Appendix 5A

Process and Rationale for Setting Minimum Thresholds and Measurable Objectives for Groundwater Levels and Depletions of Interconnected Surface Waters

Technical Memorandum

To: Colusa Groundwater Authority and Glenn Groundwater Authority

From: Davids Engineering and Woodard & Curran

Date: July 8, 2021

Subject: **Process and Rationale for Setting Minimum Thresholds and Measurable Objectives for Groundwater Levels and Depletions of Interconnected Surface Waters**

Introduction

Sustainable Management Criteria (SMC) for the Colusa Subbasin have been established in consultation with the Technical Advisory Committees of the two groundwater sustainability agencies in the subbasin, those being the Colusa Groundwater Authority (CGA) and Glenn Groundwater Authority (GGA). SMCs consist of the following: the Sustainability Goal adopted for the for the subbasin; Undesirable Results describing significant and unreasonable effects to be avoided; quantitative Minimum Thresholds (MTs) that define conditions that, if exceeded, may cause Undesirable Results; and quantitative Measurable Objectives (MOs) to achieve the Sustainability Goal of the subbasin. Undesirable results, MTs, and MOs are all established in relation to the six sustainability indicators referenced in the GSP Emergency Regulations, five of which are applicable in the Colusa Subbasin.

This Technical Memorandum (TM) documents the process and rationale for setting MTs and MOs for two specific sustainability indicators: Chronic Lowering of Groundwater Levels (Groundwater Levels), and Depletions of Interconnected Surface Water (Streamflow Depletion). As specified in 23 CCR 354.28(c)(6), Streamflow Depletion MTs and MOs shall be based on “the rate or volume of surface water depletions caused by groundwater use that has adverse impacts on beneficial uses of the surface water and may lead to undesirable results.” However, the regulations also allow the use of groundwater levels as a proxy for streamflow rates or volumes. Because the location and accuracy of existing stream gages on the Sacramento River and its tributaries are not sufficient to analyze streamflow accretions and depletions with respect to the Colusa Subbasin, water levels were used as a proxy. Thus, both of the sustainability indicators addressed in this TM involve groundwater levels and are therefore related. In particular, for representative monitoring network wells that are included in the monitoring networks for both indicators, there are two MTs and MOs. Both are valid with respect to their associated indicator but operationally the shallower MTs and MOs will govern.

The discussion of MOs and MTs for Groundwater Levels and Streamflow Depletion follow, preceded by a brief description of the outreach process used for SMC development (not just for Groundwater Levels and Streamflow Depletion, but also for other sustainability indicators and other GSP development tasks), and brief statements of the Sustainability Goal and Undesirable Results for the two sustainability indicators addressed here.

Outreach and Public Involvement Process

Outreach and public involvement in support of SMC development in the Colusa Subbasin were achieved primarily through a series of public meetings with the Technical Advisory Committees formed by the Colusa Groundwater Authority (CGA) and Glenn Groundwater Authority (GGA), respectively. The meetings were publicly noticed on the CGA and GGA websites, with agendas noting action items posted in advance of each meeting, and minutes prepared following each meeting. The technical topics and content for each meeting were developed by the Colusa Subbasin GSP Technical Team led by Davids Engineering, with Woodard & Curran serving as the lead SMC subconsultant. The TACs met together with the meetings referred to as Joint TAC meetings.

Joint TAC meetings were held approximately monthly, with total of 13 meetings held between May 8, 2020, and June 11, 2021. SMCs were addressed at nine of the 13 meetings, and at all of the 7 meetings held between January 8 and June 11, 2021. TAC members engaged in a very thorough, thoughtful, and constructive manner, giving consideration to all interests in the Subbasin involved with or affected by groundwater use and management.

Members of the public attended most meetings and were encouraged to express their opinions and suggestions.

Sustainability Goal

The Sustainability Goal for the Colusa Subbasin as accepted by the TACs and adopted by the CGA and GGA is:

> *…to maintain, through a cooperative and partnered approach, locally managed sustainable groundwater resources to preserve and enhance the economic viability, social well-being and culture of all beneficial uses and users, including domestic, agricultural, municipal, environmental, tribal, and industrial, without experiencing undesirable results by managing use within the sustainable yield.*

Undesirable Results

The undesirable results statements proposed for Groundwater Levels and Streamflow Depletion, respectively, are as follows:

- The undesirable result for the chronic lowering of groundwater levels is a result that would cause significant and unreasonable reduction in the long-term viability of beneficial uses and users over the planning and implementation horizon of this GSP.
- The undesirable result for the depletion of interconnected surface water is a result that causes significant and unreasonable adverse effects on beneficial uses and users of interconnected surface waters within the Colusa Subbasin over the planning and implementation horizon of this GSP.

Measurable Objectives

MOs represent the desired conditions for sustainable operation of the subbasin while MTs define conditions that are to be avoided because of the risk that Undesirable Results could occur if the MTs are exceeded. For both sustainability indicators addressed in this TM, the MTs were set as the numerical average of all recorded groundwater levels over the most recent five years of record available for each well. For all but 4 wells, the most recent five years of record ends in Spring 2020. Setting MOs in this manner reflects the GSAs' intention to operate the subbasin without persistent declines below recent historical groundwater levels.

Minimum Thresholds

The rationale and parameters considered in establishing MTs for Groundwater Levels and Streamflow Depletion are discussed below in respective sections.

Groundwater Levels

The primary parameters and general objectives considered in establishing Groundwater Levels MTs were:

1. Avoiding significant and unreasonable impacts to shallow (primarily domestic) wells: setting MT groundwater levels shallow enough to be reasonably protective of a majority of existing domestic wells.
2. Avoiding significant and unreasonable effects on groundwater dependent ecosystems (GDEs): setting MT groundwater levels shallow enough to be reasonably protective of GDEs.
3. Avoiding significant and unreasonable impacts to (constraints on) conjunctive management of Colusa Subbasin surface water and groundwater supplies: setting MT groundwater levels deep enough to allow a range of operational flexibility that ensures adequate water supply reliability over variable, wet and dry hydrologic conditions.

Available GDE mapping was analyzed and GDE areas ranked with regard to their likelihood of actually being dependent on groundwater as opposed to being sustained by streamflow or applied irrigation water. However, due to lack of reliable shallow groundwater elevation data, the analysis was inconclusive[1] and objectives 1 and 3, above, became the primary focus for setting Groundwater Level MTs. Obviously the two objectives directly conflict, meaning setting MTs involved striking balance and compromise between them.

For each of the 48 wells in the Groundwater Level representative monitoring network, Thiessen polygons were drawn around each well and the depths of all domestic wells expressed as an exceedance function. For example, the 10 percent exceedance for the domestic wells in any given polygon is the depth at which 10 percent of the wells are shallower and 90 percent deeper, meaning 90 percent of the wells would be protected and 10 percent would be subject to potential stranding if groundwater levels fell to the 10 percent exceedance depth. Based on technical team analysis and TAC discussion, a 20 percent exceedance threshold emerged as being reasonable for protection of existing domestic well infrastructure.

Existing domestic well infrastructure in the Subbasin is based on Well Completion Reports (WCR) available in DWR's database[2]. The WCR data generally includes all historical wells that have been reported in the system, which may include old wells that are no longer operational, or have been refurbished. The data is self-reported, and some data entries are incomplete. As such, the domestic well inventory for the Subbasin is incomplete and will be addressed with other data gaps in the Subbasin to support GSP implementation (see Chapter 3). The analysis to support setting MT was developed considering these limitations.

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[1] The lack of shallow groundwater data is identified as a data gap and will be addressed along with other data gaps during plan implementation.

[2] Available at: https://data.cnra.ca.gov/dataset/well-completion-reports

For the same 48 representative monitoring wells, historical water levels, generally for the period from spring 2000 to spring 2020 (subject to availability for any particular well), were reviewed and analyzed as a basis for understanding how groundwater levels have fluctuated and when historical minimum groundwater levels have occurred. In particular, the magnitude of the range of historical fluctuation was regarded as an indicator of how the well has behaved over wet and dry hydrologic periods, and whether there are any persistent upward or downward trends. For many wells, especially those relatively far from streams, groundwater levels have trended downward since approximately the mid-2000s, and record low groundwater levels were observed in the fall of 2015 following back-to-back critically dry years. These observations led to the approach of setting MTs at historical low levels plus some percentage of the observed groundwater level range to allow for conjunctive operation of the subbasin during droughts. The TACs considered 20 percent and 50 percent of historical range as the increment to add to the observed historical low groundwater level. After careful review of the 48 well records, 50 percent of historical range below the historical low was selected as an MT that would allow the range of fluctuation necessary to manage through future dry periods while avoiding undesirable results. To support evaluation of Groundwater Level MTs, the technical team developed an economic analysis of the costs (additional pumping costs, domestic well replacement costs) and benefits (avoided costs of other projects and management actions) associated with the proposed MTs. The analysis illustrated the direct monetary cost-benefit tradeoffs of setting MTs at different levels. The central conclusion was that the additional cost of raising the MT for most monitoring wells was substantially greater than the additional benefit to groundwater users in the Subbasin. Results of this analysis were presented to the TAC at a public meeting held on May 13, 2021 and described in more detail in Appendix 5B of the GSP.

Hydrographs for the 48 wells in the Groundwater Level representative monitoring well network are provided in Attachment A illustrating both possible MTs: one based on the 20th percentile domestic well depth exceedance and the other on 50 percent of historical range below the historical low. The two MTs are shown in relation to available historical data for each well between 2000 and 2020. For 30 of the wells, the lower of the MTs is represented by the 50 percent of range below the historical low with the lower MT for the remaining 18 wells represented by 20th percentile domestic well depth exceedance. Based on the information in these graphs and supporting analysis by the technical team, the technical team recommended and the TACs accepted adopting the lower of the two MTs as the governing threshold.

For the 30 wells with MTs based on 50 percent of historical range below the historical low, it was possible that more than 20 percent of domestic wells would be shallower than the MT, and therefore would be at risk of dewatering. An additional analysis was developed to quantify the share of domestic wells that could potentially be affected under the selected MT. The inventory of domestic wells for each polygon was screened to remove wells that were shallower than the historical low groundwater level observed prior to January 1, 2015. These wells would have been dewatered based on historical groundwater levels that occurred in the Subbasin prior to the implementation of SGMA. The proportion of the remaining wells that are shallower than the proposed MT was calculated for each polygon. In aggregate, approximately 12 percent of domestic wells—substantially less than 20 percent—are shallower than the proposed MT. This was viewed as an acceptable balance between avoiding significant and unreasonable impacts to domestic (and other shallow) wells and allowing sufficient flexibility for conjunctive management of Subbasin surface and groundwater supplies.

It is important to emphasize that groundwater levels will be managed for MOs, which are generally set substantially above MTs. MTs define the levels that would not be exceeded to avoid increasing risk of Undesirable Results. However, recognizing the importance of protecting domestic wells in the Subbasin, the GSP includes a potential management action in which the GSAs would develop a domestic well mitigation program[3]. This would provide an additional safety net for domestic well users by providing potential compensation for impacts to domestic wells that are associated with GSP implementation.

A hydrograph series showing the selected, lower MTs relative to historical water levels at each representative monitoring well is presented in Attachment B.

Streamflow Depletion

As explained in the Introduction, Streamflow Depletion MTs are based on groundwater levels as a proxy for streamflow depletion volume or rate. The basic rationale postulated by the Environmental Defense Fund (EDF) in support of using groundwater levels as a proxy for depletion volumes or rates is that adverse impacts to surface water uses and users can be avoided if groundwater gradients and levels near interconnected streams are maintained at levels that existed when implementation of the Sustainable Groundwater Management Act (SGMA) began in 2015[4].

Only 12 wells could be identified that were considered to reasonably represent groundwater levels near the three major, potentially interconnected streams in the Colusa Subbasin. The 12 wells were selected based on the following criteria developed using recommendations in the EDF report:

- Located greater than 2,000 feet and not more than 5 miles from an interconnected stream
- Depth to bottom of screened interval less than or equal to 200 feet

The three streams are: Stony Creek, which borders the Subbasin to the north; the Sacramento River, which mostly borders the Subbasin to the east but also runs through a portion of the Subbasin (approximately between Princeton and Colusa); and, the Colusa (Basin) Drain, which originates in and flows southward out of the Subbasin at the Colusa-Yolo Subbasin boundary (county line). The 12 wells are not considered adequate for long-term sustainable groundwater management; additional, dedicated near-stream, shallow monitoring wells are needed and will be designed and installed during GSP implementation. Nevertheless, quantitative MTs were established for them as described below. These MTs are considered to be provisional pending additional data collection and analysis and updating and refining the C2VSim FG-Colusa model.

Three alternative MTs were evaluated for the 12 wells currently in the Streamflow Depletion representative monitoring network, as follows:

1. The observed Fall 2015 groundwater level (on the date closest to October 15), OR
2. 20 percent of the historical range in groundwater levels below the observed Fall 2015 groundwater level (depth to water), OR
3. 10 feet below the observed Fall 2015 groundwater level (on the date closest to October 15).

The first MT is consistent with the EDF recommendation that aims to avoid or minimize incremental post-SGMA effects on stream depletions but prevents any opportunity for exercising groundwater storage, such as might be needed during prolonged droughts. The second MT is based on a similar concept as that used for Groundwater Levels, where the MT is set at 20 percent of the historical range below the observed Fall 2015 water level. However, historical water levels in most near-stream wells are

[3] See Chapter 6, Section 6.5.2 of the GSP.

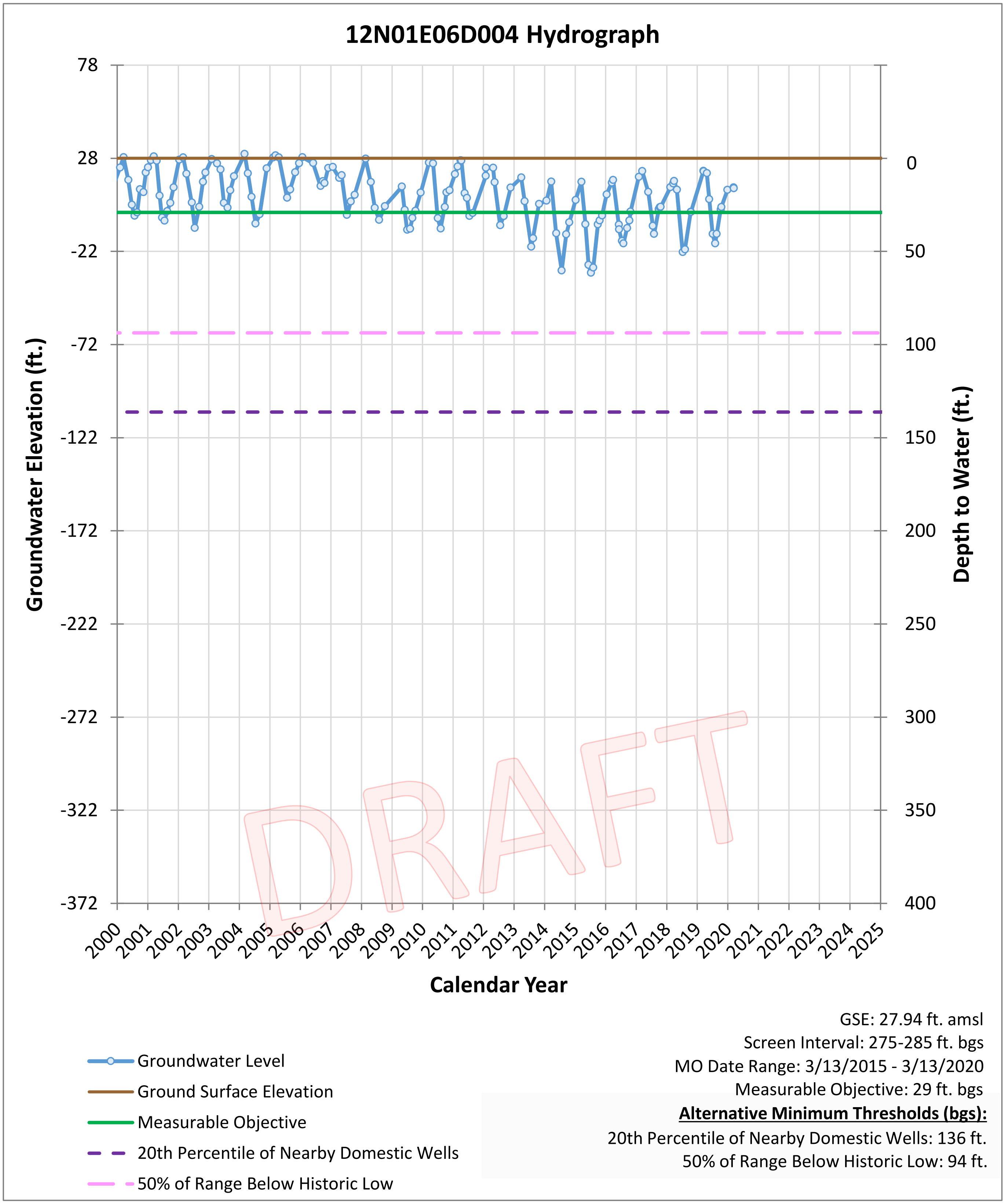
[4] Environmental Defense Fund, (EDF), 2018, Addressing Regional Surface Water Depletions in California: A Proposed Approach for Compliance with the Sustainable Groundwater Management Act. Available online at http://edf.org/california-surface-water-report.

generally stable and do not fluctuate much. Thus, the historical range is typically small, and the resulting MT was still very constraining on the ability to exercise groundwater storage when needed. Finally, due to concerns among TAC members regarding overly constrained groundwater operations, a third MT was introduced defined as 10 feet deeper than the Fall 2015 groundwater level at each well.

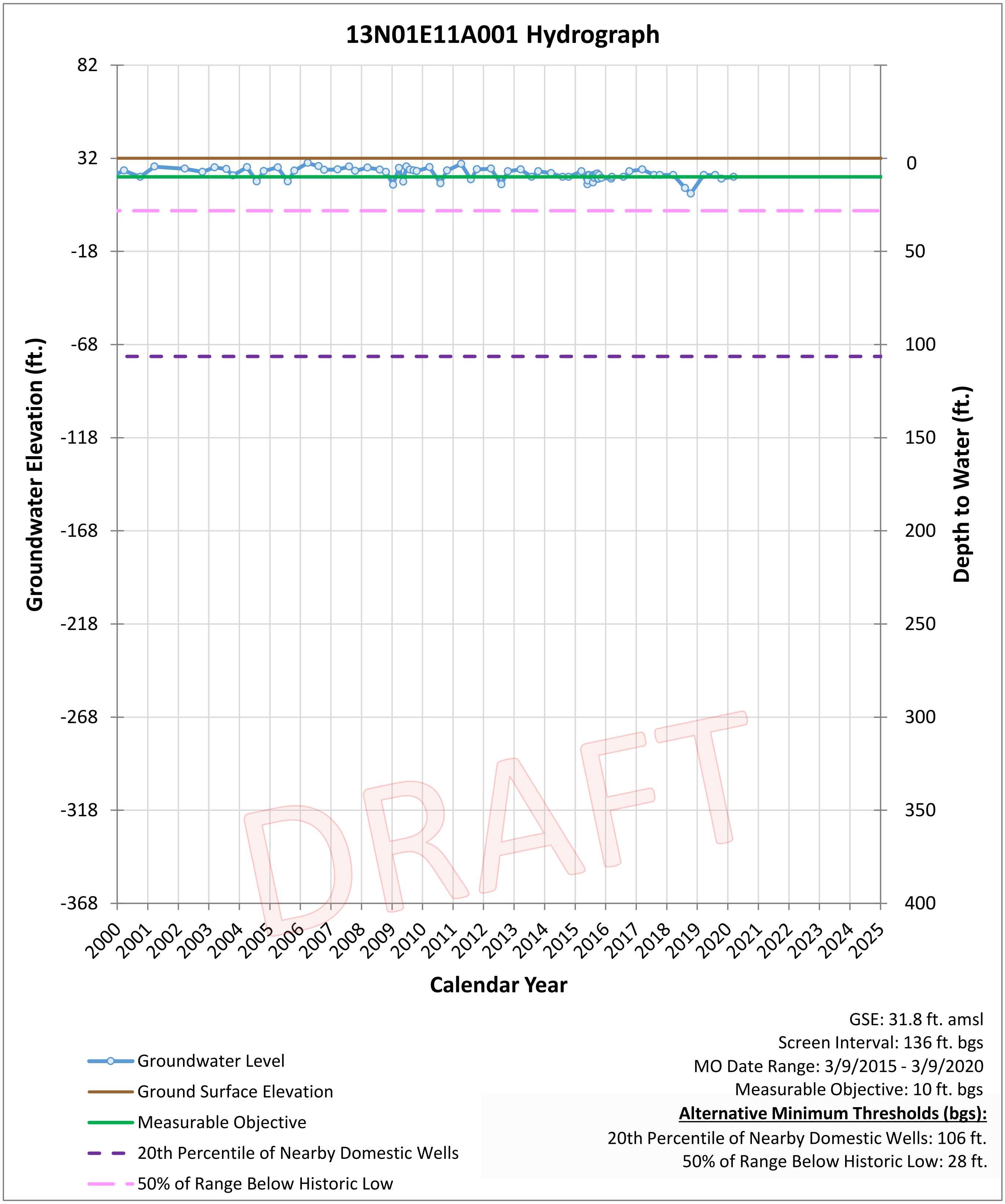
A series of hydrographs showing all three alternative MTs in relation to historical groundwater levels at each of the 12 wells is presented in Attachment C. For all wells, the highest MT is represented by the fall 2015 water level. The lowest MT is represented by the 10 feet deeper than Fall 2015 groundwater level at 10 of the 13 wells. For the three wells where the 20 percent of historical range below the observed Fall 2015 groundwater level is the deepest MT, the margin between the two deepest MTs is typically small.

Based on careful consideration of the alternative Streamflow Depletion MTs, the TAC selected the MT defined as 10 feet deeper than the observed Fall 2015 water level. A series of hydrographs showing the selected MT relative to historical groundwater level is presented in Attachment D.

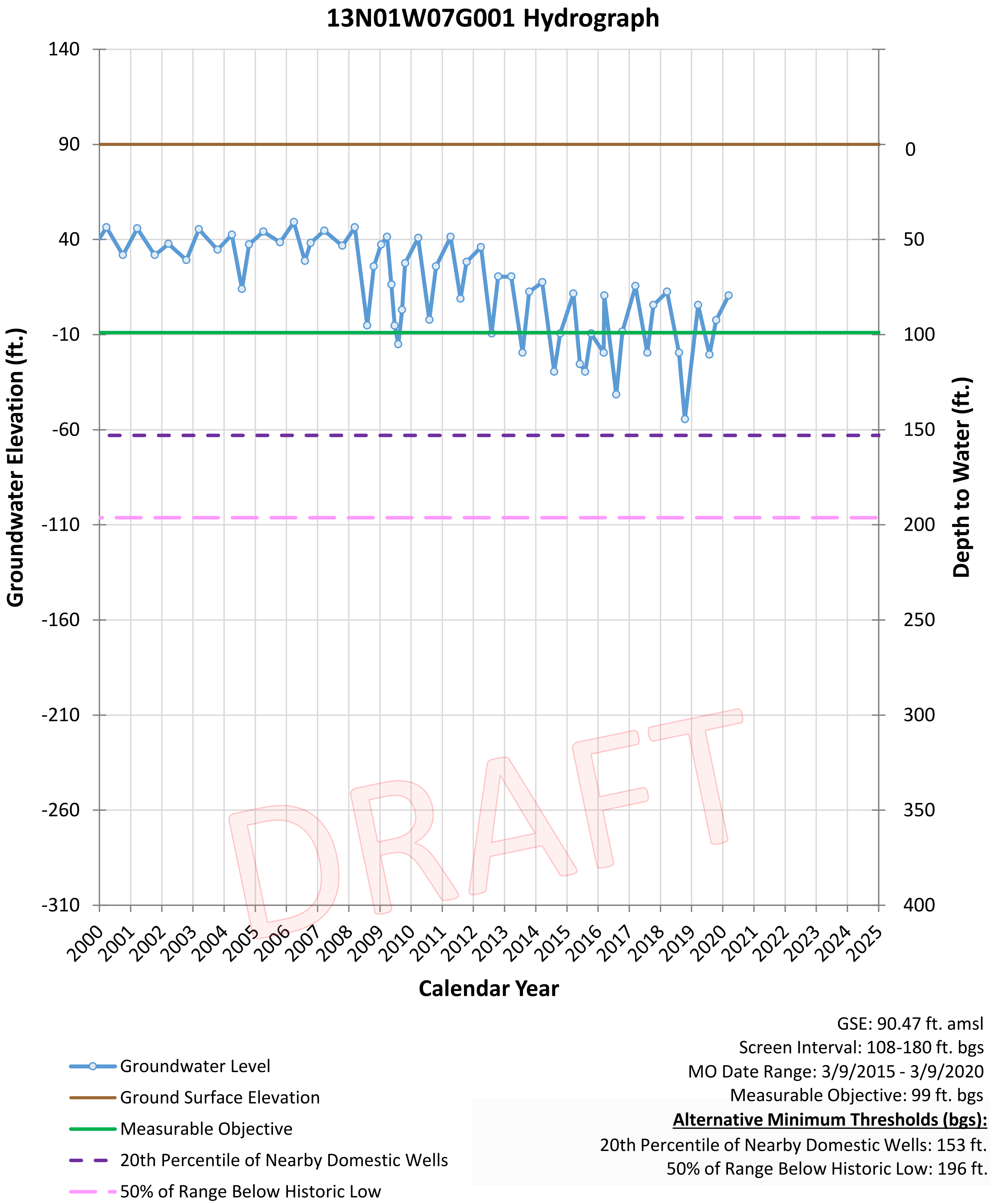
Attachment A. Groundwater Levels – Preliminary Minimum Thresholds Review



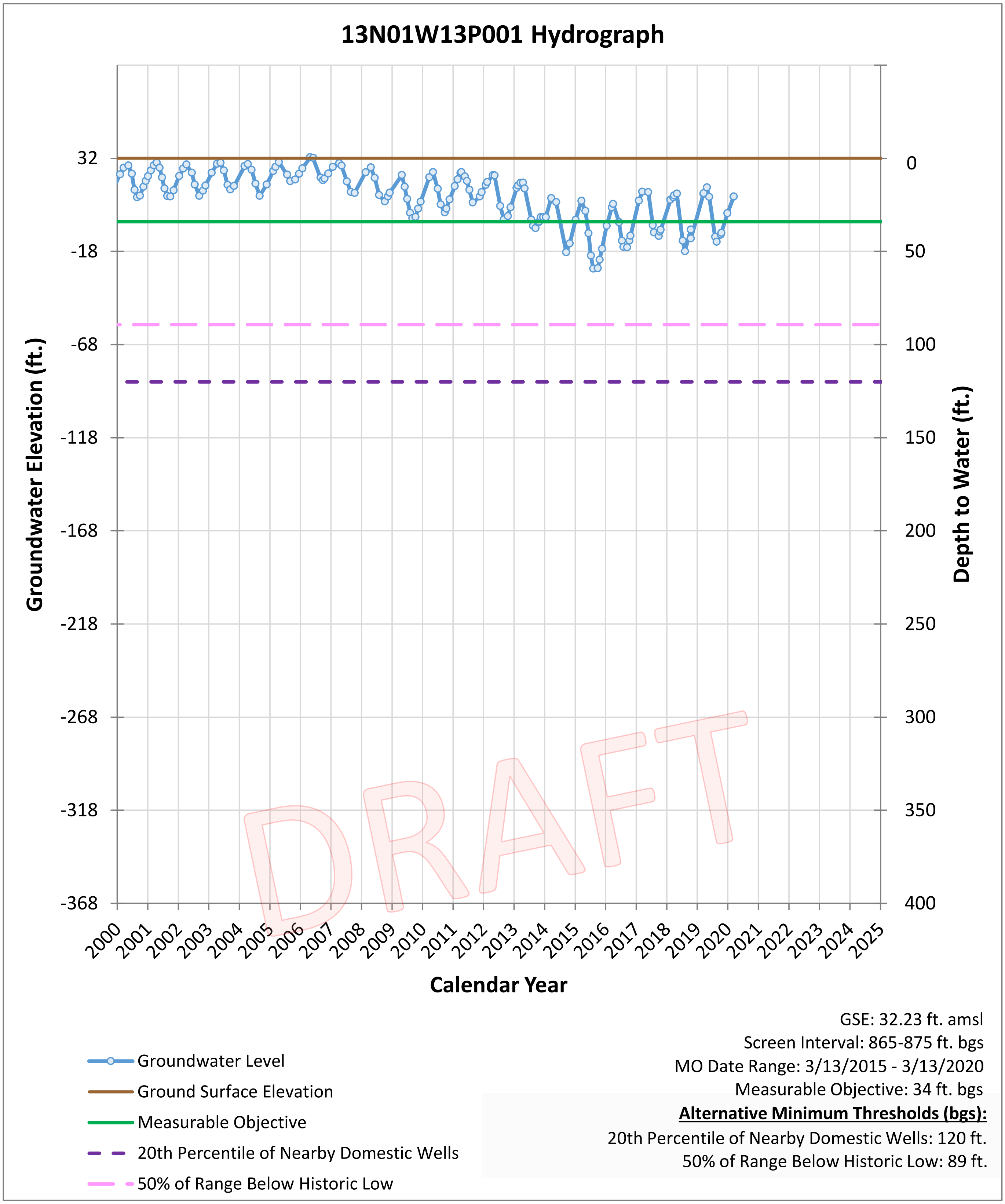
12N01E06D004 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
78
28
-22
-72
-122
-172
-222
-272
-322
-372
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 27.94 ft. amsl
Screen Interval: 275-285 ft. bgs
MO Date Range: 3/13/2015 - 3/13/2020
Measurable Objective: 29 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 136 ft.
50% of Range Below Historic Low: 94 ft.



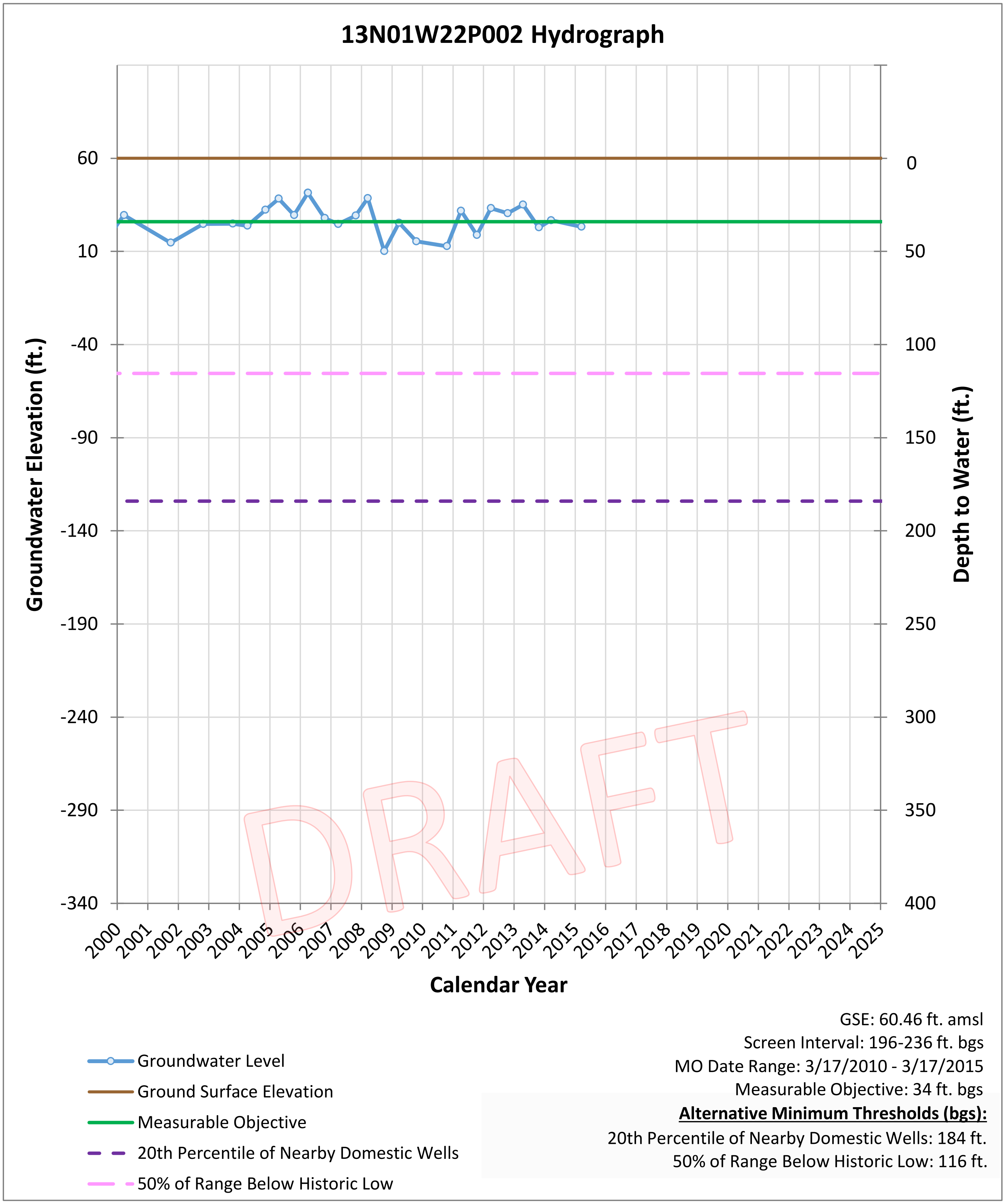
13N01E11A001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
82
32
-18
-68
-118
-168
-218
-268
-318
-368
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
GSE: 31.8 ft. amsl
Screen Interval: 136 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 10 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 106 ft.
50% of Range Below Historic Low: 28 ft.
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low

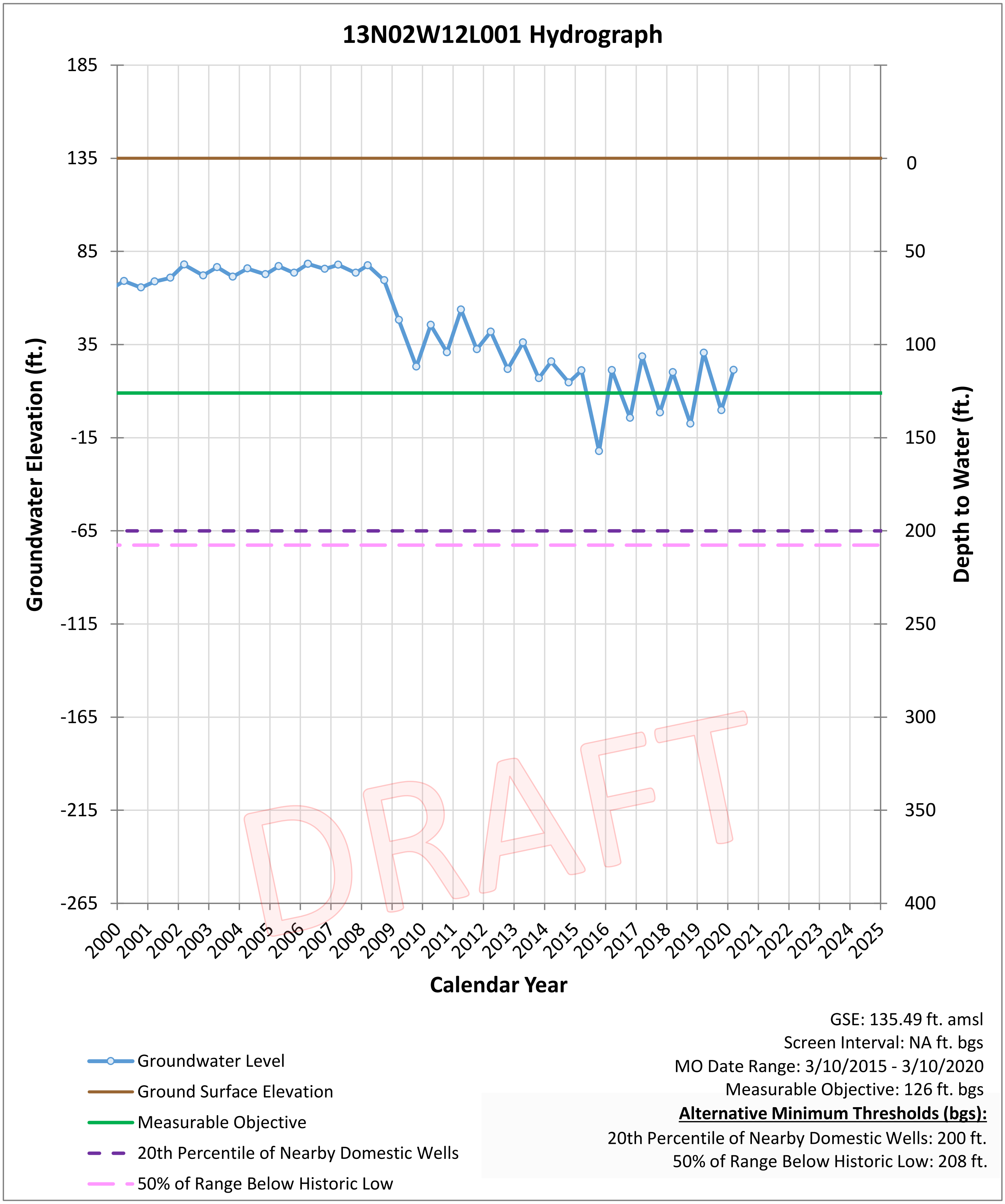


GSE: 90.47 ft. amsl
Screen Interval: 108-180 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 99 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 153 ft.
50% of Range Below Historic Low: 196 ft.

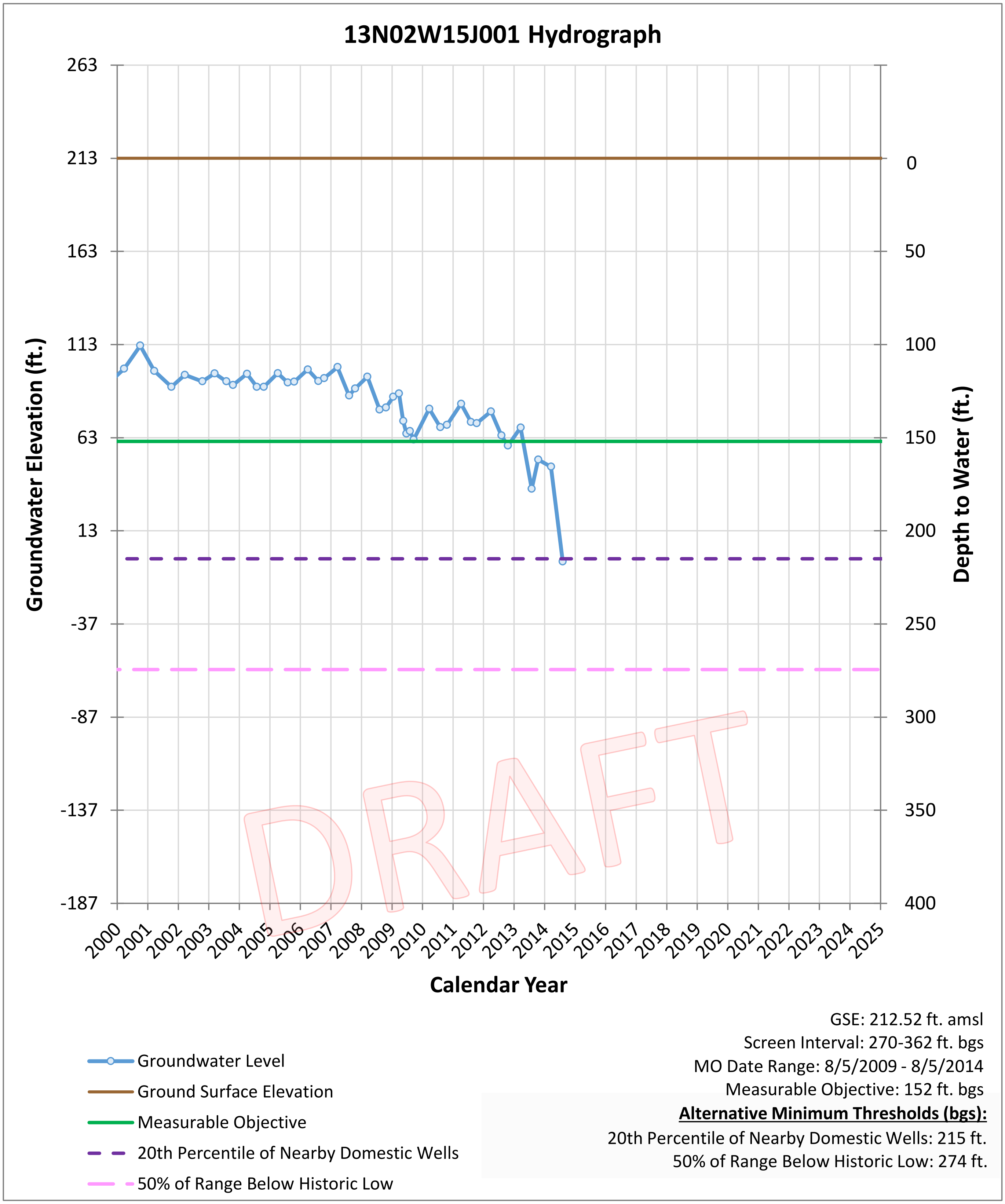


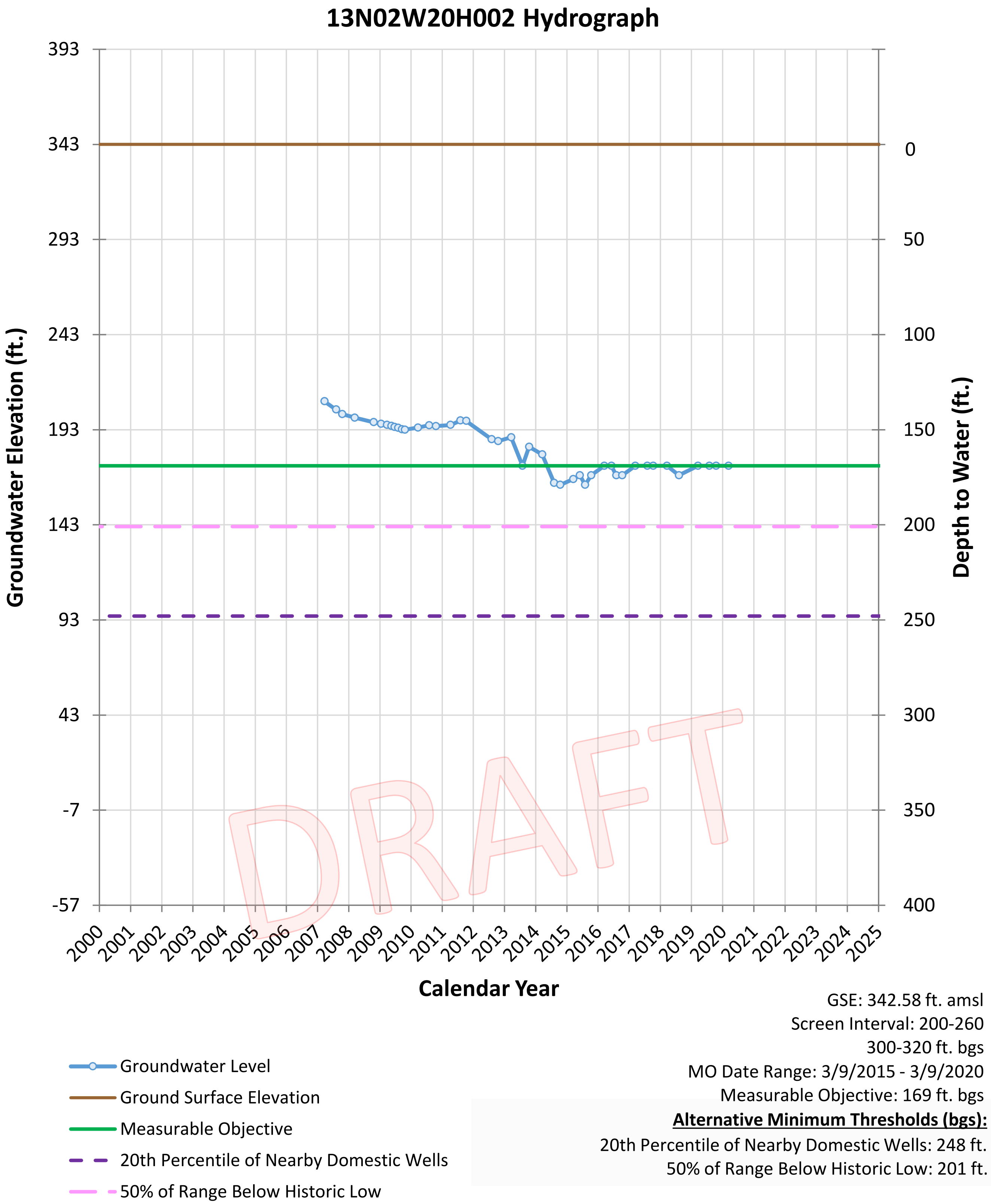
13N01W13P001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
32
-18
-68
-118
-168
-218
-268
-318
-368
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 32.23 ft. amsl
Screen Interval: 865-875 ft. bgs
MO Date Range: 3/13/2015 - 3/13/2020
Measurable Objective: 34 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 120 ft.
50% of Range Below Historic Low: 89 ft.


13N01W22P002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
60
10
-40
-90
-140
-190
-240
-290
-340
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 60.46 ft. amsl
Screen Interval: 196-236 ft. bgs
MO Date Range: 3/17/2010 - 3/17/2015
Measurable Objective: 34 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 184 ft.
50% of Range Below Historic Low: 116 ft.



13N02W12L001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
185
135
85
35
-15
-65
-115
-165
-215
-265
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 135.49 ft. amsl
Screen Interval: NA ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 126 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 200 ft.
50% of Range Below Historic Low: 208 ft.

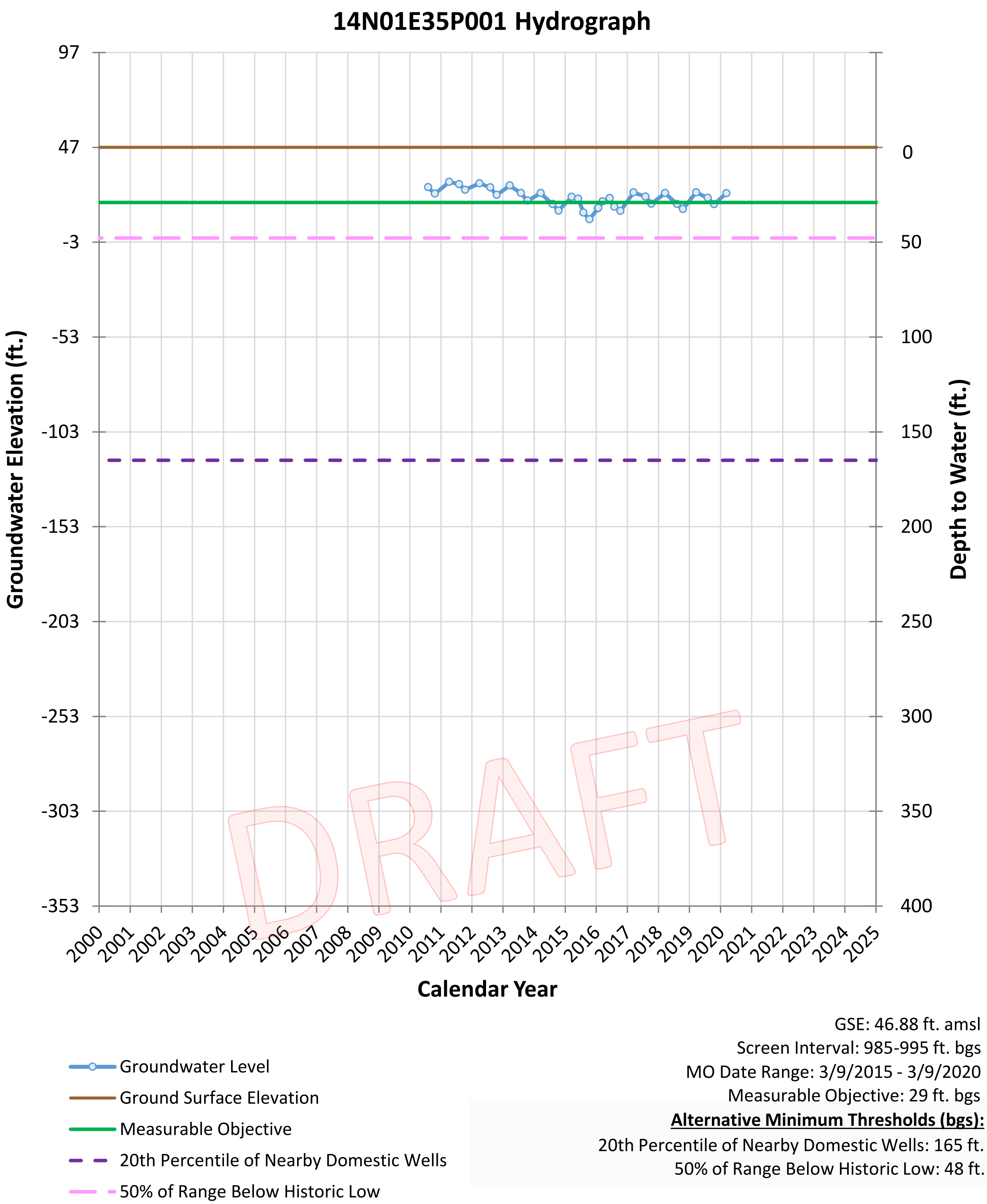

13N02W15J001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
263
213
163
113
63
13
-37
-87
-137
-187
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 212.52 ft. amsl
Screen Interval: 270-362 ft. bgs
MO Date Range: 8/5/2009 - 8/5/2014
Measurable Objective: 152 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 215 ft.
50% of Range Below Historic Low: 274 ft.



GSE: 342.58 ft. amsl
Screen Interval: 200-260
300-320 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 169 ft. bgs

Alternative Minimum Thresholds (bgs):

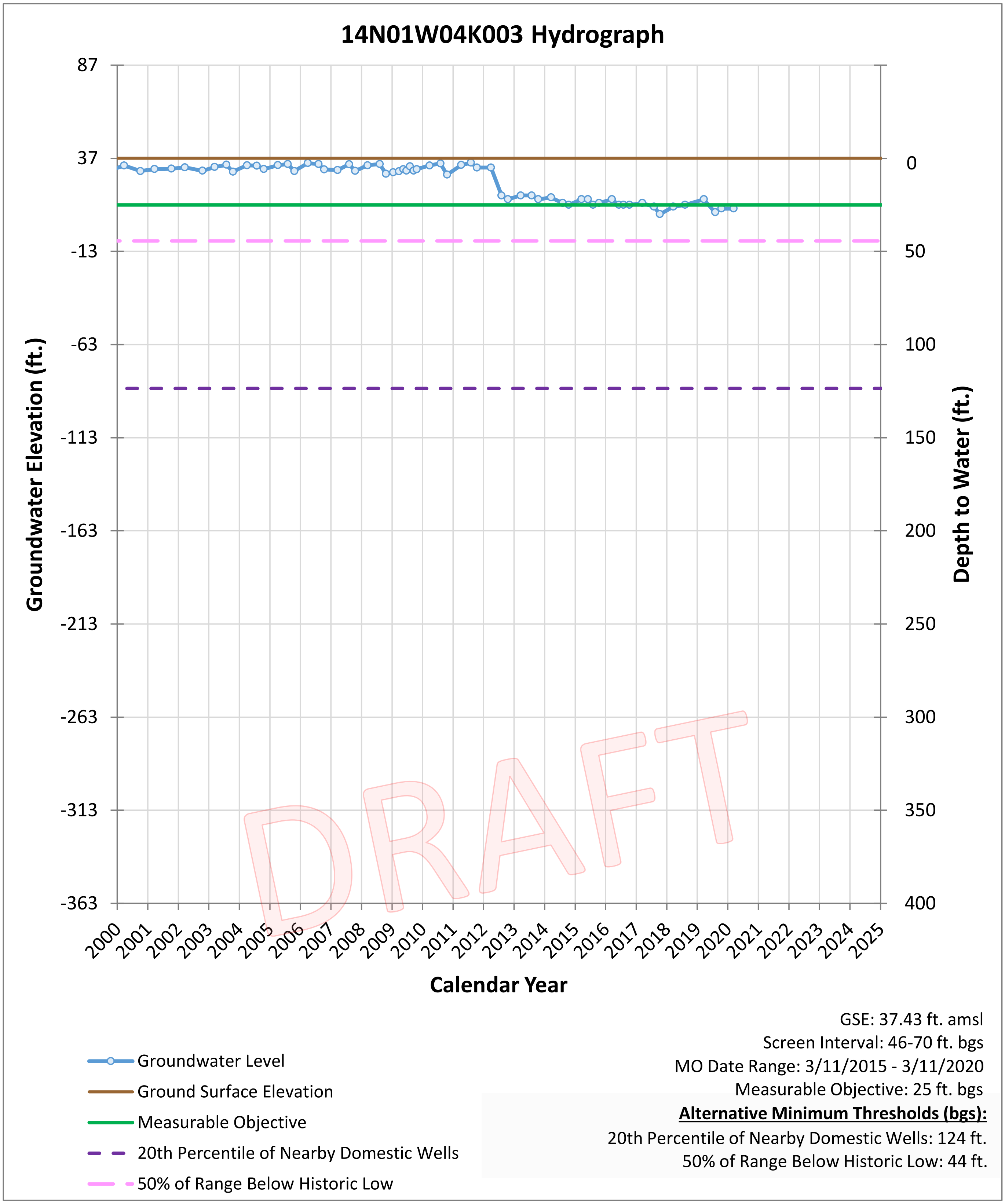
20th Percentile of Nearby Domestic Wells: 248 ft.
50% of Range Below Historic Low: 201 ft.

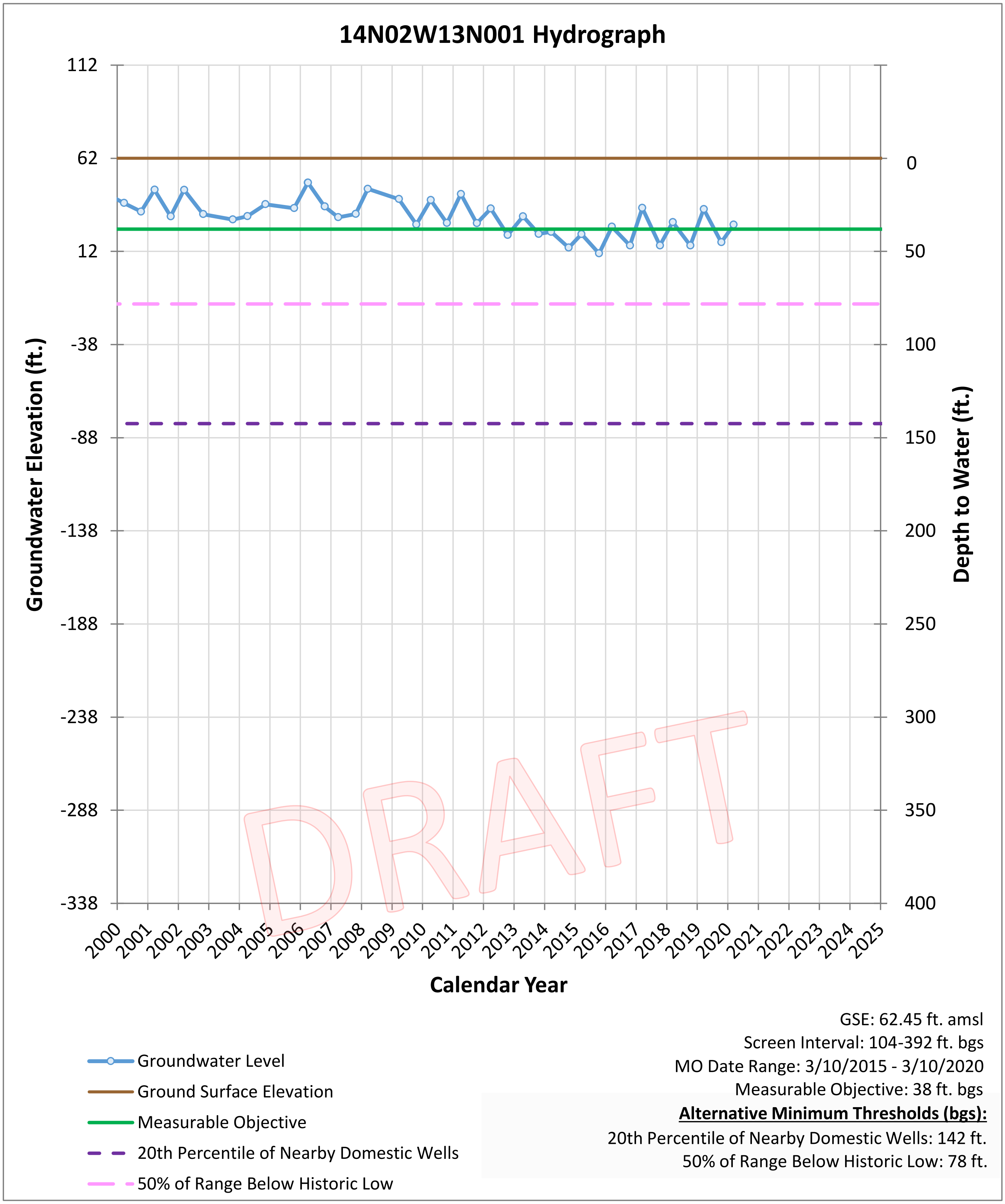


GSE: 46.88 ft. amsl
Screen Interval: 985-995 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 29 ft. bgs

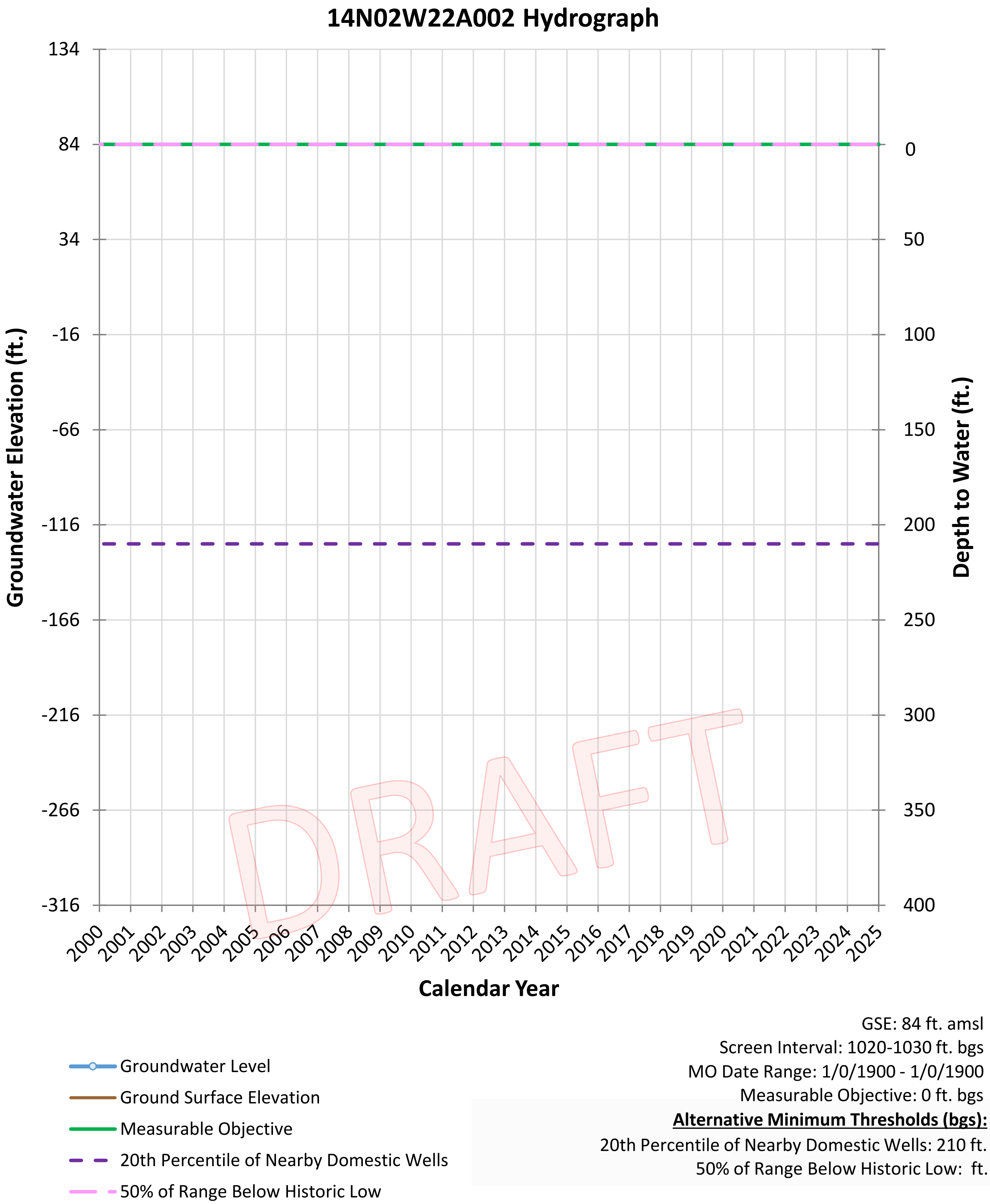
Alternative Minimum Thresholds (bgs):

20th Percentile of Nearby Domestic Wells: 165 ft.
50% of Range Below Historic Low: 48 ft.


14N01W04K003 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
87
37
-13
-63
-113
-163
-213
-263
-313
-363
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 37.43 ft. amsl
Screen Interval: 46-70 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 25 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 124 ft.
50% of Range Below Historic Low: 44 ft.

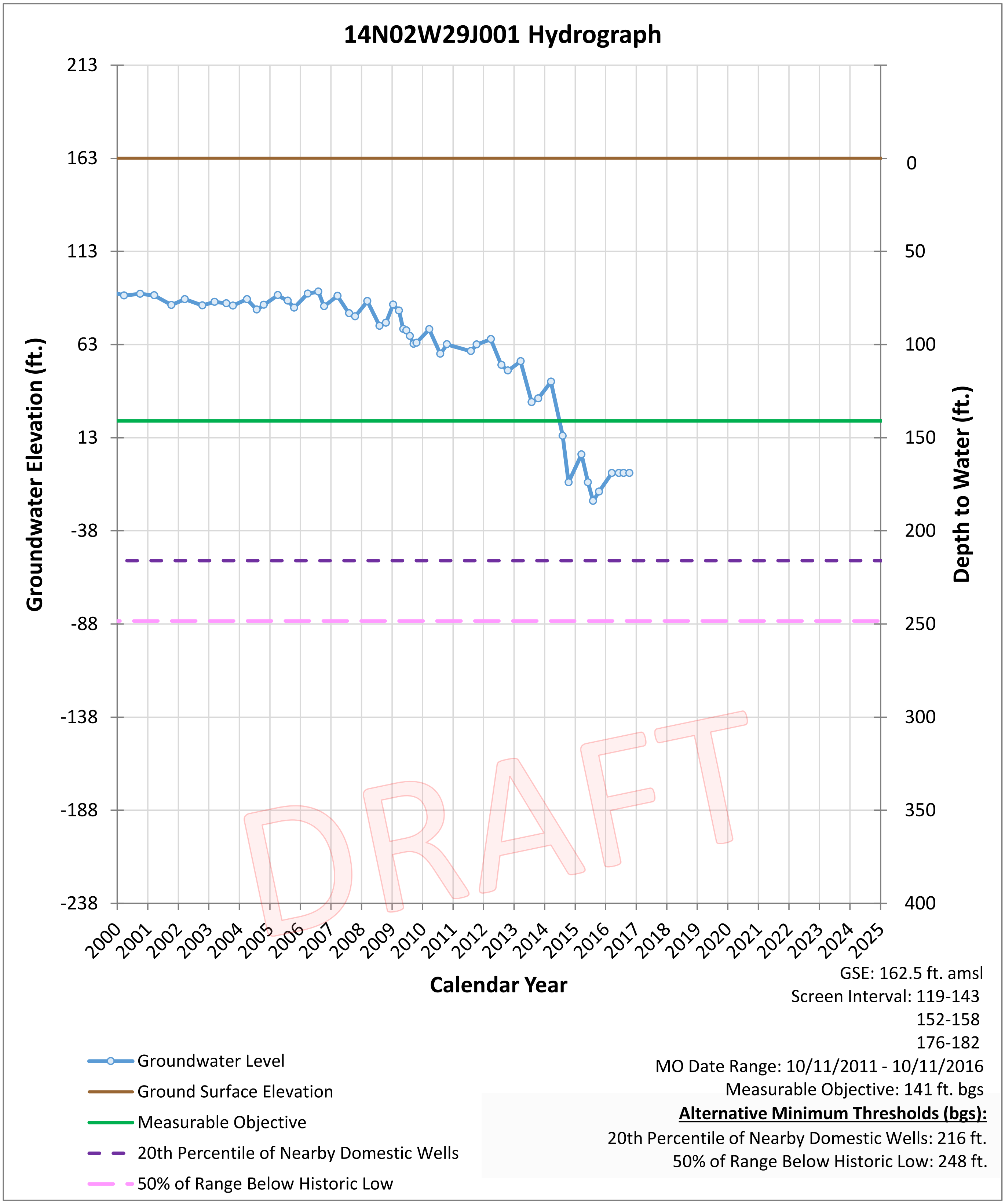


14N02W13N001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
112
62
12
-38
-88
-138
-188
-238
-288
-338
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 62.45 ft. amsl
Screen Interval: 104-392 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 38 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 142 ft.
50% of Range Below Historic Low: 78 ft.

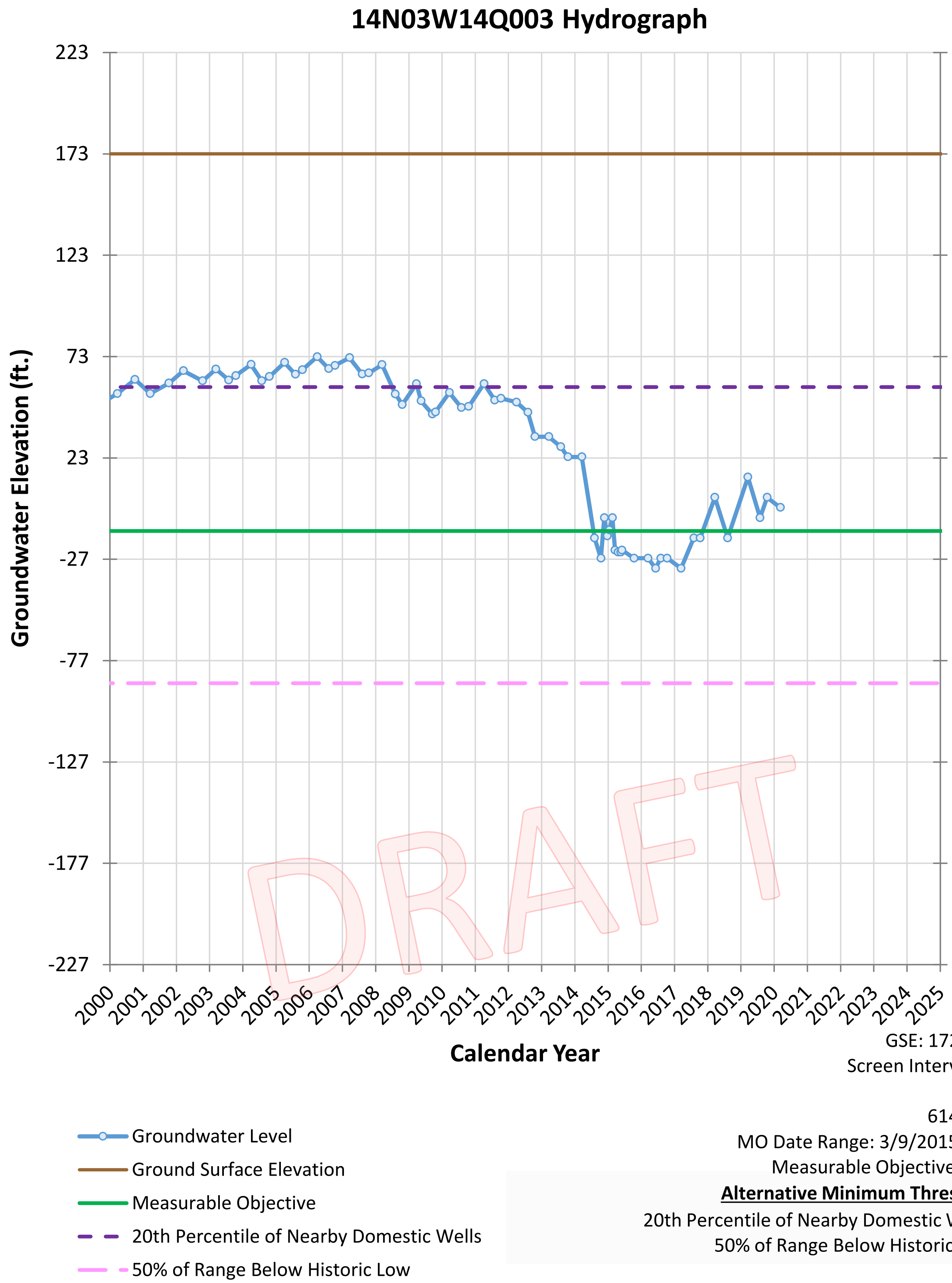


GSE: 84 ft. amsl
Screen Interval: 1020-1030 ft. bgs
MO Date Range: 1/0/1900 - 1/0/1900
Measurable Objective: 0 ft. bgs

Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 210 ft.
50% of Range Below Historic Low: ft.



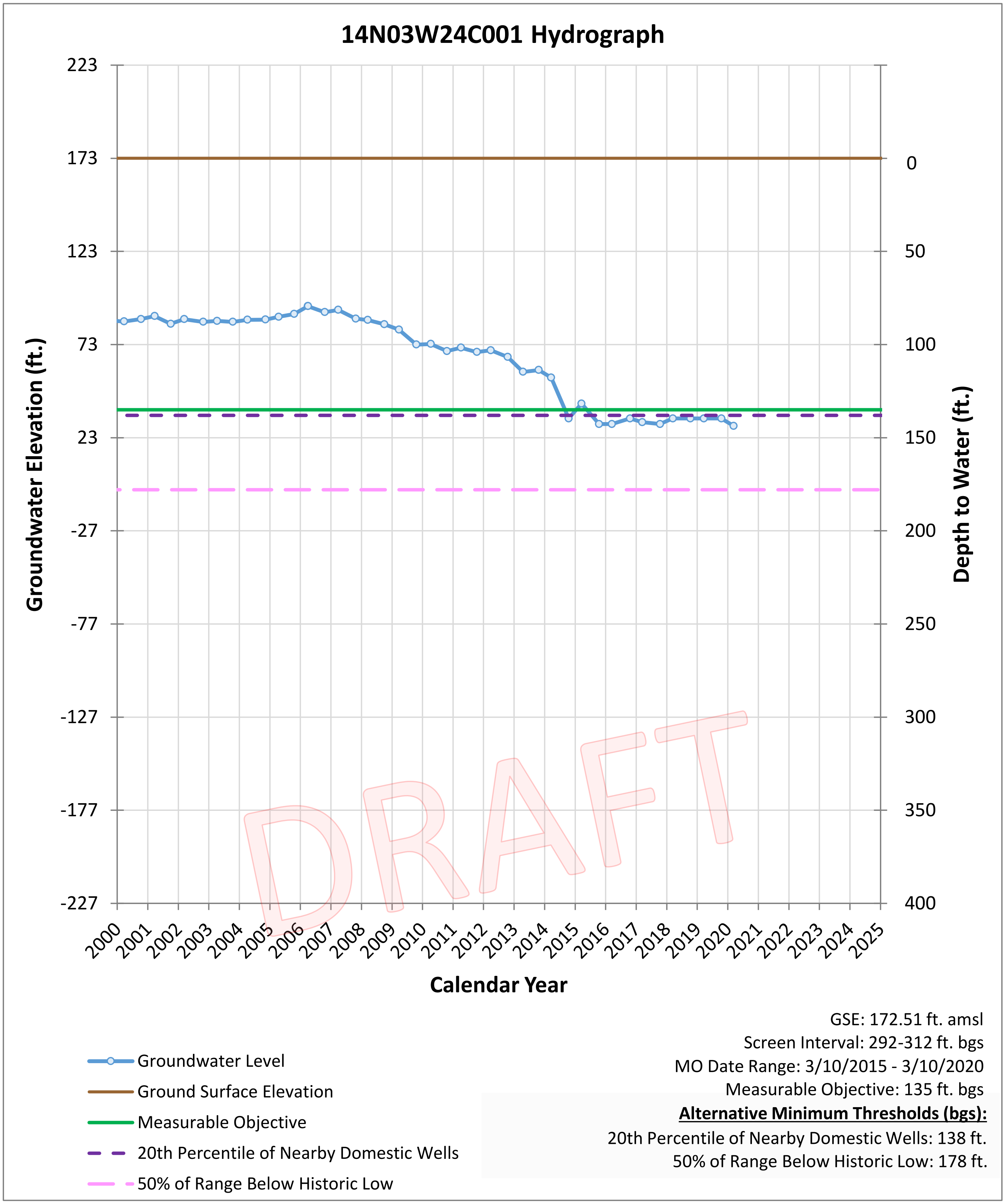
14N02W29J001 Hydrograph
213
163
113
63
13
-38
-88
-138
-188
-238
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 162.5 ft. amsl
Screen Interval: 119-143
152-158
176-182
MO Date Range: 10/11/2011 - 10/11/2016
Measurable Objective: 141 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 216 ft.
50% of Range Below Historic Low: 248 ft.



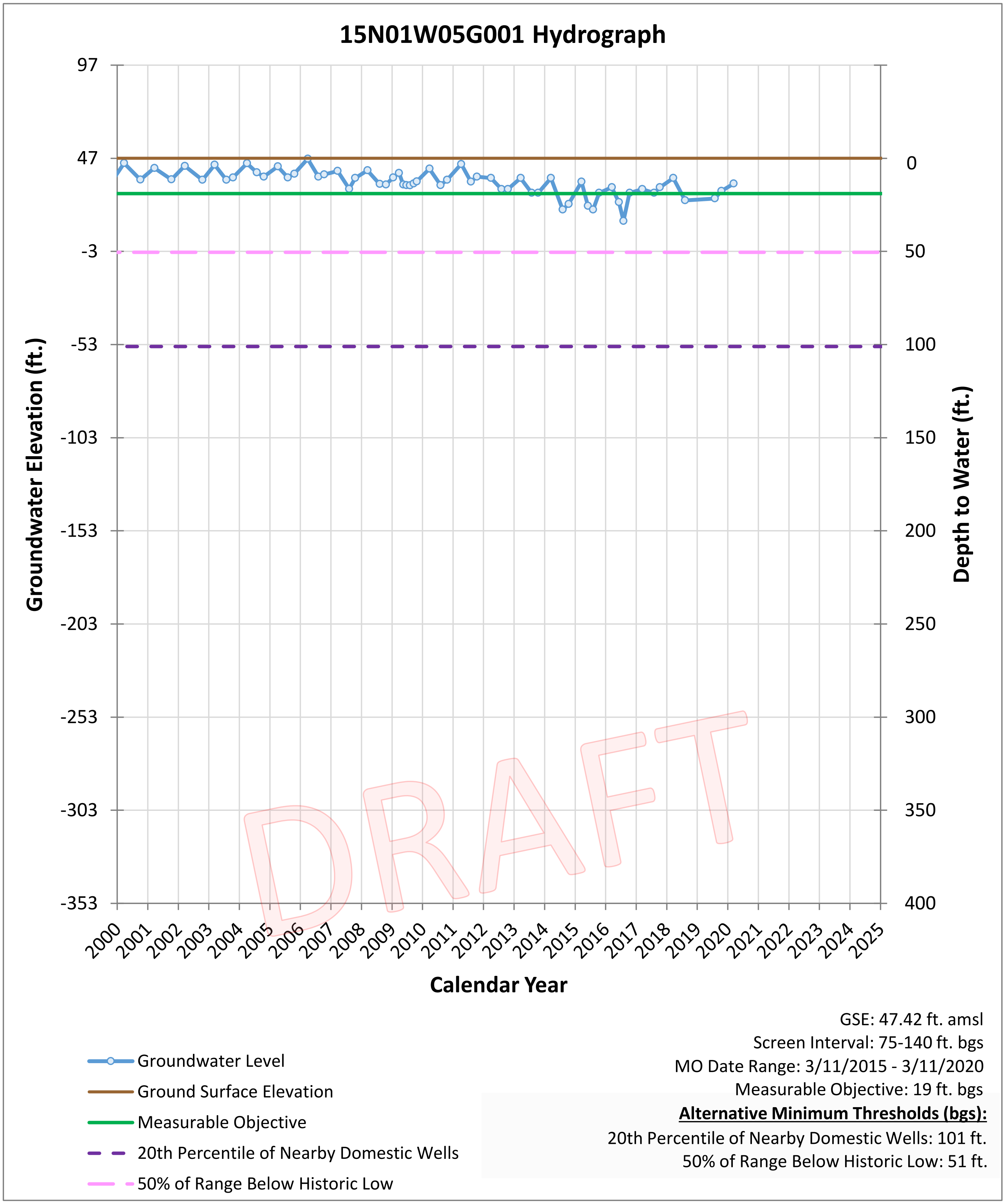
GSE: 172.52 ft. amsl
Screen Interval: 390-480
500-590
614-685 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 186 ft. bgs

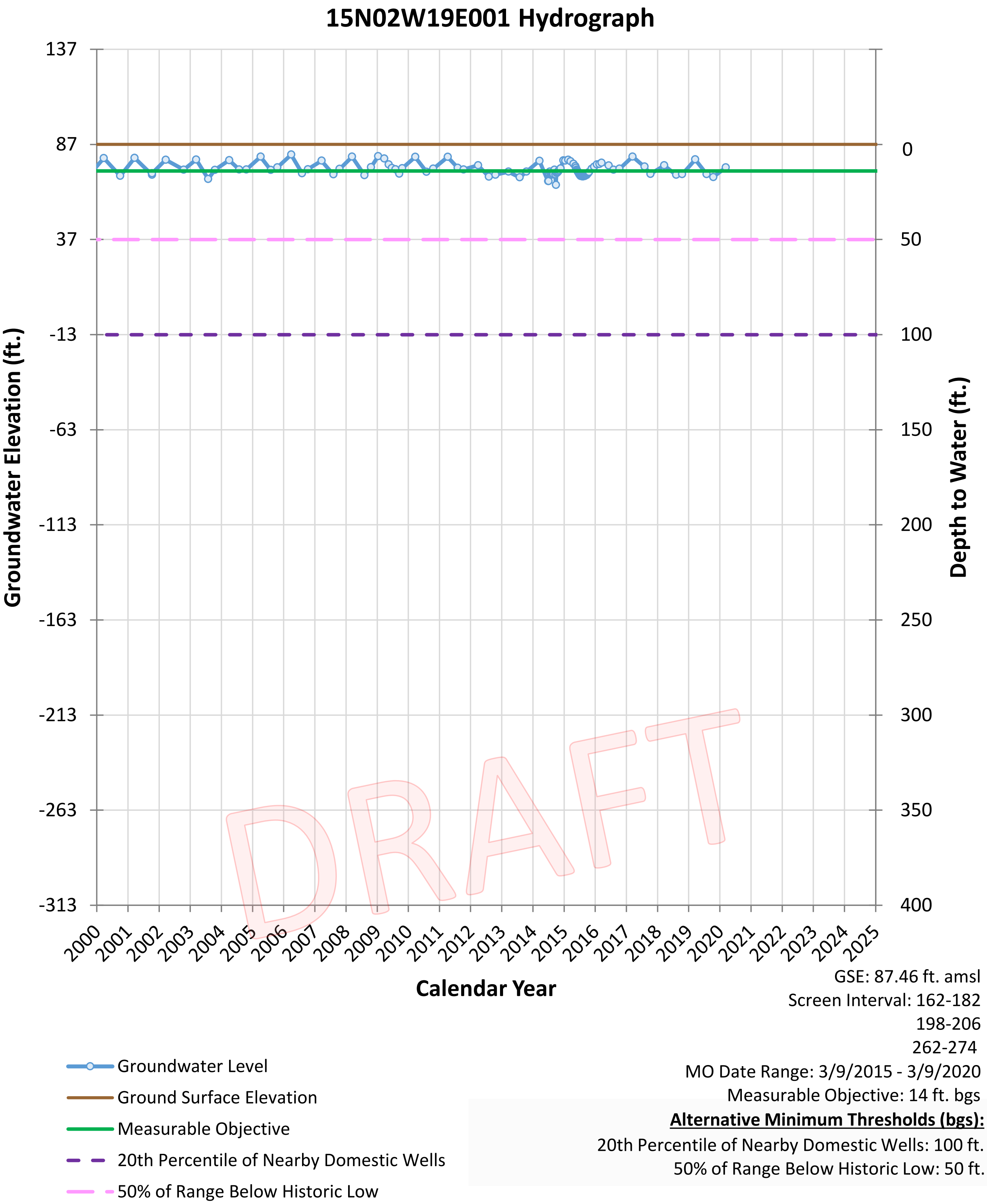
Alternative Minimum Thresholds (bgs):

20th Percentile of Nearby Domestic Wells: 115 ft.
50% of Range Below Historic Low: 261 ft.



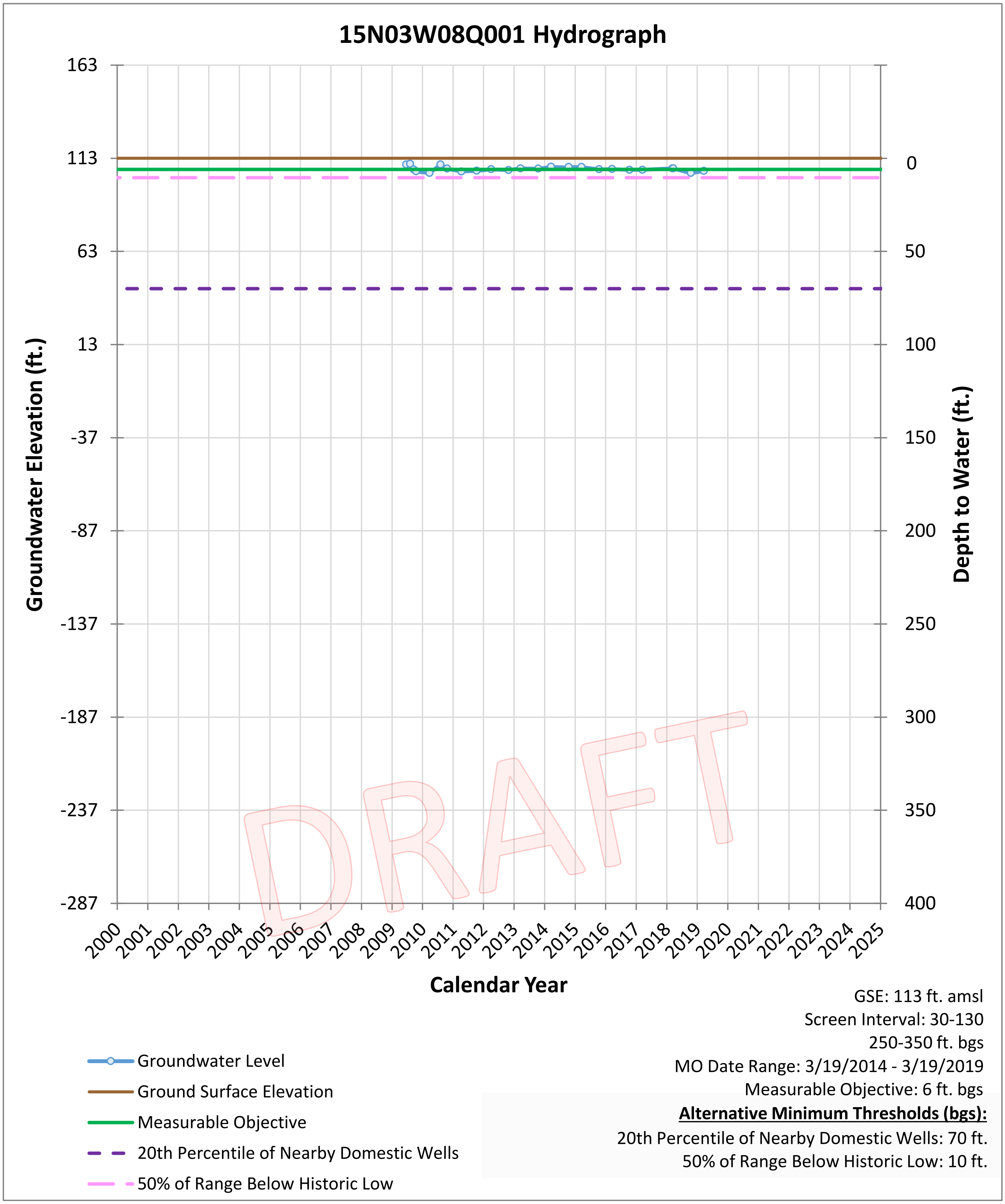
14N03W24C001 Hydrograph
Groundwater Elevation (ft.)
223
173
123
73
23
-27
-77
-127
-177
-227
Depth to Water (ft.)
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 172.51 ft. amsl
Screen Interval: 292-312 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 135 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 138 ft.
50% of Range Below Historic Low: 178 ft.


15N01W05G001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
97
47
-3
-53
-103
-153
-203
-253
-303
-353
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 47.42 ft. amsl
Screen Interval: 75-140 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 19 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 101 ft.
50% of Range Below Historic Low: 51 ft.

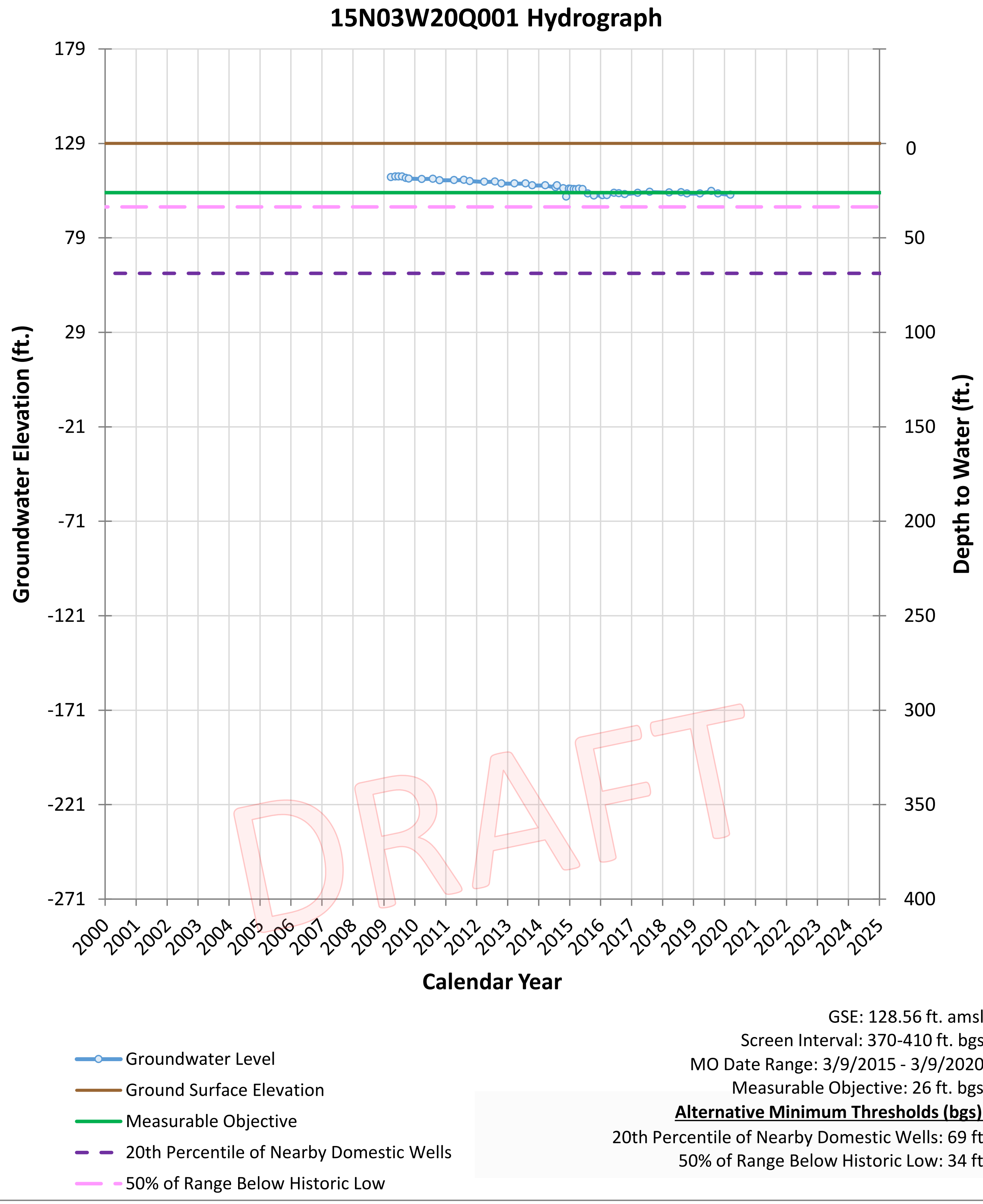


GSE: 87.46 ft. amsl
Screen Interval: 162-182
198-206
262-274
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 14 ft. bgs

Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 100 ft.
50% of Range Below Historic Low: 50 ft.

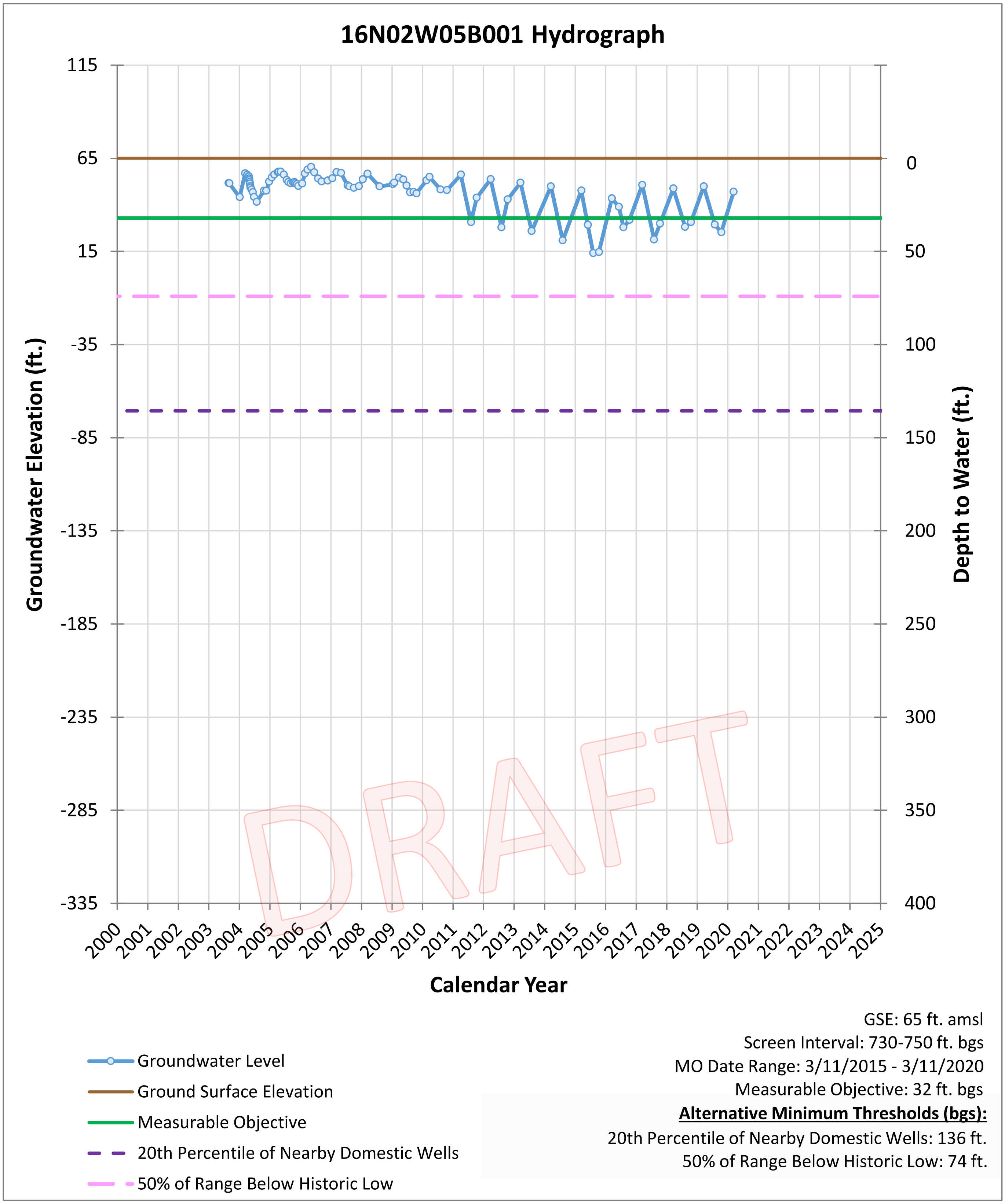


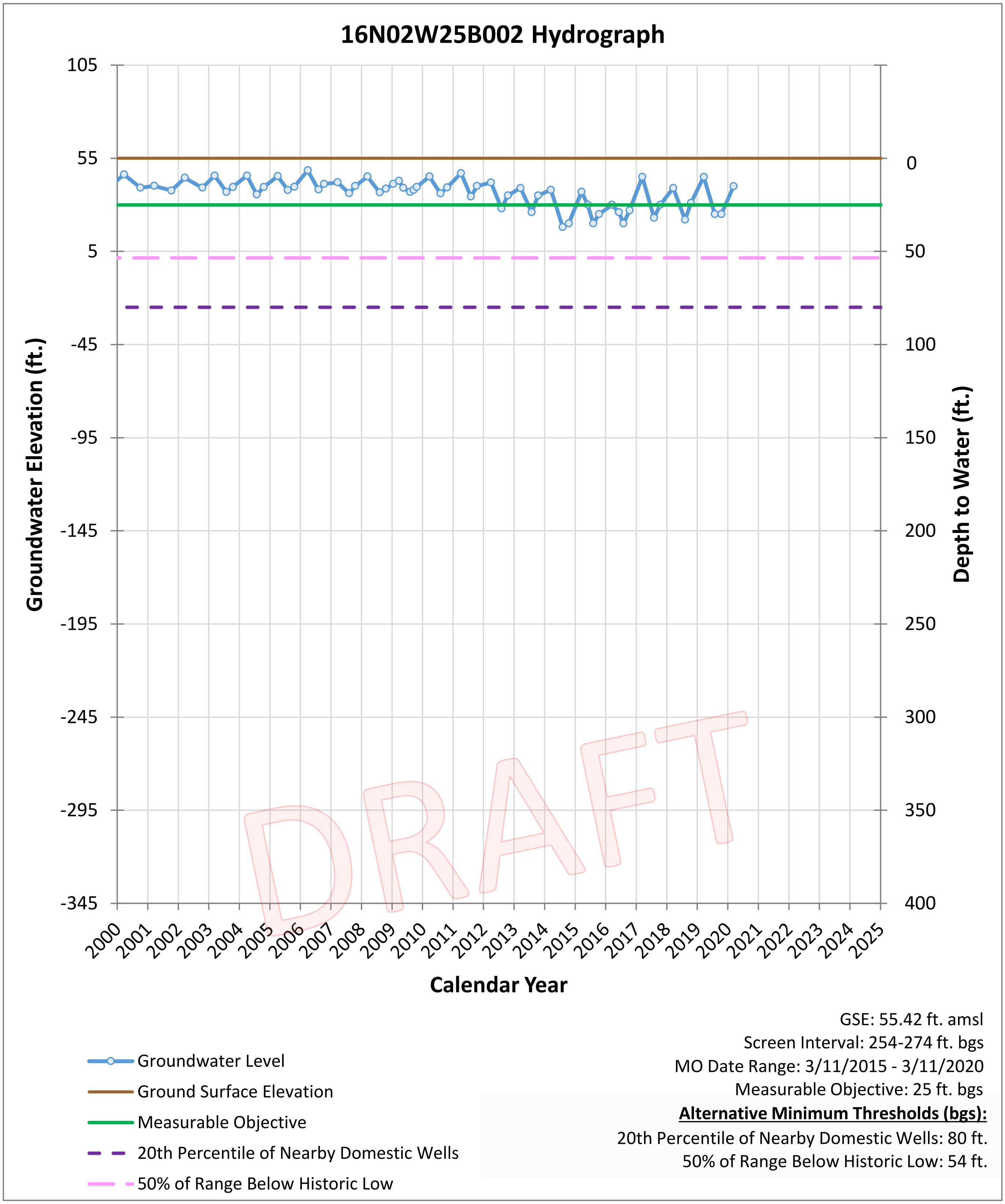
15N03W08Q001 Hydrograph
163
113
63
13
-37
-87
-137
-187
-237
-287
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 113 ft. amsl
Screen Interval: 30-130
250-350 ft. bgs
MO Date Range: 3/19/2014 - 3/19/2019
Measurable Objective: 6 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 70 ft.
50% of Range Below Historic Low: 10 ft.



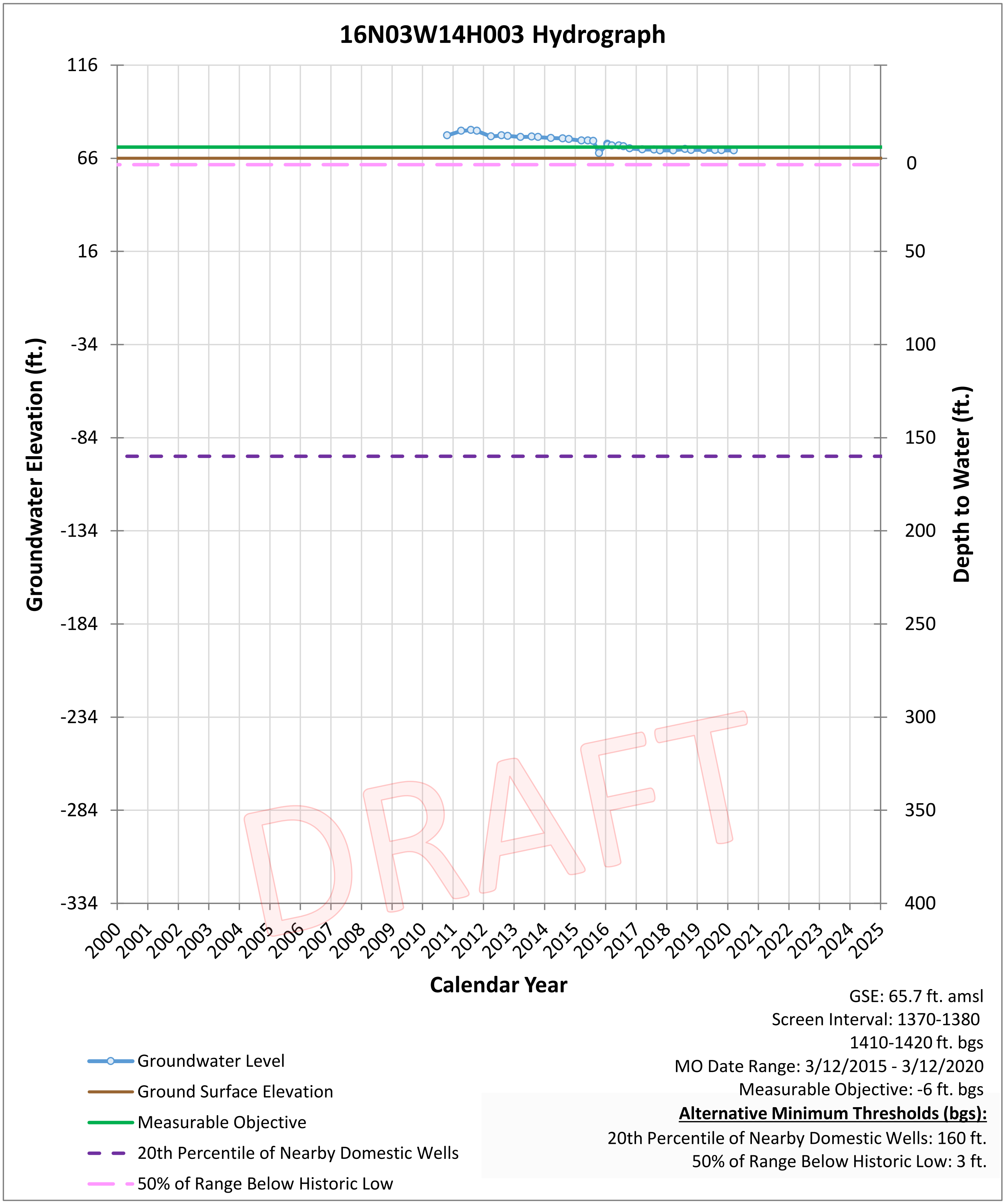
GSE: 128.56 ft. amsl
Screen Interval: 370-410 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 26 ft. bgs

Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 69 ft.
50% of Range Below Historic Low: 34 ft.

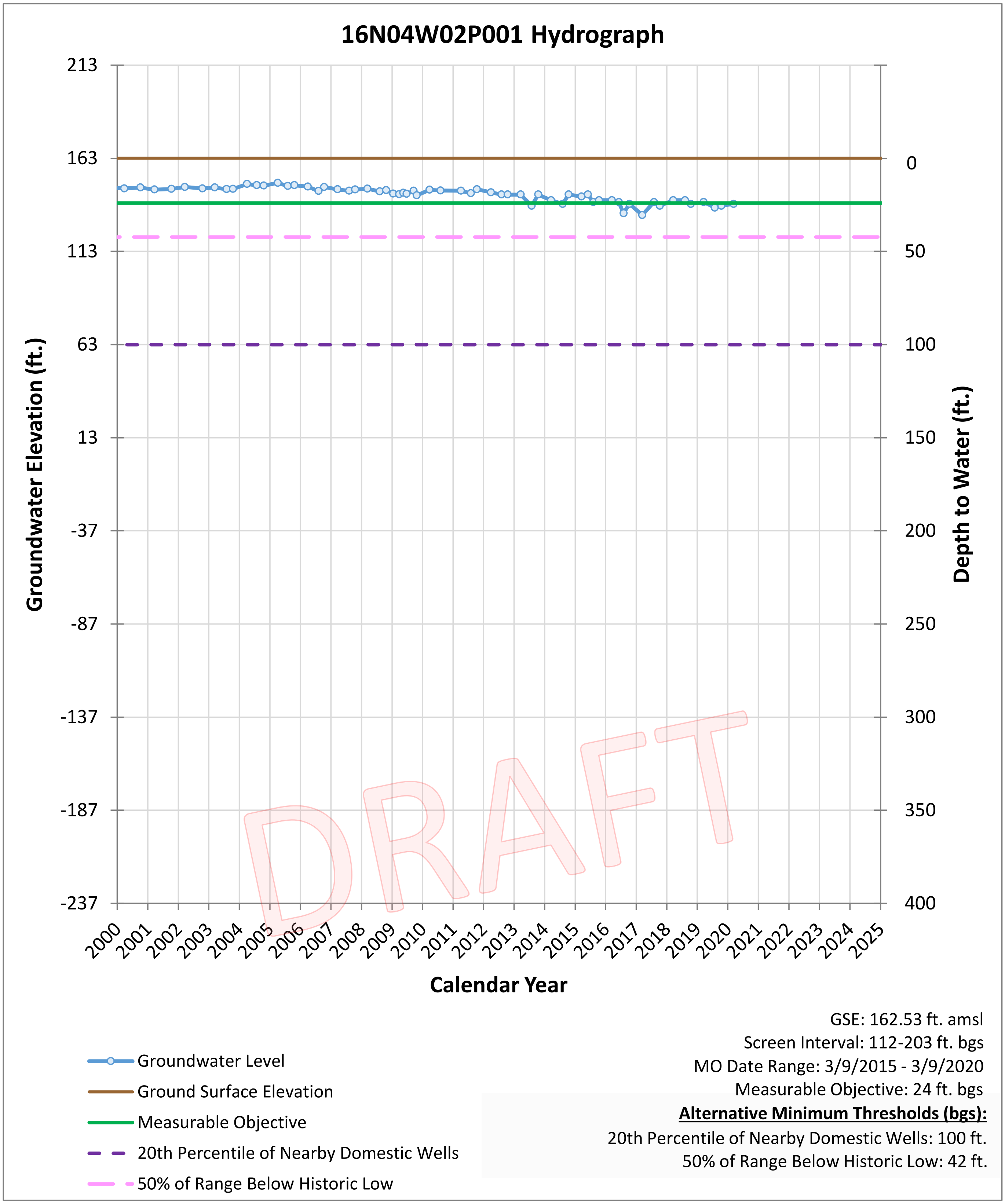

16N02W05B001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
115
65
15
-35
-85
-135
-185
-235
-285
-335
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 65 ft. amsl
Screen Interval: 730-750 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 32 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 136 ft.
50% of Range Below Historic Low: 74 ft.

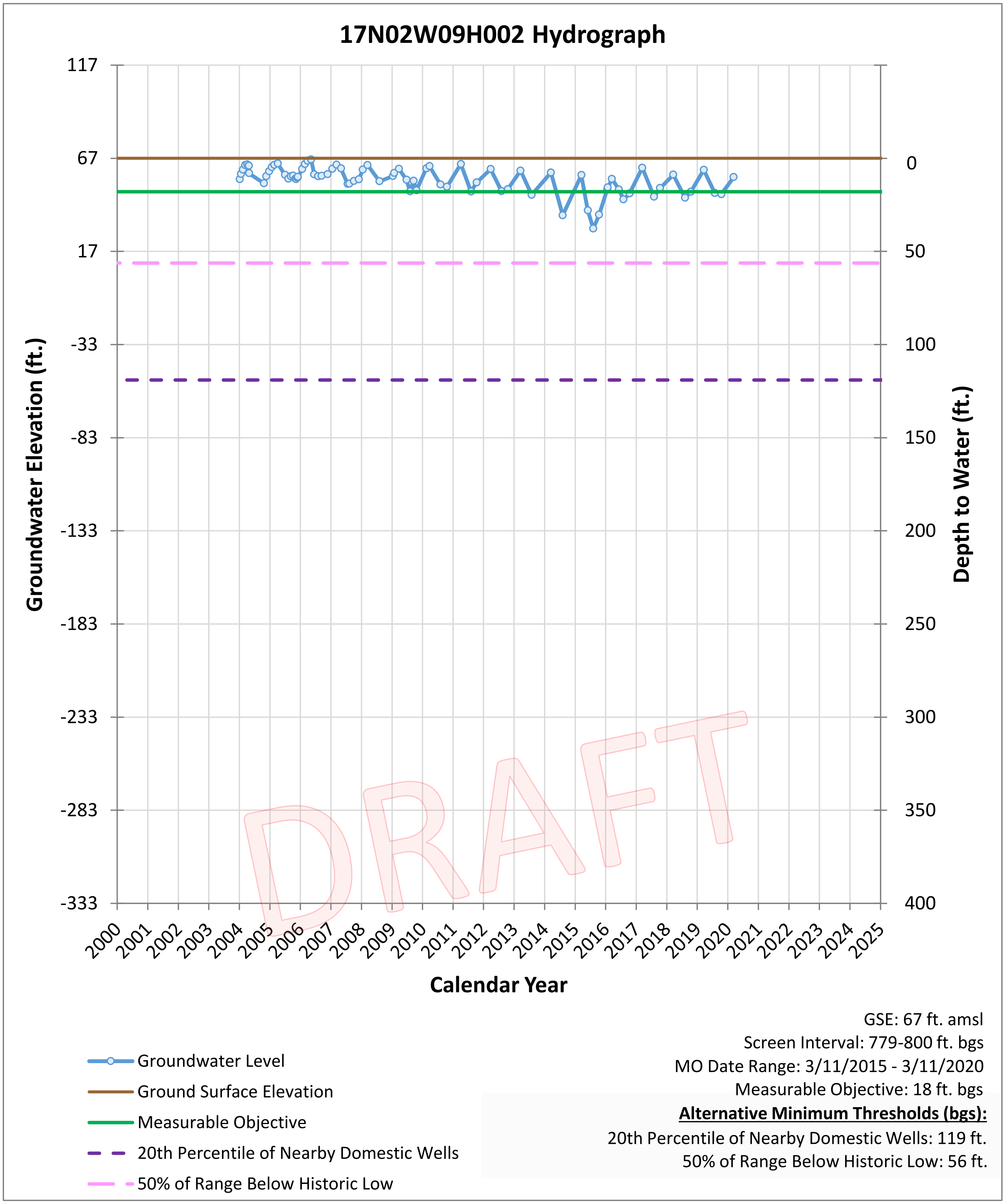


16N02W25B002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
105
55
5
-45
-95
-145
-195
-245
-295
-345
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 55.42 ft. amsl
Screen Interval: 254-274 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 25 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 80 ft.
50% of Range Below Historic Low: 54 ft.



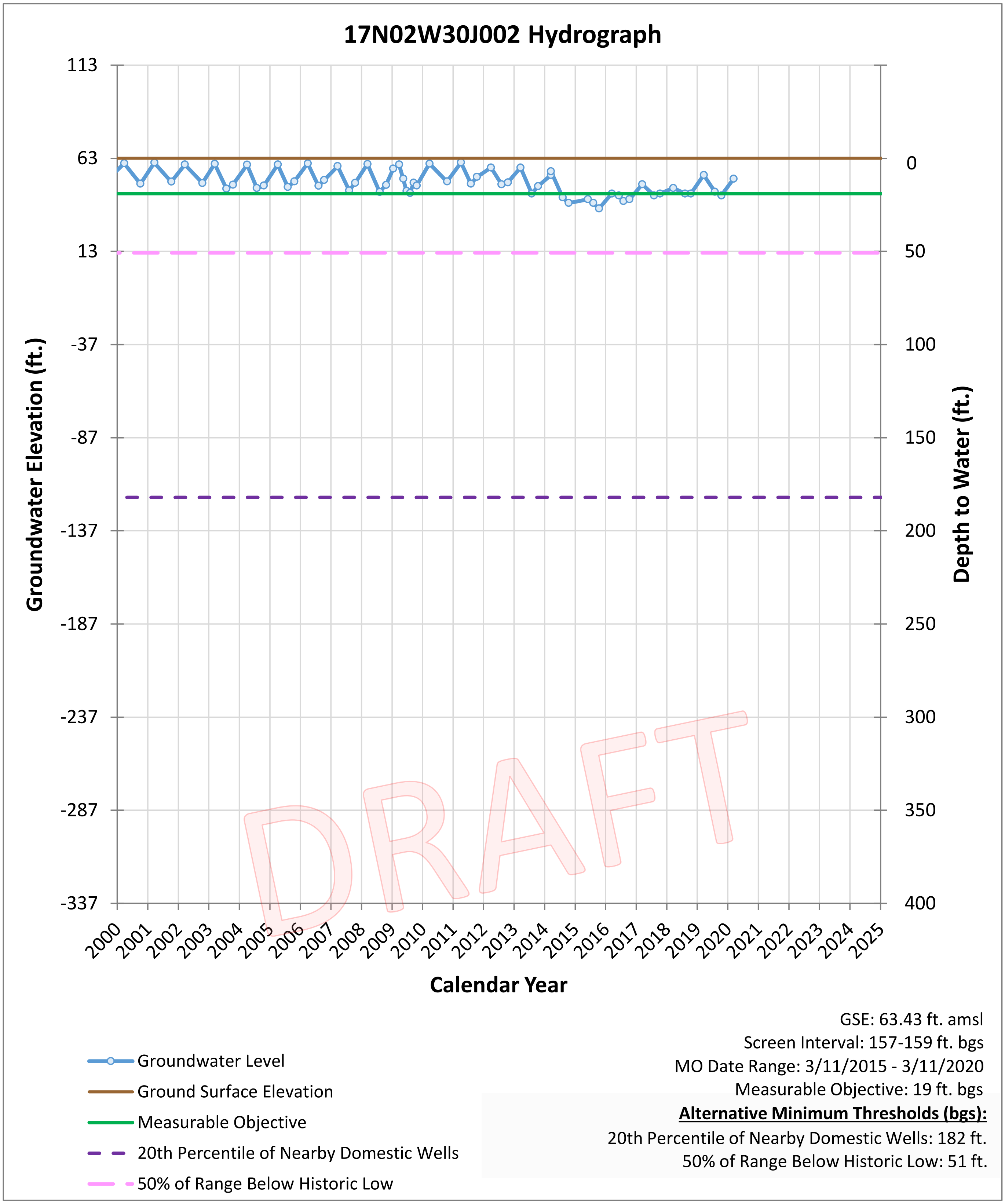
16N03W14H003 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
116
66
16
-34
-84
-134
-184
-234
-284
-334
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 65.7 ft. amsl
Screen Interval: 1370-1380
1410-1420 ft. bgs
MO Date Range: 3/12/2015 - 3/12/2020
Measurable Objective: -6 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 160 ft.
50% of Range Below Historic Low: 3 ft.

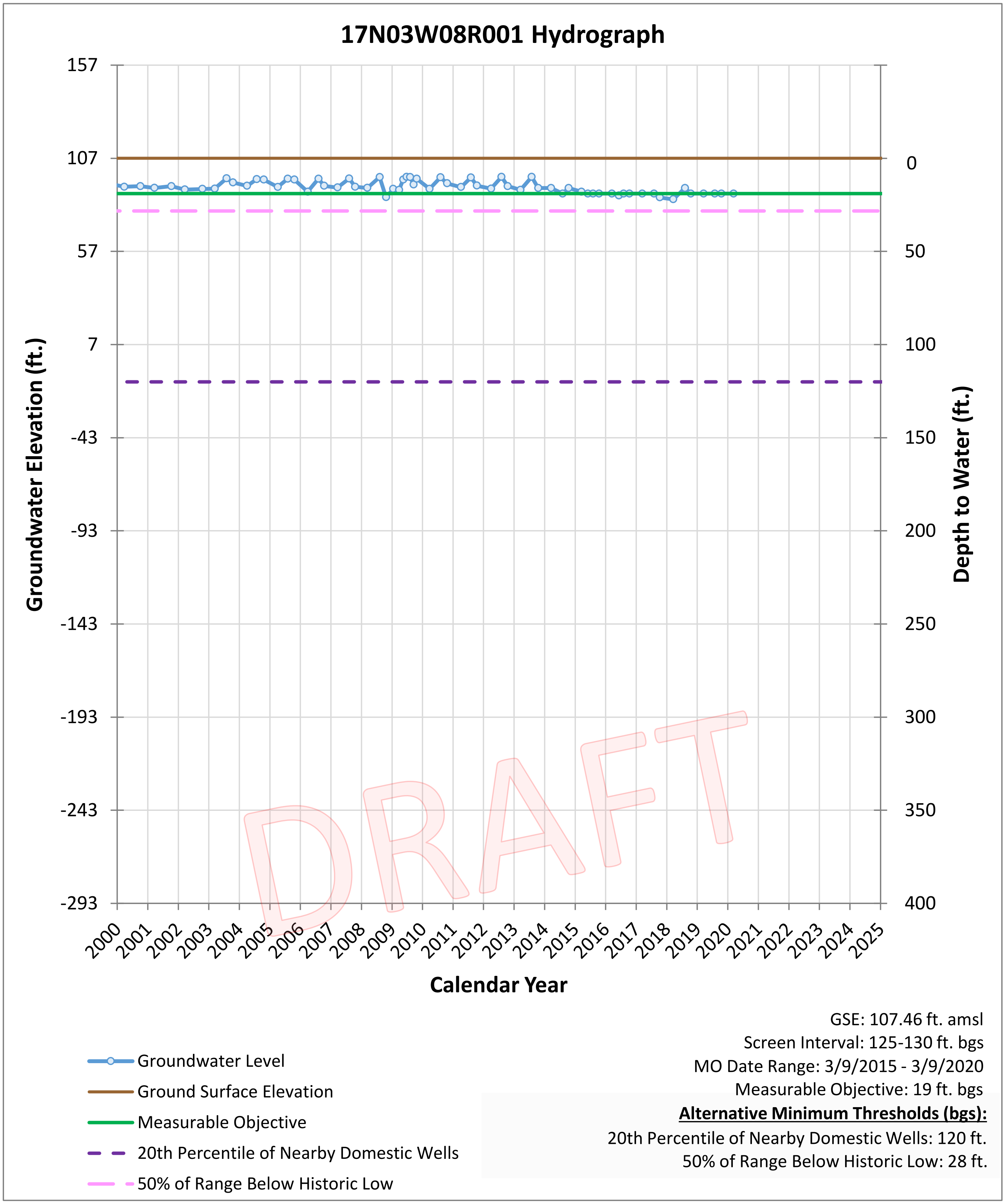

16N04W02P001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
213
163
113
63
13
-37
-87
-137
-187
-237
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 162.53 ft. amsl
Screen Interval: 112-203 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 24 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 100 ft.
50% of Range Below Historic Low: 42 ft.

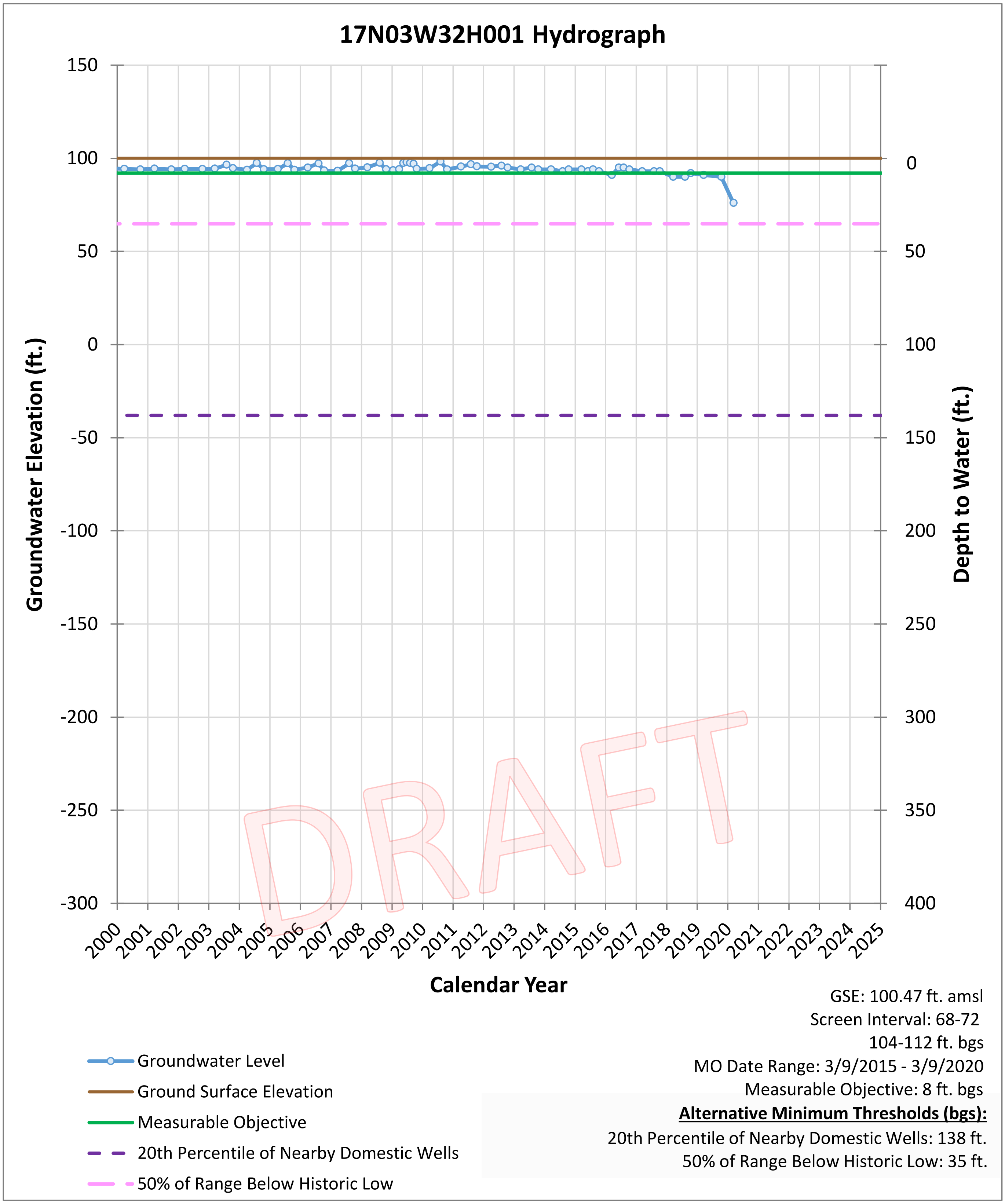


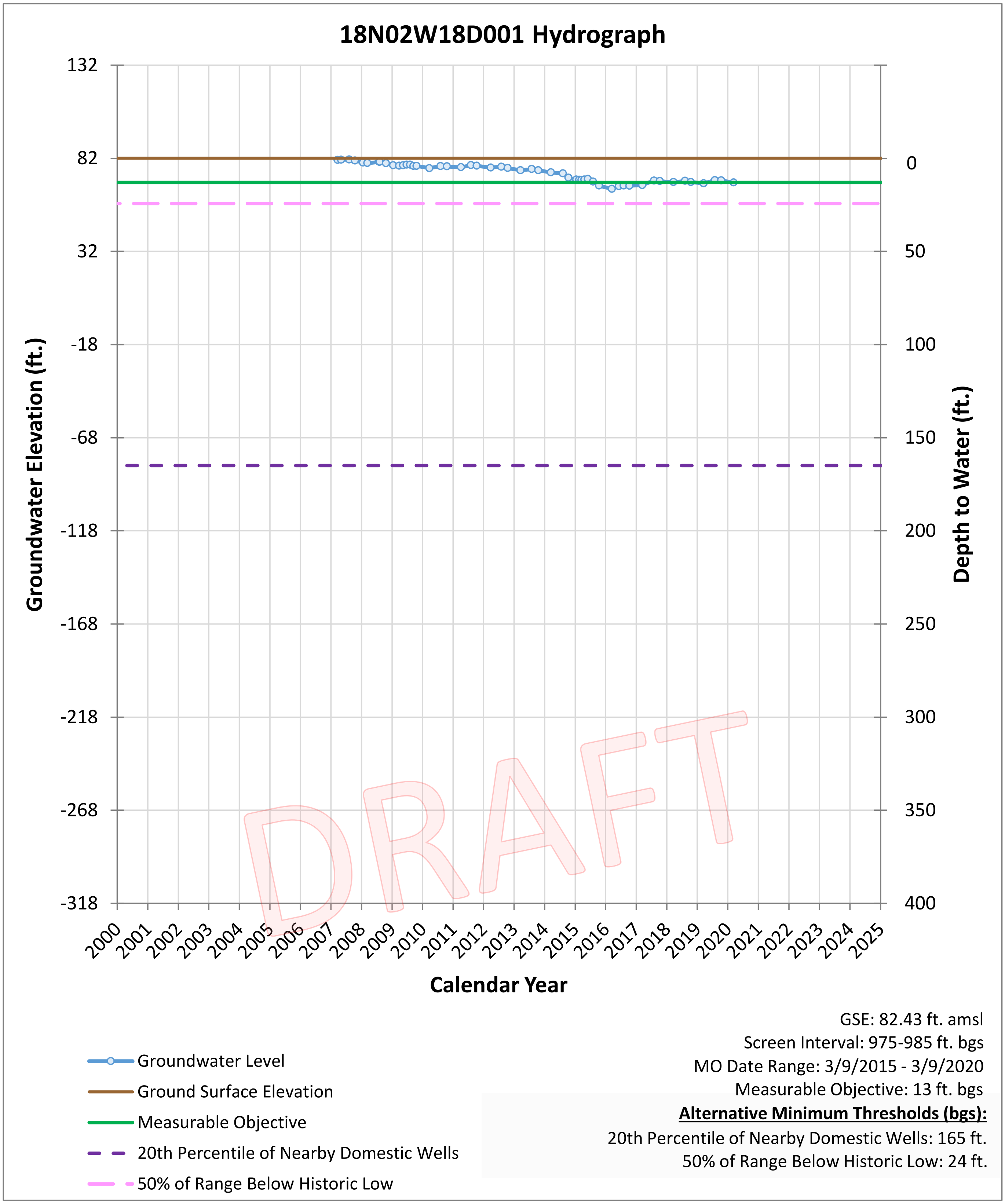
GSE: 67 ft. amsl
Screen Interval: 779-800 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 18 ft. bgs

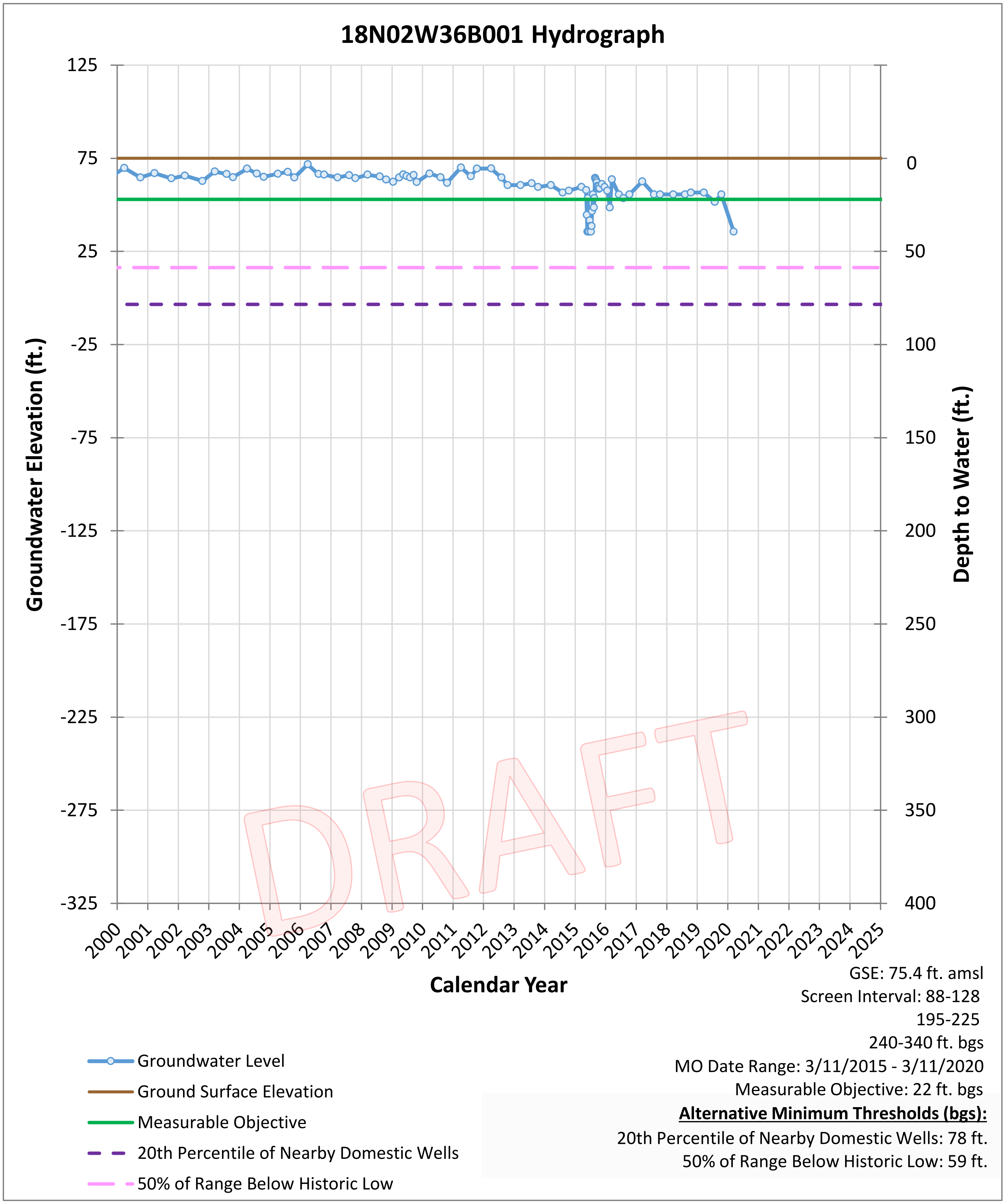
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 119 ft.
50% of Range Below Historic Low: 56 ft.


17N02W30J002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
113
63
13
-37
-87
-137
-187
-237
-287
-337
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 63.43 ft. amsl
Screen Interval: 157-159 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 19 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 182 ft.
50% of Range Below Historic Low: 51 ft.

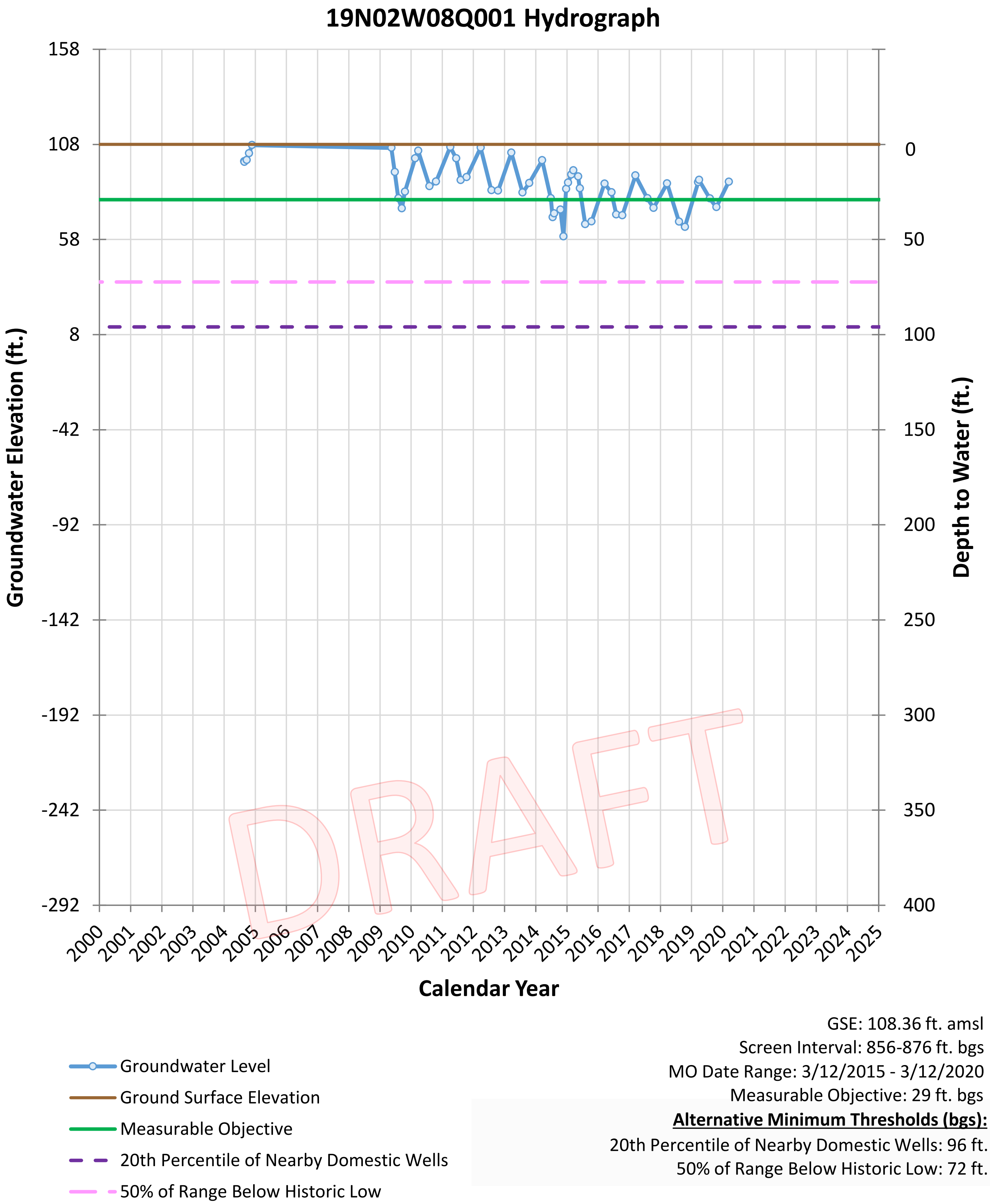

17N03W08R001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
157
107
57
7
-43
-93
-143
-193
-243
-293
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 107.46 ft. amsl
Screen Interval: 125-130 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 19 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 120 ft.
50% of Range Below Historic Low: 28 ft.


17N03W32H001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
150
100
50
0
-50
-100
-150
-200
-250
-300
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 100.47 ft. amsl
Screen Interval: 68-72
104-112 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 8 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 138 ft.
50% of Range Below Historic Low: 35 ft.


18N02W18D001 Hydrograph
132
82
32
-18
-68
-118
-168
-218
-268
-318
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 82.43 ft. amsl
Screen Interval: 975-985 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 13 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 165 ft.
50% of Range Below Historic Low: 24 ft.

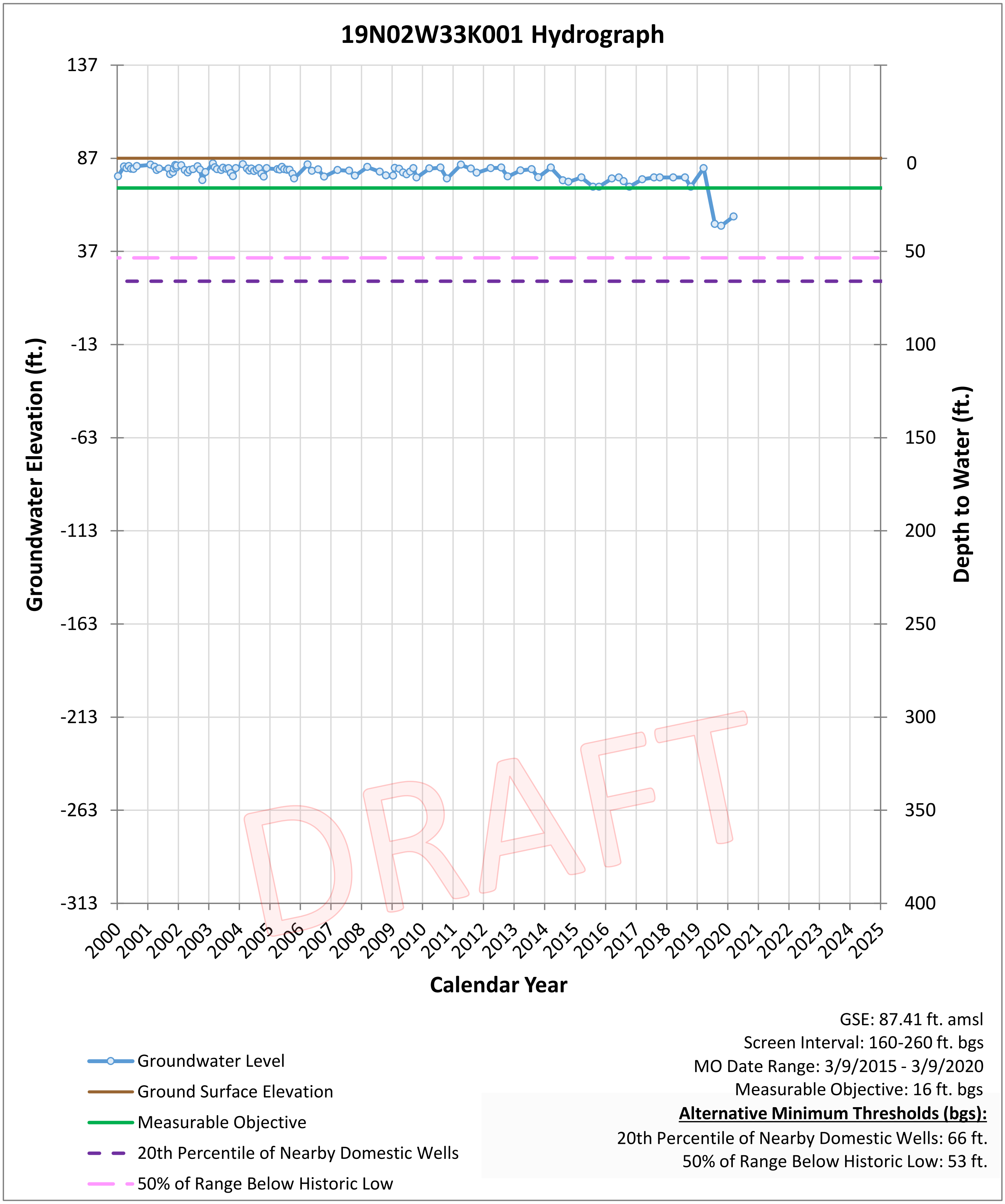


18N02W36B001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
125
75
25
-25
-75
-125
-175
-225
-275
-325
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
GSE: 75.4 ft. amsl
Screen Interval: 88-128
195-225
240-340 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 22 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 78 ft.
50% of Range Below Historic Low: 59 ft.
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low

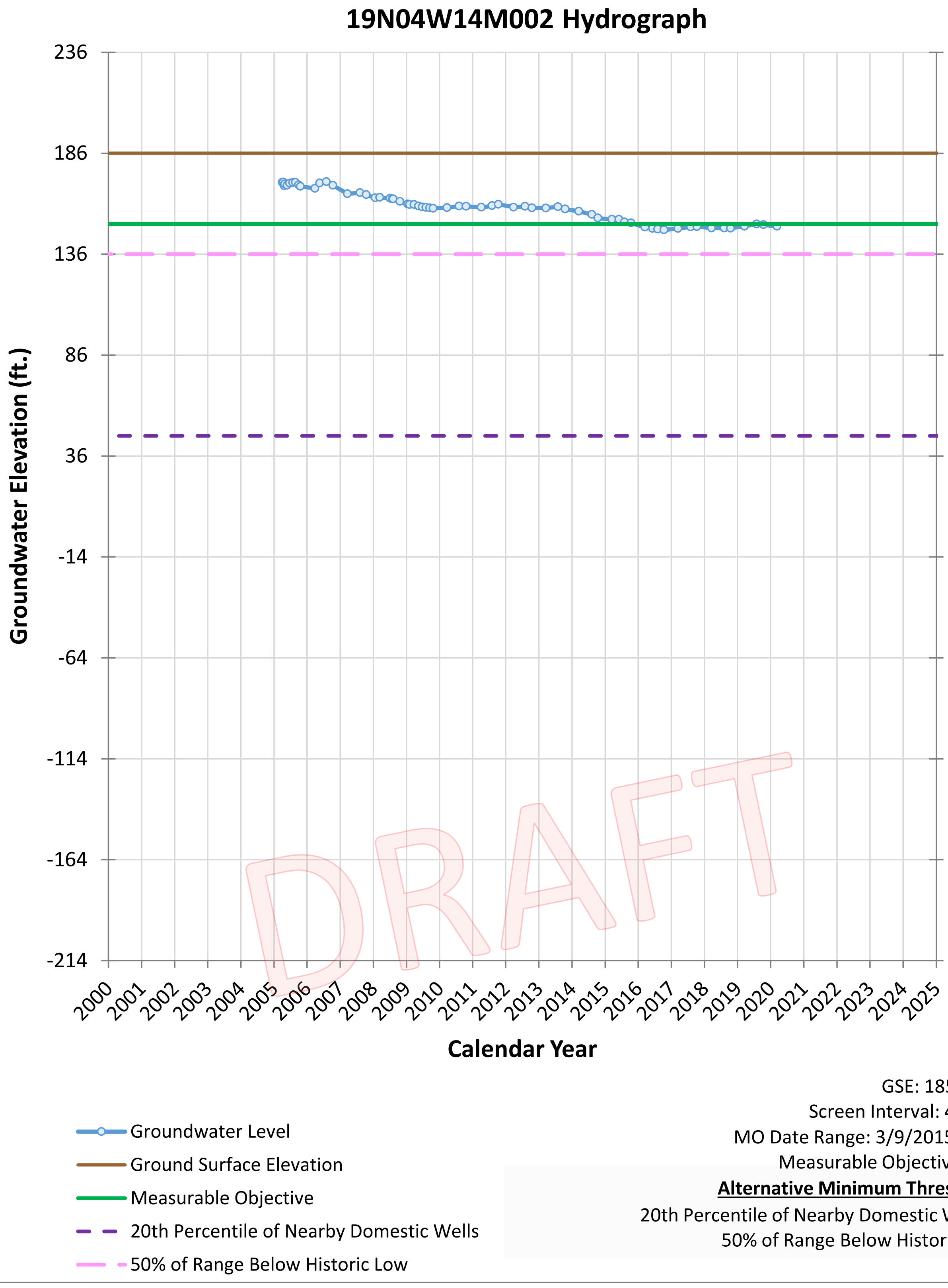


GSE: 108.36 ft. amsl
Screen Interval: 856-876 ft. bgs
MO Date Range: 3/12/2015 - 3/12/2020
Measurable Objective: 29 ft. bgs

Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 96 ft.
50% of Range Below Historic Low: 72 ft.

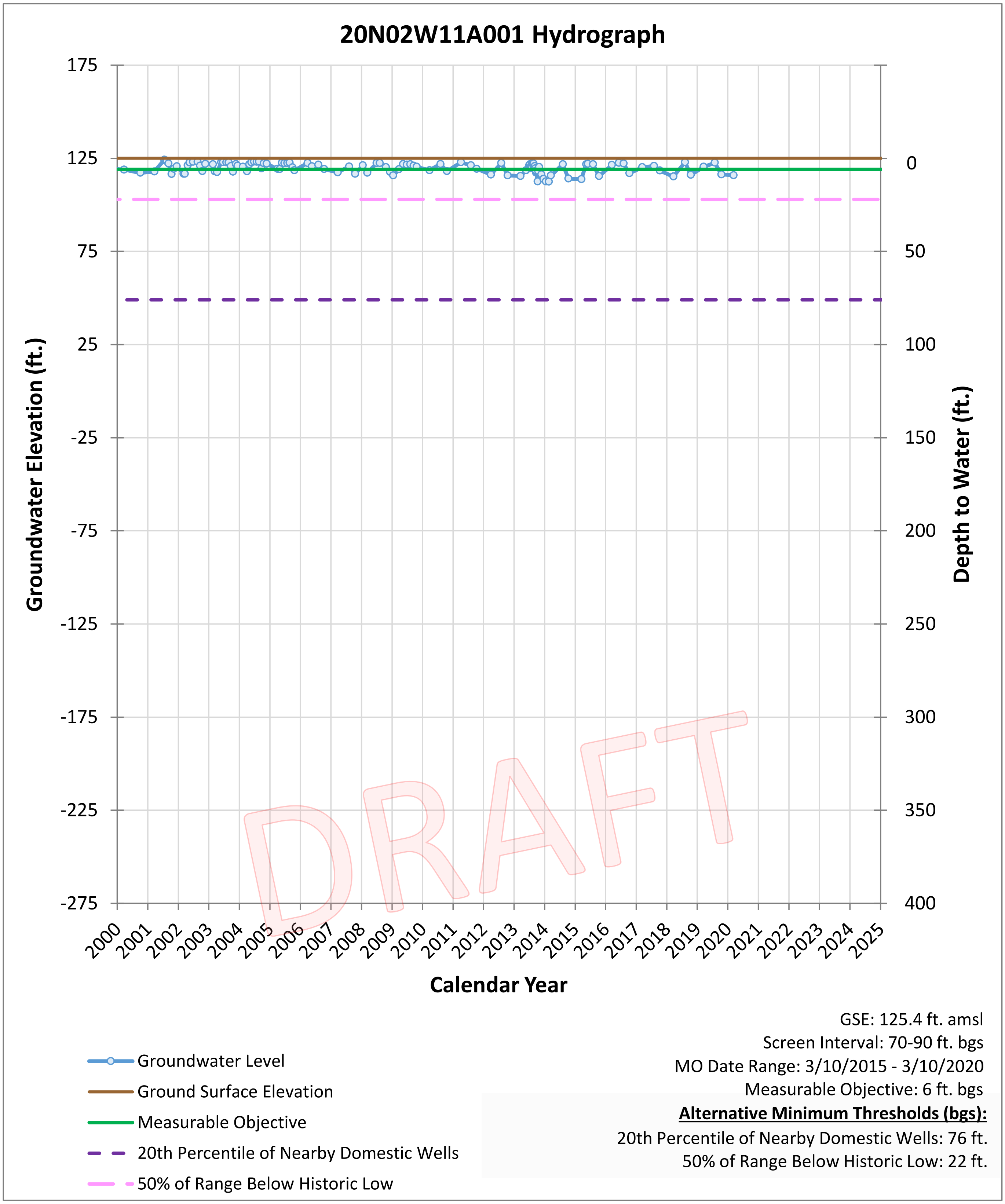


19N02W33K001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
137
87
37
-13
-63
-113
-163
-213
-263
-313
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 87.41 ft. amsl
Screen Interval: 160-260 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 16 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 66 ft.
50% of Range Below Historic Low: 53 ft.

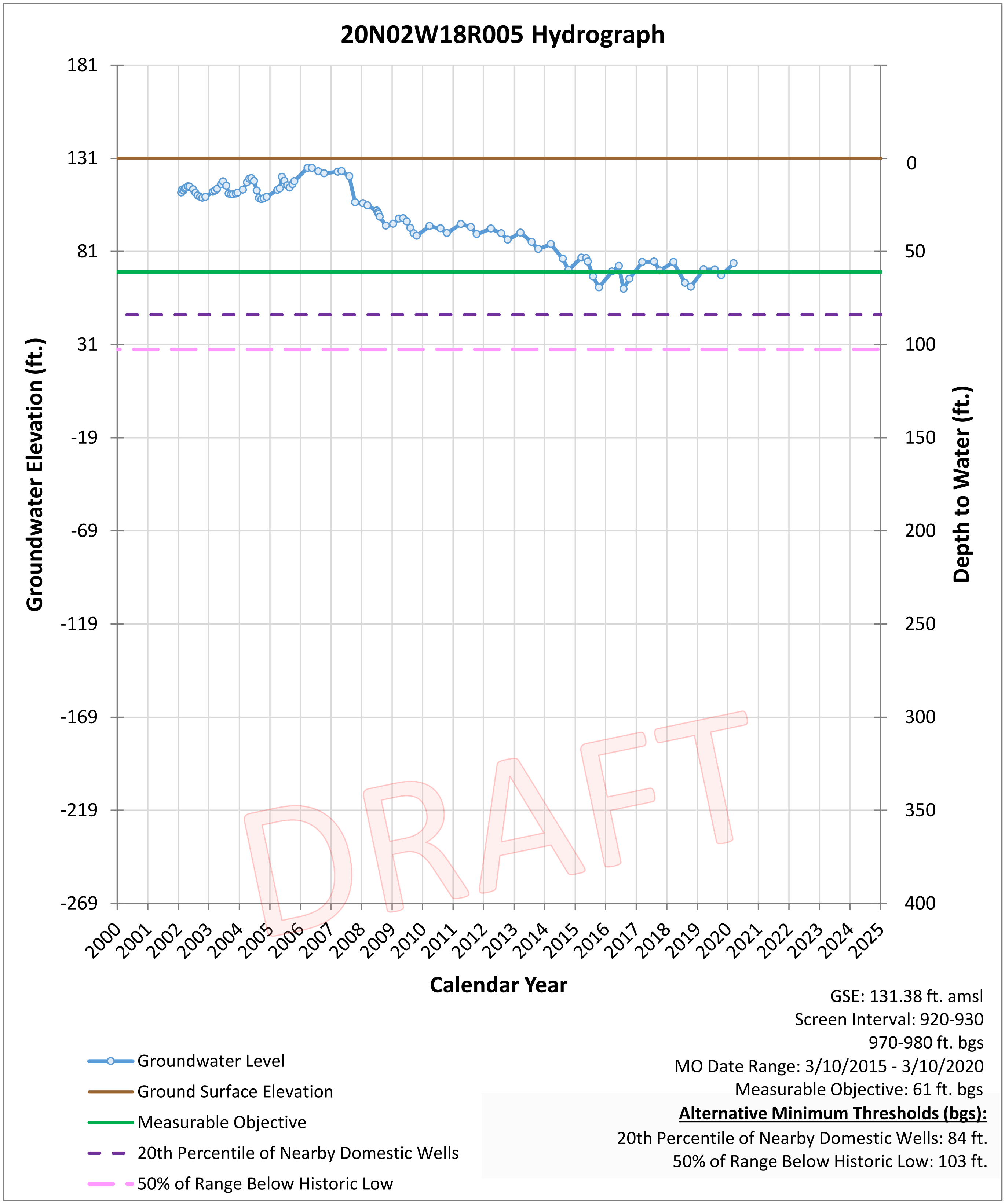


GSE: 185.83 ft. amsl
Screen Interval: 45-55 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 35 ft. bgs

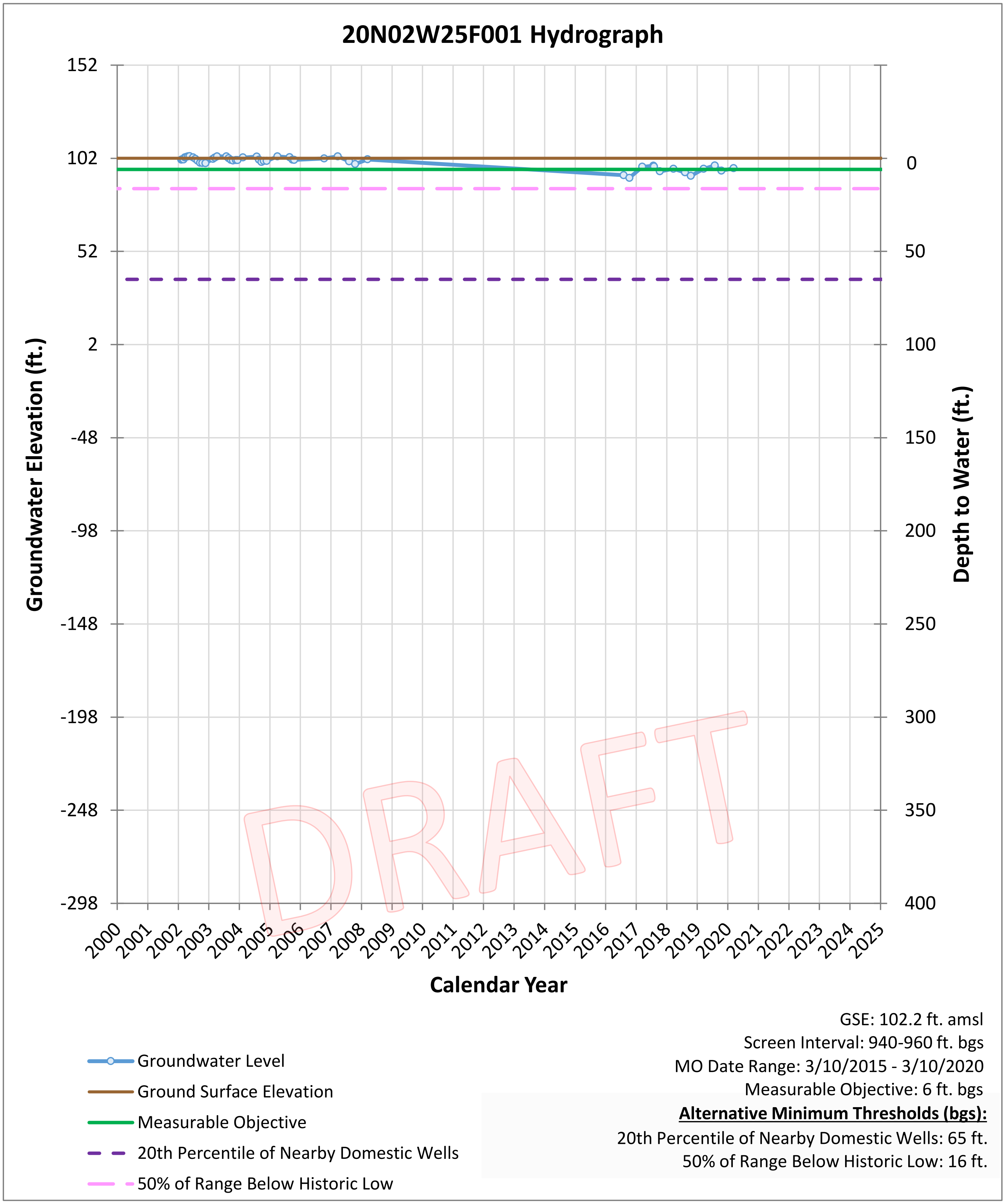
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 140 ft.
50% of Range Below Historic Low: 50 ft.

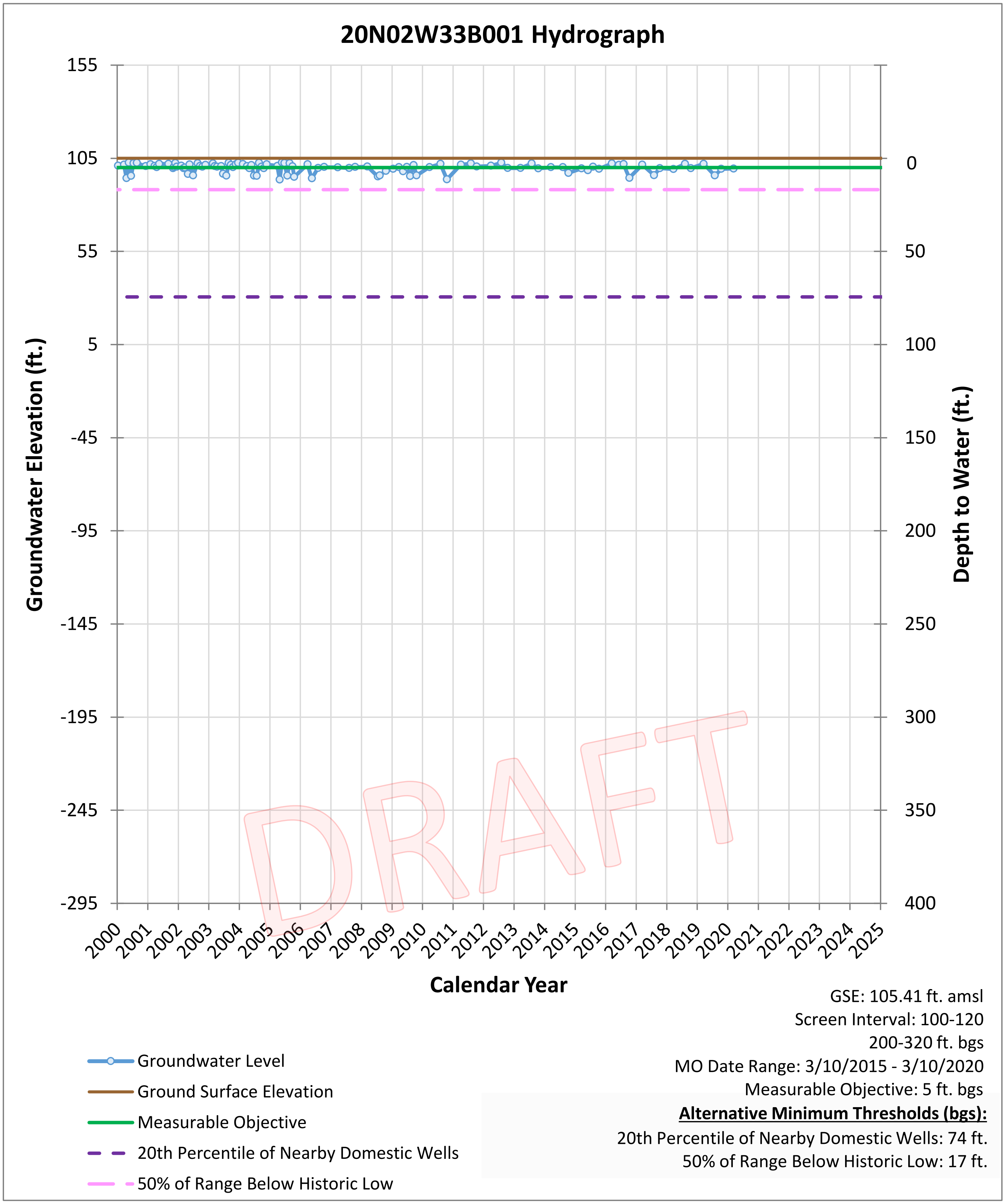


20N02W11A001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
175
125
75
25
-25
-75
-125
-175
-225
-275
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
GSE: 125.4 ft. amsl
Screen Interval: 70-90 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 6 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 76 ft.
50% of Range Below Historic Low: 22 ft.
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low

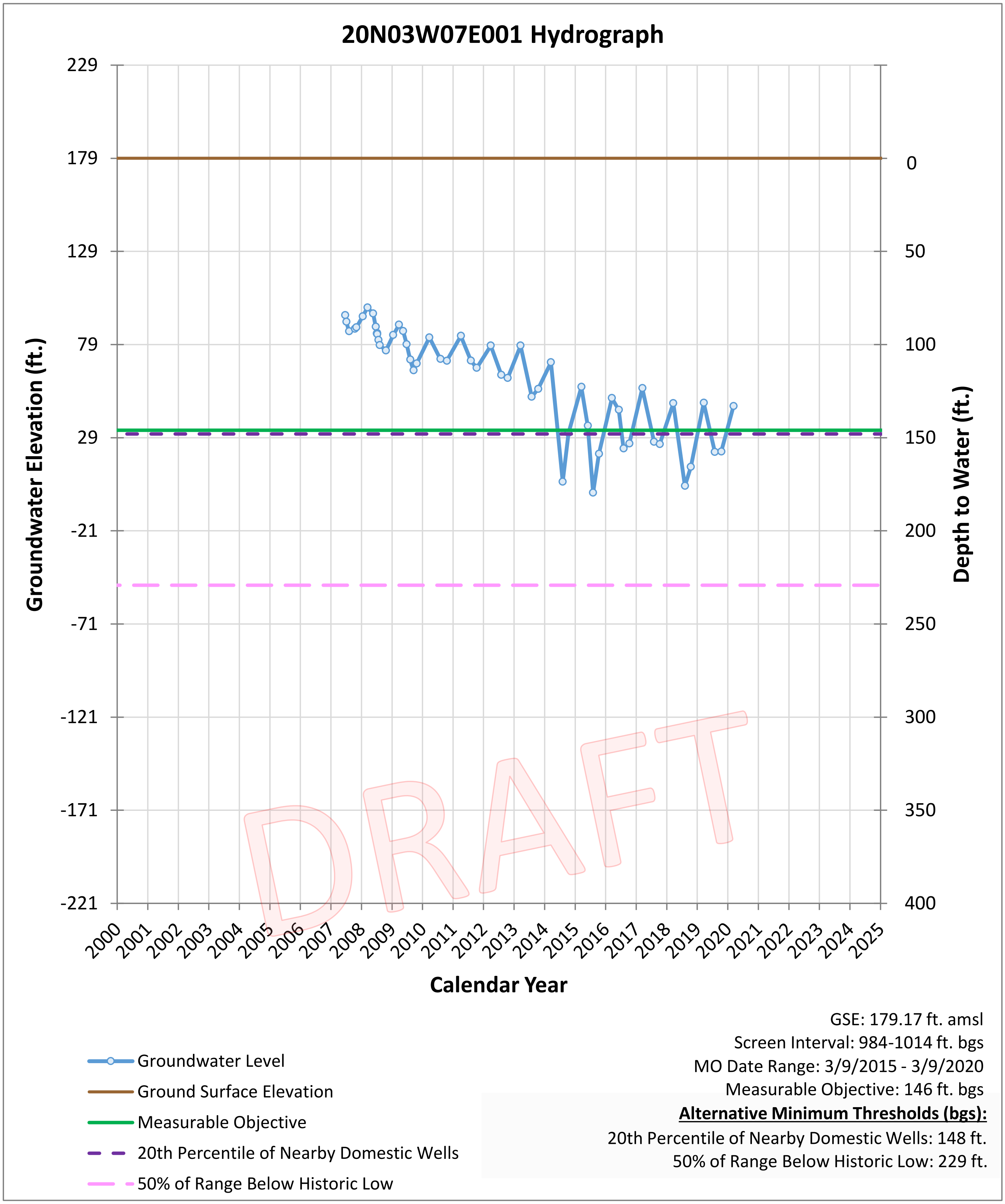


20N02W18R005 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
181
131
81
31
-19
-69
-119
-169
-219
-269
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 131.38 ft. amsl
Screen Interval: 920-930
970-980 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 61 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 84 ft.
50% of Range Below Historic Low: 103 ft.


20N02W25F001 Hydrograph
152
102
52
2
-48
-98
-148
-198
-248
-298
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 102.2 ft. amsl
Screen Interval: 940-960 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 6 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 65 ft.
50% of Range Below Historic Low: 16 ft.

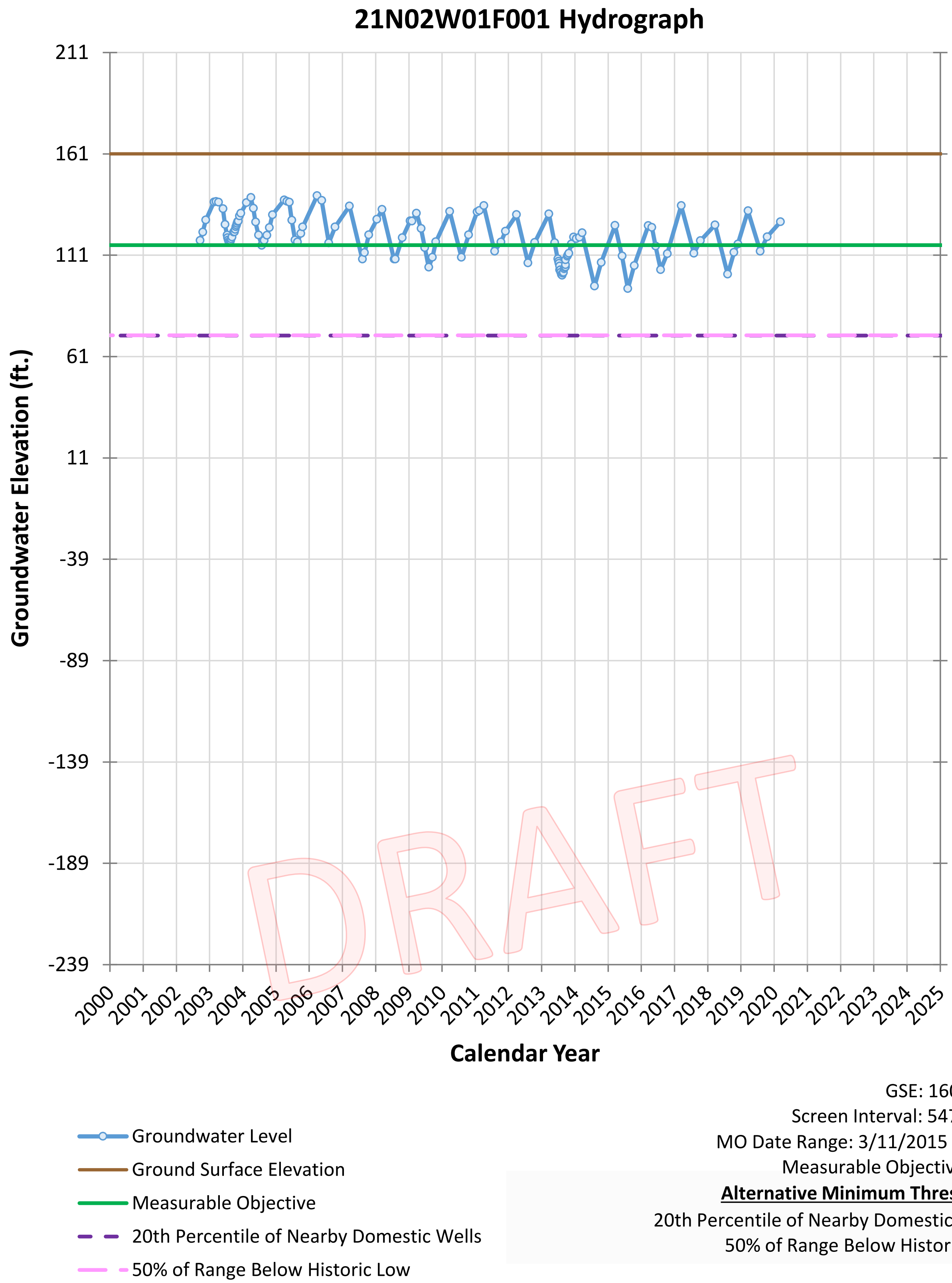


20N02W33B001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
155
105
55
5
-45
-95
-145
-195
-245
-295
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
DRAFT
GSE: 105.41 ft. amsl
Screen Interval: 100-120
200-320 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 5 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 74 ft.
50% of Range Below Historic Low: 17 ft.
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low



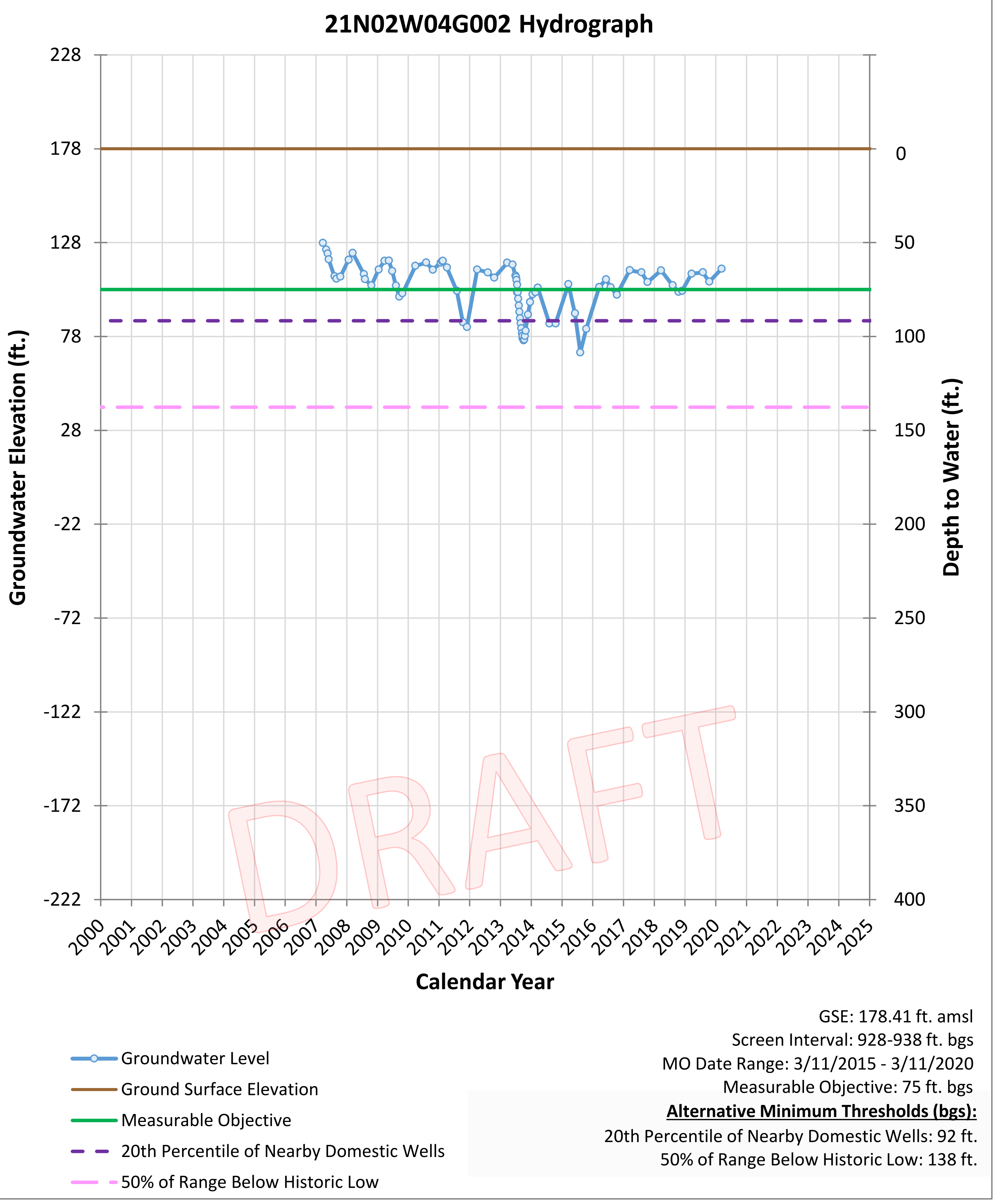
GSE: 179.17 ft. amsl
Screen Interval: 984-1014 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 146 ft. bgs

Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 148 ft.
50% of Range Below Historic Low: 229 ft.



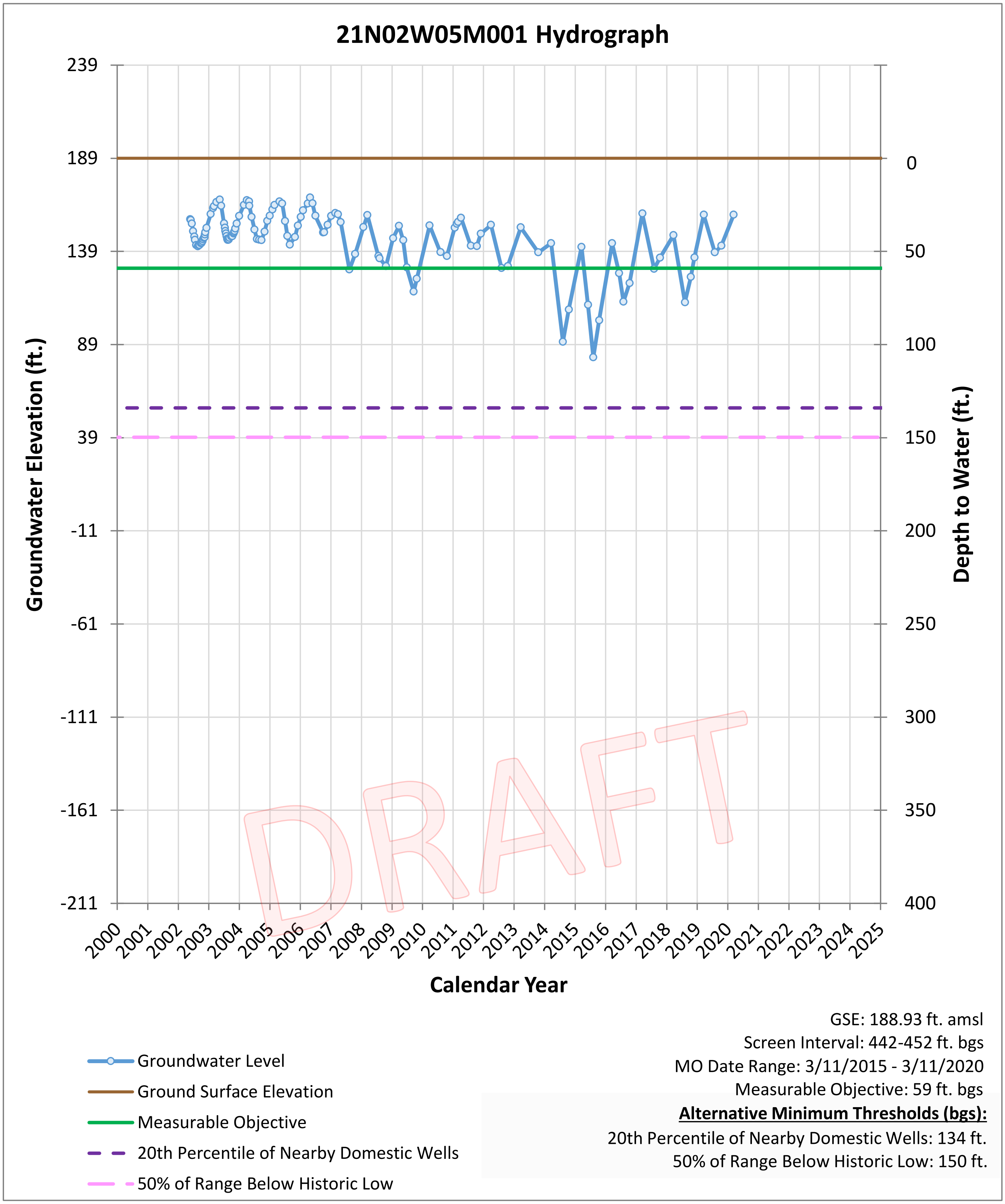
GSE: 160.88 ft. amsl
Screen Interval: 547-557 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 45 ft. bgs

Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 90 ft.
50% of Range Below Historic Low: 89 ft.

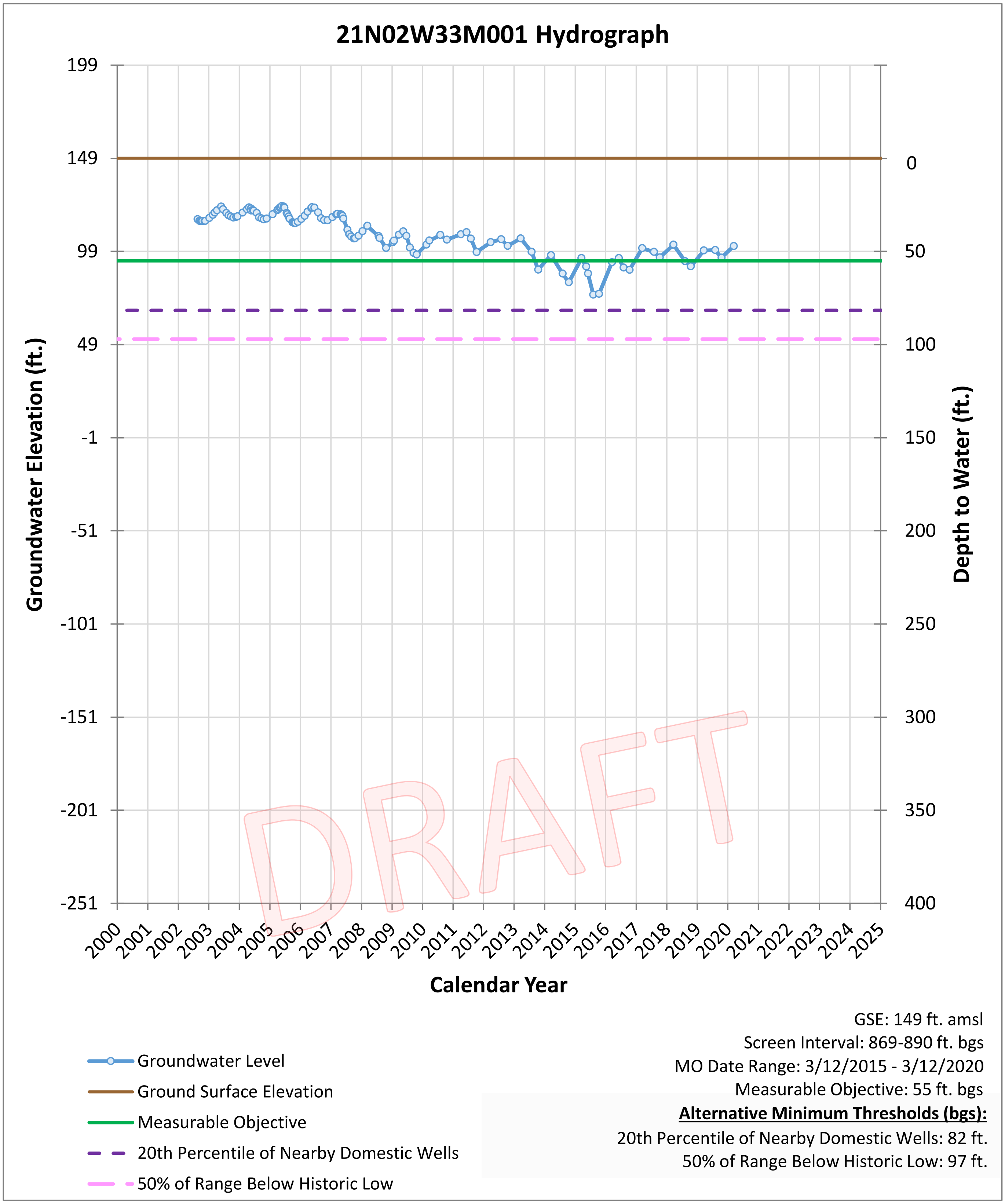


GSE: 178.41 ft. amsl
Screen Interval: 928-938 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 75 ft. bgs

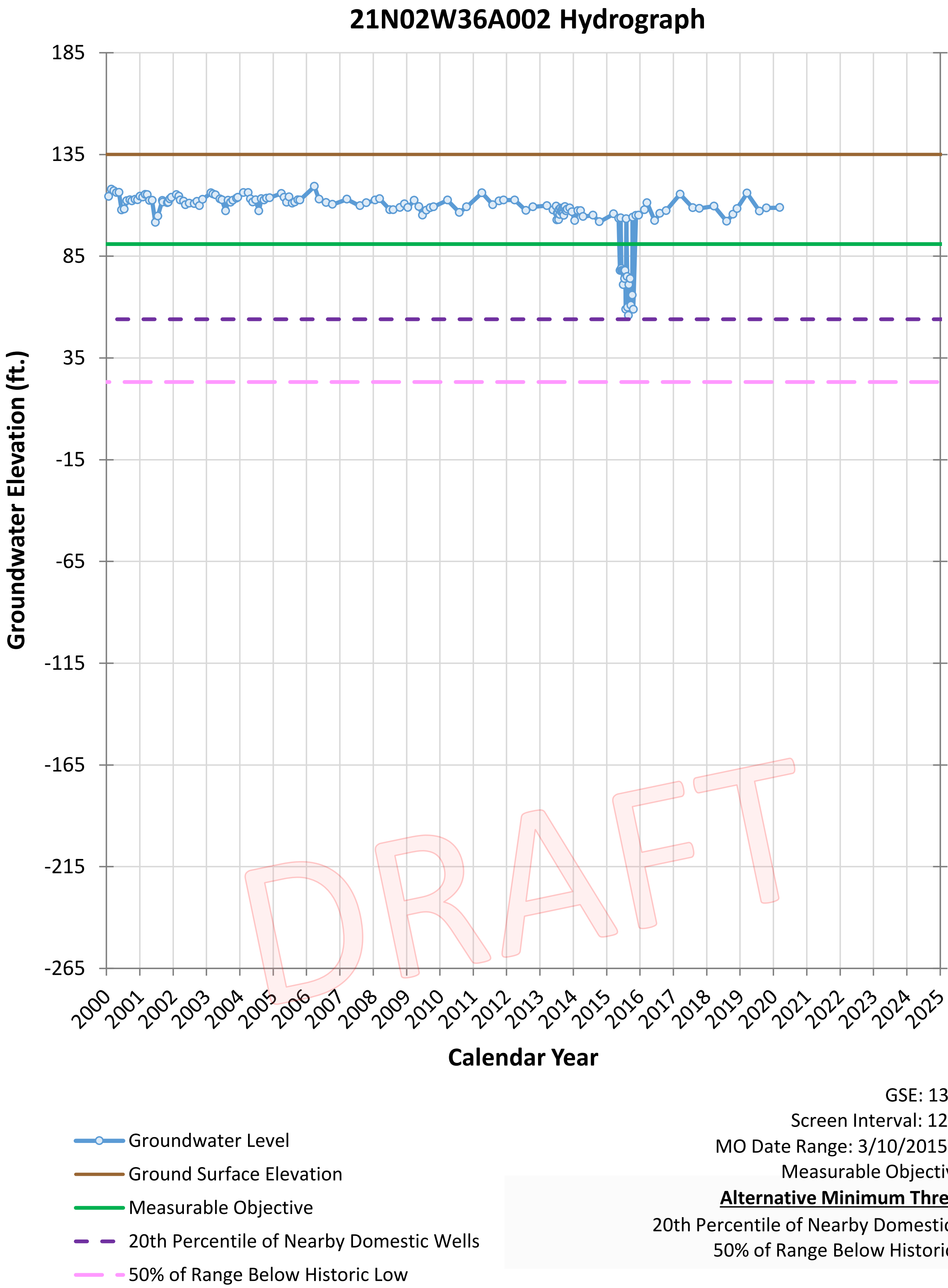
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 92 ft.
50% of Range Below Historic Low: 138 ft.



21N02W05M001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
239
189
139
89
39
-11
-61
-111
-161
-211
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 188.93 ft. amsl
Screen Interval: 442-452 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 59 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 134 ft.
50% of Range Below Historic Low: 150 ft.



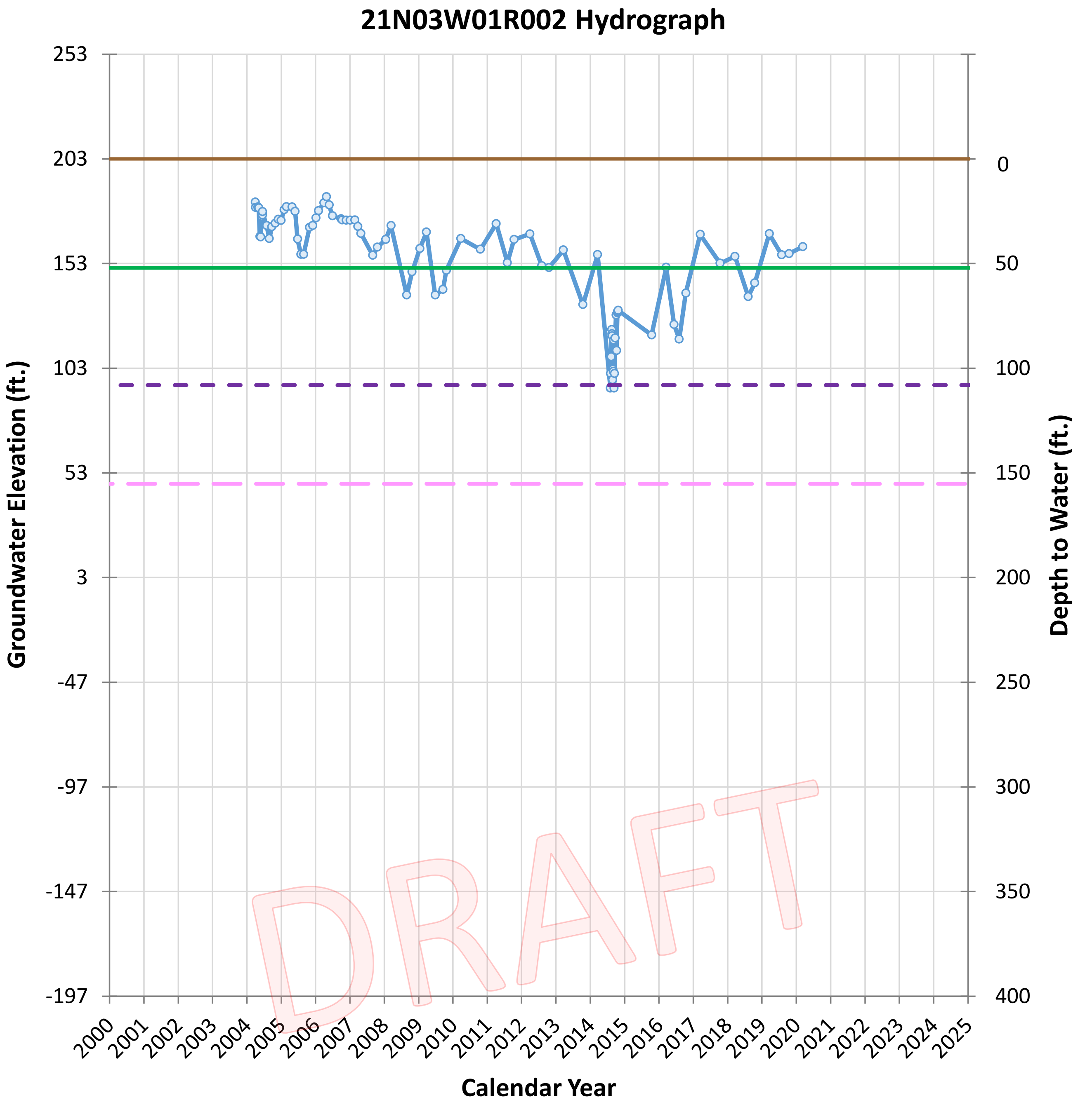
21N02W33M001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
199
149
99
49
-1
-51
-101
-151
-201
-251
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 149 ft. amsl
Screen Interval: 869-890 ft. bgs
MO Date Range: 3/12/2015 - 3/12/2020
Measurable Objective: 55 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 82 ft.
50% of Range Below Historic Low: 97 ft.



GSE: 135.39 ft. amsl
Screen Interval: 120-140 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 44 ft. bgs

Alternative Minimum Thresholds (bgs):

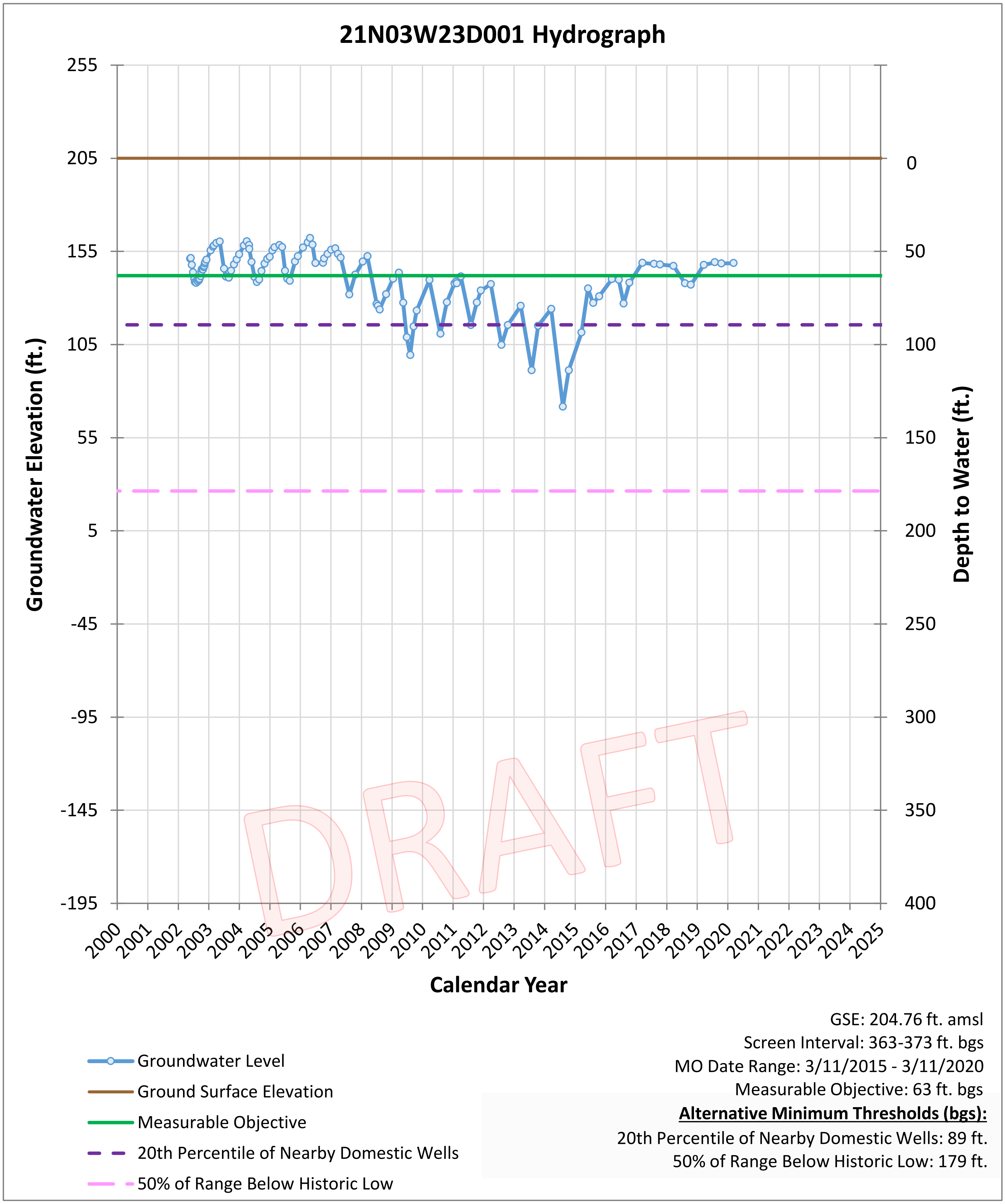
20th Percentile of Nearby Domestic Wells: 81 ft.
50% of Range Below Historic Low: 112 ft.



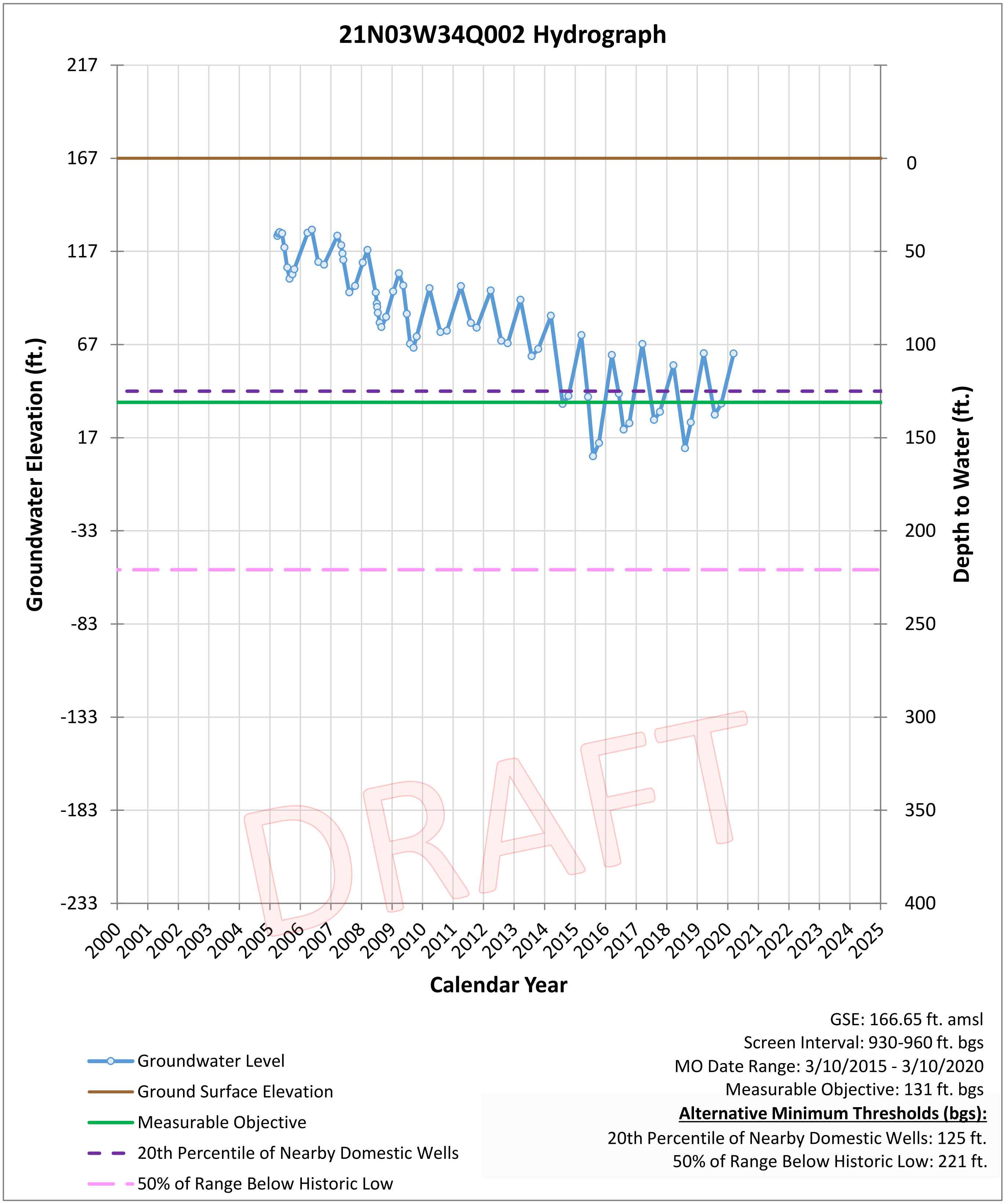
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low

GSE: 203.32 ft. amsl
Screen Interval: 235-245 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 52 ft. bgs

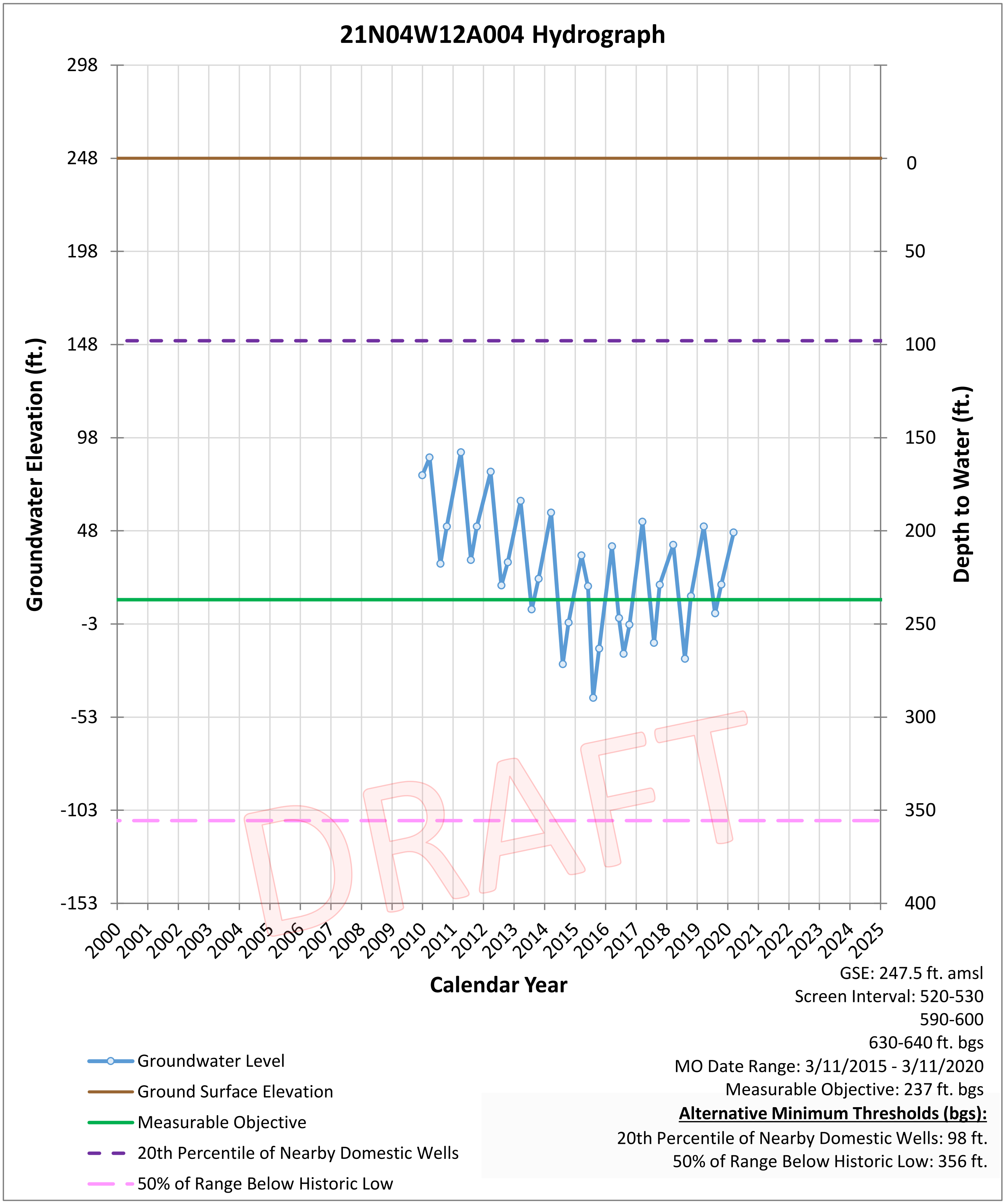
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 108 ft.
50% of Range Below Historic Low: 155 ft.



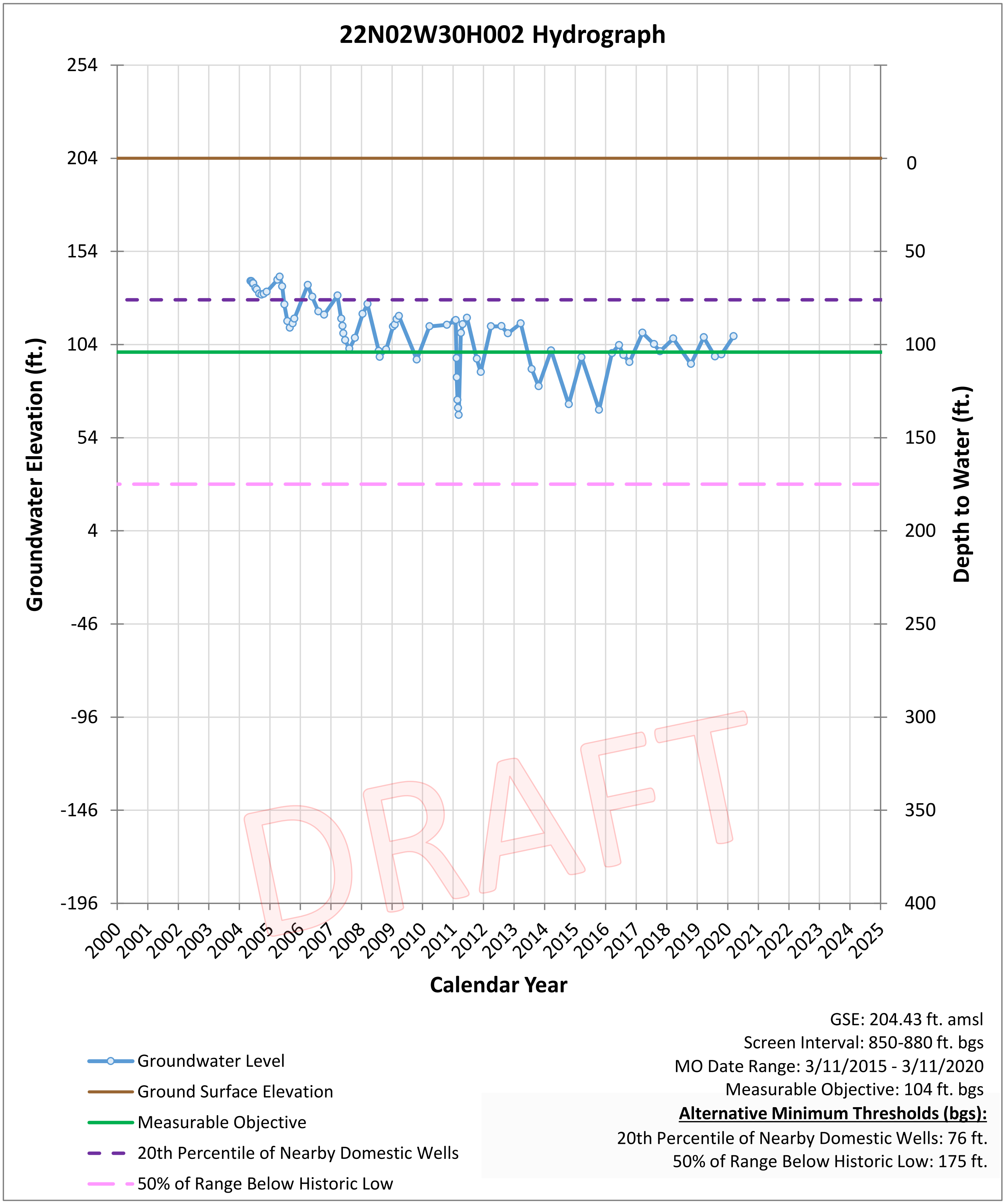
21N03W23D001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
255
205
155
105
55
5
-45
-95
-145
-195
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 204.76 ft. amsl
Screen Interval: 363-373 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 63 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 89 ft.
50% of Range Below Historic Low: 179 ft.

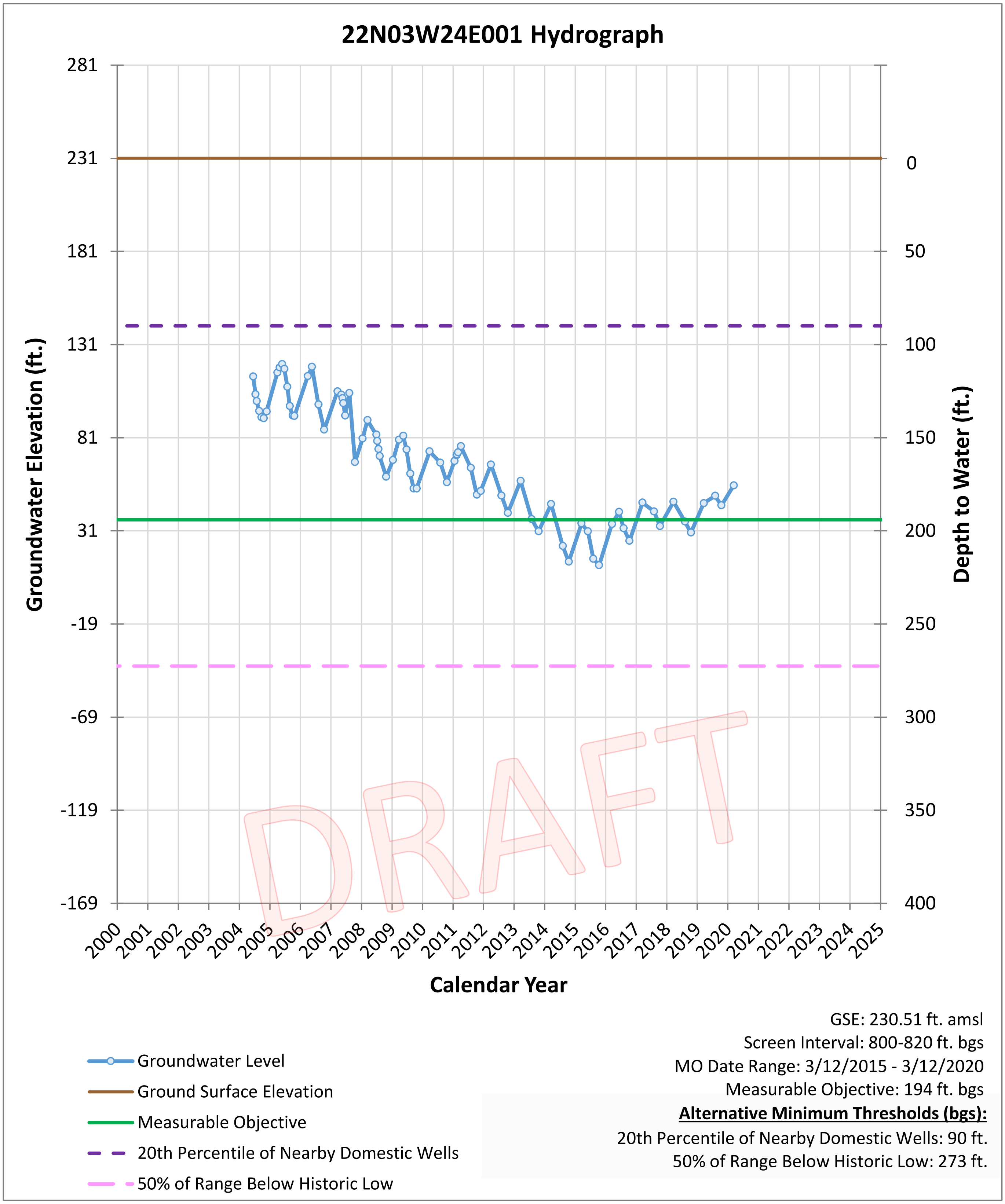


21N03W34Q002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
217
167
117
67
17
-33
-83
-133
-183
-233
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 166.65 ft. amsl
Screen Interval: 930-960 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 131 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 125 ft.
50% of Range Below Historic Low: 221 ft.

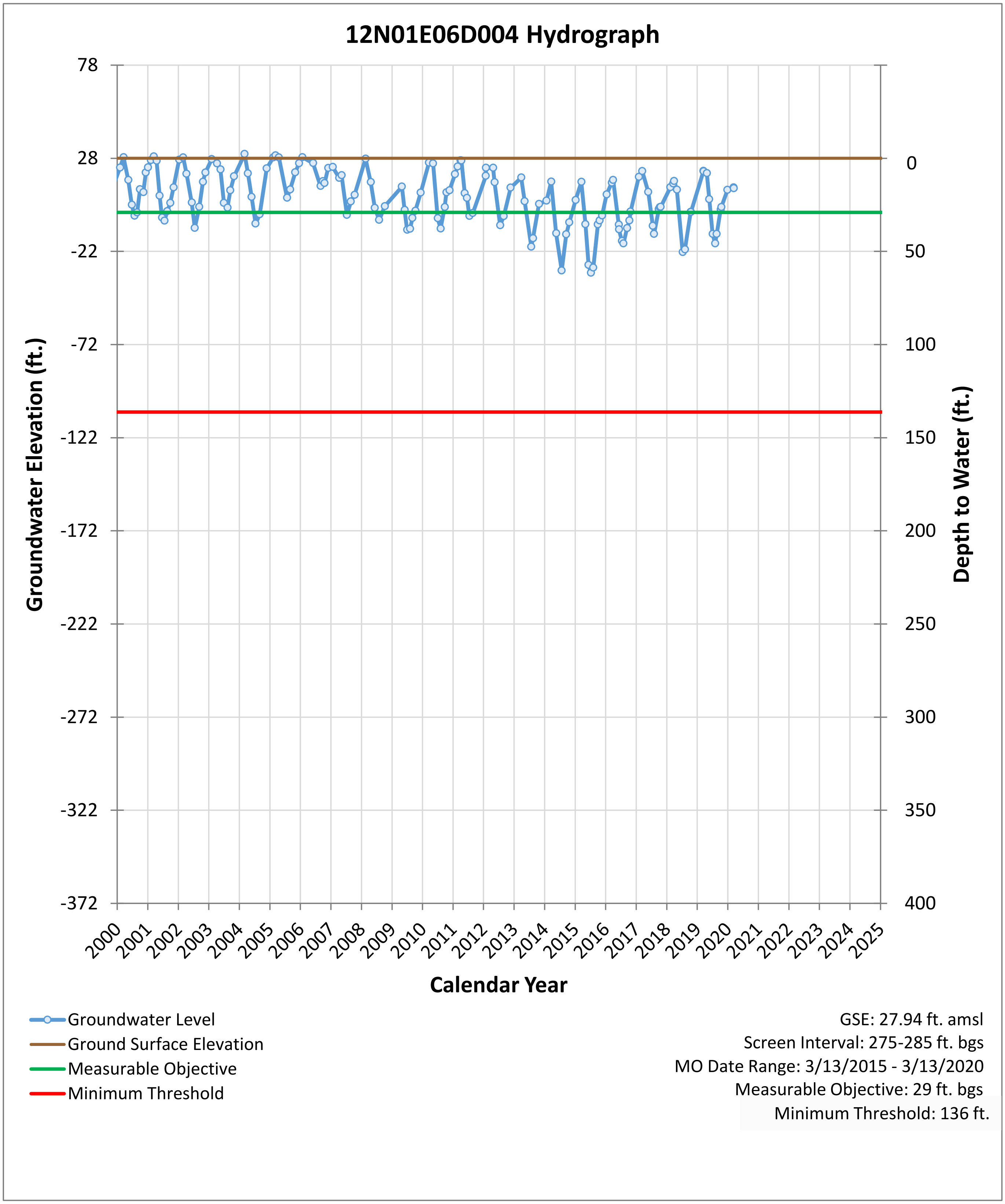


21N04W12A004 Hydrograph
298
248
198
148
98
48
-3
-53
-103
-153
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
DRAFT
GSE: 247.5 ft. amsl
Screen Interval: 520-530
590-600
630-640 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 237 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 98 ft.
50% of Range Below Historic Low: 356 ft.
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low

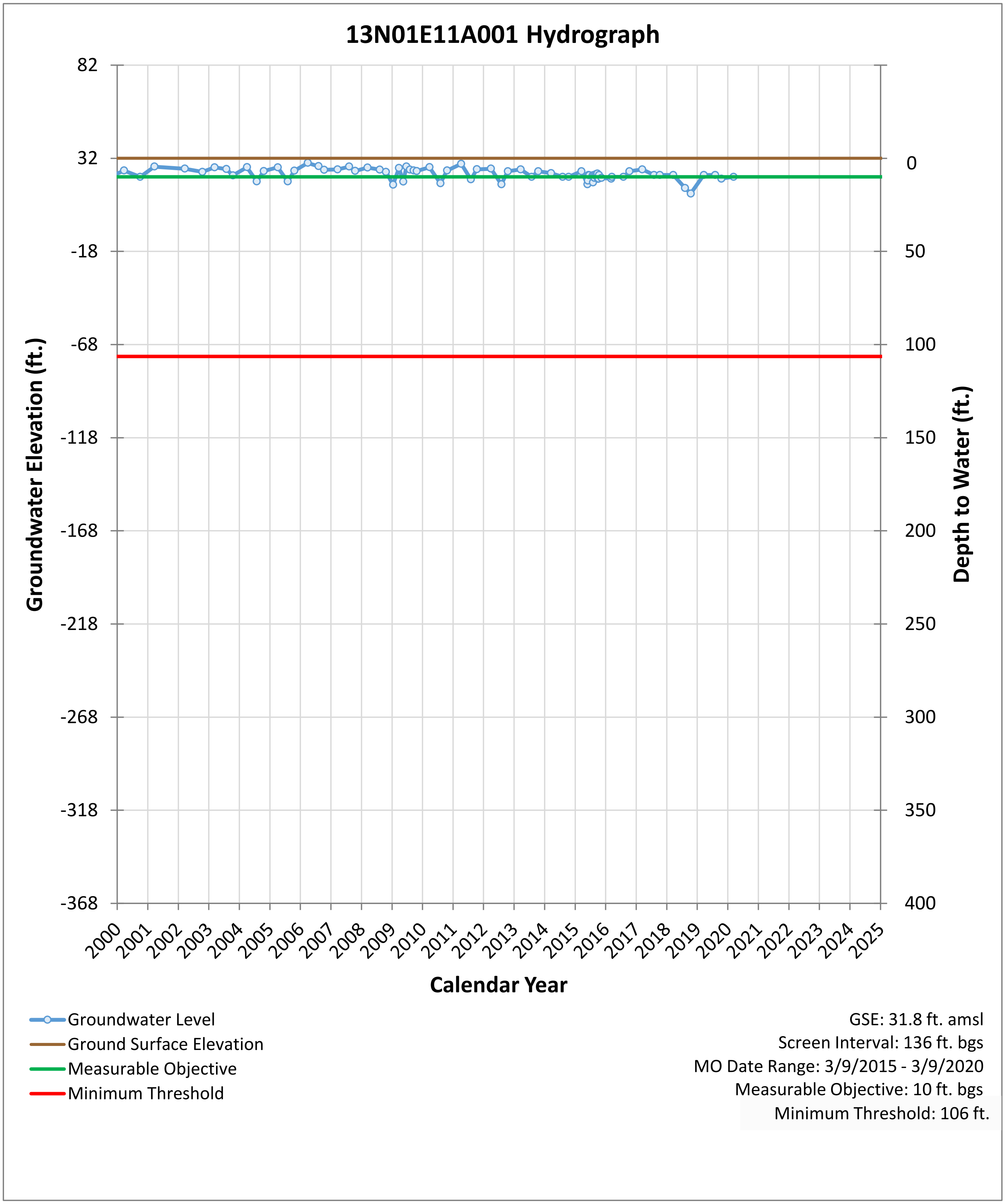

22N02W30H002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
254
204
154
104
54
4
-46
-96
-146
-196
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 204.43 ft. amsl
Screen Interval: 850-880 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 104 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 76 ft.
50% of Range Below Historic Low: 175 ft.

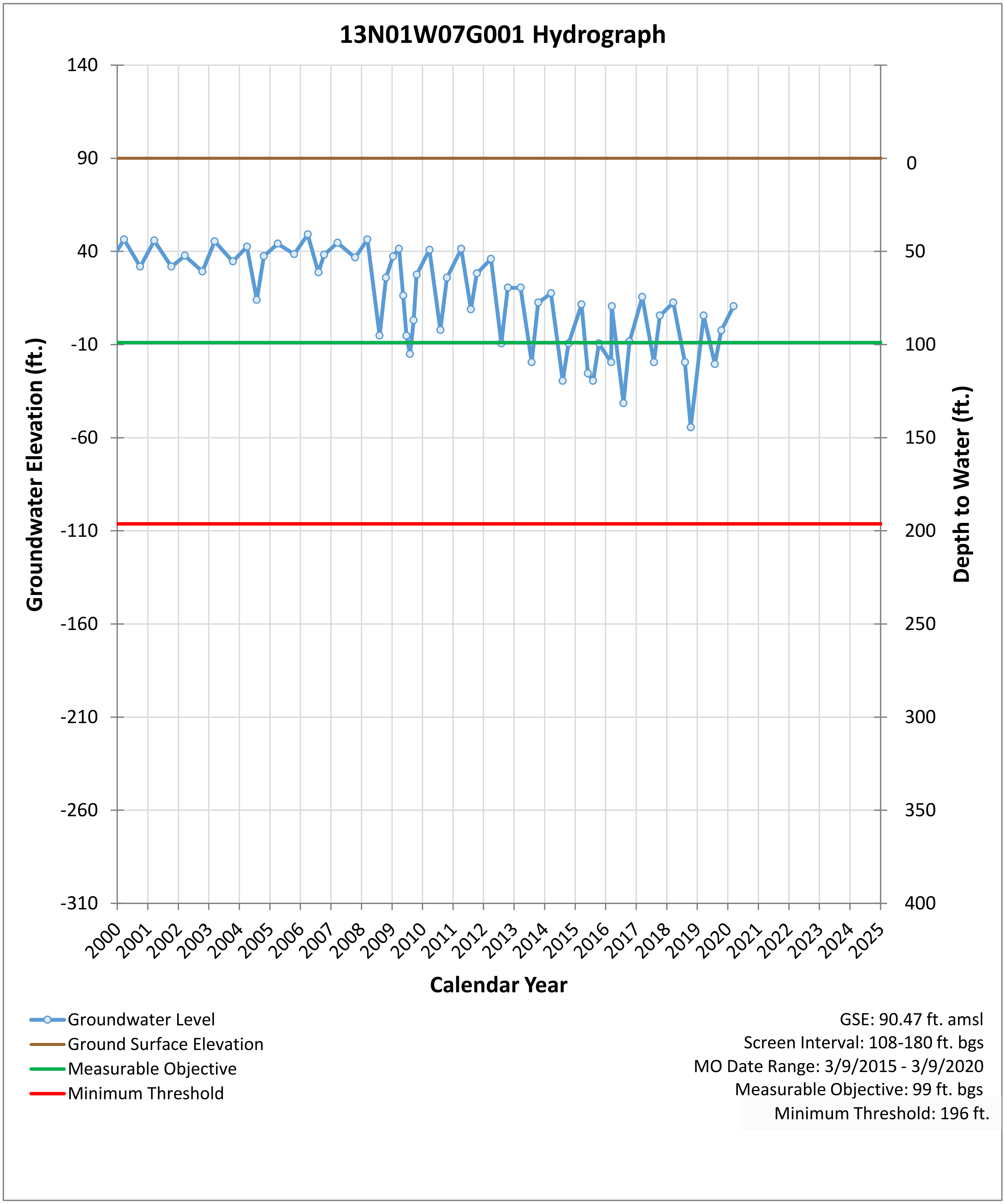

22N03W24E001 Hydrograph
281
231
181
131
81
31
-19
-69
-119
-169
Groundwater Elevation (ft.)
0
50
100
150
200
250
300
350
400
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
20th Percentile of Nearby Domestic Wells
50% of Range Below Historic Low
GSE: 230.51 ft. amsl
Screen Interval: 800-820 ft. bgs
MO Date Range: 3/12/2015 - 3/12/2020
Measurable Objective: 194 ft. bgs
Alternative Minimum Thresholds (bgs):
20th Percentile of Nearby Domestic Wells: 90 ft.
50% of Range Below Historic Low: 273 ft.

Attachment B. Groundwater Levels – Minimum Thresholds and Measurable Objectives

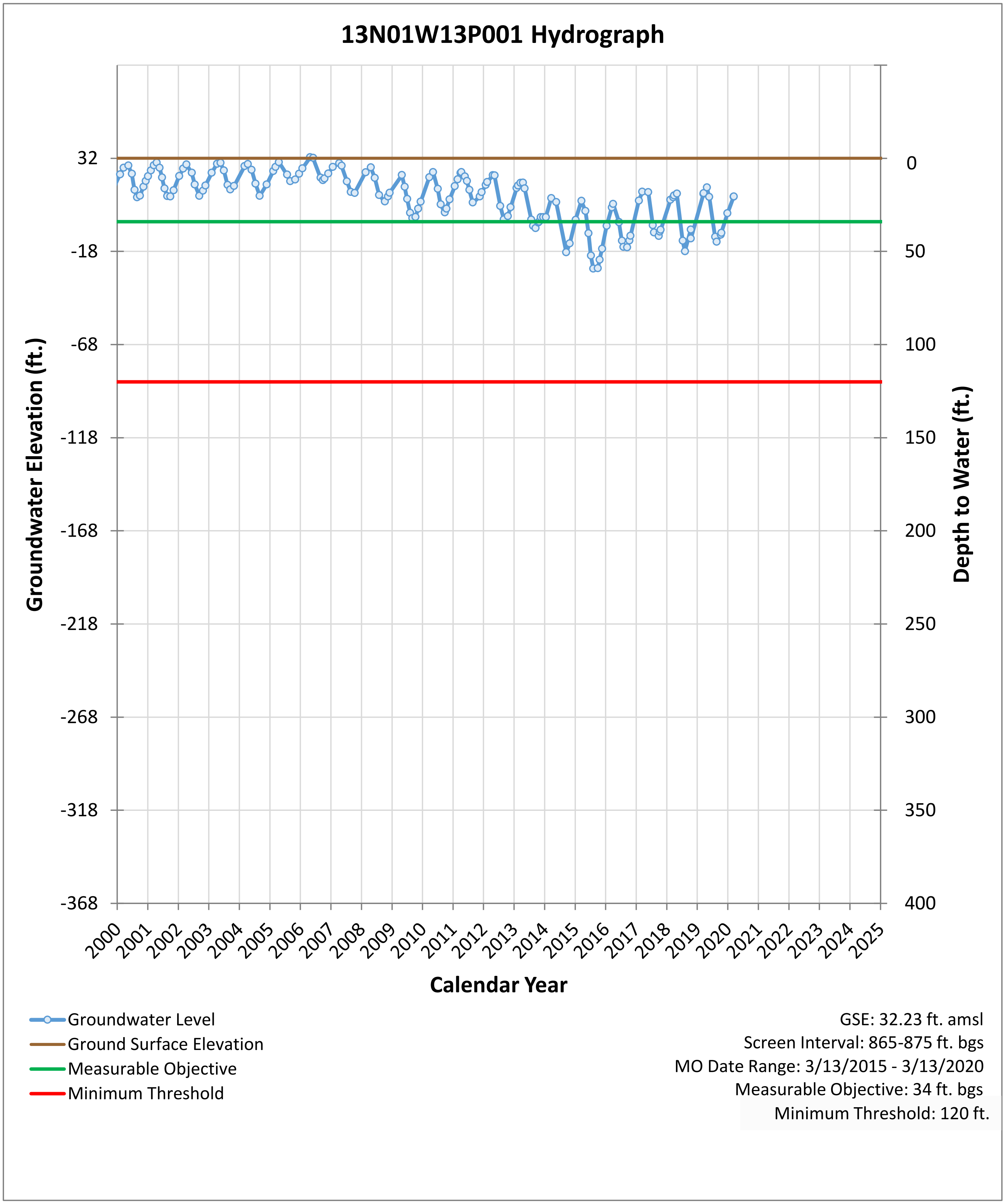


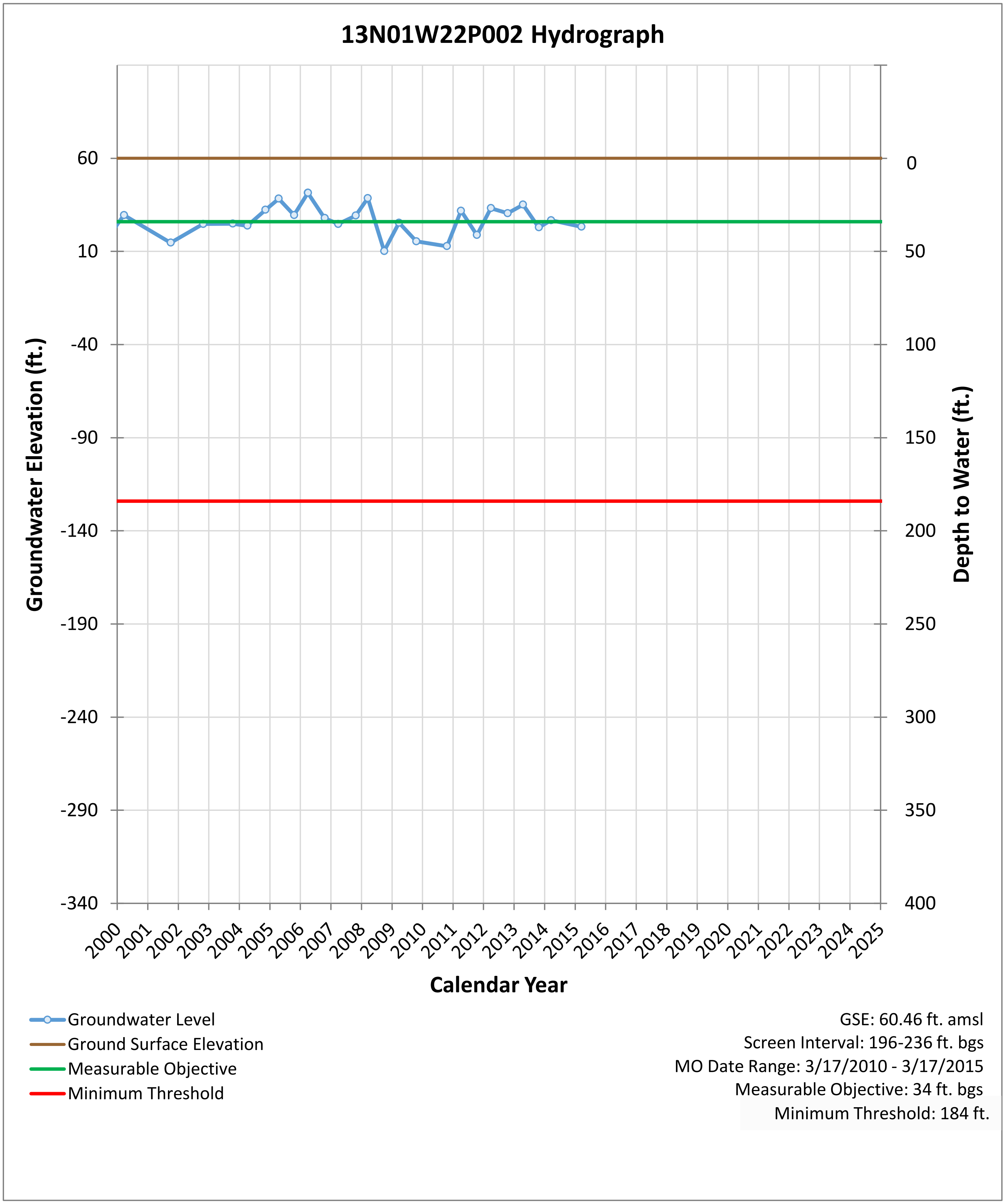
12N01E06D004 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
78
28
-22
-72
-122
-172
-222
-272
-322
-372
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 27.94 ft. amsl
Screen Interval: 275-285 ft. bgs
MO Date Range: 3/13/2015 - 3/13/2020
Measurable Objective: 29 ft. bgs
Minimum Threshold: 136 ft.


13N01E11A001 Hydrograph
Groundwater Elevation (ft.)
82
32
-18
-68
-118
-168
-218
-268
-318
-368
Depth to Water (ft.)
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 31.8 ft. amsl
Screen Interval: 136 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 10 ft. bgs
Minimum Threshold: 106 ft.

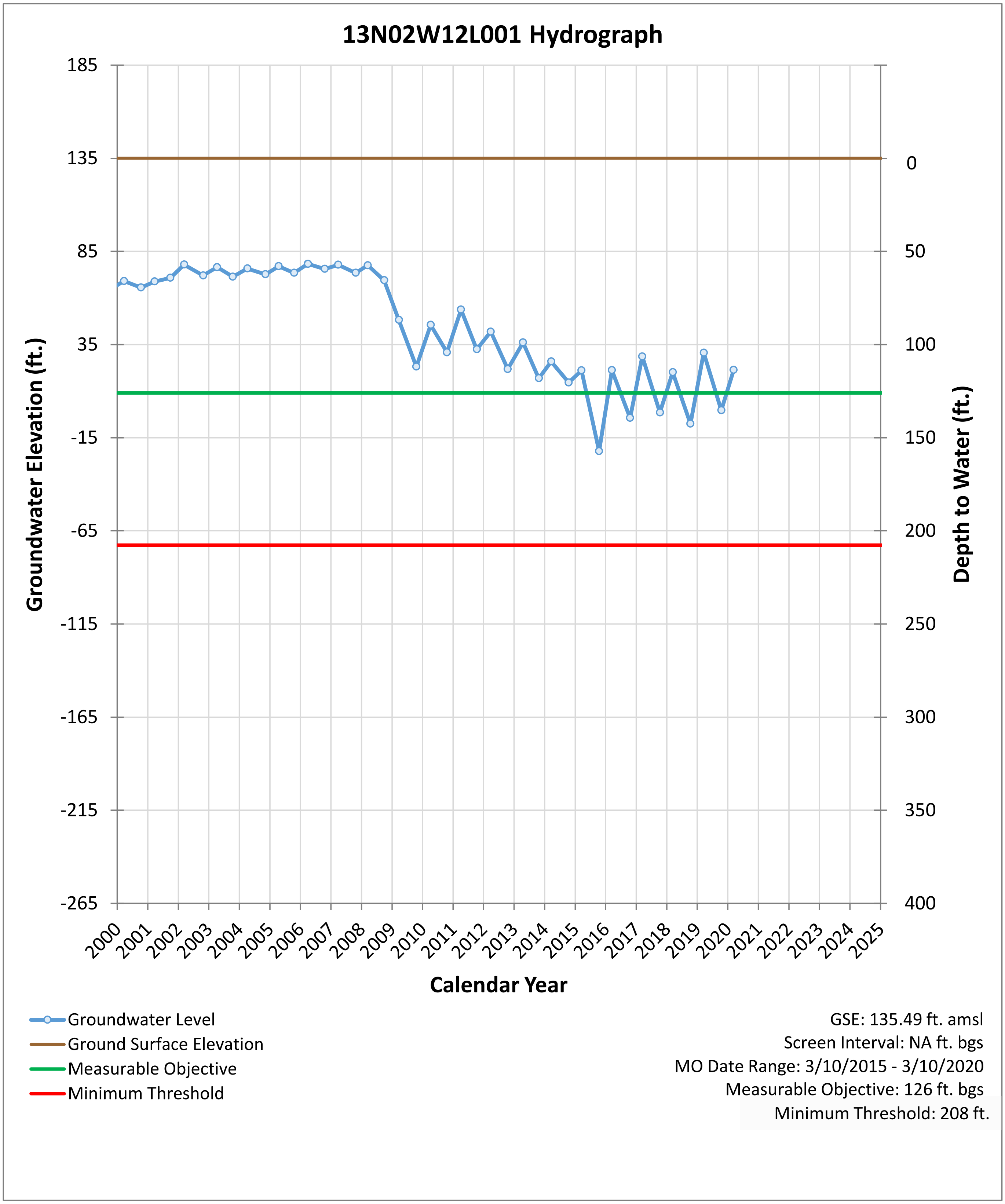


13N01W07G001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
140
90
40
-10
-60
-110
-160
-210
-260
-310
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 90.47 ft. amsl
Screen Interval: 108-180 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 99 ft. bgs
Minimum Threshold: 196 ft.

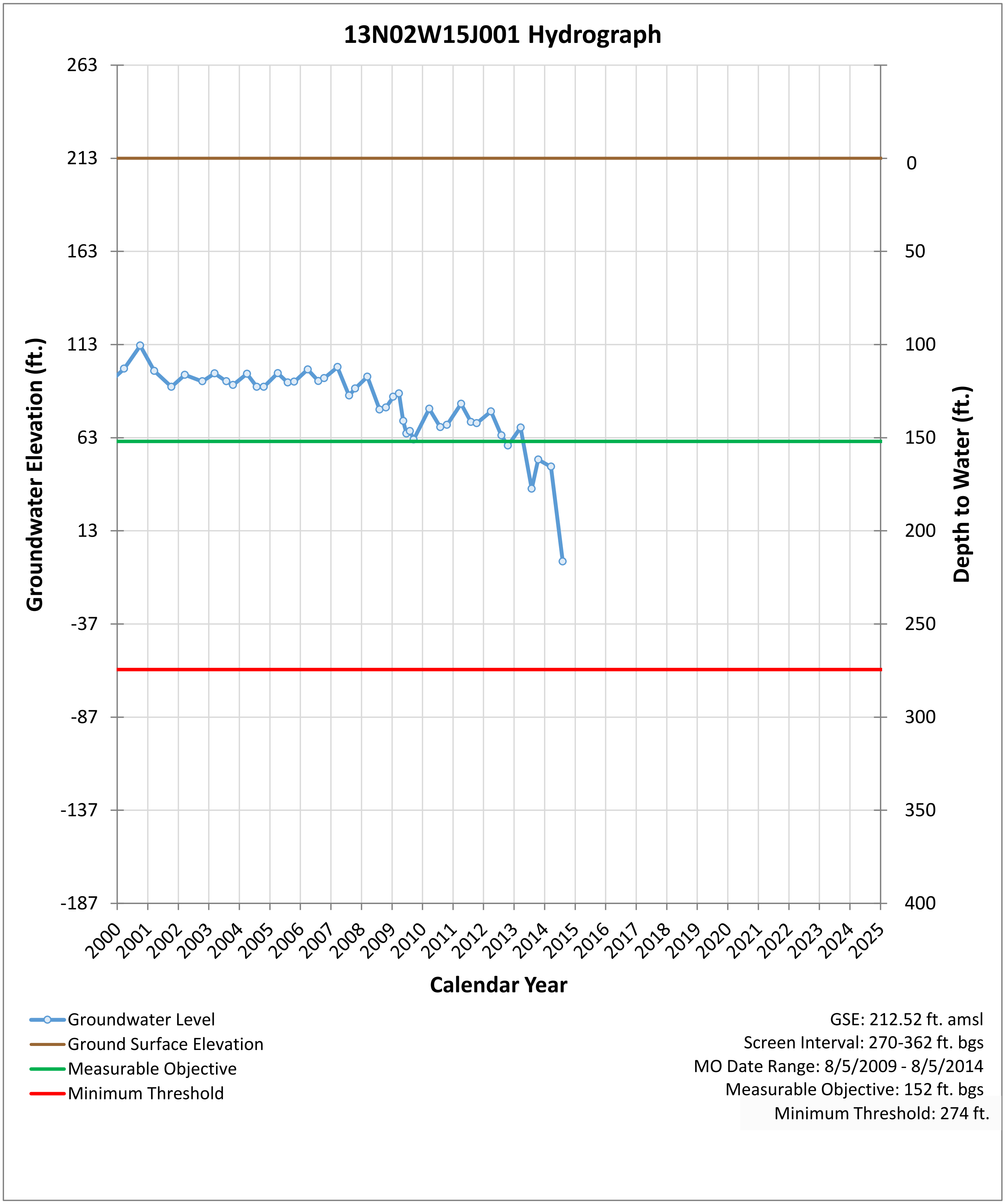

13N01W13P001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
32
-18
-68
-118
-168
-218
-268
-318
-368
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 32.23 ft. amsl
Screen Interval: 865-875 ft. bgs
MO Date Range: 3/13/2015 - 3/13/2020
Measurable Objective: 34 ft. bgs
Minimum Threshold: 120 ft.



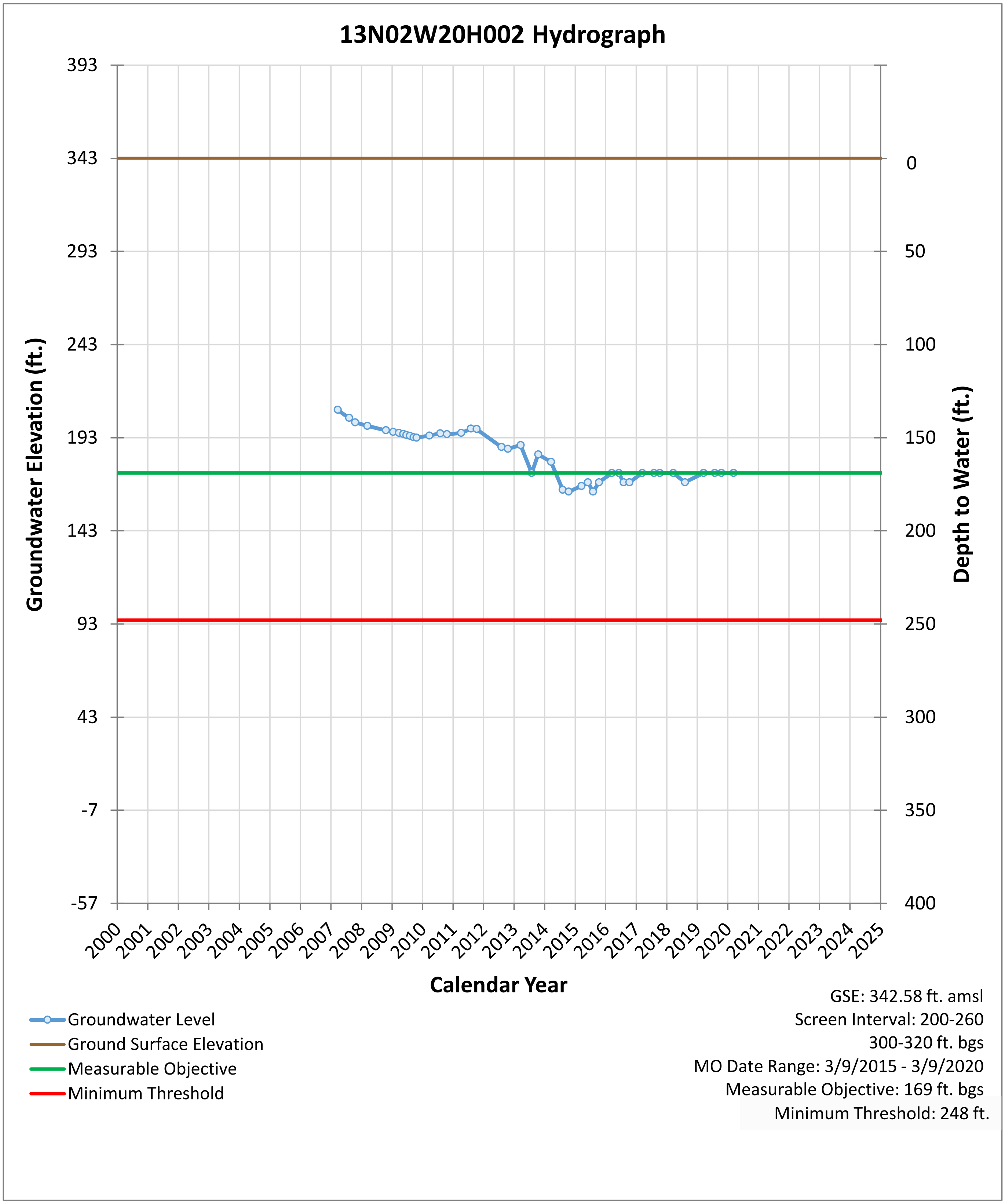
13N01W22P002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
60
10
-40
-90
-140
-190
-240
-290
-340
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 60.46 ft. amsl
Screen Interval: 196-236 ft. bgs
MO Date Range: 3/17/2010 - 3/17/2015
Measurable Objective: 34 ft. bgs
Minimum Threshold: 184 ft.



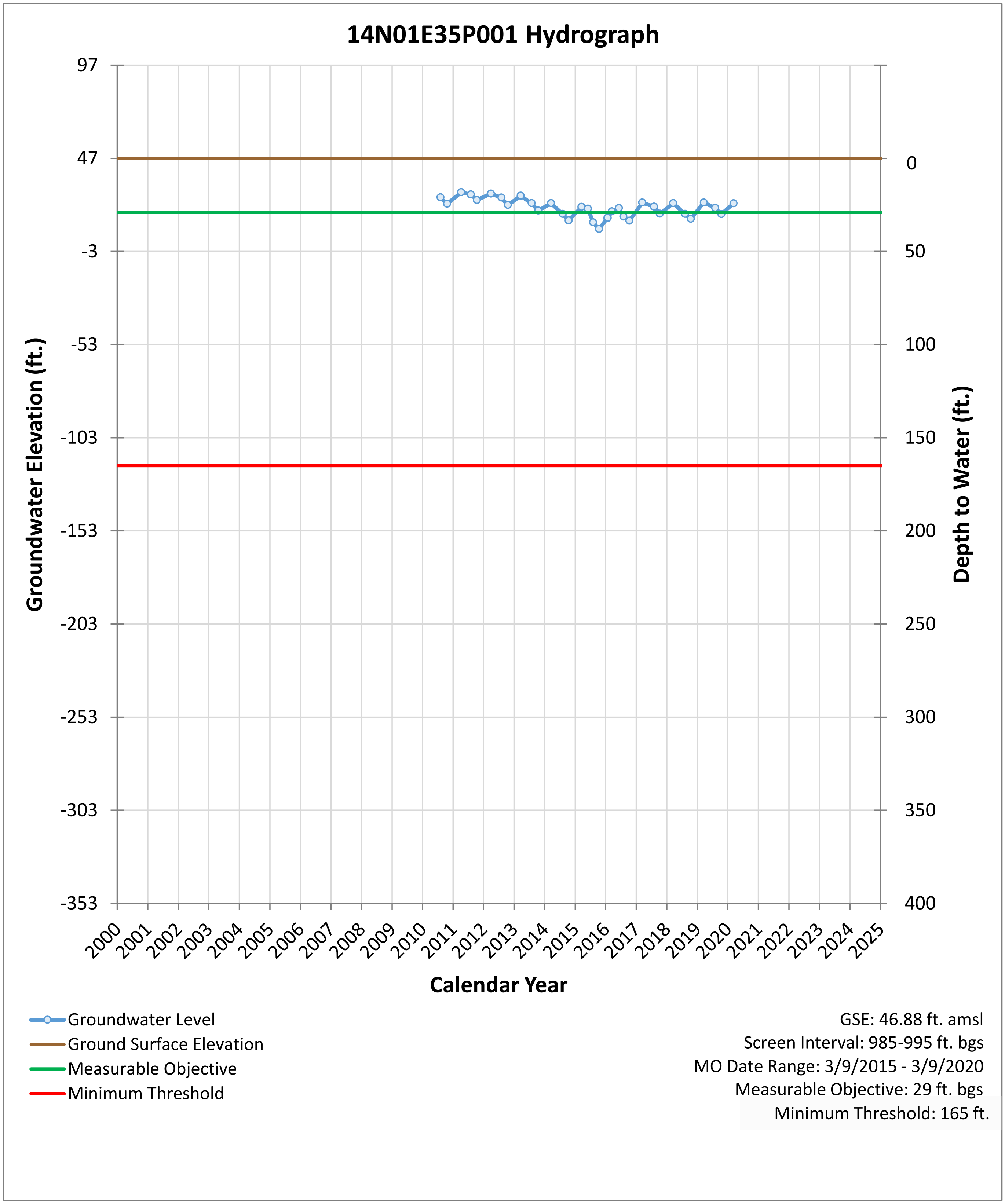
13N02W12L001 Hydrograph
185
135
85
35
-15
-65
-115
-165
-215
-265
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 135.49 ft. amsl
Screen Interval: NA ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 126 ft. bgs
Minimum Threshold: 208 ft.



13N02W15J001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
263
213
163
113
63
13
-37
-87
-137
-187
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 212.52 ft. amsl
Screen Interval: 270-362 ft. bgs
MO Date Range: 8/5/2009 - 8/5/2014
Measurable Objective: 152 ft. bgs
Minimum Threshold: 274 ft.

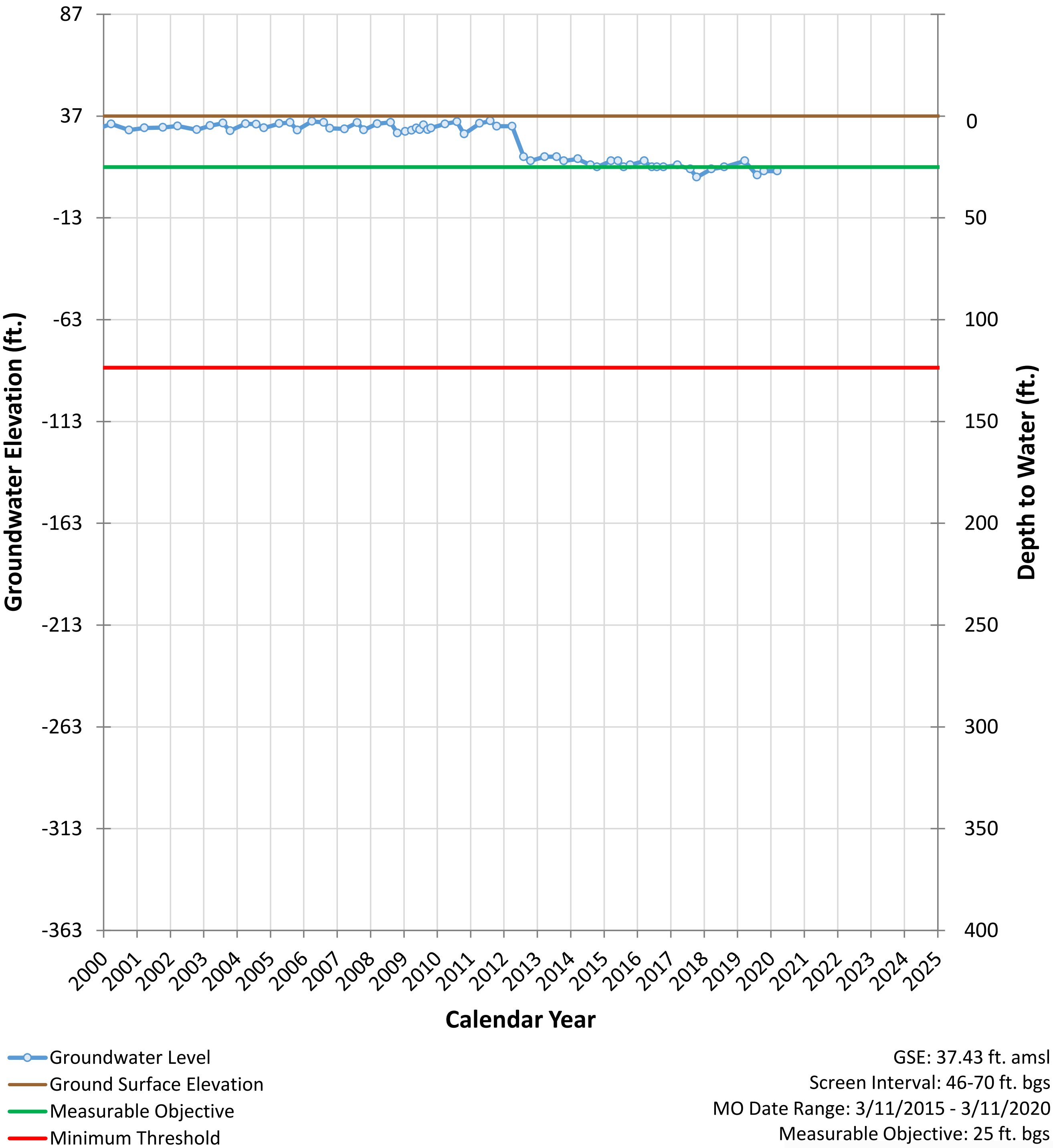


13N02W20H002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
393
343
293
243
193
143
93
43
-7
-57
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 342.58 ft. amsl
Screen Interval: 200-260
300-320 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 169 ft. bgs
Minimum Threshold: 248 ft.

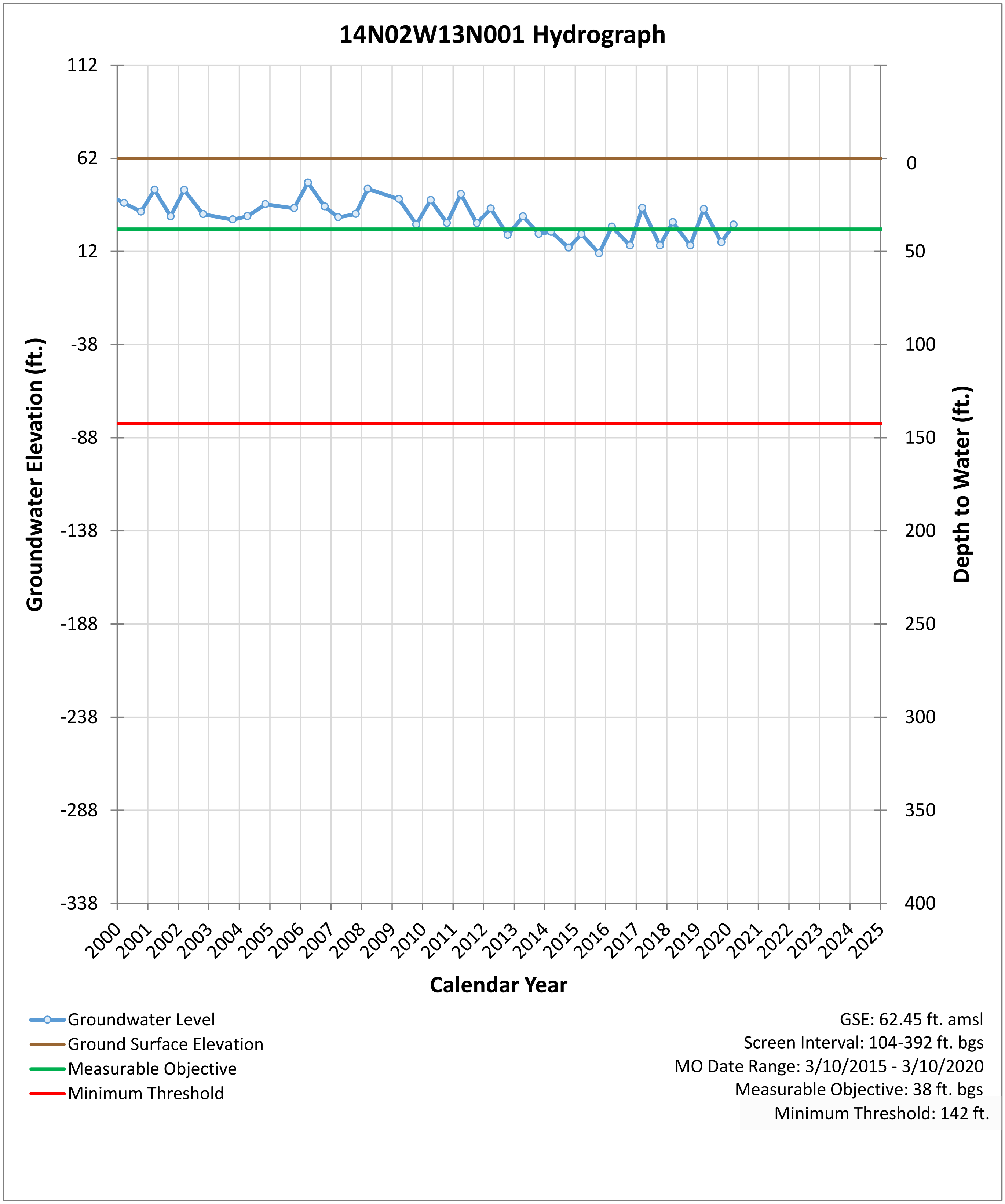


14N01E35P001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
97
47
-3
-53
-103
-153
-203
-253
-303
-353
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 46.88 ft. amsl
Screen Interval: 985-995 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 29 ft. bgs
Minimum Threshold: 165 ft.

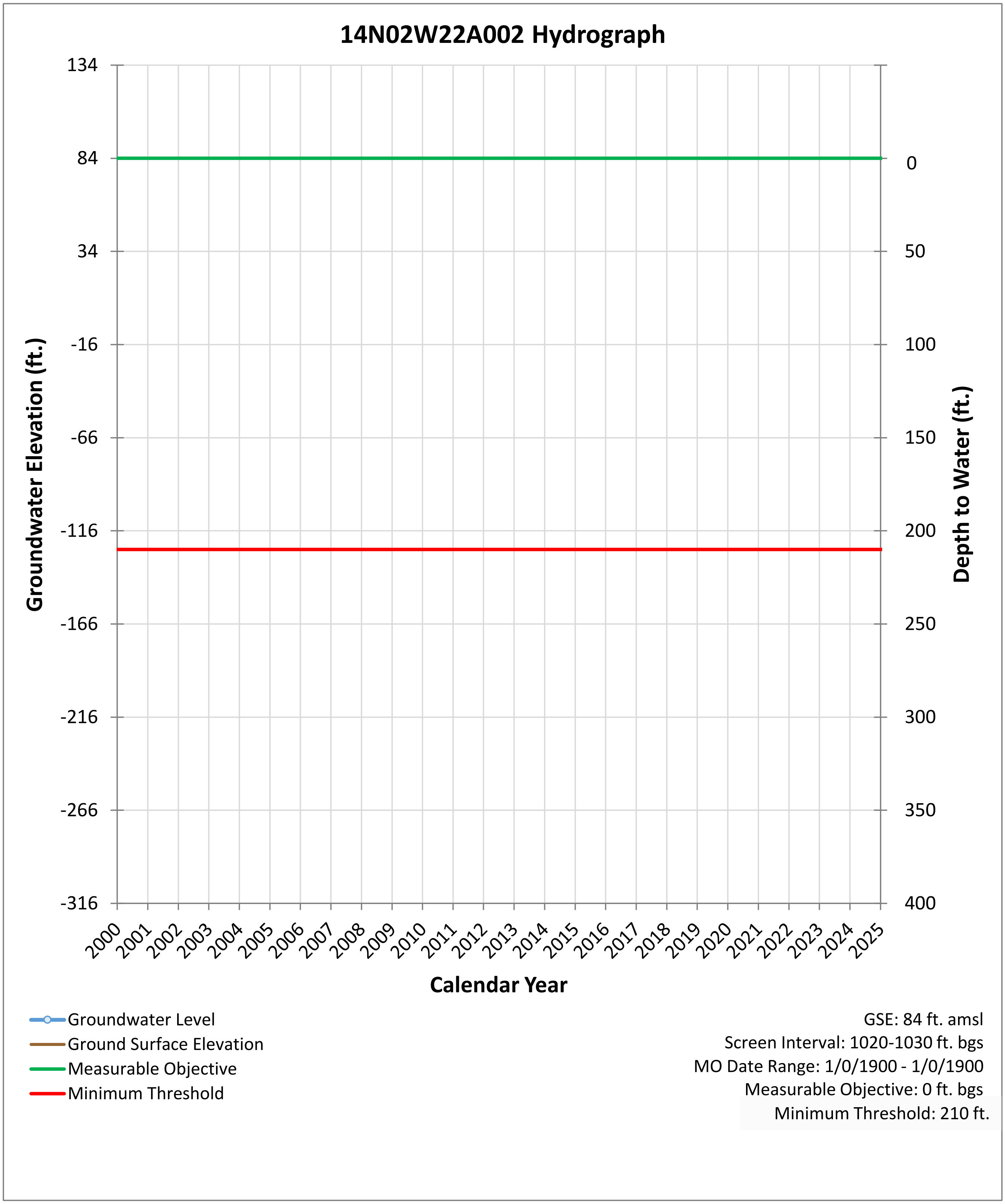
14N01W04K003 Hydrograph

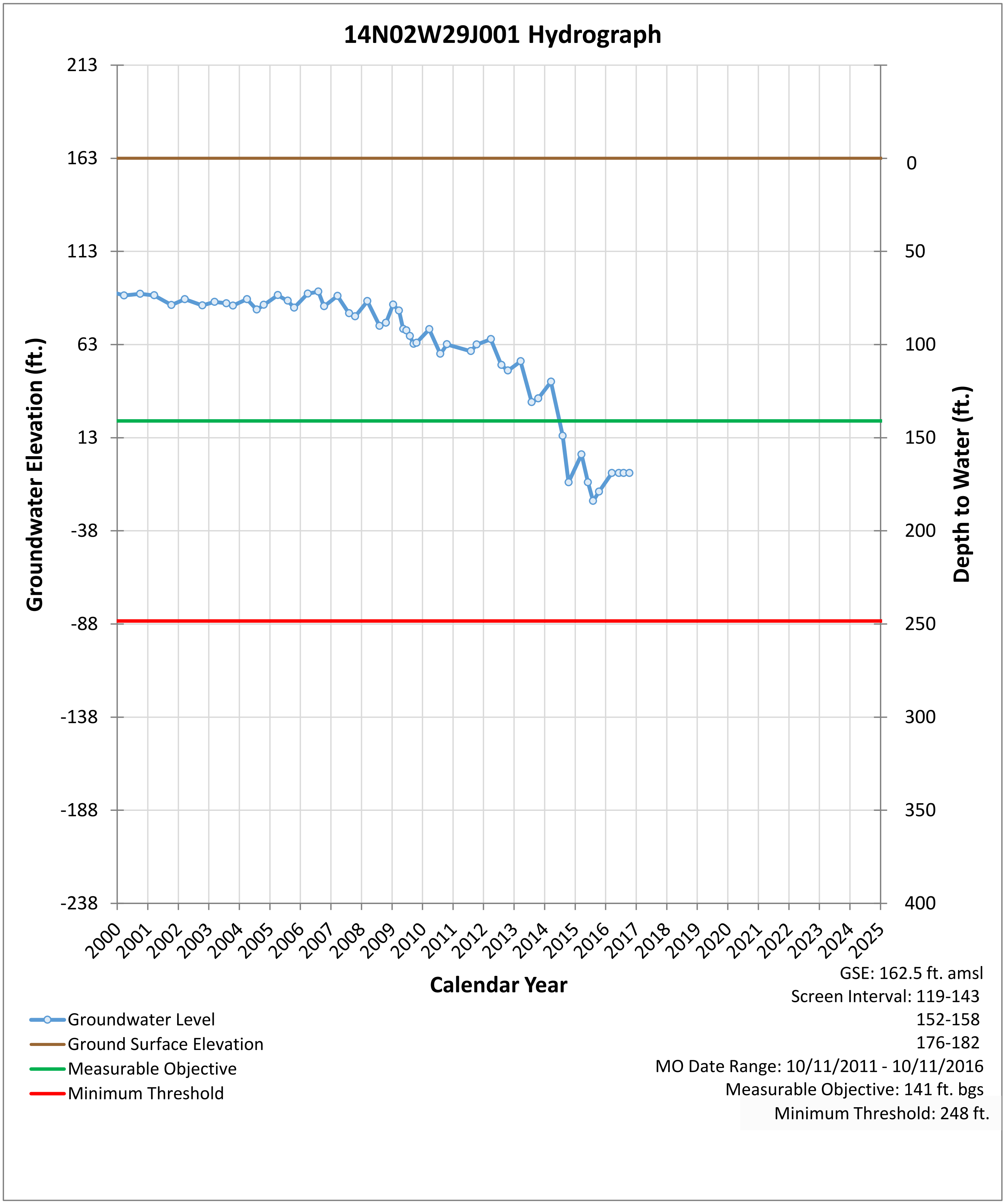


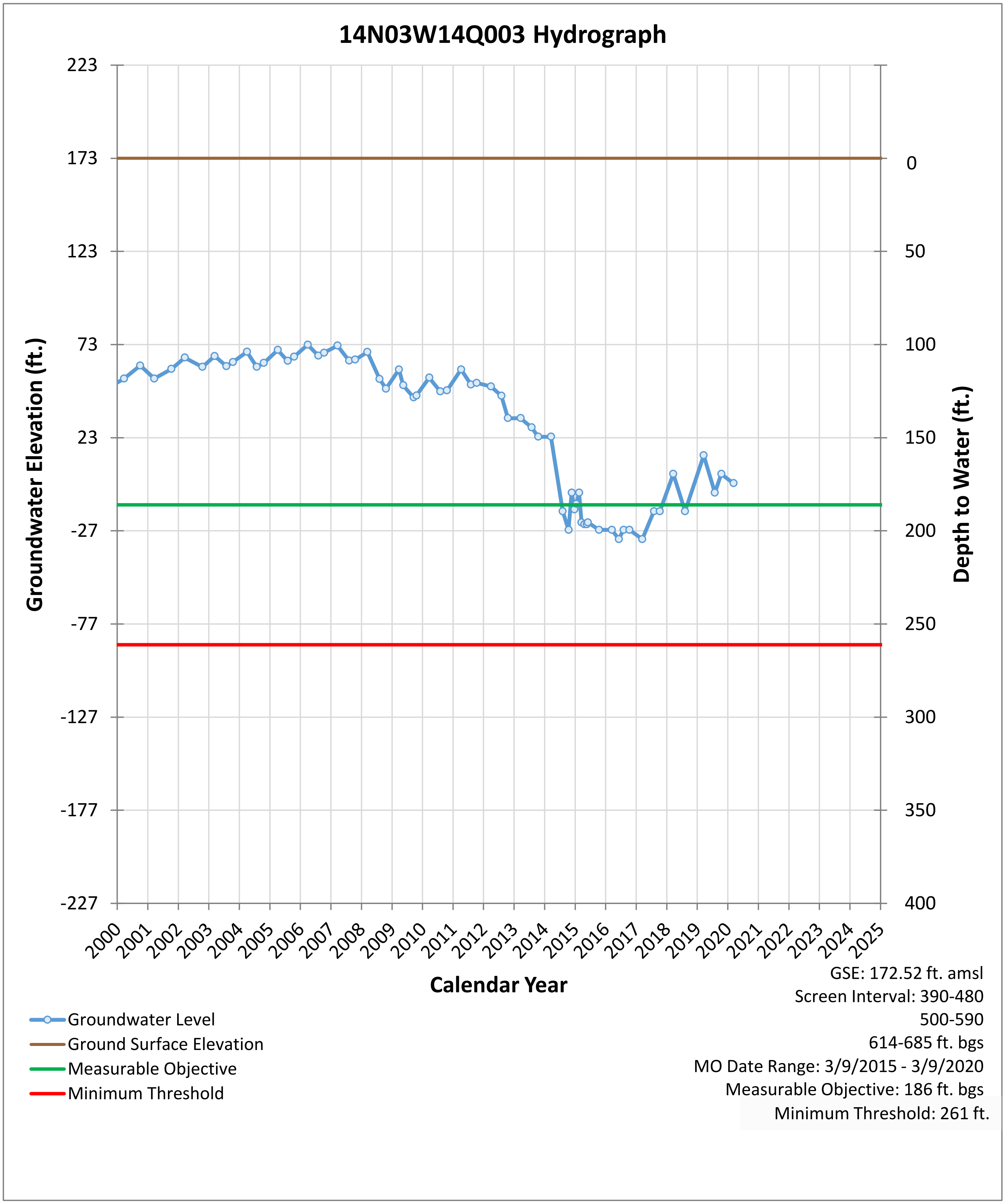
GSE: 37.43 ft. amsl
Screen Interval: 46-70 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 25 ft. bgs
Minimum Threshold: 124 ft.



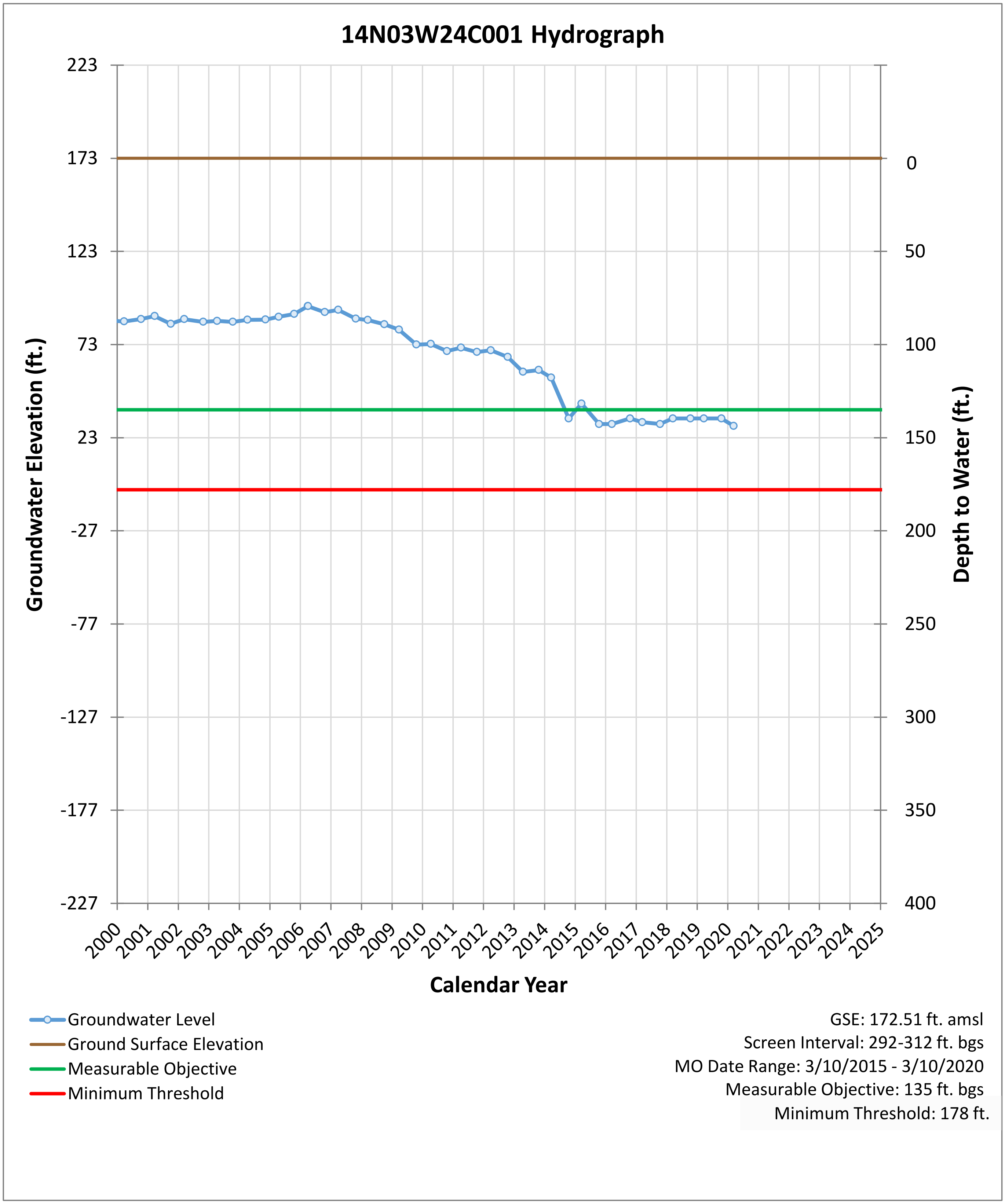
14N02W13N001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
112
62
12
-38
-88
-138
-188
-238
-288
-338
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 62.45 ft. amsl
Screen Interval: 104-392 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 38 ft. bgs
Minimum Threshold: 142 ft.

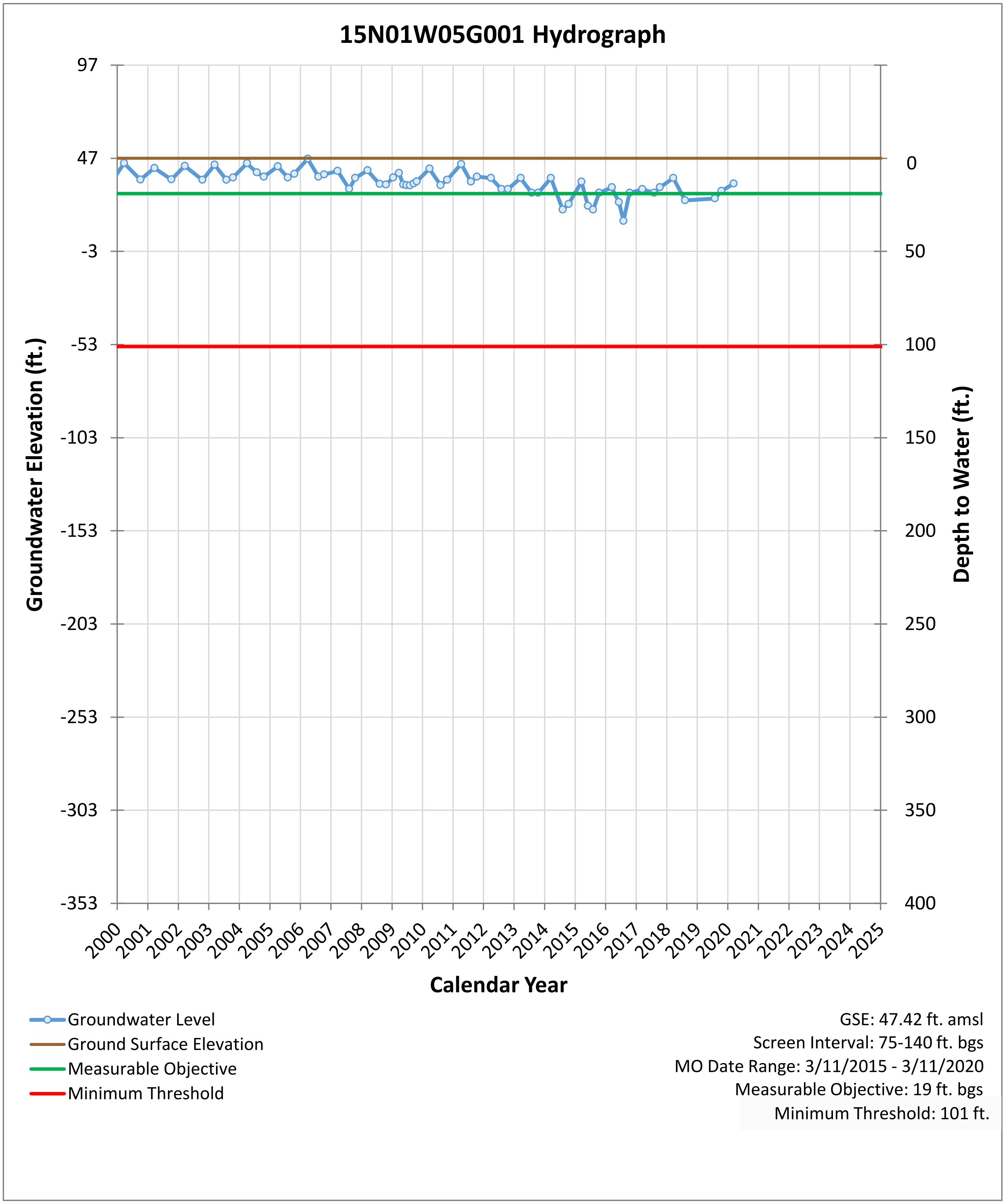

14N02W22A002 Hydrograph
134
84
34
-16
-66
-116
-166
-216
-266
-316
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 84 ft. amsl
Screen Interval: 1020-1030 ft. bgs
MO Date Range: 1/0/1900 - 1/0/1900
Measurable Objective: 0 ft. bgs
Minimum Threshold: 210 ft.

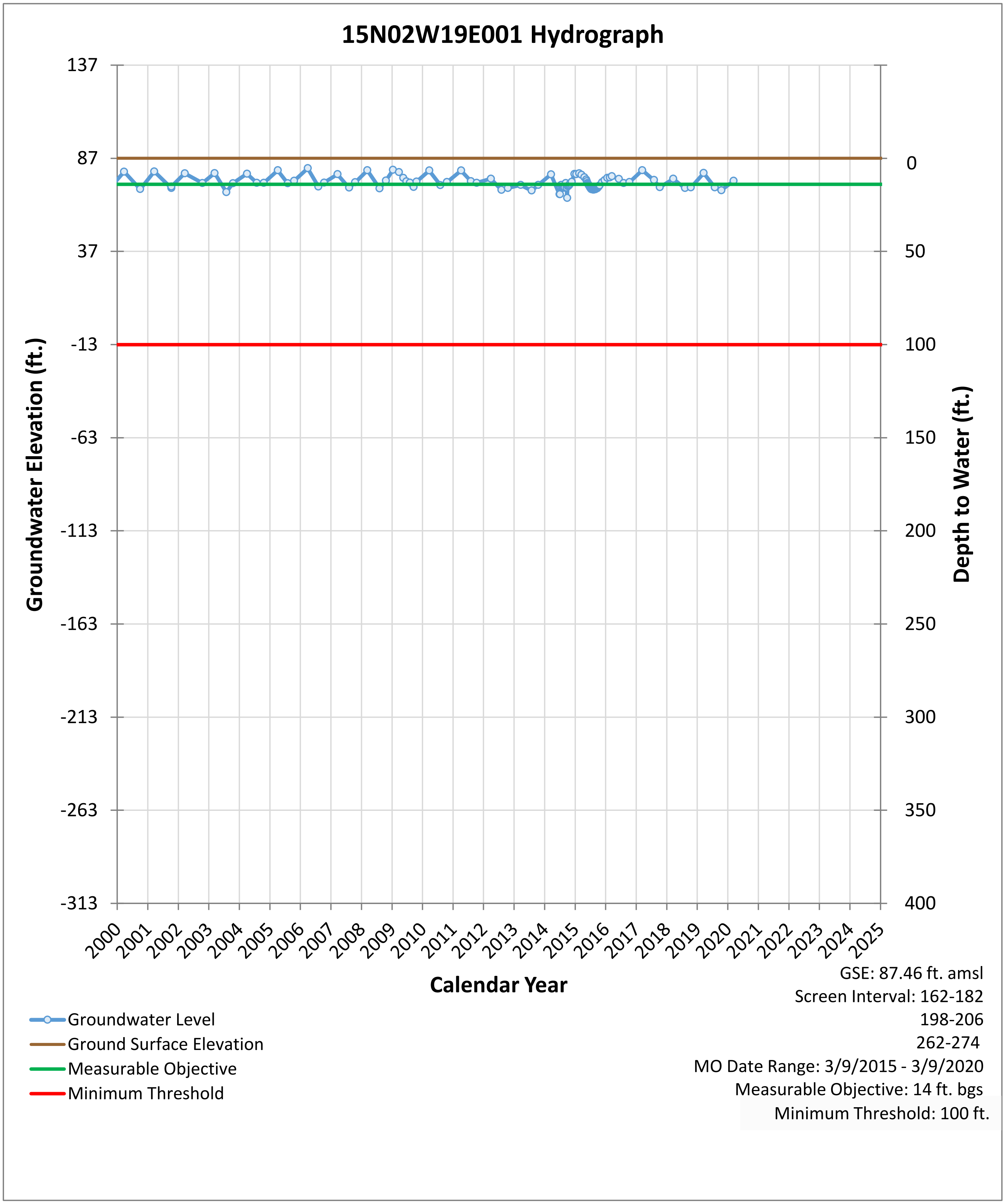

14N02W29J001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
213
163
113
63
13
-38
-88
-138
-188
-238
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 162.5 ft. amsl
Screen Interval: 119-143
152-158
176-182
MO Date Range: 10/11/2011 - 10/11/2016
Measurable Objective: 141 ft. bgs
Minimum Threshold: 248 ft.



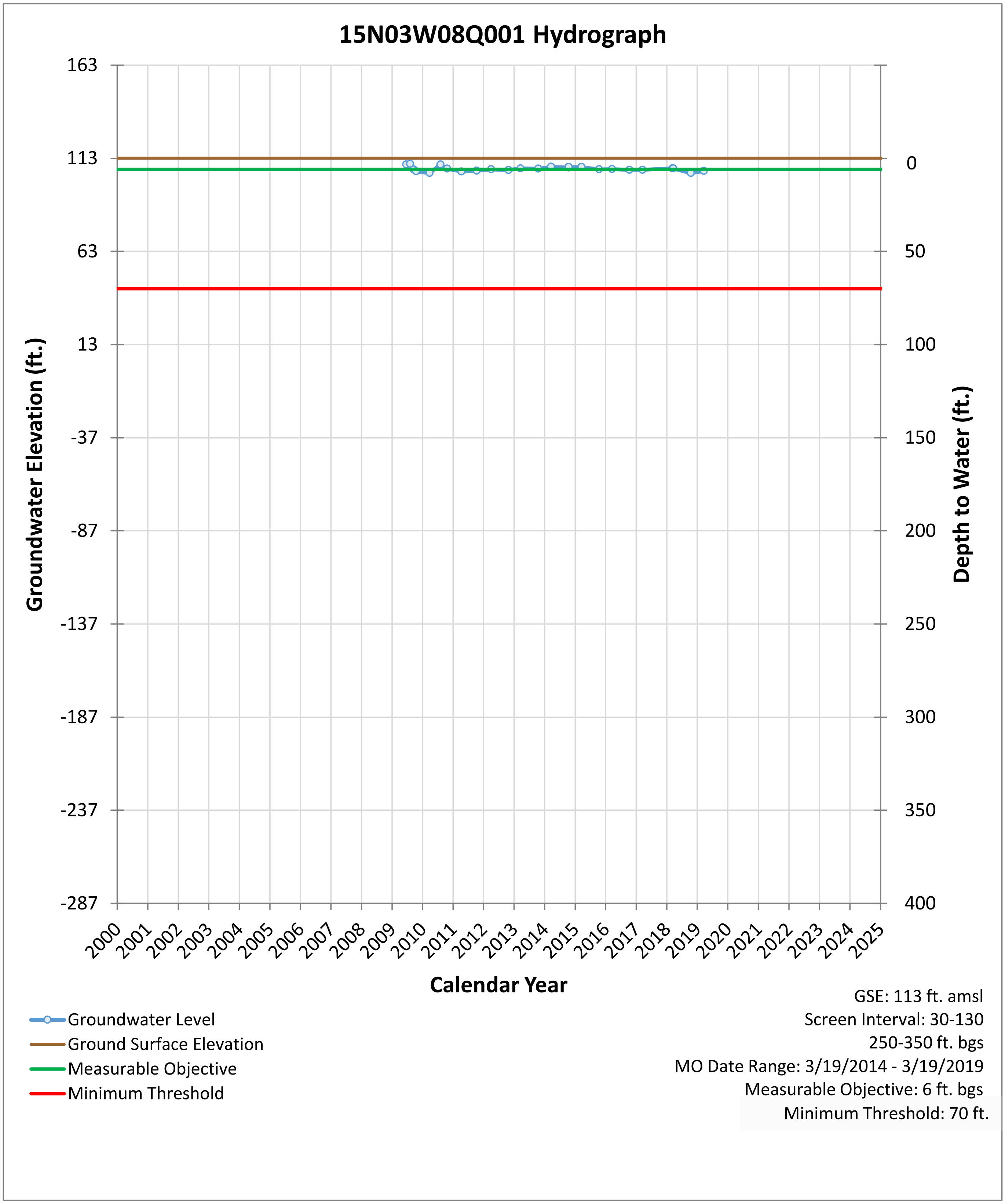
14N03W14Q003 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
223
173
123
73
23
-27
-77
-127
-177
-227
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 172.52 ft. amsl
Screen Interval: 390-480
500-590
614-685 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 186 ft. bgs
Minimum Threshold: 261 ft.

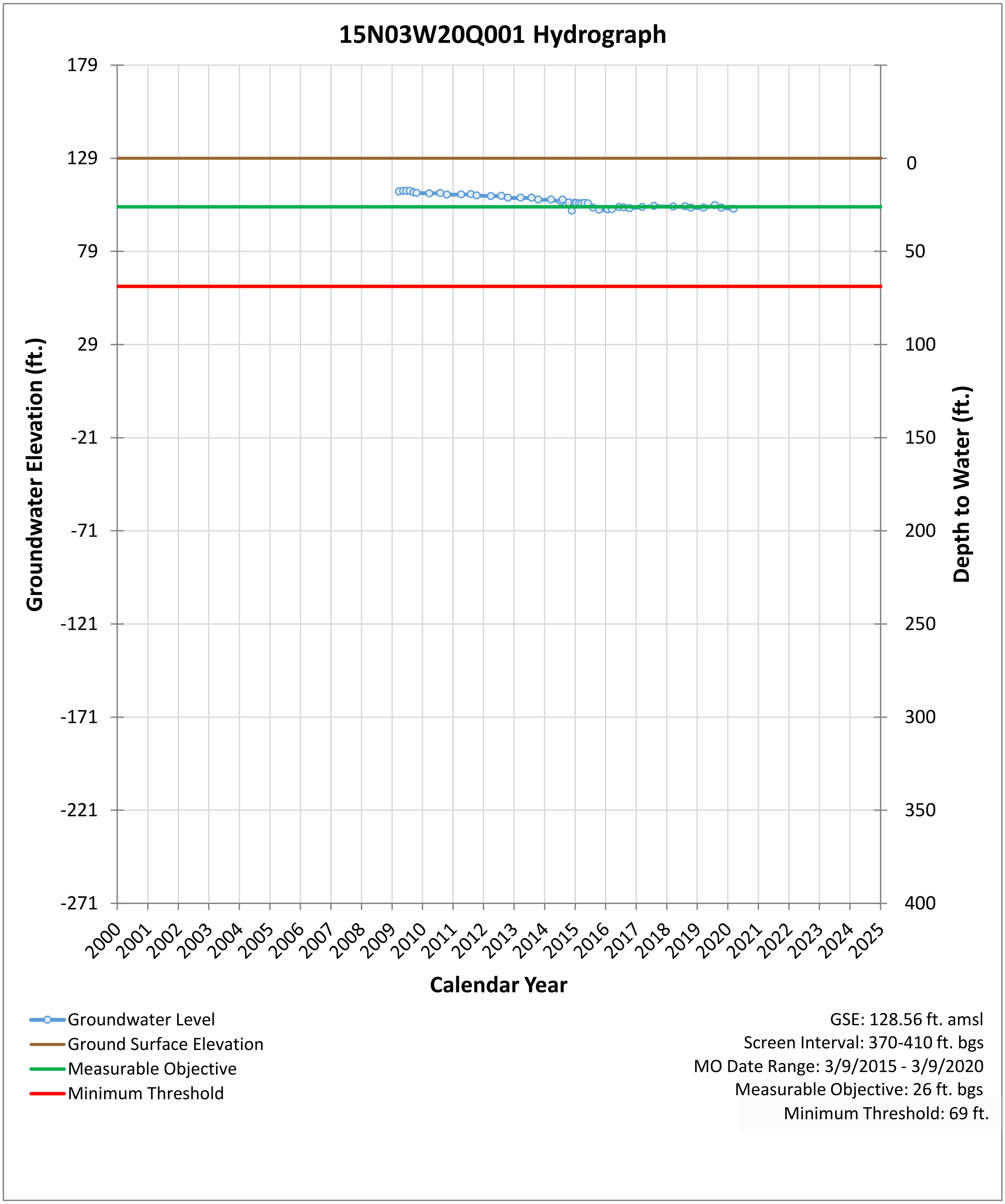

14N03W24C001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
223
173
123
73
23
-27
-77
-127
-177
-227
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 172.51 ft. amsl
Screen Interval: 292-312 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 135 ft. bgs
Minimum Threshold: 178 ft.


15N01W05G001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
97
47
-3
-53
-103
-153
-203
-253
-303
-353
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 47.42 ft. amsl
Screen Interval: 75-140 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 19 ft. bgs
Minimum Threshold: 101 ft.

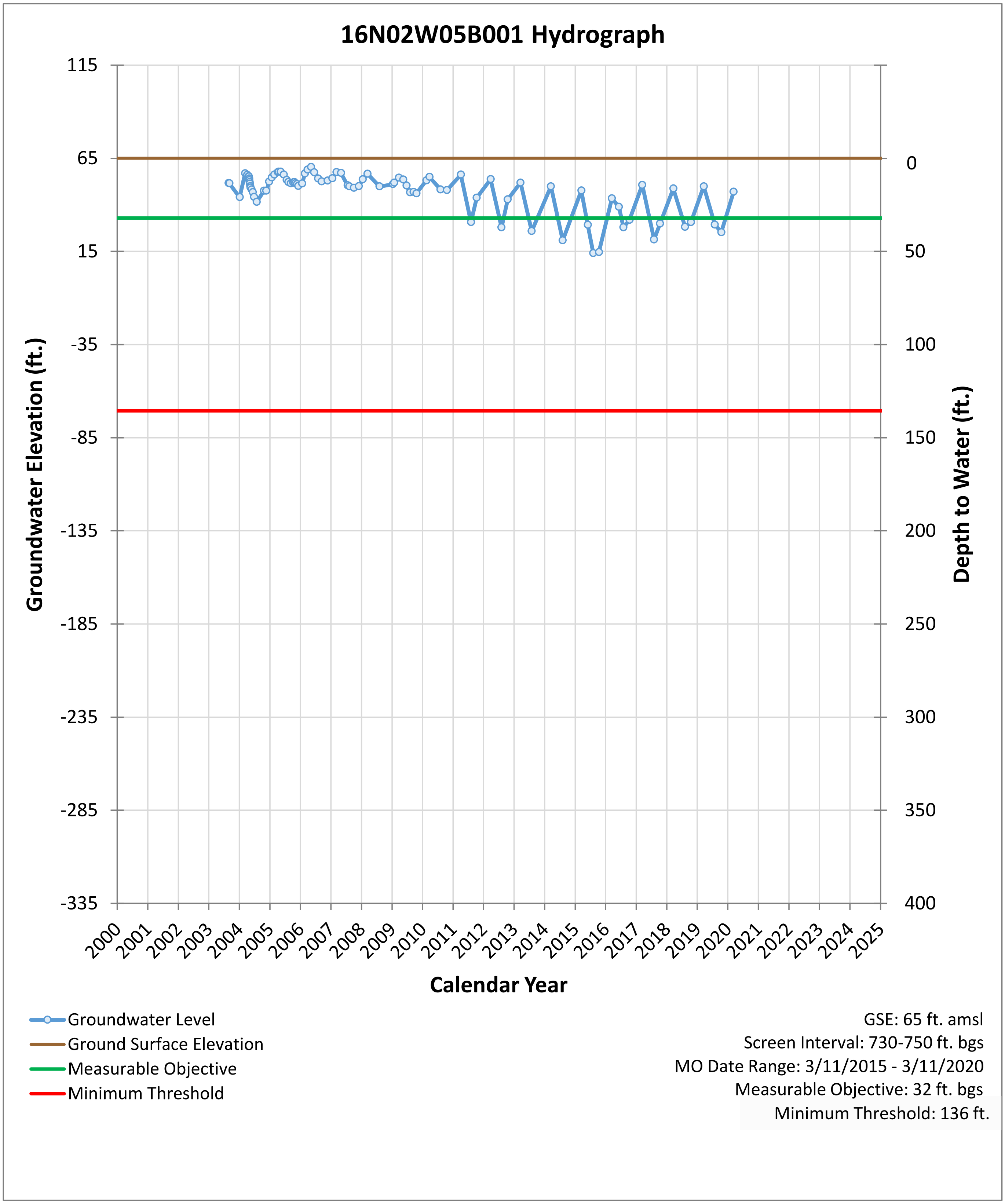


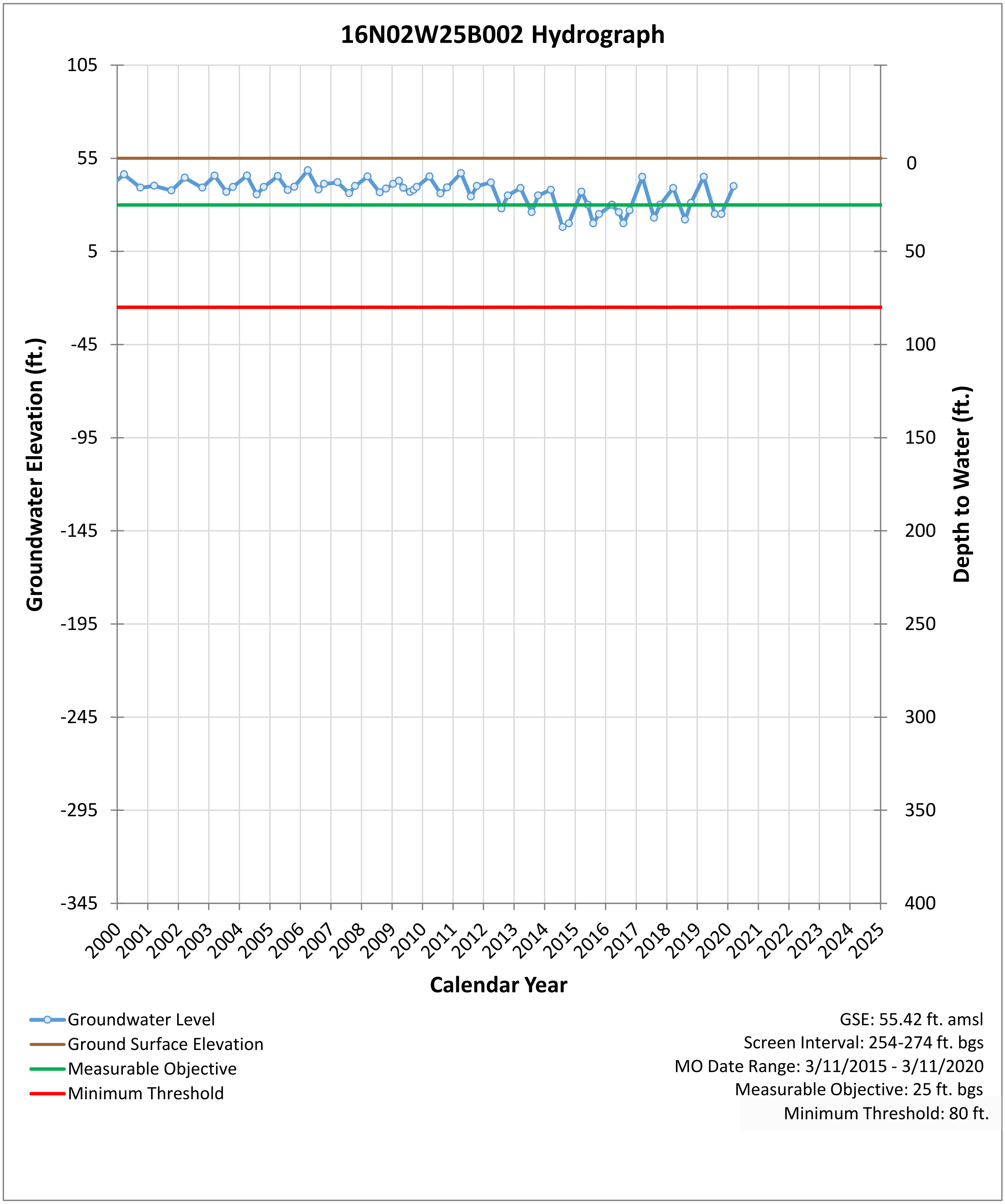
15N02W19E001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
137
87
37
-13
-63
-113
-163
-213
-263
-313
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 87.46 ft. amsl
Screen Interval: 162-182
198-206
262-274
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 14 ft. bgs
Minimum Threshold: 100 ft.


15N03W08Q001 Hydrograph
163
113
63
13
-37
-87
-137
-187
-237
-287
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 113 ft. amsl
Screen Interval: 30-130
250-350 ft. bgs
MO Date Range: 3/19/2014 - 3/19/2019
Measurable Objective: 6 ft. bgs
Minimum Threshold: 70 ft.

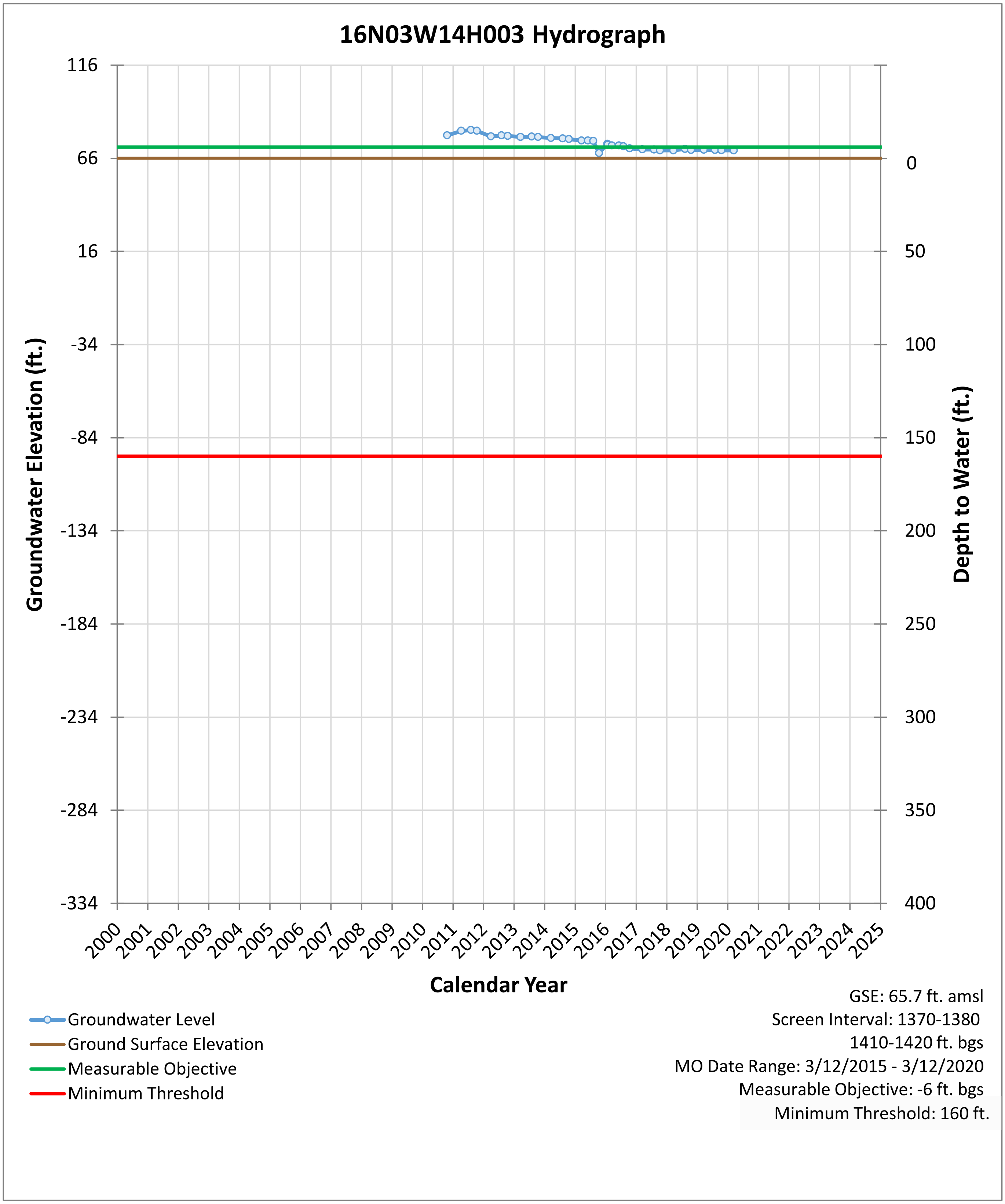


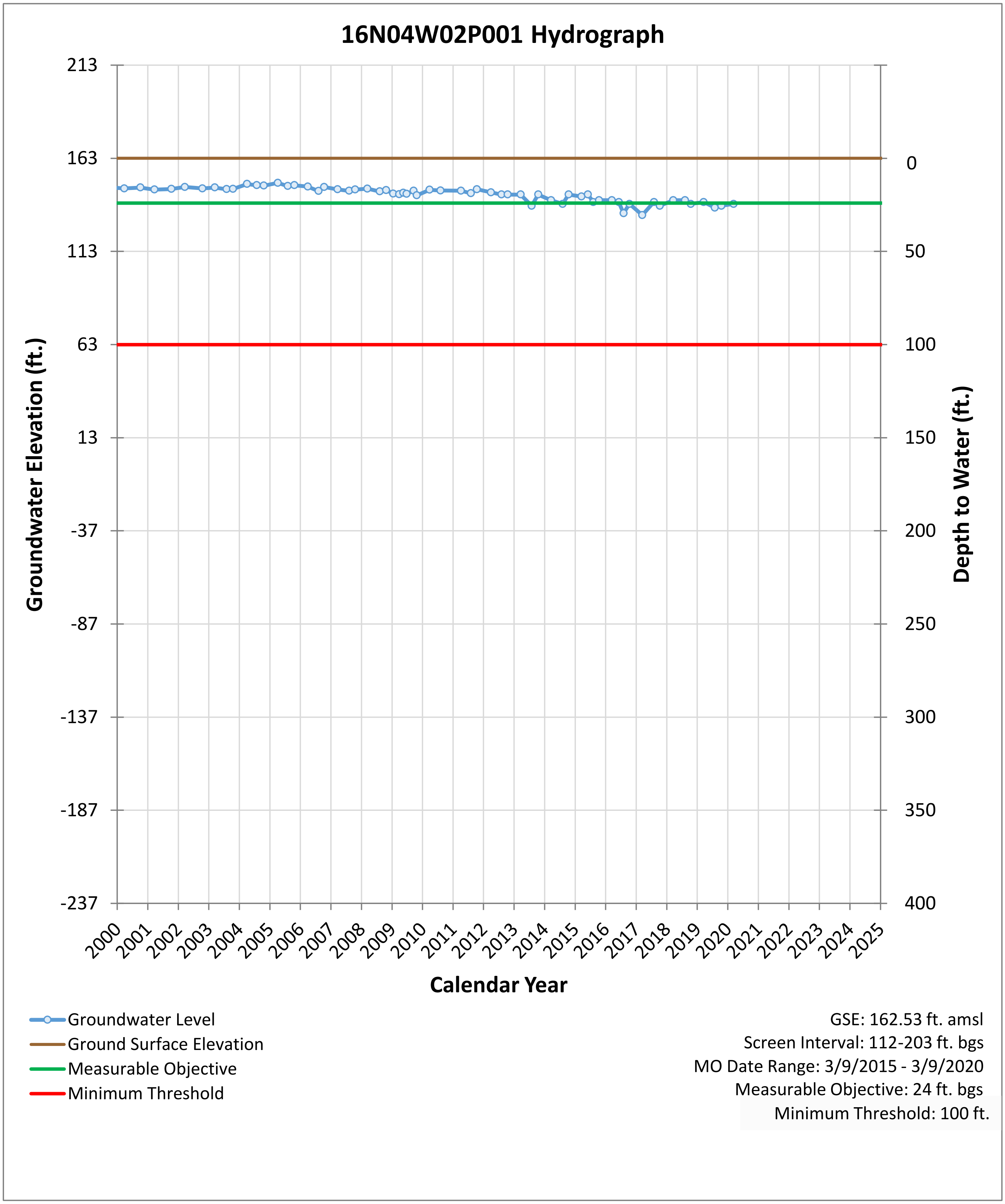
15N03W20Q001 Hydrograph
179
129
79
29
-21
-71
-121
-171
-221
-271
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 128.56 ft. amsl
Screen Interval: 370-410 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 26 ft. bgs
Minimum Threshold: 69 ft.


16N02W05B001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
115
65
15
-35
-85
-135
-185
-235
-285
-335
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 65 ft. amsl
Screen Interval: 730-750 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 32 ft. bgs
Minimum Threshold: 136 ft.

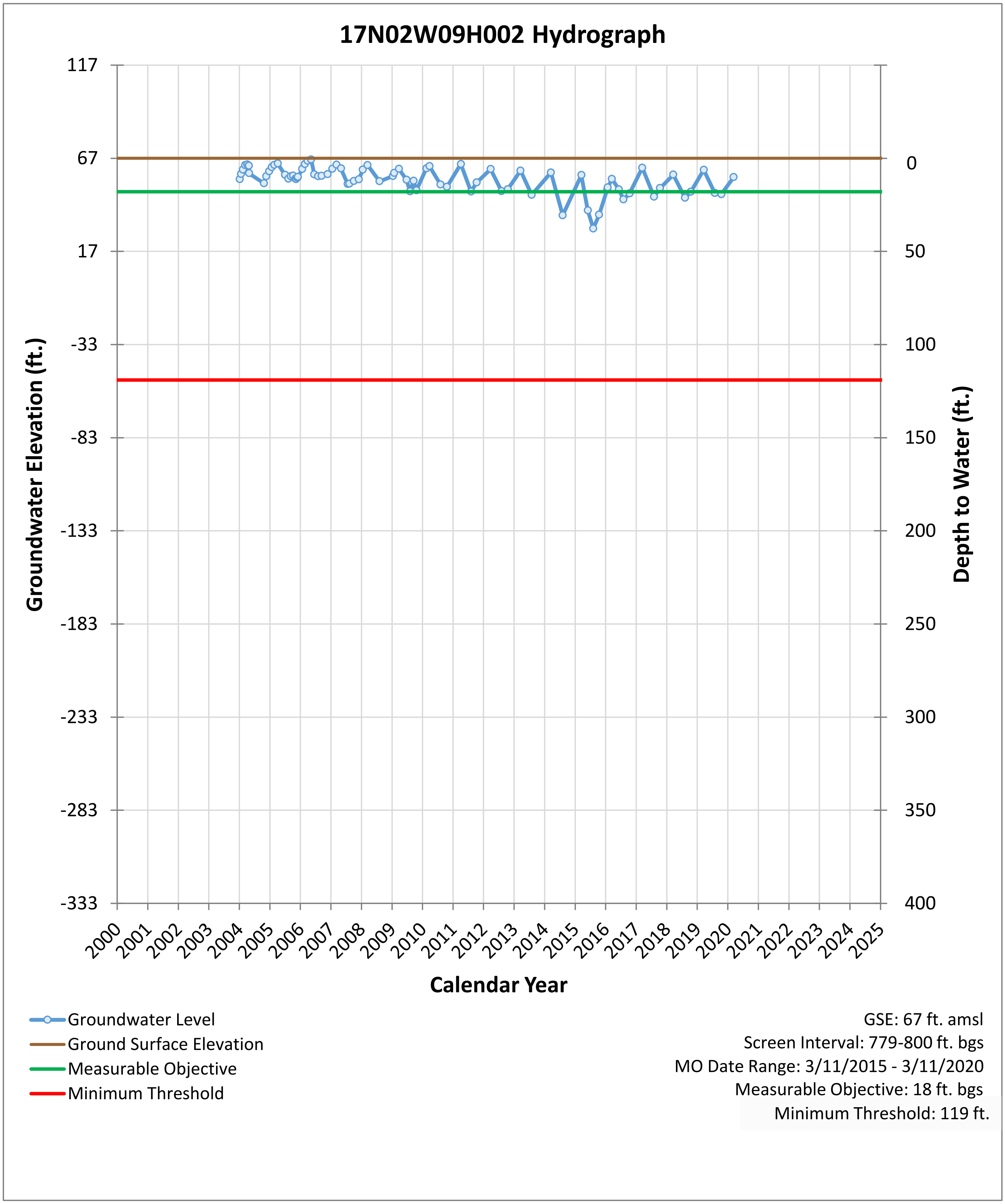


16N02W25B002 Hydrograph
105
55
5
-45
-95
-145
-195
-245
-295
-345
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 55.42 ft. amsl
Screen Interval: 254-274 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 25 ft. bgs
Minimum Threshold: 80 ft.

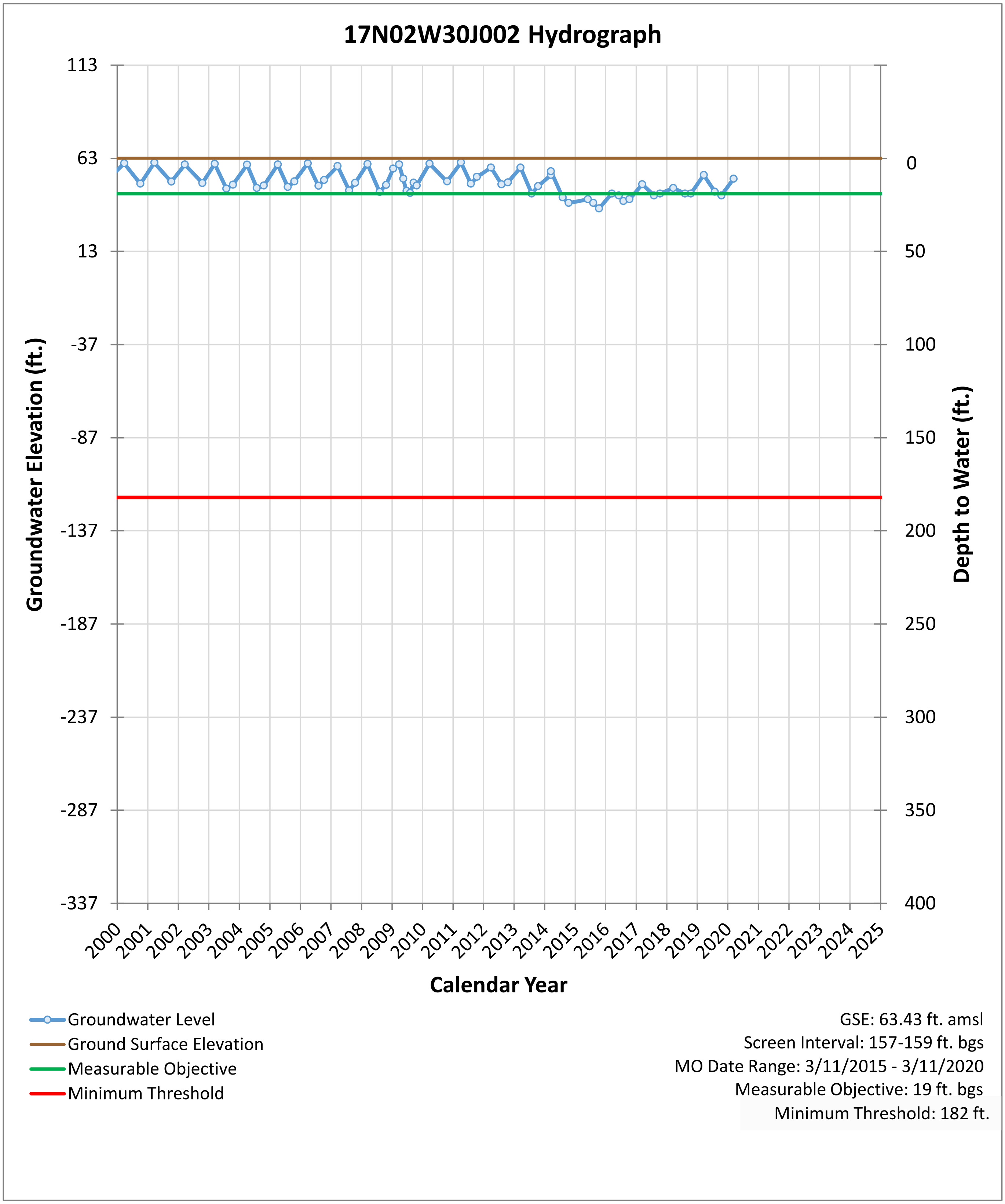

16N03W14H003 Hydrograph
116
66
16
-34
-84
-134
-184
-234
-284
-334
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 65.7 ft. amsl
Screen Interval: 1370-1380
1410-1420 ft. bgs
MO Date Range: 3/12/2015 - 3/12/2020
Measurable Objective: -6 ft. bgs
Minimum Threshold: 160 ft.



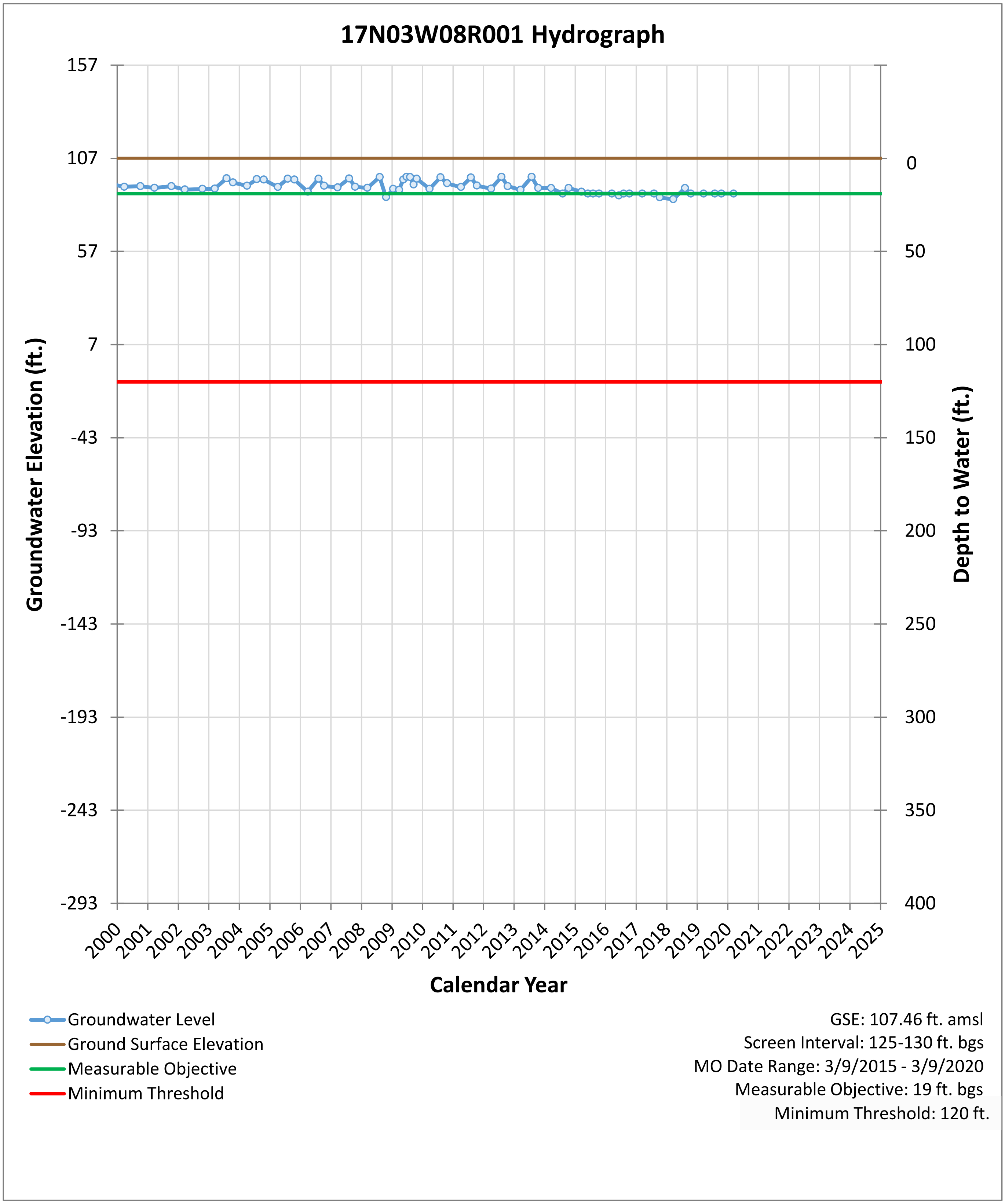
16N04W02P001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
213
163
113
63
13
-37
-87
-137
-187
-237
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 162.53 ft. amsl
Screen Interval: 112-203 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 24 ft. bgs
Minimum Threshold: 100 ft.



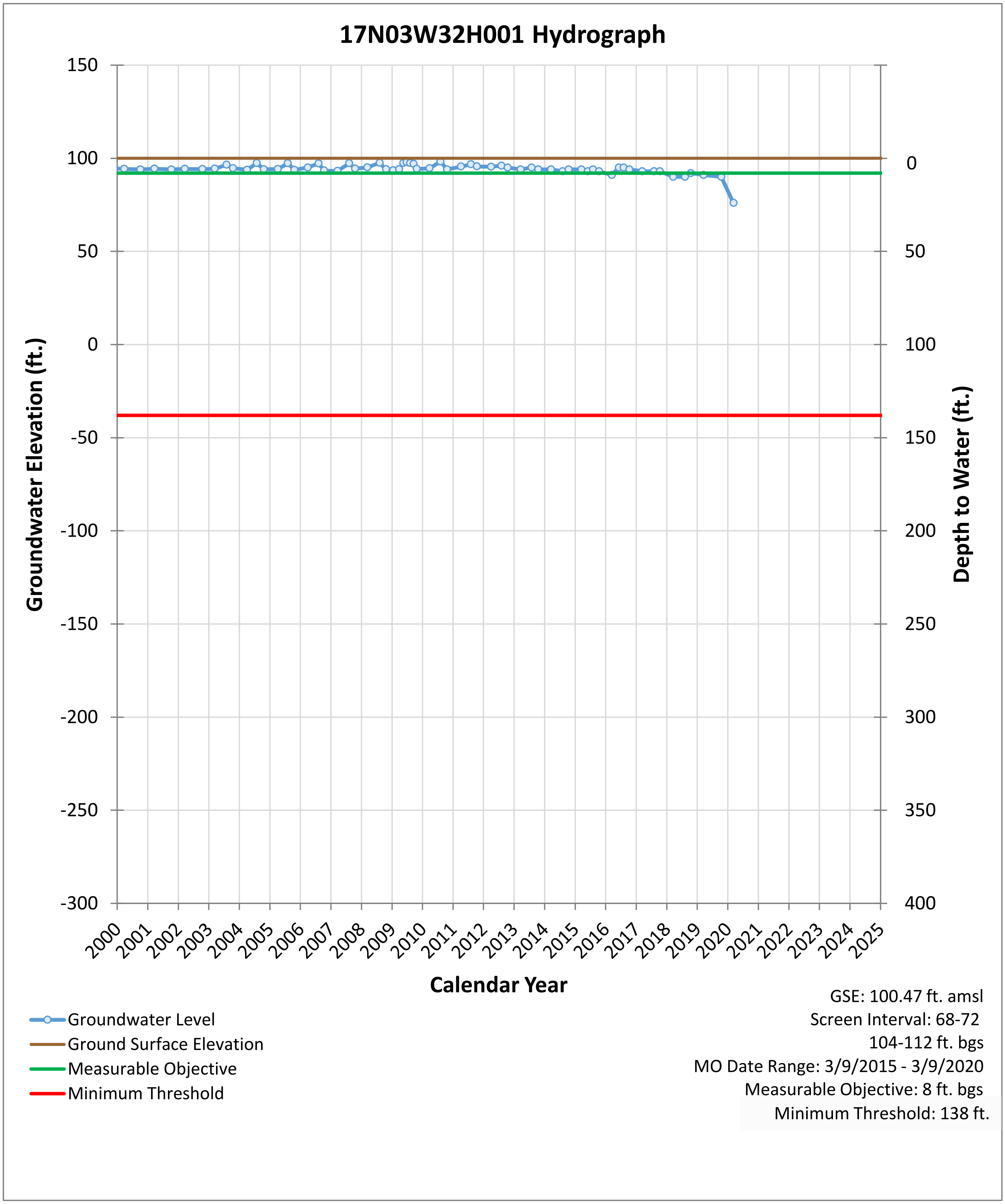
17N02W09H002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
117
67
17
-33
-83
-133
-183
-233
-283
-333
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 67 ft. amsl
Screen Interval: 779-800 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 18 ft. bgs
Minimum Threshold: 119 ft.



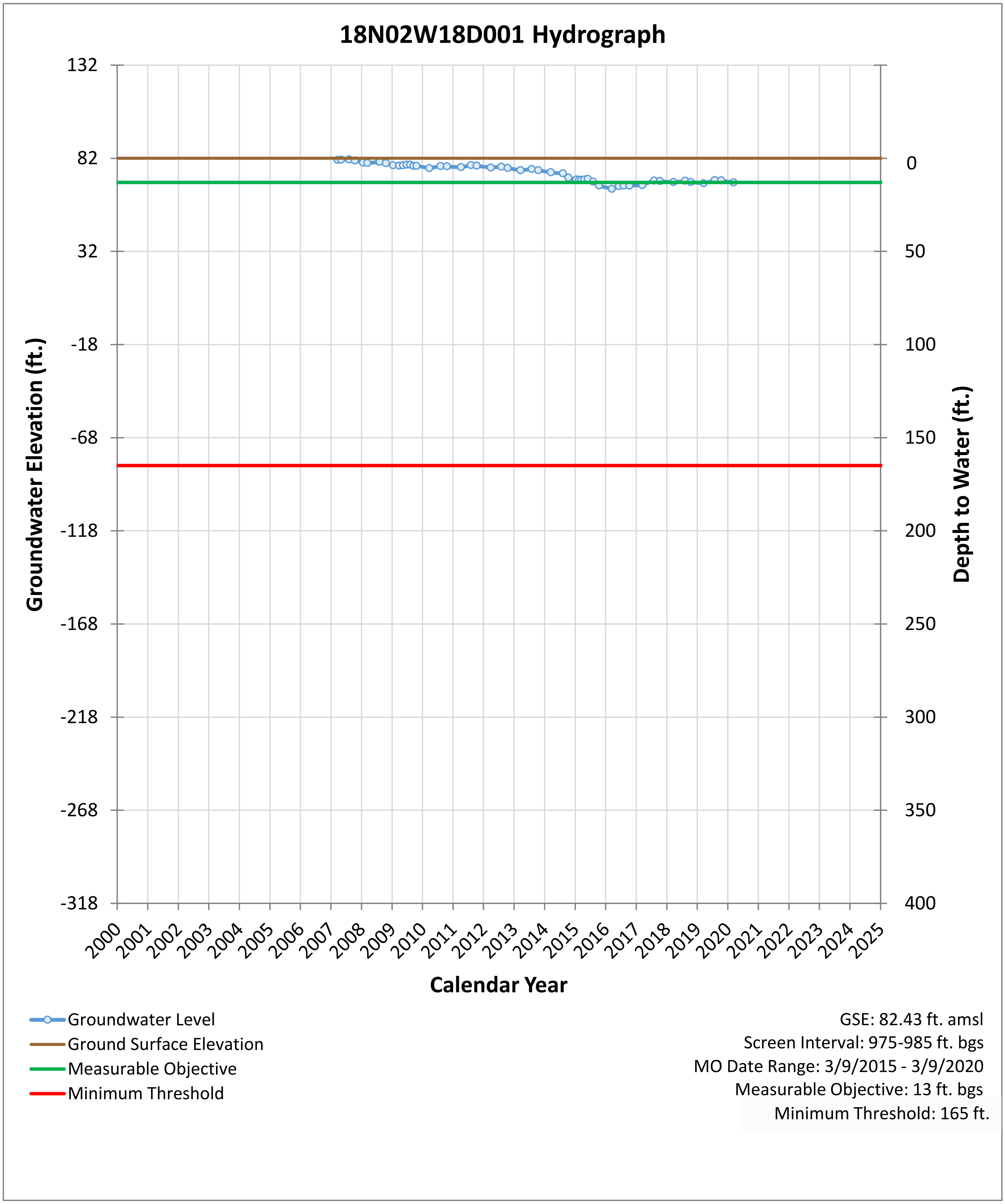
17N02W30J002 Hydrograph
113
63
13
-37
-87
-137
-187
-237
-287
-337
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 63.43 ft. amsl
Screen Interval: 157-159 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 19 ft. bgs
Minimum Threshold: 182 ft.



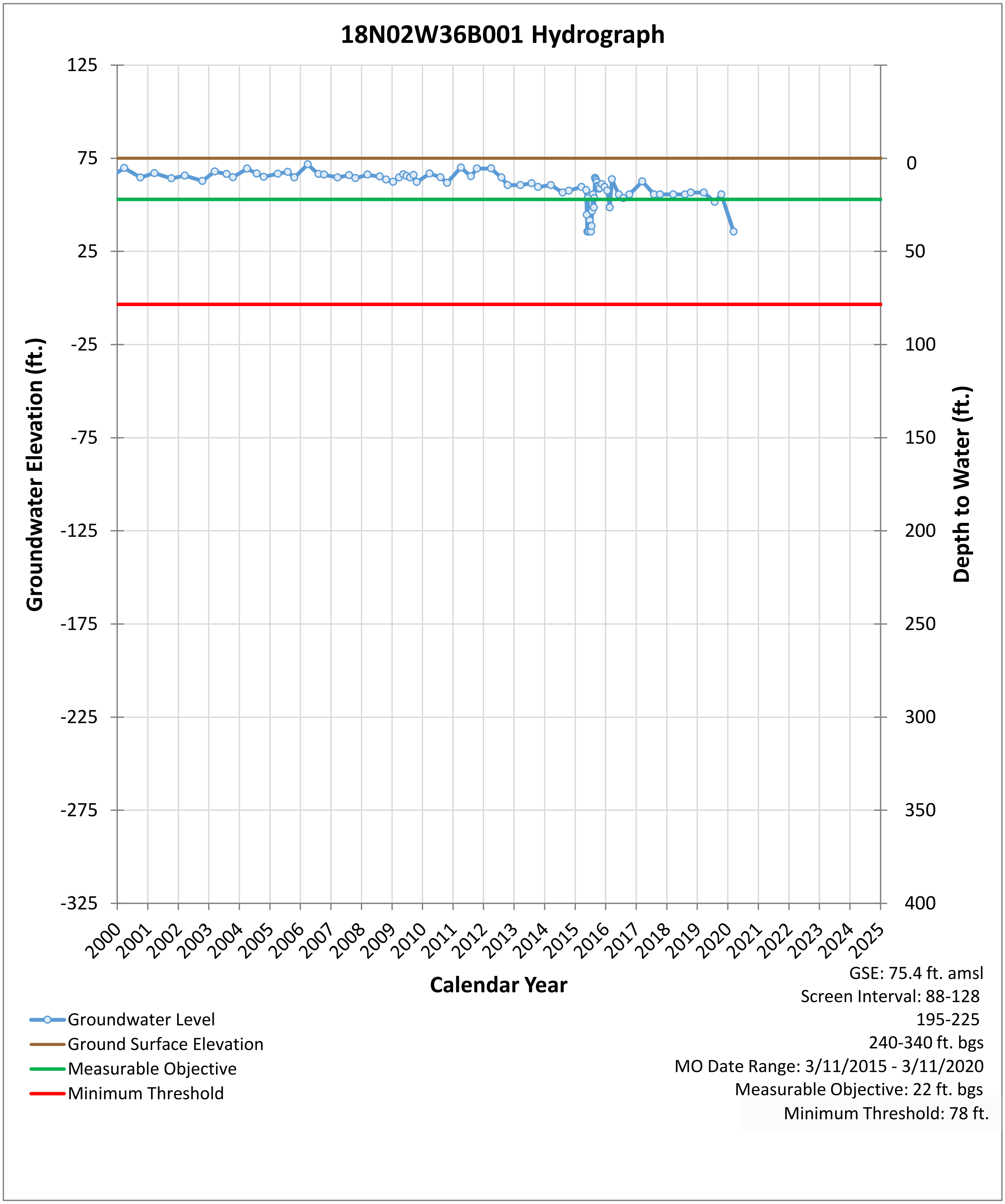
17N03W08R001 Hydrograph
157
107
57
7
-43
-93
-143
-193
-243
-293
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 107.46 ft. amsl
Screen Interval: 125-130 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 19 ft. bgs
Minimum Threshold: 120 ft.



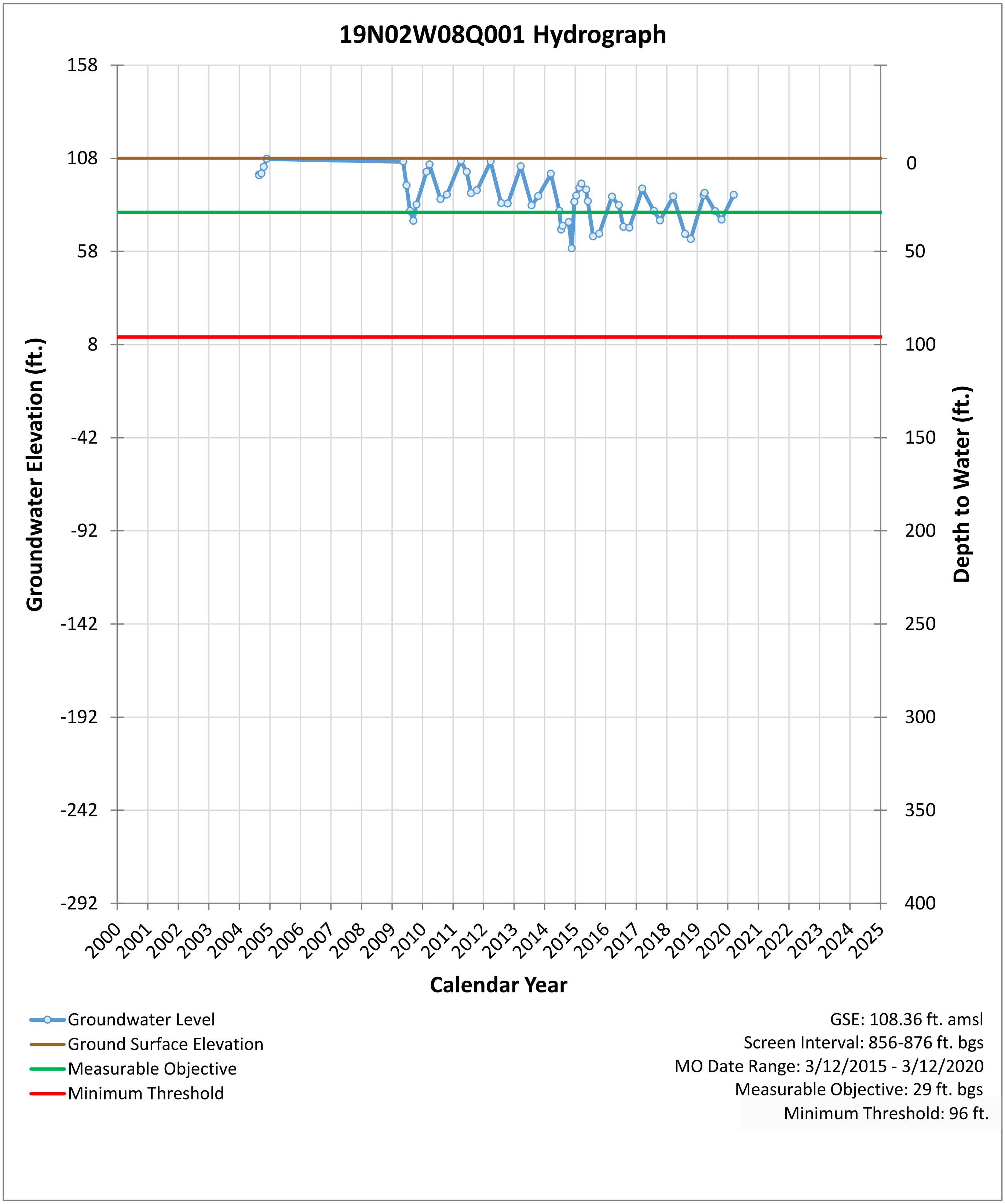
17N03W32H001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
150
100
50
0
-50
-100
-150
-200
-250
-300
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 100.47 ft. amsl
Screen Interval: 68-72
104-112 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 8 ft. bgs
Minimum Threshold: 138 ft.

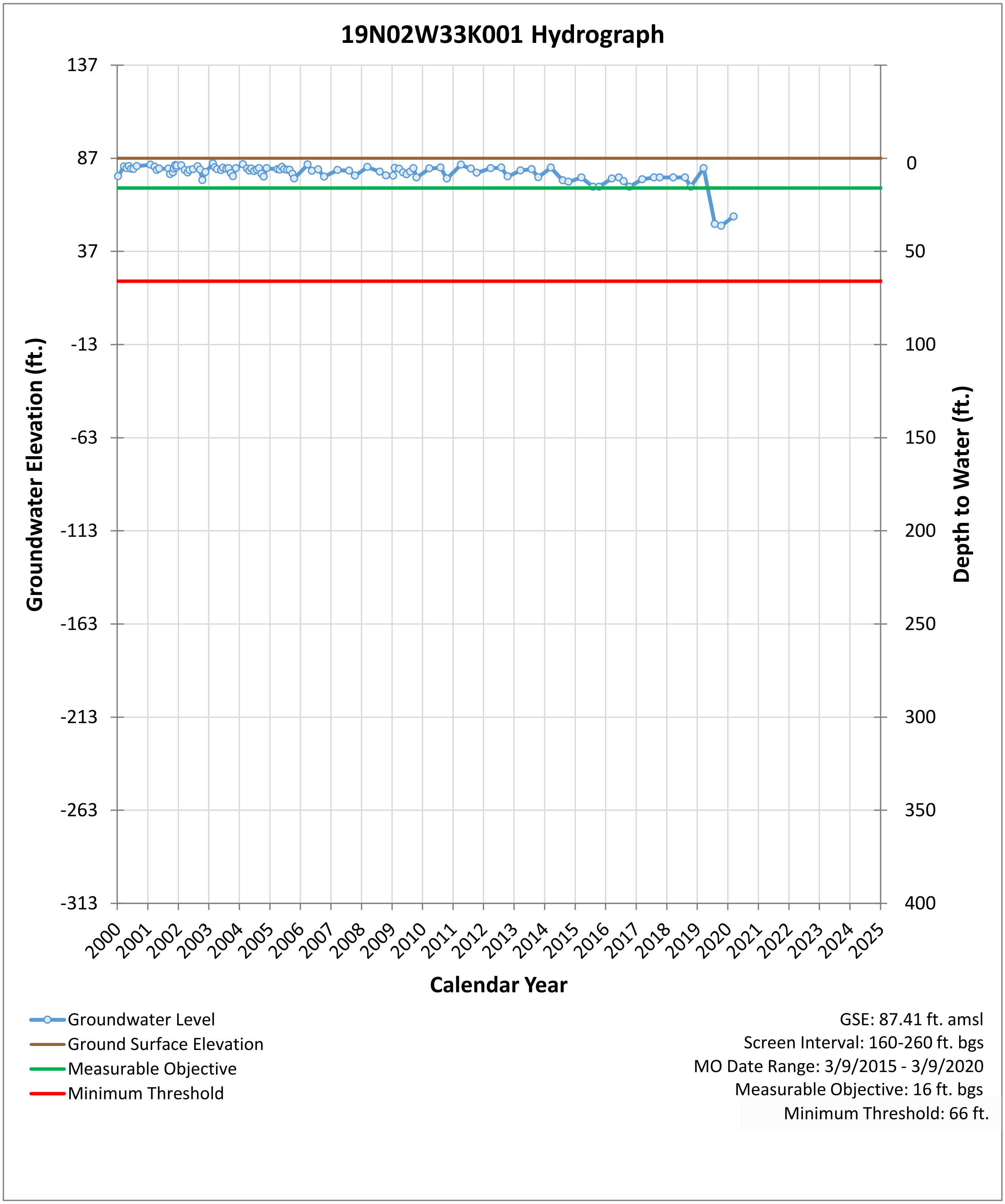


18N02W18D001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
132
82
32
-18
-68
-118
-168
-218
-268
-318
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 82.43 ft. amsl
Screen Interval: 975-985 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 13 ft. bgs
Minimum Threshold: 165 ft.

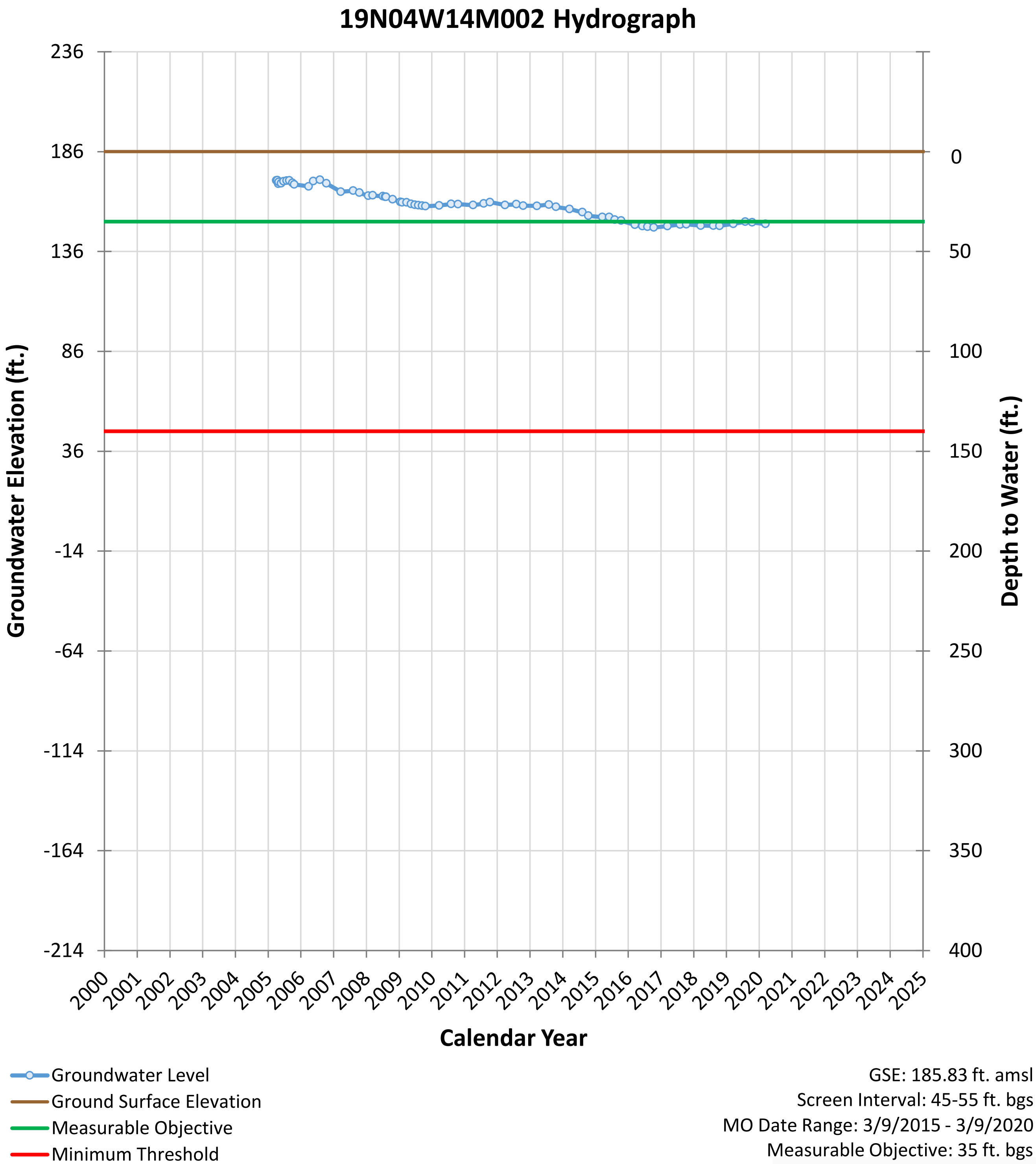


18N02W36B001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
125
75
25
-25
-75
-125
-175
-225
-275
-325
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 75.4 ft. amsl
Screen Interval: 88-128
195-225
240-340 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 22 ft. bgs
Minimum Threshold: 78 ft.

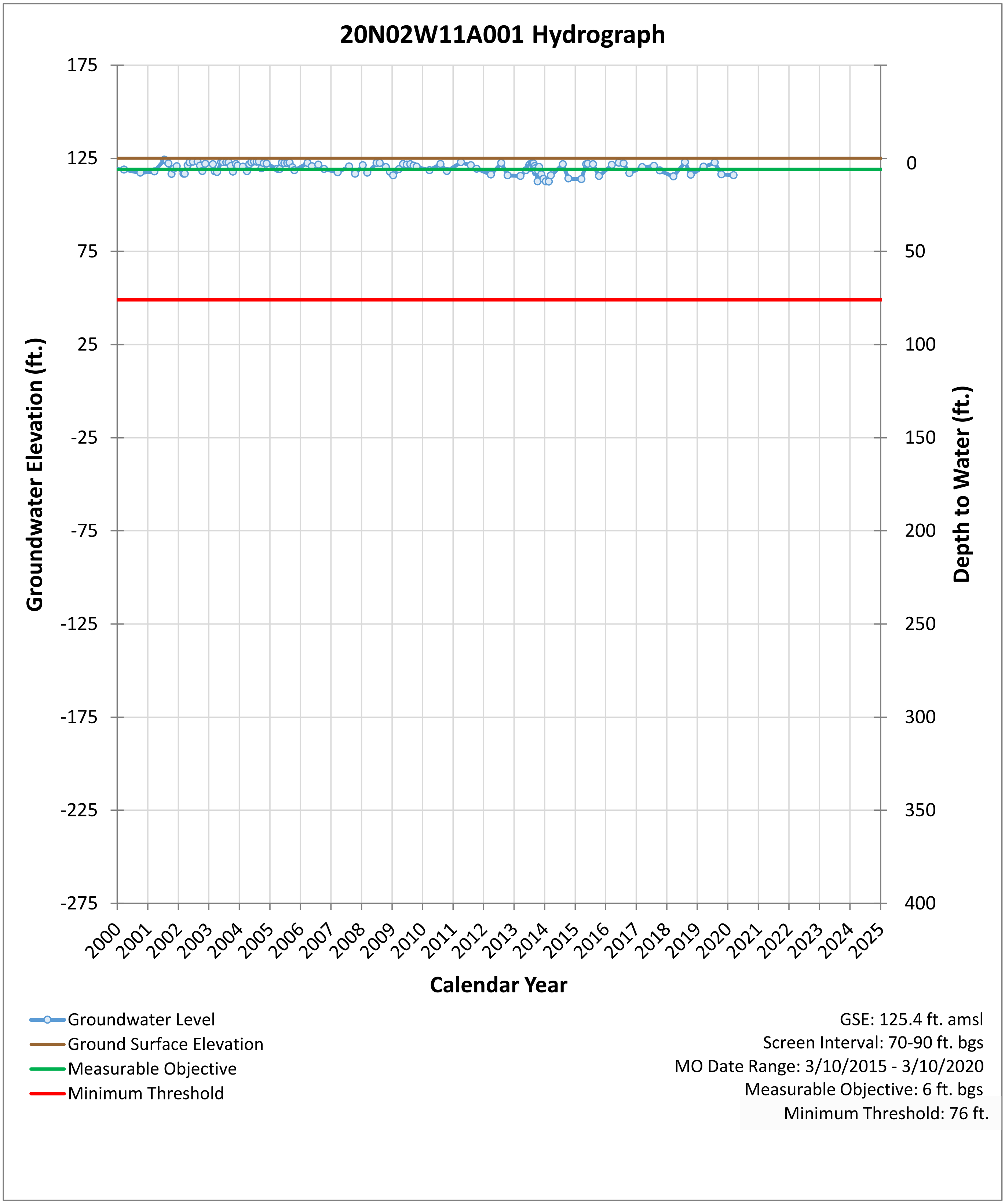

19N02W08Q001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
158
108
58
8
-42
-92
-142
-192
-242
-292
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 108.36 ft. amsl
Screen Interval: 856-876 ft. bgs
MO Date Range: 3/12/2015 - 3/12/2020
Measurable Objective: 29 ft. bgs
Minimum Threshold: 96 ft.

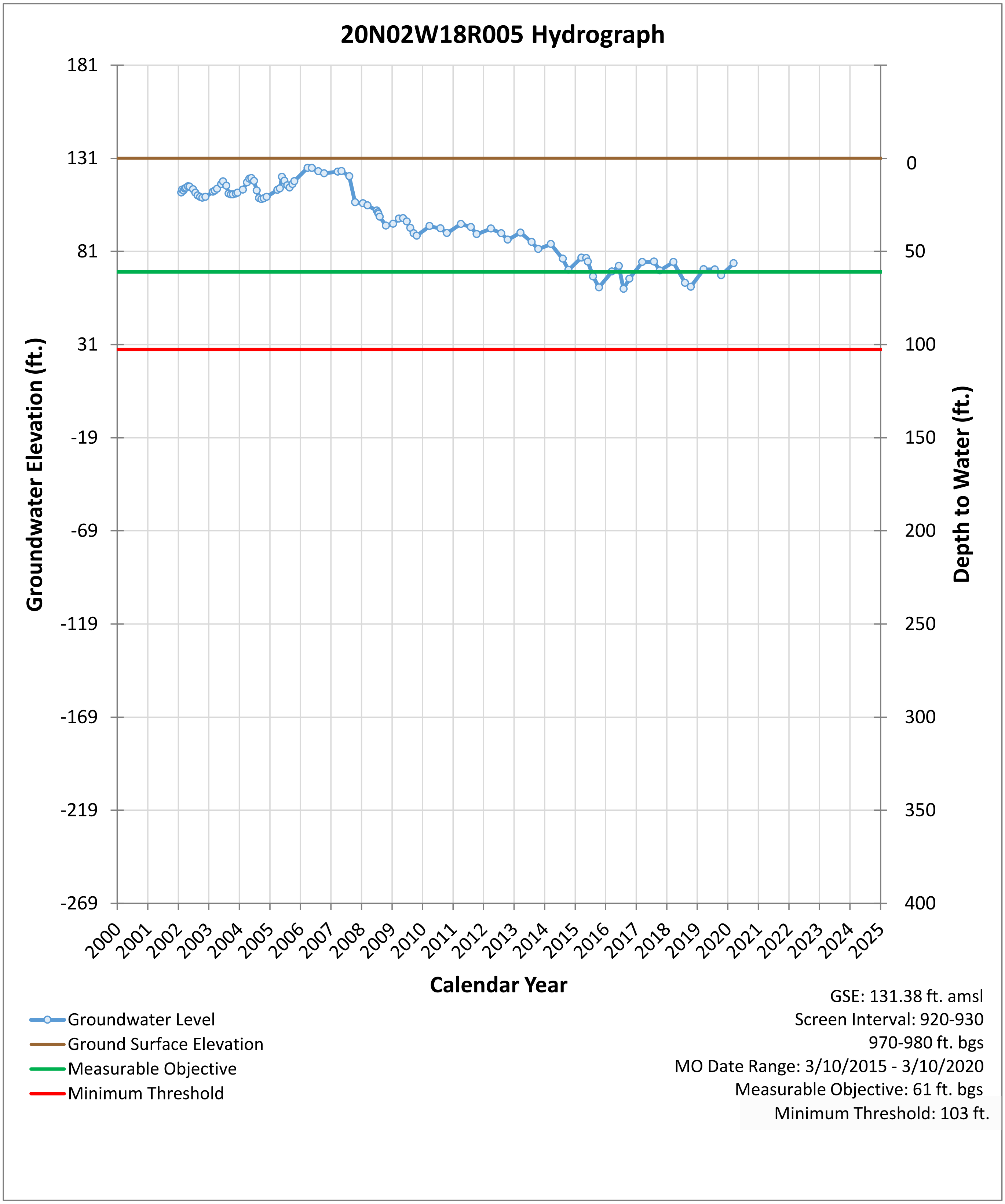


19N02W33K001 Hydrograph
137
87
37
-13
-63
-113
-163
-213
-263
-313
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 87.41 ft. amsl
Screen Interval: 160-260 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 16 ft. bgs
Minimum Threshold: 66 ft.

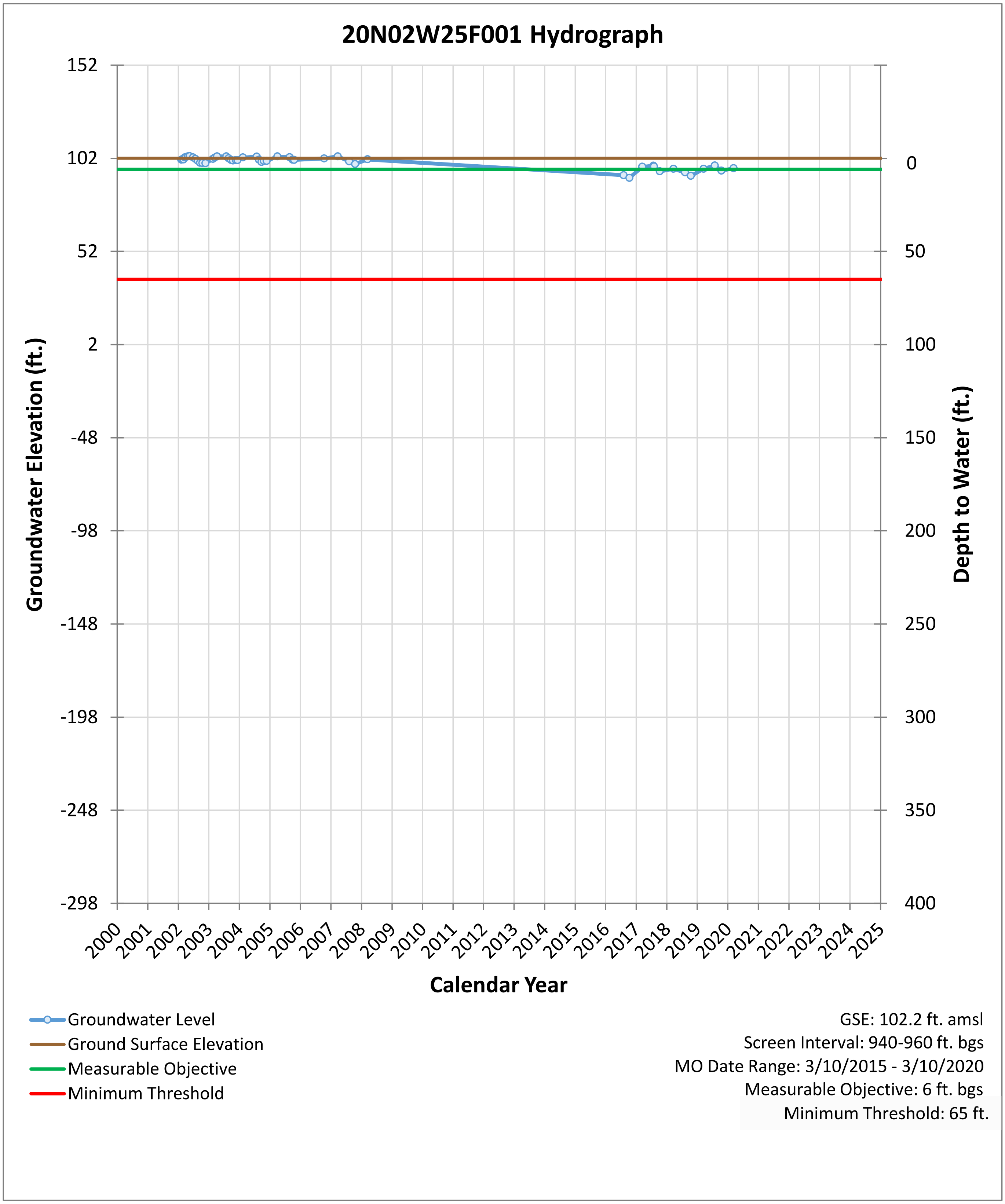


GSE: 185.83 ft. amsl
Screen Interval: 45-55 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 35 ft. bgs
Minimum Threshold: 140 ft.

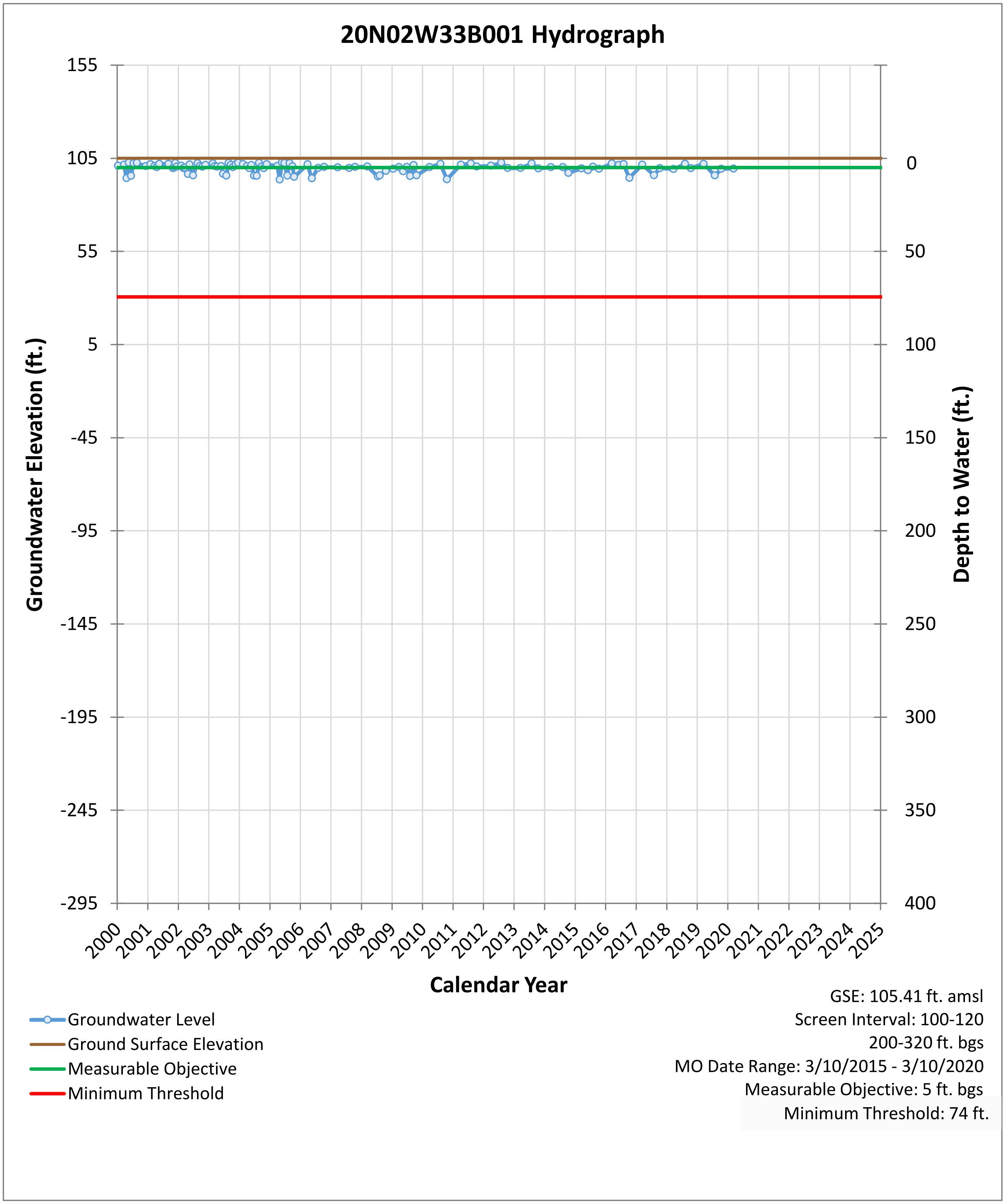

20N02W11A001 Hydrograph
175
125
75
25
-25
-75
-125
-175
-225
-275
Groundwater Elevation (ft.)
0
50
100
150
200
250
300
350
400
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 125.4 ft. amsl
Screen Interval: 70-90 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 6 ft. bgs
Minimum Threshold: 76 ft.



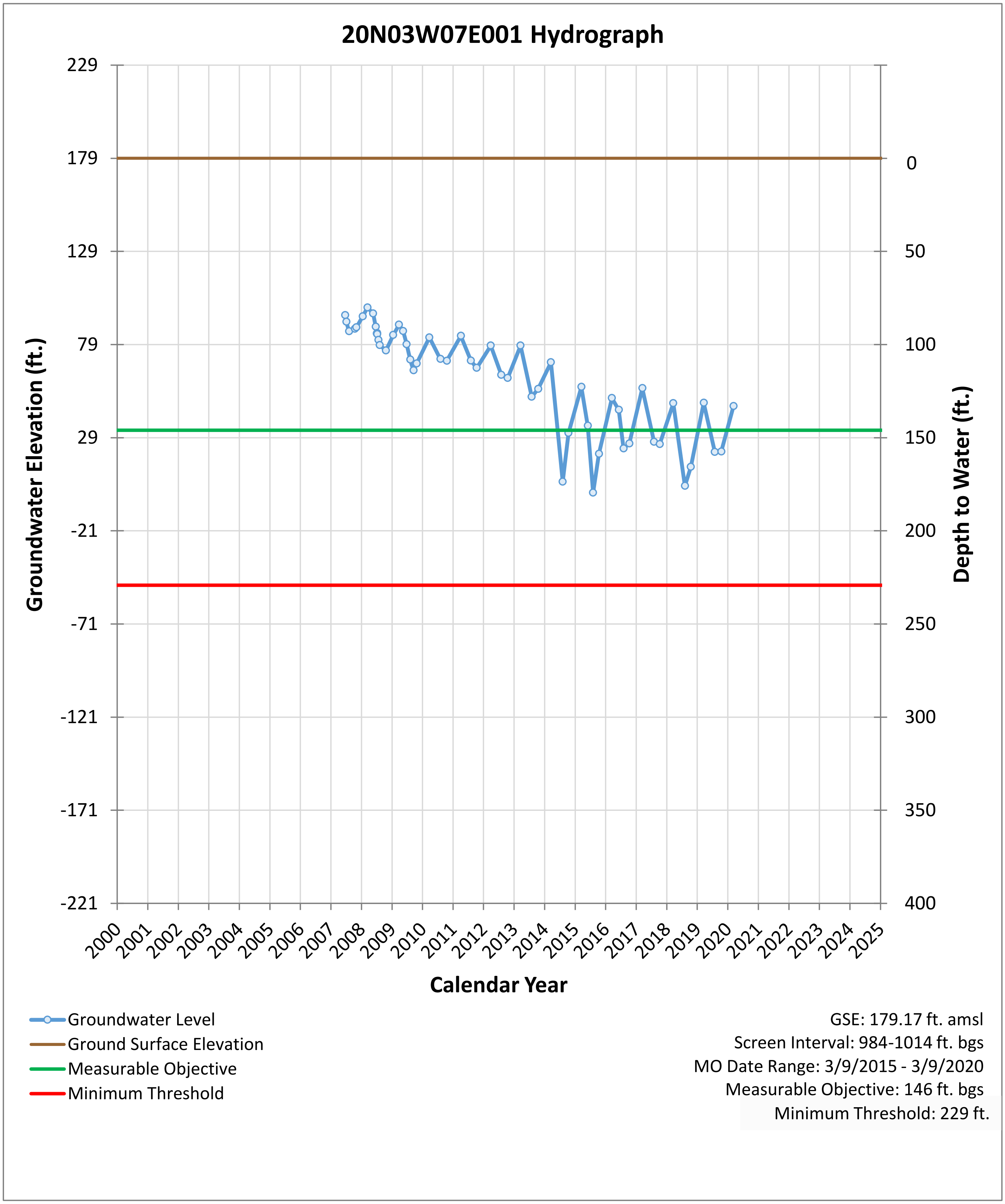
20N02W18R005 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
181
131
81
31
-19
-69
-119
-169
-219
-269
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 131.38 ft. amsl
Screen Interval: 920-930
970-980 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 61 ft. bgs
Minimum Threshold: 103 ft.



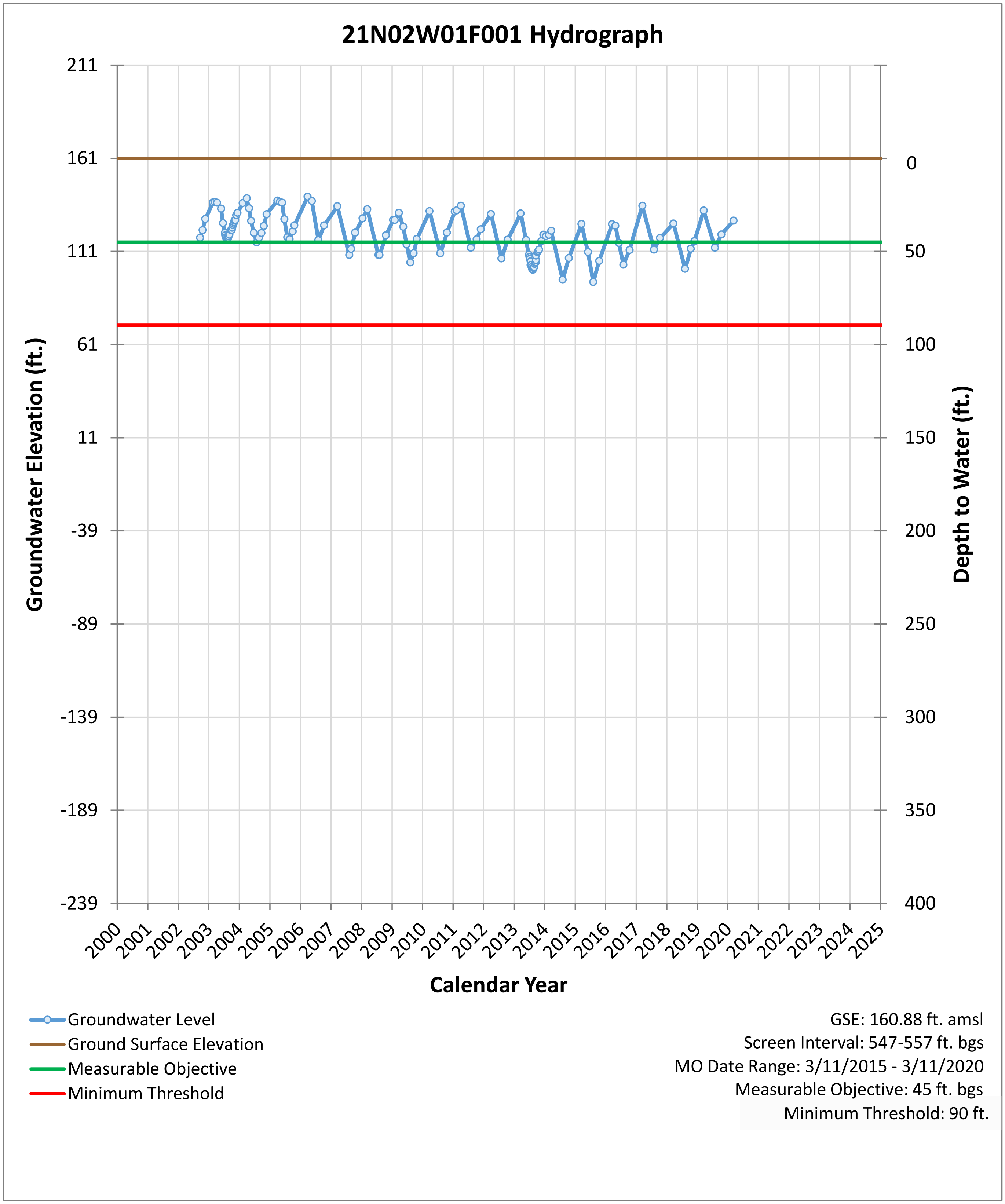
20N02W25F001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
152
102
52
2
-48
-98
-148
-198
-248
-298
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 102.2 ft. amsl
Screen Interval: 940-960 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 6 ft. bgs
Minimum Threshold: 65 ft.



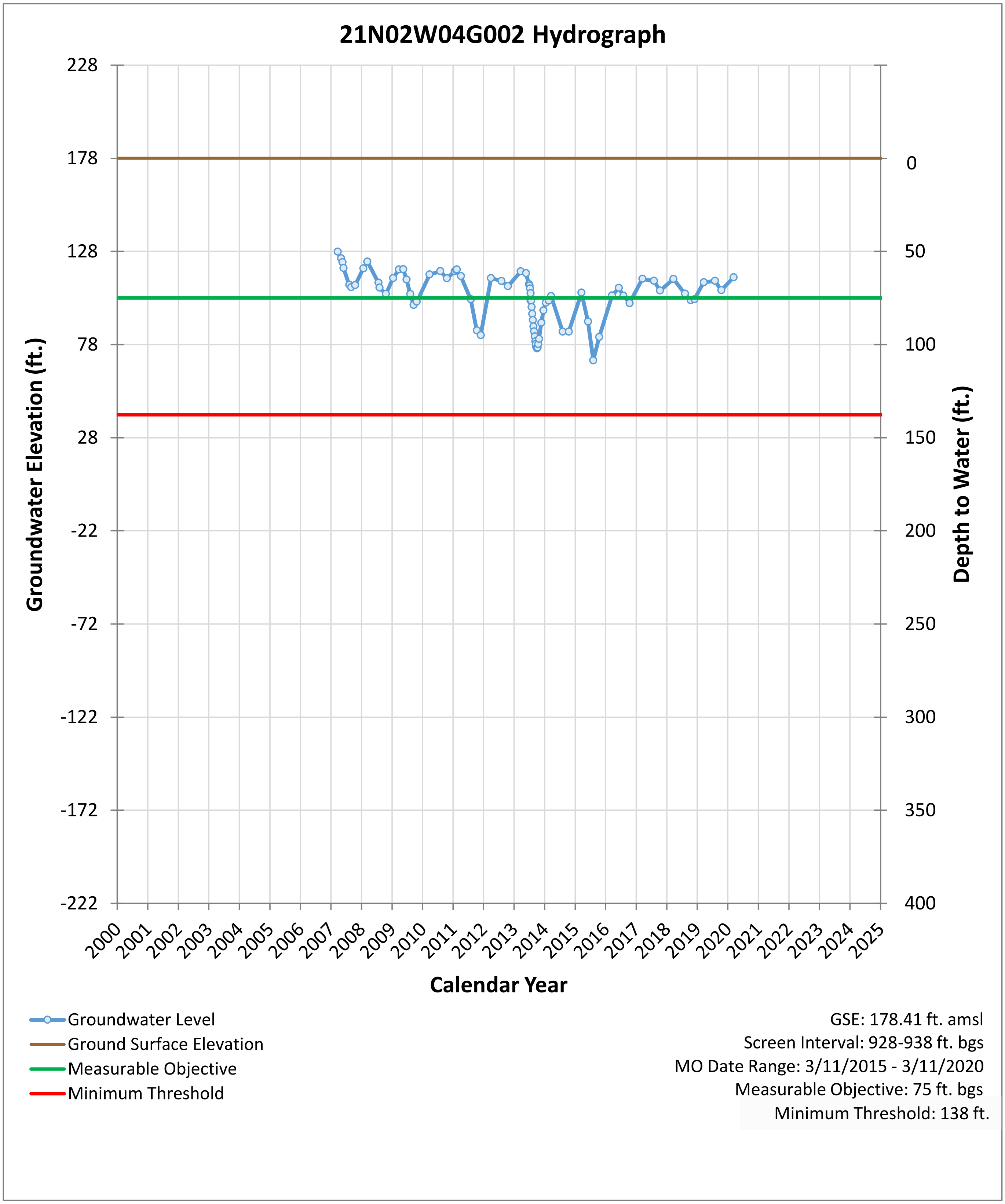
20N02W33B001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
155
105
55
5
-45
-95
-145
-195
-245
-295
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 105.41 ft. amsl
Screen Interval: 100-120
200-320 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 5 ft. bgs
Minimum Threshold: 74 ft.



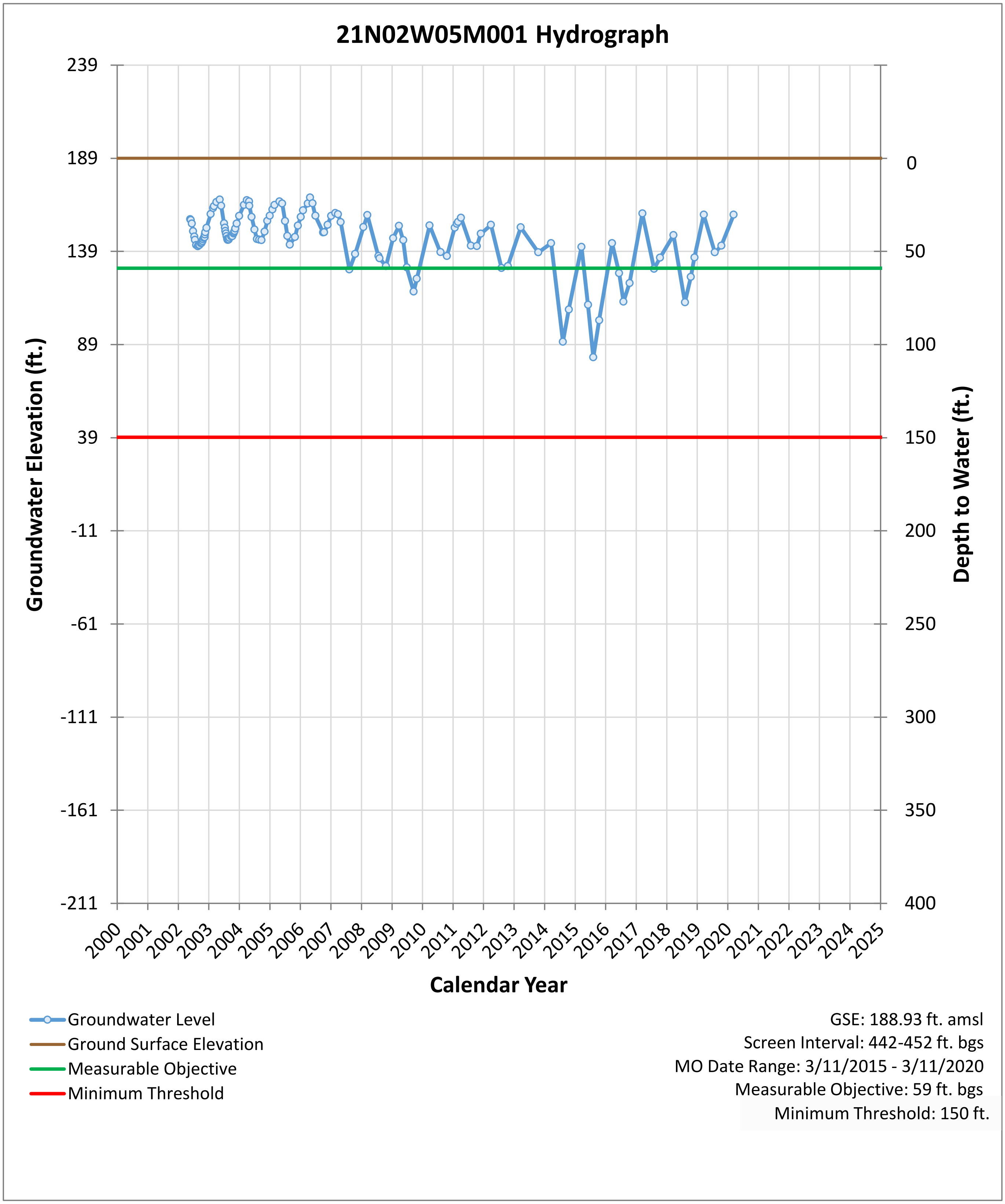
20N03W07E001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
229
179
129
79
29
-21
-71
-121
-171
-221
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 179.17 ft. amsl
Screen Interval: 984-1014 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 146 ft. bgs
Minimum Threshold: 229 ft.



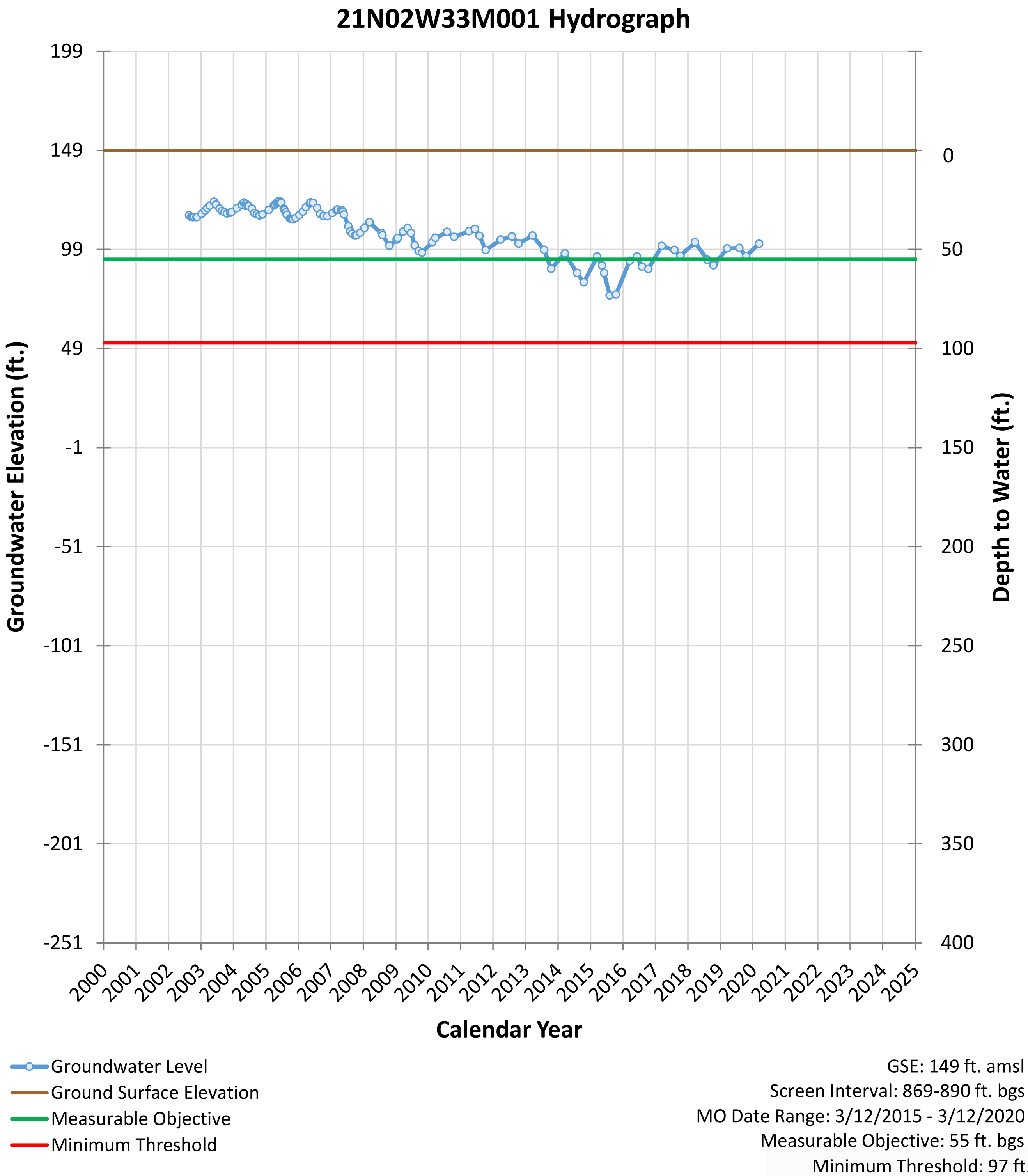
21N02W01F001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
211
161
111
61
11
-39
-89
-139
-189
-239
0
50
100
150
200
250
300
350
400
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 160.88 ft. amsl
Screen Interval: 547-557 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 45 ft. bgs
Minimum Threshold: 90 ft.



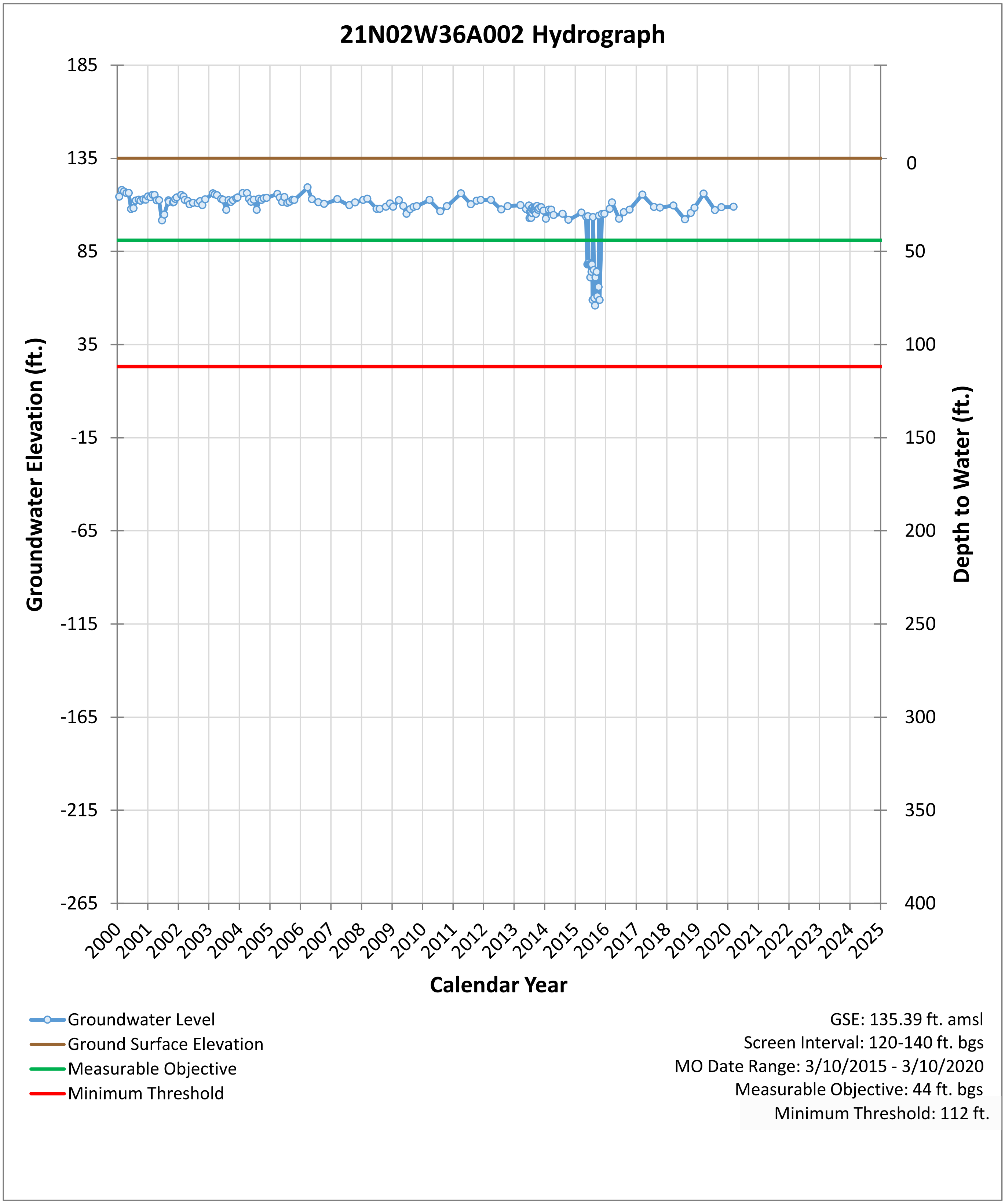
21N02W04G002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
228
178
128
78
28
-22
-72
-122
-172
-222
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 178.41 ft. amsl
Screen Interval: 928-938 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 75 ft. bgs
Minimum Threshold: 138 ft.



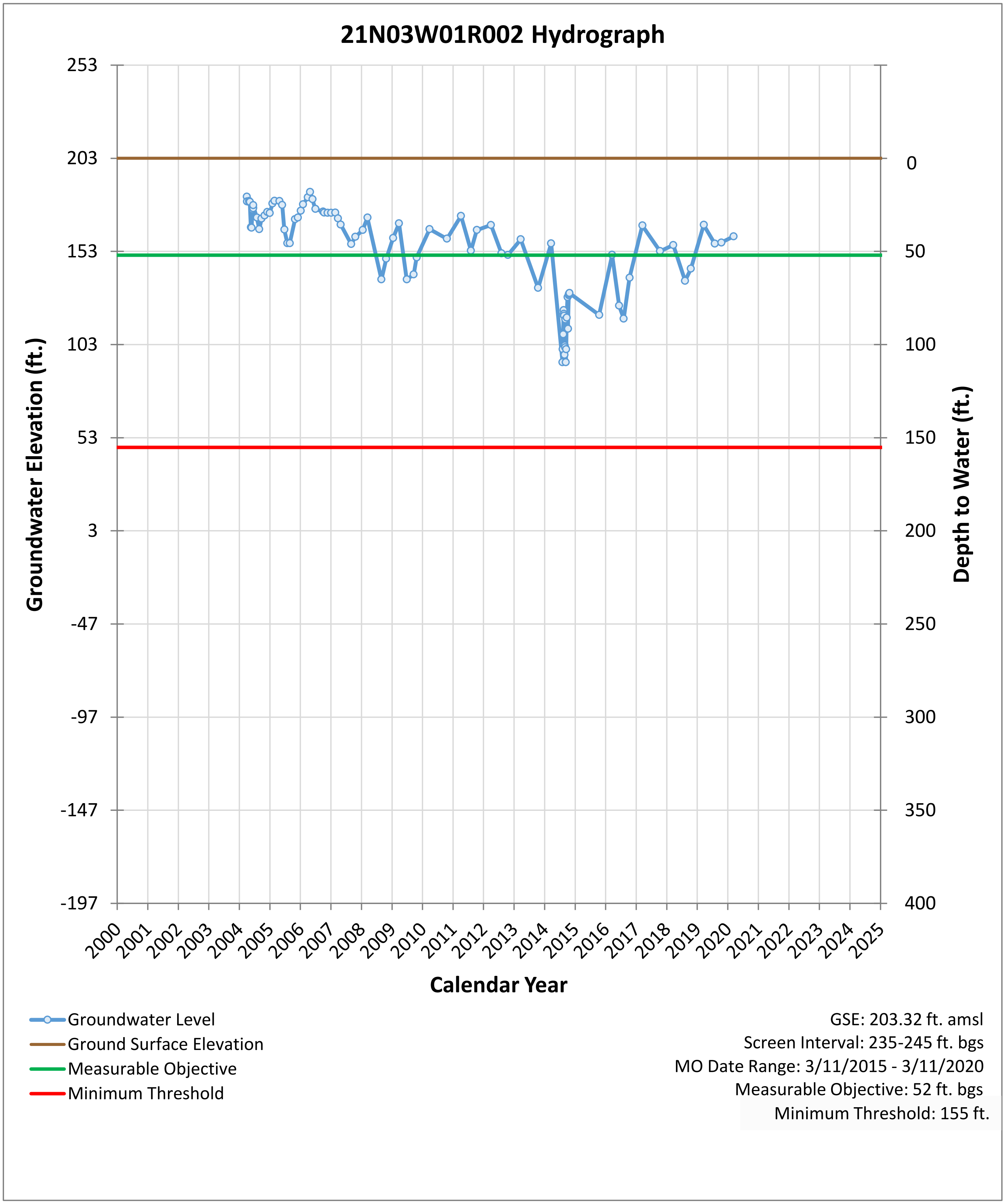
21N02W05M001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
239
189
139
89
39
-11
-61
-111
-161
-211
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 188.93 ft. amsl
Screen Interval: 442-452 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 59 ft. bgs
Minimum Threshold: 150 ft.



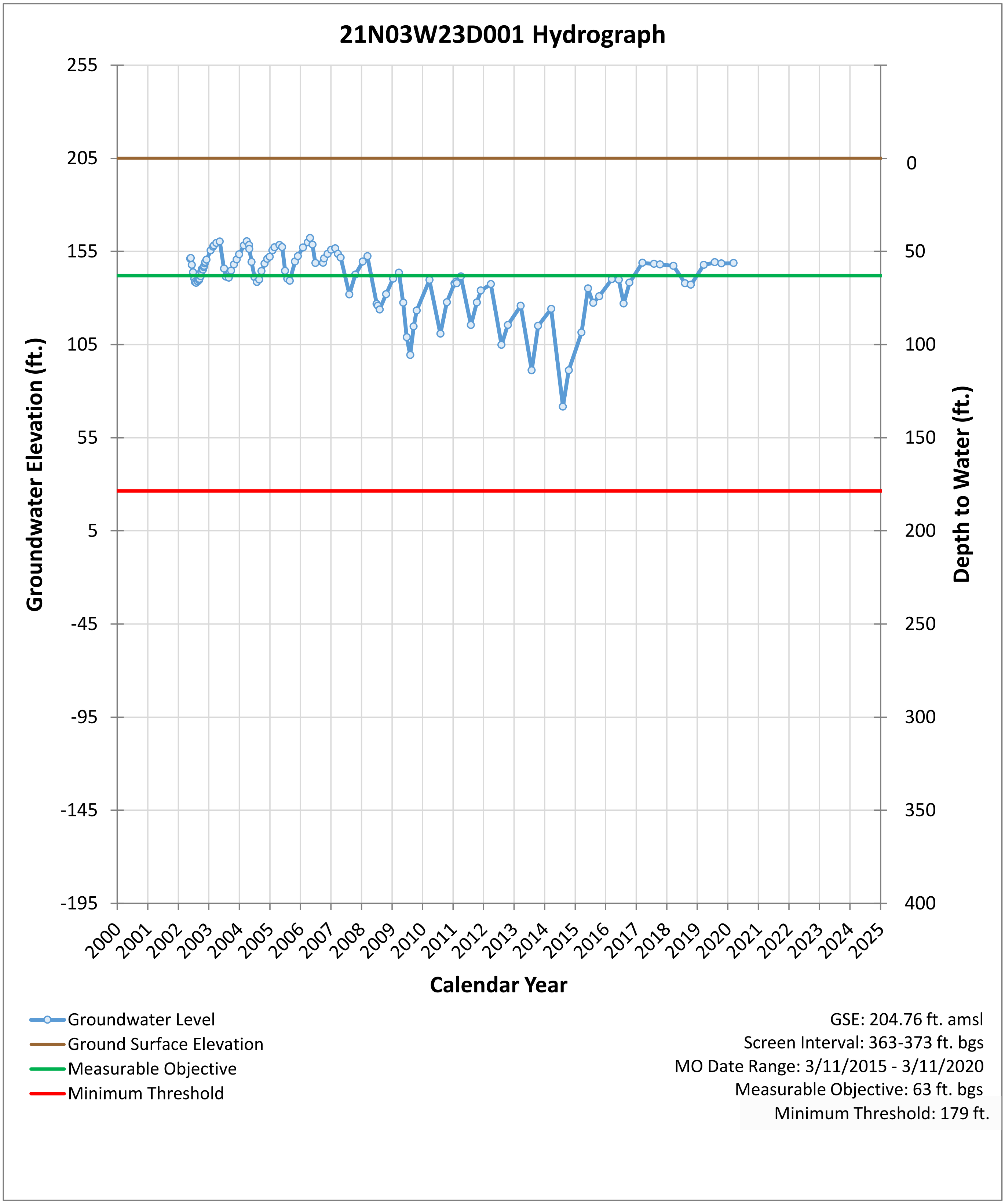
GSE: 149 ft. amsl
Screen Interval: 869-890 ft. bgs
MO Date Range: 3/12/2015 - 3/12/2020
Measurable Objective: 55 ft. bgs
Minimum Threshold: 97 ft.

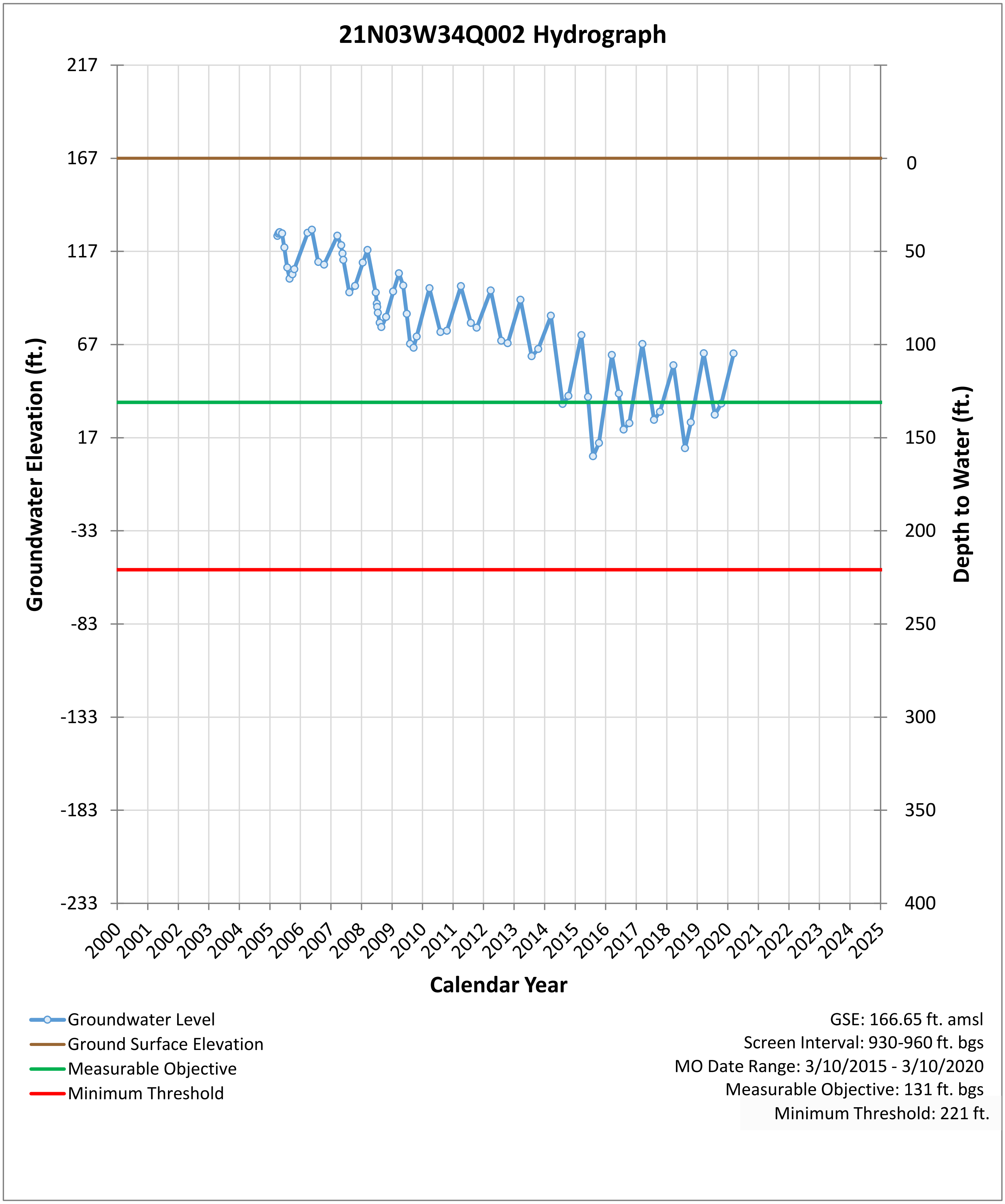


21N02W36A002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
185
135
85
35
-15
-65
-115
-165
-215
-265
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 135.39 ft. amsl
Screen Interval: 120-140 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 44 ft. bgs
Minimum Threshold: 112 ft.

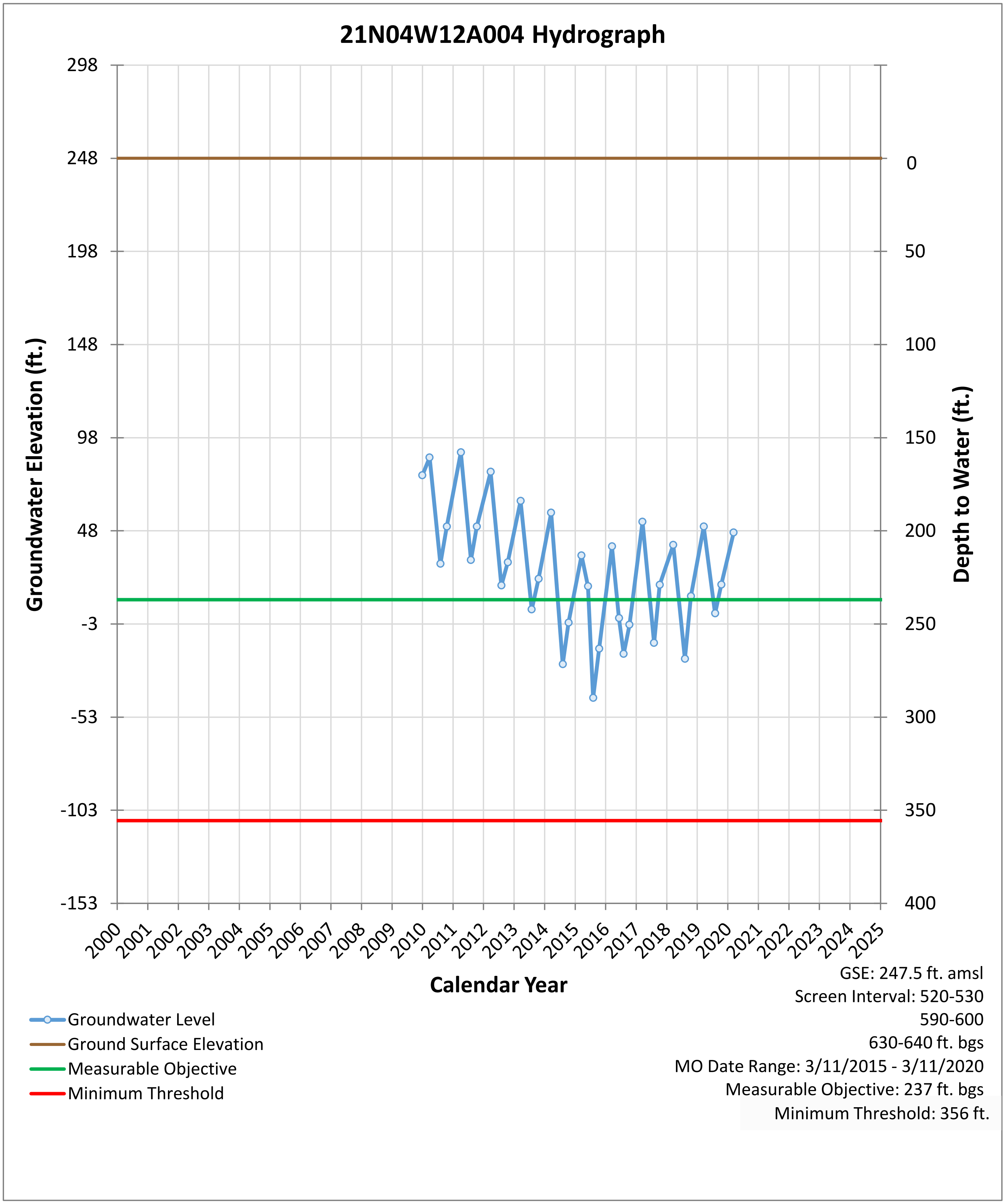


21N03W01R002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
253
203
153
103
53
3
-47
-97
-147
-197
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 203.32 ft. amsl
Screen Interval: 235-245 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 52 ft. bgs
Minimum Threshold: 155 ft.

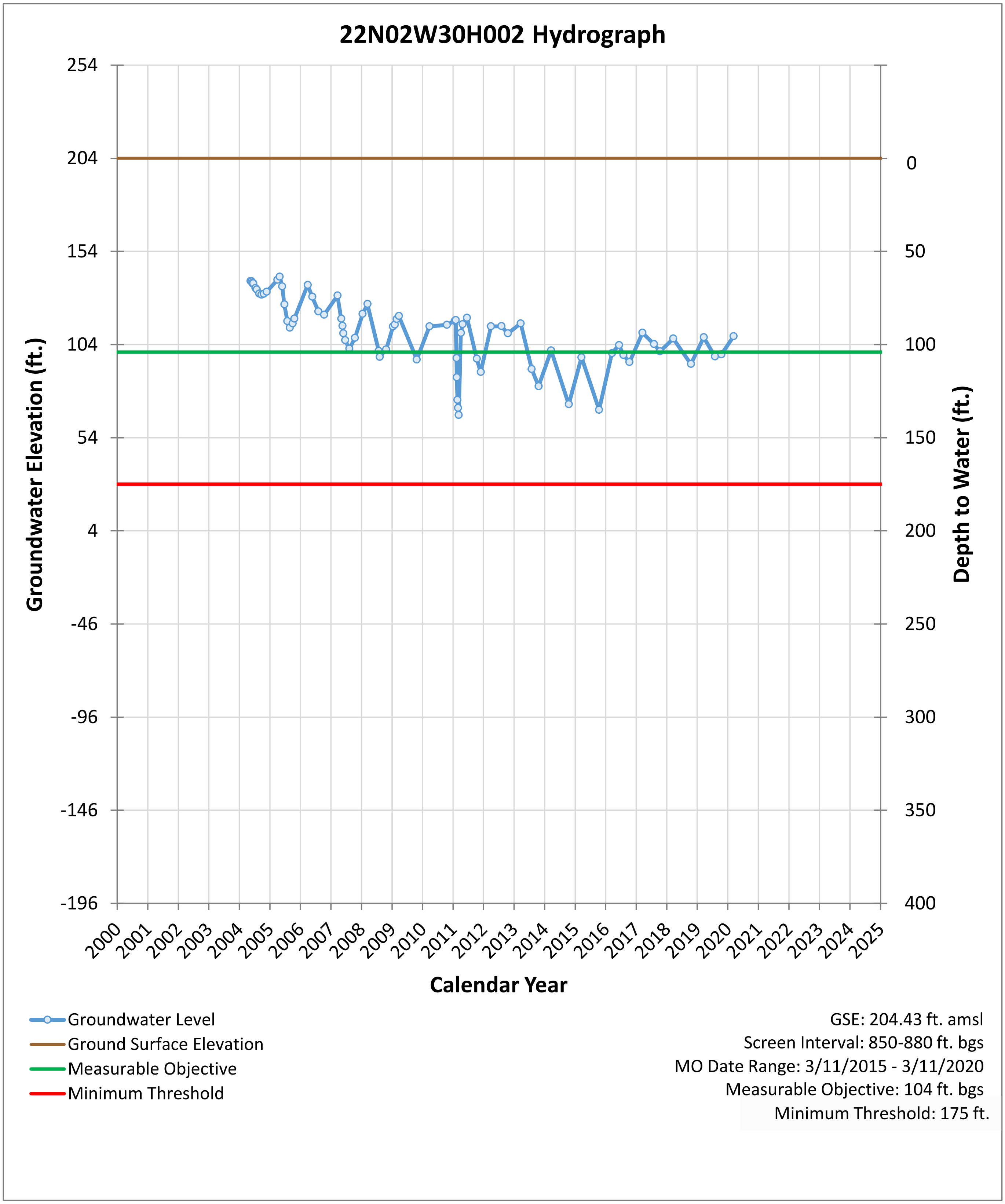

21N03W23D001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
255
205
155
105
55
5
-45
-95
-145
-195
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 204.76 ft. amsl
Screen Interval: 363-373 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 63 ft. bgs
Minimum Threshold: 179 ft.



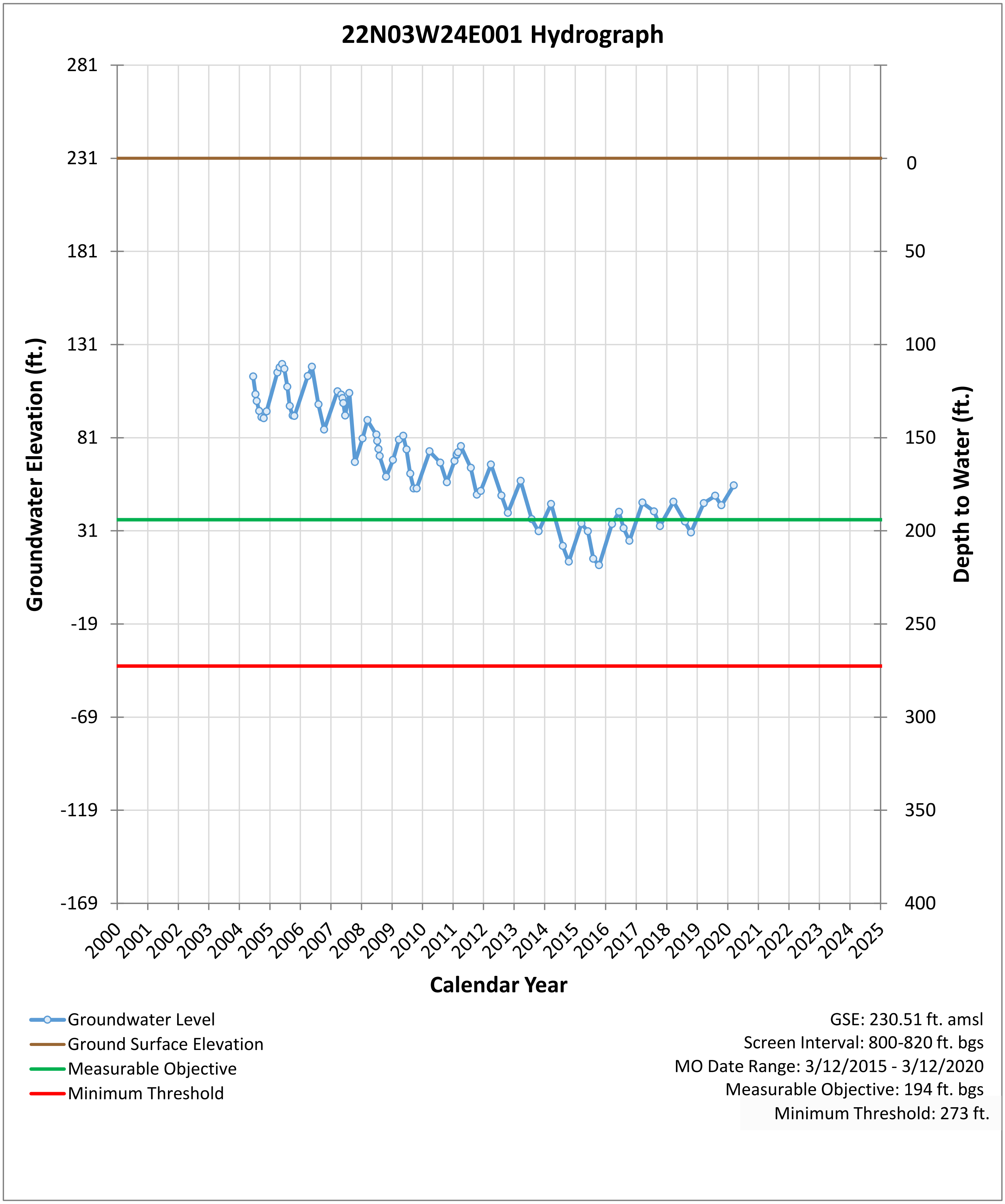
21N03W34Q002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
217
167
117
67
17
-33
-83
-133
-183
-233
0
50
100
150
200
250
300
350
400
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 166.65 ft. amsl
Screen Interval: 930-960 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 131 ft. bgs
Minimum Threshold: 221 ft.



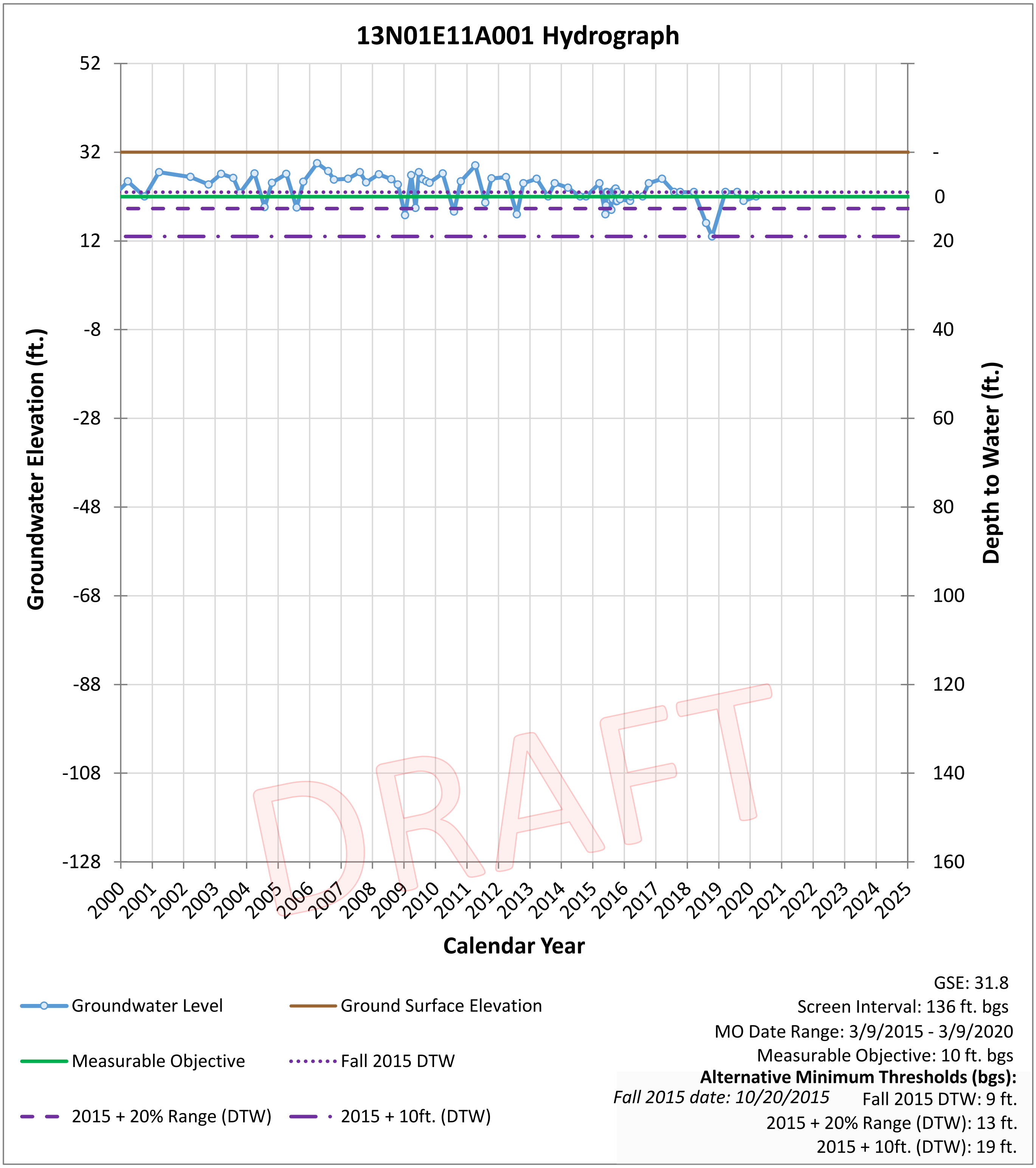
21N04W12A004 Hydrograph
298
248
198
148
98
48
-3
-53
-103
-153
Groundwater Elevation (ft.)
0
50
100
150
200
250
300
350
400
Depth to Water (ft.)
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 247.5 ft. amsl
Screen Interval: 520-530
590-600
630-640 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 237 ft. bgs
Minimum Threshold: 356 ft.



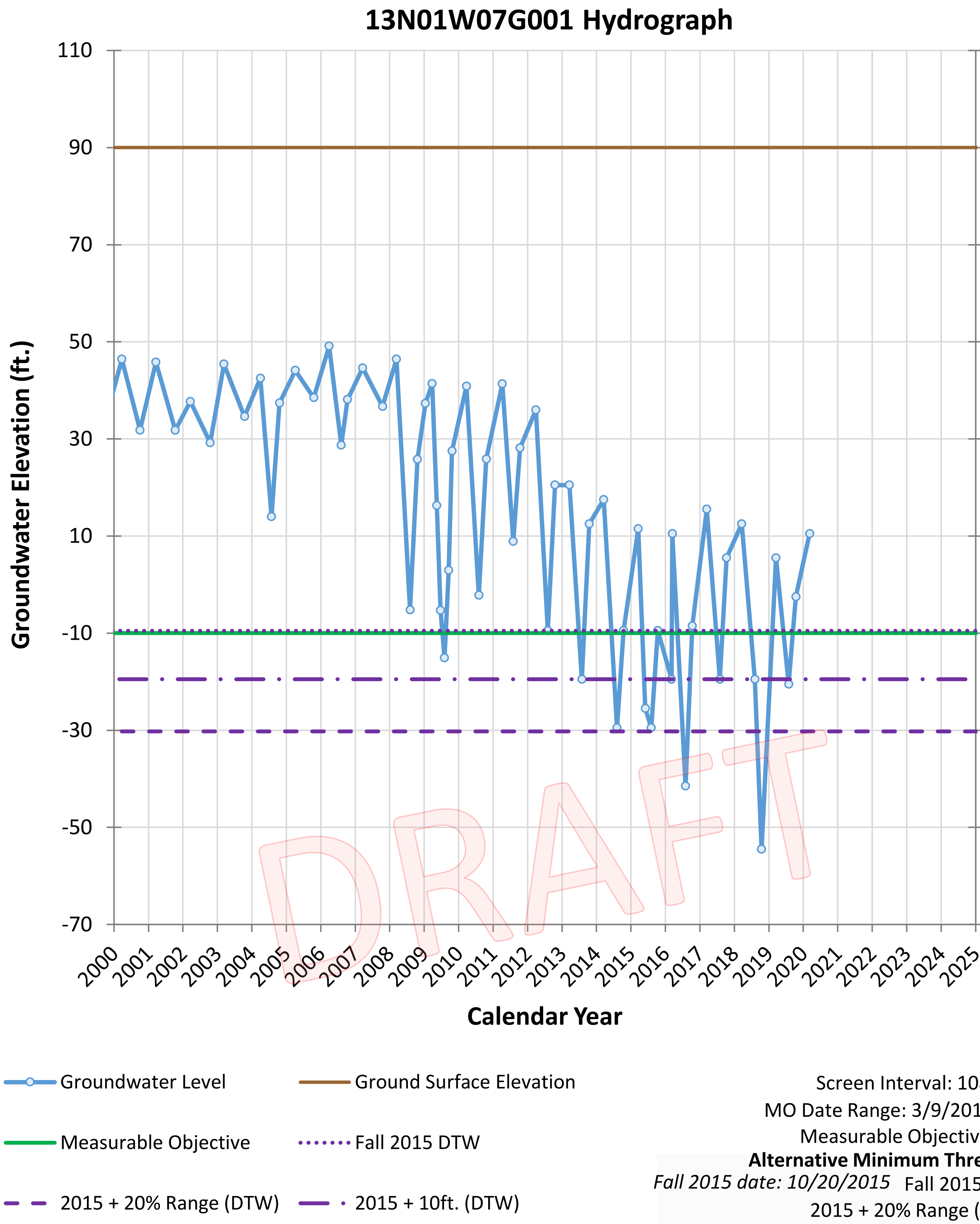
22N02W30H002 Hydrograph
254
204
154
104
54
4
-46
-96
-146
-196
0
50
100
150
200
250
300
350
400
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 204.43 ft. amsl
Screen Interval: 850-880 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 104 ft. bgs
Minimum Threshold: 175 ft.


22N03W24E001 Hydrograph
281
231
181
131
81
31
-19
-69
-119
-169
Groundwater Elevation (ft.)
0
50
100
150
200
250
300
350
400
Depth to Water (ft.)
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 230.51 ft. amsl
Screen Interval: 800-820 ft. bgs
MO Date Range: 3/12/2015 - 3/12/2020
Measurable Objective: 194 ft. bgs
Minimum Threshold: 273 ft.

Attachment C. Depletion of Interconnected Surface Water – Preliminary Minimum Thresholds Review



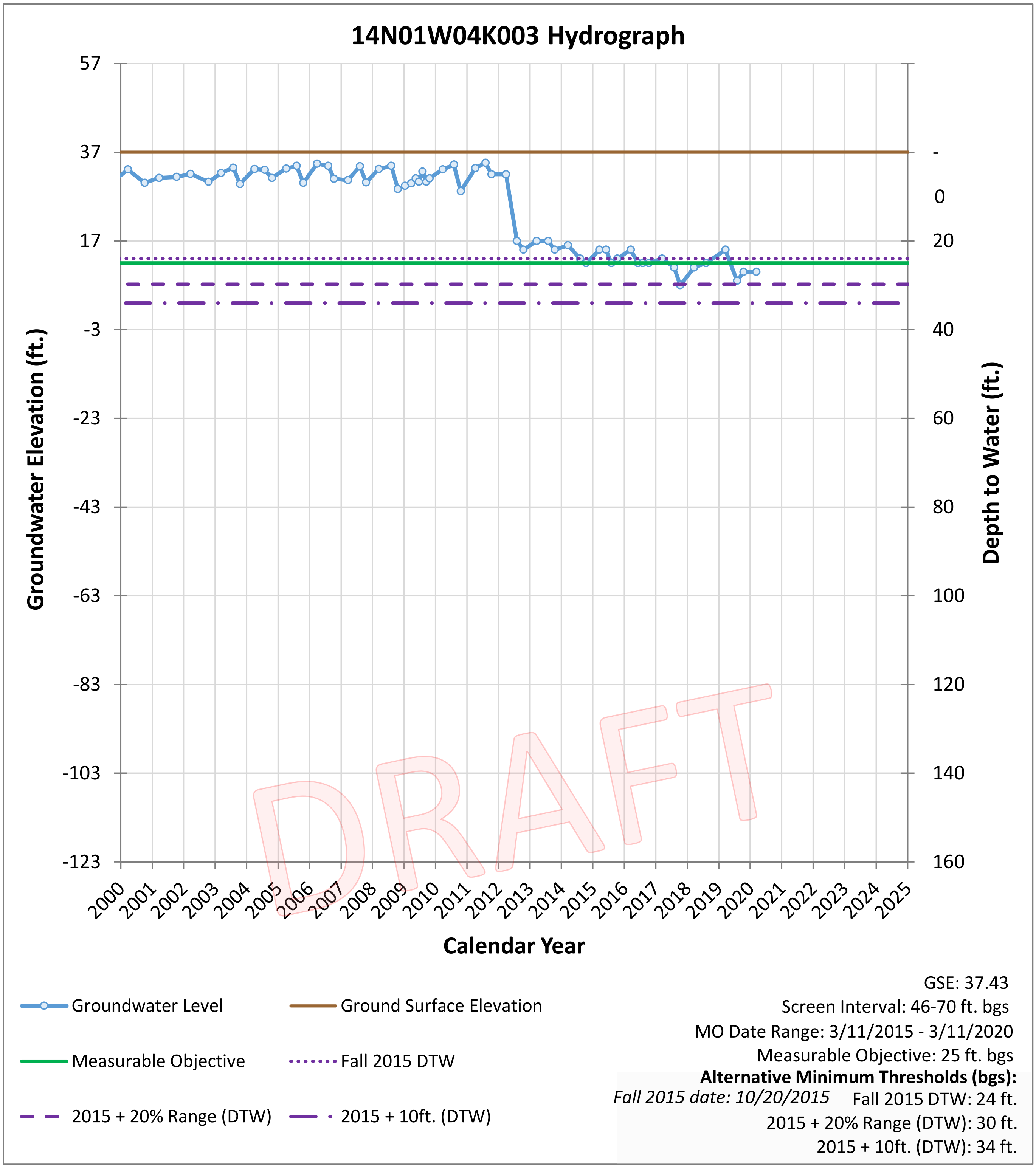
GSE: 31.8
Screen Interval: 136 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 10 ft. bgs
Alternative Minimum Thresholds (bgs):
Fall 2015 date: 10/20/2015 Fall 2015 DTW: 9 ft.
2015 + 20% Range (DTW): 13 ft.
2015 + 10ft. (DTW): 19 ft.



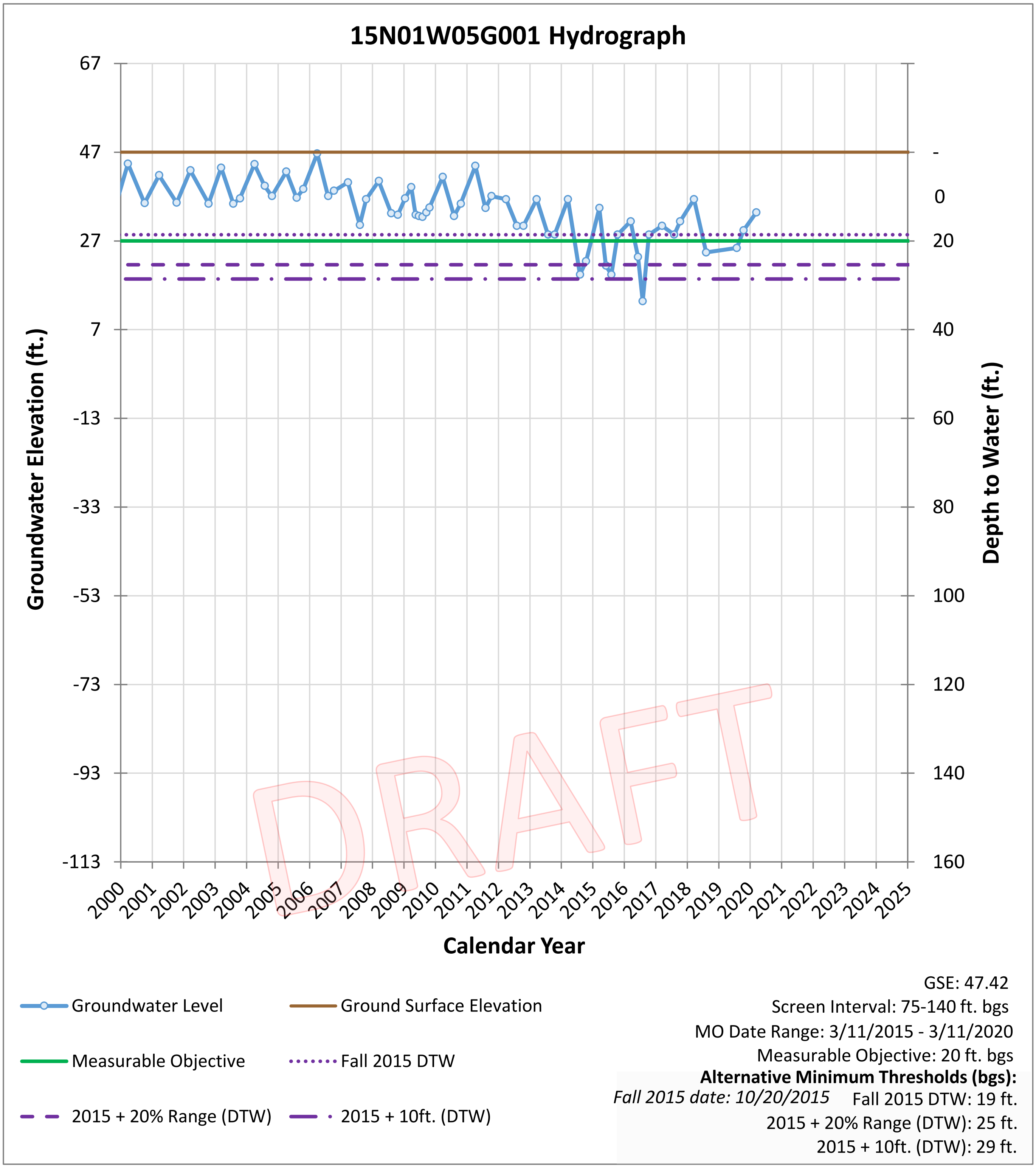
GSE: 90.47
Screen Interval: 108-180 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 100 ft. bgs

Alternative Minimum Thresholds (bgs):

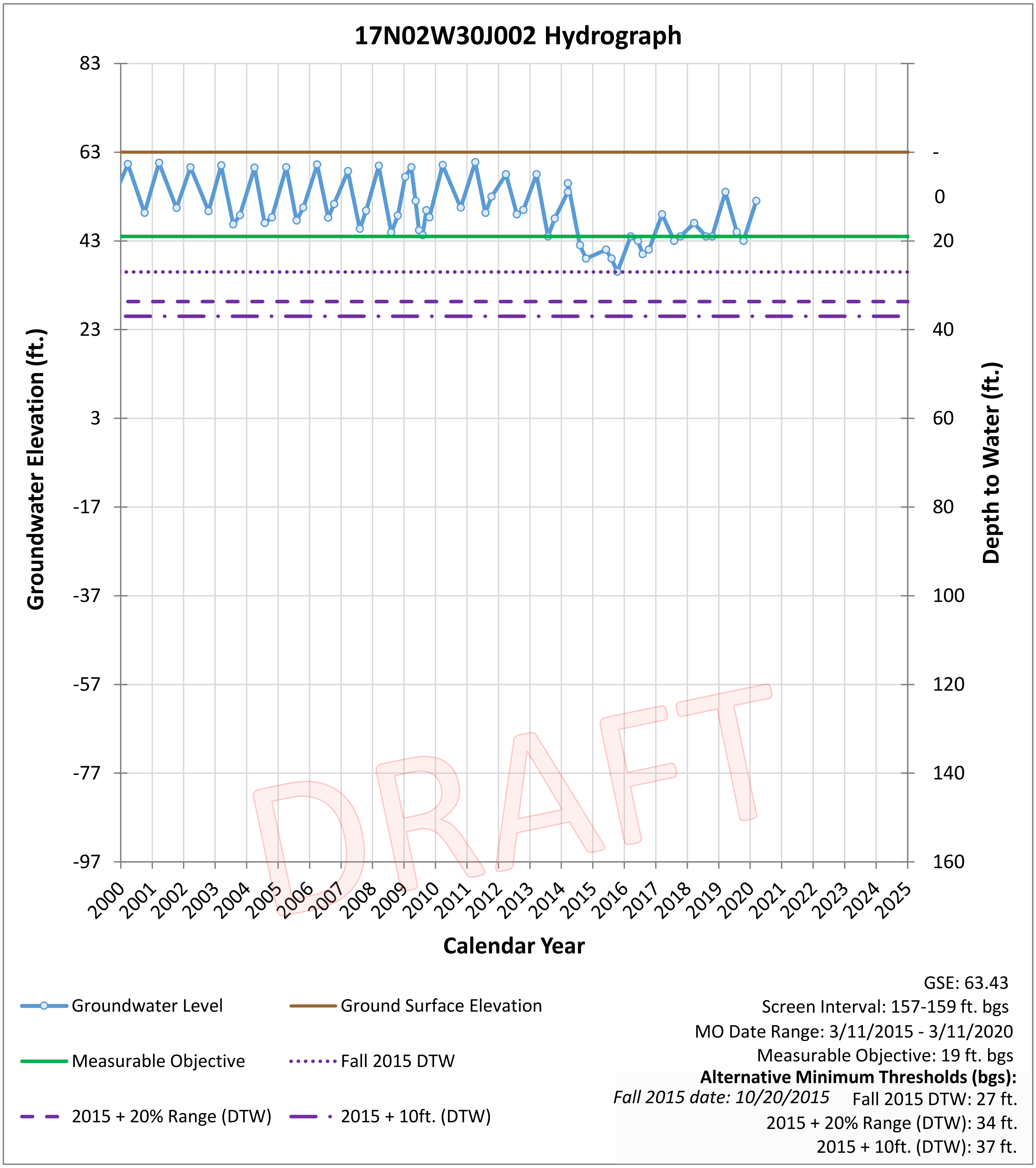
Fall 2015 date: 10/20/2015 Fall 2015 DTW: 100 ft.
2015 + 20% Range (DTW): 120 ft.
2015 + 10ft. (DTW): 110 ft.

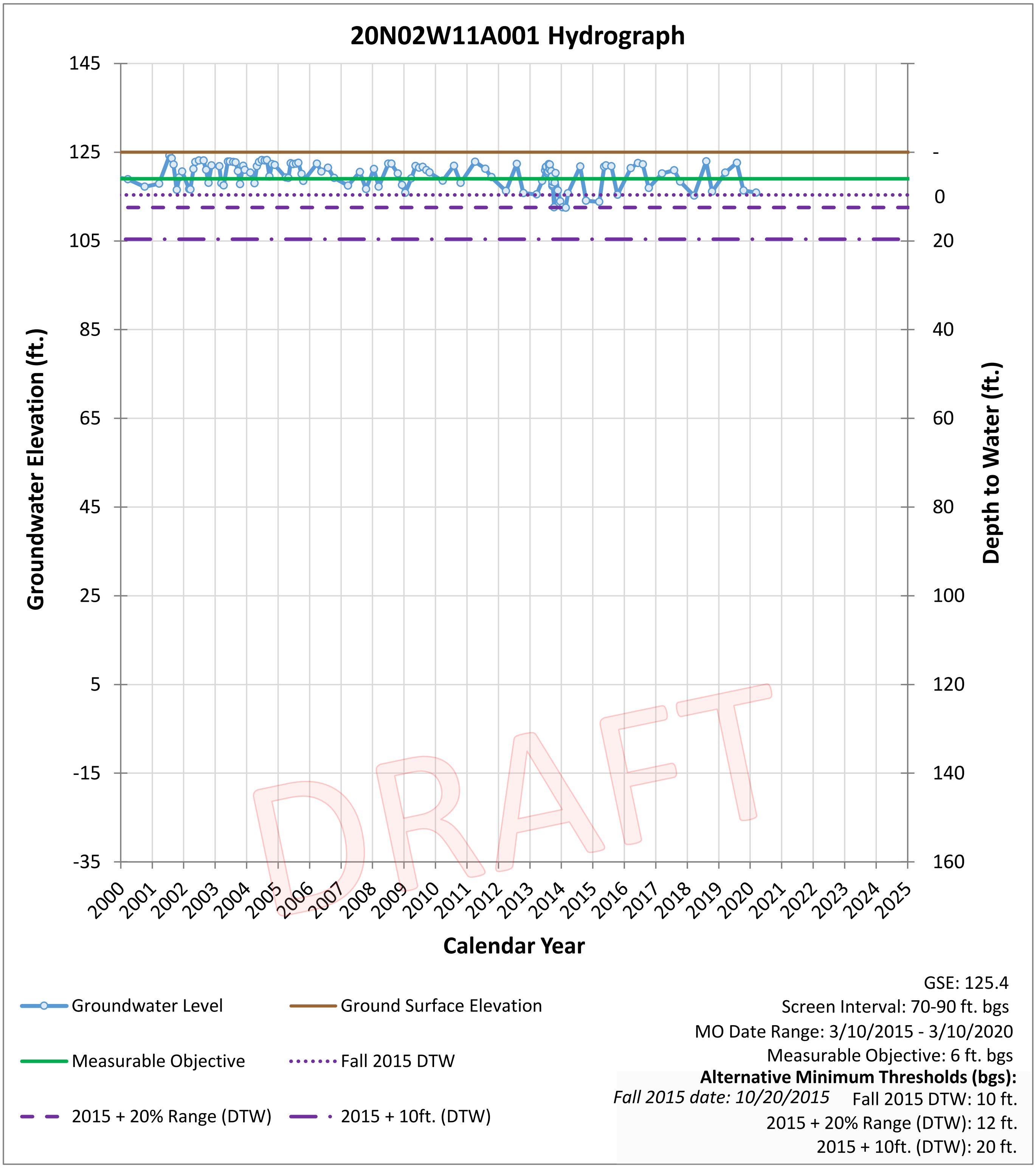


14N01W04K003 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
57
37
17
-3
-23
-43
-63
-83
-103
-123
-
0
20
40
60
80
100
120
140
160
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
Fall 2015 DTW
2015 + 20% Range (DTW)
2015 + 10ft. (DTW)
GSE: 37.43
Screen Interval: 46-70 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 25 ft. bgs
Alternative Minimum Thresholds (bgs):
Fall 2015 date: 10/20/2015
Fall 2015 DTW: 24 ft.
2015 + 20% Range (DTW): 30 ft.
2015 + 10ft. (DTW): 34 ft.

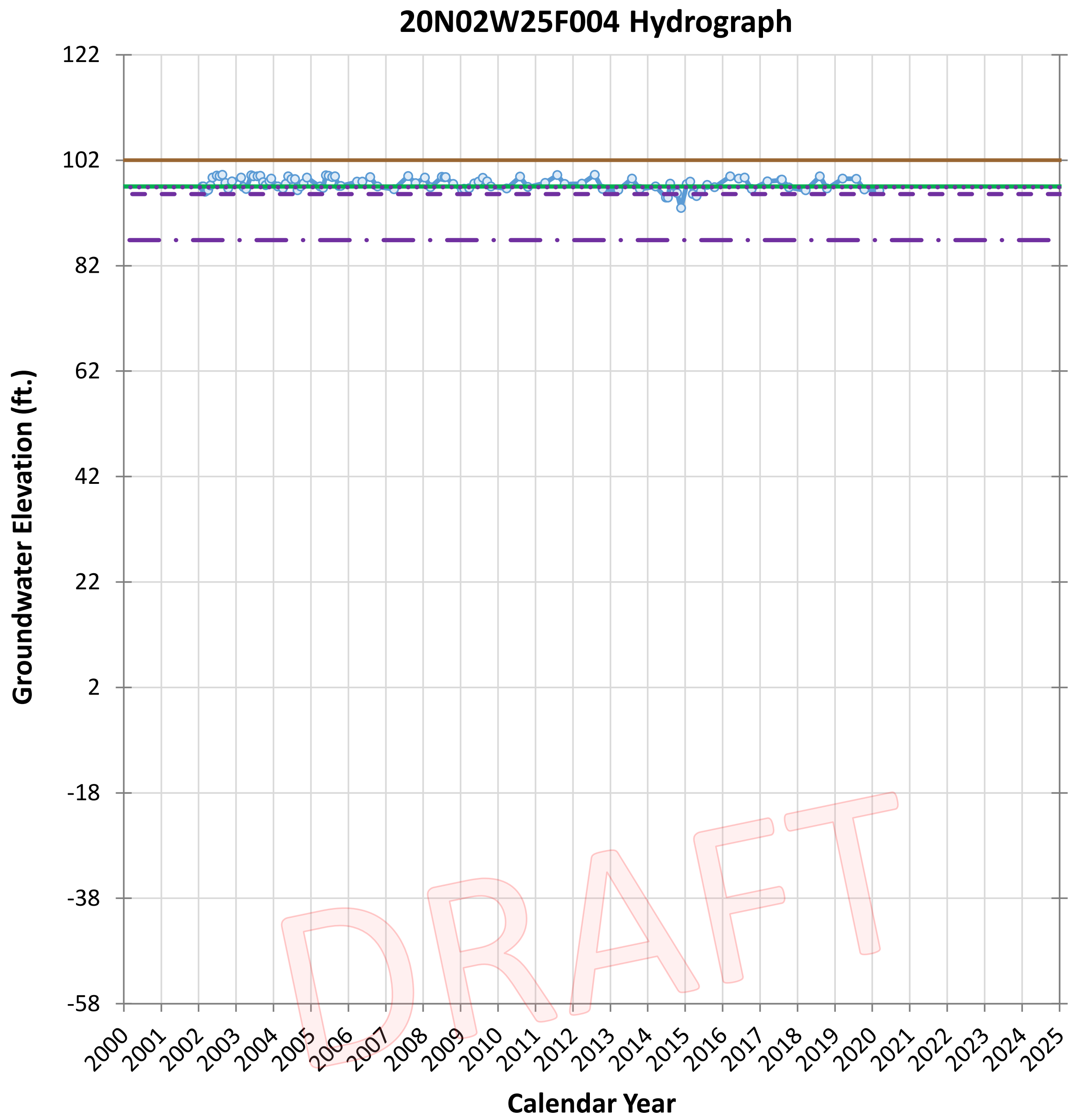


15N01W05G001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
67
47
27
7
-13
-33
-53
-73
-93
-113
-
0
20
40
60
80
100
120
140
160
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
Fall 2015 DTW
2015 + 20% Range (DTW)
2015 + 10ft. (DTW)
GSE: 47.42
Screen Interval: 75-140 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 20 ft. bgs
Alternative Minimum Thresholds (bgs):
Fall 2015 date: 10/20/2015
Fall 2015 DTW: 19 ft.
2015 + 20% Range (DTW): 25 ft.
2015 + 10ft. (DTW): 29 ft.


17N02W30J002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
83
63
43
23
3
-17
-37
-57
-77
-97
-
0
20
40
60
80
100
120
140
160
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
Fall 2015 DTW
2015 + 20% Range (DTW)
2015 + 10ft. (DTW)
GSE: 63.43
Screen Interval: 157-159 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 19 ft. bgs
Alternative Minimum Thresholds (bgs):
Fall 2015 date: 10/20/2015
Fall 2015 DTW: 27 ft.
2015 + 20% Range (DTW): 34 ft.
2015 + 10ft. (DTW): 37 ft.



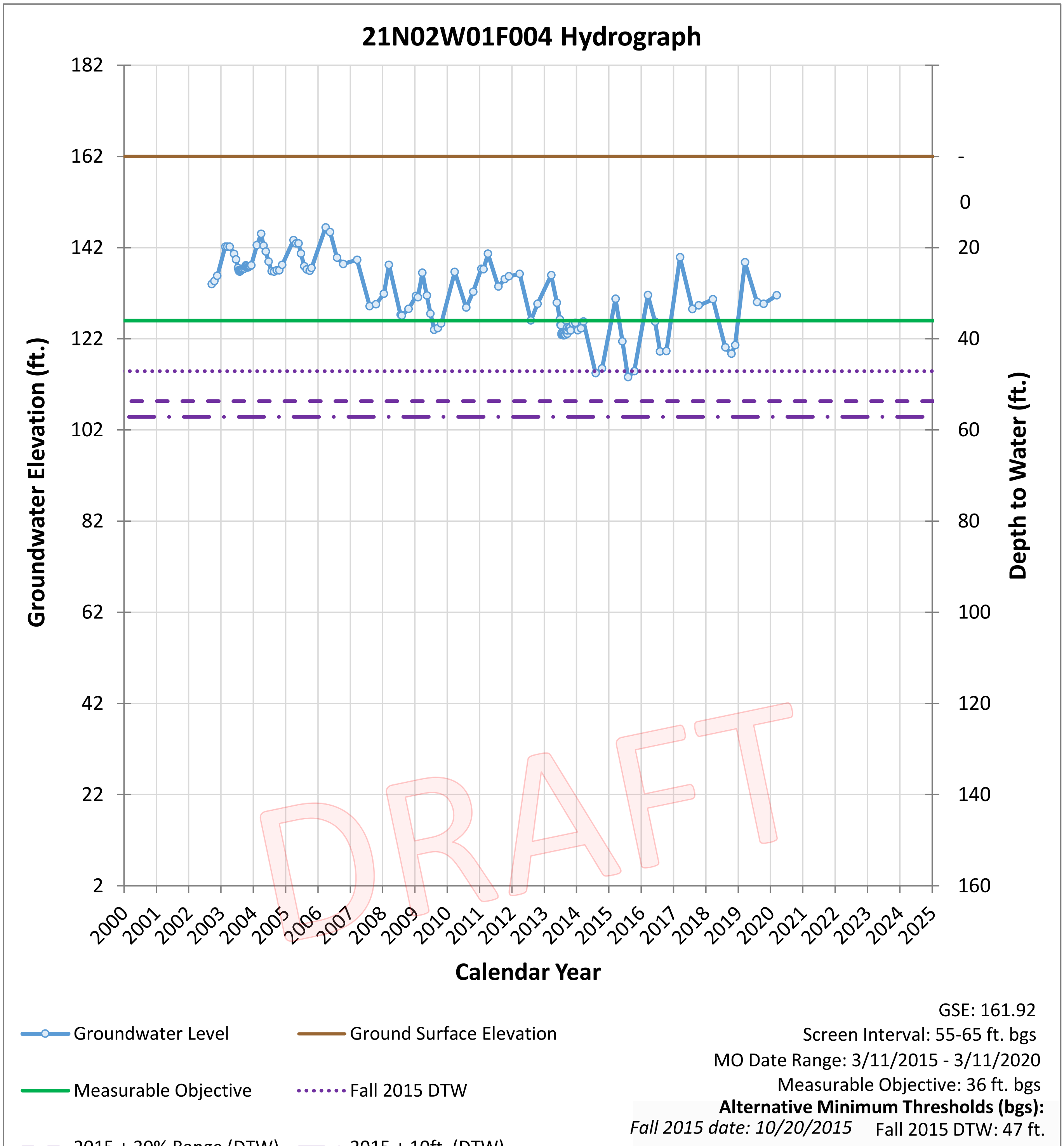
20N02W11A001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
145
125
105
85
65
45
25
5
-15
-35
-
0
20
40
60
80
100
120
140
160
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
Fall 2015 DTW
2015 + 20% Range (DTW)
2015 + 10ft. (DTW)
GSE: 125.4
Screen Interval: 70-90 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 6 ft. bgs
Alternative Minimum Thresholds (bgs):
Fall 2015 date: 10/20/2015
Fall 2015 DTW: 10 ft.
2015 + 20% Range (DTW): 12 ft.
2015 + 10ft. (DTW): 20 ft.



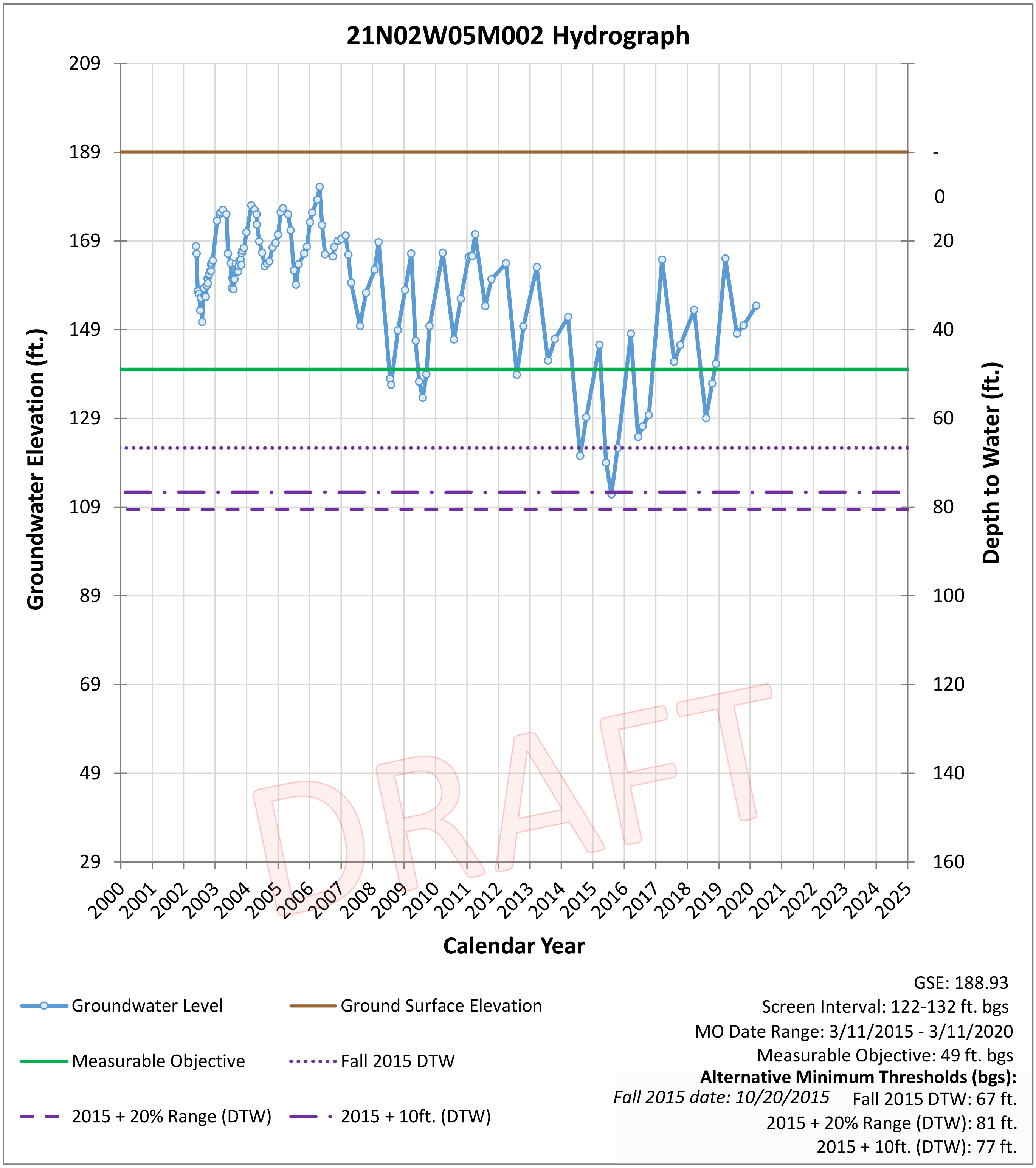
GSE: 102.2
Screen Interval: 55-65 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 5 ft. bgs

Alternative Minimum Thresholds (bgs):

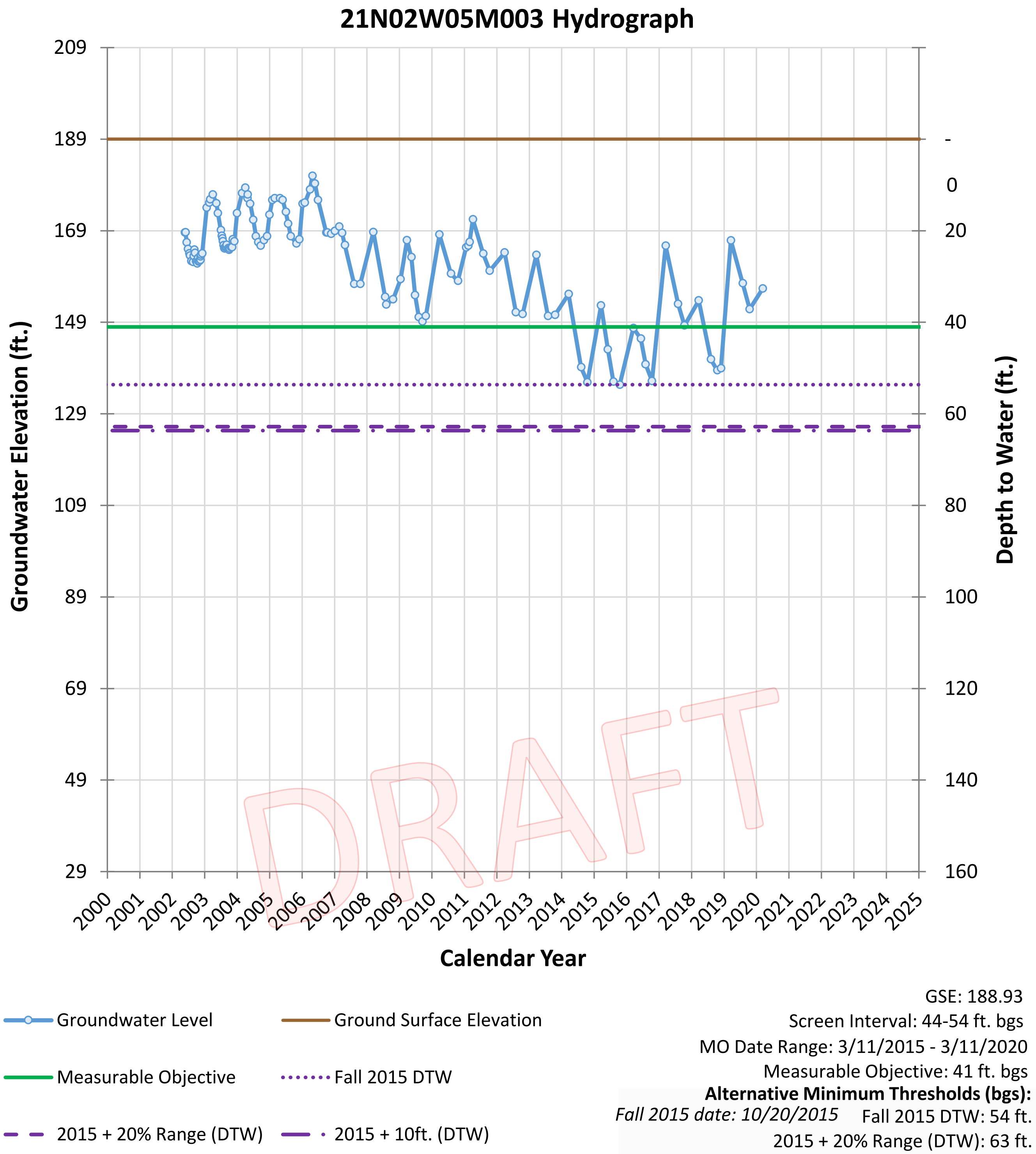
Fall 2015 date: 10/20/2015
Fall 2015 DTW: 5 ft.
2015 + 20% Range (DTW): 6 ft.
2015 + 10ft. (DTW): 15 ft.



GSE: 161.92
Screen Interval: 55-65 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 36 ft. bgs
Alternative Minimum Thresholds (bgs):
Fall 2015 date: 10/20/2015 Fall 2015 DTW: 47 ft.
2015 + 20% Range (DTW): 54 ft.
2015 + 10ft. (DTW): 57 ft.



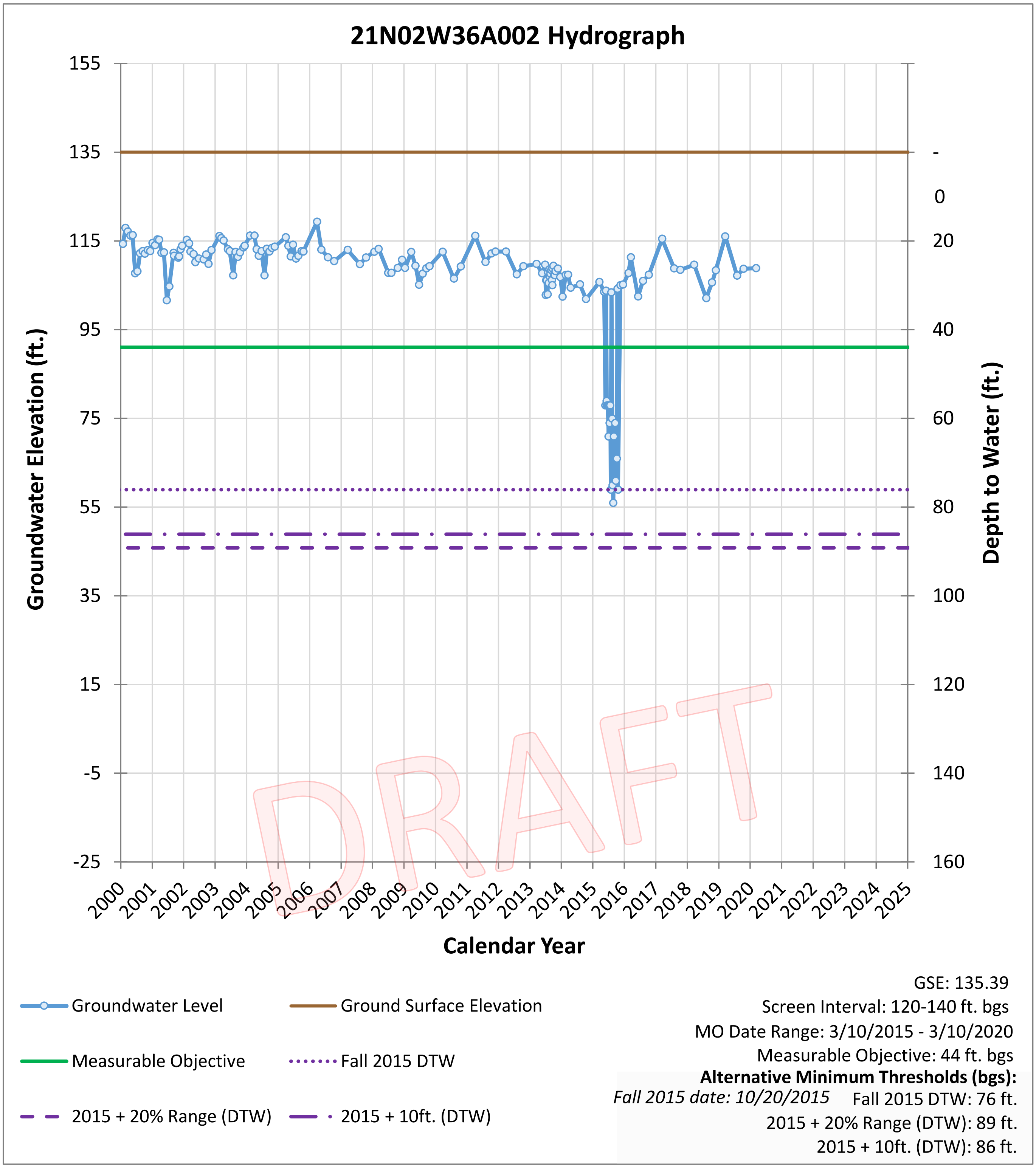
21N02W05M002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
209
189
169
149
129
109
89
69
49
29
-
0
20
40
60
80
100
120
140
160
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
Fall 2015 DTW
2015 + 20% Range (DTW)
2015 + 10ft. (DTW)
GSE: 188.93
Screen Interval: 122-132 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 49 ft. bgs
Alternative Minimum Thresholds (bgs):
Fall 2015 date: 10/20/2015
Fall 2015 DTW: 67 ft.
2015 + 20% Range (DTW): 81 ft.
2015 + 10ft. (DTW): 77 ft.

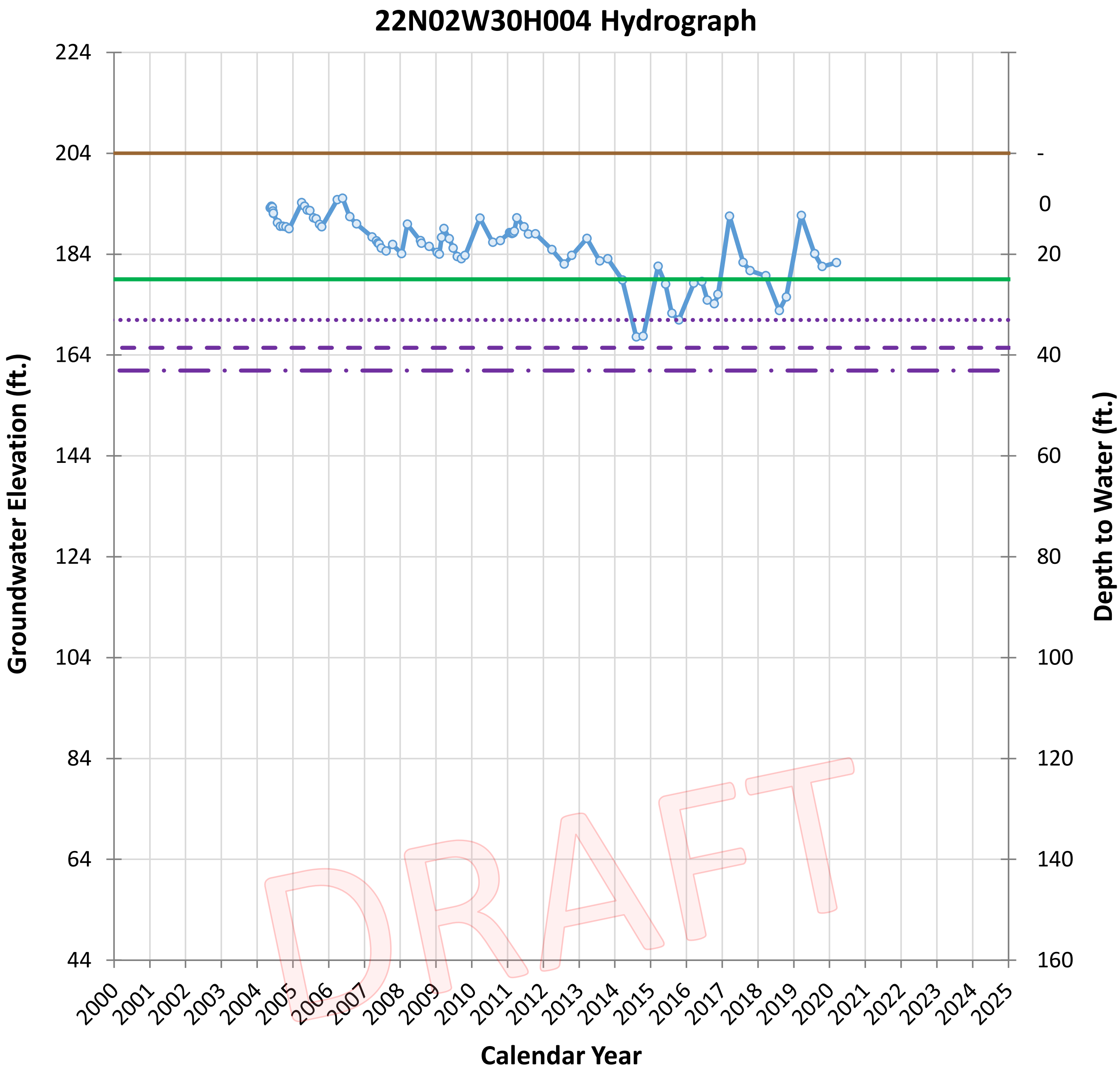


GSE: 188.93
Screen Interval: 44-54 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 41 ft. bgs

Alternative Minimum Thresholds (bgs):

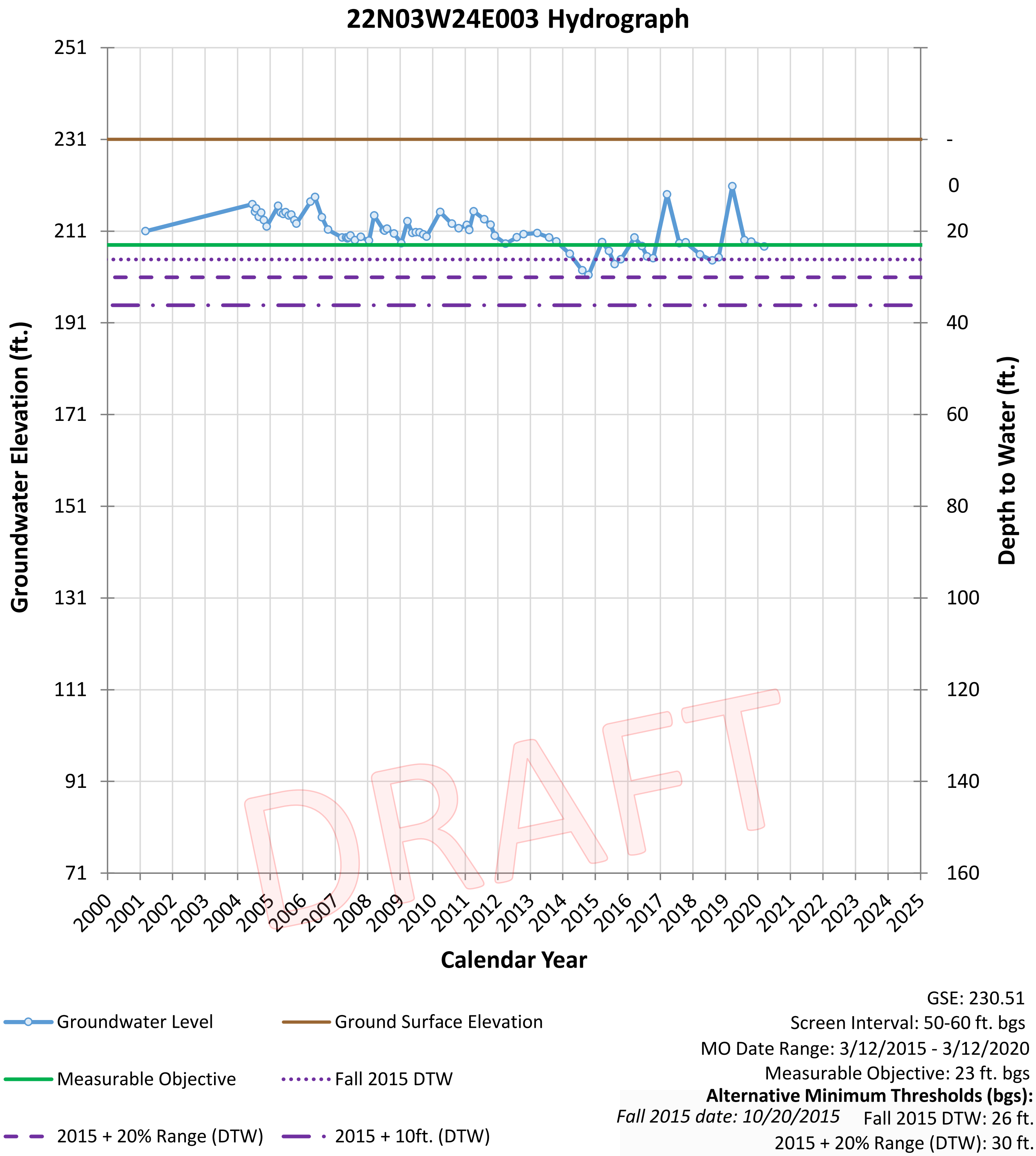
Fall 2015 date: 10/20/2015 Fall 2015 DTW: 54 ft.
2015 + 20% Range (DTW): 63 ft.
2015 + 10ft. (DTW): 64 ft.


21N02W36A002 Hydrograph
155
135
115
95
75
55
35
15
-5
-25
-
0
20
40
60
80
100
120
140
160
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
DRAFT
Groundwater Level
Ground Surface Elevation
Measurable Objective
Fall 2015 DTW
2015 + 20% Range (DTW)
2015 + 10ft. (DTW)
GSE: 135.39
Screen Interval: 120-140 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 44 ft. bgs
Alternative Minimum Thresholds (bgs):
Fall 2015 date: 10/20/2015
Fall 2015 DTW: 76 ft.
2015 + 20% Range (DTW): 89 ft.
2015 + 10ft. (DTW): 86 ft.



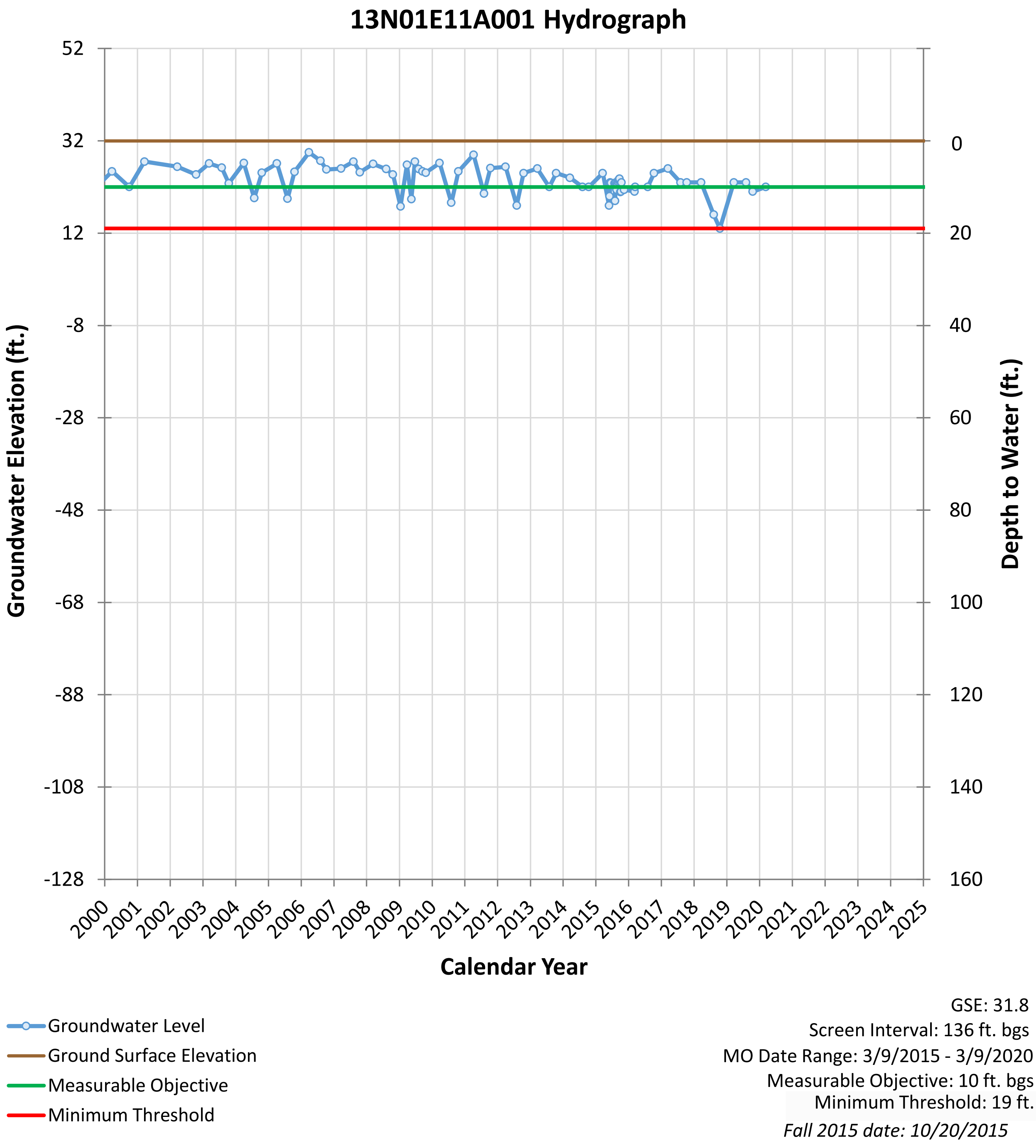
Groundwater Level
Ground Surface Elevation
Measurable Objective
Fall 2015 DTW
2015 + 20% Range (DTW)
2015 + 10ft. (DTW)

GSE: 204.43
Screen Interval: 45-55
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 25 ft. bgs
Alternative Minimum Thresholds (bgs):
Fall 2015 date: 10/20/2015 Fall 2015 DTW: 33 ft.
2015 + 20% Range (DTW): 39 ft.
2015 + 10ft. (DTW): 43 ft.



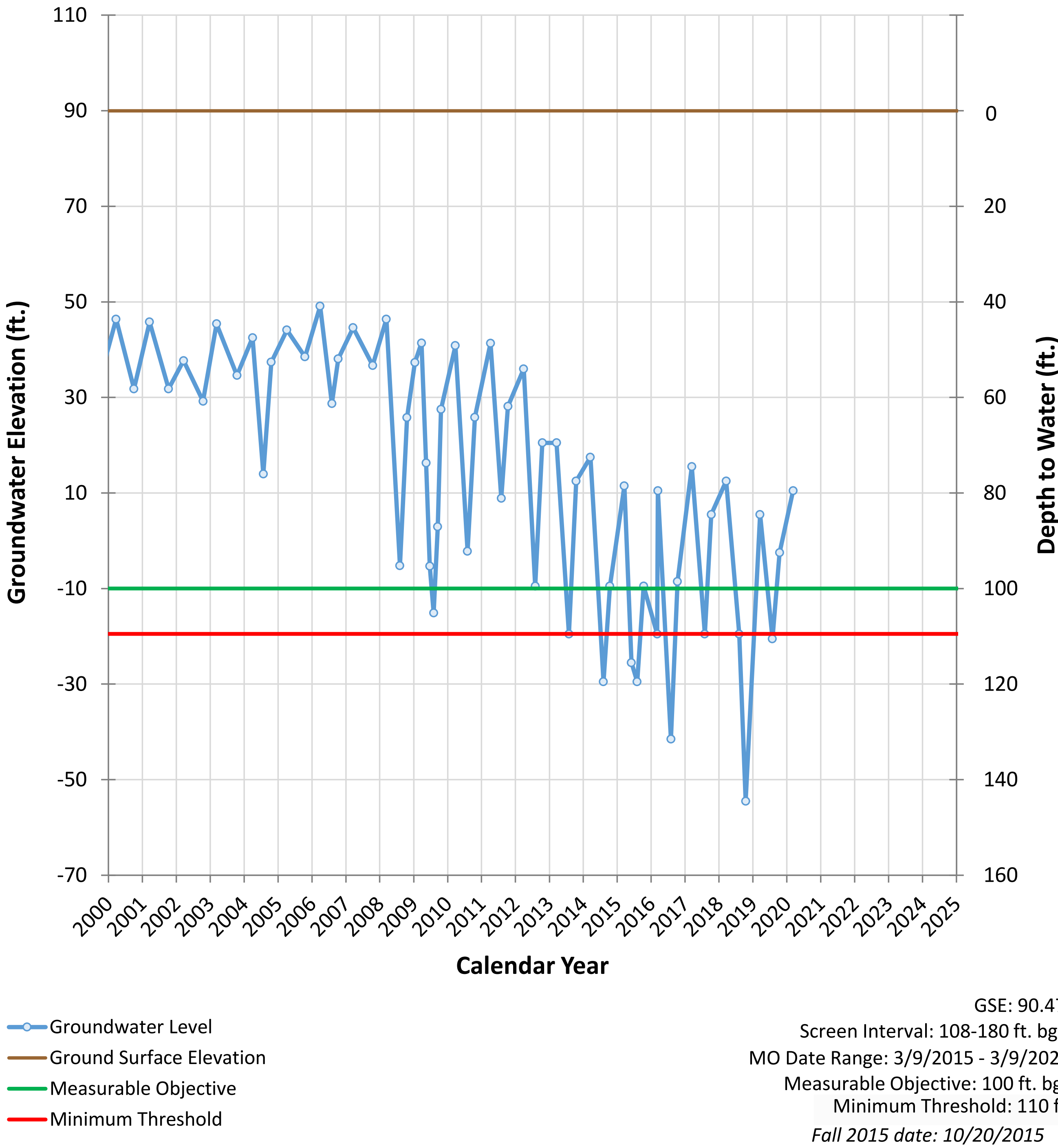
GSE: 230.51
Screen Interval: 50-60 ft. bgs
MO Date Range: 3/12/2015 - 3/12/2020
Measurable Objective: 23 ft. bgs
Alternative Minimum Thresholds (bgs):
Fall 2015 date: 10/20/2015 Fall 2015 DTW: 26 ft.
2015 + 20% Range (DTW): 30 ft.
2015 + 10ft. (DTW): 36 ft.

Attachment D. Depletion of Interconnected Surface Water – Minimum Thresholds and Measurable Objectives

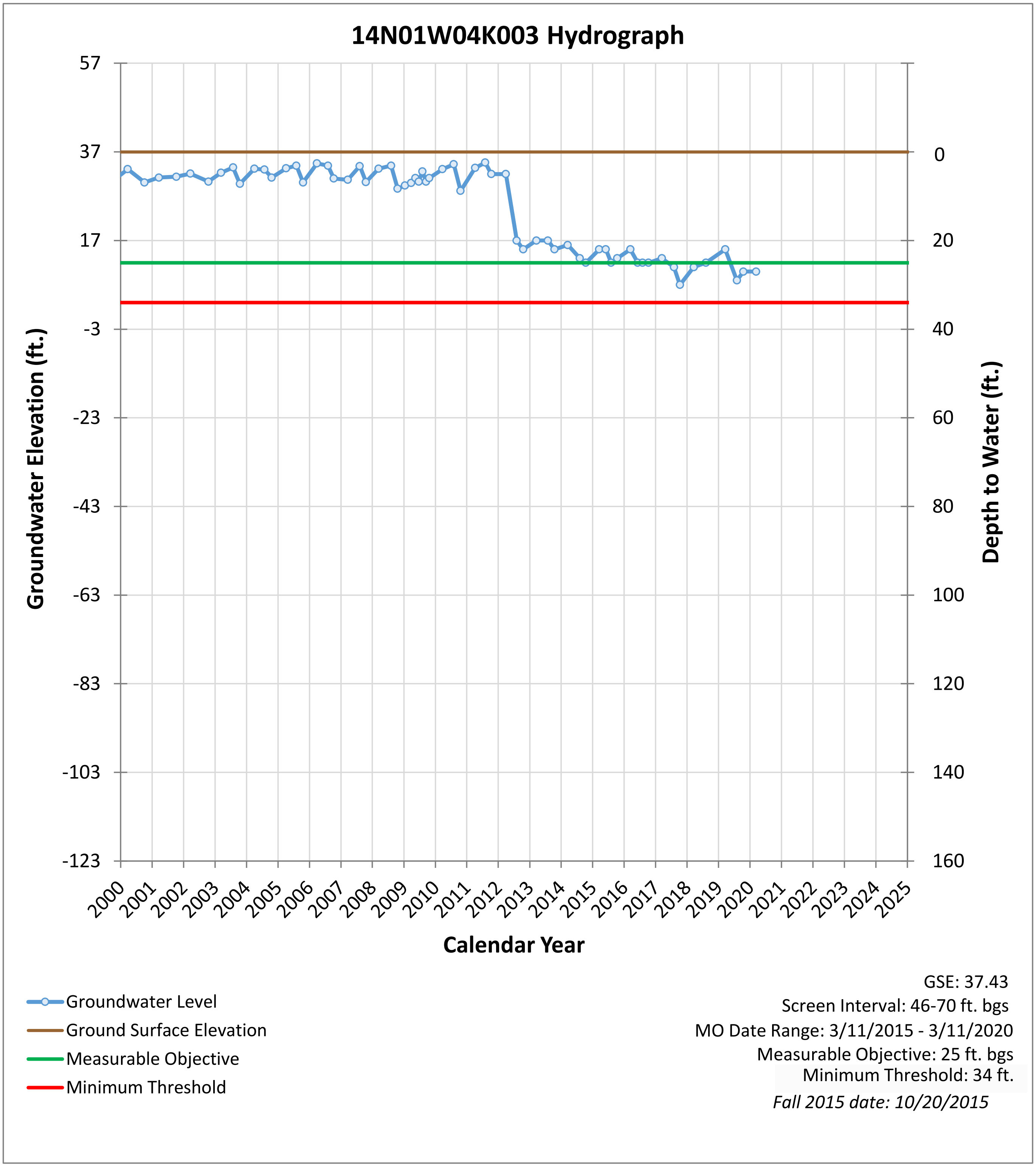


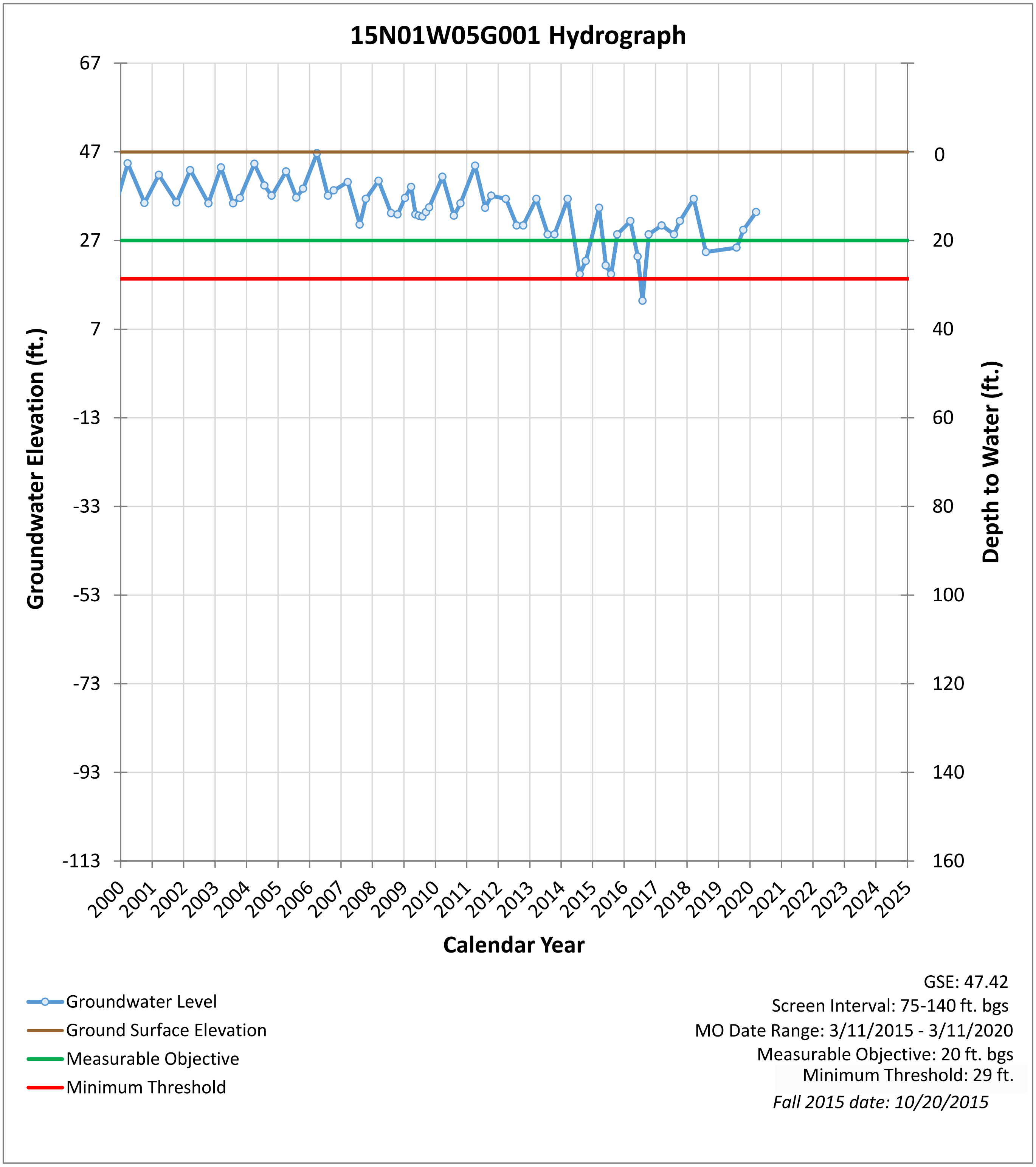
GSE: 31.8
Screen Interval: 136 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 10 ft. bgs
Minimum Threshold: 19 ft.
Fall 2015 date: 10/20/2015

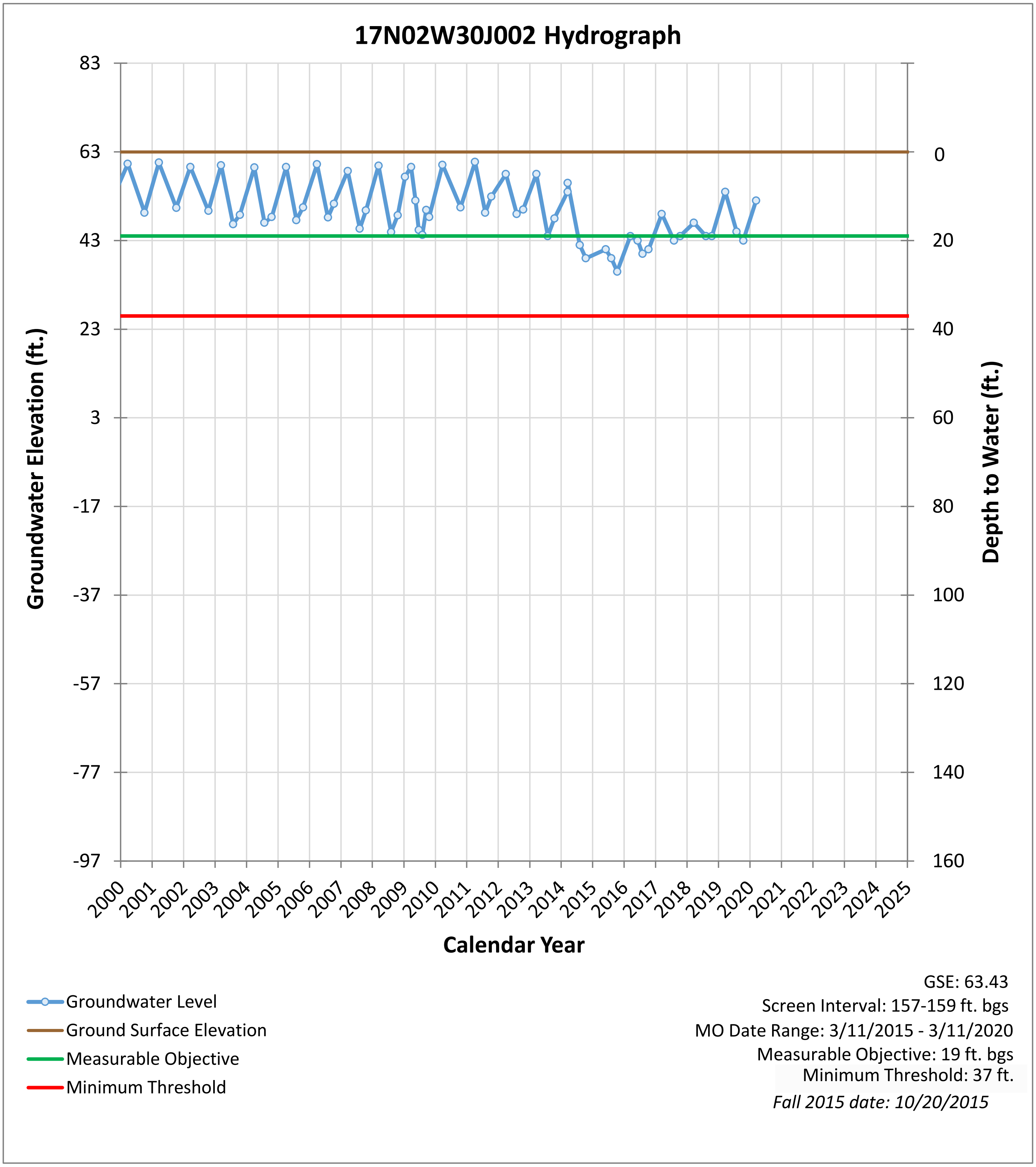
13N01W07G001 Hydrograph



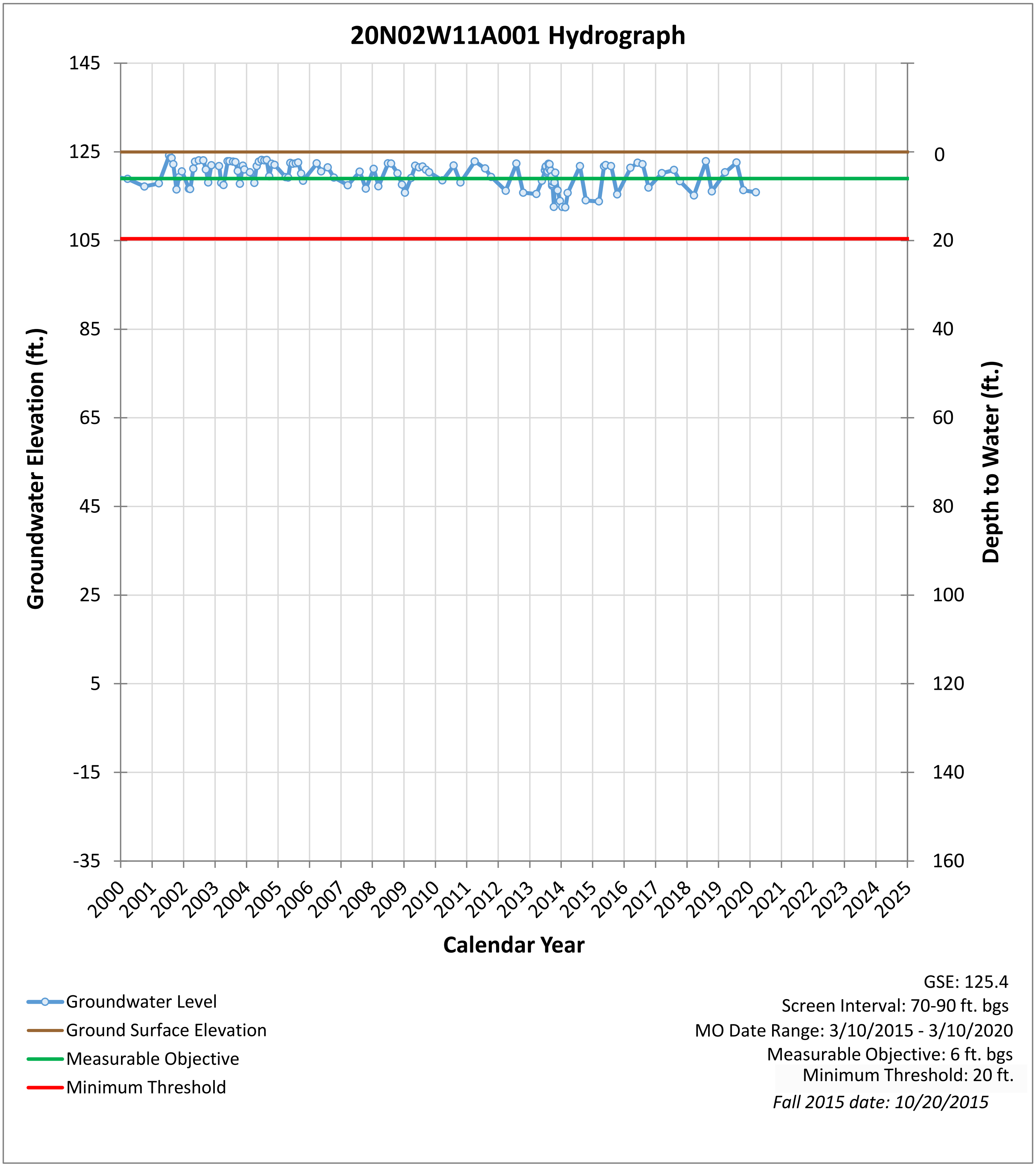
GSE: 90.47
Screen Interval: 108-180 ft. bgs
MO Date Range: 3/9/2015 - 3/9/2020
Measurable Objective: 100 ft. bgs
Minimum Threshold: 110 ft.
Fall 2015 date: 10/20/2015


14N01W04K003 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
57
37
17
-3
-23
-43
-63
-83
-103
-123
0
20
40
60
80
100
120
140
160
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 37.43
Screen Interval: 46-70 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 25 ft. bgs
Minimum Threshold: 34 ft.
Fall 2015 date: 10/20/2015

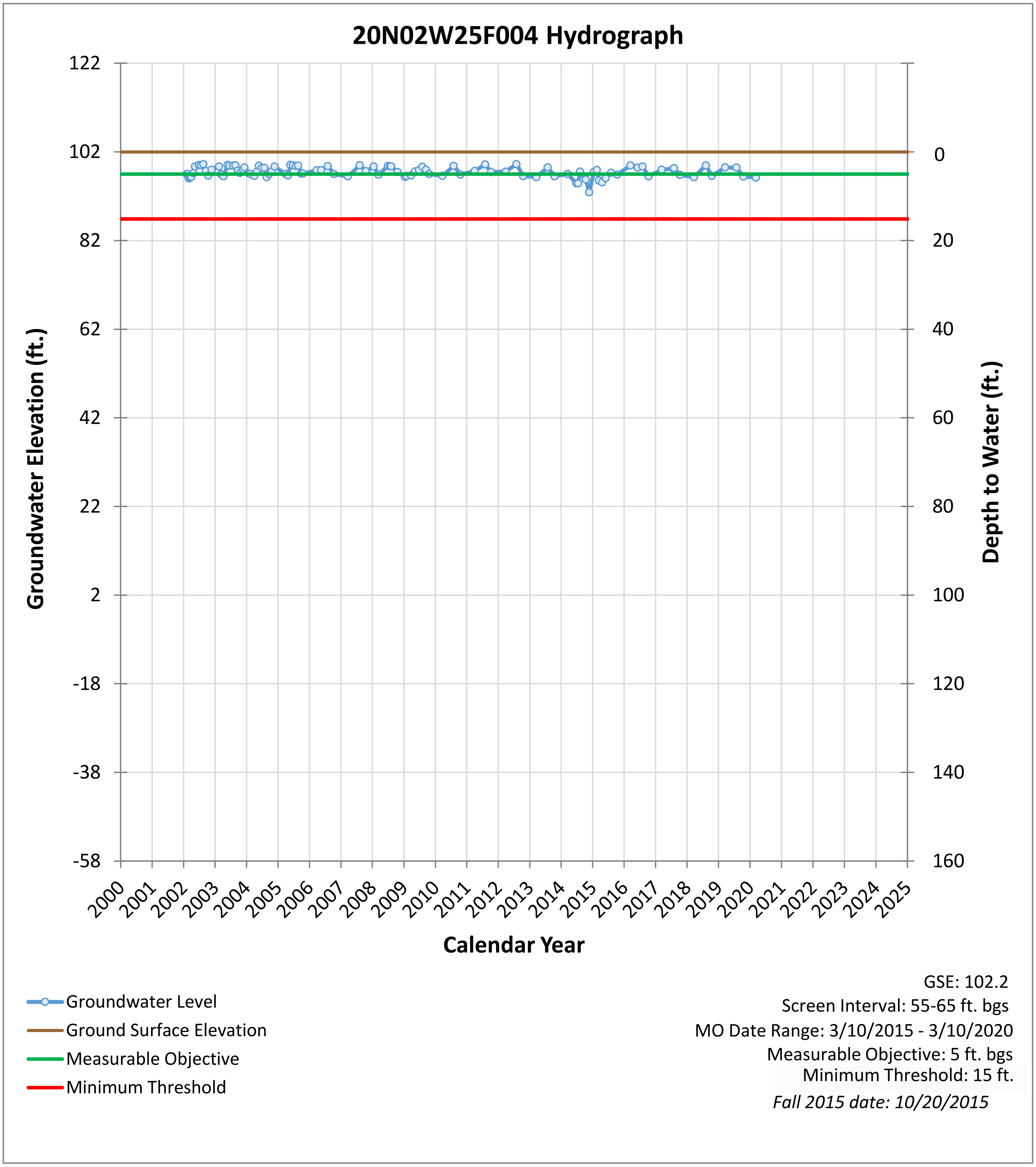

15N01W05G001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
67
47
27
7
-13
-33
-53
-73
-93
-113
0
20
40
60
80
100
120
140
160
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 47.42
Screen Interval: 75-140 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 20 ft. bgs
Minimum Threshold: 29 ft.
Fall 2015 date: 10/20/2015

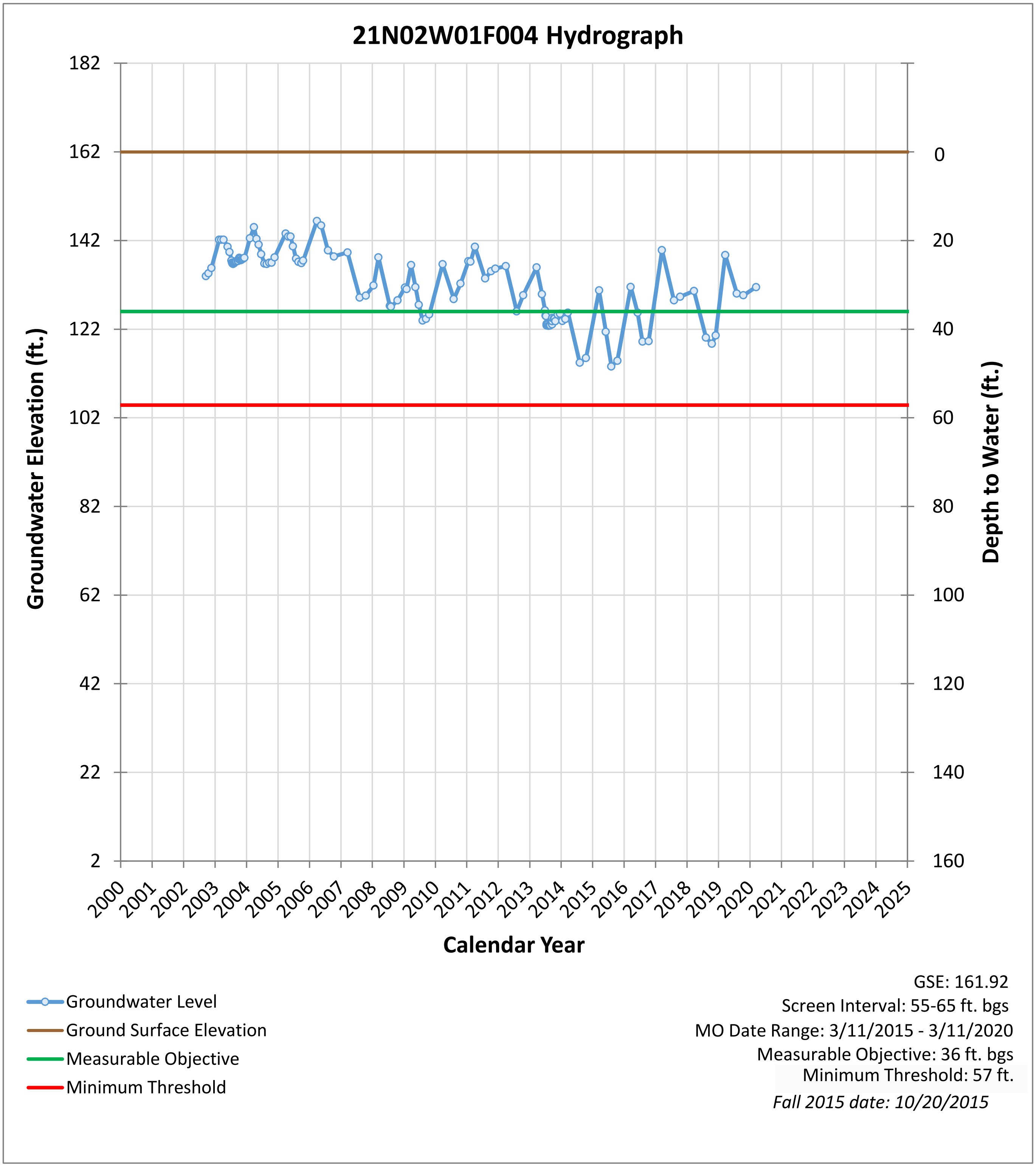


17N02W30J002 Hydrograph
83
63
43
23
3
-17
-37
-57
-77
-97
0
20
40
60
80
100
120
140
160
Groundwater Elevation (ft.)
Depth to Water (ft.)
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 63.43
Screen Interval: 157-159 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 19 ft. bgs
Minimum Threshold: 37 ft.
Fall 2015 date: 10/20/2015

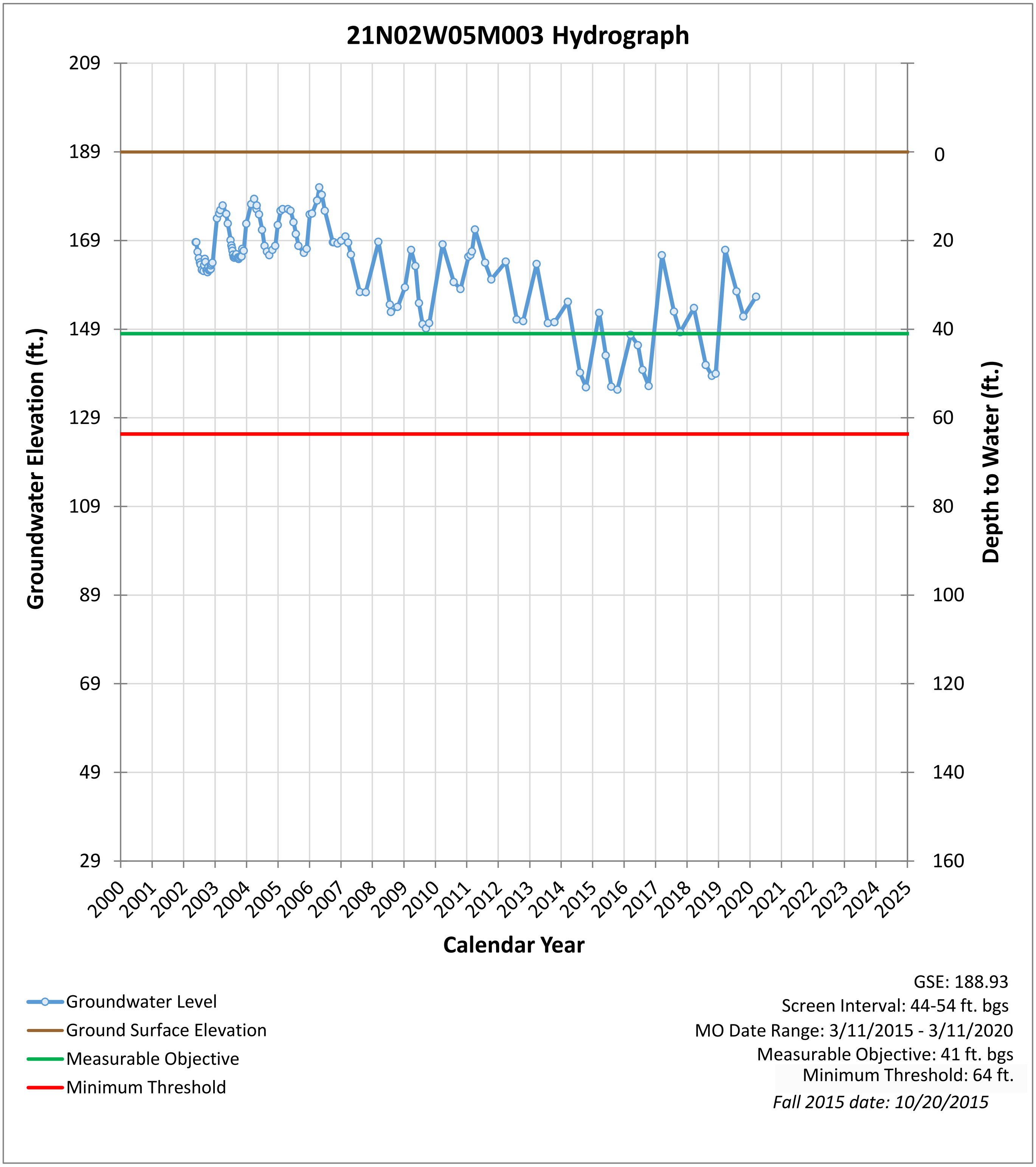


20N02W11A001 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
145
125
105
85
65
45
25
5
-15
-35
0
20
40
60
80
100
120
140
160
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 125.4
Screen Interval: 70-90 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 6 ft. bgs
Minimum Threshold: 20 ft.
Fall 2015 date: 10/20/2015

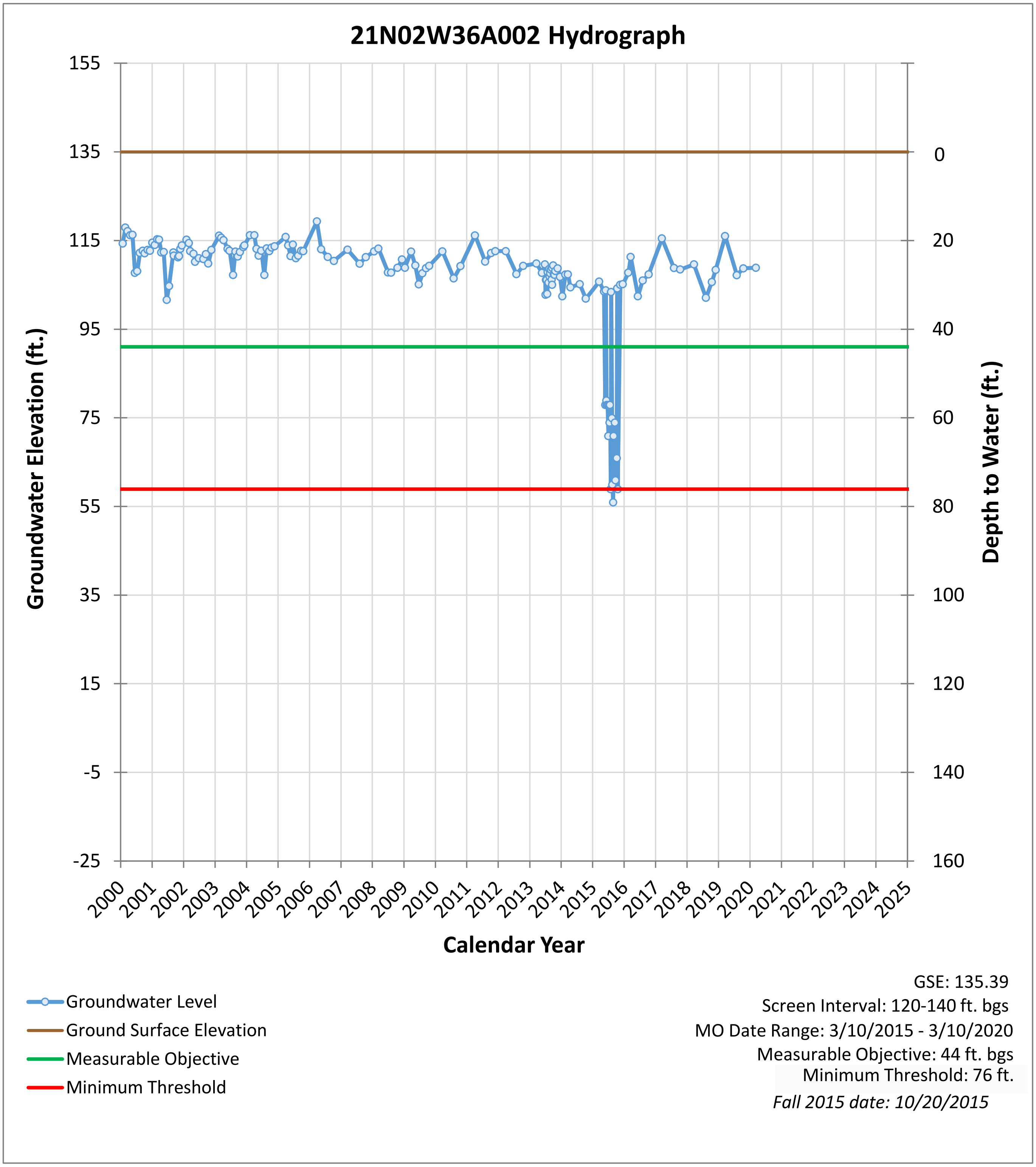

20N02W25F004 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
122
102
82
62
42
22
2
-18
-38
-58
0
20
40
60
80
100
120
140
160
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 102.2
Screen Interval: 55-65 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 5 ft. bgs
Minimum Threshold: 15 ft.
Fall 2015 date: 10/20/2015



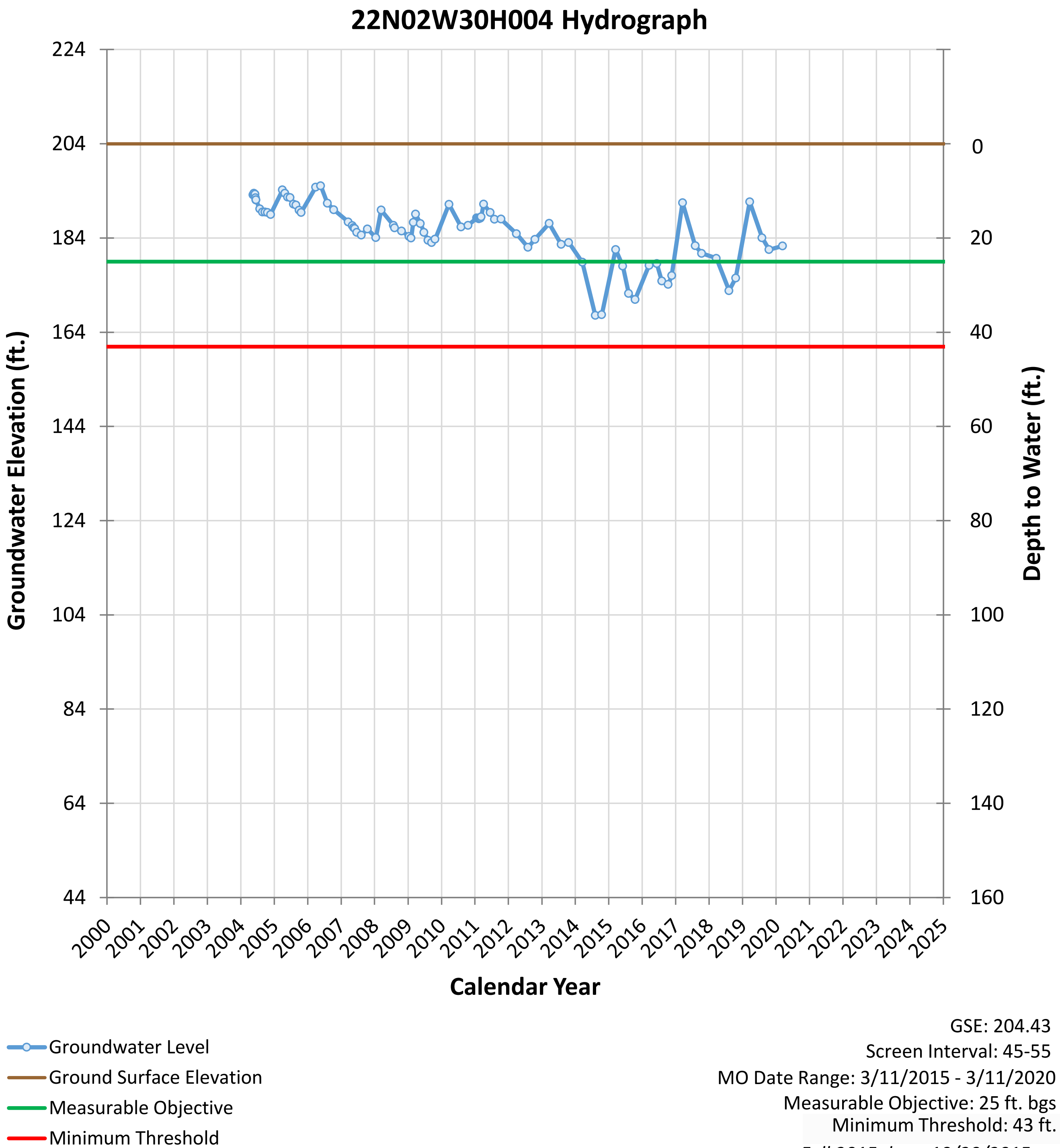
21N02W01F004 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
182
162
142
122
102
82
62
42
22
2
0
20
40
60
80
100
120
140
160
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 161.92
Screen Interval: 55-65 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 36 ft. bgs
Minimum Threshold: 57 ft.
Fall 2015 date: 10/20/2015



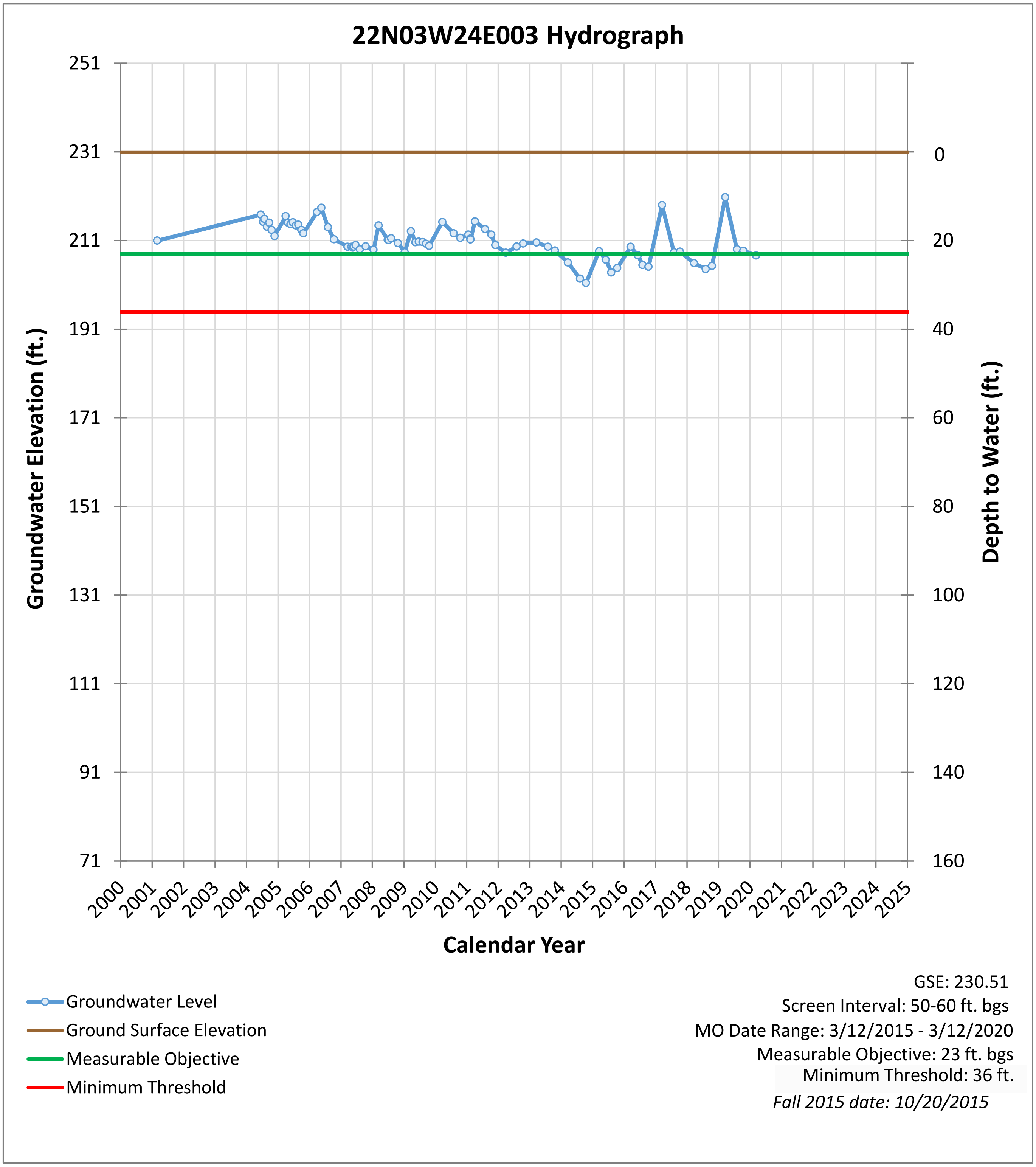
21N02W05M003 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
209
189
169
149
129
109
89
69
49
29
0
20
40
60
80
100
120
140
160
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 188.93
Screen Interval: 44-54 ft. bgs
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 41 ft. bgs
Minimum Threshold: 64 ft.
Fall 2015 date: 10/20/2015



21N02W36A002 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
155
135
115
95
75
55
35
15
-5
-25
0
20
40
60
80
100
120
140
160
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Calendar Year
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 135.39
Screen Interval: 120-140 ft. bgs
MO Date Range: 3/10/2015 - 3/10/2020
Measurable Objective: 44 ft. bgs
Minimum Threshold: 76 ft.
Fall 2015 date: 10/20/2015



GSE: 204.43
Screen Interval: 45-55
MO Date Range: 3/11/2015 - 3/11/2020
Measurable Objective: 25 ft. bgs
Minimum Threshold: 43 ft.
Fall 2015 date: 10/20/2015



22N03W24E003 Hydrograph
Groundwater Elevation (ft.)
Depth to Water (ft.)
Calendar Year
251
231
211
191
171
151
131
111
91
71
0
20
40
60
80
100
120
140
160
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
Groundwater Level
Ground Surface Elevation
Measurable Objective
Minimum Threshold
GSE: 230.51
Screen Interval: 50-60 ft. bgs
MO Date Range: 3/12/2015 - 3/12/2020
Measurable Objective: 23 ft. bgs
Minimum Threshold: 36 ft.
Fall 2015 date: 10/20/2015