



MEMORANDUM

TO: SLDMWA Board of Directors, Alternates

FROM: John Brodie, Water Resource Programs Manager
Joe McGahan, Regional Drainage/Westside Watershed Coalition Coordinator

DATE: September 15, 2022

RE: Activity Agreements – Staff Report for August 2022

This memorandum serves as the Staff Report for August 2022 regarding specified¹ Water Authority activities not separately addressed on the Board meeting agenda.

1. Integrated Regional Water Management (IRWM) Activity Summary

General Westside-San Joaquin Integrated Regional Water Management Plan (IRWMP)

Three projects from the Westside San Joaquin IRWM Region were submitted for consideration by the California Department of Water Resources (DWR) for consideration of funding from the Proposition 1 Round 2 IRWM Implementation Grant Program. Del Puerto Water District submitted an application for \$950,000 from the San Joaquin River Funding Area (SJRF). Two projects from Westlands Water District will compete with projects from the Tulare Kern Funding Area's (TKFA) seven other IRWM regions.

Work continues on projects funded in Proposition 1 Round 1 in the SJRF. Three active projects will add approximately 17,000 acre feet per year (AFY), plus increase water supply reliability and pumping efficiency by another 88,000 AFY. Two completed projects will add approximately 14,000 AFY in SJRF and 1,000 AFY in TKFA.

Staff continues to take part in meetings and webinars including meetings of the IRWM Roundtable of Regions (ROR), the IRWM ROR Disadvantaged Communities and Tribal Working Group, and the Technical Advisory Committee of the Water Blueprint for the San Joaquin Valley.

2. Sustainable Groundwater Management Activity (SGMA) Activity Summary

Coordinated Activities

GSAs recently completed collection of water quality samples from Representative Monitoring Network (RMN) sites in the Subbasin. The information will be stored in the Subbasin's data

¹ For the sake of completeness, this includes those Activity Agreements that have been approved by the Board of Directors, but not yet signed by all interested members and/or participants (i.e., the Los Vaqueros Expansion Project Activity Agreement, the Exchange Contractors 2019-2023 Transfer Program Activity Agreement, and the Westside-San Joaquin Integrated Regional Water Management Activity Agreement).

management system and uploaded to DWR's SGMA Portal. Fall groundwater level monitoring will begin September 1, 2022. GSP groups are also reviewing the latest subsidence monitoring data from USBR and DWR.

General SGMA Activities

DWR and Del Puerto Water District are expected to finalize a grant agreement for \$7.6 million dollars from the state's SGMA Round 1 Implementation Grant Program. Del Puerto Water District served as the lead applicant on behalf of the Subbasin. Water recharge and enhancement activities are expected to add more than 25,000 AFY in storage, recharge, and water supply reliability to the Subbasin once completed. Other funds will be used for installation of monitoring equipment, site selections and studies to inform adaptive management for SGMA implementation activities. Funds can also be used to offset the cost of revising GSPs determined incomplete by DWR, and to pay for work on the 5 year GSP updates due in 2025.

3. Drainage Activity Summary

Grassland Basin Drainage Management Steering Committee Activity Summary

- *Grassland Water District Monitoring Wells*

A total of 10 observation wells are planned to be installed to monitor groundwater levels and quality within the San Joaquin River Improvement Project and in a portion of Grassland Water District to the north. To date, five of the observation wells have been installed. The remaining five were delayed due to permitting issues from Merced County and landowner issues, which are in the process of being addressed.

- *Compliance Monitoring*

Work is continuing to comply with the monitoring requirement of the 2019 Revised WDRs and with the December 2019 Use Agreement. This monitoring includes particulate sediment and fish collection and analysis to continue to analyze possible impacts of very infrequent discharge from the Grassland Bypass Project to Mud Slough and the San Joaquin River.

- *Other ongoing activities*

Continue to review GBD invoices, prepare annual monitoring reports, support for ongoing litigation and data management and management of the Third Party Group for the Grassland Drainage Area Coalition to implement the Irrigated Lands Regulatory Program. Work includes participation in activities for groundwater protection values.

San Joaquin Valley Drainage Authority Activity Summary

- *General*

Continue management of the Westside San Joaquin River Watershed Coalition to comply with the Irrigated Lands Regulatory Program. Follow up calls and emails were answered to assist farmers in completing their paperwork requirements. Manage field monitoring program and provide update of the management plan to the Regional Board. Review invoices from consultants and prepare letters to admin staff. Continue to update membership database. Enter farmer evaluation and nitrogen summary reports into coalition database. Meet with members to answer program questions.

- *Groundwater Protection Formula, Values and Targets*

Coalitions are developing a methodology to establish nitrogen loading values and targets as required by the WDRs. The coalitions have calculated current values by township (36 square miles) and will propose interim targets and longer-term final targets for each township. If a township does not meet the approved GWP Targets, Coalitions will need to amend their Groundwater Quality Management Plan to include new management practices designed to meet the township's GWP Target. If a Coalition has elected to comply with the state's Nitrogen Permitting Strategy through the Management Zone alternative, the Coalition will have significantly more time to meet final GWP Targets.

- *Management Zones*

The Central Valley Basin Plan's Nitrate Permitting Strategy divided the Central Valley into Priority 1, Priority 2 and non-Prioritized basins. The Westside Coalition is in Priority 2. Priority 1 basins have developed and begun to implement their nitrate programs. The Regional Board is expected to issue notices to comply to Priority 2 basins in early 2023. The Westside San Joaquin River Watershed Coalition is in a Priority 2 basin and therefore is expected to receive a Notice to Comply from the Regional Board in 2023. The Westside Coalition is working to develop a plan to help form a Management Zone to comply with the requirements. The Management Zone will incorporate all dischargers of nitrate to groundwater, including municipal wastewater plants, dairies and industrial dischargers. The Management Zone will need to identify domestic wells that are high in nitrate and develop and plan to provide alternative water.

San Luis & Delta-Mendota Water Authority
Procurement Activity Report
From July 28, 2022 to September 6, 2022

Date Executed	Contract Title	Vendor or Service Provider	Contract Amount	Contract Solicitation Type	Contract Type	Funding Source	Notes
NOTE: NO CONTRACTS WERE AWARDED UNDER THE AUTHORITY'S INFORMAL BIDDING, FORMAL BIDDING, OR SINGLE-SOURCE PROCEDURES DURING THIS REPORT PERIOD							
CONTRACT CHANGE ORDER NOTIFICATIONS:							
Date Executed	Contract Title	Vendor or Service Provider	Change Order Amount	Original Contract Amount	% Change	Justification	
NOTE: NO CONTRACT CHANGE ORDERS WERE ISSUED DURING THIS REPORT PERIOD							

This Procurement Activity Report is intended to satisfy the requirements in the San Luis & Delta-Mendota Water Authority's Consolidated Procurement Policy that the Board be notified of all contracts awarded under informal and formal bidding procedures and single-source procedures, as well as certain change orders, promptly following award.



MEMORANDUM

TO: SLDMWA Board of Directors. Alternates
SLDMWA Water Resources Committee Members, Alternates

FROM: Scott Petersen, Water Policy Director
Cynthia Meyer, Special Programs Manager

DATE: September 12, 2022

RE: Recommendation to Board of Directors to Authorize Execution of Agreement with Friant Water Authority for Joint Funding of Consultant Services Relating to Phase 3b of the Delta Smelt Structured Decision Making Project

BACKGROUND

On May 19, 2022, the State Water Contractors entered into a Consulting Services Agreement with Compass Resource Management, Ltd., for completion of the Delta Smelt Structured Decision Making Project – Phase 3b – Completion of Round 1 Structured Decision Making Evaluation. Consistent with historical funding practices, SLDMWA staff engaged in cost sharing discussions with Contra Costa Water District and Friant Water Authority to spread the costs of funding the study more equitably across the various Delta-reliant federal contractors participating in CSAMP/CAMT.

As a reminder, the proposal to CAMT for the Delta Smelt Structured Decision Making Project envisioned three phases:

1. **Phase 1 – Project Initiation:** Set up the necessary structures and processes to manage and implement the multi-year project, including the CSAMP Steering Committee and Technical Working Group. *COMPLETE*
2. **Phase 2 – Foundation Work:** Focus on foundational work necessary for the Delta Smelt-related components of the SDM process. *COMPLETE*
3. **Phase 3a – SDM Evaluation (front end):** Specify management portfolios (distinct combinations of actions) to evaluate and methods for modeling or otherwise capturing their effects. *COMPLETE*
4. **Phase 3b – Complete Round 1 SDM Evaluation:** Formal evaluation of Delta Smelt recovery actions/portfolios along with the full suite of objectives: Salmon, Longfin Smelt, Water Supply, and Cost.

The current project would complete the first round of structured decision making evaluation for delta smelt recovery actions/portfolios, further informing upcoming regulatory processes and advancing the analysis of tradeoffs between various recovery actions. To date, SLDMWA has funded the prior Delta Smelt SDM work on a 50-50 basis with the State Water Contractors.

ISSUE FOR DECISION

Whether the Water Resources Committee should recommend to the Board that it authorize, in substantially similar form, the execution of the Agreement for Joint Funding of Consultant Services Related to Phase 3b of the Collaborative Science and Adaptive Management Program Delta Smelt Structured Decision Making Project.

RECOMMENDATION

Staff recommends the Committee recommend that the Board authorize execution, in substantially similar form, of the proposed agreement.

ANALYSIS

The SLDMWA Board has provided staff direction to work to increase the funding partners for SLDMWA jointly funded science programs with other contractor participants, particularly CSAMP and CAMT. The proposed agreement would reduce expenditures for SLDMWA member agencies participating in the Science Program funding by 18.89% for this project, consistent with Board direction.

BUDGET

The Science Program budget includes a total of \$392,500 for new Science Studies/Efforts, of which SLDMWA staff has earmarked \$180,000 for support of CAMT/CSAMP efforts.

The total fee estimate for Structured Decision Making Phase 3b is \$424,722, which has traditionally been funded by a 50-50 cost share between the State Water Contractors and SLDMWA. Metropolitan Water District provided an initial \$40,000 contribution to advance the project, leaving the remaining scope of work to be \$384,722 (Exhibit 2).

If the federal contractor participants match the historical cost share between state and federal contractors, the federal share of the work would be \$212,361, of which Contra Costa Water District has executed a cost share agreement directly with the State Water Contractors for \$30,000, leaving the remaining federal contractor share to be \$182,361.

The breakdown of costs (assuming this cost split) is below:

CSAMP Delta Smelt Structured Decision Making Phase 3b	
Total Cost	\$424,722
State PWA Share	\$212,361
Federal PWA Share	\$212,361
<i>Contra Costa WD</i>	<i>\$30,000 (to date)</i>
<i>SLDMWA</i>	<i>\$182,361</i>
<i>FWA (18.89% of SLDMWA cost (EC match))</i>	<i>\$34,448</i>

The agreement is structured in such a way that Friant Water Authority will participate in the funding for this project at the same rate as the Exchange Contractors participation percentage in the Leg-Ops Fund (18.89%).

33

EXHIBITS

1. Agreement for Joint Funding of Consultant Services Related to Phase 3b of the Collaborative Science and Adaptive Management Program Delta Smelt Structured Decision Making Project
2. State Water Contractors Consulting Services Agreement with Compass Resource Management Ltd.

blank

Anthea Hansen

From: Ramirez, Desiree@DWR <Desiree.Ramirez@water.ca.gov>
Sent: Monday, September 12, 2022 9:42 AM
To: Anthea Hansen
Cc: Lindsey Wilcox; Katie Cole; Ryan Hirano
Subject: RE: Proposition 1 IRWM Implementation Grant Program, Round 2

Good Morning Anthea,

Thank you for providing additional details explaining how the primary benefit of this project is water-related and directly benefits a Disadvantaged Community (DAC). Given the information in the revised DAC attachment, we have determined that your project will receive the requested Cost Share Waiver. Your application is complete and eligible and will now move on to technical review.

Have a great day!
 Desiree Ramirez
 916-902-6952

From: Anthea Hansen <ahansen@delpuertowd.org>
Sent: Monday, September 12, 2022 8:57 AM
To: Ramirez, Desiree@DWR <Desiree.Ramirez@water.ca.gov>
Cc: Lindsey Wilcox <lwilcox@woodardcurran.com>; Katie Cole <kcole@woodardcurran.com>; Ryan Hirano <RHirano@woodardcurran.com>
Subject: RE: Proposition 1 IRWM Implementation Grant Program, Round 2

Hi Desiree,

We provide the following revision to attachment 5 in answer to your email below. Please let us know if this helps.

Sincerely,
 Anthea

Anthea G. Hansen

*General Manager
 Del Puerto Water District
 PH 209-892-4470/FAX 209-892-4469*

From: Ramirez, Desiree@DWR <Desiree.Ramirez@water.ca.gov>
Sent: Thursday, September 8, 2022 1:45 PM
To: Anthea Hansen <ahansen@delpuertowd.org>
Subject: Proposition 1 IRWM Implementation Grant Program, Round 2

Dear Anthea Hansen,

35

blank

VIII.B.

Westside San Joaquin River Watershed Coalition
2021 Paperwork Status Update for Del Puerto WD as of 9/12/2022

<u>Survey Type</u>	<u>recvd</u>	<u>total</u>	<u>pct recvd</u>
INMPSR	111	116	96%

IDNo	Member Name	FE Req?	INMPSR Req?	2021 INMPSR Status	2021 paperwork req. met?
25040A	Gonzalez Farms	no	yes	not recvd	INMPSR missing
25117A	JT Farms #2	no	yes	not recvd	INMPSR missing
25122A	L & L Investments, LLC	no	yes	not recvd	INMPSR missing
25158A	Ace Orchards, LLC	no	yes	not recvd	INMPSR missing
25160A	Garlic City Properties, LLC	no	yes	not recvd	INMPSR missing

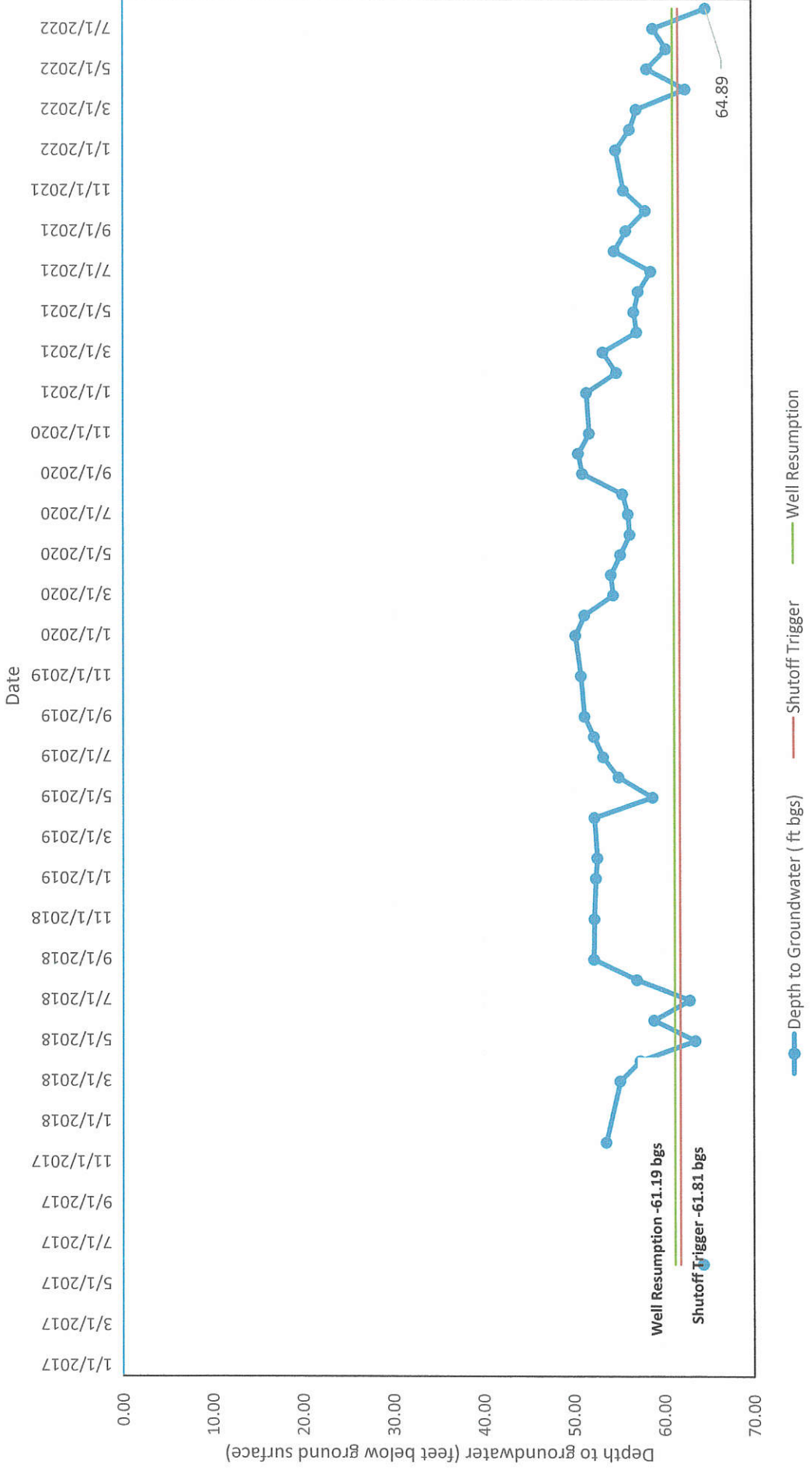
36

blank

VIII.C.

MP64.85L

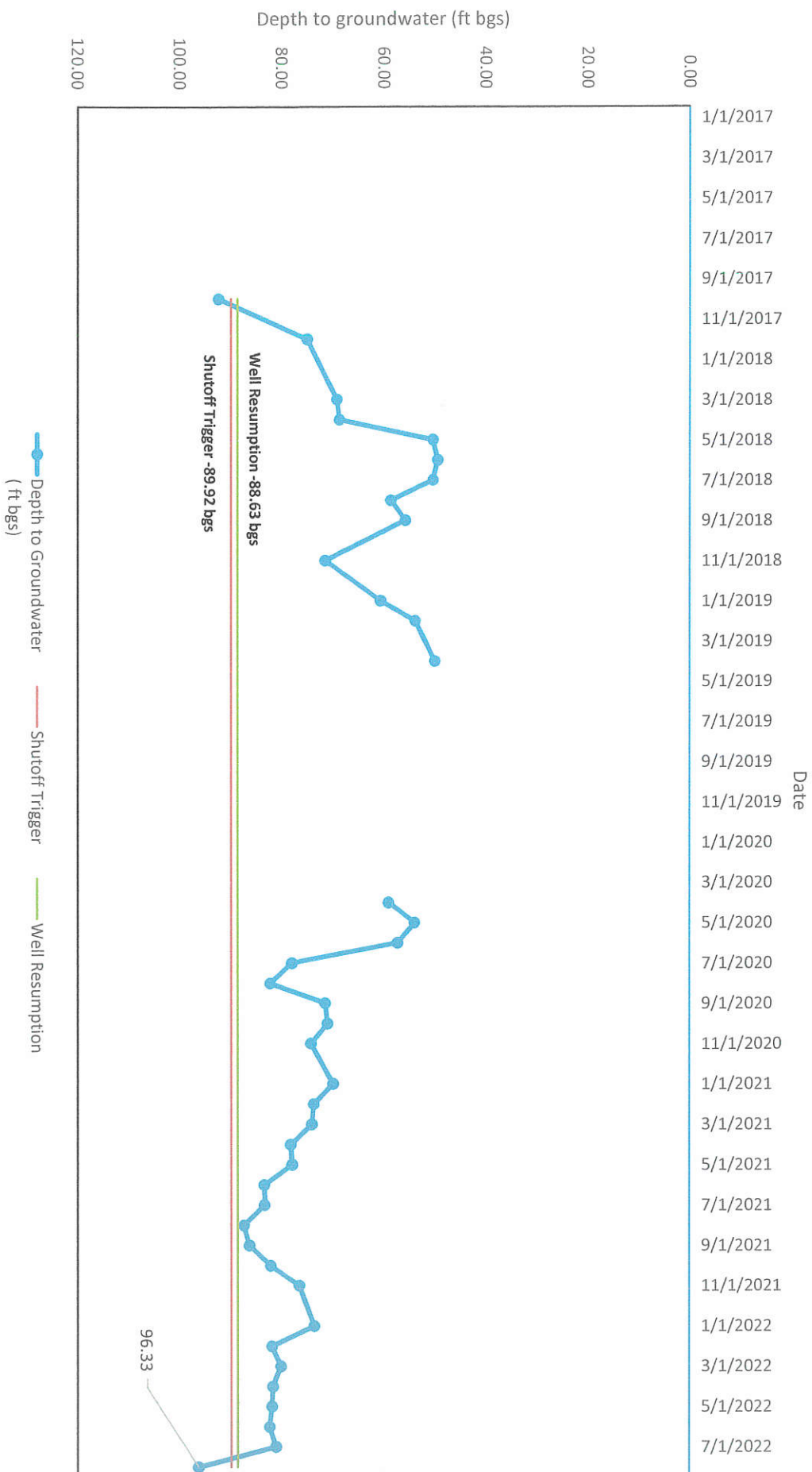
Perf:
Aquifer:



Perf:
Aquifer:

MP58.73R

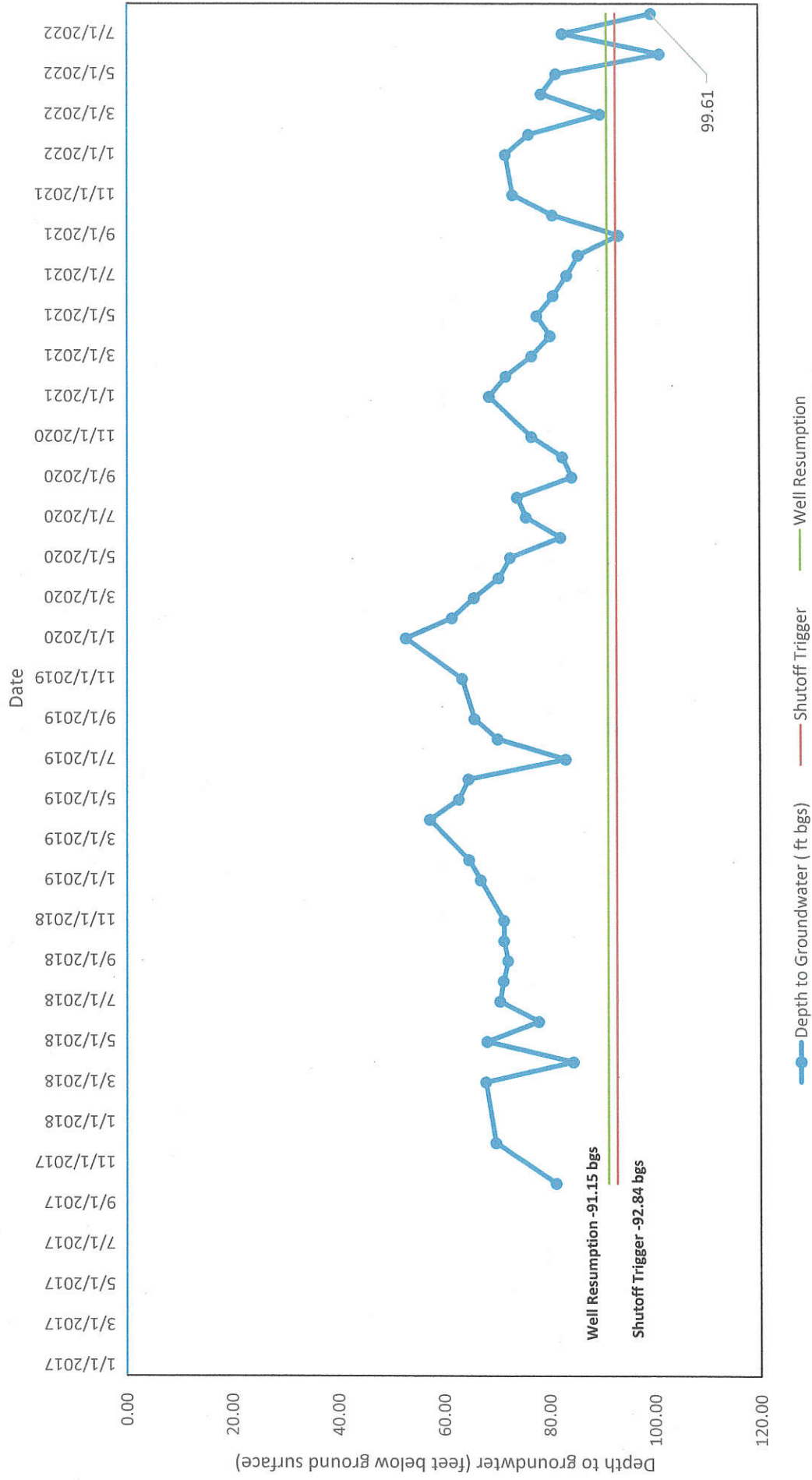
Well removed from program in 2019



25

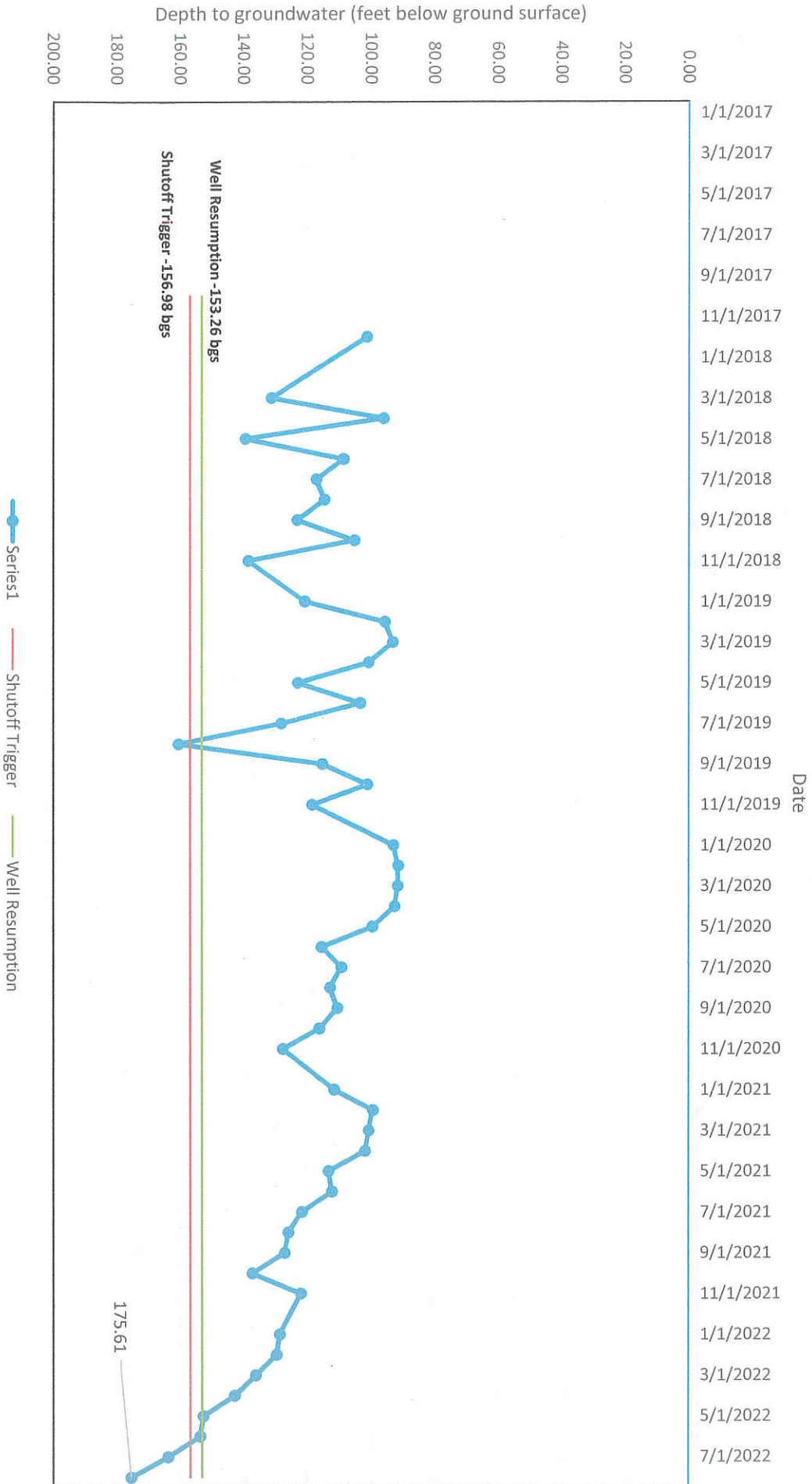
MP58.60L

Perf:
Aquifer:



Perf:
Aquifer:

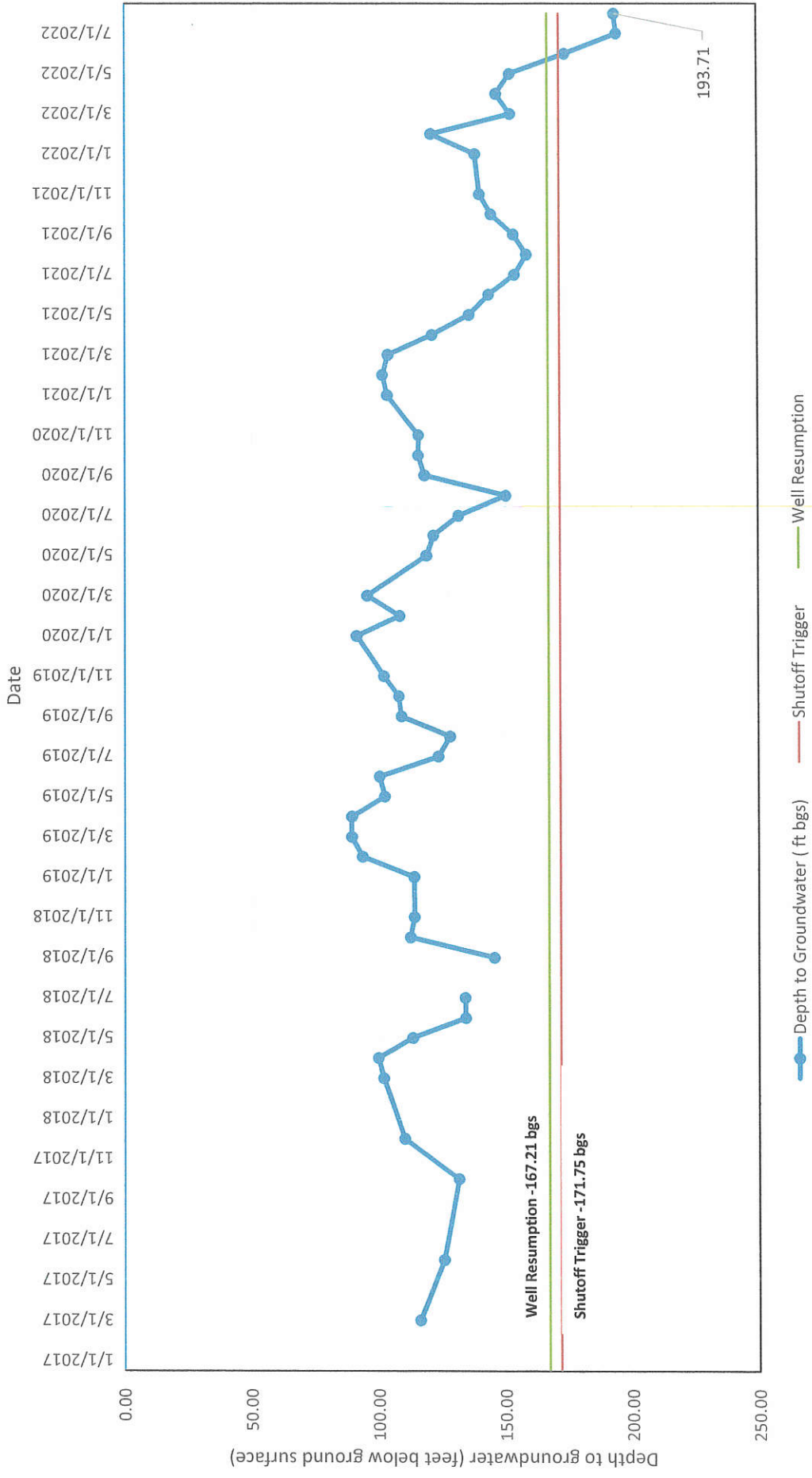
MP52.40L



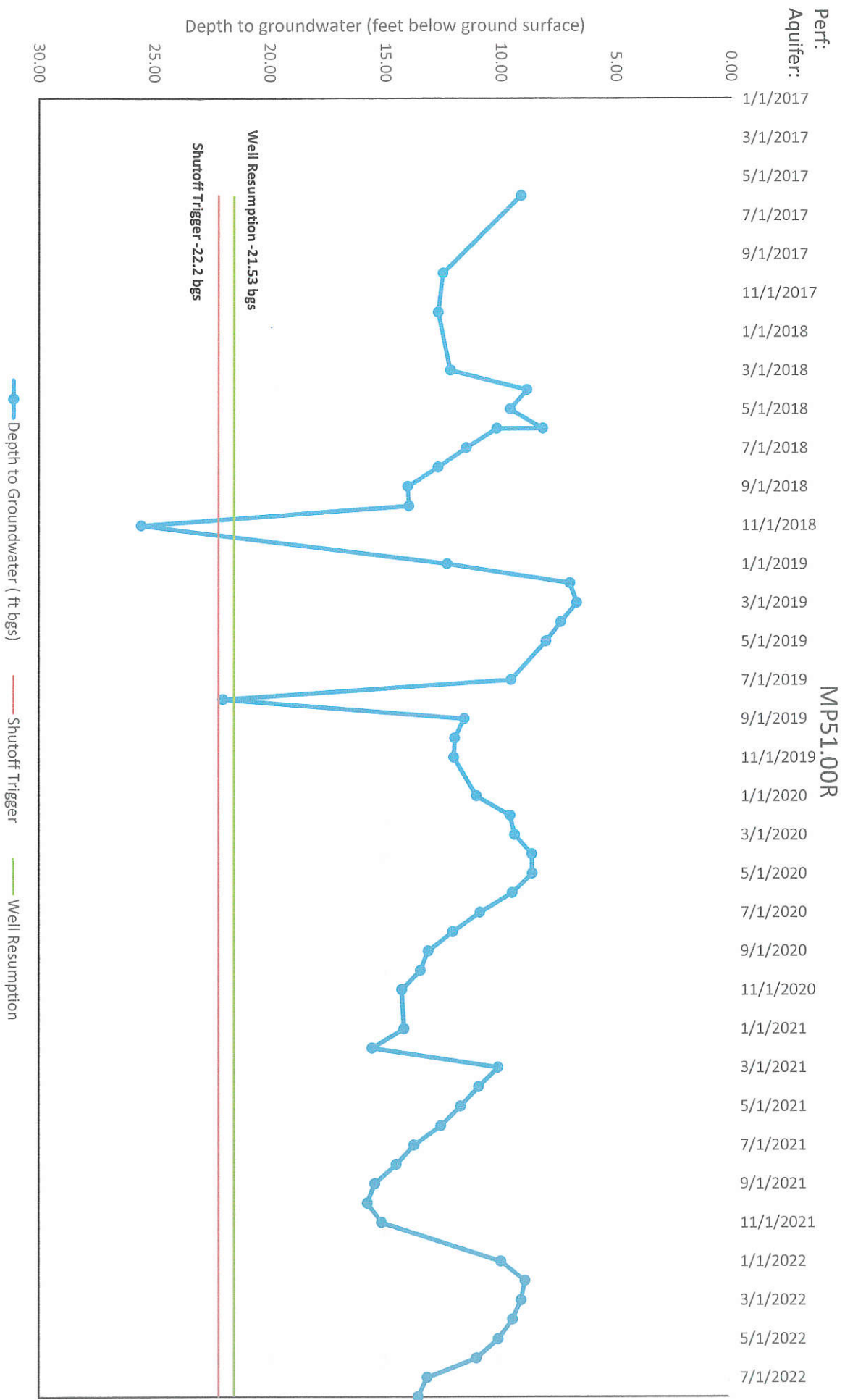
240

Perf: MP51.66L

Aquifer:



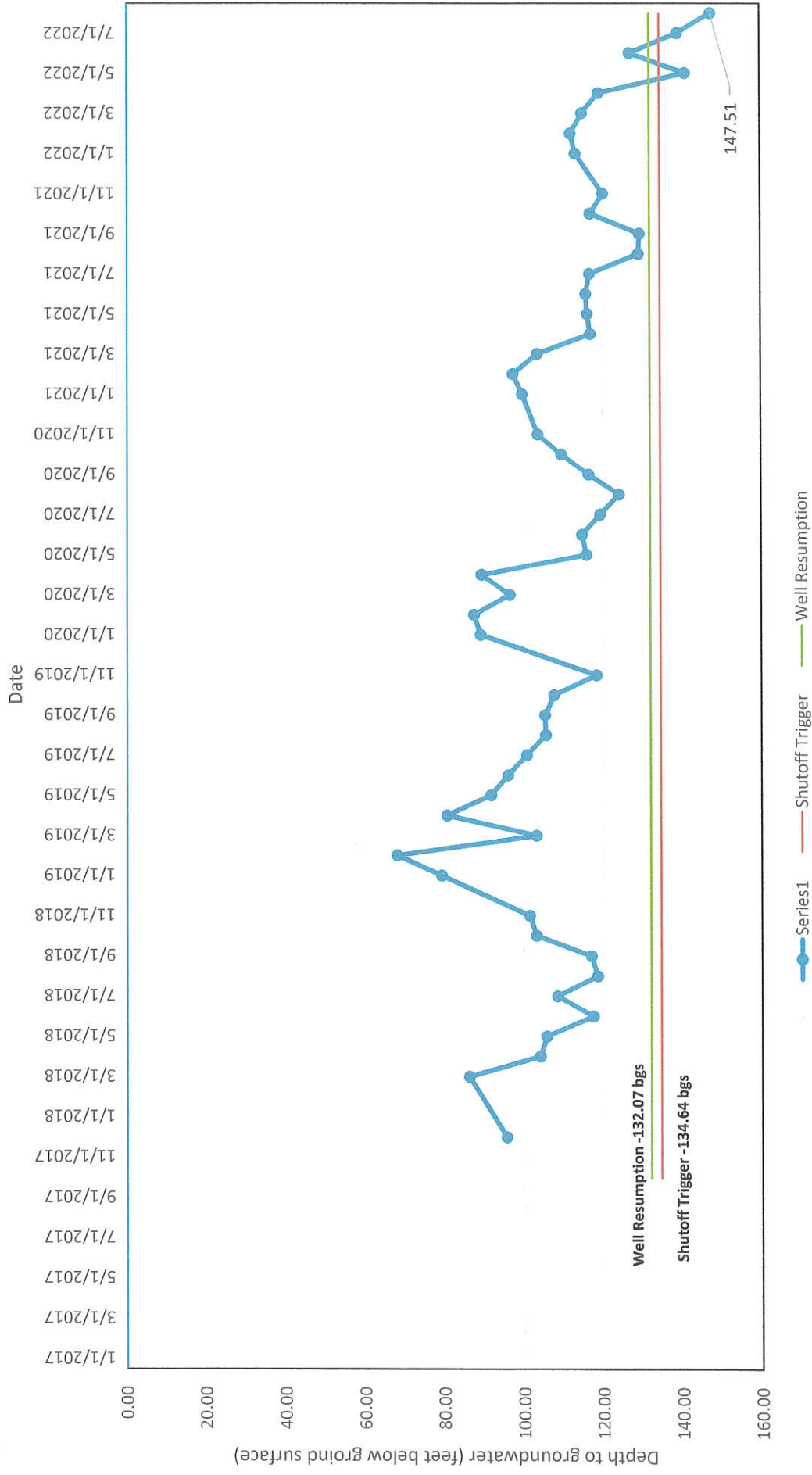
11



eh

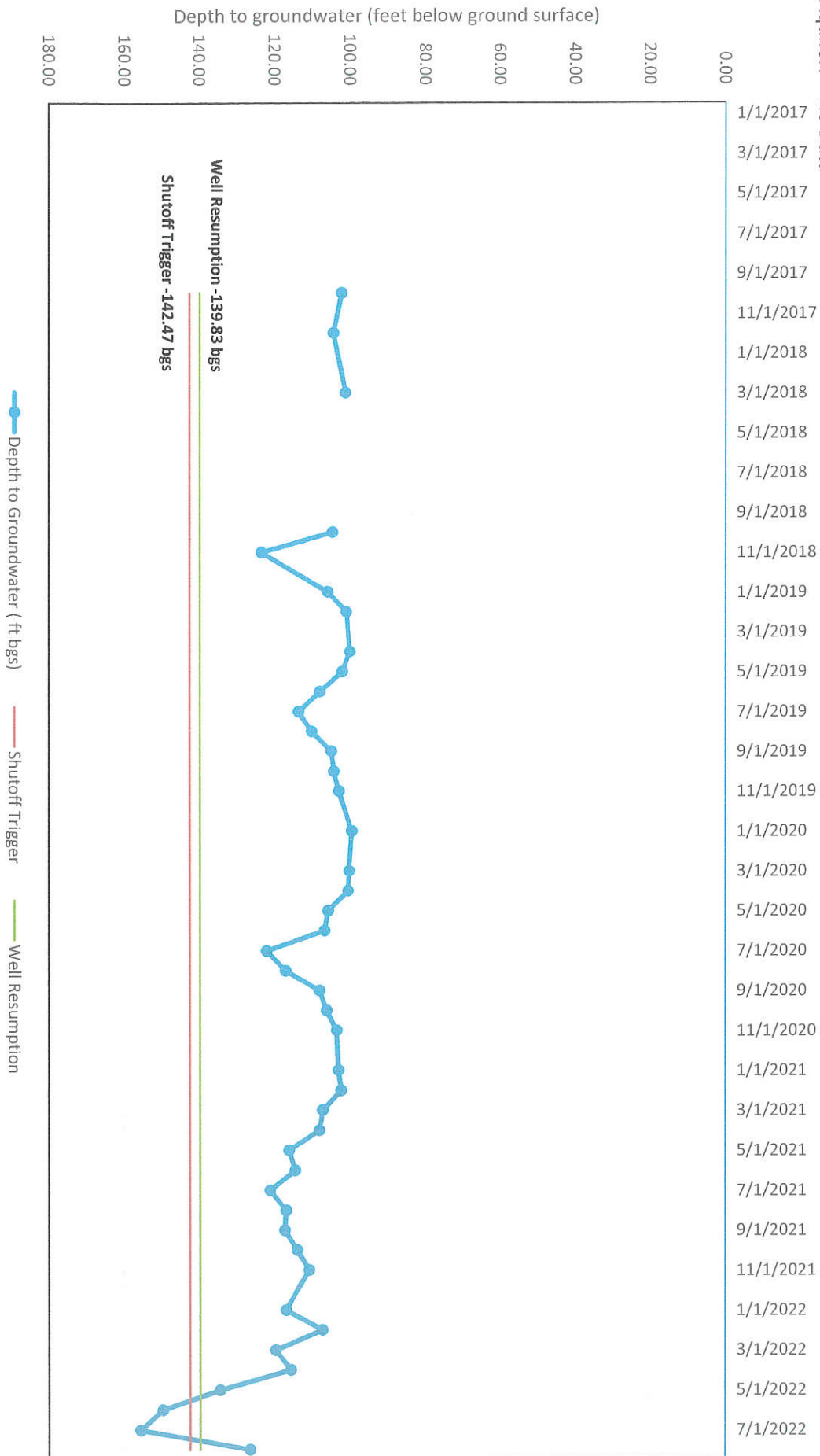
Perf: MP50.46L

Aquifer:



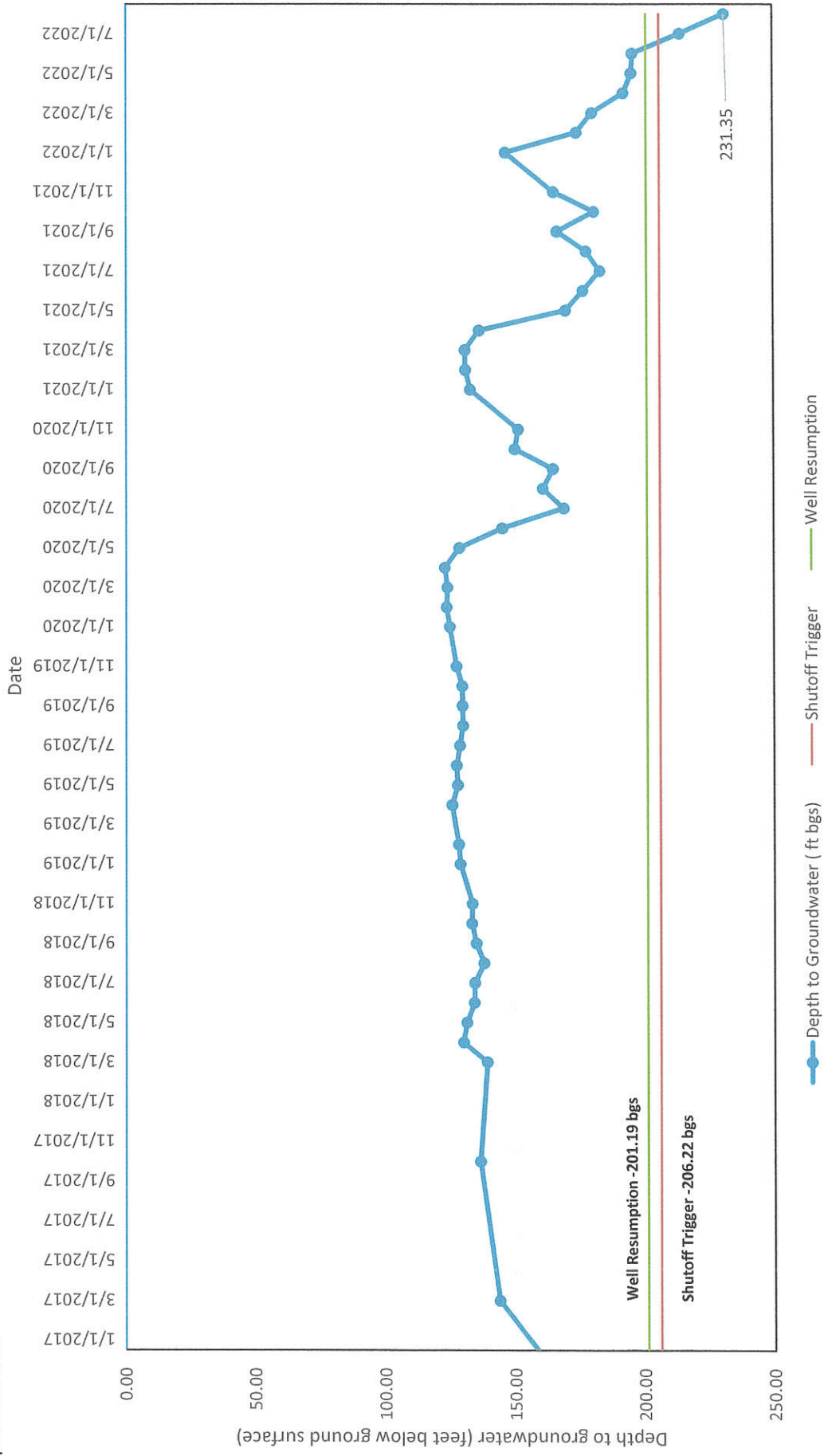
Perf: No Data
Aquifer: No Data

MP43.22L
Date



MP42.50R

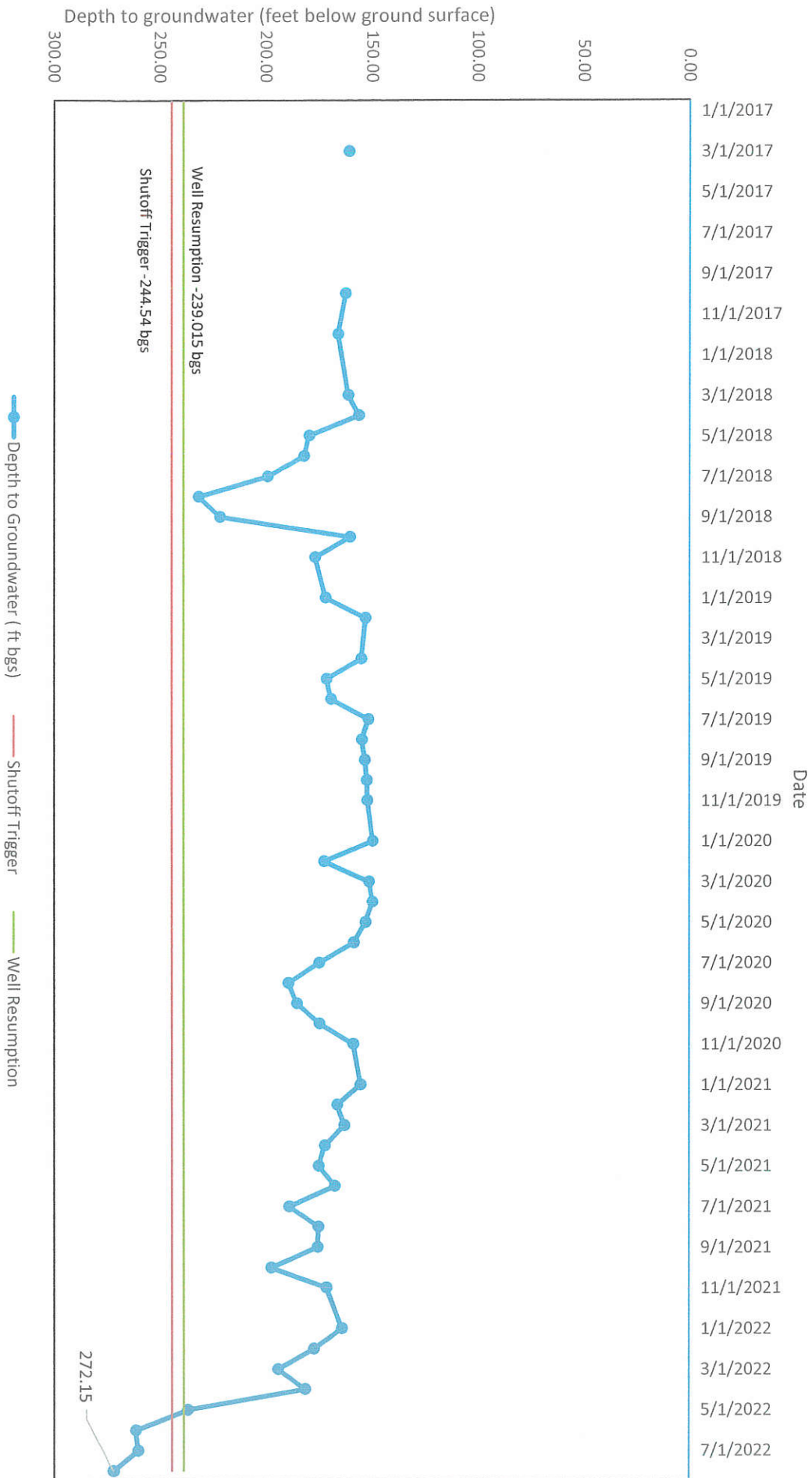
Perf: 420-450, 490-530, 550-600
Aquifer: Lower



45

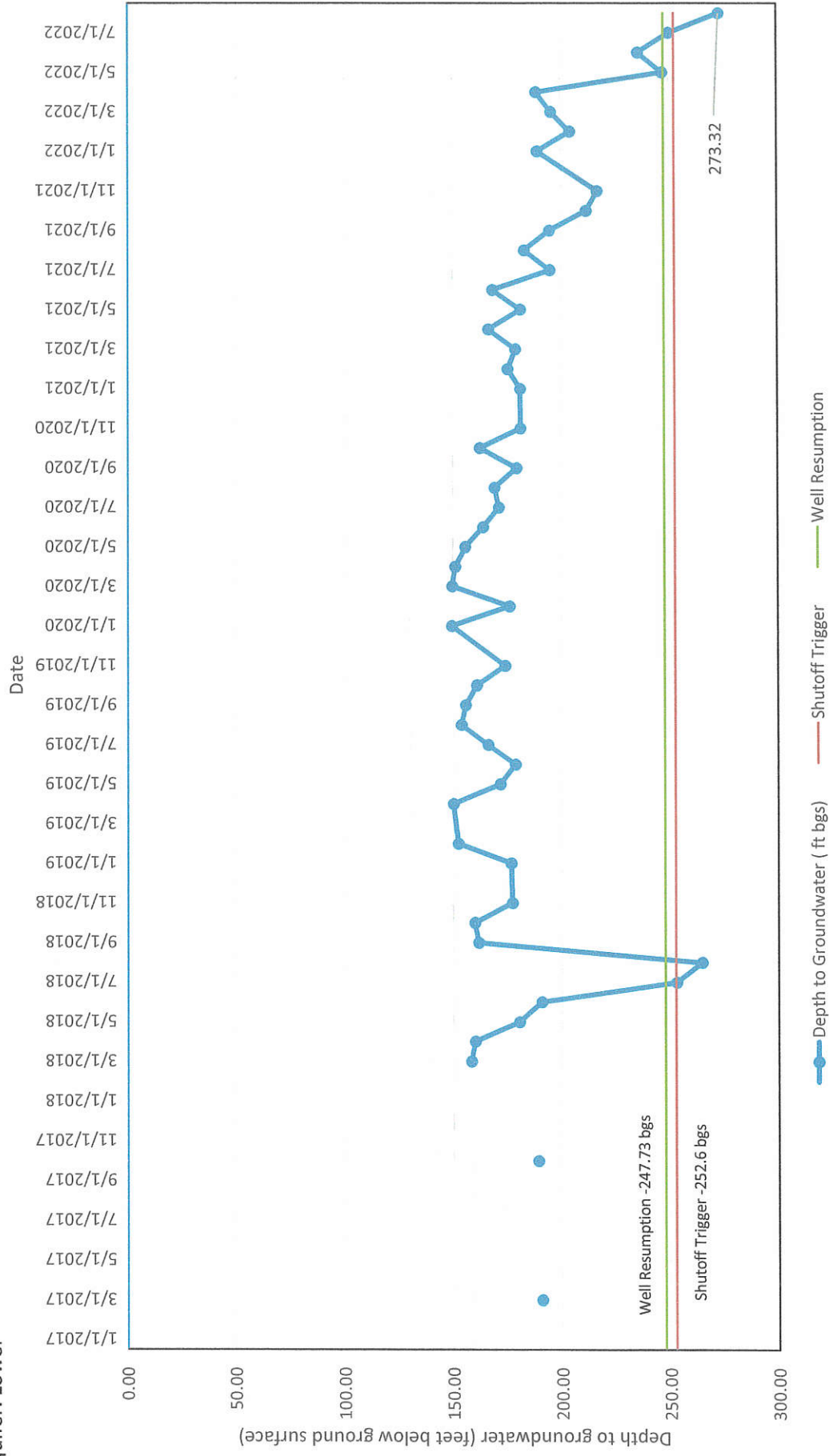
Perf: 150-360
Aquifer: Upper

MP37.32L



Perf: 190-350, 370-410, 440-500
Aquifer: Lower

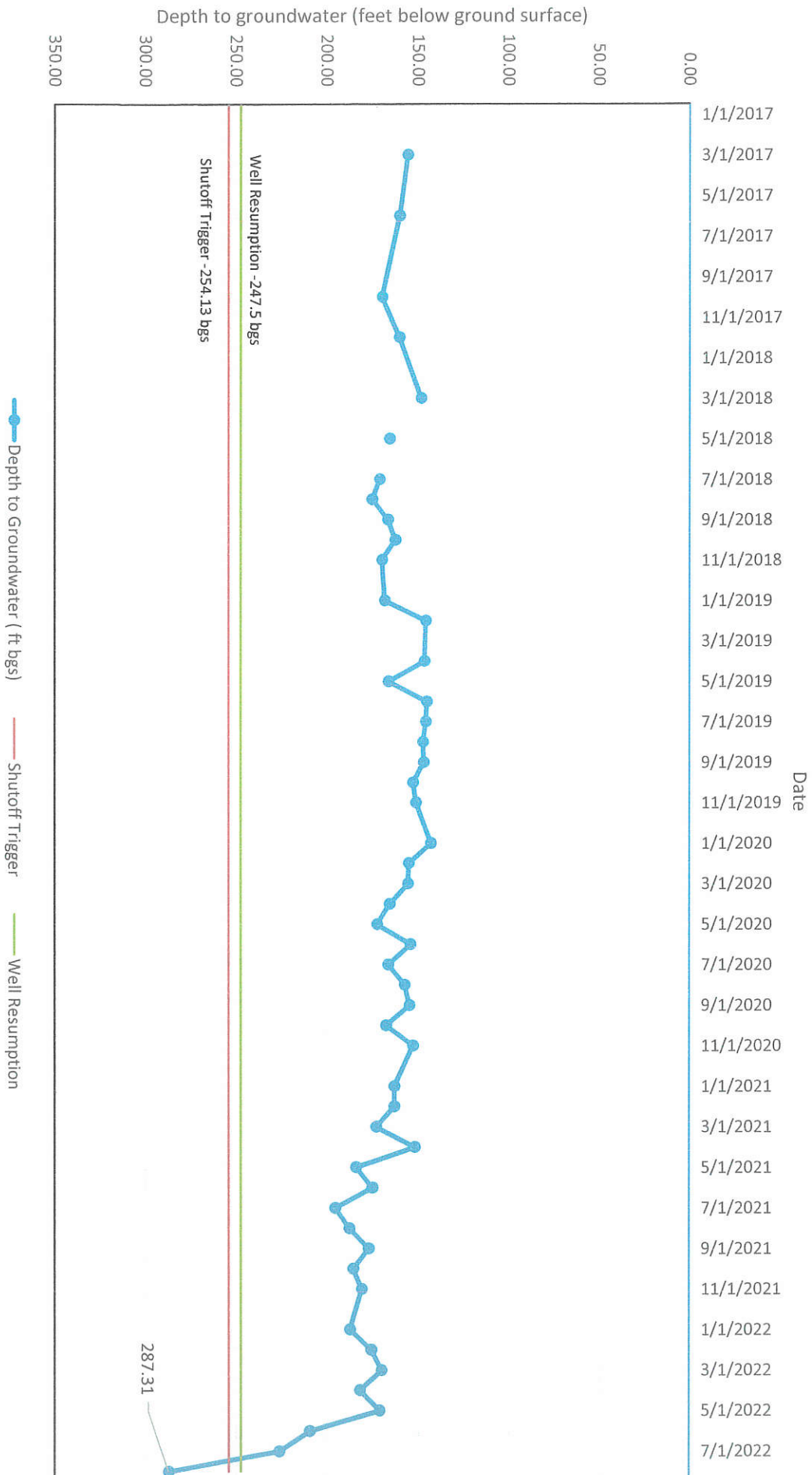
MP37.10L



2/7

Perf: 190-350, 370-410, 440-500
Aquifer: Lower

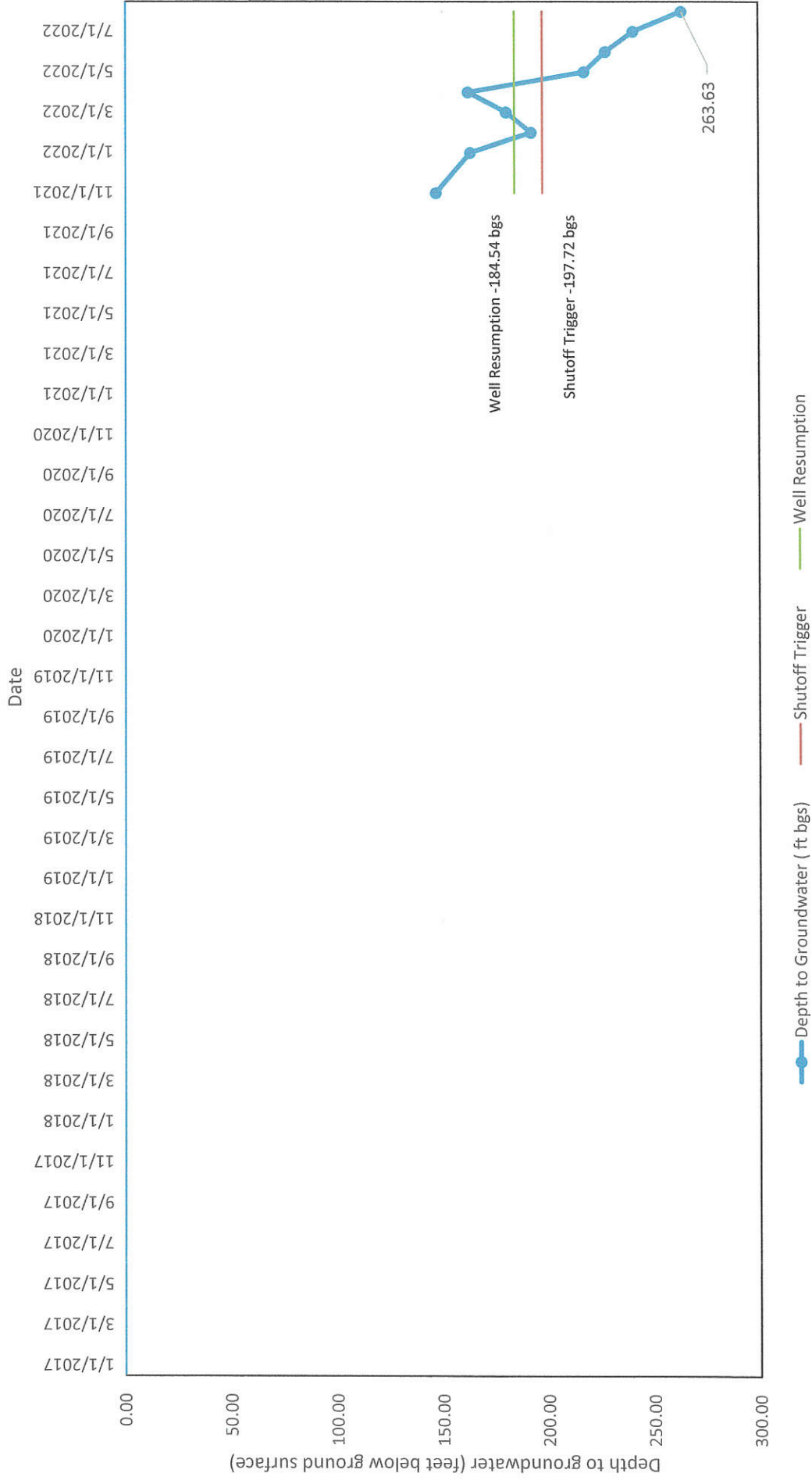
MP36.80L



48

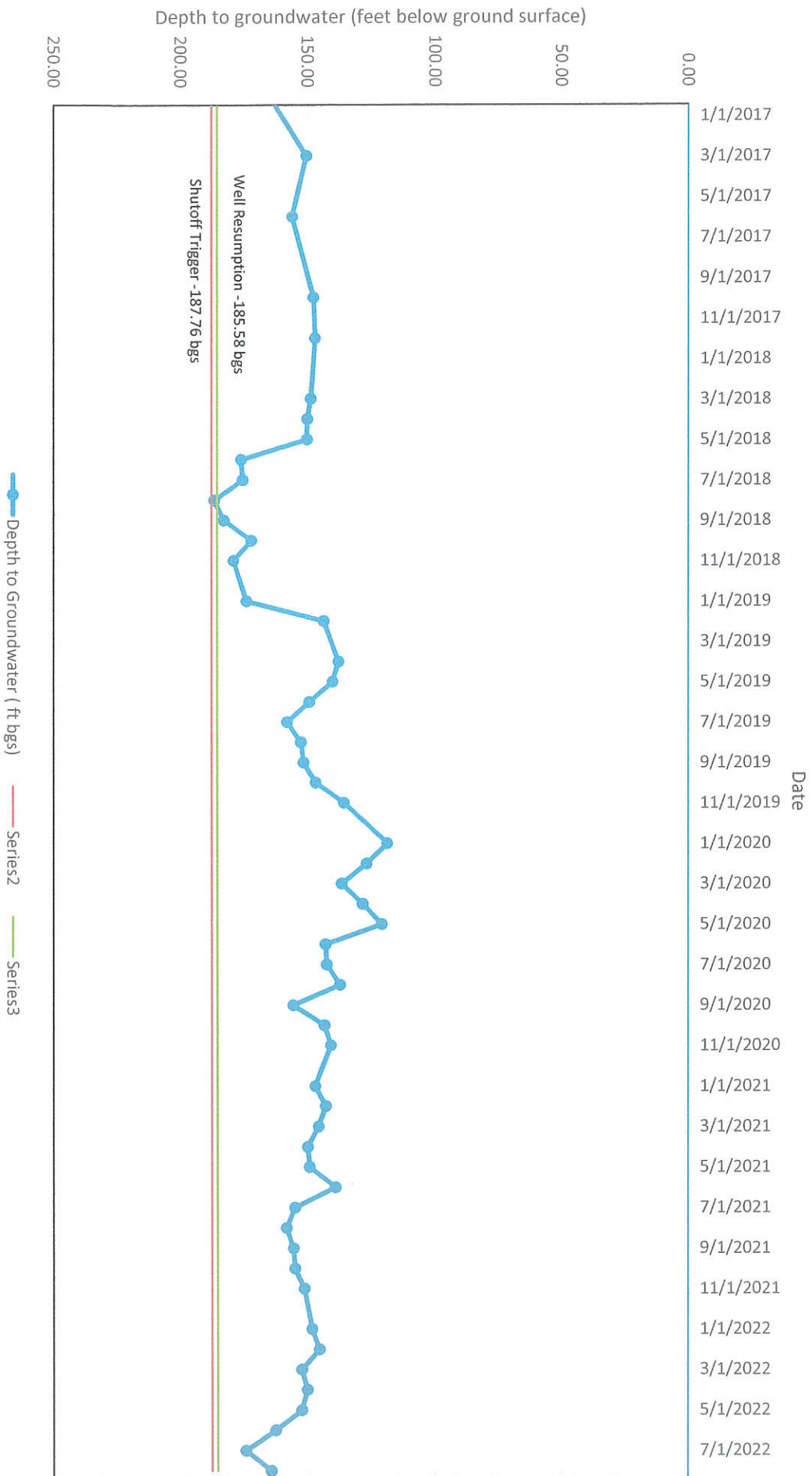
Perf: MP36.45R

Aquifer: Lower



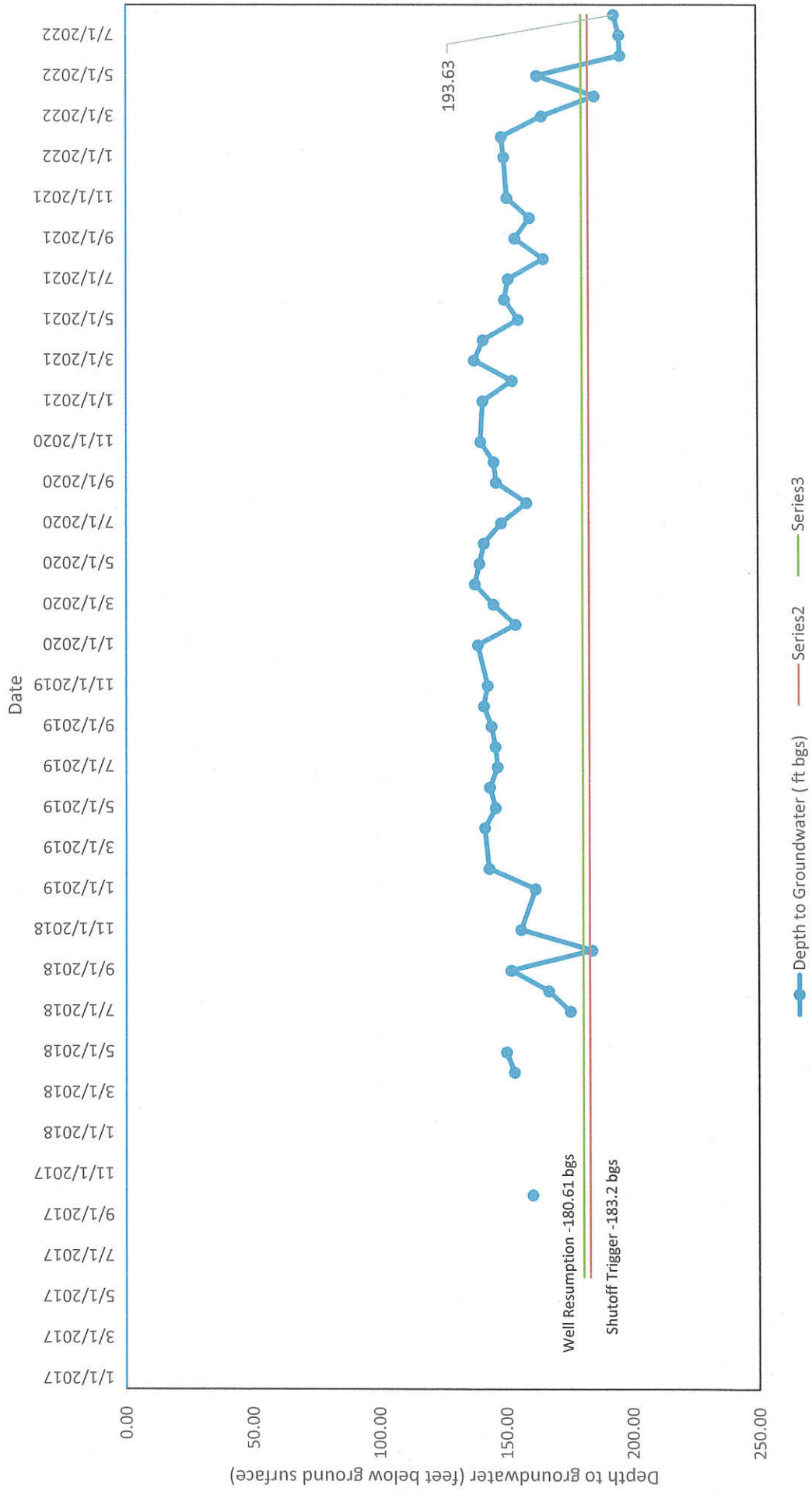
Perf: 235-475
Aquifer: Lower

MP33.71L



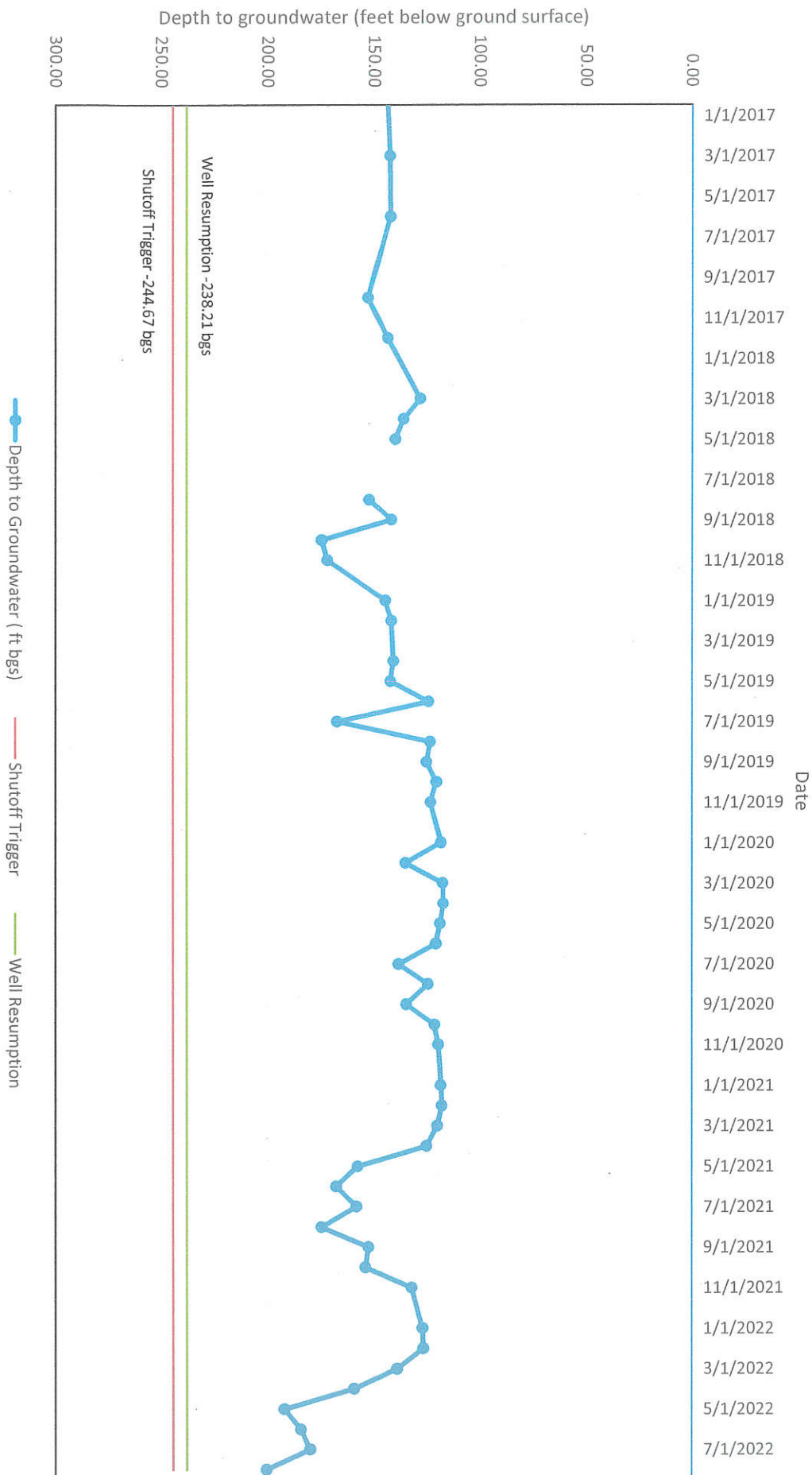
MP32.35L

Perf:
Aquifer:

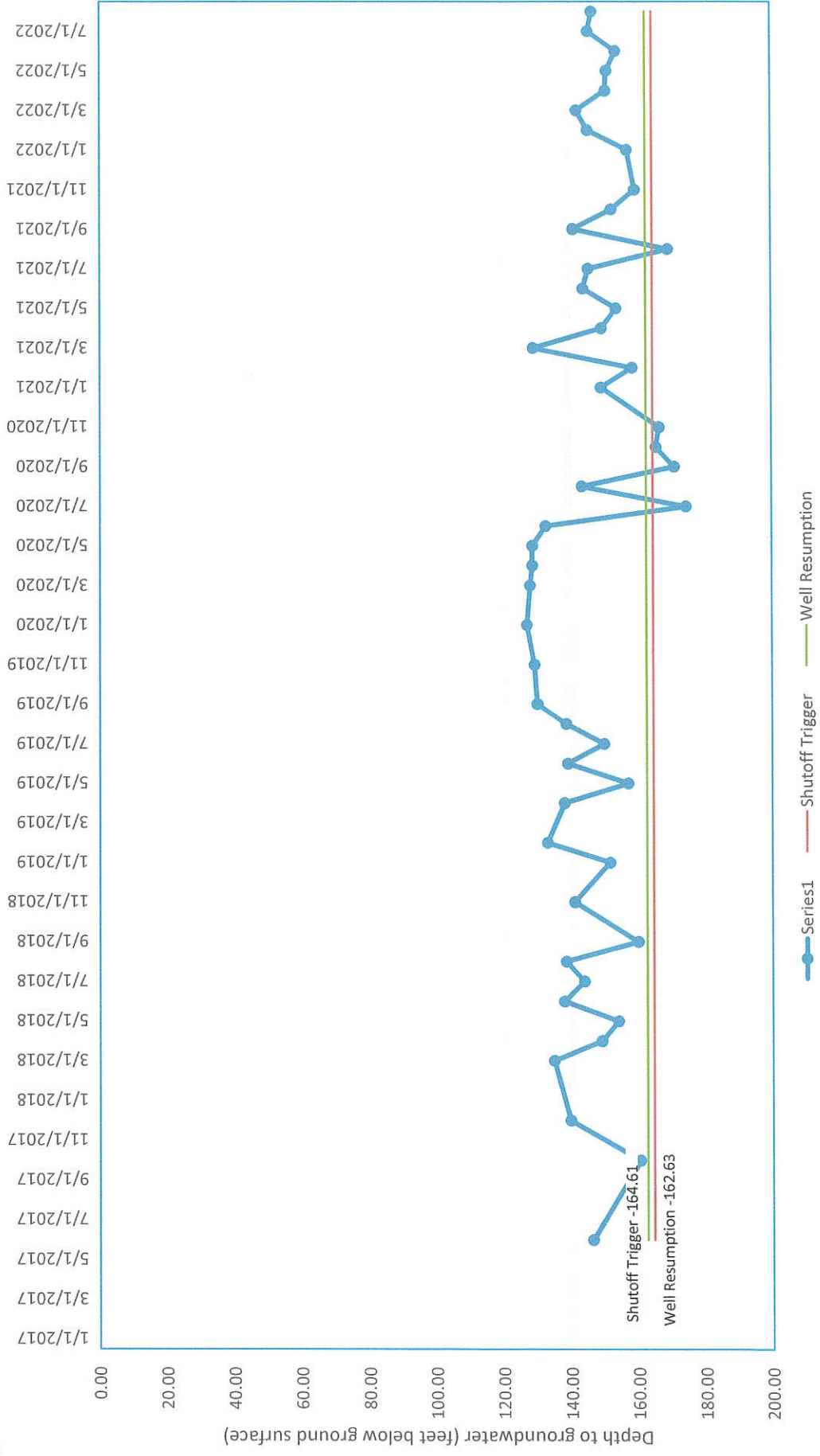


Perf:
Aquifer:

MP31.60L

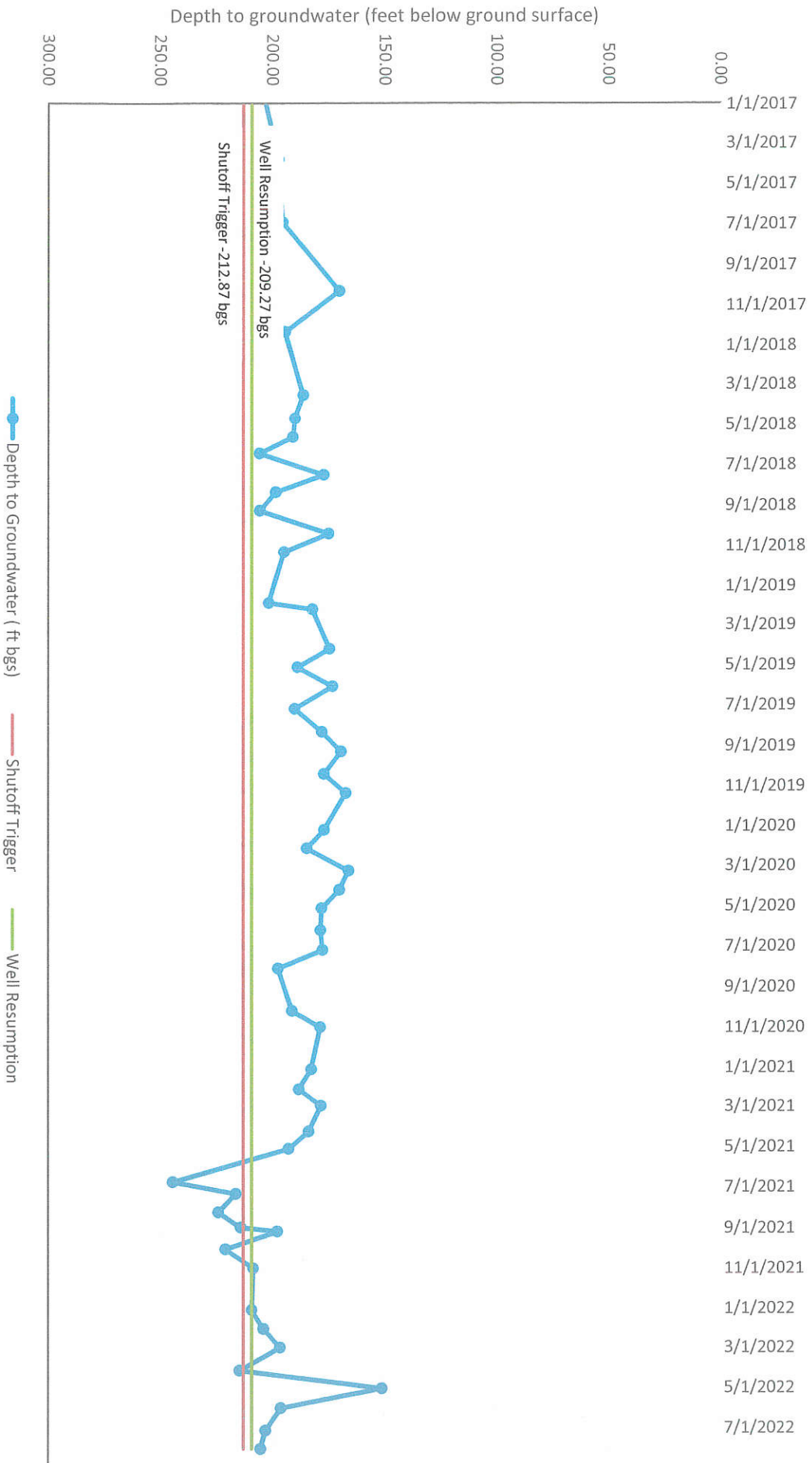


Perf: MP30.95L
Aquifer: Date



Perf: 230-475
Aquifer: Lower

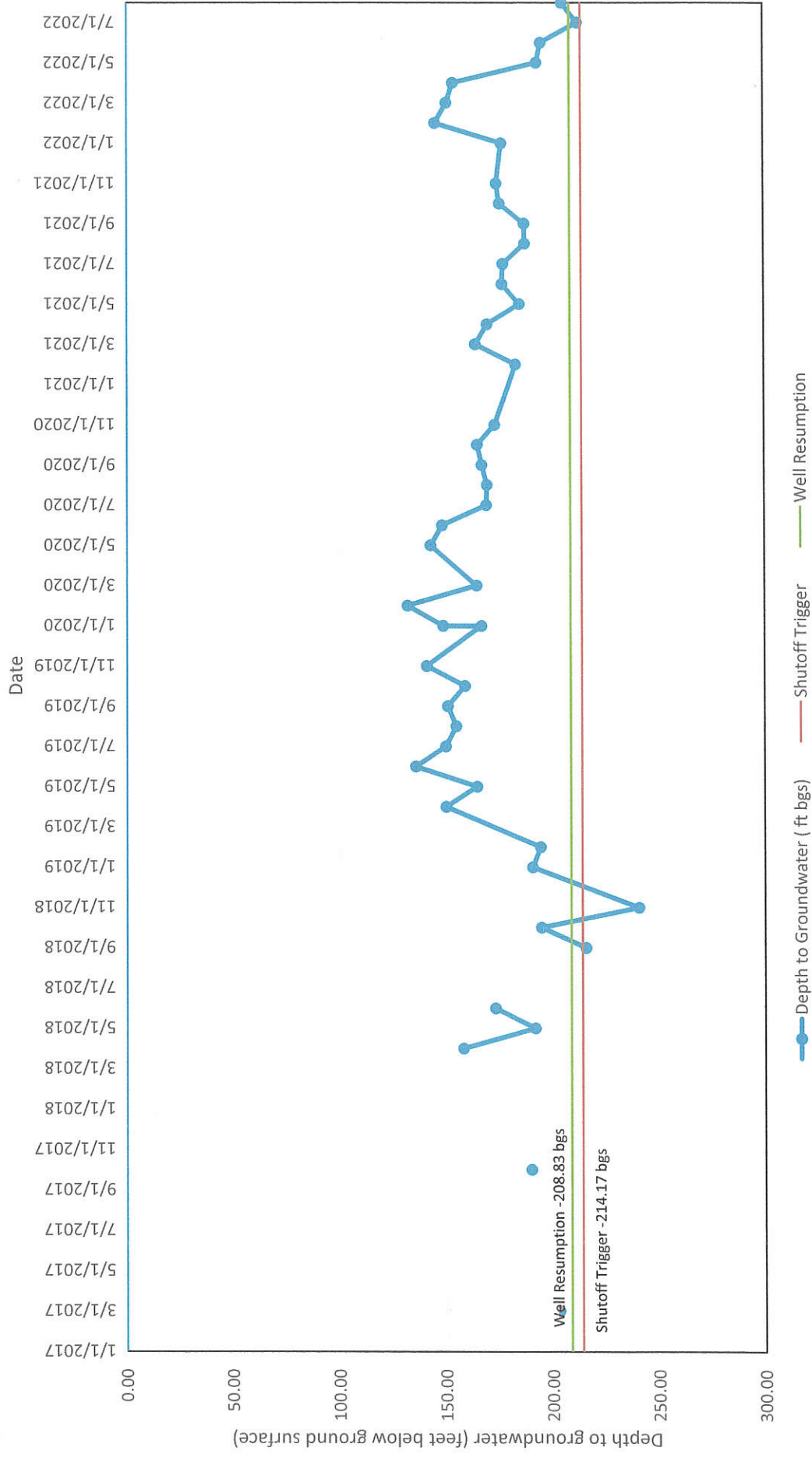
MP30.43R
Date



52

Perf: 210-267, 298-326, 336-435
Aquifer: Lower

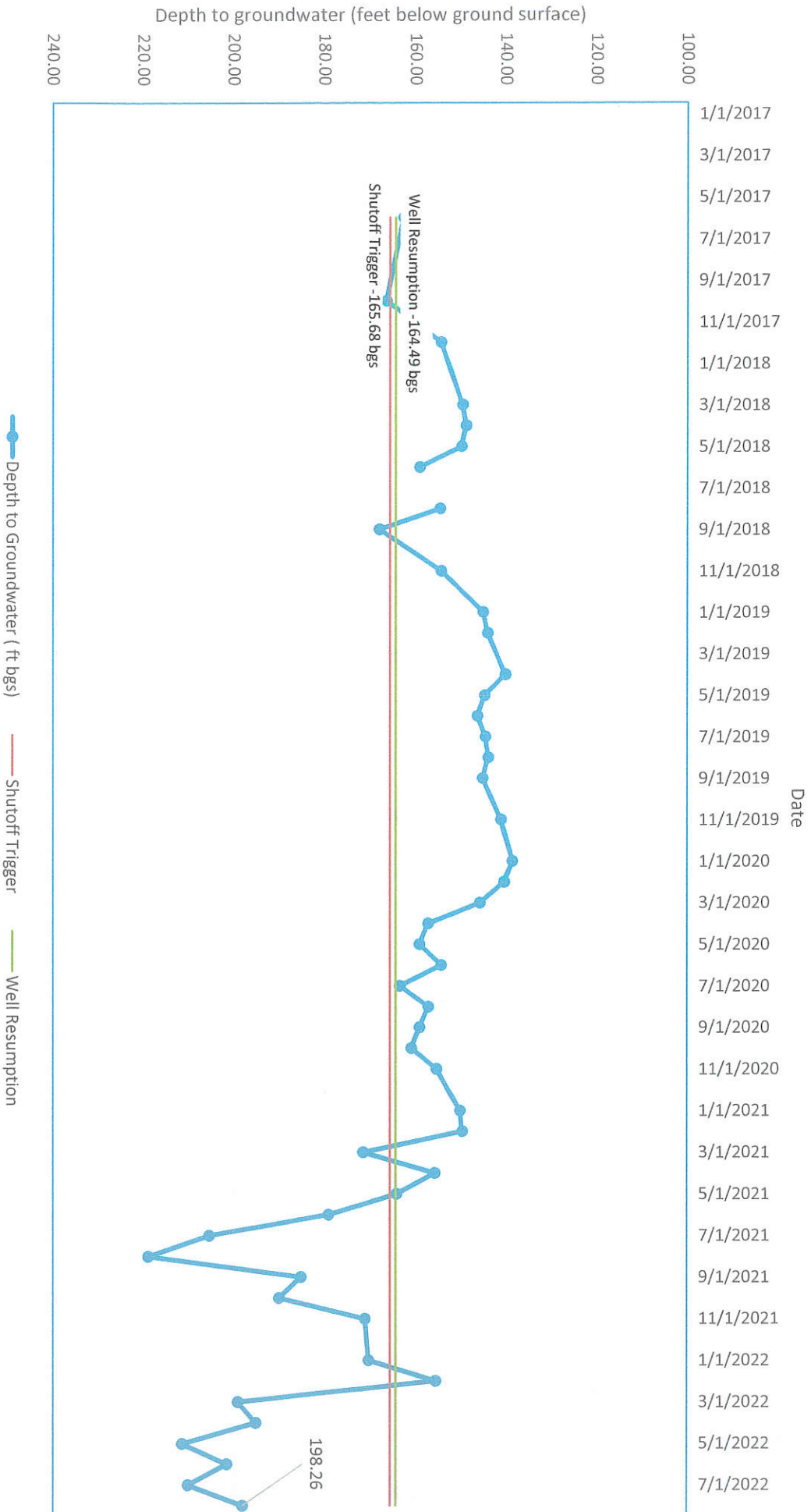
MP30.43L



SS

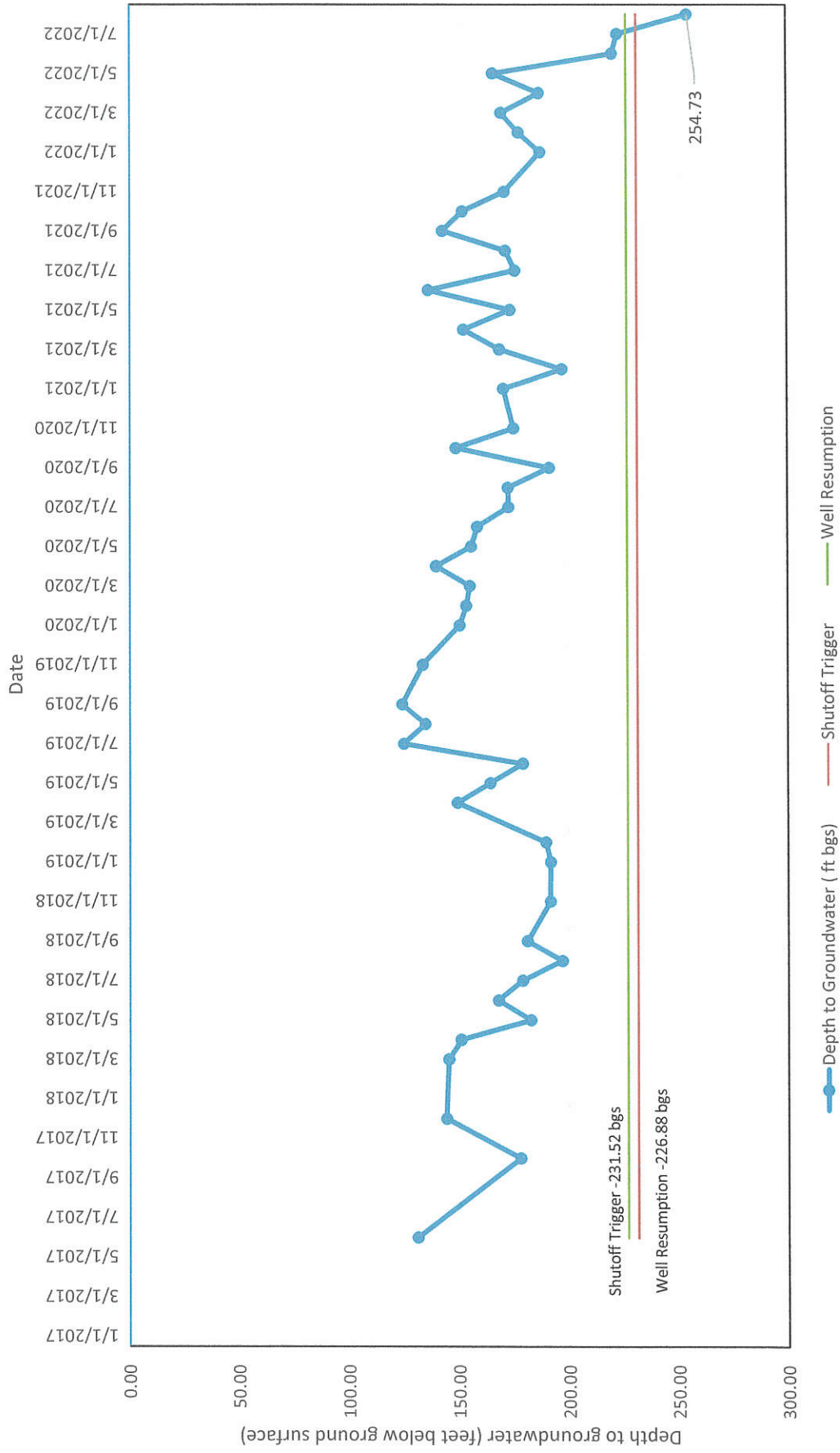
Perf:
Aquifer:

MP29.95R



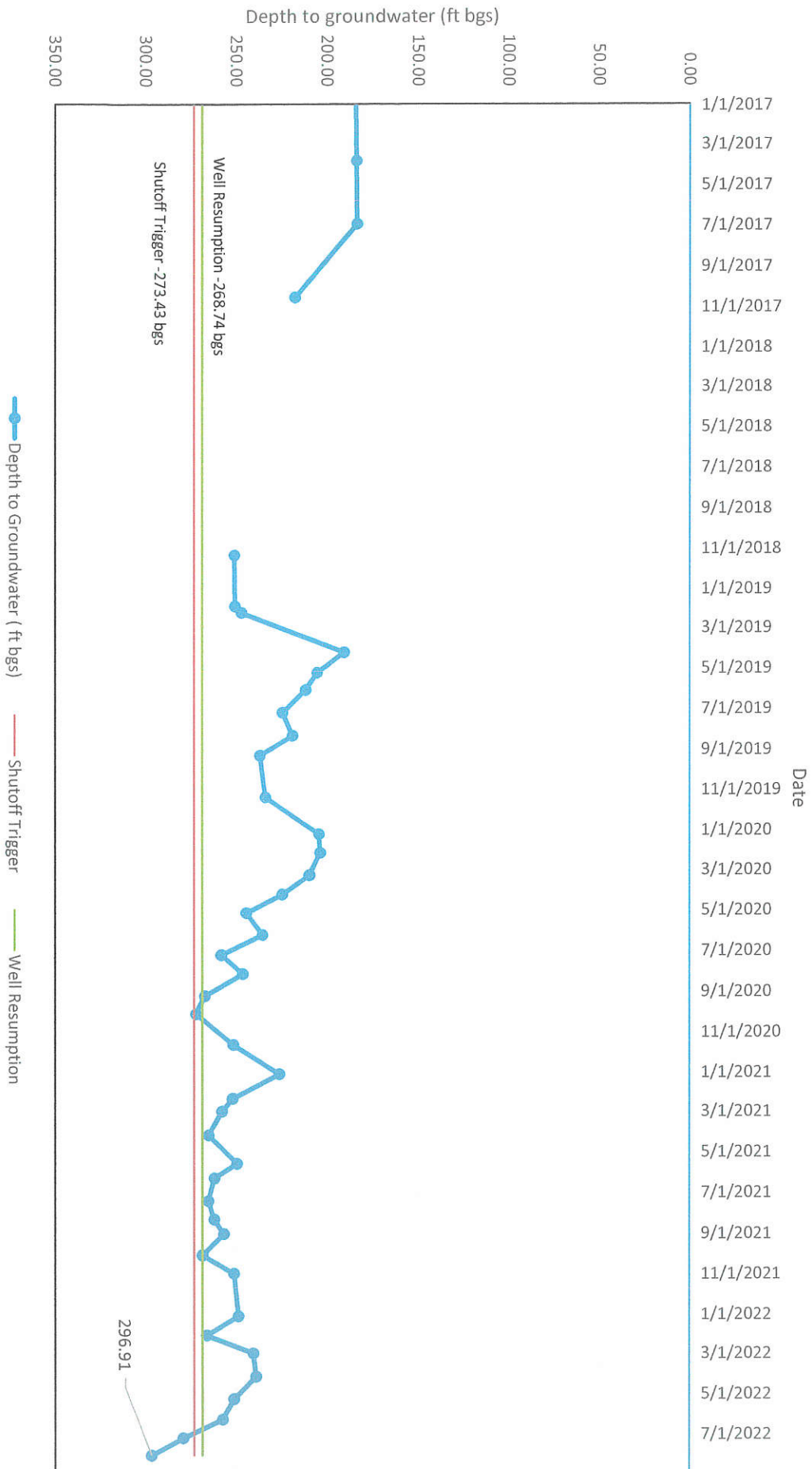
MP24.38L

Perf:
Aquifer:



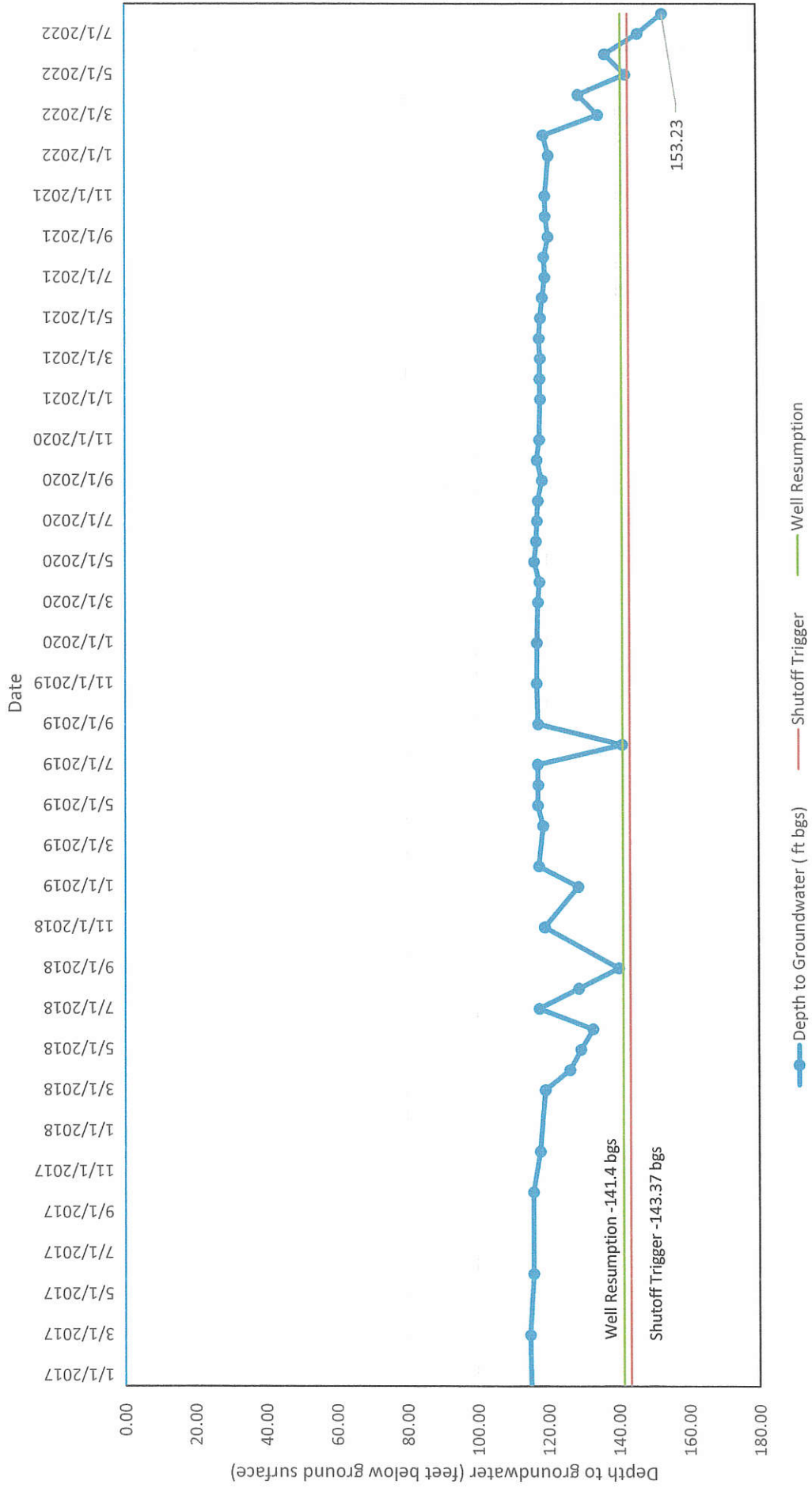
Perf:
Aquifer:

MP23.41L



Perf: MP21.86L

Aquifer:

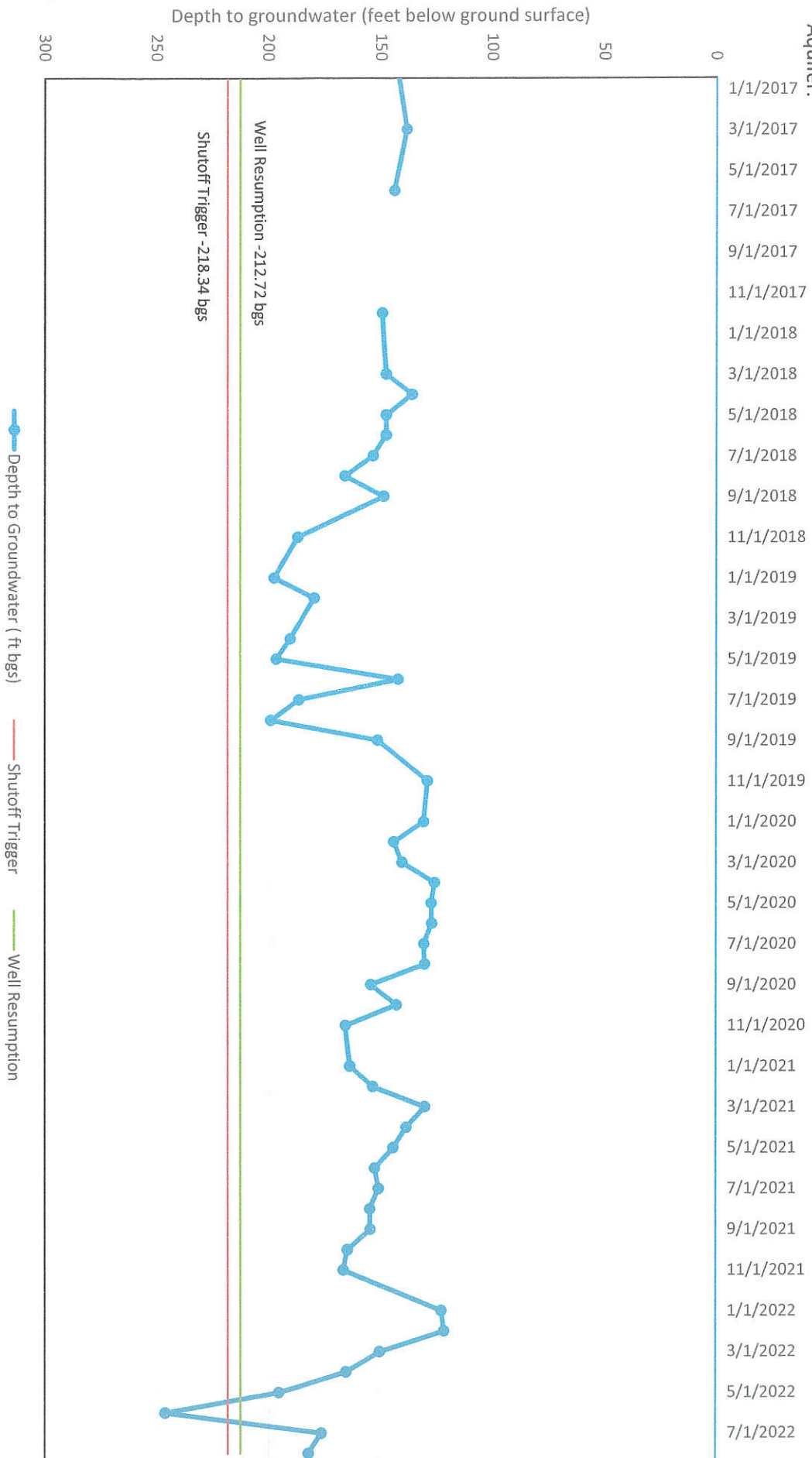


Perf:

Aquifer:

MP21.12L

Date



60

Anthea Hansen

From: Jochimsen, Maria@DWR <Maria.Jochimsen@water.ca.gov>
Sent: Tuesday, September 13, 2022 1:29 PM
To: Anthea Hansen
Subject: RE: Next Round of Solicitations

Hi Anthea,

We are still working on having our legal team review the draft agreement. I will let you know as soon as I get that back and hopefully we can still get it signed this week. I know we have you as the signer on the agreement. Is there anyone else that needs to see the agreement prior to signing it or needs a copy of it after it is signed?

Also, we are working on opening Round 2 of funding next month and wondering if you wouldn't mind giving us some feedback on the last round, especially anything regarding the Scoring Criteria? But also in general if there were there aspects about the last round that really worked for you, or any aspects that were especially difficult that you would like to see changed? Any comments are helpful.

Thank you,

Maria Jochimsen
 Environmental Scientist
 DWR - Division of Regional Assistance
 Work Phone: (916) 902-7423
Maria.Jochimsen@water.ca.gov



saveourwater.com

From: Jochimsen, Maria@DWR
Sent: Monday, August 22, 2022 12:32 PM
To: Anthea Hansen <ahansen@delpuertowd.org>
Subject: Next Round of Solicitations

Hi Anthea,

We are starting to look at our next round of solicitations and wondering if you wouldn't mind giving us some feedback on the last round? Were there aspects about the last round that really worked for you? Or any aspects that were especially difficult that you would like to see changed? Any comments are helpful.

Thank you,

Maria Jochimsen
 Environmental Scientist
 DWR - Division of Regional Assistance
 Work Phone: (916) 902-7423
Maria.Jochimsen@water.ca.gov

blau



DEL PUERTO WATER DISTRICT

STAFF REPORT/ACTION ITEM REQUEST

BOD Meeting Date: September 14, 2022

Title: Draft SGMA Management Actions and Triggers

Background Information: As you will recall from prior discussions, the DM-II GSA and DPWD need to have policies in place for implementing management actions in response to the GSP area triggering undesirable results. The last discussion the board had was focused on maximizing other water supplies and developing lower aquifer pumping rules. These are listed as Tier 1 management actions in NCDM GSP. Staff has summarized those discussions and identify potential responses the District may need to take to address undesirable results and minimum thresholds identified in the GSP in the following discussion items. These are for discussion purposes and will likely change quite a bit, but staff wanted to put something on paper so the Board could have a good starting place for the conversations at the September board meeting. Included with the staff report are the management actions listed in the NCDM GSP and a summary of the URs listed in the GSP Common Chapter.

Issues for Consideration/Discussion:

Develop and refine management actions for the DM-II for the two most critical management actions listed in the NCDM GSP (Lower aquifer pumping rules for minimizing subsidence and maximizing the use of other water supplies).

Regarding maximizing use of other water supplies:

- Where surface water is available to a parcel, requisite infrastructure will be perfected by the landowner/water user to convey surface water from the designated DMC point of diversion to the parcel.

- NVERRWP allocations will be utilized by the parcel the water is allocated to as long as the land is in production.

- In years where CVP allocations are greater than 10%, use of CVP allocated water will be required prior to use of well water until a water user's CVP allocation remaining equates to a 10% allocation for the acreage on the account. This is to allow for the possibility of storing the water for use in the subsequent year.

-A non-refundable deposit for 25% of the CVP allocation made to a water user will be required unless a portion of the land farmed by the water user will remain fallow for the entire water year. In that case, the required deposit may be decreased by a proportional amount to cover the acreage in production.

Regarding lower aquifer pumping rules:

-When static water level at a well drops below the minimum threshold, pumping at the well will cease for any District operated program. Well use may continue for on-field use as long as no available surface water remains in the account.

-When Undesirable Results or Minimum Thresholds for chronic lowering of groundwater levels are met for any DM-II GSA representative monitoring sites, year-to-date groundwater extractions will be required for all groundwater wells within 1 mile of the representative site/s below the minimum threshold. Groundwater pumping within that 1-mile radius will rationed to decrease the rate of groundwater extractions for the effected area. If groundwater levels return to above the minimum threshold or the triggers for undesirable results are no longer met, pumping restrictions can be lifted at the GSA's discretion.

-Where inelastic land subsidence is observed at critical infrastructure in excess of 0.25 ft/yr through 2027, 0.1 ft/yr from 2027-2032, and 0.05 ft/yr from 2032-2037, lower aquifer pumping will be restricted with 0.25 miles from the impacted infrastructure and rationed for wells within 0.5 miles. Wells with unknown screening intervals or wells that have screens above and below the Corcoran clay will be treated as lower aquifer wells unless substantial data can show otherwise.

Staff Recommendation: Provide staff guidance on refining the above management actions regarding lower aquifer pumping rules for minimizing subsidence and maximizing the use of other water supplies so staff can develop a new District policy for Board approval at the October Board of Directors meeting.

Table 7-1. Northern & Central Delta-Mendota Region GSP Projects and Management Actions

Tier	Category	Project / Management Action	Project Proponent
Tier 1	Projects	Los Banos Creek Recharge and Recovery Project	San Luis Water District
		Orestimba Creek Recharge and Recovery Project	Del Puerto Water District
		North Valley Regional Recycled Water Program (NVRWP) – Modesto and Early Turlock Years	Del Puerto Water District
		City of Patterson Percolation Ponds for Stormwater Capture and Recharge	City of Patterson
		Kaljian Drainwater Reuse Project	San Luis Water District
		West Stanislaus Irrigation District Lateral 4-North Recapture and Recirculation Reservoir	West Stanislaus Irrigation District
		Revision to Tranquillity Irrigation District Lower Aquifer Pumping	Tranquillity Irrigation District
	Management Actions	Lower Aquifer Pumping Rules for Minimizing Subsidence	N/A
		Maximize Use of Other Water Supplies	N/A
		Increasing GSA Access to and Input on Well Permits	N/A
		Drought Contingency Planning in Urban Areas	N/A
		Fill Data Gaps	N/A
Tier 2	Projects	Del Puerto Canyon Reservoir Project	Del Puerto Water District
		Little Salado Creek Groundwater Recharge and Flood Control Basin	Stanislaus County
		Patterson Irrigation District Groundwater Bank and/or Flood-Managed Aquifer Recharge (MAR)-type Project	Patterson Irrigation District
		West Stanislaus Irrigation District Lateral 4-South Recapture and Recirculation Reservoir	West Stanislaus Irrigation District
		Ortogonal Creek Groundwater Recharge and Recovery Project	San Luis Water District
	Management Action	Develop Program to Incentivize Use of Surface Water and Reduce Groundwater Demand	N/A
Tier 3	Projects	Pacheco Reservoir Expansion	Santa Clara Valley Water District
		Raising San Luis Reservoir	U.S. Bureau of Reclamation (USBR)
		Sites Reservoir	Sites Project Authority
		Los Vaqueros Expansion Phase 2	Contra Costa Water District
	Management Actions	Groundwater Extraction Fee with Land Use Modifications	N/A
		City of Patterson Reduced Groundwater Use Portfolio	City of Patterson
		Rotational Fallowing of Crop Lands	N/A

N/A – Not applicable; no specific project proponent identified. In most cases, management action will be implemented by a single GSA, all of the GSAs, and/or a proponent/manager for the management action will be identified prior to implementation.

blank

Undesirable Results and Indicators Per NCDM GSP		
SMC	UR	UR Indicator
Chronic Lowering of GWL	An undesirable result for chronic lowering of groundwater levels in the Delta-Mendota Subbasin is experienced through significant and unreasonable chronic changes in groundwater levels that diminish access to groundwater, causing significant and unreasonable impacts to beneficial uses and users of groundwater.	Significant and unreasonable impacts to beneficial uses and users of groundwater are substantially increased costs associated with higher total pumping lift, lowering pumps, drilling deeper wells or otherwise modifying wells to access groundwater, securing alternative water sources, or required mitigation of groundwater dependent ecosystems. Significant and unreasonable is quantitatively defined as exceeding the minimum threshold at more than 50 percent of representative monitoring sites by principal aquifer in a GSP area.
Reduction GW Storage	A significant and unreasonable undesirable result for reduction of groundwater storage in the Delta-Mendota Subbasin is defined as a chronic decrease in groundwater storage that causes a significant and unreasonable impact to the beneficial uses and users of groundwater. A significant and unreasonable impact to beneficial uses and users of groundwater is insufficient water storage to maintain beneficial uses and natural resource areas in the Subbasin, including the conjunctive use of groundwater.	The same trigger for an undesirable result for the chronic lowering of groundwater levels is applicable to the longterm reduction of groundwater storage in the Upper Aquifer and for inelastic land subsidence in the Lower Aquifer. Long-term reductions in storage are not anticipated for either principal aquifer so long as groundwater levels in the Upper Aquifer and land subsidence in the Lower Aquifer are managed above the respective proxy minimum thresholds. Through coordination with the other GSP Groups in the Delta-Mendota Subbasin, additional projects and/or management actions will be implemented to prevent long-term decline in groundwater storage.
Degraded WQ	Undesirable results for the degradation of groundwater quality in the Delta-Mendota Subbasin is defined as the degradation of groundwater quality as a result of groundwater management activities that causes significant and unreasonable impacts to beneficial uses and users of groundwater. Significant and unreasonable impacts to beneficial uses and users of groundwater as a result of groundwater management activities are the migration of contaminant plumes or elevated concentrations of constituents of concern that reduce groundwater availability, and the degradation of surface water quality as a result of groundwater migration that substantially impair an existing beneficial use.	An undesirable result for degraded water quality is triggered, or considered "significant and unreasonable," when the minimum threshold at more than 50 percent of representative monitoring sites by principal aquifer in the GSP area is exceeded where current groundwater quality does not exceed 1,000 milligrams per liter (mg/L) of TDS.
Land Subsidence	An undesirable result for land subsidence in the Delta-Mendota Subbasin is experienced through changes in ground surface elevation that cause damage to critical infrastructure that would cause significant and unreasonable reductions of conveyance capacity, impacts to natural resources, or conditions that threaten public health and safety.	<ul style="list-style-type: none"> Significant and unreasonable damage to conveyance capacity from inelastic land subsidence is structural damage that decreases an unmitigated and unmanageable reduction of design capacity or freeboard. Significant and unreasonable impacts to natural resource areas from inelastic land subsidence are unmitigated decreases in the ability to flood or drain such areas by gravity. Significant and unreasonable threats to public health and safety from inelastic land subsidence are those that cause an unmitigated reduction of freeboard that allows for flooding, or unmitigated damage to roads and bridges.

Depletion of Interconnected Surface Water	Undesirable results for depletions of interconnected surface water in the Delta-Mendota Subbasin is experienced through depletions of interconnected surface water as a direct result of groundwater pumping that causes significant and unreasonable impacts on natural resources or downstream beneficial uses and users.	An undesirable result for depletions of interconnected surface water is triggered, or considered "significant and unreasonable," when impacts on natural resources or downstream beneficial uses and users of groundwater are a reduction in available surface water supplies for natural resource areas, and reductions in downstream water availability as a result of increased streamflow depletions along the San Joaquin River when compared to similar historic water year types.
---	---	--

66