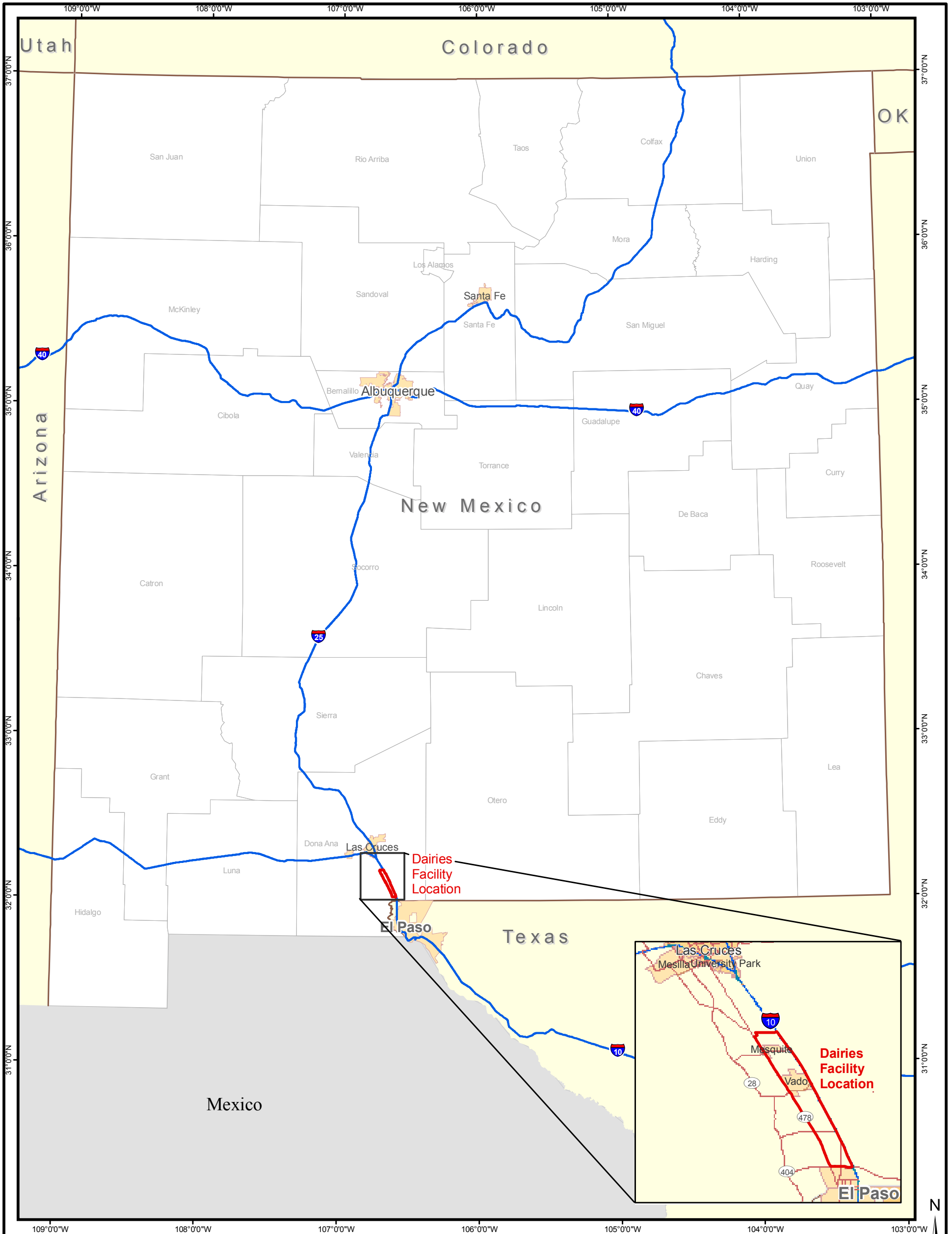


**FIGURES**

---

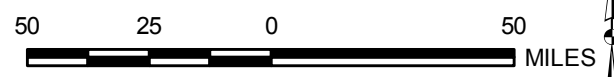


**LEGEND:**


 Facility Boundary

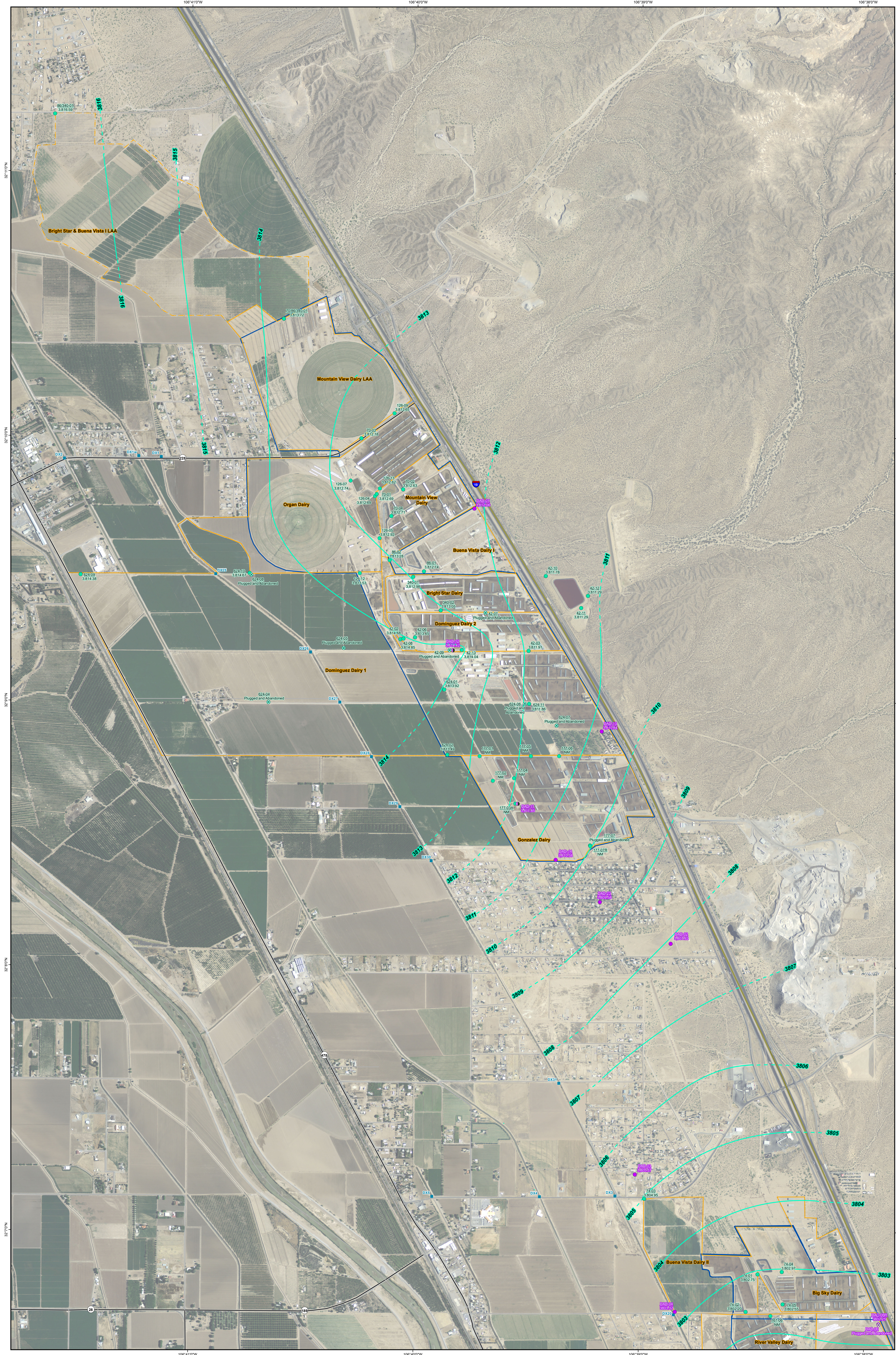
**REFERENCES**

Base Data: ESRI, 2008.



SCALE 1:2,500,000  
WHEN PRODUCED AT 11X17IN

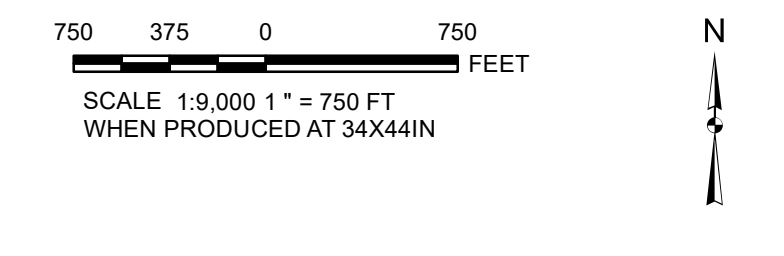
PROJECT		DOÑA ANA DAIRIES MESQUITE, NEW MEXICO	
TITLE		SITE LOCATION MAP	
	PROJECT No.	11x17_siteloc.mxd	
	DESIGN		SCALE AS SHOWN
	GIS		REV 0
	CHECK		
REVIEW			
			<b>FIGURE 1</b>



- LEGEND**
- Discharge Plan Well With Water Elevations (Feet MSL)
  - Abatement Plan Well With Water Elevations (Feet MSL)
  - Abatement Plan Vertical Delineation (Feet MSL)
  - Monitoring Well with Water Elevation (Feet MSL)
  - ⊗ AP P&A
  - ⊗ DP Destroyed, Discharge Plan Well with Water Elevations (Feet MSL)
  - Drain Crossing Location
  - Potentiometric Contour
  - - - Potentiometric Contour - Assumed
  - Interstate Highway
  - State Highway
  - Other Road
  - Land Owned by Dairies
  - Land Application on Non-Dairy Property
  - Stage 2 Abatement Plan Area

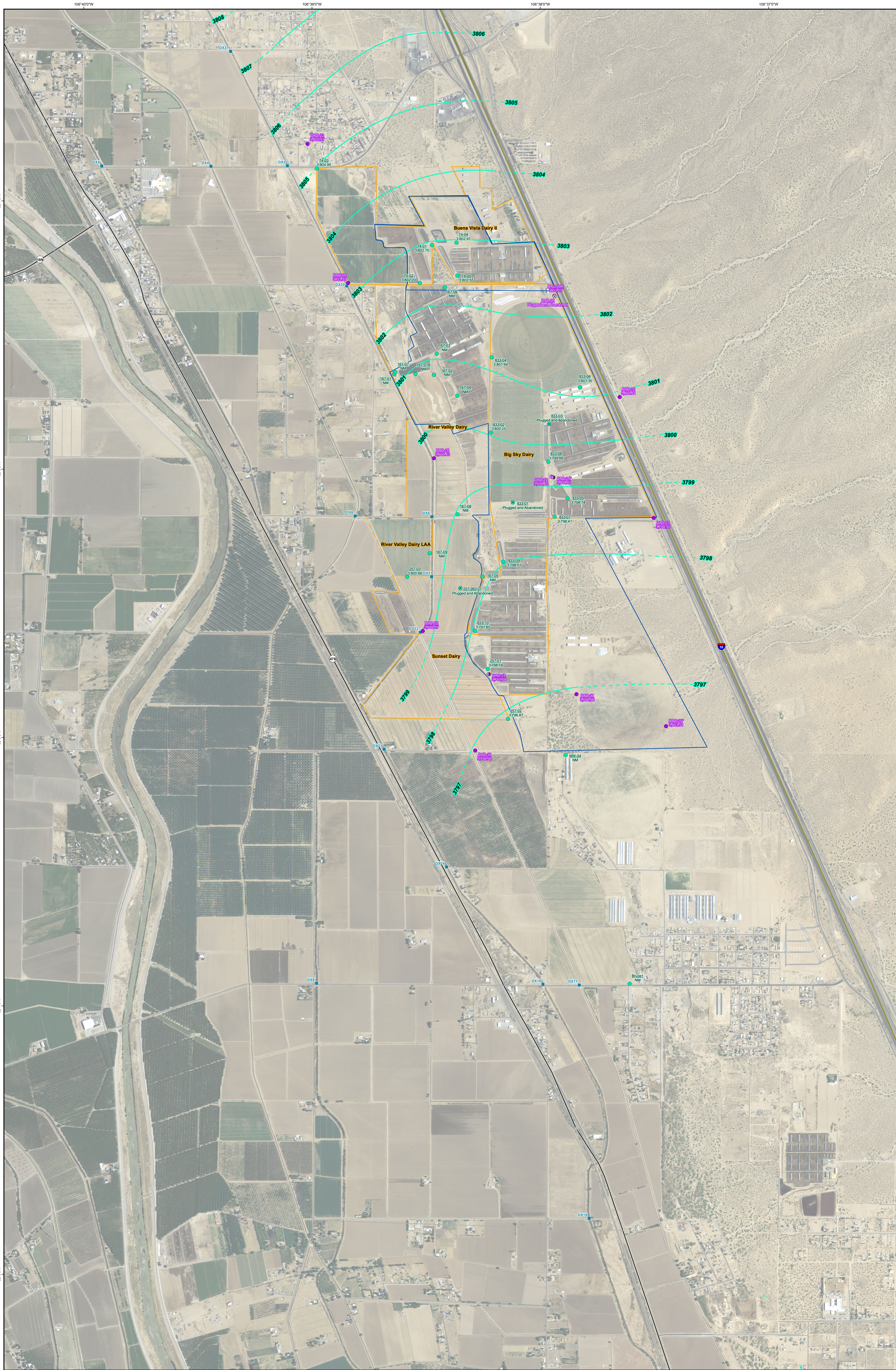
**Notes:**  
 \* = Well not used in contouring  
 Feet MSL = Feet above mean sea level  
 NM = Not measured

**REFERENCES**  
 Roads: Dona Ana County, 2001  
 Aerial Photography: NAIP, 2011  
 NAD 83, UTM, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)



PROJECT		DOÑA ANA DAIRIES MESQUITE, NEW MEXICO	
DATE		POTENTIOMETRIC SURFACE MAP, FEBRUARY 2023, NORTHERN PORTION	
PROJECT NO.	DATE	SCALE	FIGURE 2
DATE	DATE	DATE	
DATE	DATE	DATE	

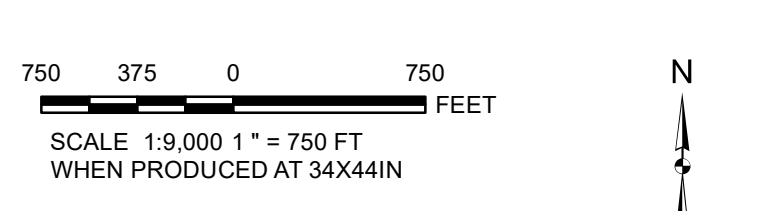
2023-02-17 10:00:00 AM \\fs01\GIS\Projects\2023\20230217\20230217\_PotentialSurfaceMap\20230217\_PotentialSurfaceMap.aprx



- Discharge Plan Well with Water Elevation (Feet MSL)
- Abatement Plan Well With Water Elevations (Feet MSL)
- Abatement Plan Vertical Delineation Well (Feet MSL)
- Abatement Plan Well - Plugged and Abandoned
- Discharge Plan Well - Plugged and Abandoned
- Drain Crossing Location
- Legend-Contours
- Land Owned by Dairies
- Land Application on Non-Dairy Property
- Stage 2 Abatement Plan

Note:  
 ● = Well not used in contouring  
 Feet MSL = Feet above mean sea level  
 NM = Not measured

**REFERENCES**  
 Roads: Doña Ana County, 2001  
 Aerial Photography: NAIP, 2011  
 U.S.G.S, 8.5M, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)

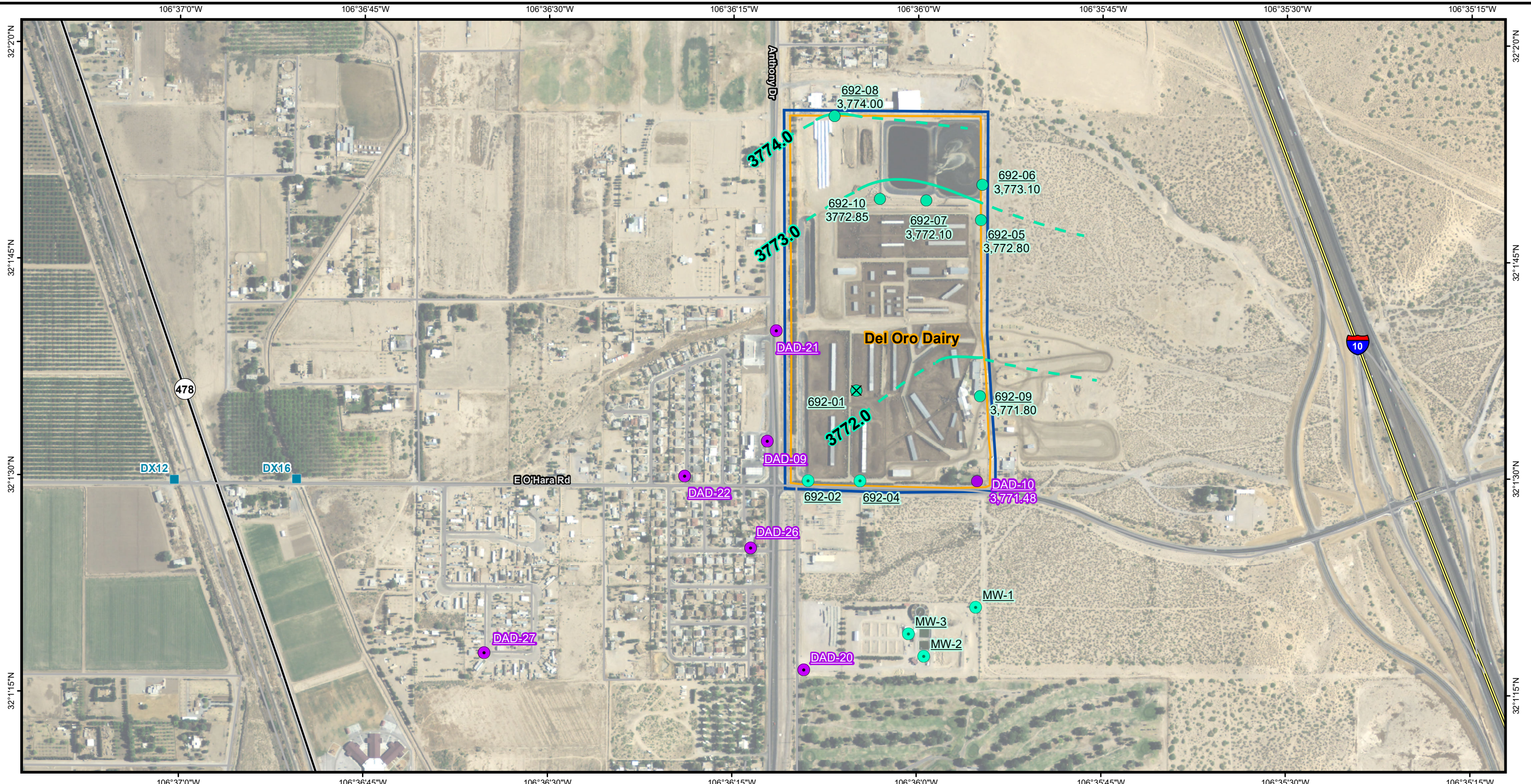


PROJECT: DOÑA ANA DAIRIES  
 MESQUITE, NEW MEXICO

DATE: POTENTIOMETRIC SURFACE MAP  
 FEBRUARY 2023, CENTRAL PORTION

PROJECT NO:	DATE:
DRAWN BY:	CHECKED BY:
SCALE:	FIGURE 3

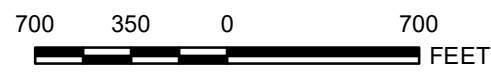
2023-05-26 P:\gis2\Commercial\Dona Ana Dairies - 1464109\05 Feb 2023\Projects\Fig 4 SouthRegionAq\_Pot\_2023\_02.mxd EA-Abuquerque sinch



**LEGEND:**

- Drain Crossing Location
- Abatement Plan Well With Water Elevations (Feet Above Mean Sea Level)
- Discharge Plan Well with Water Elevation (Feet Above Mean Sea Level)
- ✕ Discharge Plan Well - Plugged and Abandoned
- Abatement Plan Well With Water Elevations (Feet Above Mean Sea Level)
- Discharge Plan Well with Water Elevation (Feet Above Mean Sea Level)
- Potentiometric Contour
- - - Potentiometric Contour - Assumed
- Land Owned by Dairies
- Stage 2 Abatement Plan Area

**REFERENCES**  
 Aerial Photography: NAIP, 2011  
 PLSS: BLM, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)

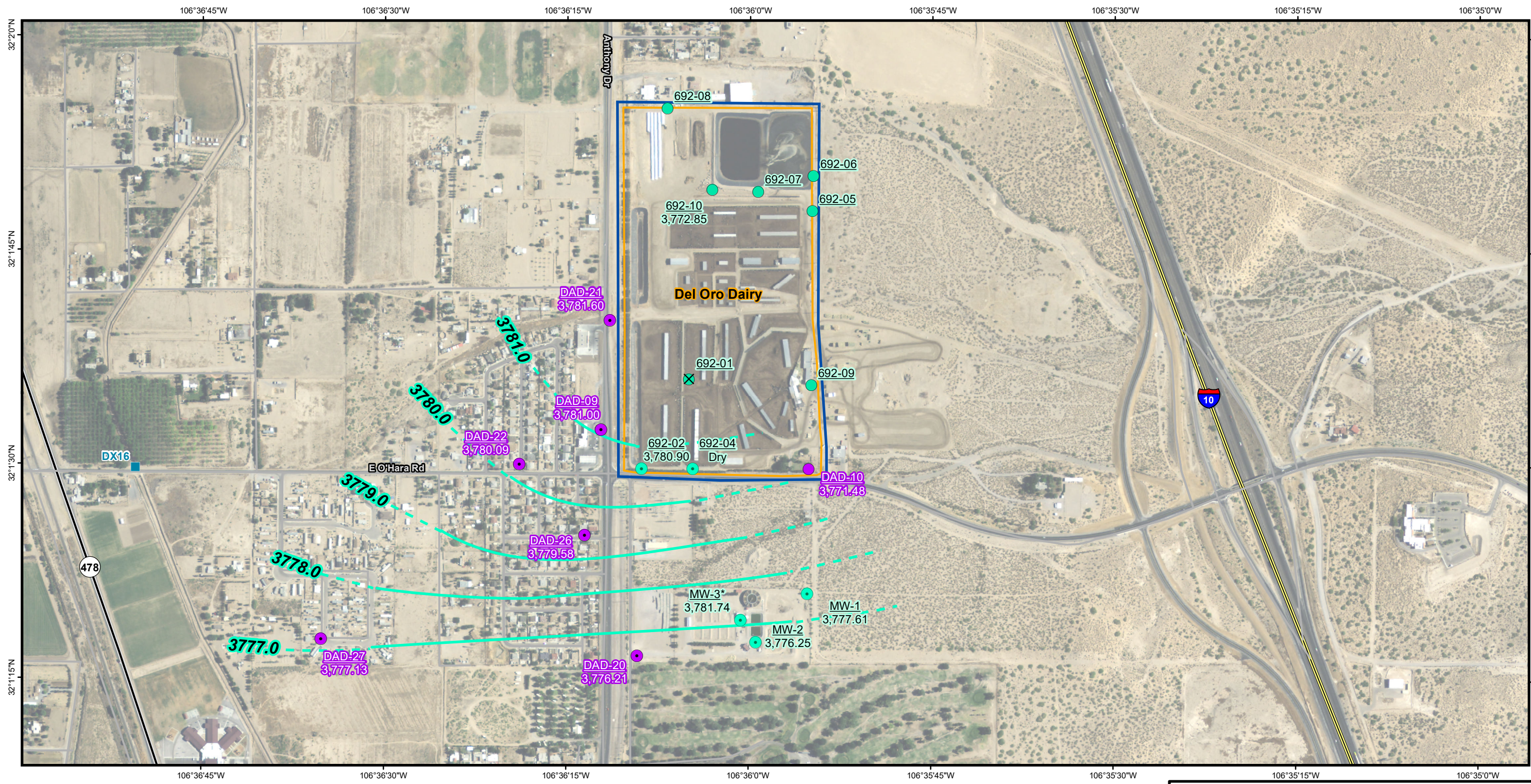


SCALE 1:8,400 1" = 700 FT  
 WHEN PRODUCED AT 11X17IN



<b>PROJECT</b>			
<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>TITLE</b>			
<b>POTENTIOMETRIC SURFACE MAP FEBRUARY 2023, SOUTHERN PORTION REGIONAL AQUIFER</b>			
	PROJECT No. 1464109.05		Fig 4 SouthRegionAq_Pot.mxd
	DESIGN	NA	SCALE AS SHOWN
	GIS	RMM	REV 0
	CHECK		
REVIEW			
			FIGURE 4

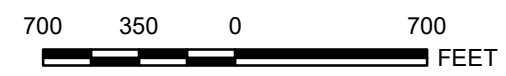
2023-05-26 P:\gis2\Commercial\Dona Ana Dairies - 1464109\05 Feb 2023\Projects\Fig 5 SouthPerchAq\_Pot\_2023\_02.mxd EA-Albuquerque slfnch



**LEGEND:**

- Drain Crossing Location
- Perched Aquifer Monitoring Well**
  - Abatement Plan Well With Water Elevations (Feet Above Mean Sea Level)
  - Discharge Plan Well with Water Elevation (Feet Above Mean Sea Level)
  - X Discharge Plan Well - Plugged and Abandoned
- Regional Aquifer Monitoring Well**
  - Abatement Plan Well With Water Elevations (Feet Above Mean Sea Level)
  - Discharge Plan Well with Water Elevation (Feet Above Mean Sea Level)
- Potentiometric Contour
- - - Potentiometric Contour - Assumed
- Land Owned by Dairies
- Stage 2 Abatement Plan Area

**Note:**  
\* = Not used in contouring.



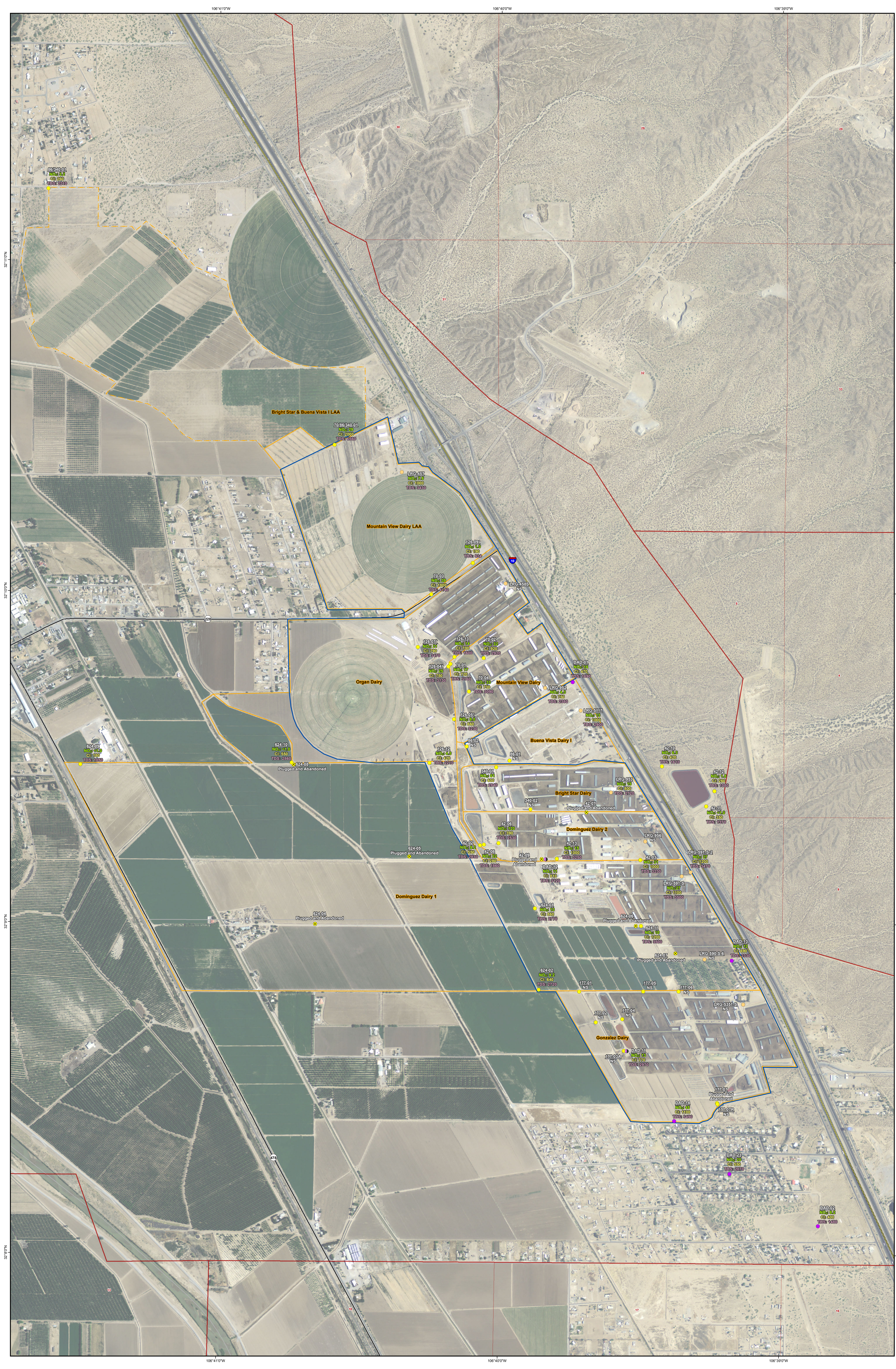
SCALE 1:8,400 1" = 700 FT  
WHEN PRODUCED AT 11X17IN



**REFERENCES**

Aerial Photography: NAIP, 2011  
PLSS: BLM, 2000  
Projection: State Plane NAD 83 New Mexico Central (feet)

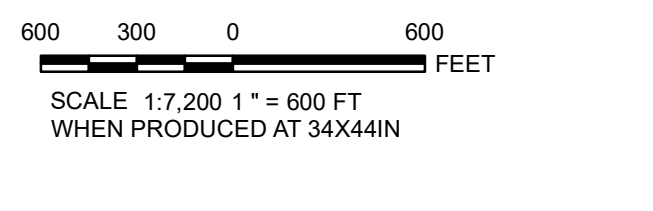
<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>POTENTIOMETRIC SURFACE MAP FEBRUARY 2023, SOUTHERN PORTION PERCHED AQUIFER</b>			
	PROJECT No. 1464109.05		SCALE AS SHOWN
	DESIGN	NA	REV 0
	GIS	RMM	
	CHECK		
	REVIEW		
			<b>FIGURE 5</b>



- LEGEND:**
- Abatement Plan Monitoring Well
  - Discharge Plan Monitoring Well
  - Discharge Plan Monitoring Well, Plugged and Abandoned or Destroyed
  - Dairy Irrigation/Supply Well
  - Abatement Plan Vertical Delineation Monitoring Well
  - Interstate Highway
  - State Highway
  - Other Road
  - Land Owned by Dairies
  - Land Application on Non-Dairy Property
  - Stage 2 Abatement Plan Area

**NOTES:**  
 Units are in milligrams per liter.  
 \* Data are from May 2022.  
 Cl = Chloride  
 LRG = irrigation well  
 NO<sub>3</sub> = Nitrate as N  
 NS = Not Sampled  
 TDS = Total Dissolved Solids

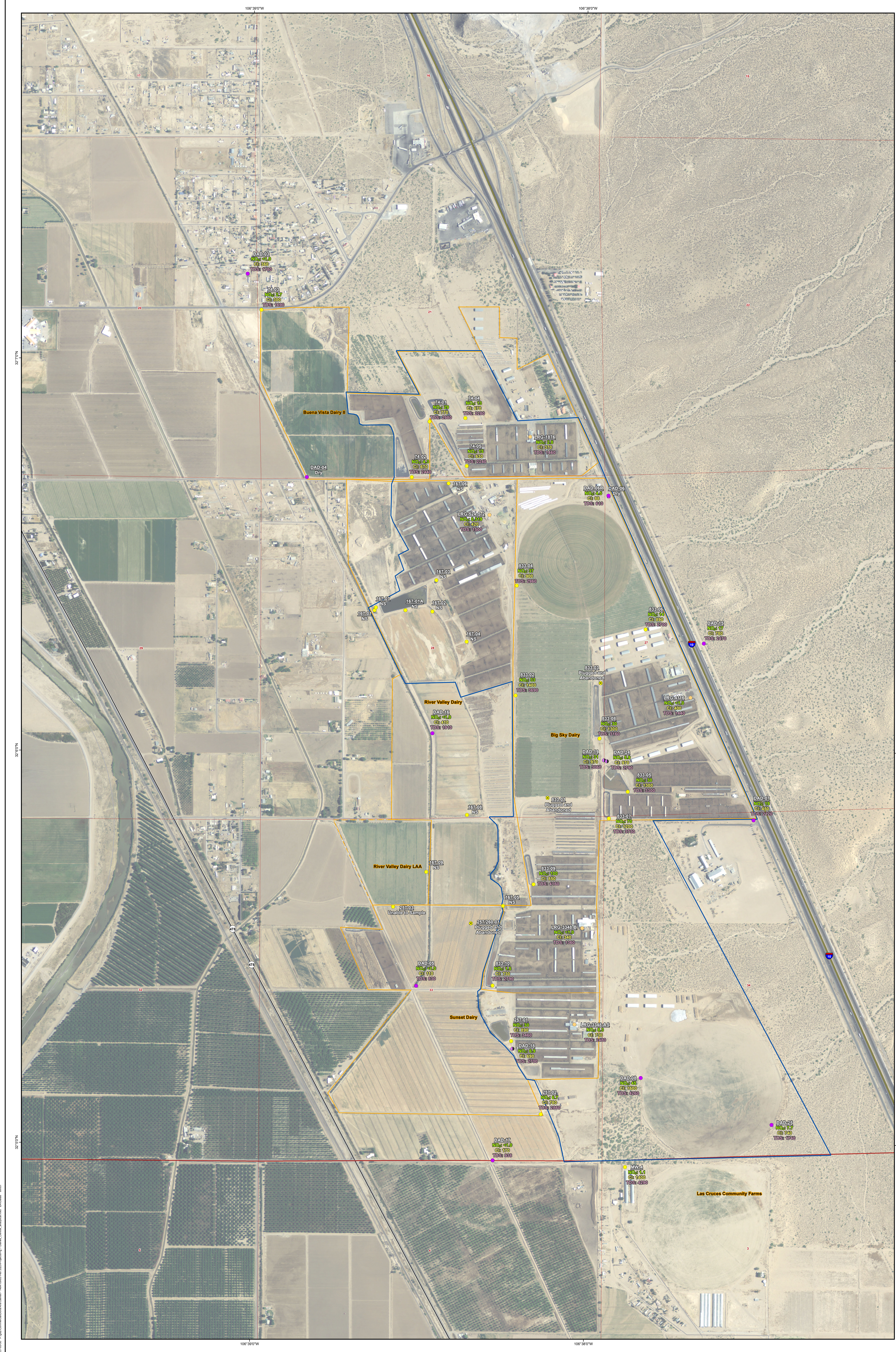
**REFERENCES**  
 Roads: Dona Ana County, 2001  
 Aerial Photography: NAIP, 2011  
 F.S.S. 84.W. 2002  
 Projection: State Plane NAD 83 New Mexico Central (feet)



PROJECT: **DOÑA ANA DAIRIES**  
**MESQUITE, NEW MEXICO**  
 TITLE: **GROUNDWATER ANALYTICAL RESULTS**  
**FEBRUARY/MARCH 2023**  
**NORTHERN PORTION**  
 SCALE: 1:7,200 (1" = 600 FT)  
 WHEN PRODUCED AT 34x44IN

EA **FIGURE 6**

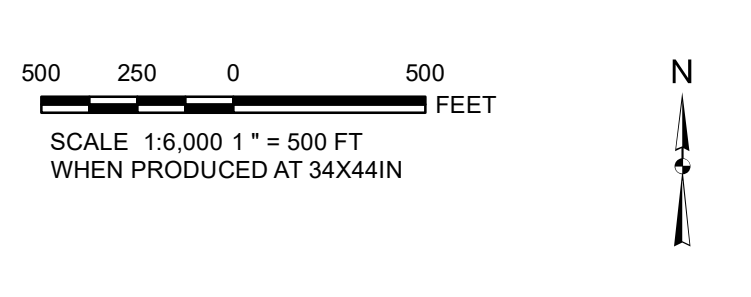
2023 01 18 10:50:00 AM C:\Users\jdoyle\OneDrive\Documents\188188831\03\_2023\Groundwater Data\Map\_0323\Map\_0323.mxd EA/James W. Doyle



- LEGEND:**
- Abatement Plan Monitoring Well
  - Abatement Plan Monitoring Well, Plugged and Abandoned
  - Discharge Plan Monitoring Well, Plugged and Abandoned
  - Abatement Plan Vertical Delineation Monitoring Well
  - Interstate Highway
  - State Highway
  - Other Road
  - ▭ Land Owned by Dairies
  - ▭ Land Application on Non-Dairy Property
  - ▭ Stage 2 Abatement Plan Area

**Notes:**  
 Units are in milligrams per liter.  
 Cl = Chloride  
 LRG = Irrigation Well  
 NO<sub>3</sub> = Nitrate as N  
 NS = Not Sampled  
 TDS = Total Dissolved Solids

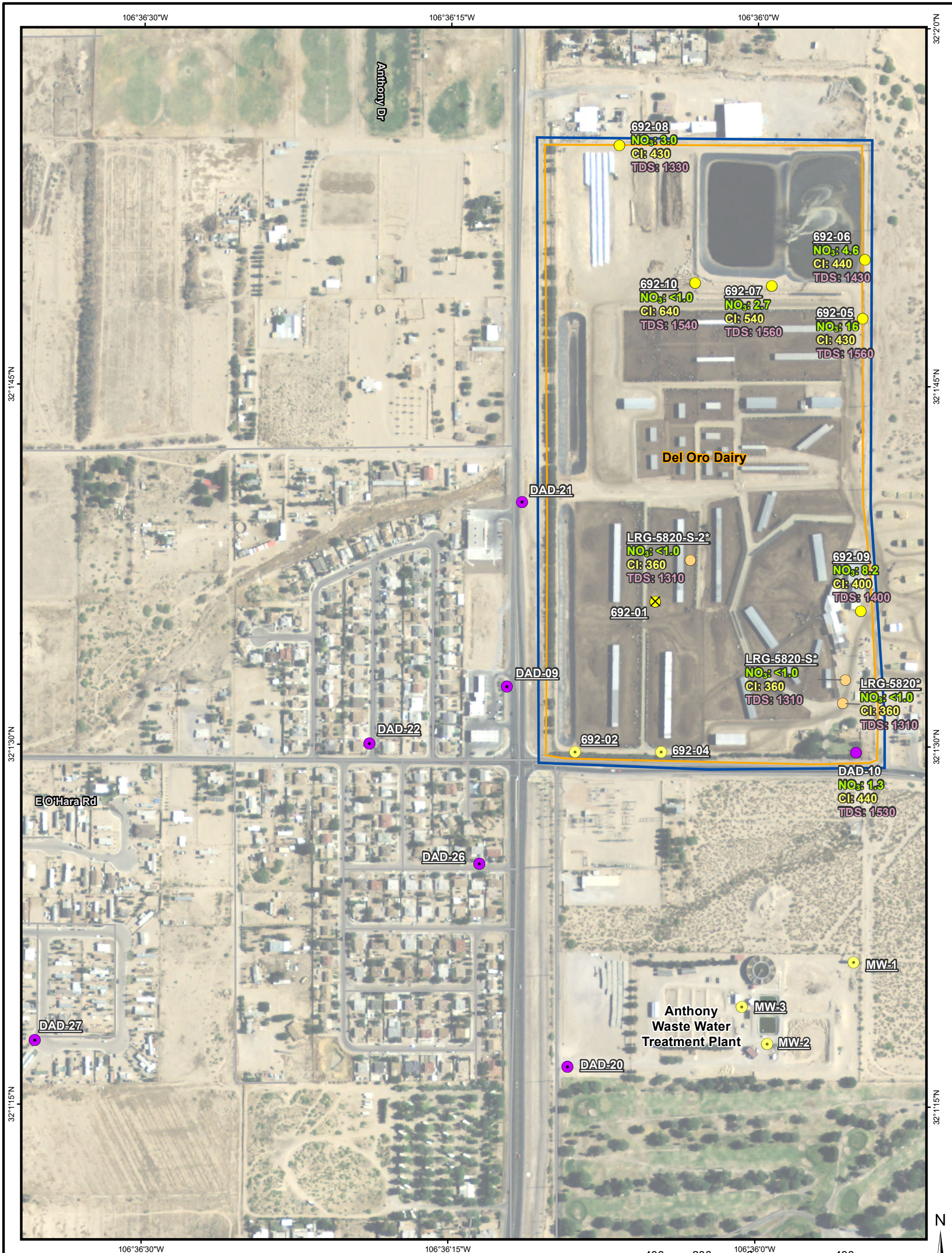
**REFERENCES**  
 Roads: Doña Ana County, 2011  
 Aerial Photography: NAIP, 2011  
 FIPS: 844, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)



PROJECT	DOÑA ANA DAIRIES MESQUITE, NEW MEXICO		
DATE	FEBRUARY/MARCH 2023		
REPORT	CENTRAL PORTION		
FIGURE	FIGURE 7		

2023-03-01 P:\GIS\Projects\Doña Ana Dairies - 18482023.rpt 2023/03/01 10:48:11 AM





**LEGEND :**

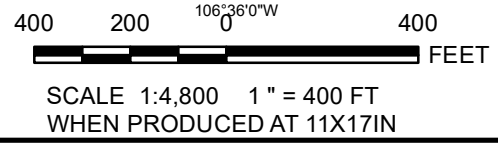
- Dairy Irrigation/Supply Well
- Perched Aquifer Monitoring Well**
- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- ✕ Discharge Plan Monitoring Well - Plugged and Abandoned
- Regional Aquifer Monitoring Well**
- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- Land Owned by Dairies
- Stage 2 Abatement Plan Area

**Notes:**

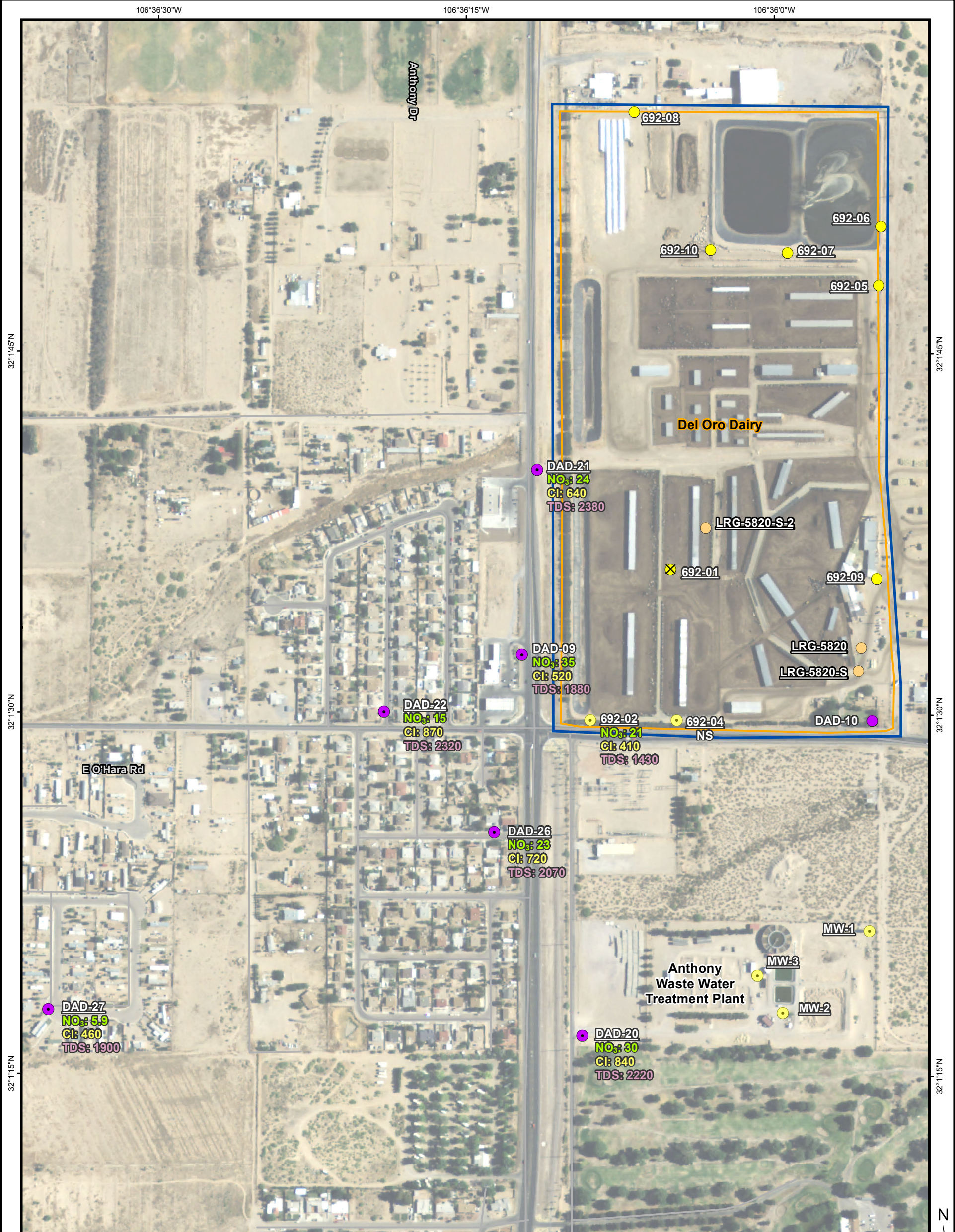
Units are in milligrams per liter.  
 \* Result represents a composite sample from a water tank supplied by wells LRG-5820, LRG-5820-S, and LRG-5820-S-2.  
 Cl = Chloride  
 LRG = irrigation well  
 NO<sub>3</sub> = Nitrate as N  
 TDS = Total Dissolved Solids

**REFERENCES**

Aerial Photography: NAIP, 2011  
 PLSS: BLM, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)



<b>PROJECT</b>			
<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>TITLE</b>			
<b>GROUNDWATER ANALYTICAL RESULTS FEBRUARY/MARCH 2023 SOUTHERN PORTION, REGIONAL AQUIFER</b>			
	PROJECT No. 1464109.04	SCALE AS SHOWN	REV 0
	DESIGN NA		
	GIS RM		
	CHECK		
REVIEW			
			<b>FIGURE 8</b>

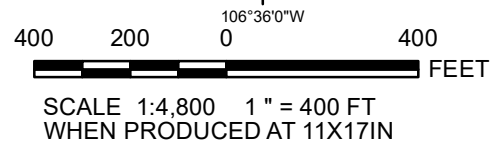


**LEGEND:**

- Dairy Irrigation/Supply Well
- Perched Aquifer Monitoring Well**
- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- ✕ Discharge Plan Monitoring Well - Plugged and Abandoned
- Regional Aquifer Monitoring Well**
- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- Land Owned by Dairies
- Stage 2 Abatement Plan Area

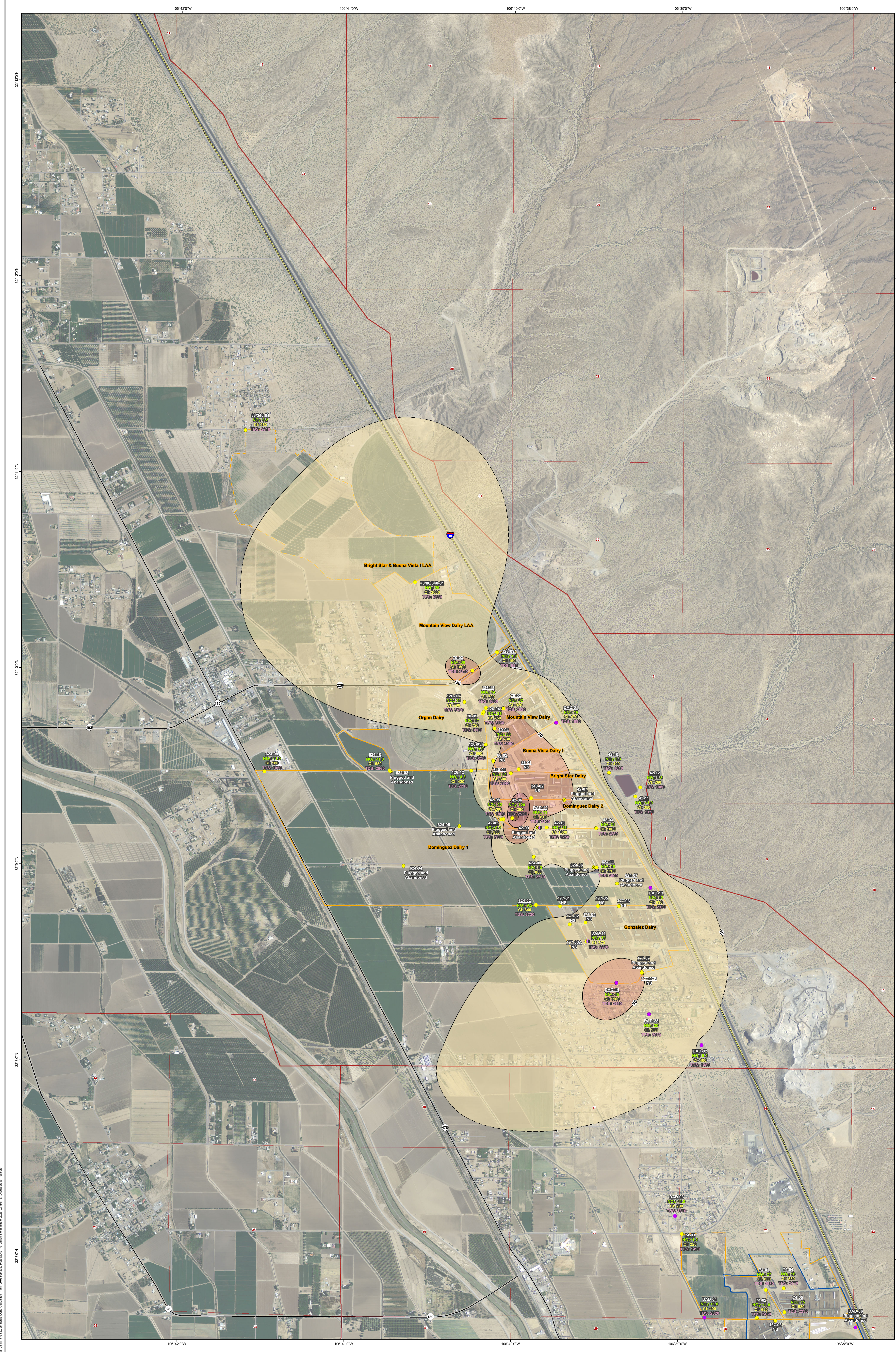
**Notes:**  
 Units are in milligrams per liter.  
 Cl = Chloride  
 LRG = irrigation well  
 mg/L = Milligram(s) per liter  
 NO<sub>3</sub> = Nitrate as N  
 NS = Not sampled  
 TDS = Total Dissolved Solids

**REFERENCES**  
 Aerial Photography: NAIP, 2011  
 PLSS: BLM, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)



<b>PROJECT</b>			
<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>TITLE GROUNDWATER ANALYTICAL RESULTS FEBRUARY/MARCH 2023 SOUTHERN PORTION, PERCHED AQUIFER</b>			
	PROJECT No. 1464109.04		SCALE AS SHOWN
	DESIGN	NA	REV 0
	GIS	RM	
	CHECK		
REVIEW			<b>FIGURE 9</b>

2023-05-30 P:\gis2\Commercial\Dona Ana Dairies - 1464109\05 Feb 2023\Projects\Fig 9 SouthPerchAq\_Analytical.mxd EA-Dallas sfinch



**LEGEND:**

- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well - Plugged and Abandoned
- Abatement Plan Vertical Delineation Well
- Interstate Highway
- State Highway
- Other Road
- Land Owned by Dairies
- Land Application on Non-Dairy Property
- Stage 2 Abatement Plan Area
- Public Land Survey System
- Township and Range

**Notes:**  
 Units are in milligrams per liter.  
 Dashed line indicates manually drawn isopleth. Solid line indicates that the isopleth was generated by ArcGIS.  
 Data from vertical delineation wells were not used in modeling.  
 \* Data are from May 2022.

Cl = Chloride  
 mg/L = Milligrams per liter  
 NO<sub>3</sub>-N = Nitrate as N  
 NS = Not Sampled  
 TDS = Total Dissolved Solids

**REFERENCES**

Roads: Doña Ana County, 2001  
 Aerial Photography: NAIP, 2011  
 FIPS: 3449, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)

1,000 500 0 500  
 FEET

SCALE 1:12,000 1" = 1,000 FT  
 WHEN PRODUCED AT 34X44IN

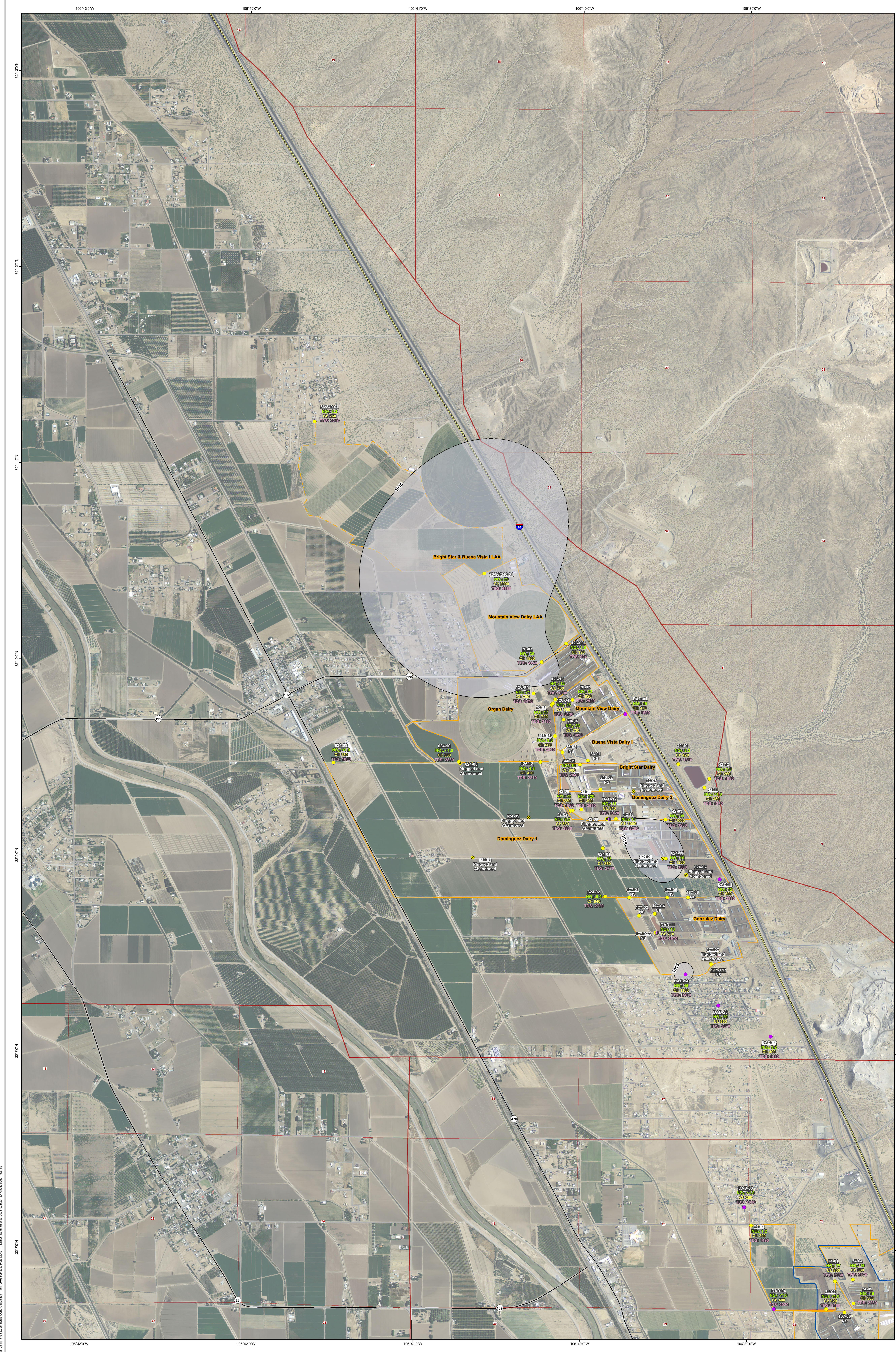
**DOÑA ANA DAIRIES  
 MESQUITE, NEW MEXICO**

**NITRATE DISTRIBUTION IN GROUNDWATER  
 FEBRUARY/MARCH 2023  
 NORTHERN PORTION**

**EA**

PROJECT: DOÑA ANA DAIRIES MESQUITE, NEW MEXICO  
 DRAWING: NITRATE DISTRIBUTION IN GROUNDWATER FEBRUARY/MARCH 2023 NORTHERN PORTION  
 DATE: 2/23/23  
 SCALE: 1:12,000  
 SHEET: 1 OF 1

**FIGURE 10**



- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- Discharge Plan Monitoring Well - Plugged and Abandoned
- Abatement Plan Vertical Delineation Well
- Interstate Highway
- State Highway
- Other Road
- Land Owned by Dairies
- Land Application on Non-Dairy Property
- Stage 2 Abatement Plan Area
- Public Land Survey System
- Township and Range
- Chloride Concentration (mg/L)
- 1,015-2,000

**Notes:**  
 Units are in milligrams per liter.  
 Dashed line indicates manually drawn isopleth. Solid line indicates that the isopleth was generated by ArcGIS.  
 Data from vertical delineation wells were not used in modeling.  
 \* Data are from May 2022.  
 Cl = Chloride  
 mg/L = Milligrams per liter  
 NO<sub>3</sub> = Nitrate as N  
 NS = Not Sampled  
 TDS = Total Dissolved Solids

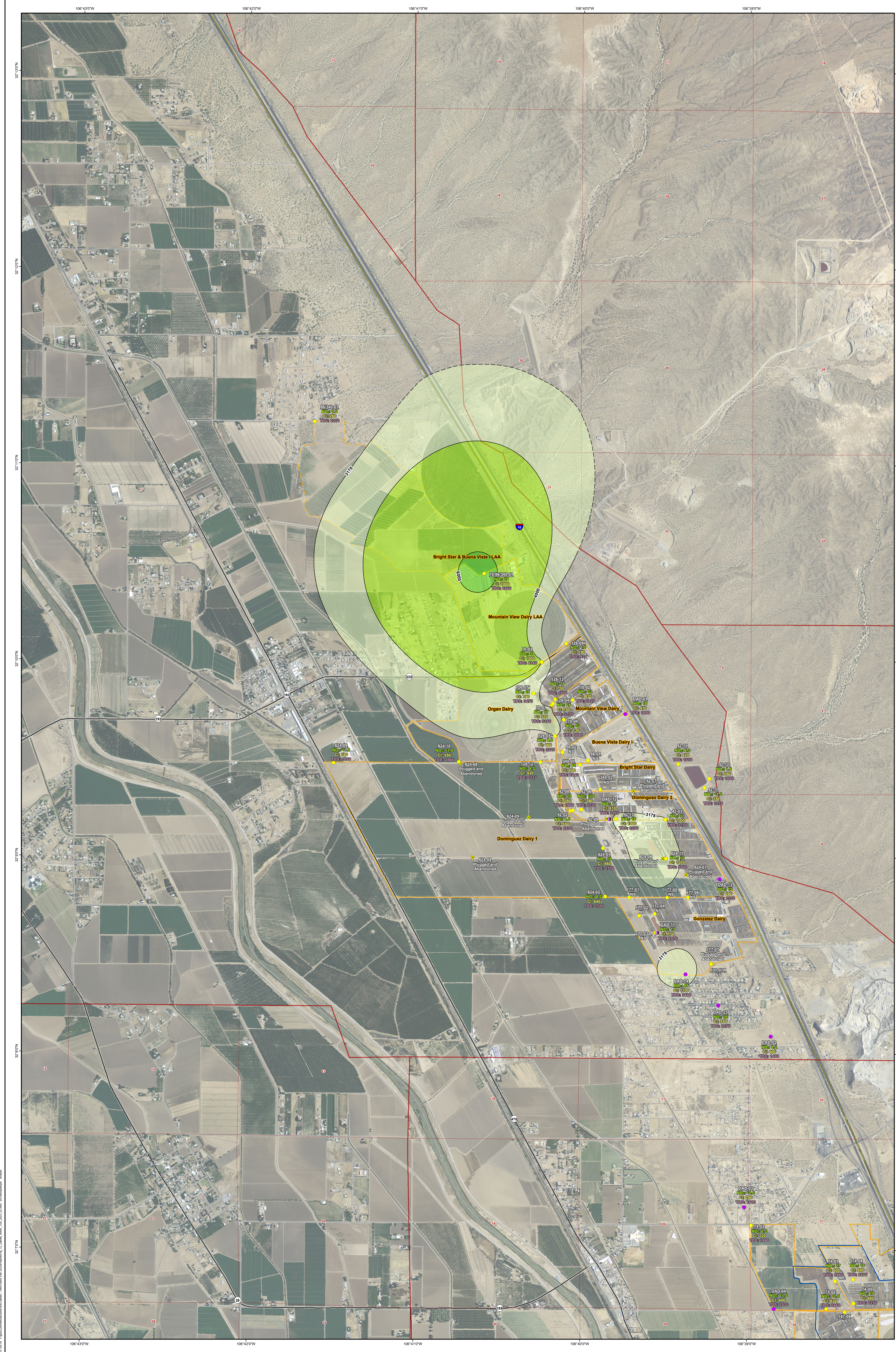
**REFERENCES**  
 Roads: Doña Ana County, 2001  
 Aerial Photography: NADP, 2011  
 FIPS: 844, 2007  
 Projection: State Plane NAD 83 New Mexico Central (feet)

1,000 500 0 500  
 FEET  
 SCALE 1:12,000 1" = 1,000 FT  
 WHEN PRODUCED AT 34X44IN

PROJECT: **DOÑA ANA DAIRIES  
 MESQUITE, NEW MEXICO**

**CHLORIDE DISTRIBUTION IN GROUNDWATER  
 FEBRUARY/MARCH 2023  
 NORTHERN PORTION**

EA **FIGURE 11**



**LEGEND:**

- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- Discharge Plan Monitoring Well - Plugged and Abandoned
- Abatement Plan Vertical Delineation Well
- Interstate Highway
- State Highway
- Other Road
- Land Owned by Dairies
- Land Application on Non-Dairy Property
- Stage 2 Abatement Plan
- Public Land Survey System
- Township and Range

**TDS Concentration (mg/L)**

- 3,178 - 4,000
- 4,000 - 6,000
- > 6,000

**Notes:**  
 Units are in milligrams per liter.  
 Dashed line indicates manually drawn isopleth. Solid line indicates that the isopleth was generated by ArcGIS.  
 Data from vertical delineation wells were not used in modeling.  
 \* Data used are from May 2022.

Cl = Chloride  
 mg/L = Milligrams per liter  
 NO<sub>3</sub> = Nitrate as N  
 TDS = Total Dissolved Solids

**REFERENCES**

Roads: Doña Ana County, 2001  
 Aerial Photography: NADP, 2011  
 FIPS: 844, 2007  
 Projection: State Plane NAD 83 New Mexico Central (feet)

1,000 500 0 500  
 FEET

SCALE 1:12,000 1" = 1,000 FT  
 WHEN PRODUCED AT 34X44IN

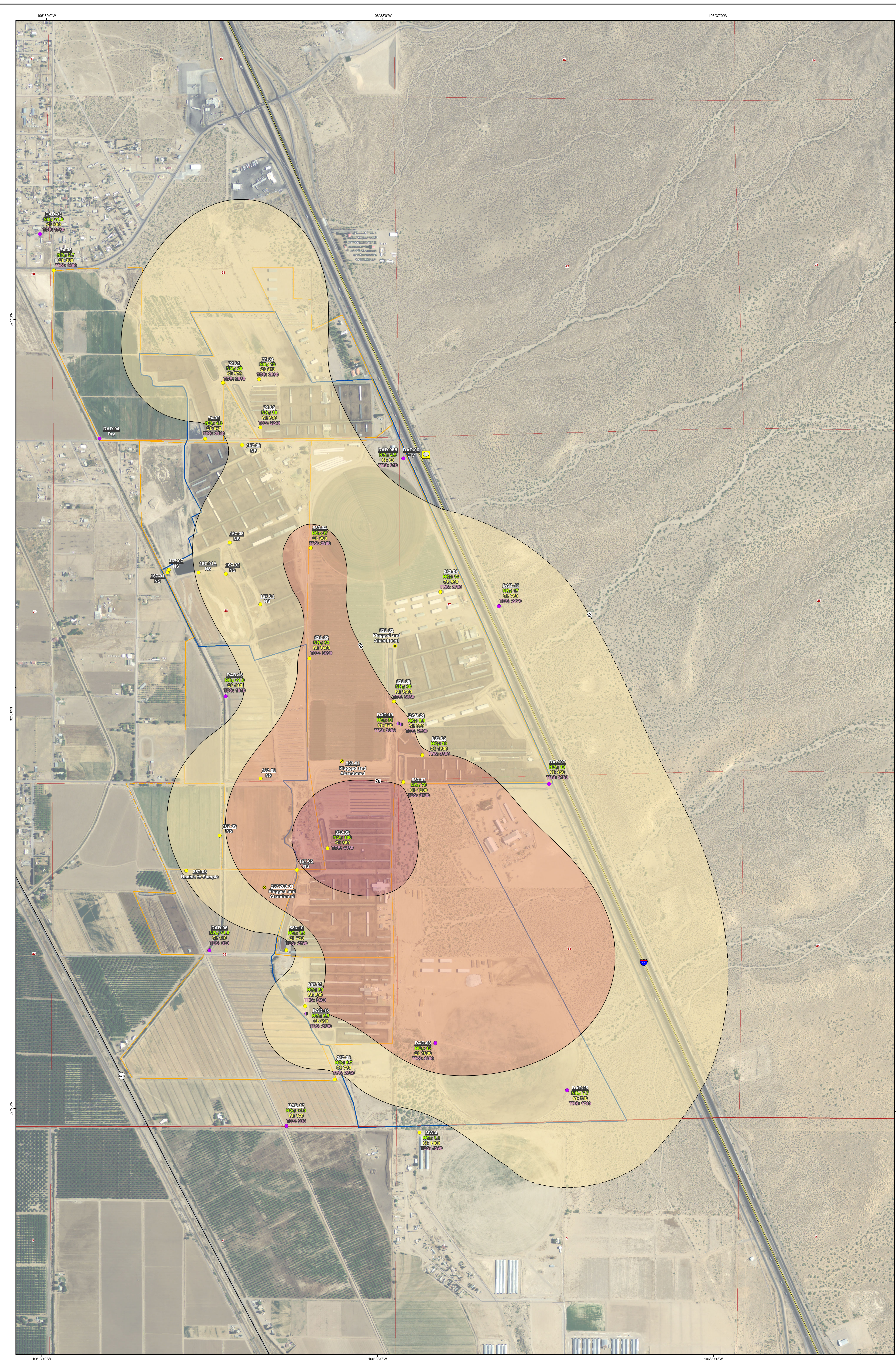
PROJECT: **DOÑA ANA DAIRIES  
 MESQUITE, NEW MEXICO**

TITLE: **TDS DISTRIBUTION IN GROUNDWATER  
 FEBRUARY/MARCH 2023  
 NORTHERN PORTION**

PROJECT NO: 19-000001  
 SHEET NO: 45 OF 45  
 DATE: 02/20/23  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]

**EA**

FIGURE 12



**LEGEND:**

- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- Discharge Plan Monitoring Well - Plugged and Abandoned
- Abatement Plan Vertical Delineation Well
- Interstate Highway
- State Highway
- Other Road
- Land Owned by Dairies
- Land Application on Non-Dairy Property
- Stage 2 Abatement Plan
- Public Land Survey System
- Township and Range

**Nitrate Concentration (mg/L)**

- 10-30
- 30-70
- 70-100
- >100

**Notes:**  
 Units are in milligrams per liter.  
 Dashed line indicates manually drawn isopleth. Solid line indicates that the isopleth was generated by ArcGIS.  
 Vertical delineation wells were not used in modeling.  
 \* = Not used in modeling.  
 \*\* = February/March 2022 data were not available. November 2022 data were used in modeling.

Cl = Chloride  
 mg/L = Milligrams per liter  
 NO<sub>3</sub> = Nitrate as N  
 NS = Not sampled  
 TDS = Total dissolved solids

**REFERENCES**

Roads: Doña Ana County, 2001  
 Aerial Photography: NADP, 2011  
 FIPS: 3444, 2007  
 Projection: State Plane NAD 83 New Mexico Central (feet)

500 250 0 250 500  
 FEET  
 SCALE 1:6,000 1" = 500 FT  
 WHEN PRODUCED AT 34X44IN

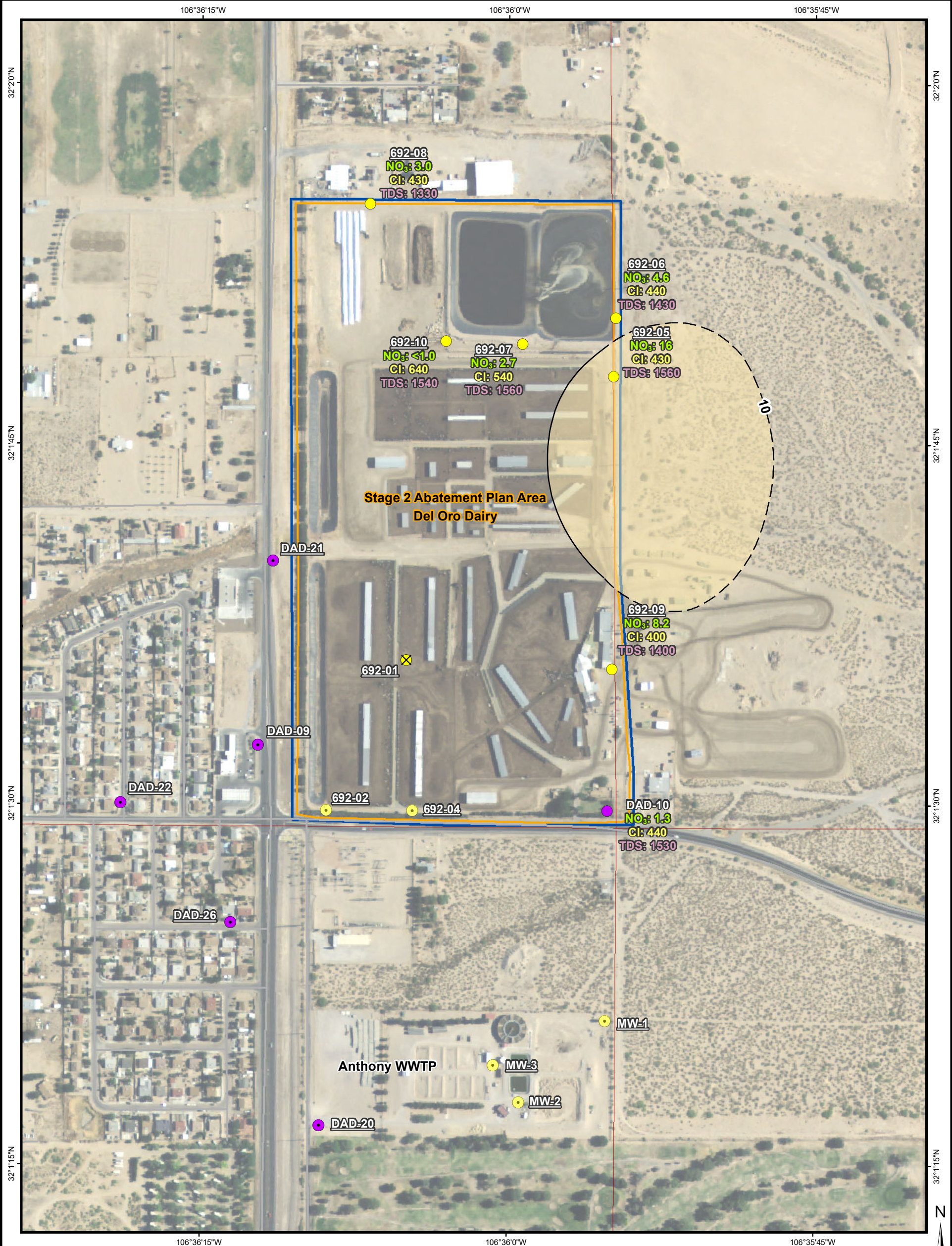
PROJECT: **DOÑA ANA DAIRIES  
 MESQUITE, NEW MEXICO**

TITLE: **NITRATE DISTRIBUTION IN GROUNDWATER  
 FEBRUARY/MARCH 2023  
 CENTRAL PORTION**

DATE: 02/2023  
 SCALE: 1:6,000  
 PROJECT: 3444

**EA**

FIGURE 13



**LEGEND:**

- Perched Aquifer Monitoring Well**
- Abatement Plan Monitoring Well
  - Discharge Plan Monitoring Well
  - ⊗ Discharge Plan Monitoring Well - Plugged and Abandoned
- Regional Aquifer Monitoring Well**
- Abatement Plan Monitoring Well
  - Discharge Plan Monitoring Well
  - ▭ Land Owned by Dairies
  - ▭ Stage 2 Abatement Plan Area
  - ▭ Public Land Survey System
- Nitrate Concentration (mg/L)**
- 10-30

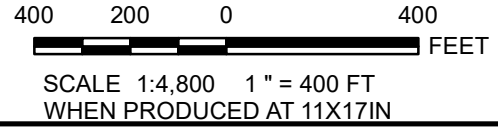
**Notes:**

Units are in milligrams per liter.  
 Dashed line indicates manually drawn isopleth. Solid line indicates that the isopleth was generated by ArcGIS.

Cl = Chloride  
 NO<sub>3</sub> = Nitrate as N  
 TDS = Total Dissolved Solids

**REFERENCES**

Aerial Photography: NAIP, 2011  
 PLSS: BLM, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)



<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>NITRATE DISTRIBUTION IN GROUNDWATER FEBRUARY/MARCH 2023 SOUTHERN PORTION, REGIONAL AQUIFER</b>			
	PROJECT No. 1464109.05		
	DESIGN	NA	SCALE AS SHOWN
	GIS	RM	REV 0
	CHECK		
REVIEW			<b>FIGURE 14</b>



**Perched Aquifer Monitoring Well**

- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- ✕ Discharge Plan Monitoring Well - Plugged and Abandoned

**Regional Aquifer Monitoring Well**

- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- Land Owned by Dairies
- Stage 2 Abatement Plan Area
- Public Land Survey System

**Chloride Concentration (mg/L)**

- 503-600

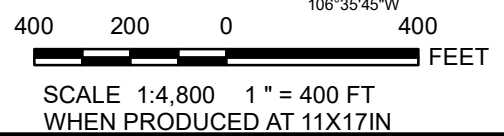
**Notes:**

Units are in milligrams per liter.  
Dashed line indicates manually drawn isopleth. Solid line indicates that the isopleth was generated by ArcGIS.

Cl = Chloride  
NO<sub>3</sub> = Nitrate as N  
TDS = Total Dissolved Solids

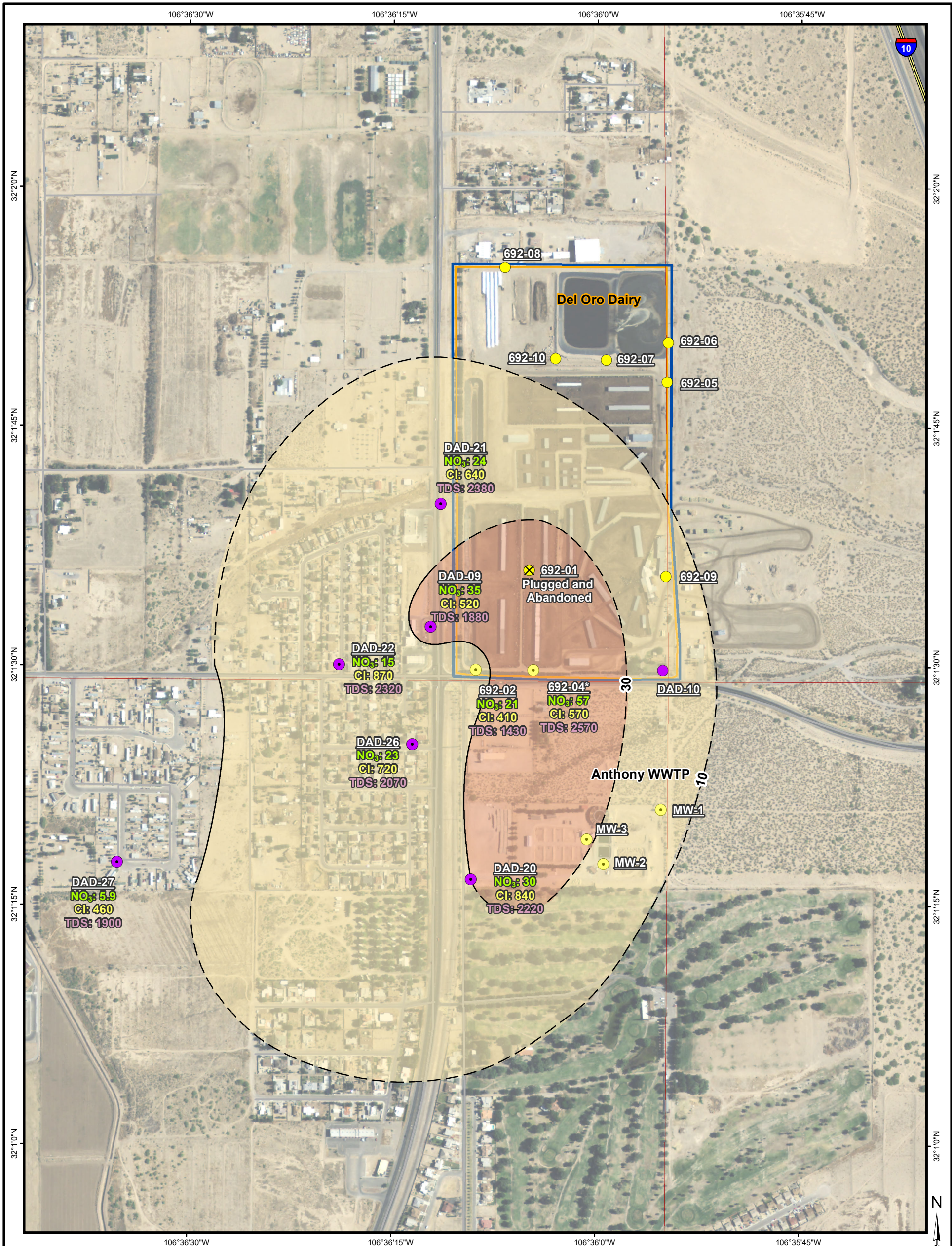
**REFERENCES**

Aerial Photography: NAIP, 2011  
PLSS: BLM, 2000  
Projection: State Plane NAD 83 New Mexico Central (feet)



<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>CHLORIDE DISTRIBUTION IN GROUNDWATER FEBRUARY/MARCH 2023 SOUTHERN PORTION, REGIONAL AQUIFER</b>			
<b>EA</b>	PROJECT No. 1464109.05		SCALE AS SHOWN
DESIGN	NA	CHECK	REV 0
GIS	RM	REVIEW	FIGURE 15





**Perched Aquifer Monitoring Well**

- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- ⊗ Discharge Plan Monitoring Well - Plugged and Abandoned

**Regional Aquifer Monitoring Well**

- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- Stage 2 Abatement Plan
- Public Land Survey System
- Land Owned by Dairies

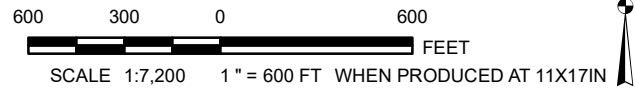
**Nitrate Concentration (mg/L)**

- 10-30
- 30-70

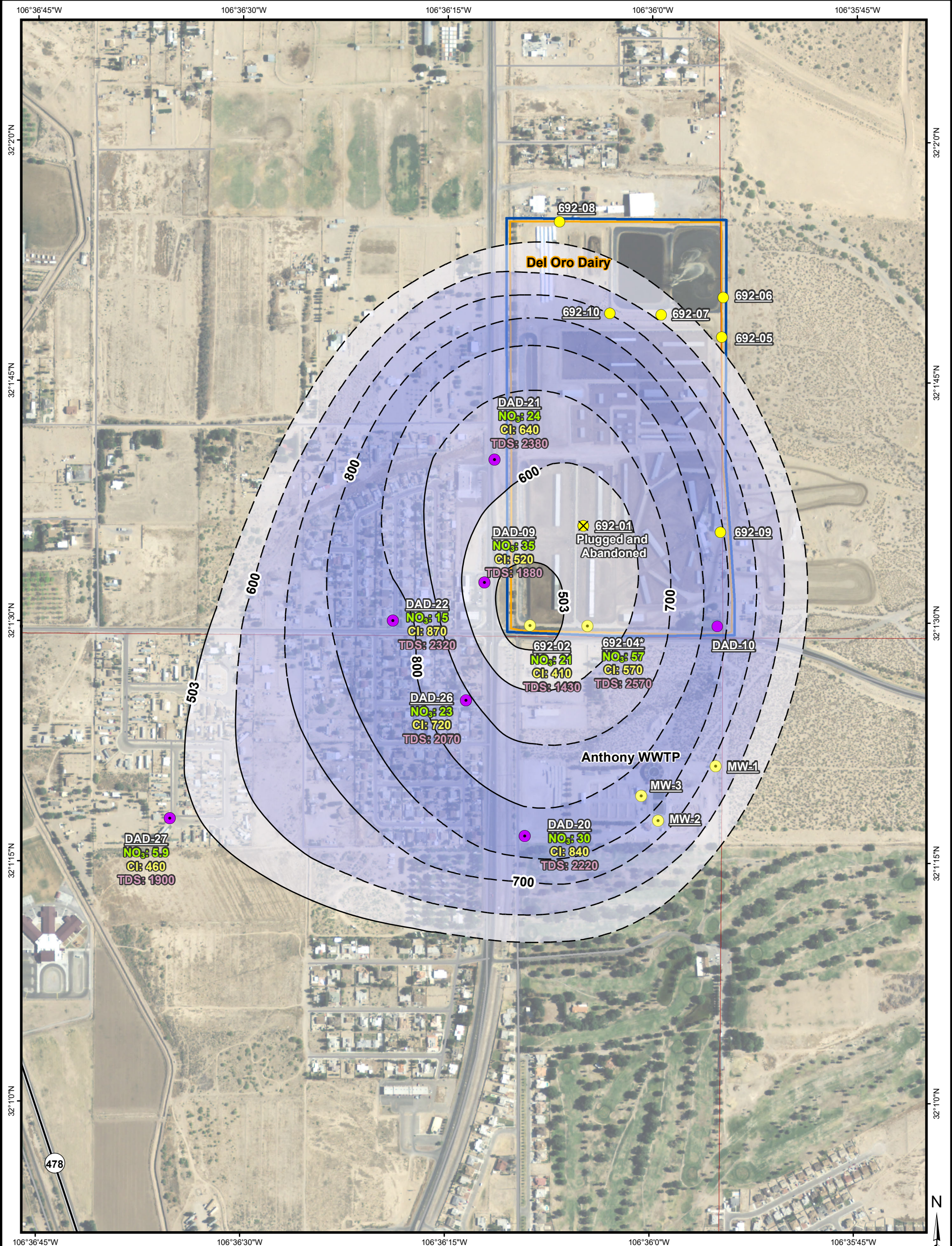
Units are in milligrams per liter.  
Dashed line indicates manually drawn isopleth. Solid line indicates that the isopleth was generated by ArcGIS.

\*Data are from May 2022.

Cl = Chloride  
mg/L = Milligram(s) per liter  
NO<sub>3</sub> = Nitrate as N  
TDS = Total Dissolved Solids



<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>NITRATE DISTRIBUTION IN GROUNDWATER FEBRUARY/MARCH 2023 SOUTHERN PORTION, PERCHED AQUIFER</b>			
	PROJECT No. 1464109.05		SCALE AS SHOWN
	DESIGN NA	CHECK RM	REV 0
	GIS RM		<b>FIGURE 16</b>
	REVIEW		



**Perched Aquifer Monitoring Well**

- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- ✕ Discharge Plan Monitoring Well - Plugged and Abandoned

**Regional Aquifer Monitoring Well**

- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well

- Stage 2 Abatement Plan
- Public Land Survey System
- Land Owned by Dairies

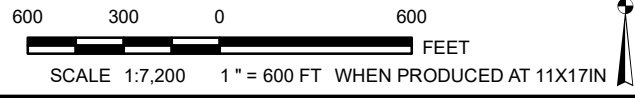
**Chloride Concentration (mg/L)**

- 503-600
- 600-700
- 700-800
- 800-900

Units are in milligrams per liter.  
Dashed line indicates manually drawn isopleth. Solid line indicates that the isopleth was generated by ArcGIS.

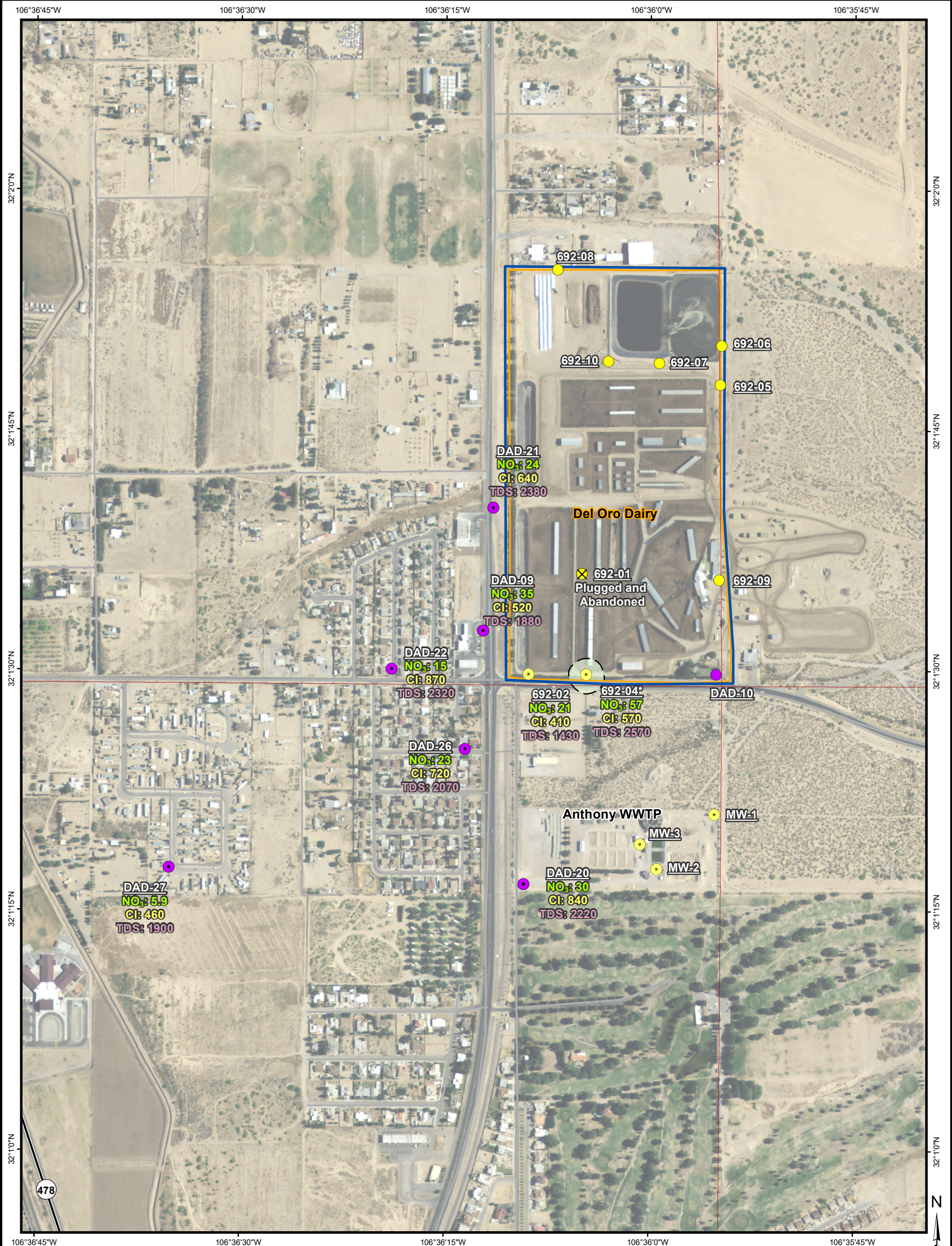
\* Data are from May 2022.

Cl = Chloride  
mg/L = Milligram(s) per liter  
NO<sub>3</sub> = Nitrate as N  
TDS = Total Dissolved Solids



<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>CHLORIDE DISTRIBUTION IN GROUNDWATER FEBRUARY/MARCH 2023 SOUTHERN PORTION, PERCHED AQUIFER</b>			
<b>PROJECT</b>	<b>EA</b>		
<b>TITLE</b>	PROJECT No. 1464109.05	SCALE AS SHOWN	REV 0
<b>DESIGN</b>	NA		
<b>GIS</b>	RM		
<b>CHECK</b>			
<b>REVIEW</b>			
<b>FIGURE 17</b>			

2023-05-22 P:\gis2\Commercial\Dona Ana Dairies - 1464109\05 Feb 2023\Projects\Fig\_17\_Dairies\_SouthPerchAq\_chloride\_2023\_02.mxd EA-Albuquerque rmullen



**Perched Aquifer Monitoring Well**

- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- ⊗ Discharge Plan Monitoring Well - Plugged and Abandoned

**Regional Aquifer Monitoring Well**

- Abatement Plan Monitoring Well
- Discharge Plan Monitoring Well
- Stage 2 Abatement Plan
- Public Land Survey System
- Land Owned by Dairies

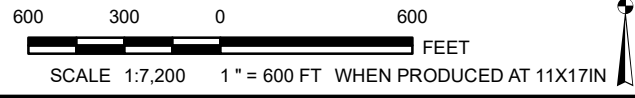
**TDS Concentration (mg/L)**

2,552-2,700

Units are in milligrams per liter.  
Dashed line indicates manually drawn isopleth. Solid line indicates that the isopleth was generated by ArcGIS.

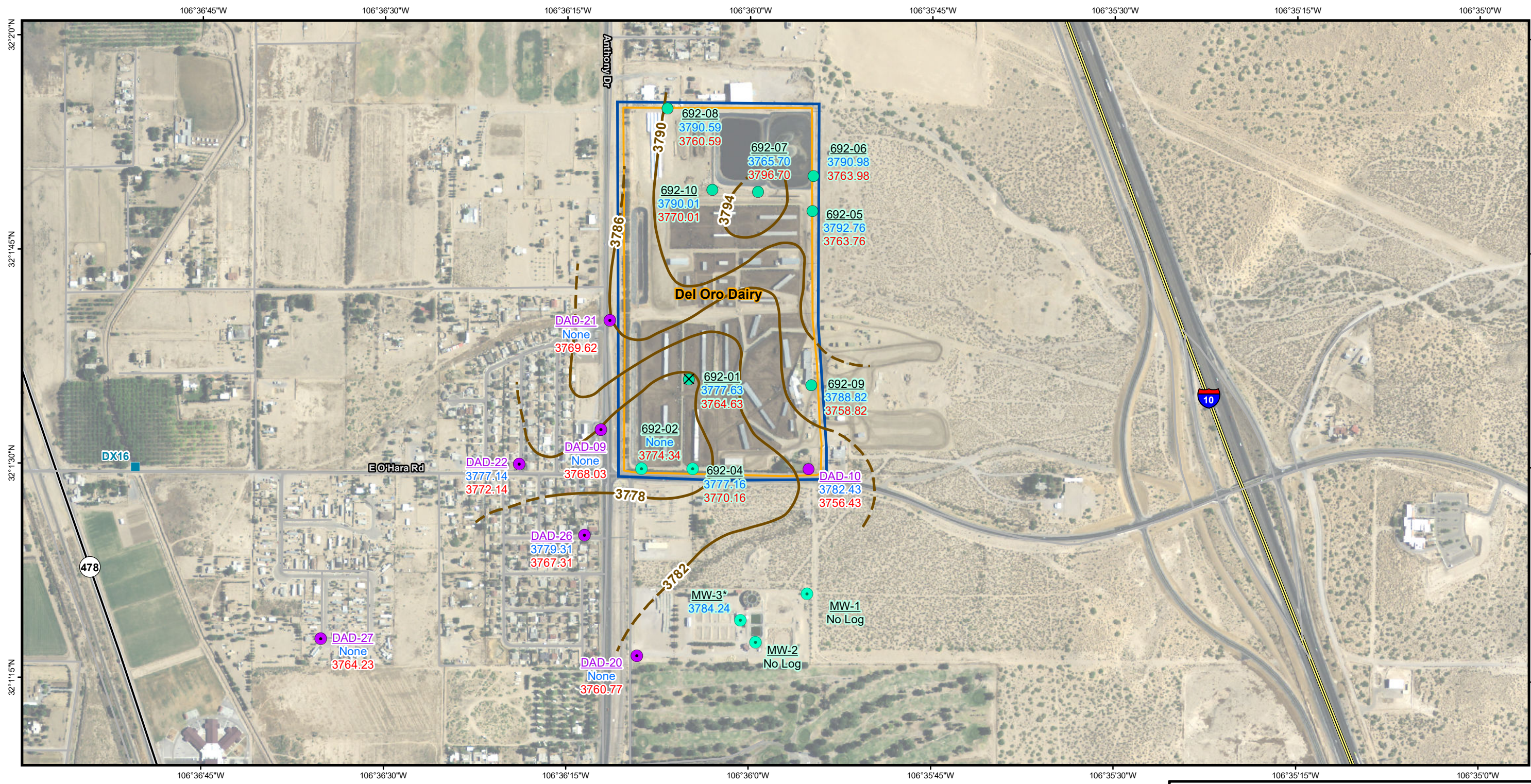
\* Data are from May 2022.

Cl = Chloride  
mg/L = Milligram(s) per liter  
NO<sub>3</sub> = Nitrate as N  
TDS = Total Dissolved Solids



<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>TDS DISTRIBUTION IN GROUNDWATER FEBRUARY/MARCH 2023 SOUTHERN PORTION, PERCHED AQUIFER</b>			
	PROJECT No. 1464109.05		SCALE AS SHOWN
	DESIGN	NA	REV 0
	GIS	RM	
	CHECK		
REVIEW			<b>FIGURE 18</b>

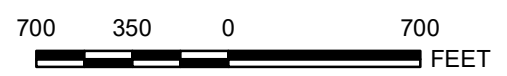
2023-05-15 Y:\gis2\Commercial\Dona Ana Dairies - 1464110\Fig 3A SouthPerchAq\_Clay\_2023\_02.mxd EA-Albuquerque escapilo



**LEGEND:**

- Drain Crossing Location
- Perched Aquifer Monitoring Well**
  - Abatement Plan Well With Water Elevations (Feet Above Mean Sea Level)
  - Discharge Plan Well with Water Elevation (Feet Above Mean Sea Level)
  - ✕ Discharge Plan Well - Plugged and Abandoned
- Regional Aquifer Monitoring Well**
  - Abatement Plan Well With Water Elevations (Feet Above Mean Sea Level)
  - Discharge Plan Well with Water Elevation (Feet Above Mean Sea Level)
- Clay Elevation in feet
- - - Clay Elevation - Assumed
- Land Owned by Dairies
- Stage 2 Abatement Plan Area
- 3779.31 = Elevation of Clay Layer
- 3760.77 = Elevation @ Total Depth

Note:  
\* = Not used in contouring.



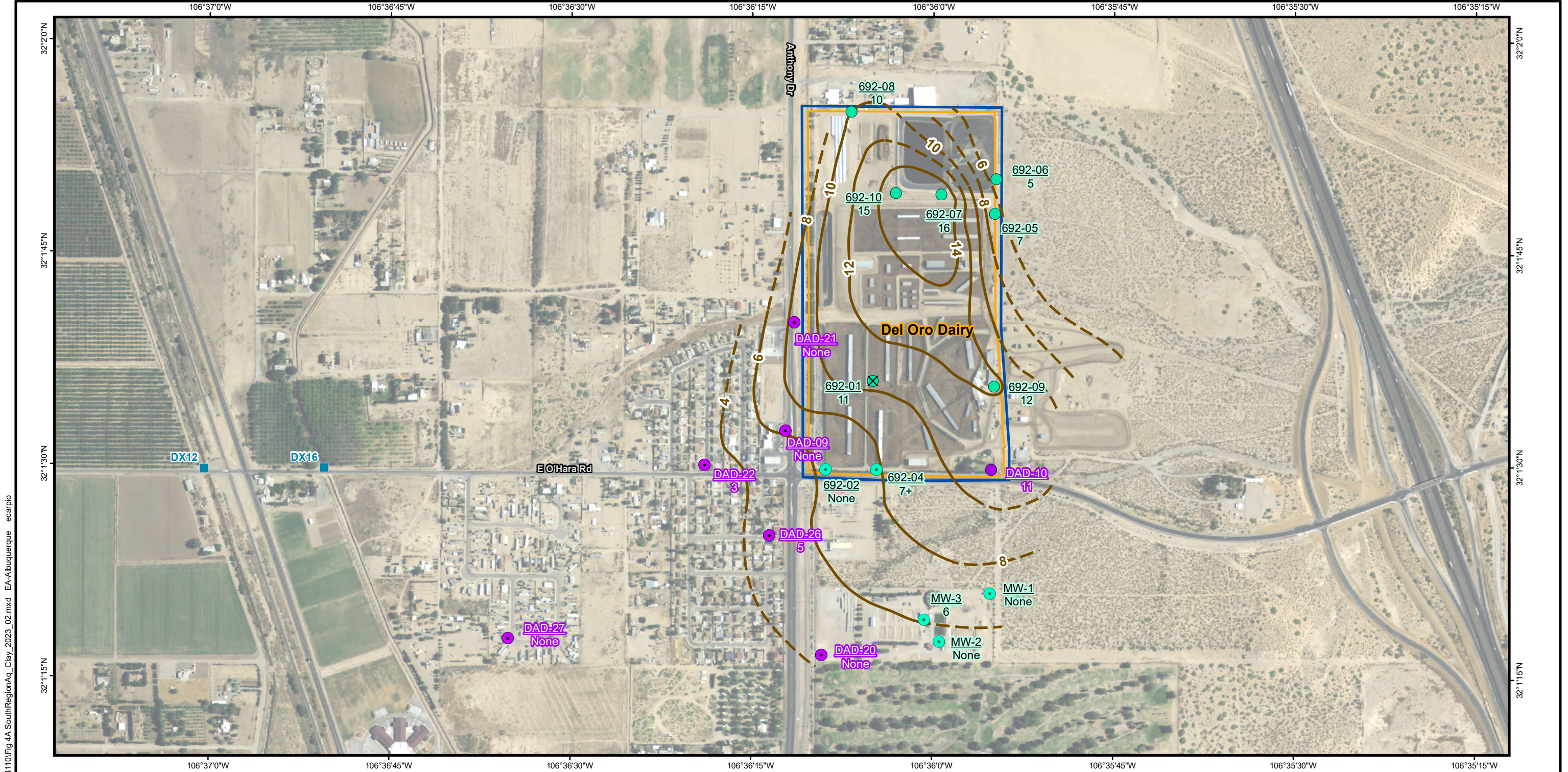
SCALE 1:8,400 1" = 700 FT  
WHEN PRODUCED AT 11X17IN



**REFERENCES**

Aerial Photography: NAIP, 2011  
PLSS: BLM, 2000  
Projection: State Plane NAD 83 New Mexico Central (feet)

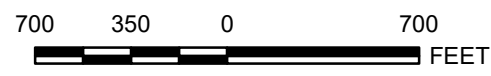
<b>PROJECT</b>			
<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>TITLE</b>			
<b>CLAY LAYER ELEVATION MAP FEBRUARY 2023, SOUTHERN PORTION PERCHED AQUIFER</b>			
	PROJECT No. 1464109.05		SCALE AS SHOWN
	DESIGN NA		REV 0
	GIS RMM		
	CHECK		
REVIEW			
			<b>FIGURE 19</b>



**LEGEND:**

- Drain Crossing Location
- Abatement Plan Well With Water Elevations (Feet Above Mean Sea Level)
- Discharge Plan Well with Water Elevation (Feet Above Mean Sea Level)
- ✕ Discharge Plan Well - Plugged and Abandoned
- Abatement Plan Well With Water Elevations (Feet Above Mean Sea Level)
- Discharge Plan Well with Water Elevation (Feet Above Mean Sea Level)
- - - Clay Thickness in feet
- - - Clay Thickness - Assumed
- Land Owned by Dairies
- Stage 2 Abatement Plan Area

**REFERENCES**  
 Aerial Photography: NAIP, 2011  
 PLSS: BLM, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)



SCALE 1:8,400 1" = 700 FT  
 WHEN PRODUCED AT 11X17IN



<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>CLAY LAYER THICKNESS MAP FEBRUARY 2023, SOUTHERN PORTION REGIONAL AQUIFER</b>			
	PROJECT No. 1464109.05		Fig 4 SouthRegionAq_Pot.mxd
	DESIGN	NA	SCALE AS SHOWN
	GIS	RMM	REV 0
	CHECK		
REVIEW			
			FIGURE 20

2023-05-15 Y:\gis2\Commercial\Donna Ana Dairies - 1464110\Fig 4A SouthRegionAq\_Clay\_2023\_02.mxd EA-Albuquerque escarpio