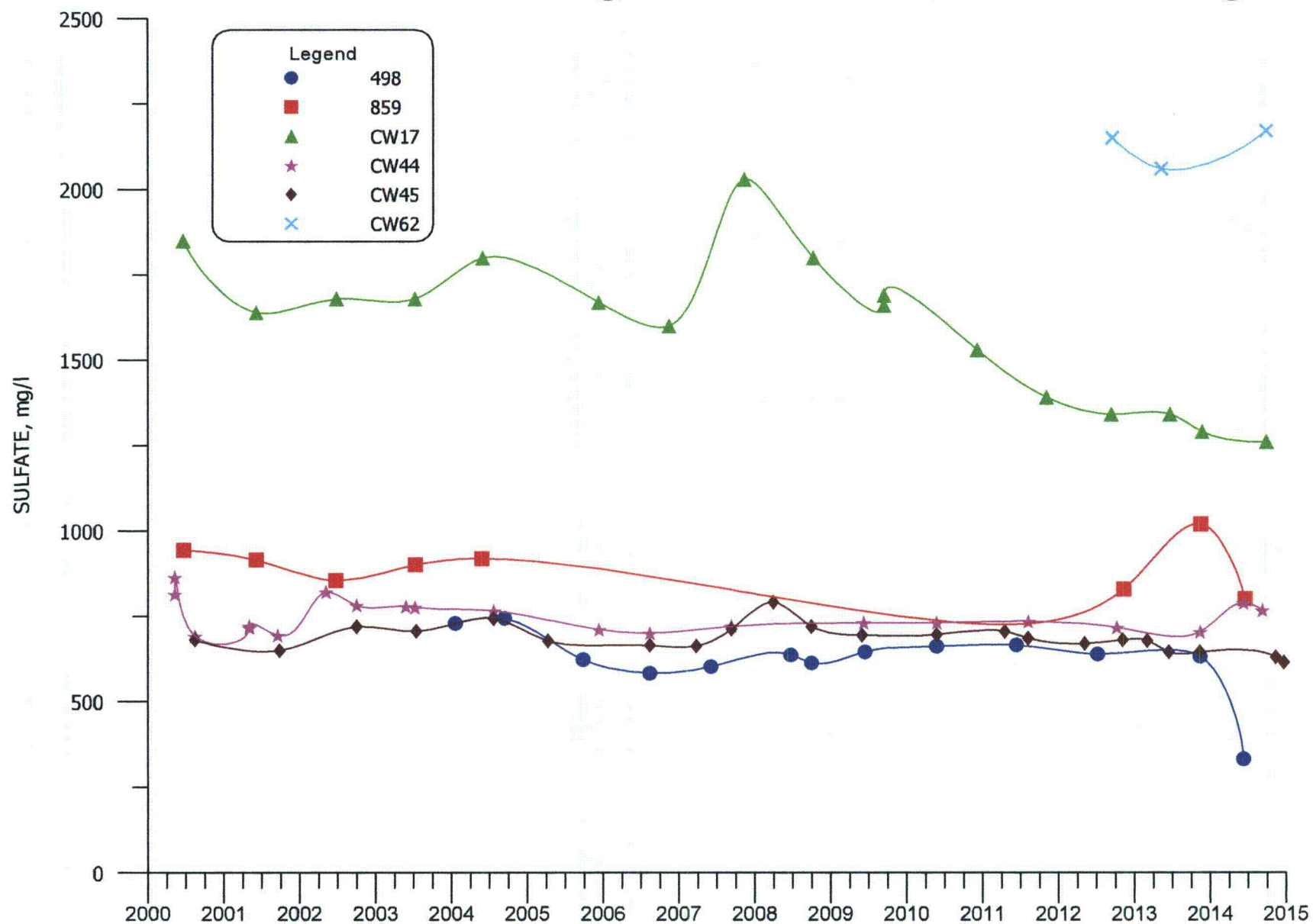
PAGE: 6.3-10



HOMESTAKE MILL AND ADJACENT PROPERTIES ~ GRANTS, NM ~ TOWNSHIP-11&12N, RANGE-10W

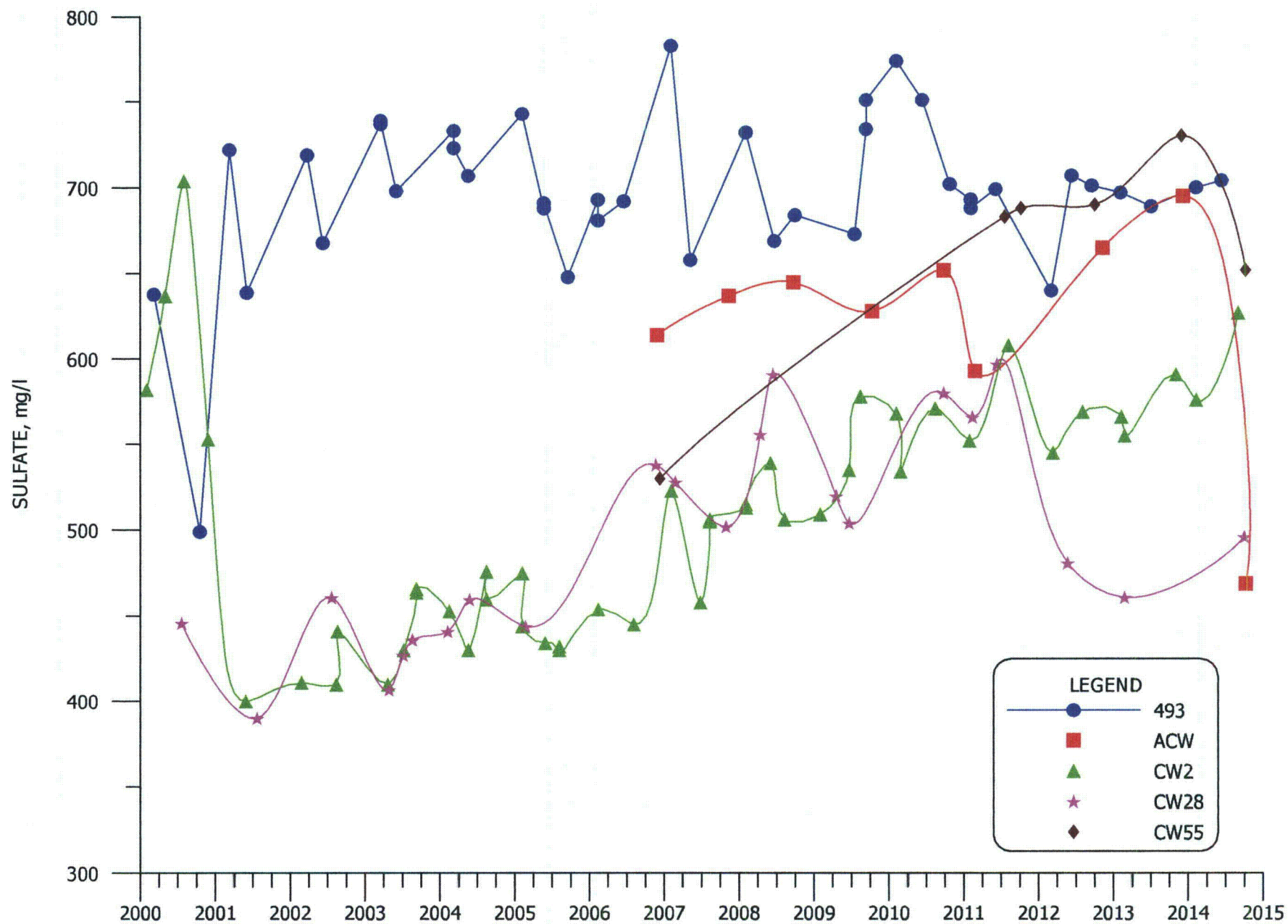
FIGURE 6.3-2. LOCATION OF MIDDLE CHINLE WELLS WITH WATER-QUALITY PLOTS, 2014

6.3-12



**FIGURE 6.3-3. SULFATE CONCENTRATIONS FOR MIXING ZONE WELLS
498, 859, CW17, CW44, CW45, AND CW62**

6.3-13



**FIGURE 6.3-4. SULFATE CONCENTRATIONS FOR NON-MIXING ZONE WELLS
493, ACW, CW2, CW28, AND CW55**

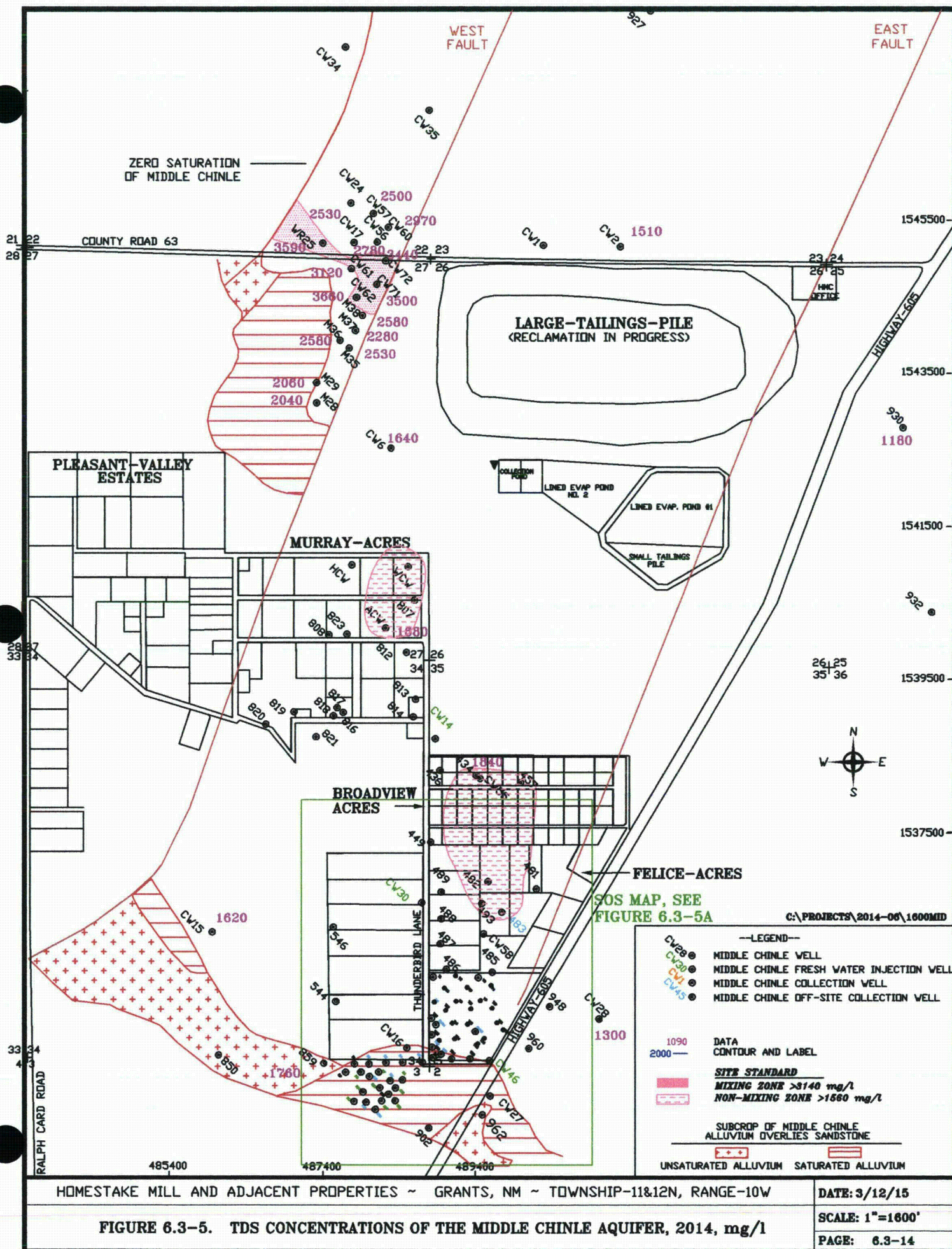
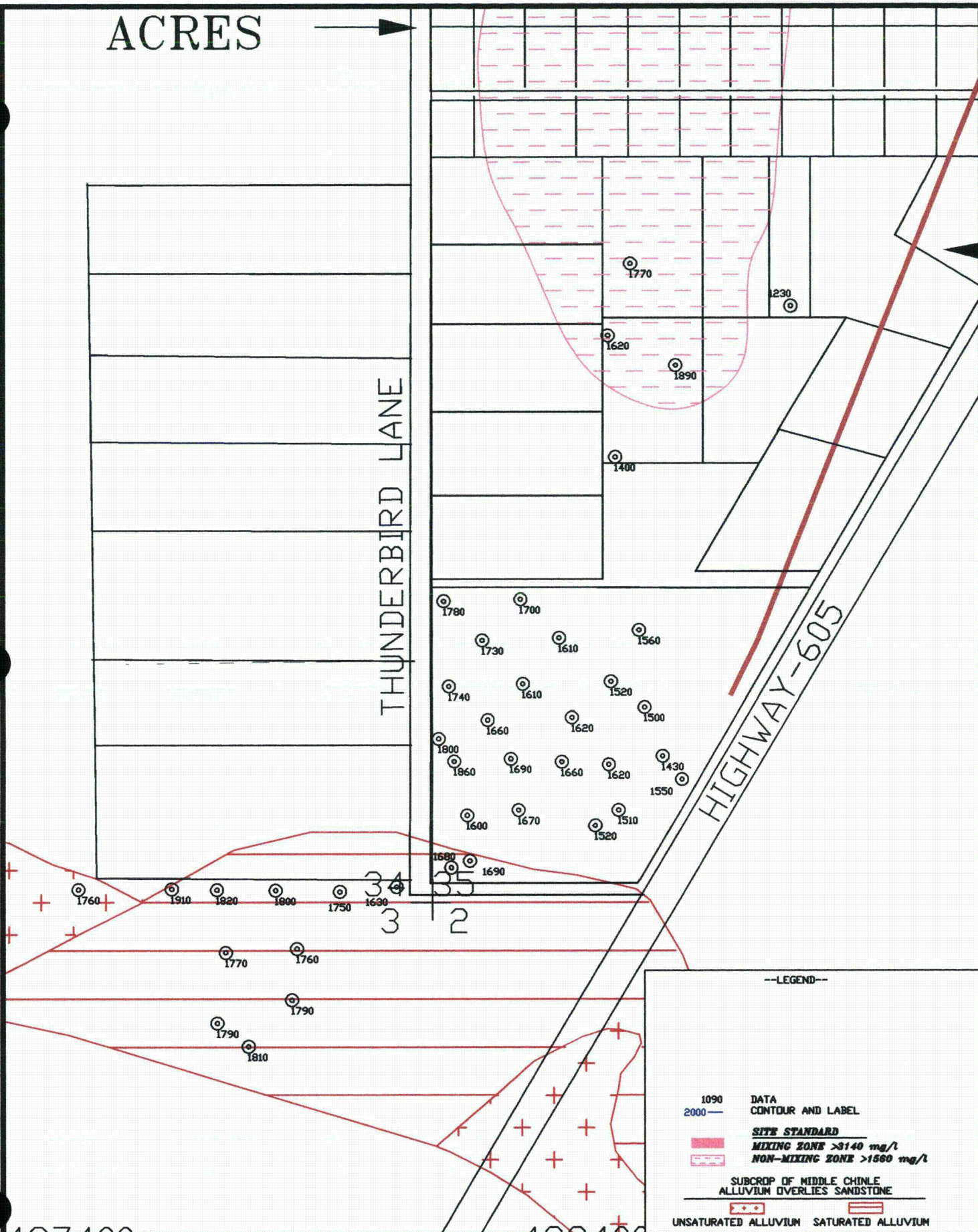


FIGURE 6.3-5. TDS CONCENTRATIONS OF THE MIDDLE CHINLE AQUIFER, 2014, mg/l

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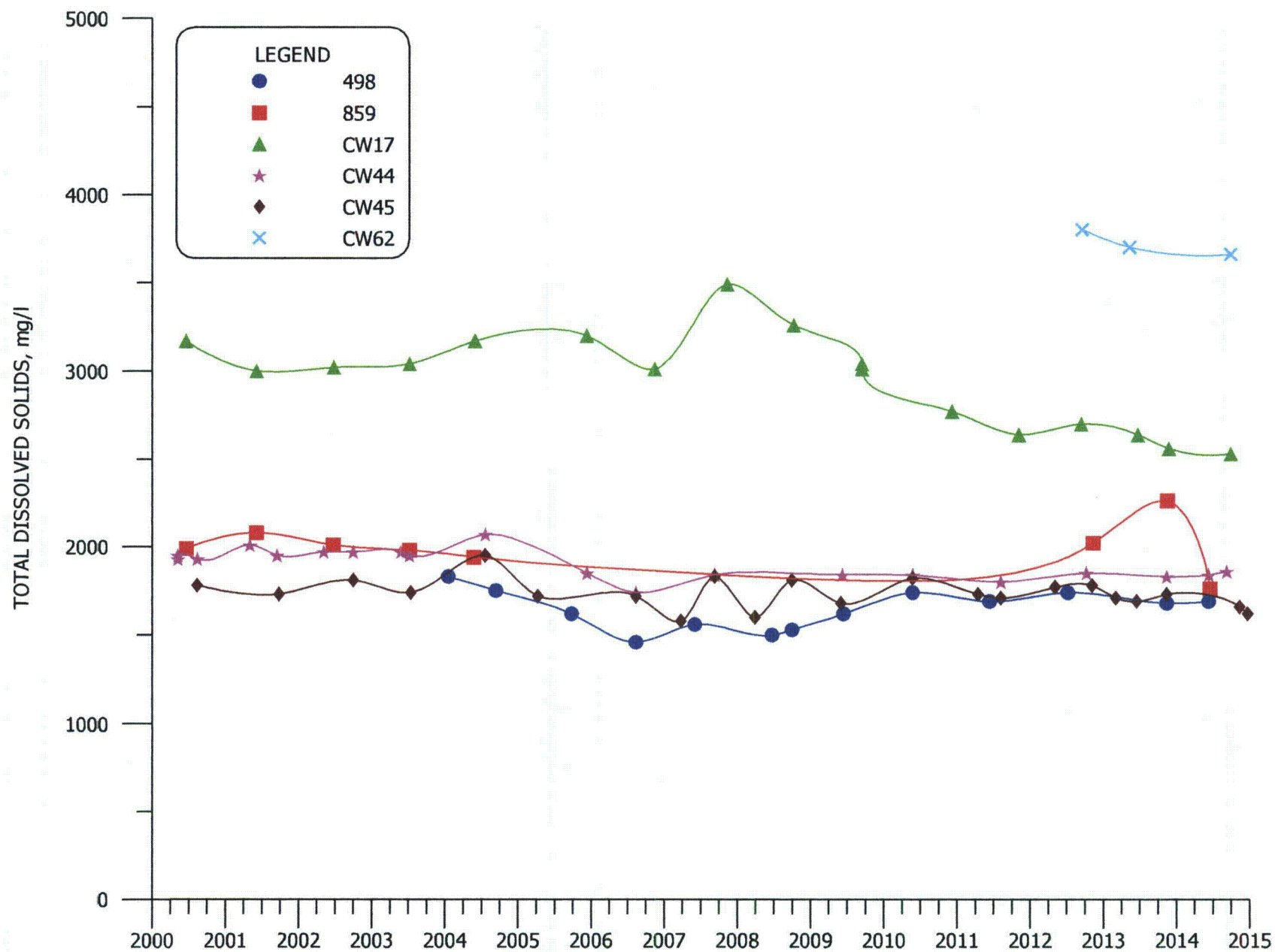
HOMESTAKE MILL AND ADJACENT PROPERTIES ~ GRANTS, NM ~ TOWNSHIP-11&12N, RANGE-10W

DATE: 3/12/15

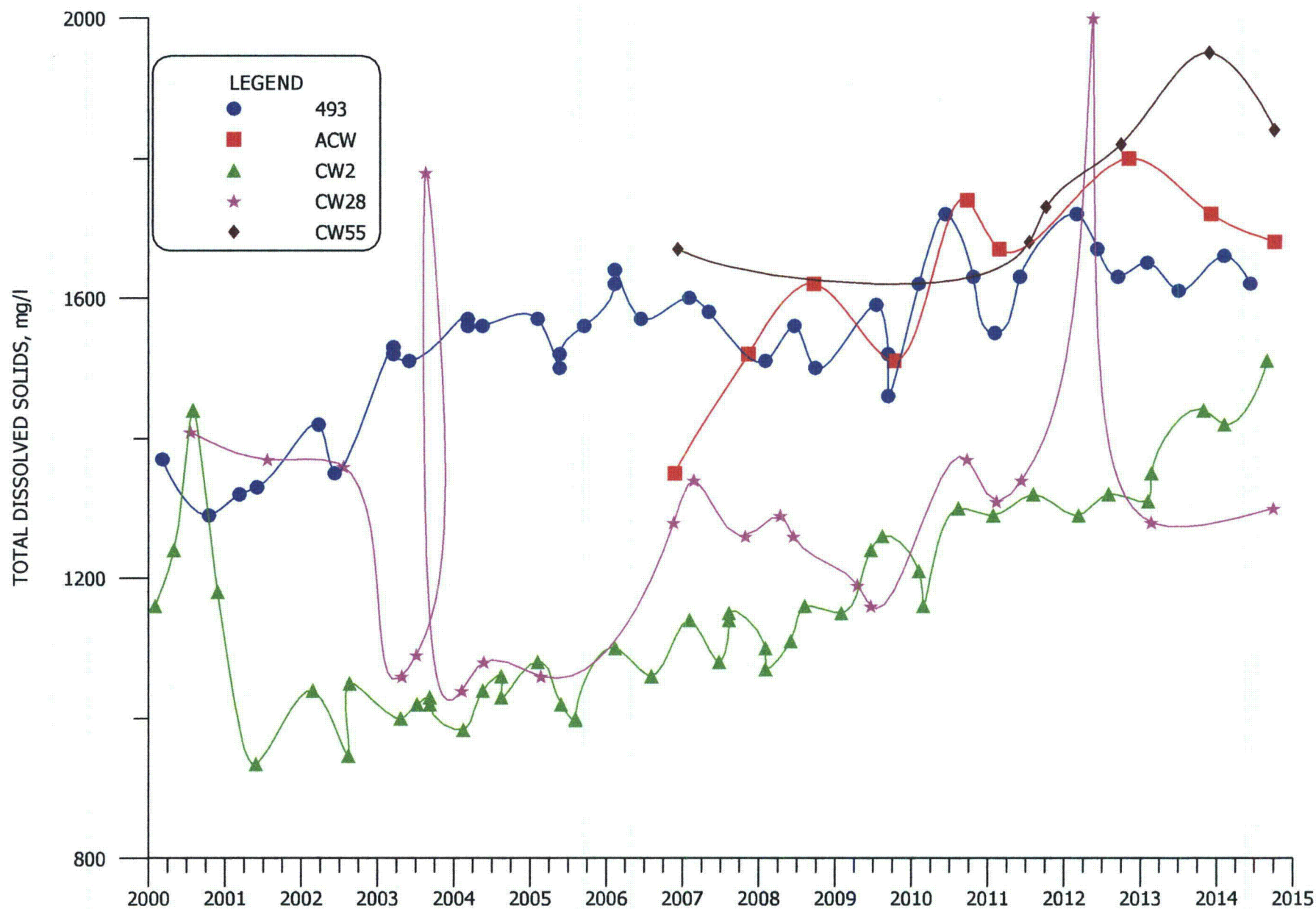
FIGURE 6.3-5A. TDS CONCENTRATIONS OF THE MIDDLE CHINLE AQUIFER, 2014, SOS, mg/l

SCALE: 1"=500'

PAGE: 6.3-15



**FIGURE 6.3-6. TDS CONCENTRATIONS FOR MIXING ZONE WELLS
498, 859, CW17, CW44, CW45, AND CW62**

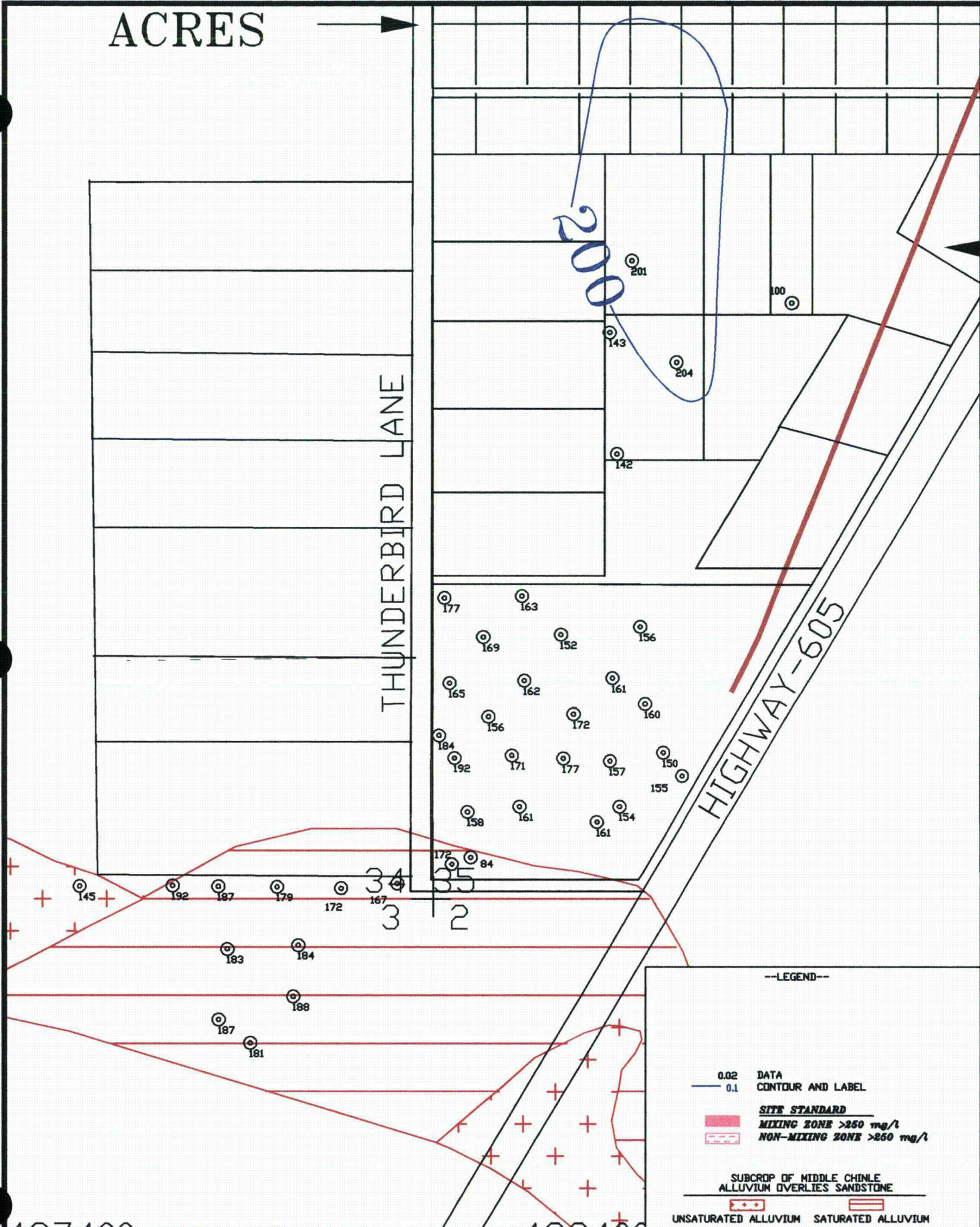


**FIGURE 6.3-7. TDS CONCENTRATIONS FOR NON-MIXING ZONE WELLS
493, ACW, CW2, CW28, AND CW55**

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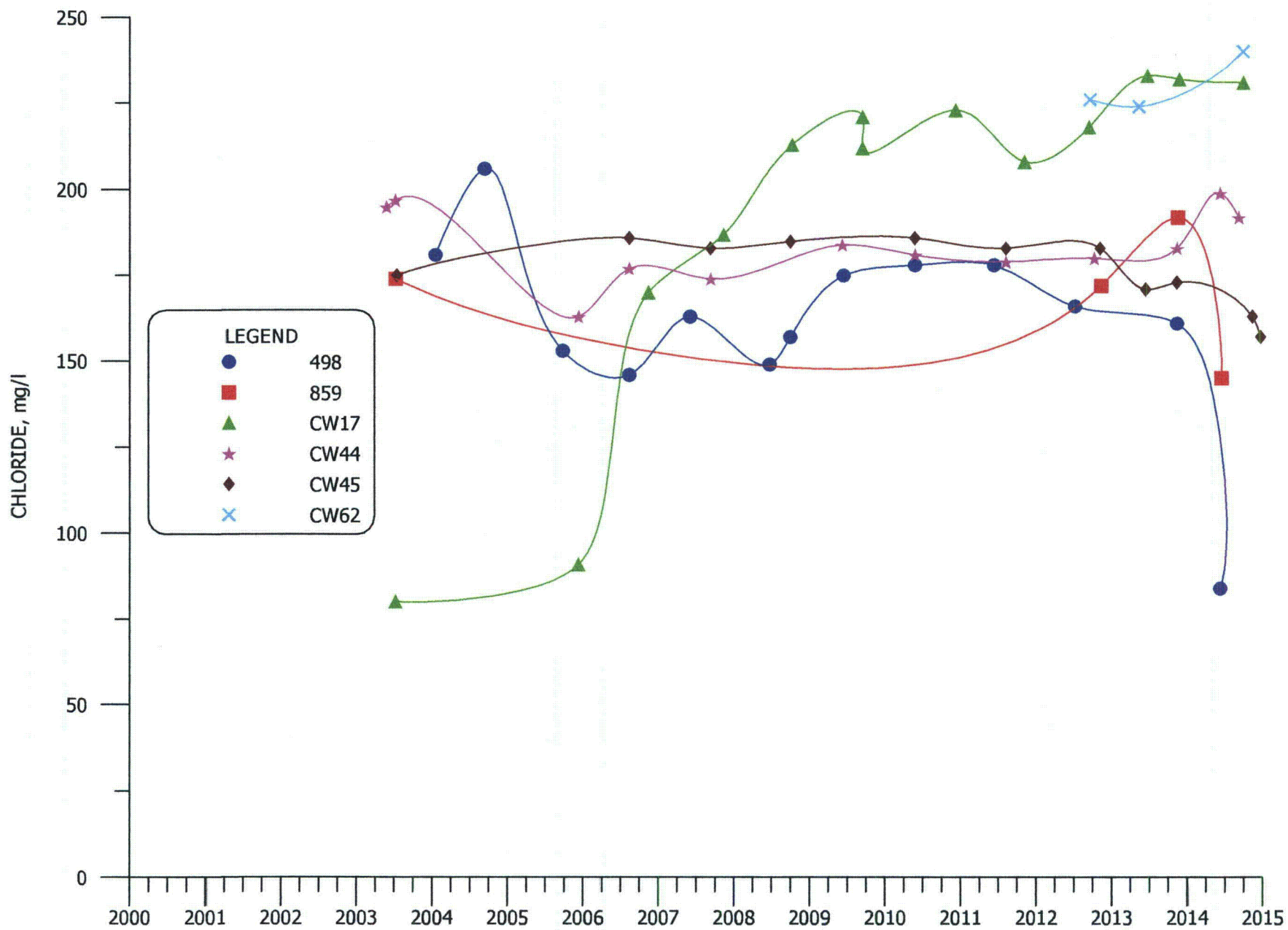
HOMESTAKE MILL AND ADJACENT PROPERTIES ~ GRANTS, NM ~ TOWNSHIP-11&12N, RANGE-10W

DATE: 3/12/15

FIGURE 6.3-8A. CHLORIDE CONCENTRATIONS OF THE MIDDLE CHINLE AQUIFER, 2014, SOS, mg/l

SCALE: 1"=500'

PAGE: 6.3-19



**FIGURE 6.3-9. CHLORIDE CONCENTRATIONS FOR MIXING ZONE WELLS
498, 859, CW17, CW44, CW45, AND CW62**

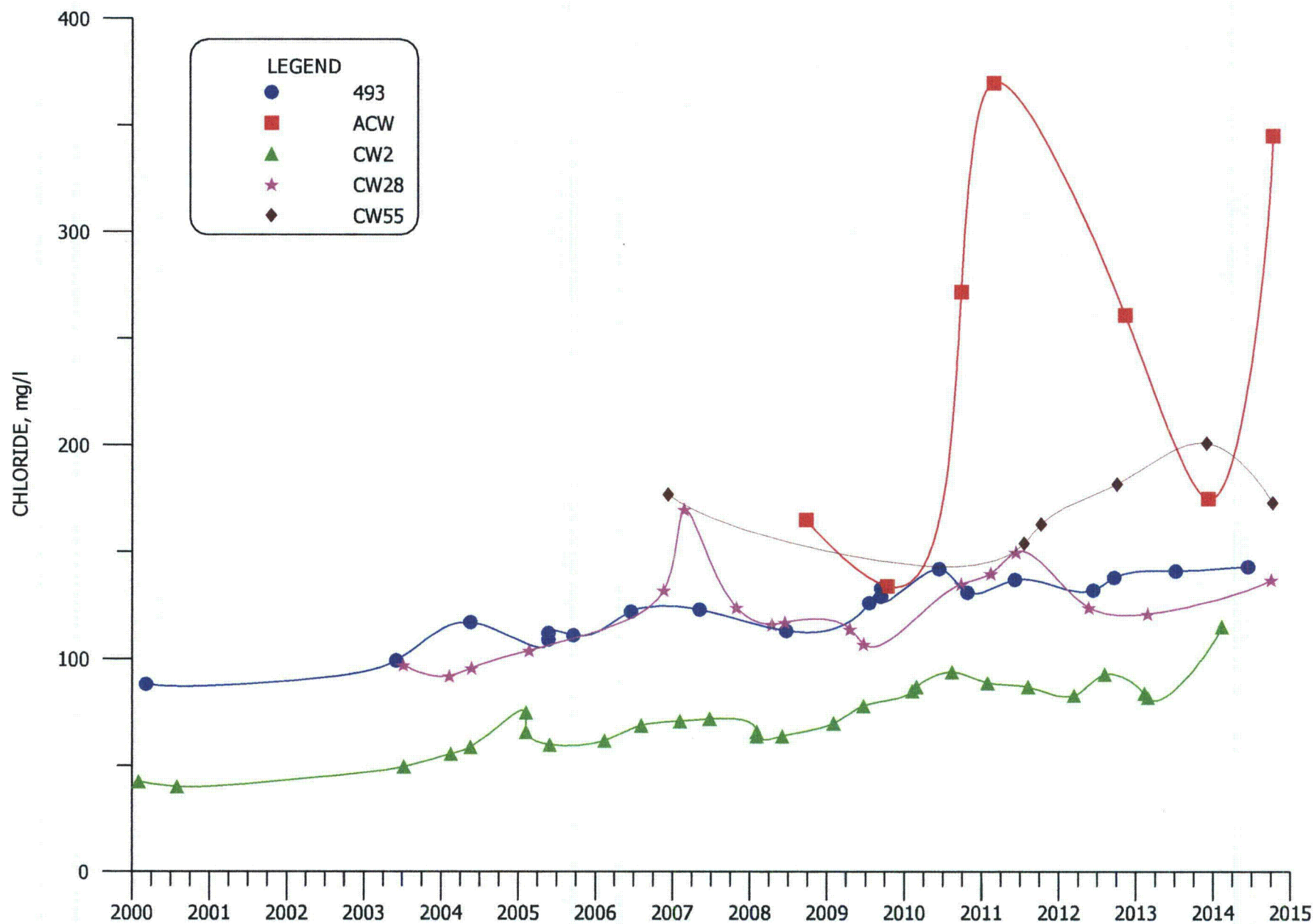
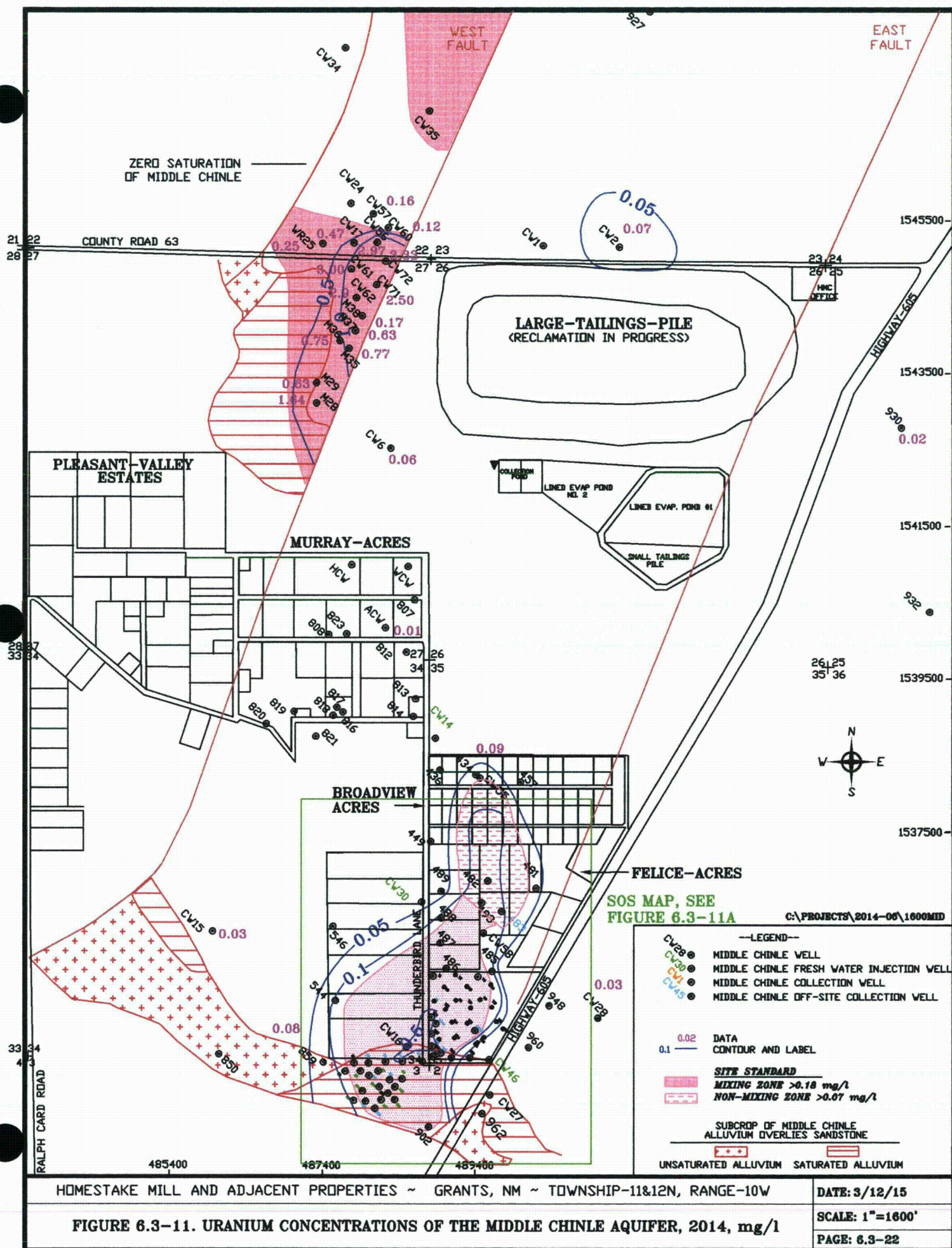
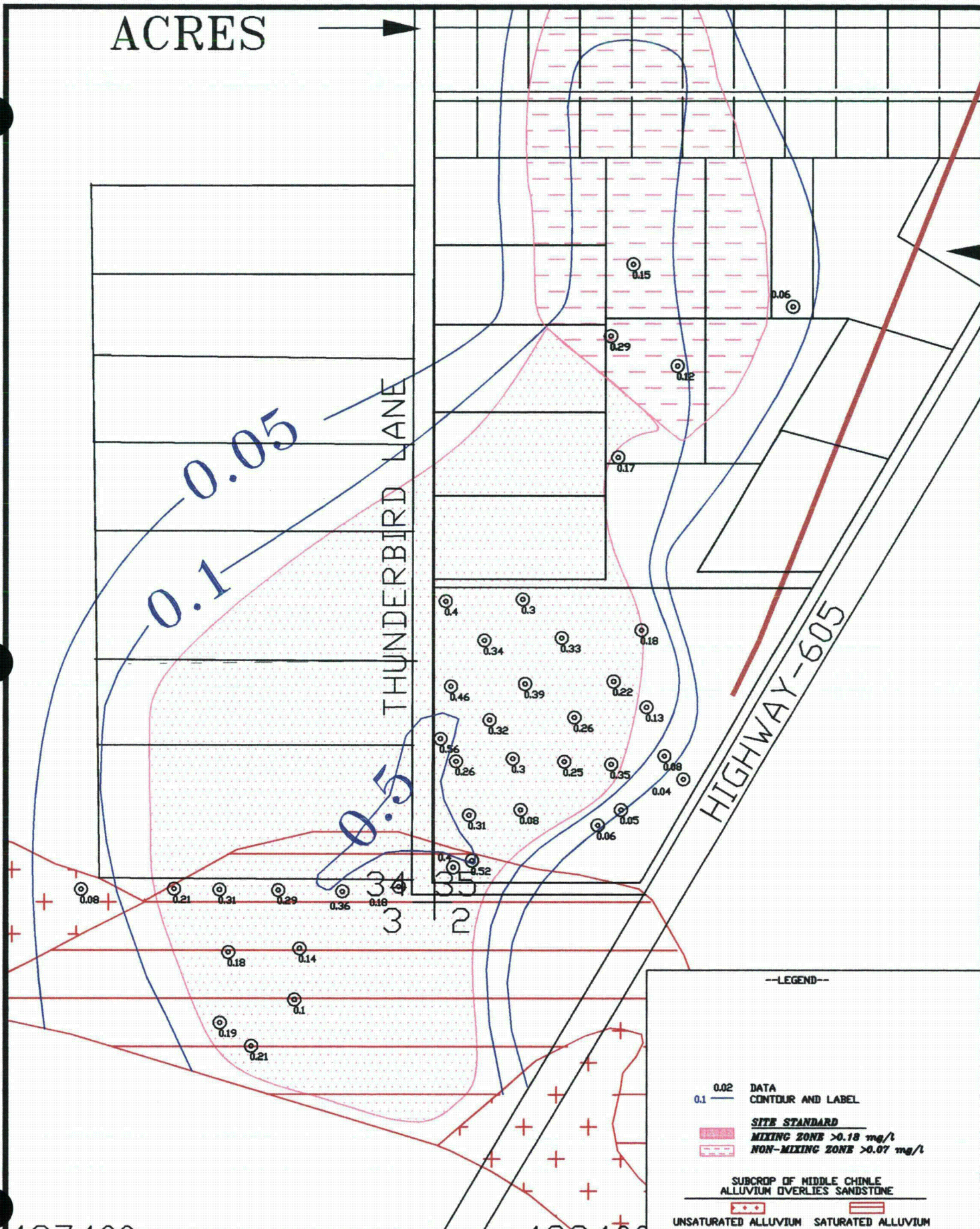


FIGURE 6.3-10. CHLORIDE CONCENTRATIONS FOR NON-MIXING ZONE WELLS 493, ACW, CW2, CW28, AND CW55



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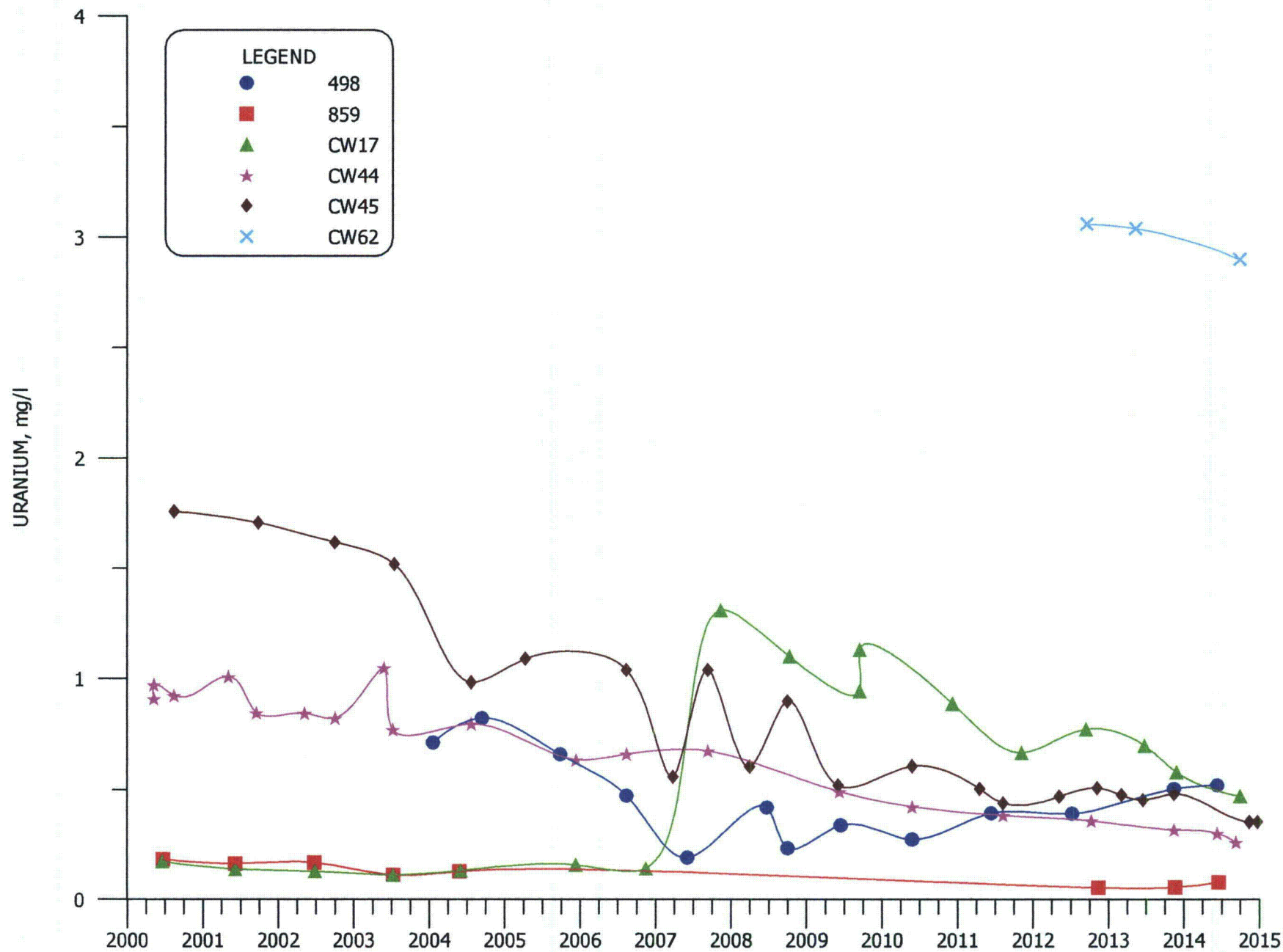
HOMESTAKE MILL AND ADJACENT PROPERTIES ~ GRANTS, NM ~ TOWNSHIP-11&12N, RANGE-10W

DATE: 3/12/15

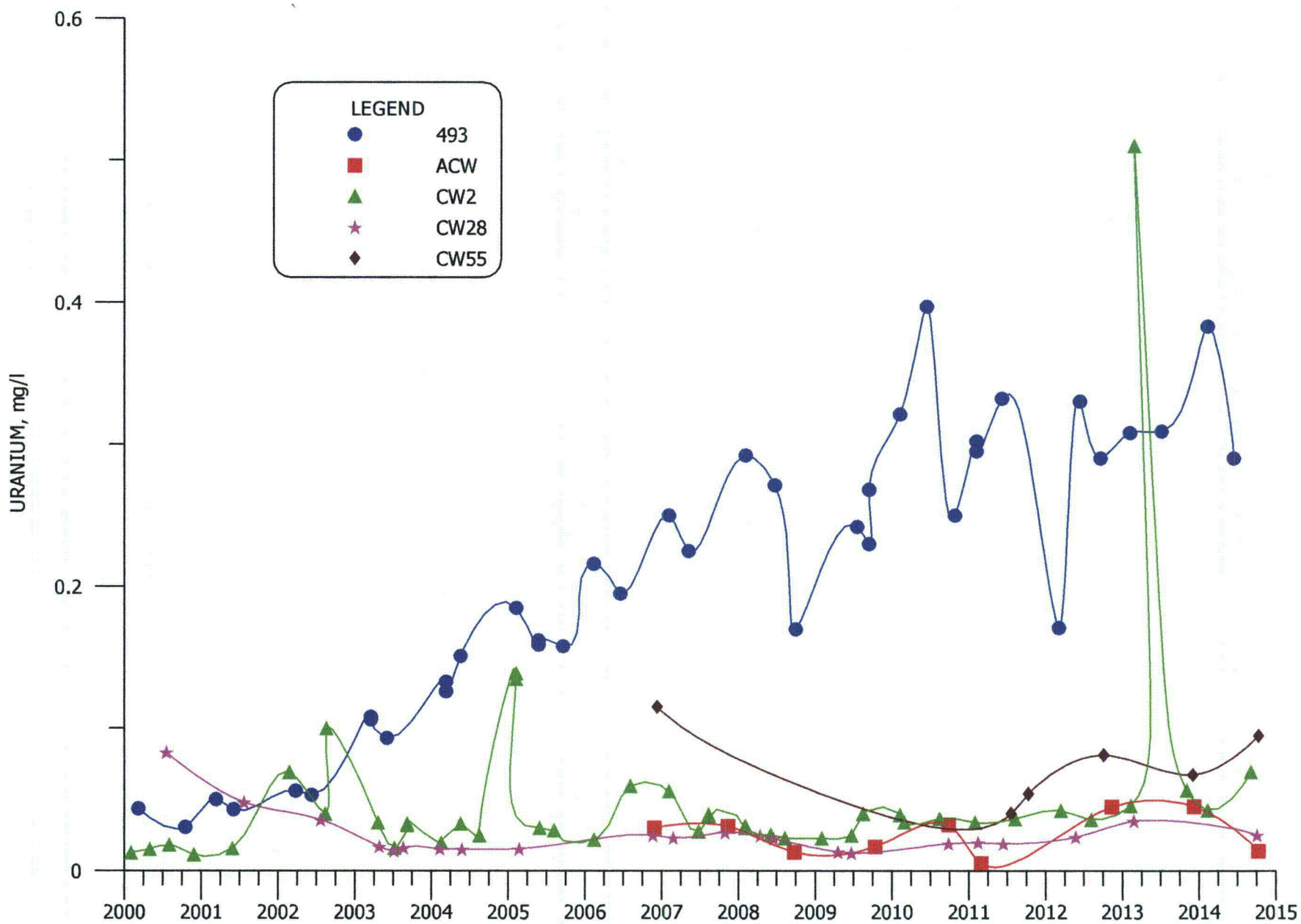
FIGURE 6.3-11A. URANIUM CONCENTRATIONS OF THE MIDDLE CHINLE AQUIFER, SOS, 2014, mg/l

SCALE: 1"=500'

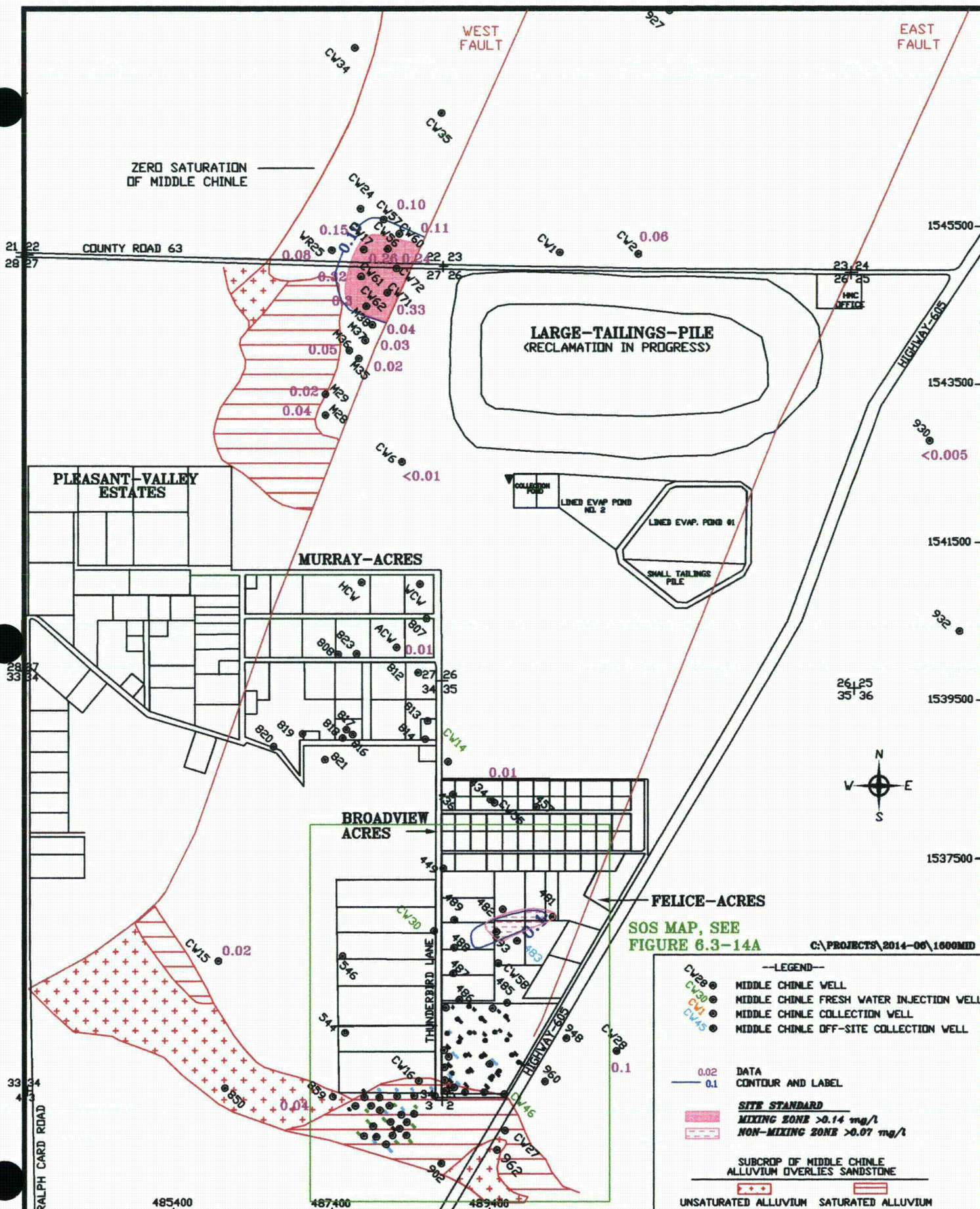
PAGE: 6.3-23



**FIGURE 6.3-12. URANIUM CONCENTRATIONS FOR MIXING ZONE WELLS
498, 859, CW17, CW44, CW45, AND CW62**



**FIGURE 6.3-13. URANIUM CONCENTRATIONS FOR NON-MIXING ZONE WELLS
493, ACW, CW2, CW28, AND CW55**



HOMESTAKE MILL AND ADJACENT PROPERTIES ~ GRANTS, NM ~ TOWNSHIP-11&12N, RANGE-10W

FIGURE 6.3-14. SELENIUM CONCENTRATIONS OF THE MIDDLE CHINLE AQUIFER, 2014, mg/l

DATE: 3/12/15

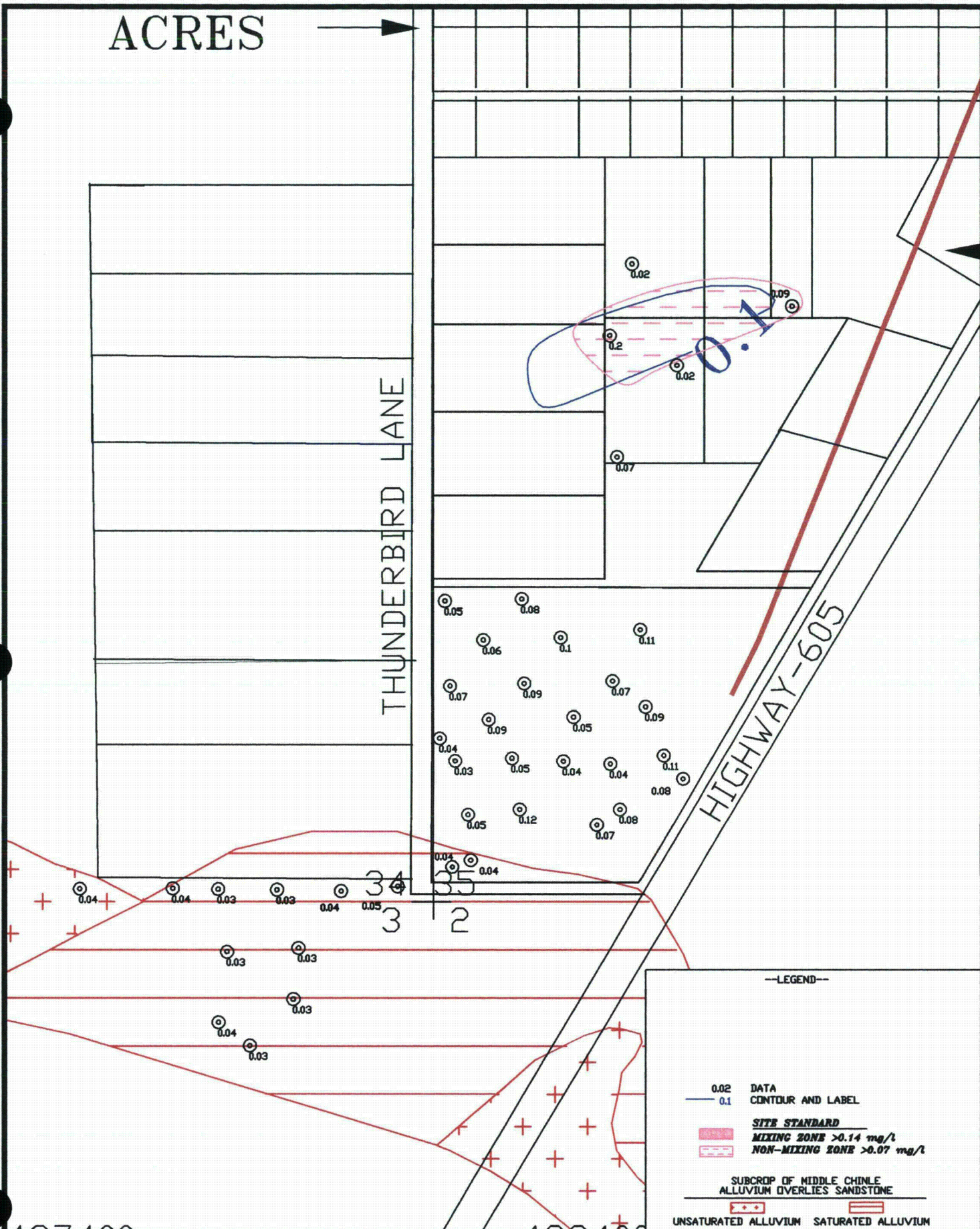
SCALE: 1"=1600'

PAGE: 6.3-26

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HOMESTAKE MILL AND ADJACENT PROPERTIES ~ GRANTS, NM ~ TOWNSHIP-11&12N, RANGE-10W

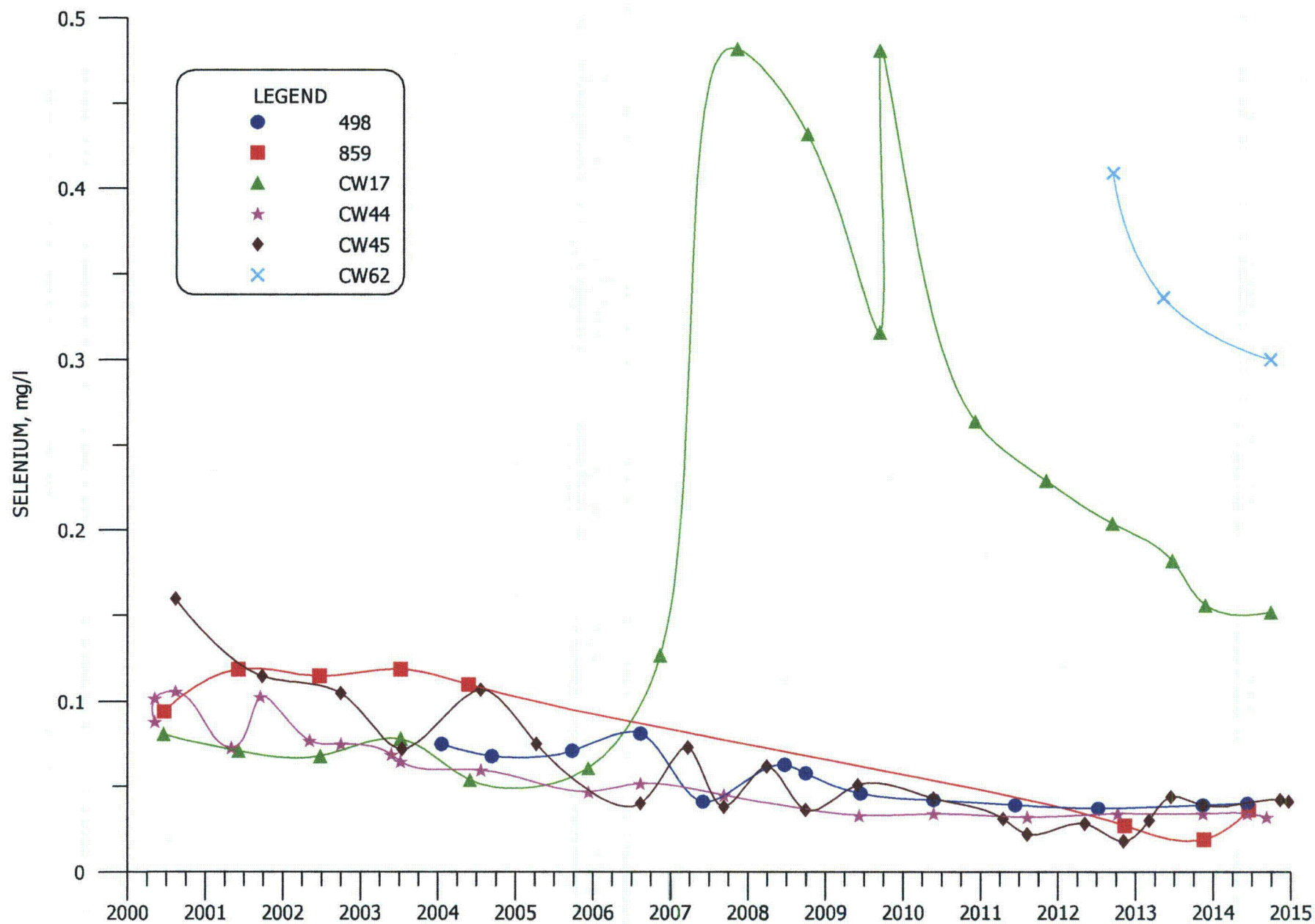
DATE: 3/12/15

FIGURE 6.3-14A. SELENIUM CONCENTRATIONS OF THE MIDDLE CHINLE AQUIFER, SOS, 2014, mg/l

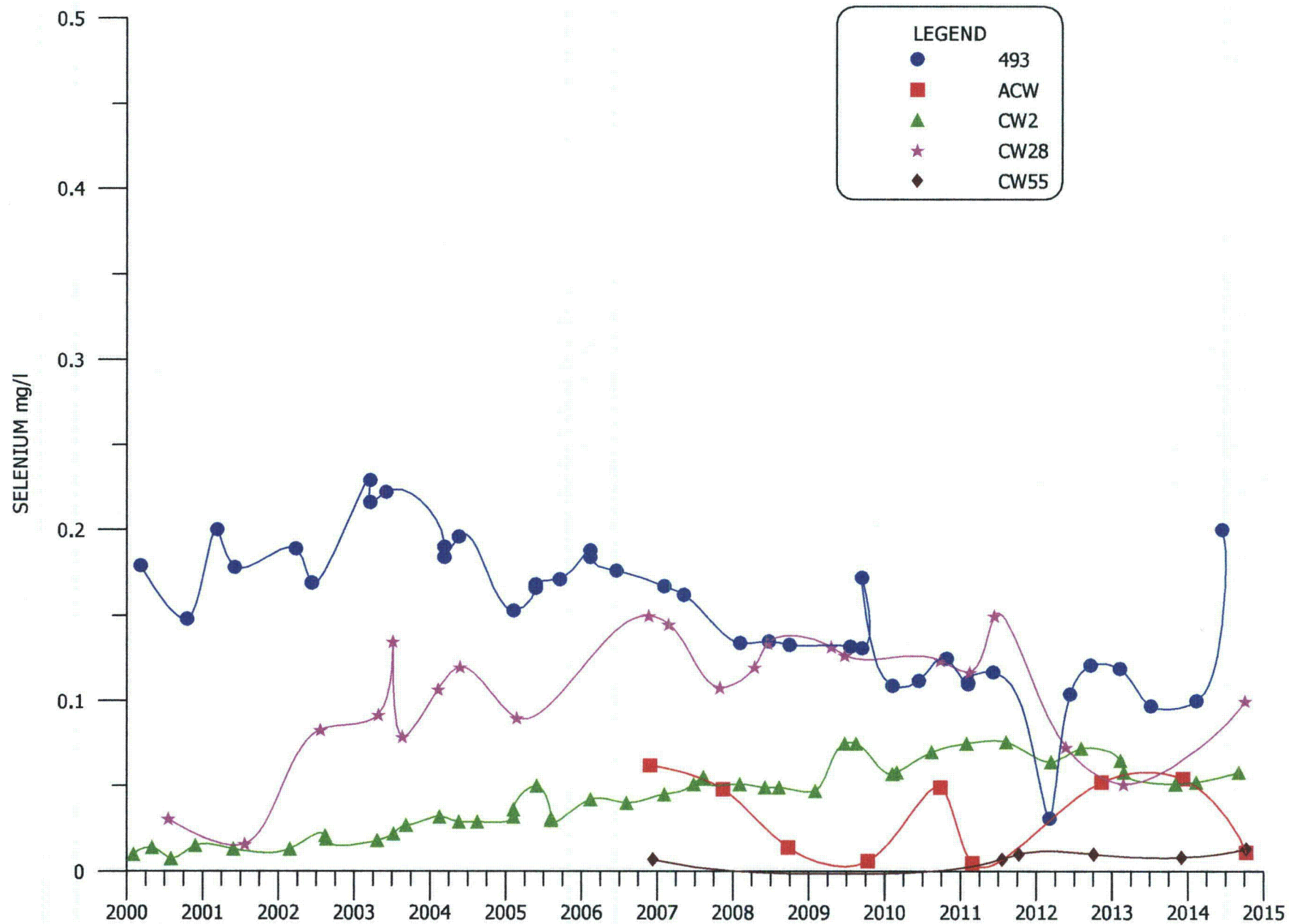
SCALE: 1"=500'

PAGE: 6.3-27

6.3-28



**FIGURE 6.3-15. SELENIUM CONCENTRATIONS FOR MIXING ZONE WELLS
498, 859, CW17, CW44, CW45, AND CW62**

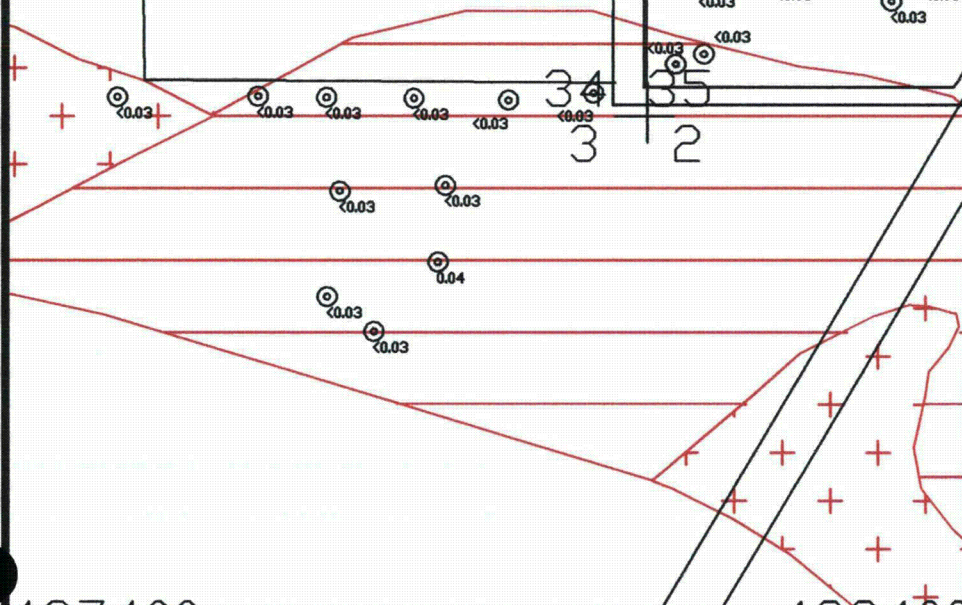


**FIGURE 6.3-16. SELENIUM CONCENTRATIONS FOR NON-MIXING ZONE WELLS
493, ACW, CW2, CW28, AND CW55**

ACRES

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--LEGEND--

<0.03 DATA
0.05 CONTOUR AND LABEL

SITE STANDARD
 MIXING ZONE >0.10 mg/l
 NON-MIXING ZONE >0.10 mg/l

SUBCROP OF MIDDLE CHINLE ALLUVIUM OVERLIES SANDSTONE

UNSATURATED ALLUVIUM SATURATED ALLUVIUM

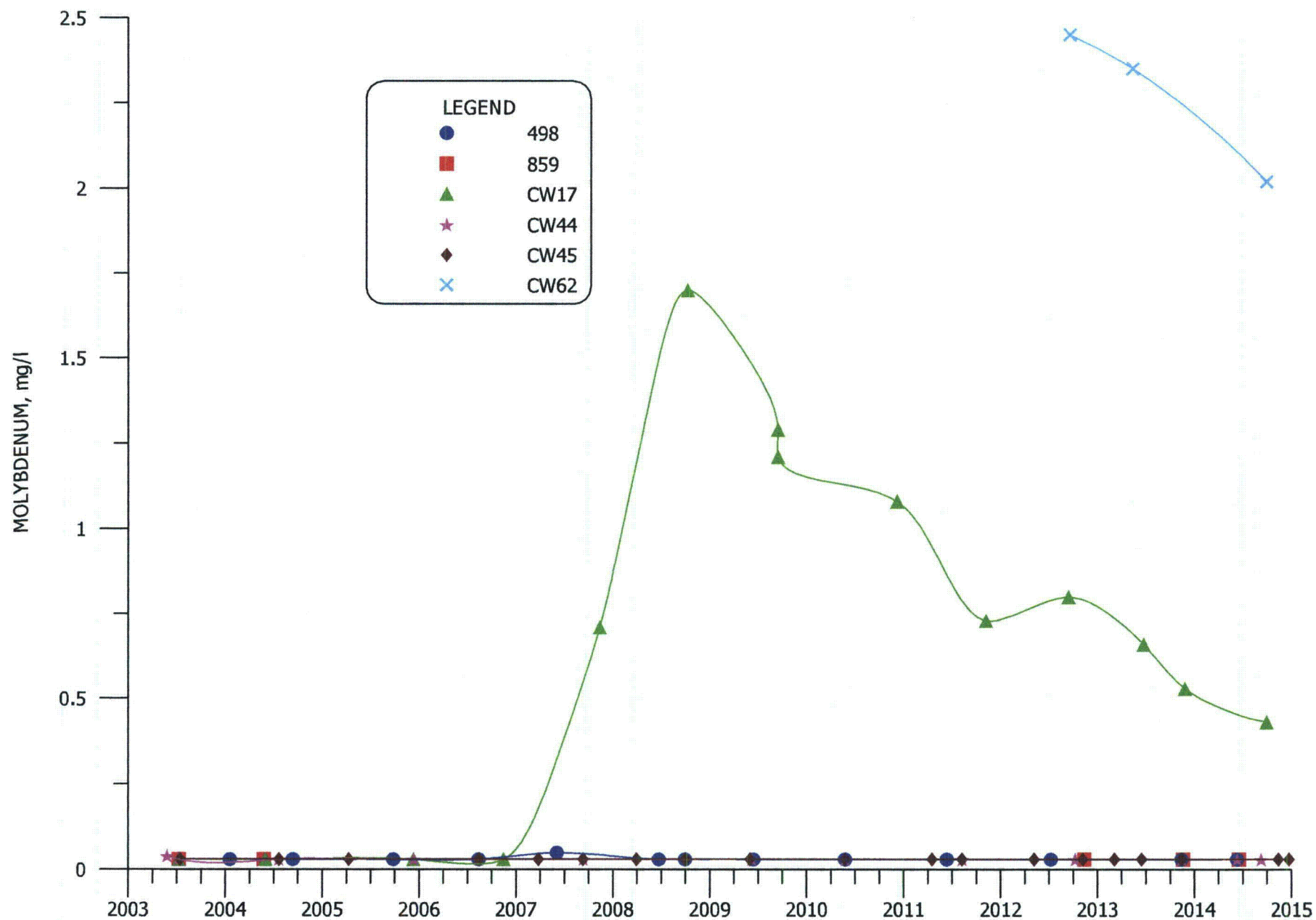
HOMESTAKE MILL AND ADJACENT PROPERTIES ~ GRANTS, NM ~ TOWNSHIP-11&12N, RANGE-10W

DATE: 3/12/15

FIGURE 6.3-17A. MOLYBDENUM OF THE MIDDLE CHINLE AQUIFER, SOS, 2014, mg/l

SCALE: 1"=500'

PAGE: 6.3-31



**FIGURE 6.3-18. MOLYBDENUM CONCENTRATIONS FOR MIXING ZONE WELLS
498, 859, CW17, CW44, CW45, AND CW62**

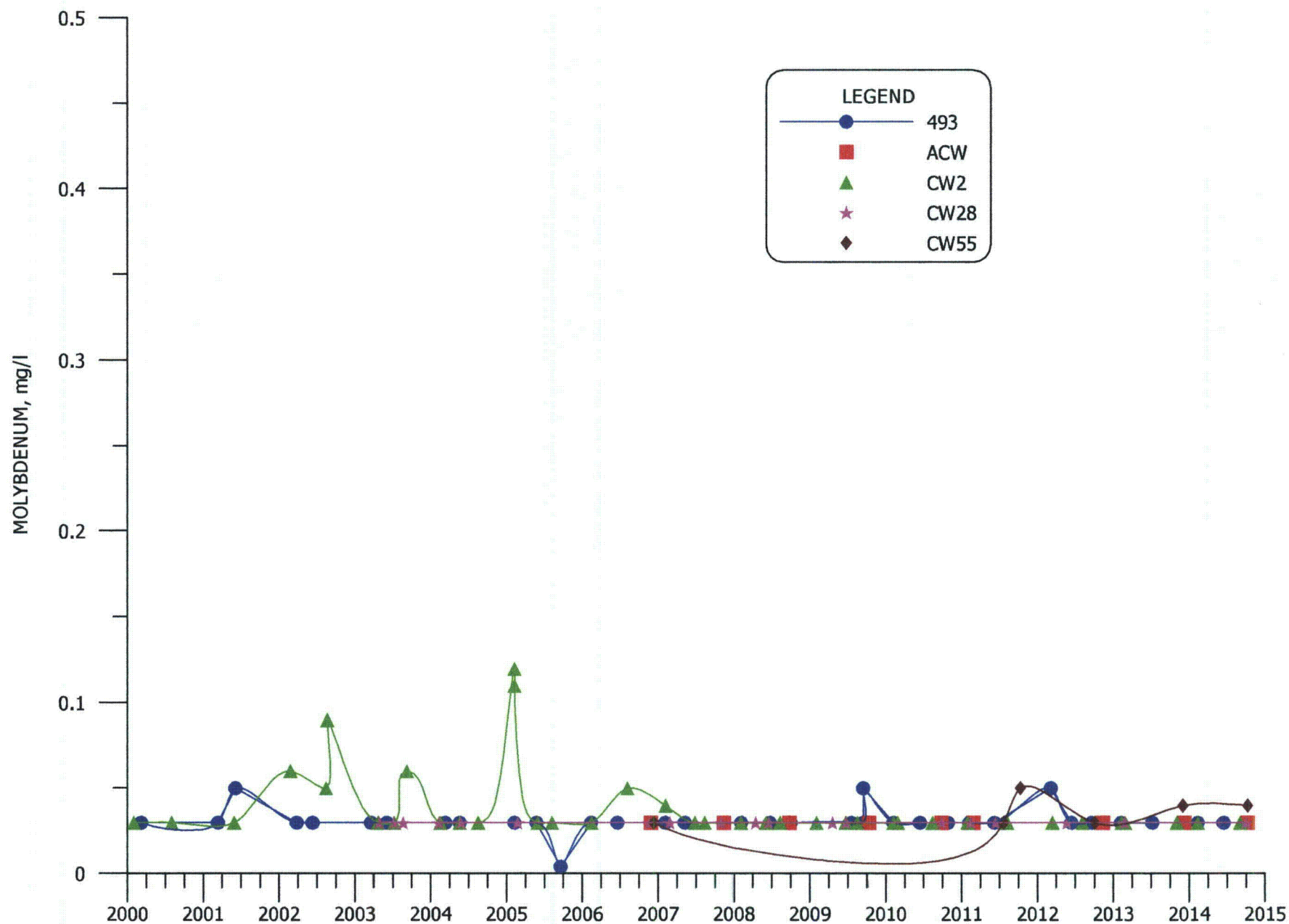


FIGURE 6.3-19. MOLYBDENUM CONCENTRATIONS FOR NON-MIXING ZONE WELLS 493, ACW, CW2, CW28, AND CW55

