This area, approximately 200' long and 60 to 75' wide at the eastern end, has no in-process monitoring locations for groundwater elevation measurements or sampling for uranium concentrations within the Transition Zone. In order to ensure the effectiveness of the injection & extraction system of trenches, monitoring points will be required in this general area.

The horizontal extent of the extraction system at steady state was not determined during the 2018 Pilot Testing of the GETR-BA1-01A trench.

Water level elevations must be monitored in this general area before and during groundwater extraction from the trenches in order to determine the horizontal extent of the induced drawdown.

Approximate western edge of Transition Zone Soils.

LEGEND

- MONITOR WELL IN ALLUVIUM
- MONITOR WELL IN SANDSTONE B
- MONITOR WELL IN SANDSTONE C
- MONITOR WELL IN TRANSITION ZONE
- EXTRACTION WELL/SUMP
- INJECTION WELL
- GROUNDWATER EXTRACTION PIPING
- TREATED WATER INJECTION PIPING
- GROUNDWATER EXTRACTION TRENCH
- TREATED WATER INJECTION TRENCH

NOTES

1) WHITE BACKGROUND ON MONITOR WELL INDICATES IN-PROCESS MONITORING LOCATION.

2) BASEMAP: GOOGLE EARTH 2017

0 100 200

SCALE IN FEET

N

FIGURE 8-8
BURIAL AREA #1 IN-PROCESS GROUNDWATER MONITORING LOCATIONS
FACILITY DECOMMISSIONING PLAN
REVISION 3

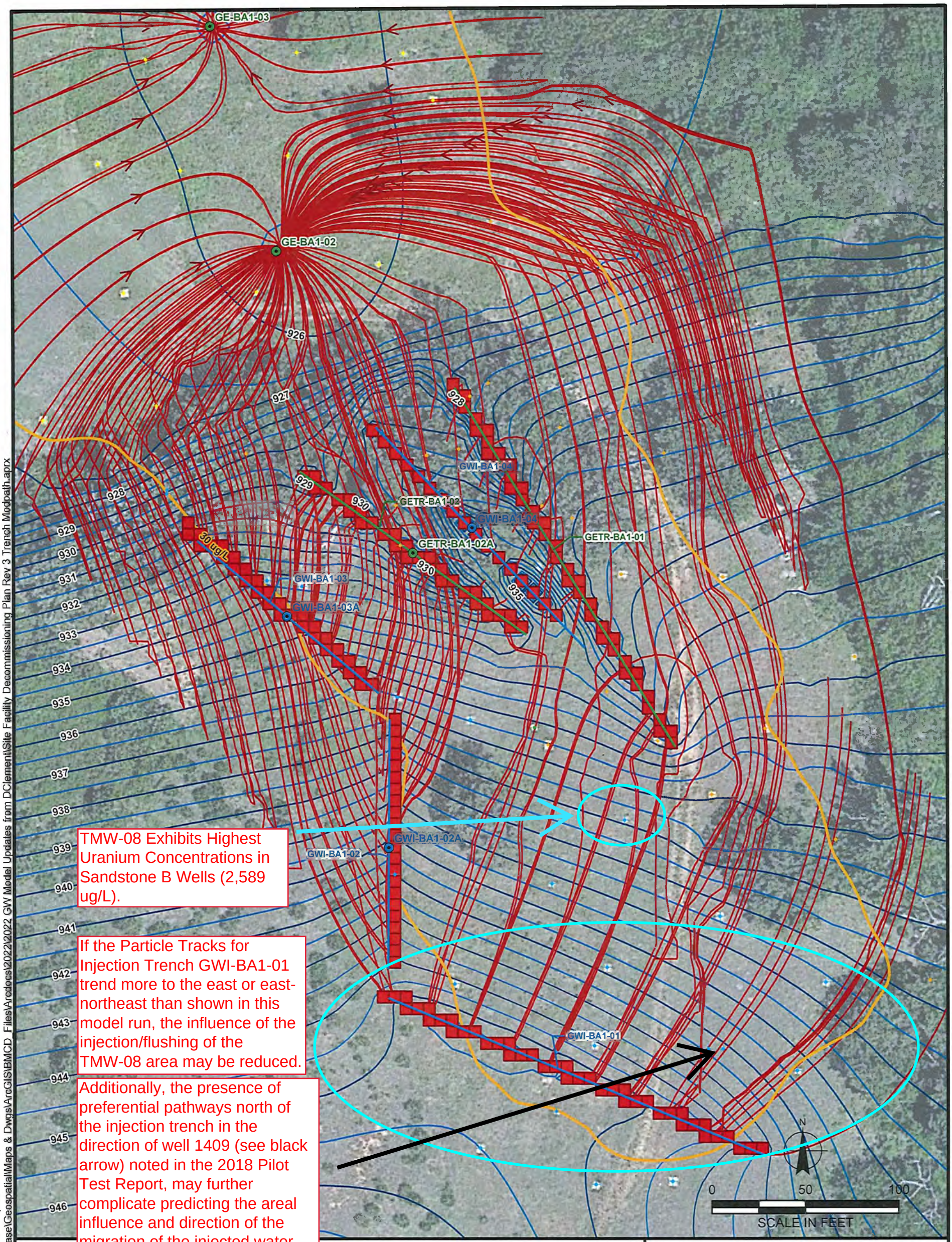
BURNS McDONNELL

environmental properties management, LLC

	Rev No: 0
Preparer: TJKIMMEL	Date: 9/9/2022
Reviewer: EDULLE	Date: 9/9/2022

Coordinate System
NAD 1983 StatePlane Oklahoma North FIPS 3501 Feet

Z:\Clients\ENSICERT_ClientInfo\Sites\Database\GeospatialMaps & Dwgs\ArcGIS\BMCD_Files\Arcdocs\2020\2022 - Decommissioning Plan\Figure 8-8_BA1 In-process GW Mon Locations



LEGEND

- MONITOR WELL IN ALLUVIUM
- MONITOR WELL IN SANDSTONE B
- MONITOR WELL IN SANDSTONE C
- MONITOR WELL IN TRANSITION ZONE
- EXTRACTION WELL/SUMP
- INJECTION WELL
- GROUNDWATER EXTRACTION TRENCH
- GROUNDWATER INJECTION TRENCH
- BA1 URANIUM CONTOUR (30 UG/L)
- PARTICLE TRACKING
- PARTICLE FLOW DIRECTION ARROWS
- PUMPING HEAD CONTOURS (1 FT)
- PUMPING HEAD CONTOURS (0.5 FT)
- TRENCH MODEL CELLS

NOTES

1) GROUNDWATER ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL (NORTH AMERICAN VERTICAL DATUM OF 1988).

2) BASEMAP: GOOGLE EARTH 2017

FIGURE 4-3
BA1 GROUNDWATER FLOW MODEL
MODPATH PARTICLE TRACKING RESULTS
NEAR TRENCHES
SITE FACILITY DECOMMISSIONING PLAN (REVISION 3)

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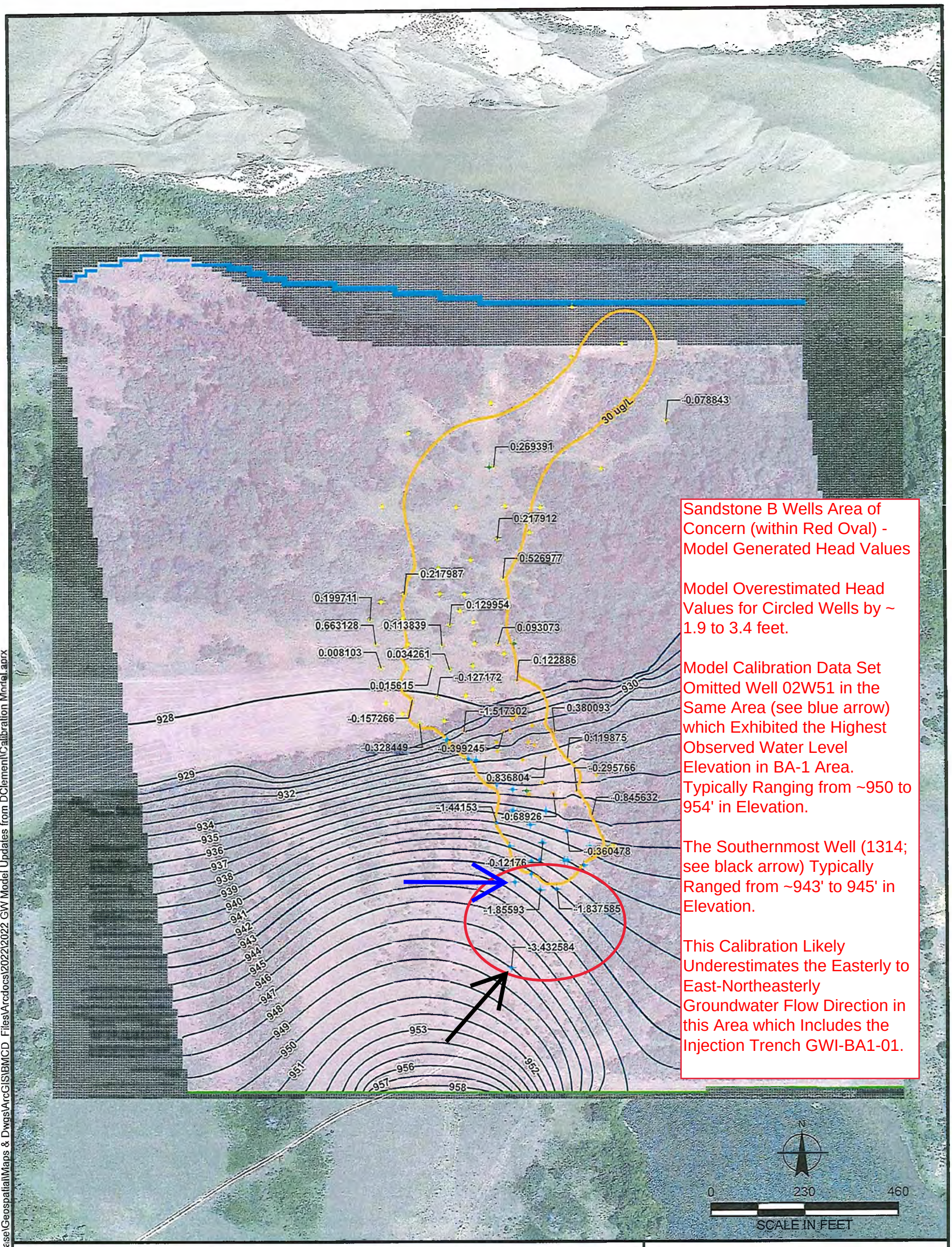
Reviewer: DCLEMENT	Date: 9/20/2022

Coordinate System
WGS 1984 Web Mercator Auxiliary Sphere



LEGEND

- MONITOR WELL IN ALLUVIUM
- MONITOR WELL IN SANDSTONE B
- MONITOR WELL IN SANDSTONE C
- MONITOR WELL IN TRANSITION ZONE
- BA1 URANIUM CONTOUR (30 UG/L)
- NON-PUMPING HEAD CONTOURS (1 FT) FROM LAYER 7
- ACTIVE MODEL DOMAIN
- GENERAL HEAD BOUNDARY CELLS
- RIVER BOUNDARY CELLS
- NO FLOW BOUNDARIES

NOTES

1) GROUNDWATER ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL (NORTH AMERICAN VERTICAL DATUM OF 1988).

2) BASEMAP: GOOGLE EARTH 2017

FIGURE 3-2
BA1 GROUNDWATER FLOW MODEL
CALIBRATED MODEL HEADS / RESIDUALS
SITE FACILITY DECOMMISSIONING PLAN
(REVISION 3)

BURNS McDONNELL. environmental properties management, LLC

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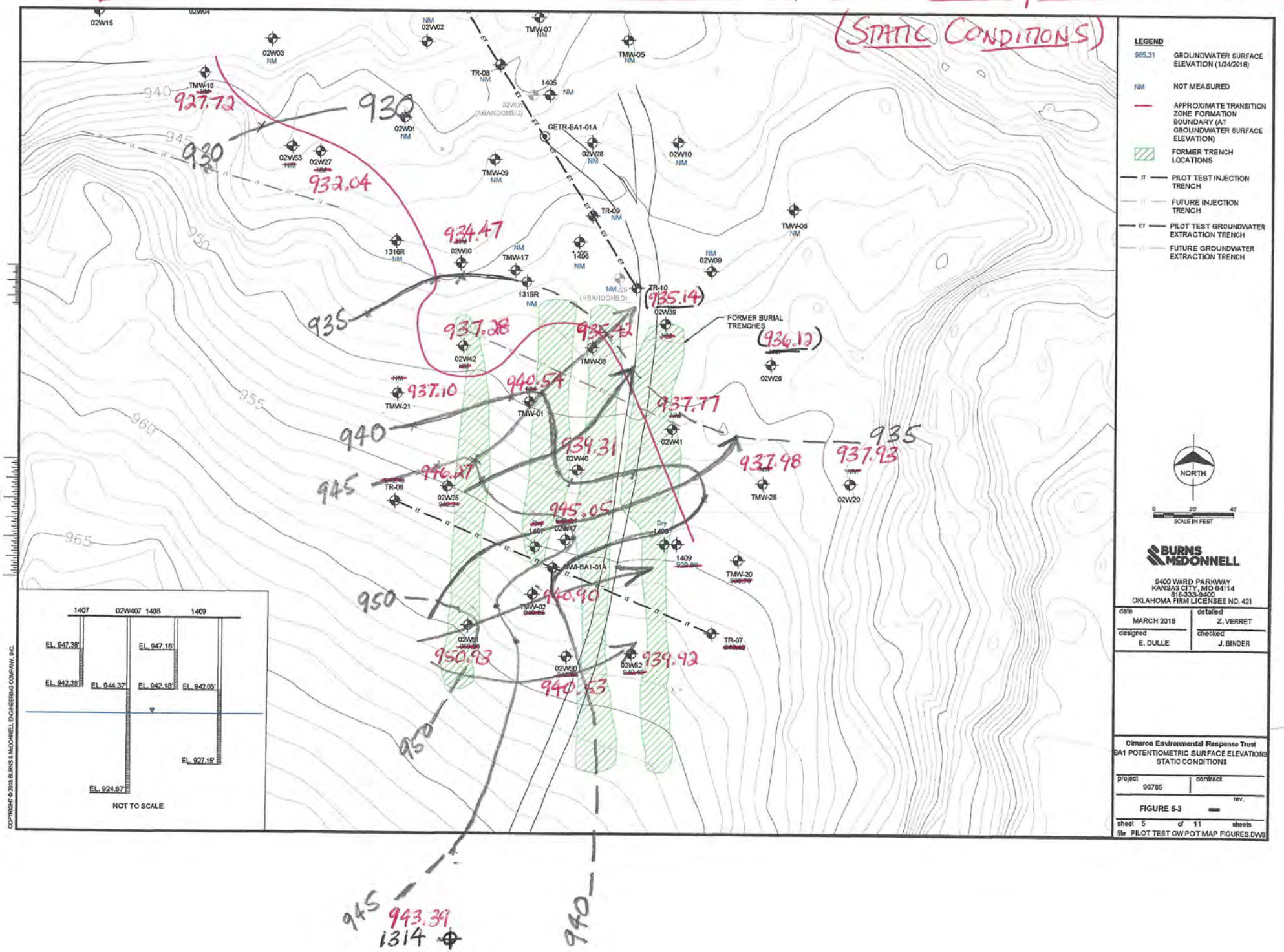
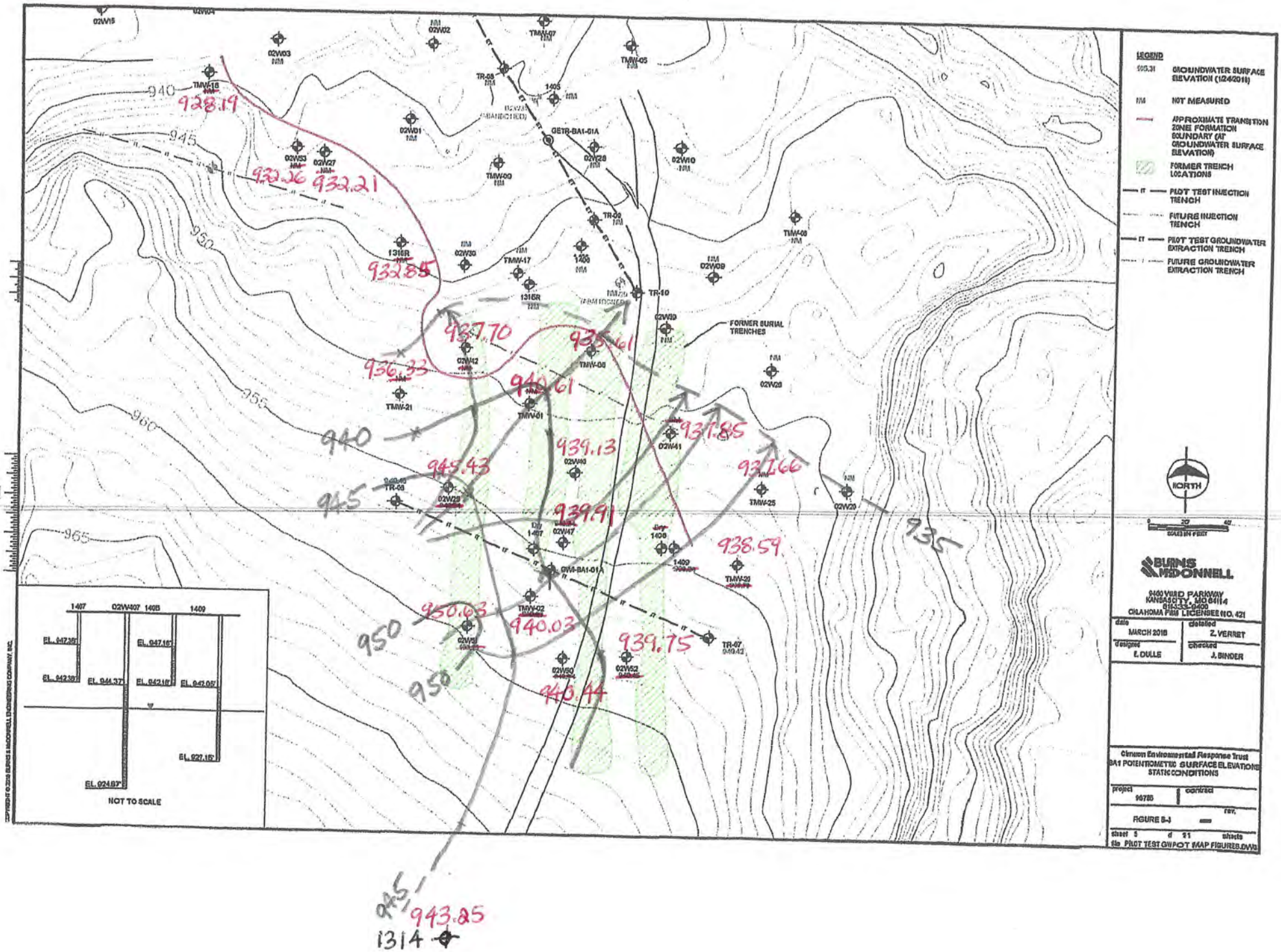
FLOW MAP # 1

SANDSTONE B WELLS
DECEMBER 19, 2012 GW FLOW/WATER LEVEL ELEVATION
(STATIC CONDITIONS)



FLOW MAP #2

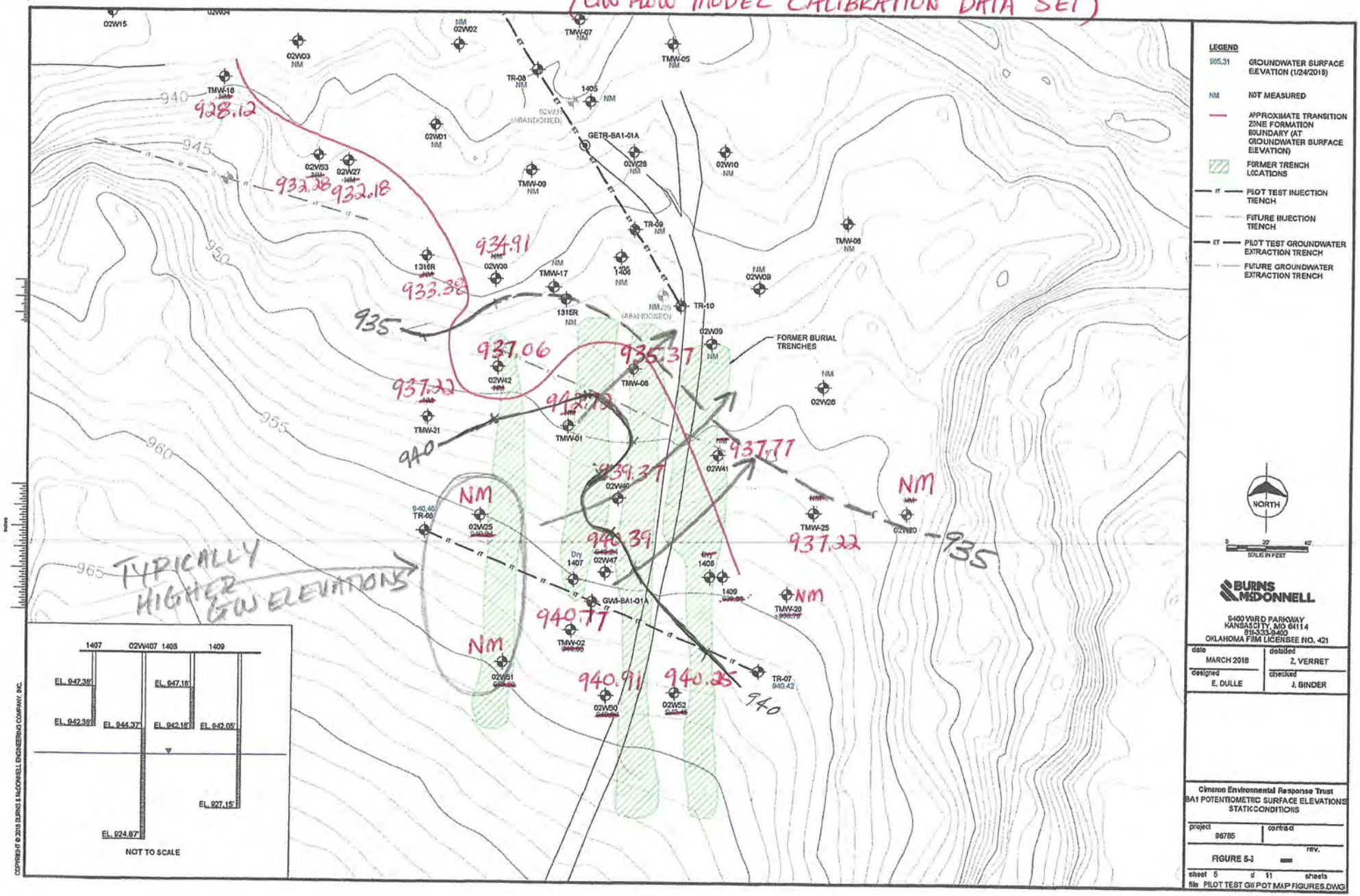
SANDSTONE B WELLS
MARCH 18, 2015 GW FLOW/WATER LEVEL ELEVATIONS



FLOW MAP #3

SANDSTONE B WELLS

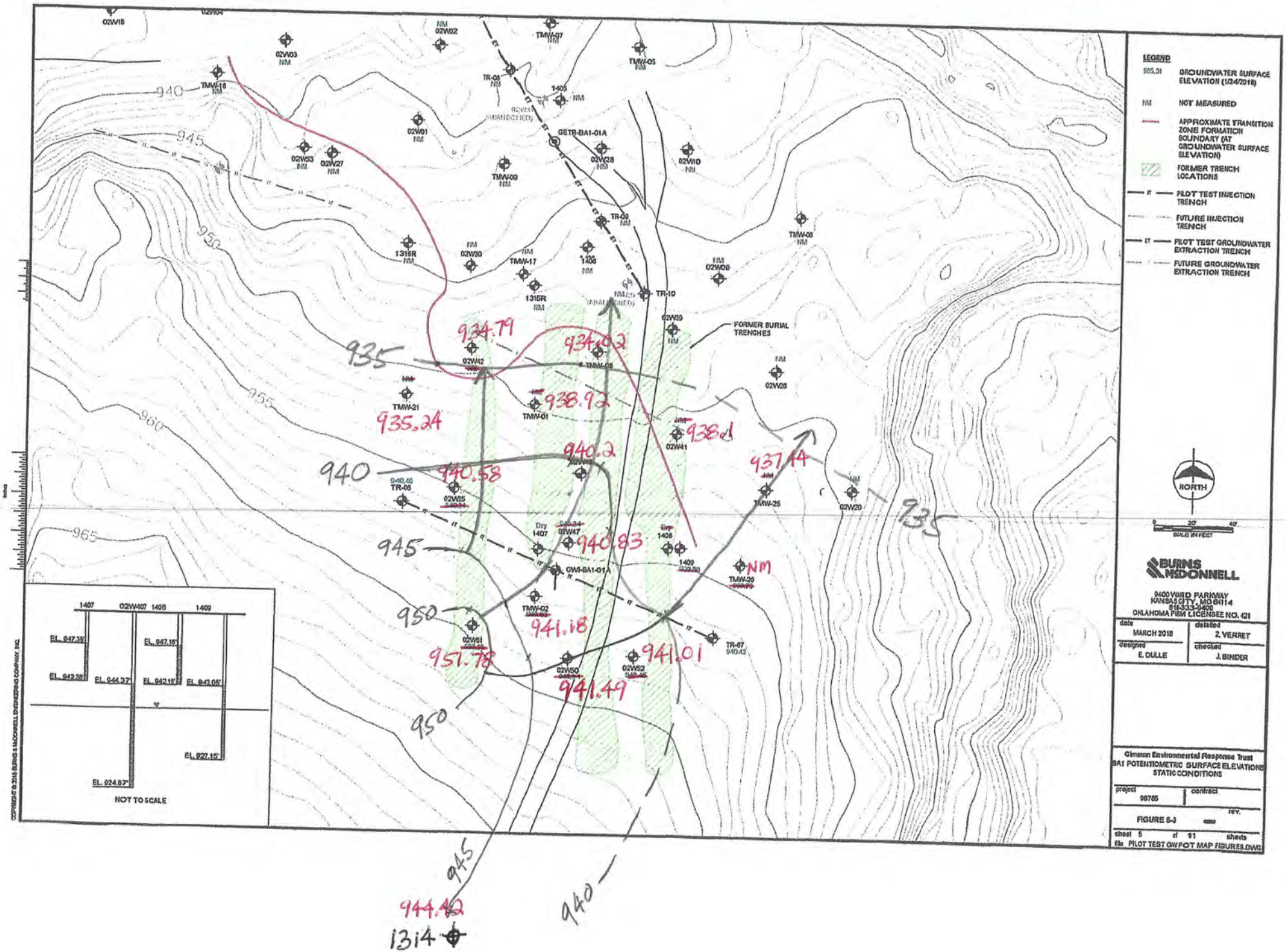
AUGUST 2016 GW FLOW/WATER LEVEL ELEVATIONS (GW FLOW MODEL CALIBRATION DATA SET)

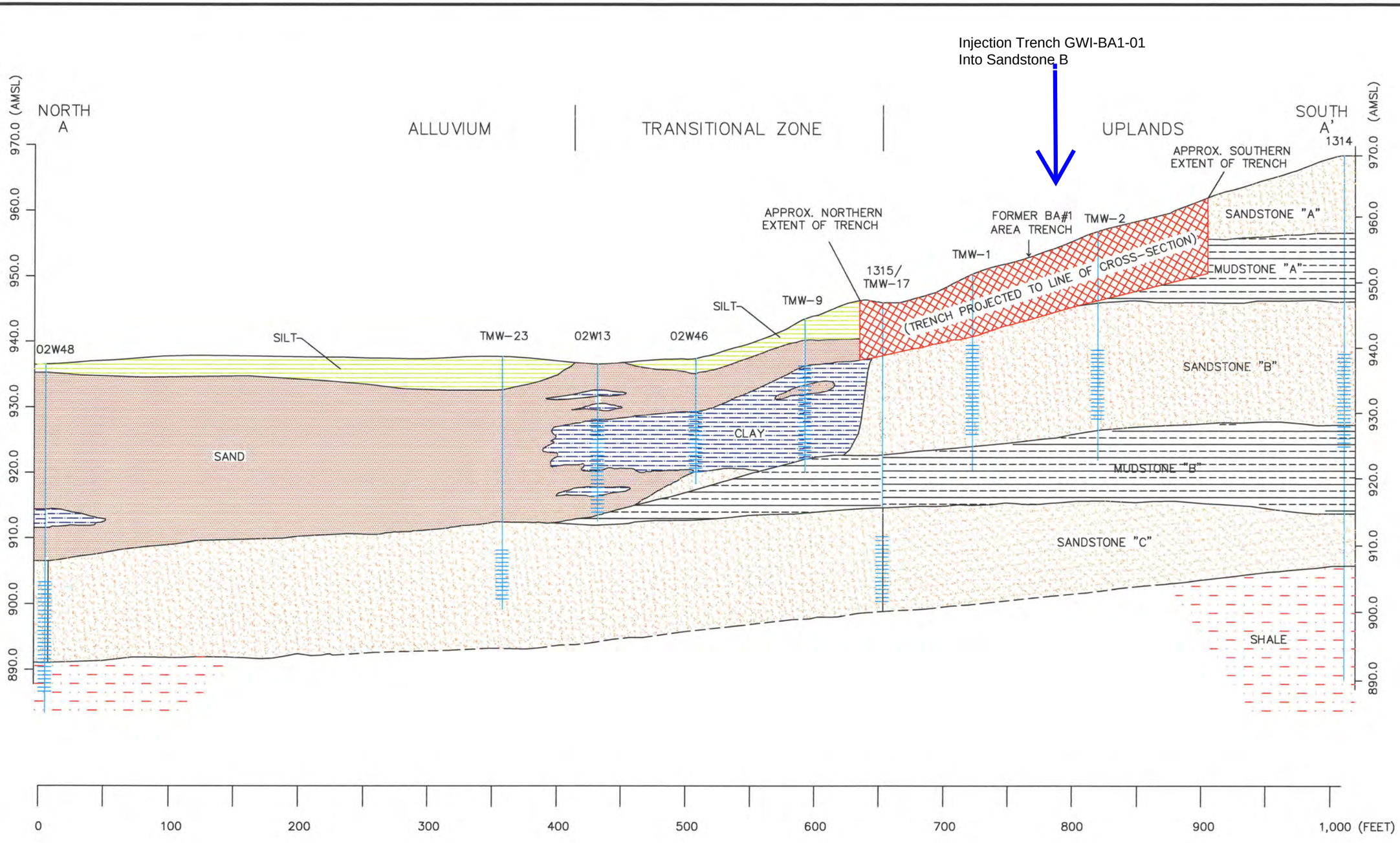


944.45
1314

FLOW MAP #4

SANDSTONE B WELLS
JULY 20, 2020 GW FLOW/WATER LEVEL ELEVATIONS





REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:
1		4/01/05	JAS
2		6/17/05	

DESIGNED BY:	DRAWN BY:	CHECKED BY:	APPROVED BY:
	JAS	DJF	DJF

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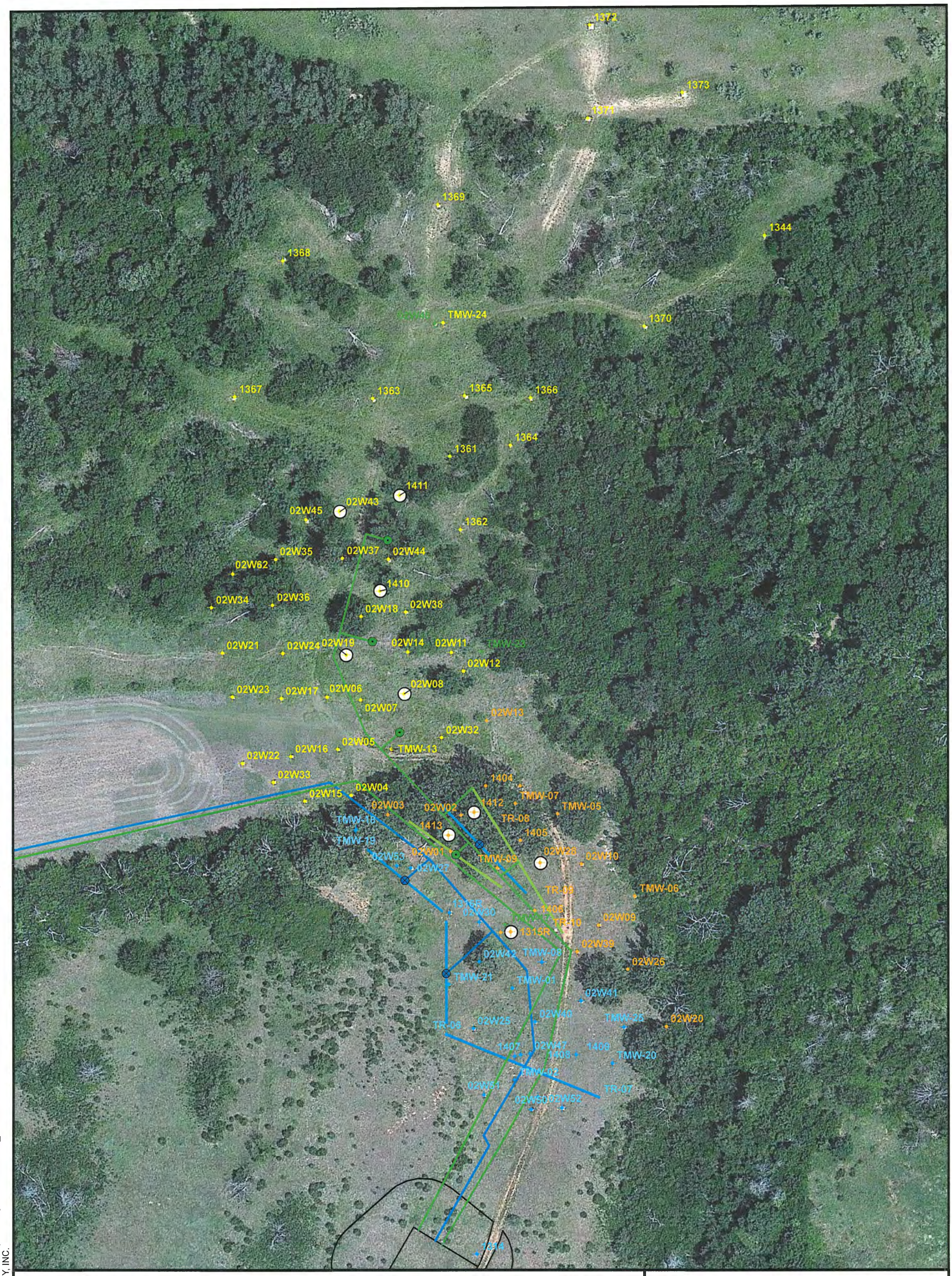
FIGURE 2-5
BA #1 AREA
GEOLOGICAL CROSS-SECTION A-A'
CIMARRON CORPORATION
CRESCENT, OKLAHOMA

SCALE:	DATE:	PROJECT NUMBER:
1" = 75'	8/10/05	04020-044-200

FIGURE NUMBER:
2-5

SHEET NUMBER:
1



Z:\Clients\ENS\CERT_ClientInfo\Sites\Database\GeospatialMaps & Dwgs\ArcGIS\BMCD_FilesArcdocs\2020\2022 - Decommissioning Plan\Figure 8-10_BA1 Post-Remediation GW Mon Locations
2021 BURNS & McDONNELL ENGINEERING COMPANY, INC.

LEGEND

- MONITOR WELL IN ALLUVIUM
- MONITOR WELL IN SANDSTONE B
- MONITOR WELL IN SANDSTONE C
- MONITOR WELL IN TRANSITION ZONE
- EXTRACTION WELL/SUMP
- INJECTION WELL
- GROUNDWATER EXTRACTION PIPING
- TREATED WATER INJECTION PIPING
- GROUNDWATER EXTRACTION TRENCH
- TREATED WATER INJECTION TRENCH
- BA #1 REMEDIATION FACILITY

NOTES

1) WHITE BACKGROUND ON MONITOR WELL INDICATES POST-REMEDIATION MONITORING LOCATION.

2) BASEMAP: GOOGLE EARTH 2017

0 100 200
SCALE IN FEET

N

FIGURE 8-10
BURIAL AREA #1 POST-REMEDIATION GROUNDWATER MONITORING LOCATIONS
FACILITY DECOMMISSIONING PLAN
REVISION 3

BURNS McDONNELL

environmental properties management, LLC

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NAD 1983 StatePlane Oklahoma North FIPS 3501 Feet