

TOP OF WINNIPEG SHALE AND RED RIVER CARBONATE ISOPACH

Figure: 5-6

VIVIAN SAND EXTRACTION PROJECT
HYDROGEOLOGY AND GEOCHEMISTRY ASSESSMENT
CANWHITE SANDS CORPORATION
Project No.: 60640258 Date: April 2021

Legend

Project Site

(59)

WINNIPEG SHALE ISOPACH

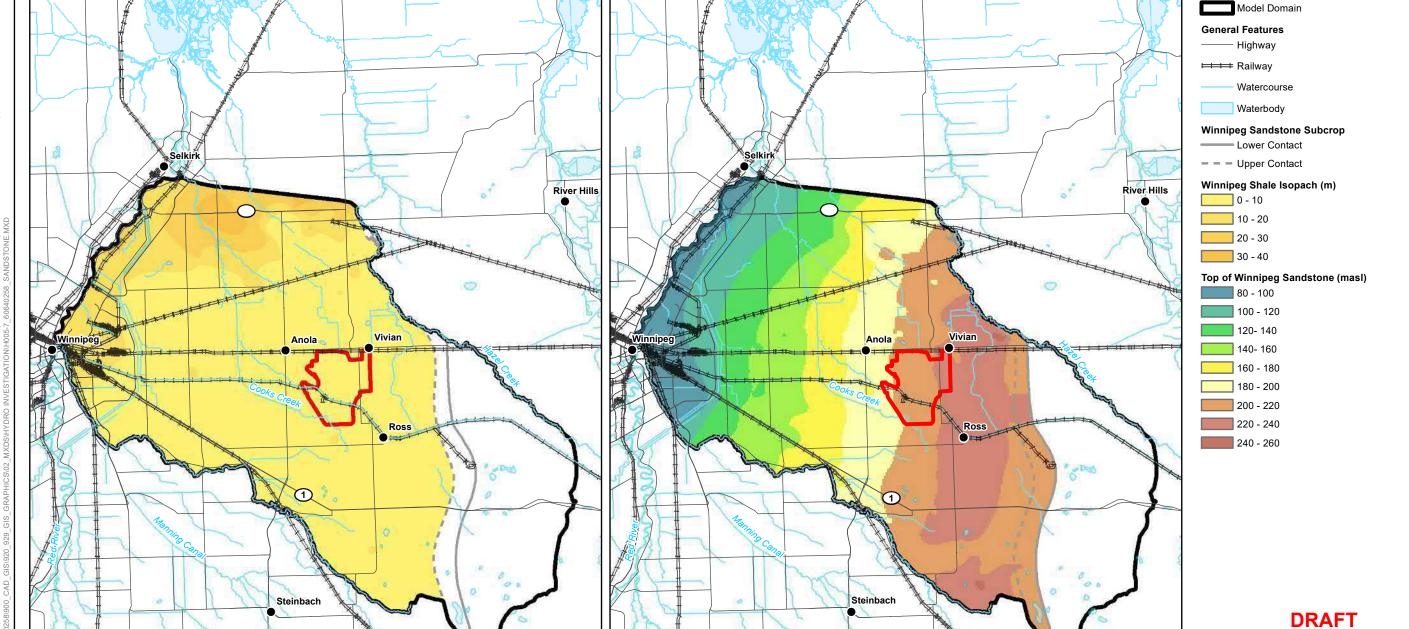
VIVIAN SAND EXTRACTION PROJECT
HYDROGEOLOGY AND GEOCHEMISTRY ASSESSMENT
CANWHITE SANDS CORPORATION
Project No.: 60640258 Date: April 2021

1:580,000 NAD 1983 UTM Zone 14N

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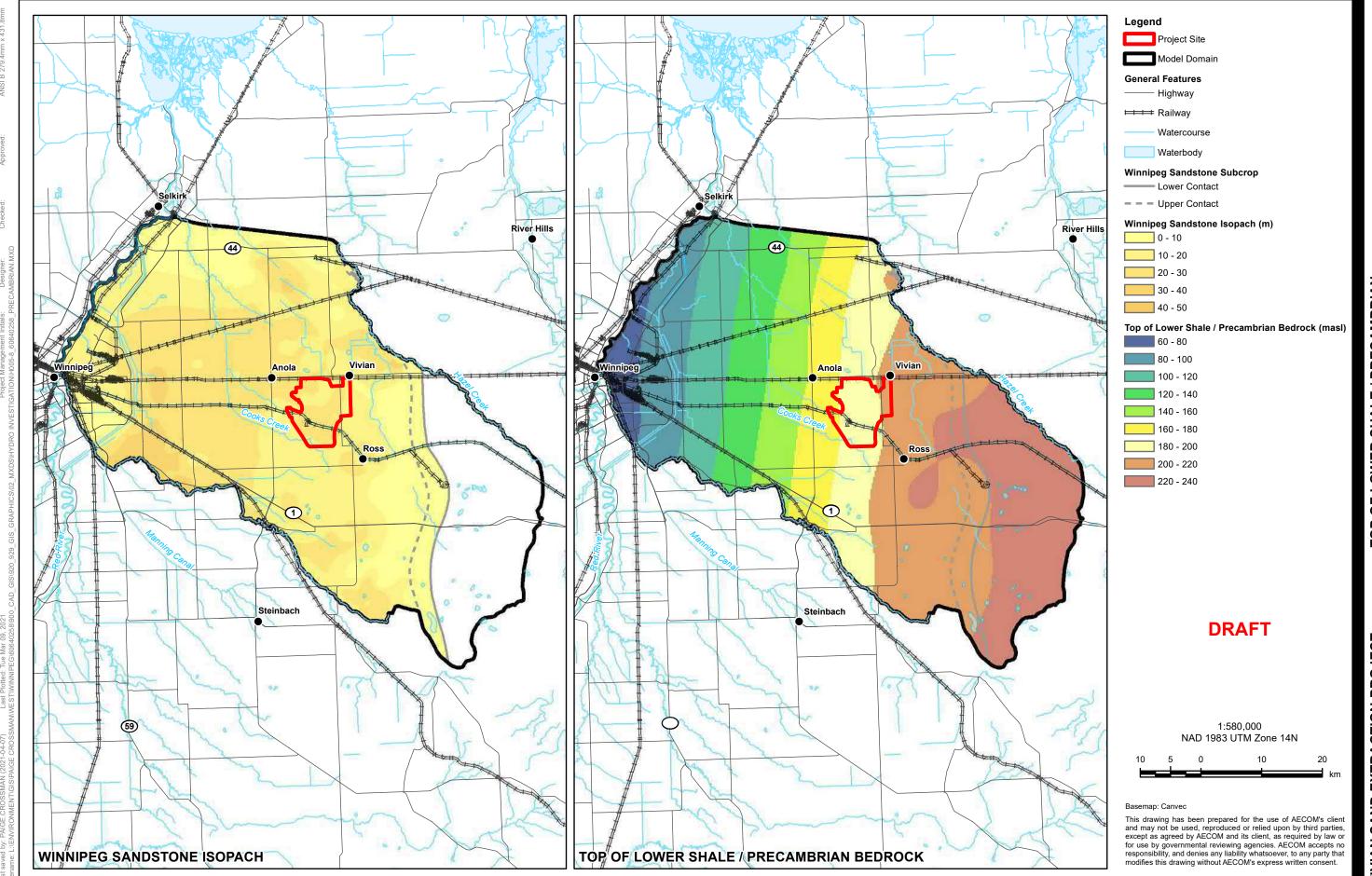
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TOP OF WINNIPEG SANDSTONE



F LOWER SHALE / PRECAMBRIAN BEDROCK AND WINNIPEG SANDSTONE ISOPACH 9

VIVIAN SAND EXTRACTION PROJECT TOP HYDROGEOLOGY AND GEOCHEMISTRY ASSESSMENT CANWHITE SANDS CORPORATION Project No.: 60640258 Date: April 2021

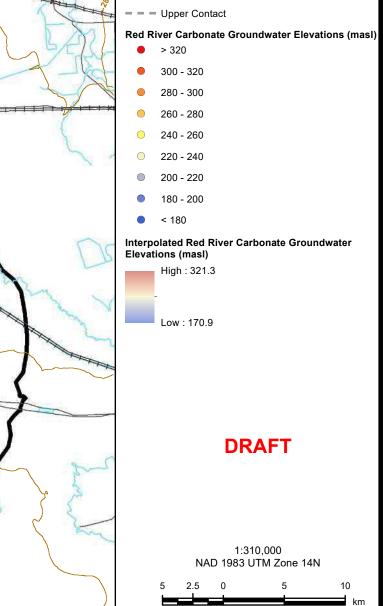
AECOM Figure: 5-8

VIVIAN SAND EXTRACTION PROJECT
HYDROGEOLOGY AND GEOCHEMISTRY ASSESSMENT
CANWHITE SANDS CORPORATION
Project No.: 60640258 Date: April 2021

Figure: 5-9

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VIVIAN SAND EXTRACTION PROJECT
HYDROGEOLOGY AND GEOCHEMISTRY ASSESSMENT
CANWHITE SANDS CORPORATION
Project No.: 60640258 Date: April 2021



Basemap: Canvec

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Legend

River Hills

Project Site

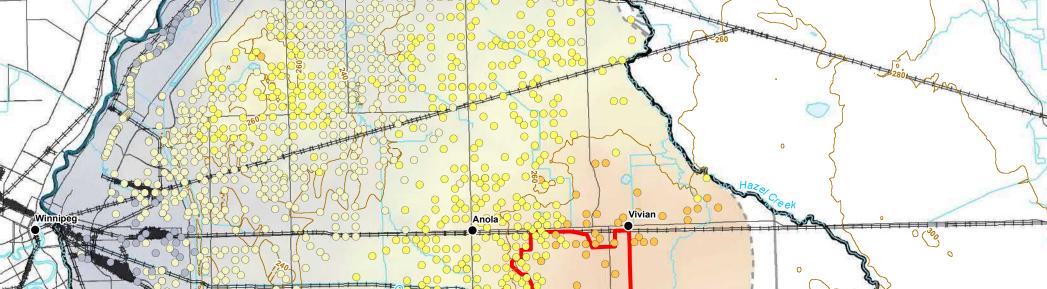
General Features - Highway

□ Railway

Model Domain

Watercourse Waterbody Winnipeg Sandstone Subcrop Lower Contact

Topographic Contour (20m)



Steinbach

(59)

(44)

VIVIAN SAND EXTRACTION PROJECT
HYDROGEOLOGY AND GEOCHEMISTRY ASSESSMENT
CANWHITE SANDS CORPORATION
Project No.: 60640258 Date: April 2021

< 180</p> Interpolated Winnipeg Sandstone Groundwater Elevations (masl) High: 321.3 Low: 170.9 **DRAFT** 1:310,000 NAD 1983 UTM Zone 14N

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Basemap: Canvec

Legend

Project Site

General Features Highway

> 320 9 300 - 320 **280 - 300 o** 260 - 280

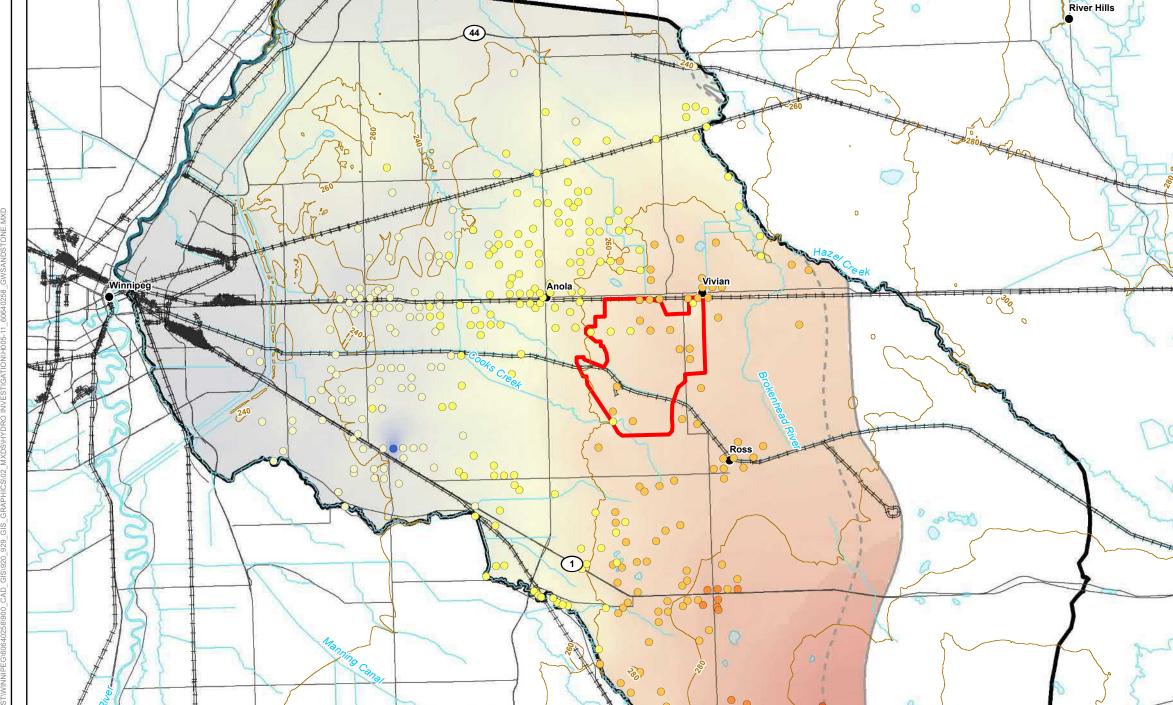
<u>240 - 260</u> O 220 - 240 0 200 - 220 **180 - 200**

Model Domain

Watercourse Waterbody Winnipeg Sandstone Subcrop Lower Contact — — Upper Contact

Topographic Contour (20m)

Winnipeg Sandstone Groundwater Elevations (masl)



Steinbach

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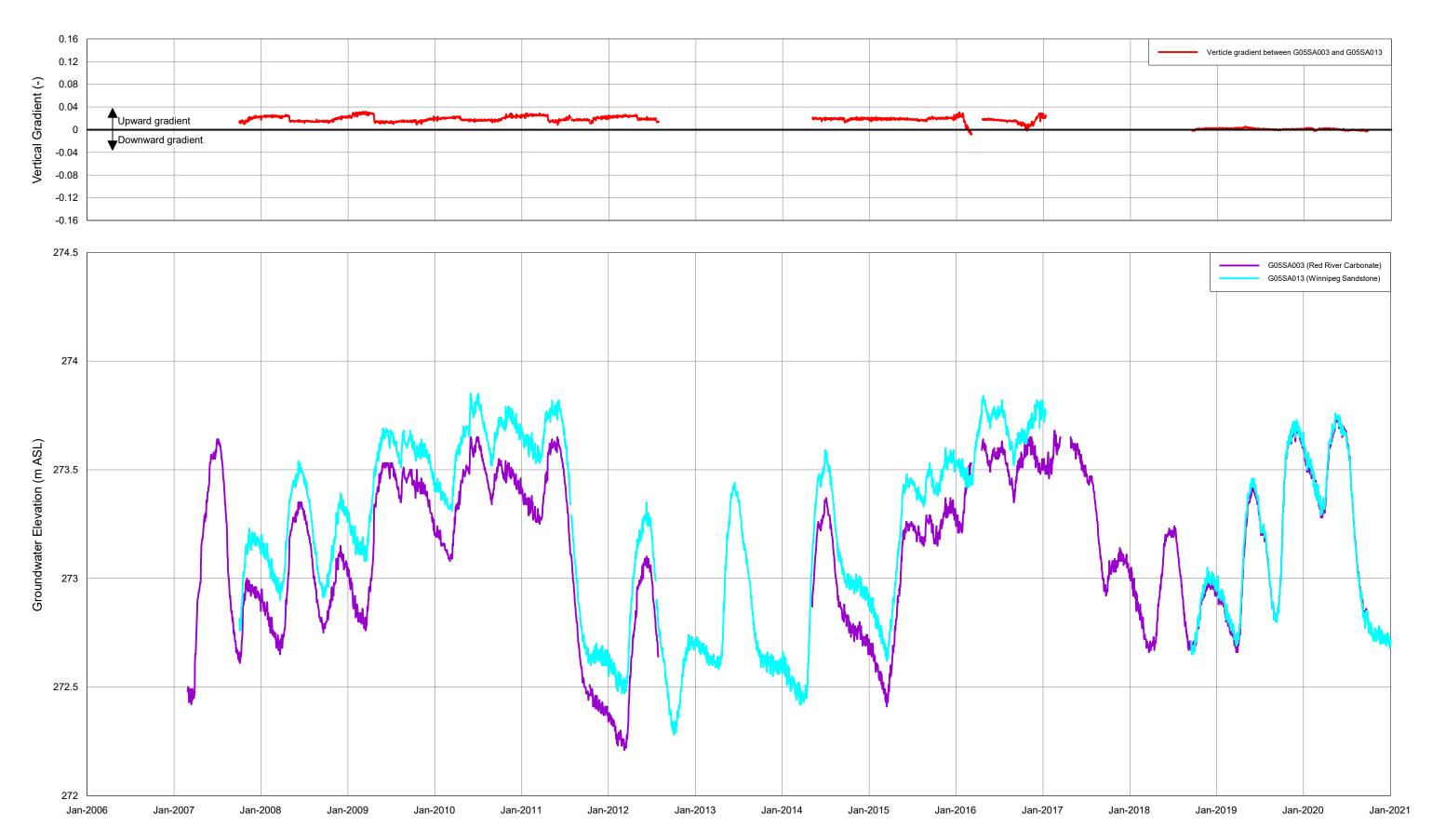


Figure 5-12. Manitoba Observation Well Hydrograph – Wells G05SA003 / G05SA013

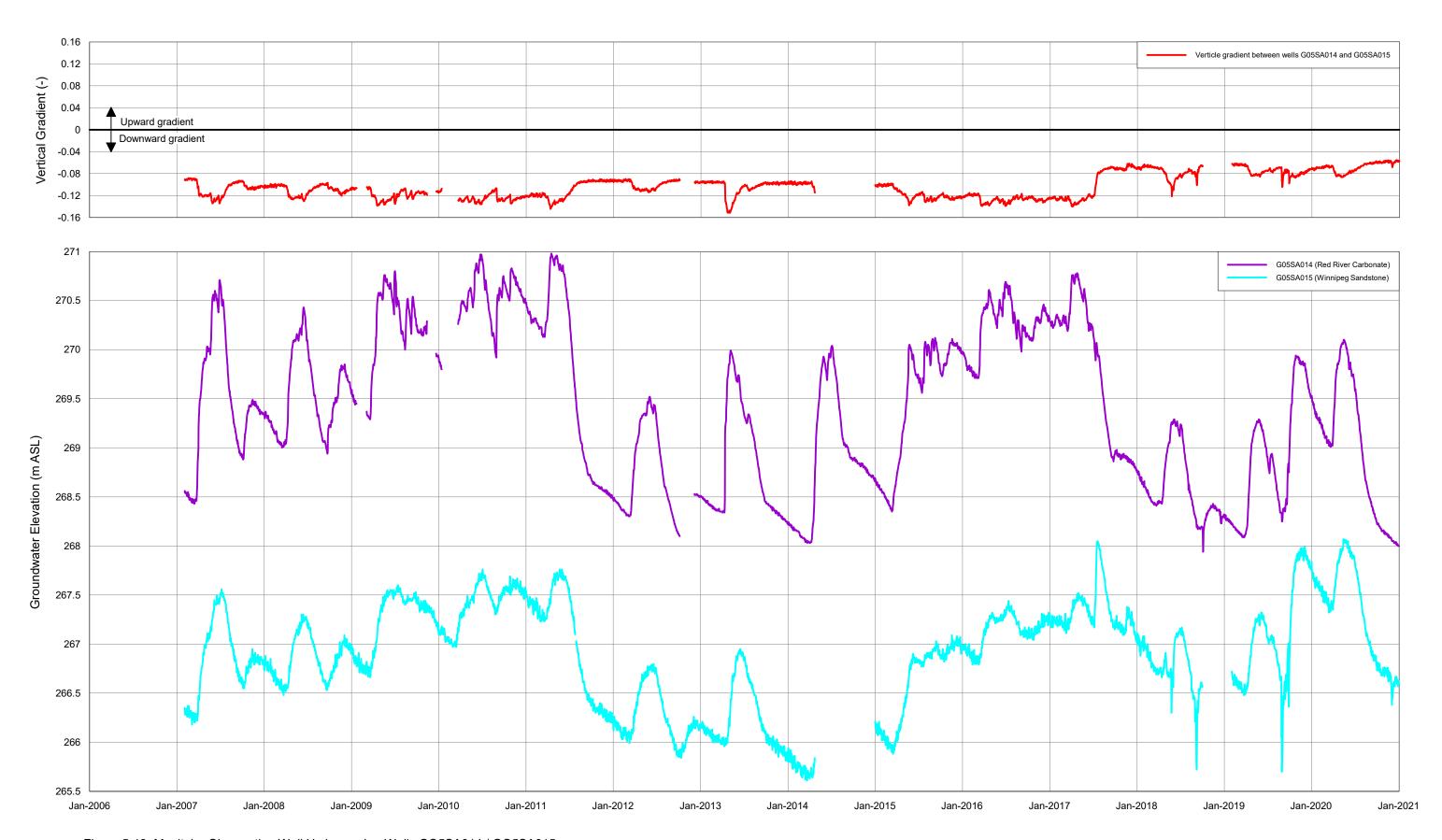


Figure 5-13. Manitoba Observation Well Hydrograph – Wells GO5SA014 / GO5SA015

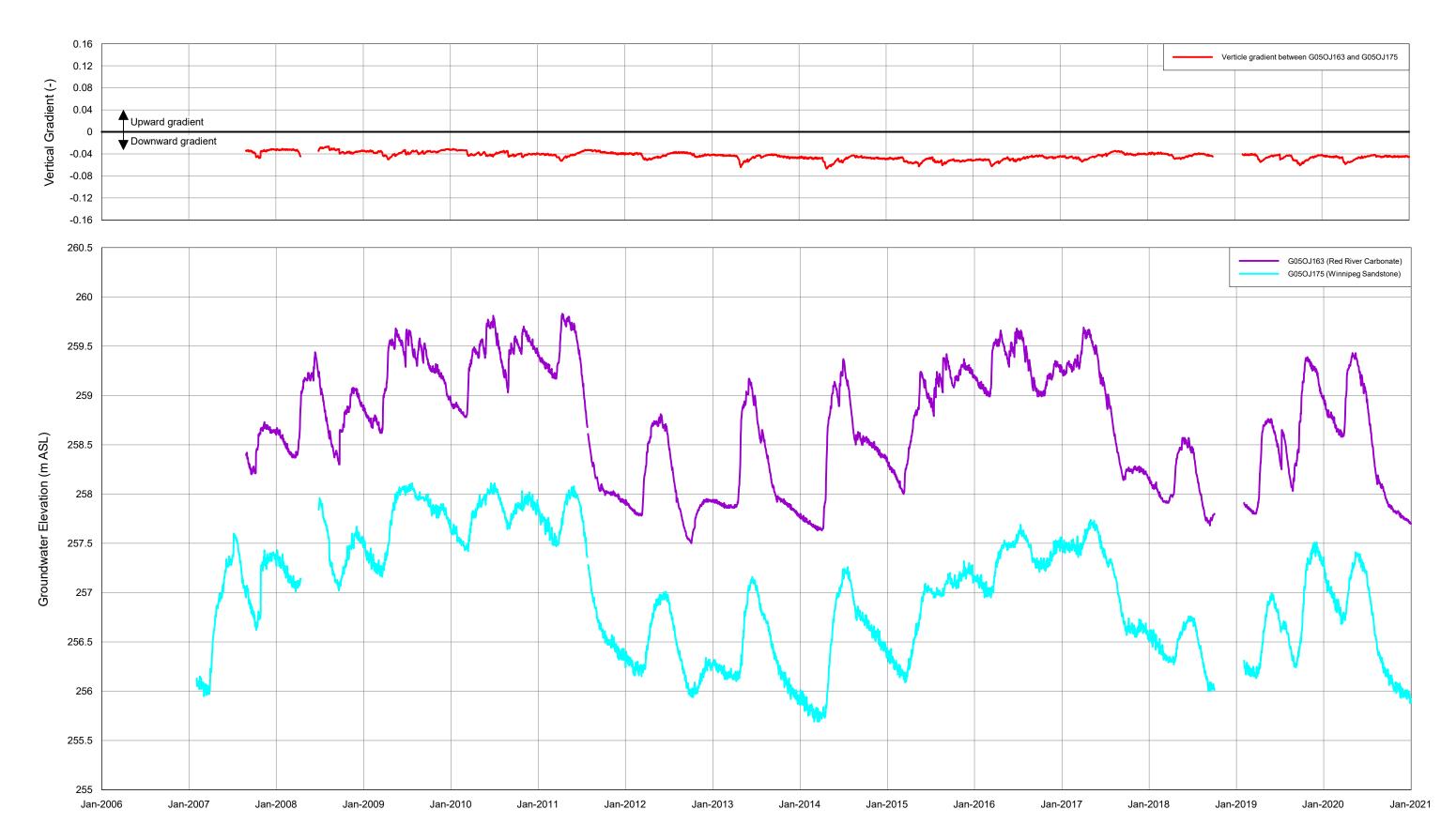
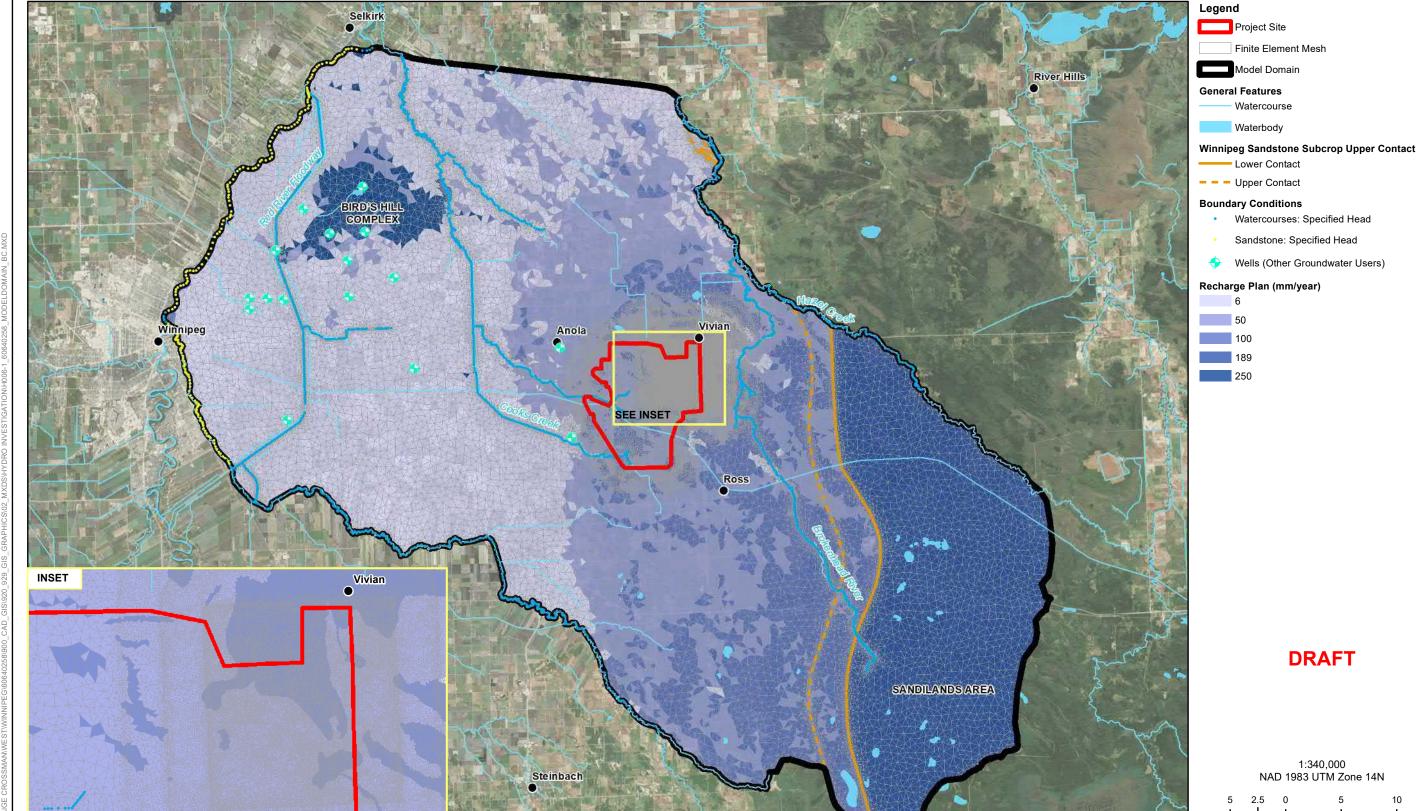


Figure 5-14. Manitoba Observation Well Hydrograph – Wells GO5OJ175 / GO5OJ163

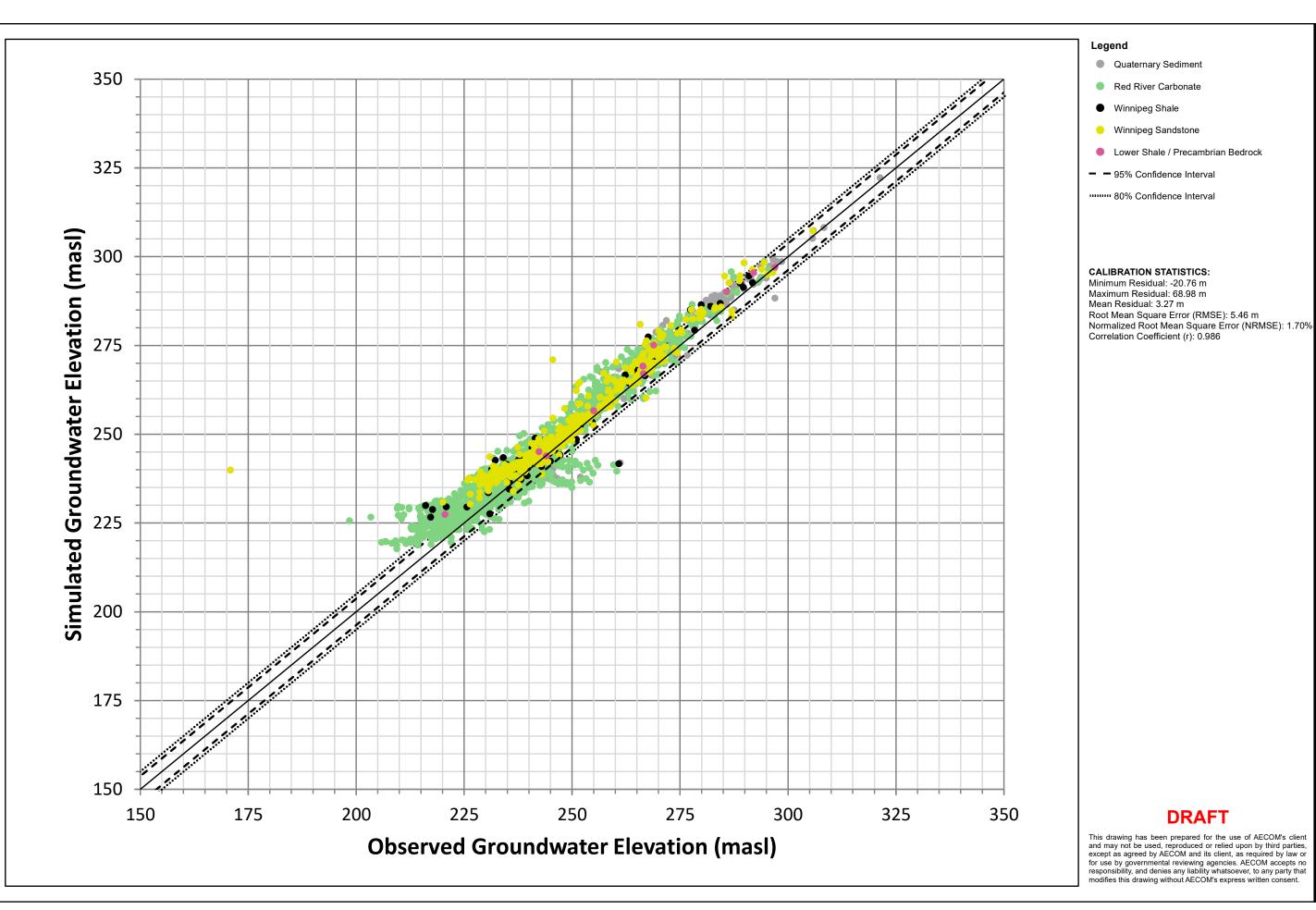
1:340,000 NAD 1983 UTM Zone 14N

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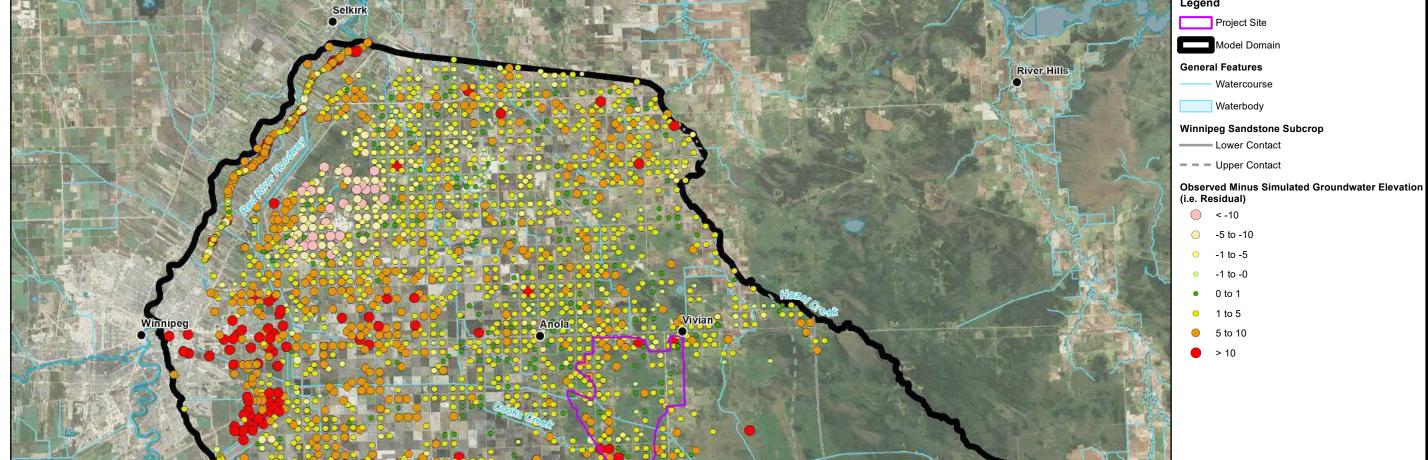
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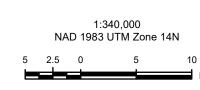






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Legend

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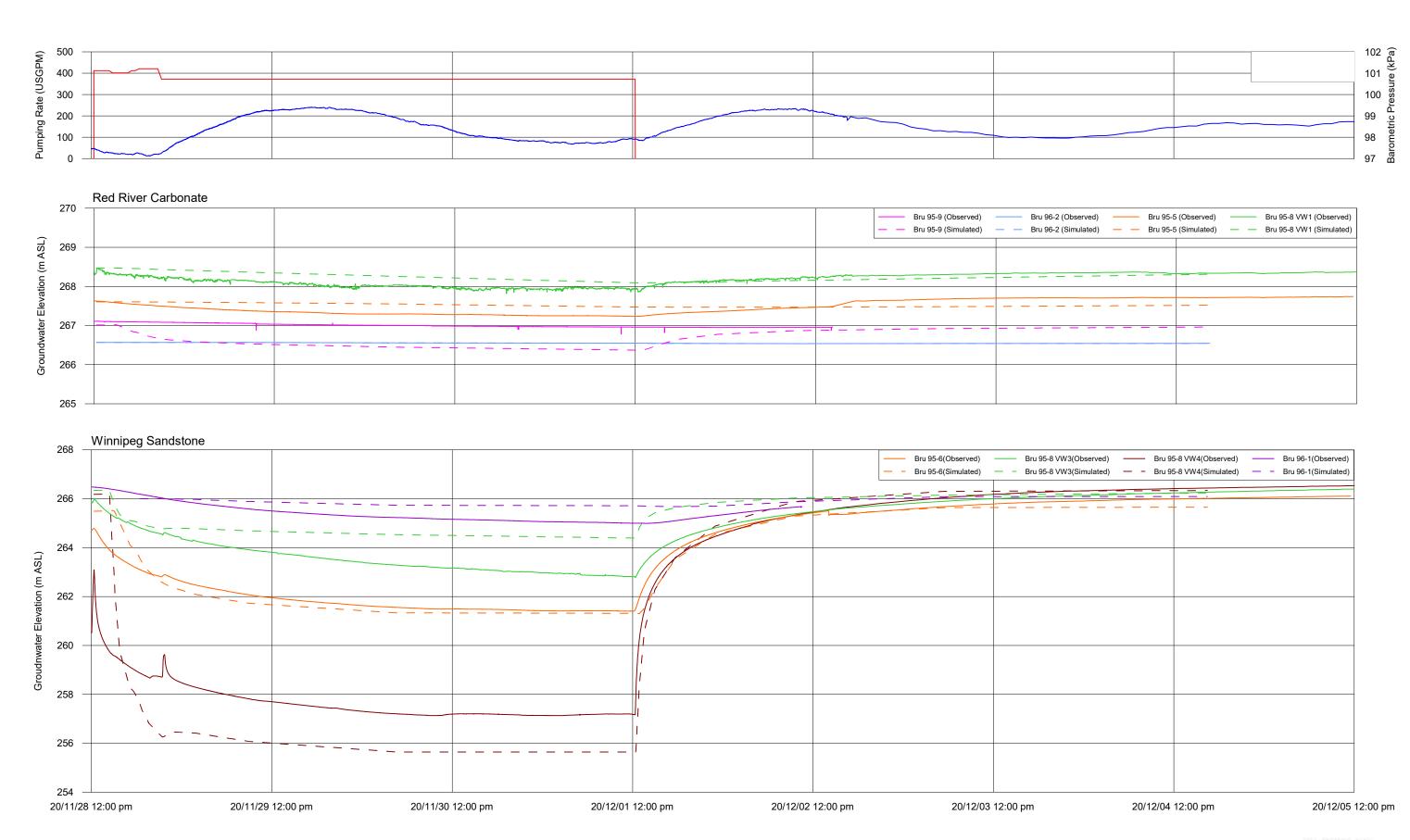
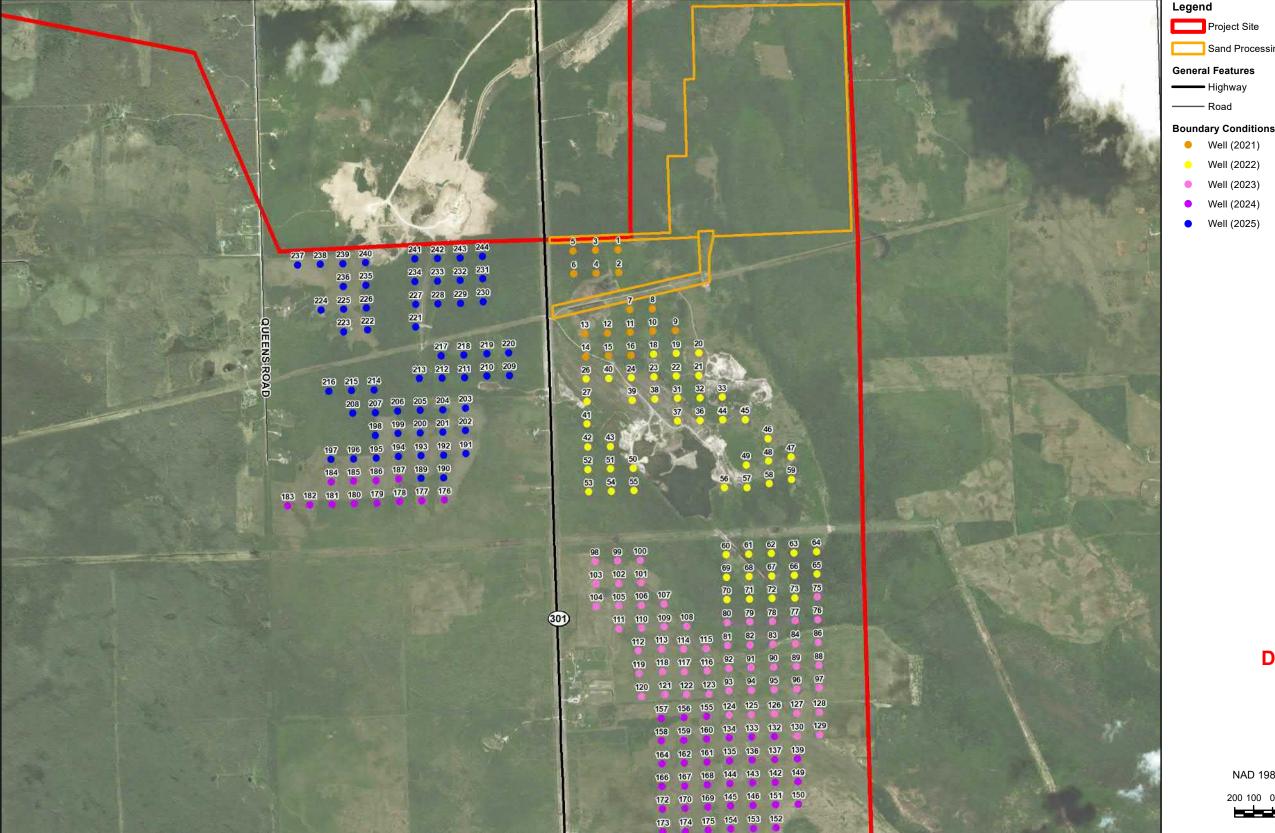


Figure 6-4. Transient Calibration Time Series Plot (Pumping Test)

Figure: 6-5

> bing



Well (2023) Well (2024)

Well (2022)

Sand Processing Facility

Well (2025)

— Highway — Road

DRAFT

1:20,000 NAD 1983 UTM Zone 14N



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Figure: 6-6

General Features Highway ----- Road ⊨=== Railway

> Watercourse Waterbody

1:40,000 NAD 1983 UTM Zone 14N

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