



Waverly Water Update September 2024

- Well # 7 has been completed and is running in rotation every other day and producing currently 325 GPM.
- Test wells identified by the Olsson studies have been proposed to be funded in the 24/25 budget year and once the data from those test wells are completed, then moving forward with addition capacity of production wells can be decided on where, how many, budgeting, engineering, land and ROW access, and construction of additional wells or wellfields can take place.
- The 2023 drought was in comparison to the 1936 drought and is not typical climatological for this region. Waverly was not the only city to see static levels drop in 2023 as region wide static levels dropped as was not unique only to Waverly.
- Currently we are at 22.76 in precipitation for the year Jan-Aug 2024 compared to last year at 18.24 in. Jan-Aug 2023
- However Static water levels remain on the low end historically.

Water use

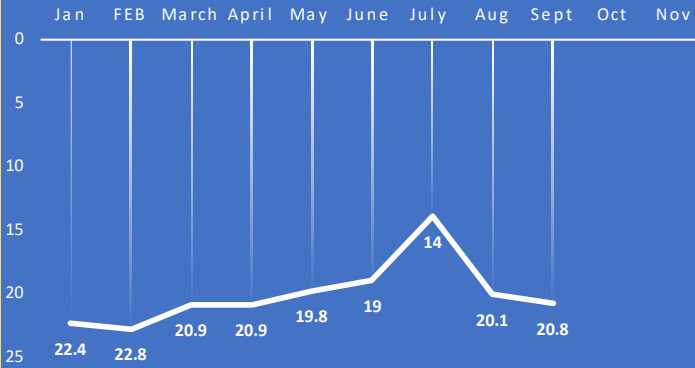
| All wells monthly total | | 12,849,314 | 11,939,898 | 13,268,481 | 18,093,805 | 30,387,370 | 34,230,812 | 20,758,649 | 19,475,559 |
|--------------------------------|------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 2023 | January | February | March | April | May | June | July | August |
| Daily average | | 414,494 | 426,425 | 428,016 | 603,127 | 980,238 | 1,141,027 | 669,634 | 628,244 |
| All wells monthly total | | 12,952,242 | 12,542,549 | 13,994,744 | 17,522,752 | 17,958,629 | 20,386,191 | 24,316,242 | 26,076,931 |
| | 2024 | January | February | March | April | May | June | July | August |
| Daily average | | 417,814 | 432,502 | 451,443 | 584,092 | 579,311 | 679,540 | 784,395 | 841,191 |

2024 we have used 15.2 million gallons less than the same time of 2023.

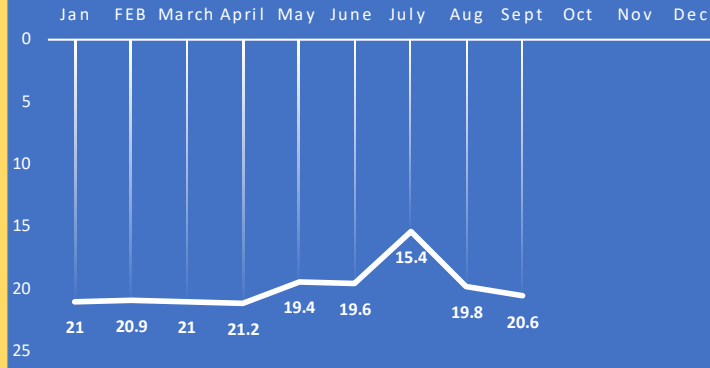
Note: Irrigation pivots surrounding Waverly started running in July and however most have stopped with some running on soybean fields. They draw water from the same aquifer as our wells. Along with irrigation pivots running throughout the state and regional area.

| | | | | | | | | | | as of July 2 | as of Aug 11 | as of Sept 8 | | | |
|--|-----------------------|--------------|-------|-------|-------|-------|-------|-------|-------|--------------|--------------|--------------|-----|-----|--|
| Pumping Levels distance from shutoff points | | | | | | | | | | | | | | | |
| | Well | Speed | Jan | FEB | March | April | May | June | July | Aug | Sept | Oct | Nov | Dec | |
| | 4 | 100% | 4.7 | 5.9 | 6.8 | 7.2 | 5.5 | 5.5 | 11 | 5.7 | 5.6 | | | | |
| | 5 | 94% | 1.1 | 1.5 | 3 | 3 | 3 | 3.2 | 6.2 | 2.4 | 1.4 | | | | |
| | 6 | 83% | 0.8 | 12.7 | 10 | 9.4 | 9.1 | 9.4 | 10.3 | 9.1 | 8.6 | | | | |
| | 7 | | | | | | | | | | 6.4 | | | | |
| | 8 | 100% | 9.2 | 9.2 | 9.1 | 8.8 | 6.3 | 8.2 | 6.8 | 5 | 6.6 | | | | |
| | 9 | 85% | 4.1 | 6.5 | 7.1 | 7.1 | 11.4 | 14.9 | 16 | 14.2 | 15.2 | | | | |
| | 10 | 100% | 19.7 | 18.3 | 18.1 | 18.2 | 19.8 | 17.4 | 20.1 | 18.3 | 18.2 | | | | |
| | 11 | 85% | 22.2 | 11.5 | 11.5 | 11.3 | 11.4 | 10.7 | 11.6 | 9.9 | 10.3 | | | | |
| | Precip. Inches | 22.76 | 0.95 | 0.51 | 1.09 | 3.42 | 4.78 | 3.28 | 7.23 | 1.5 | 0 | | | | |
| | | | | | | | | | | as of July 2 | as of Aug 11 | as of Sept 8 | | | |
| Static Levels- Water distance from ground level | | | | | | | | | | | | | | | |
| | Well | | Jan | FEB | March | April | May | June | July | Aug | Sept | Oct | Nov | Dec | |
| | 4 | | 22.4 | 22.8 | 20.9 | 20.9 | 19.8 | 19 | 14 | 20.1 | 20.8 | | | | |
| | 5 | | 21 | 20.9 | 21 | 21.2 | 19.4 | 19.6 | 15.4 | 19.8 | 20.6 | | | | |
| | 6 | | 80 | 79.9 | 79.7 | 81.1 | 81.2 | 81.8 | 81.1 | 82.5 | 82.7 | | | | |
| | 7 | | | | | | | | | | 64.1 | | | | |
| | 8 | | 73.8 | 74.3 | 73.3 | 73.8 | 73.9 | 74.4 | 74.1 | 75.2 | 75.4 | | | | |
| | 9 | | 104.8 | 104.7 | 102 | 102 | 102.8 | 103.7 | 102.9 | 105 | 104.9 | | | | |
| | 10 | | 85 | 85.9 | 85.9 | 86.2 | 86.9 | 87.8 | 86.2 | 88.5 | 88.9 | | | | |
| | 11 | | 98 | 101.5 | 98.1 | 99.3 | 99.1 | 99.6 | 98.9 | 101 | 100.7 | | | | |
| | Precip. Inches | 22.76 | 0.95 | 0.51 | 1.09 | 3.42 | 4.78 | 3.28 | 7.23 | 1.5 | 0 | | | | |

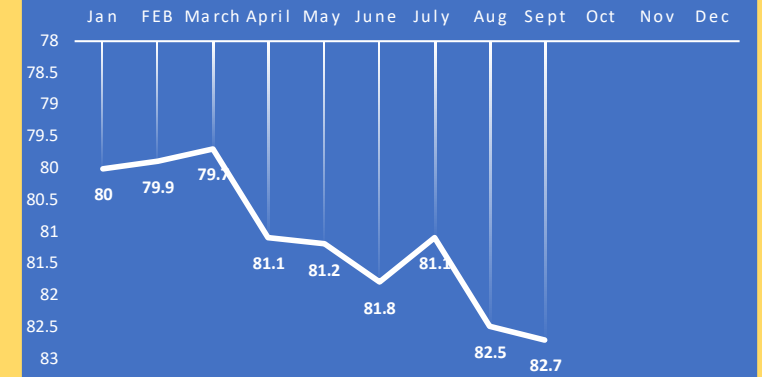
WELL #4 STATIC LEVELS 2024



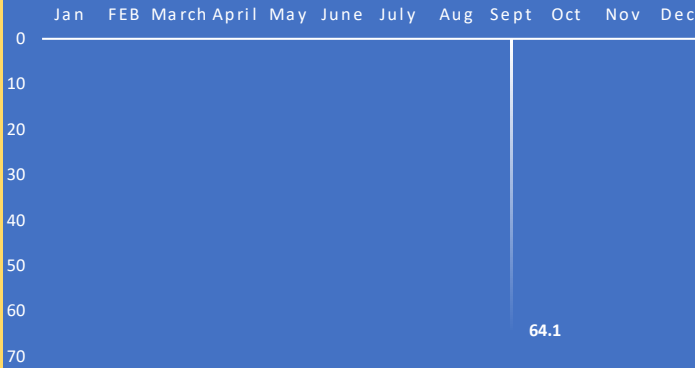
WELL #5 STATIC LEVELS 2024



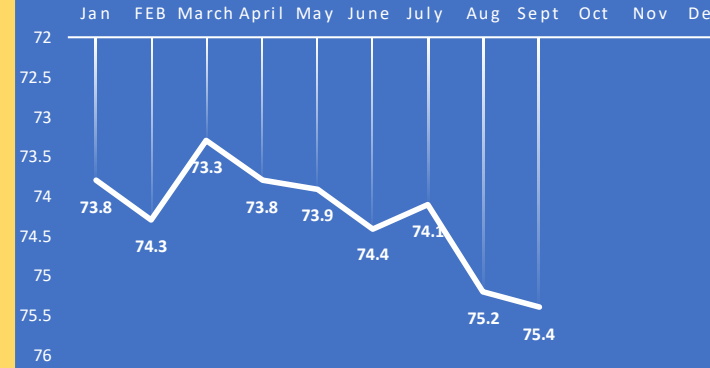
WELL #6 STATIC LEVELS 2024



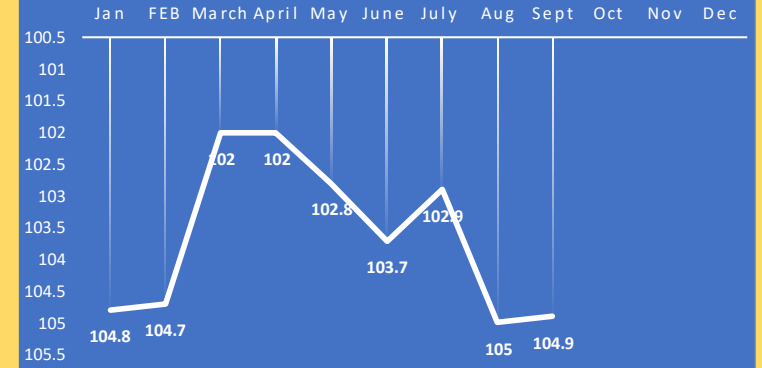
WELL #7 STATIC LEVELS 2024



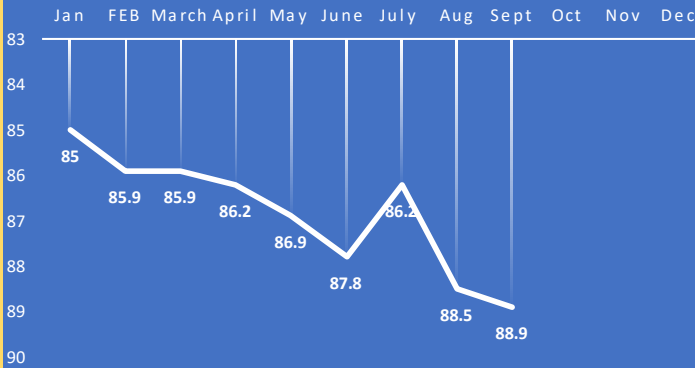
WELL #8 STATIC LEVELS 2024



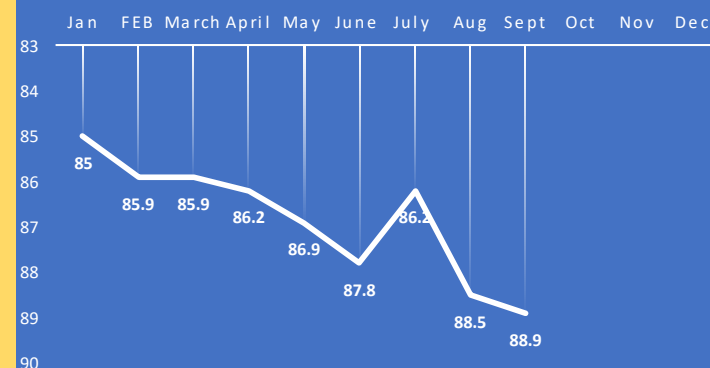
WELL #9 STATIC LEVELS 2024



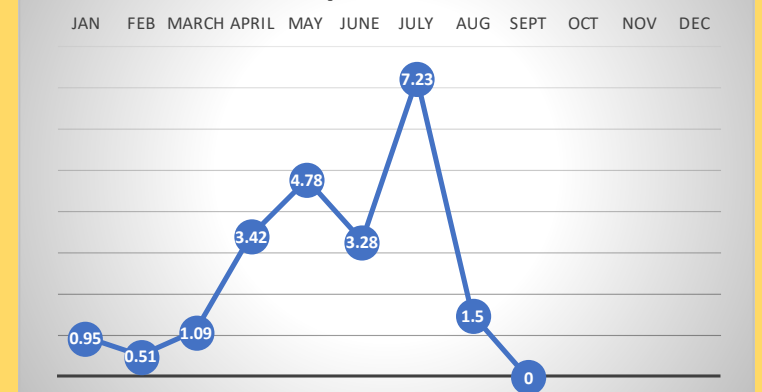
WELL #10 STATIC LEVELS 2024



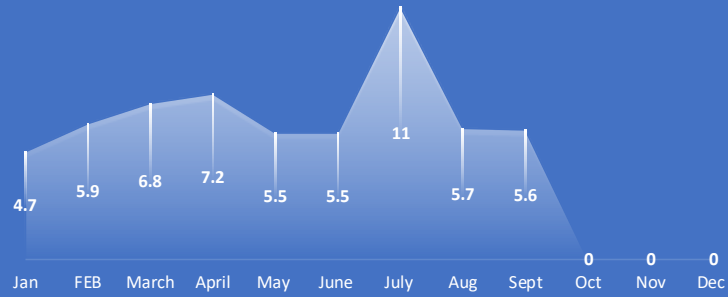
WELL #11 STATIC LEVELS 2024



Precipitation 2024



WELL # 4 PUMPING LEVEL TO SHUTOFF



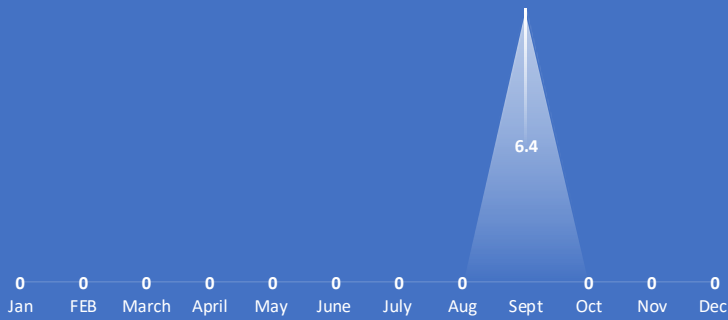
WELL # 5 PUMPING LEVEL TO SHUTOFF



WELL # 6 PUMPING LEVEL TO SHUTOFF



WELL # 7 PUMPING LEVEL TO SHUTOFF



WELL # 8 PUMPING LEVEL TO SHUTOFF



WELL # 9 PUMPING LEVEL TO SHUTOFF



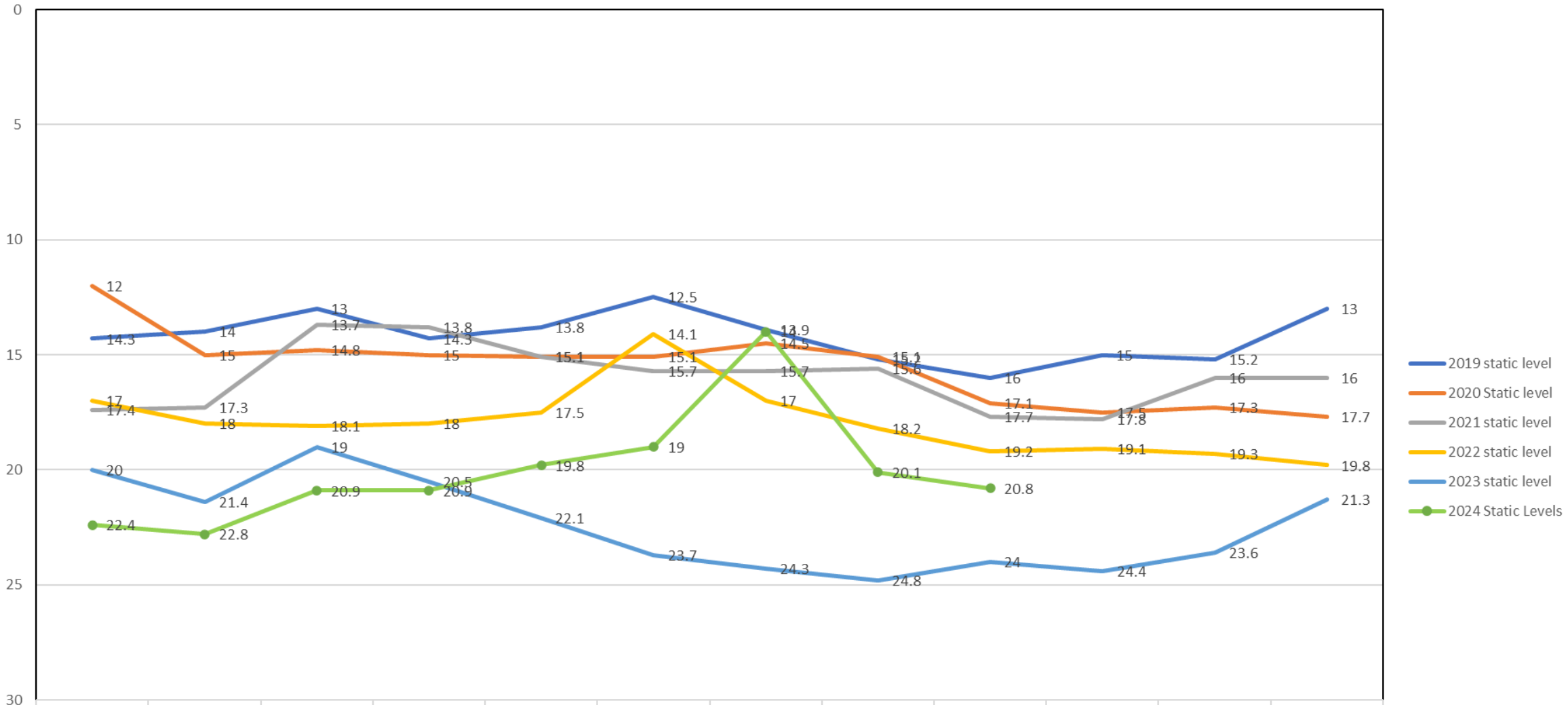
WELL #10 PUMPING LEVEL TO SHUTOFF



WELL # 11 PUMPING LEVEL TO SHUTOFF

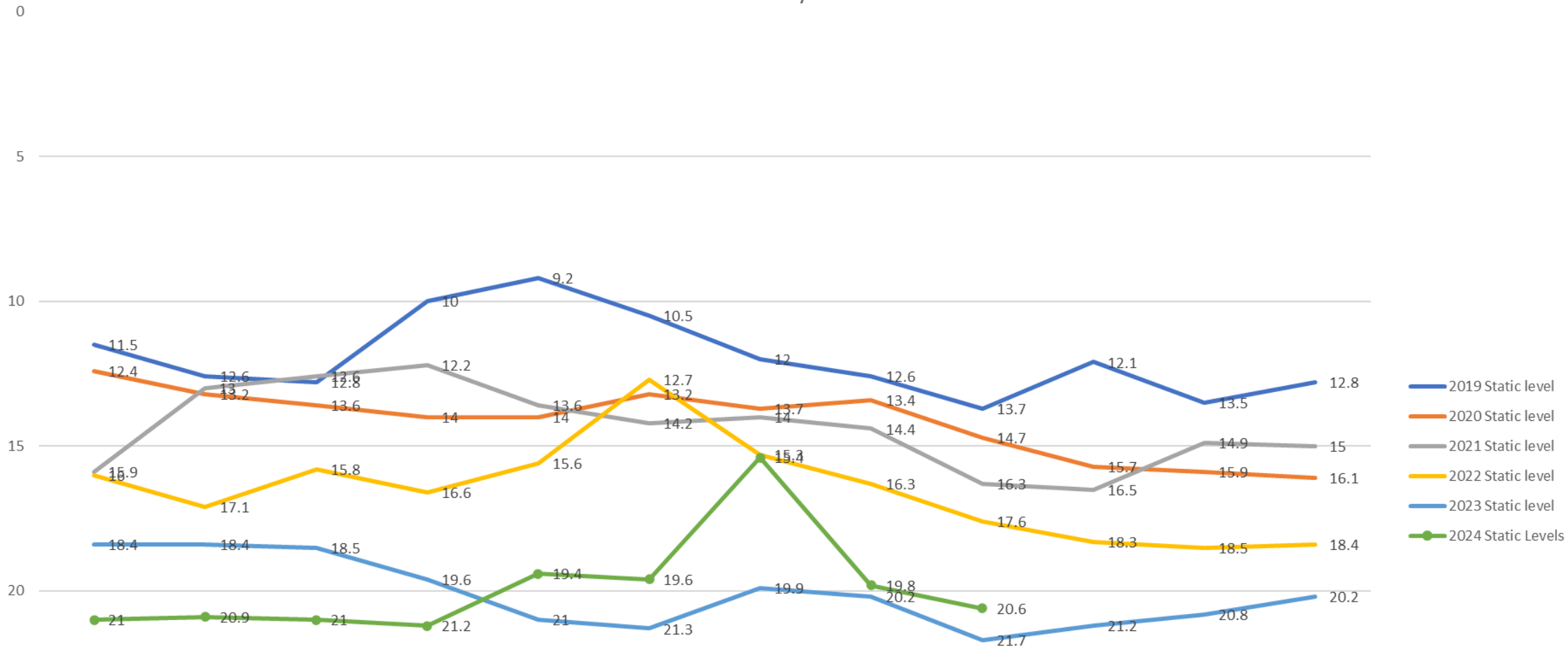


Well 4 static level last 5 years



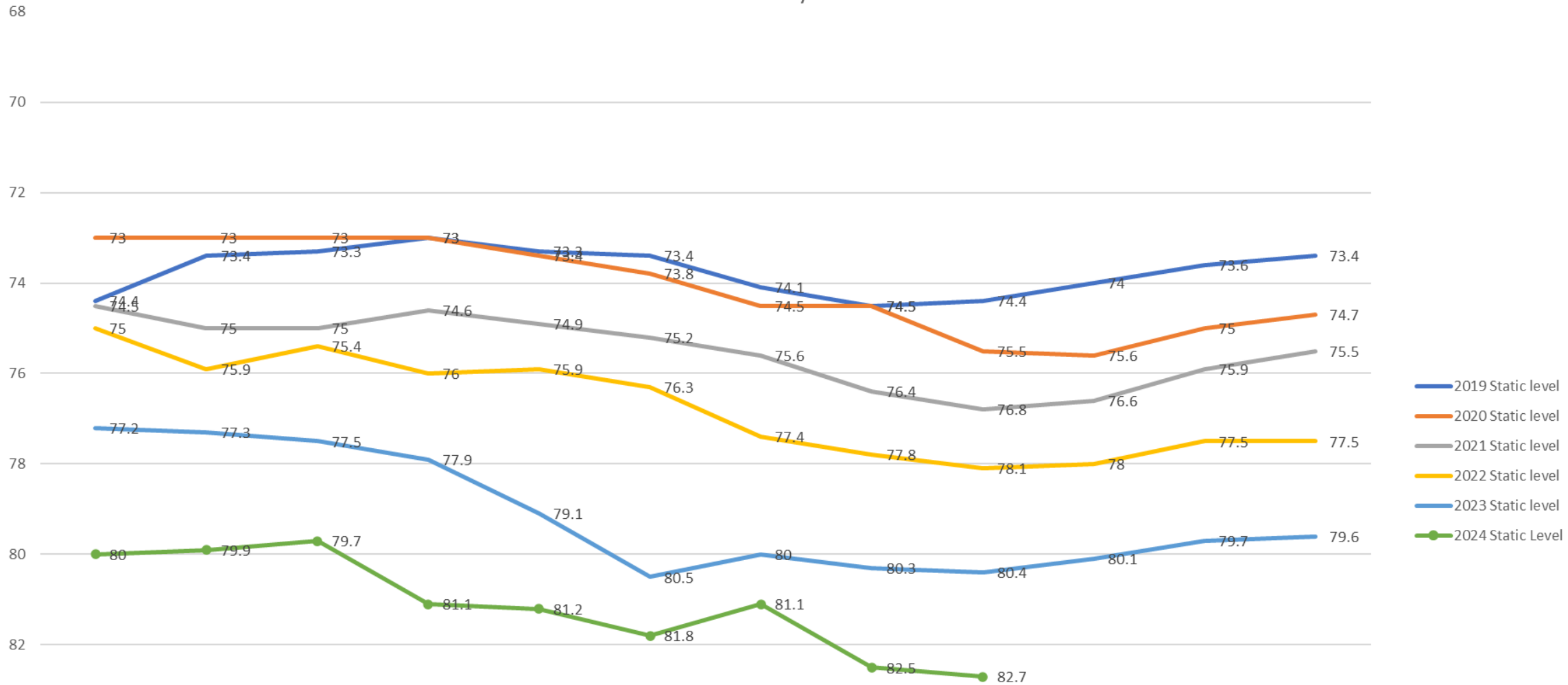
| | Jan | FEB | March | April | May | June | July | Aug | Sept | Oct | Nov | Dec |
|--------------------|------|------|-------|-------|------|------|------|------|------|------|------|------|
| 2019 static level | 14.3 | 14 | 13 | 14.3 | 13.8 | 12.5 | 13.9 | 15.2 | 16 | 15 | 15.2 | 13 |
| 2020 Static level | 12 | 15 | 14.8 | 15 | 15.1 | 15.1 | 14.5 | 15.1 | 17.1 | 17.5 | 17.3 | 17.7 |
| 2021 static level | 17.4 | 17.3 | 13.7 | 13.8 | 15.1 | 15.7 | 15.7 | 15.6 | 17.7 | 17.8 | 16 | 16 |
| 2022 static level | 17 | 18 | 18.1 | 18 | 17.5 | 14.1 | 17 | 18.2 | 19.2 | 19.1 | 19.3 | 19.8 |
| 2023 static level | 20 | 21.4 | 19 | 20.5 | 22.1 | 23.7 | 24.3 | 24.8 | 24 | 24.4 | 23.6 | 21.3 |
| 2024 Static Levels | 22.4 | 22.8 | 20.9 | 20.9 | 19.8 | 19 | 14 | 20.1 | 20.8 | | | |

Well 5 static level last 5 years



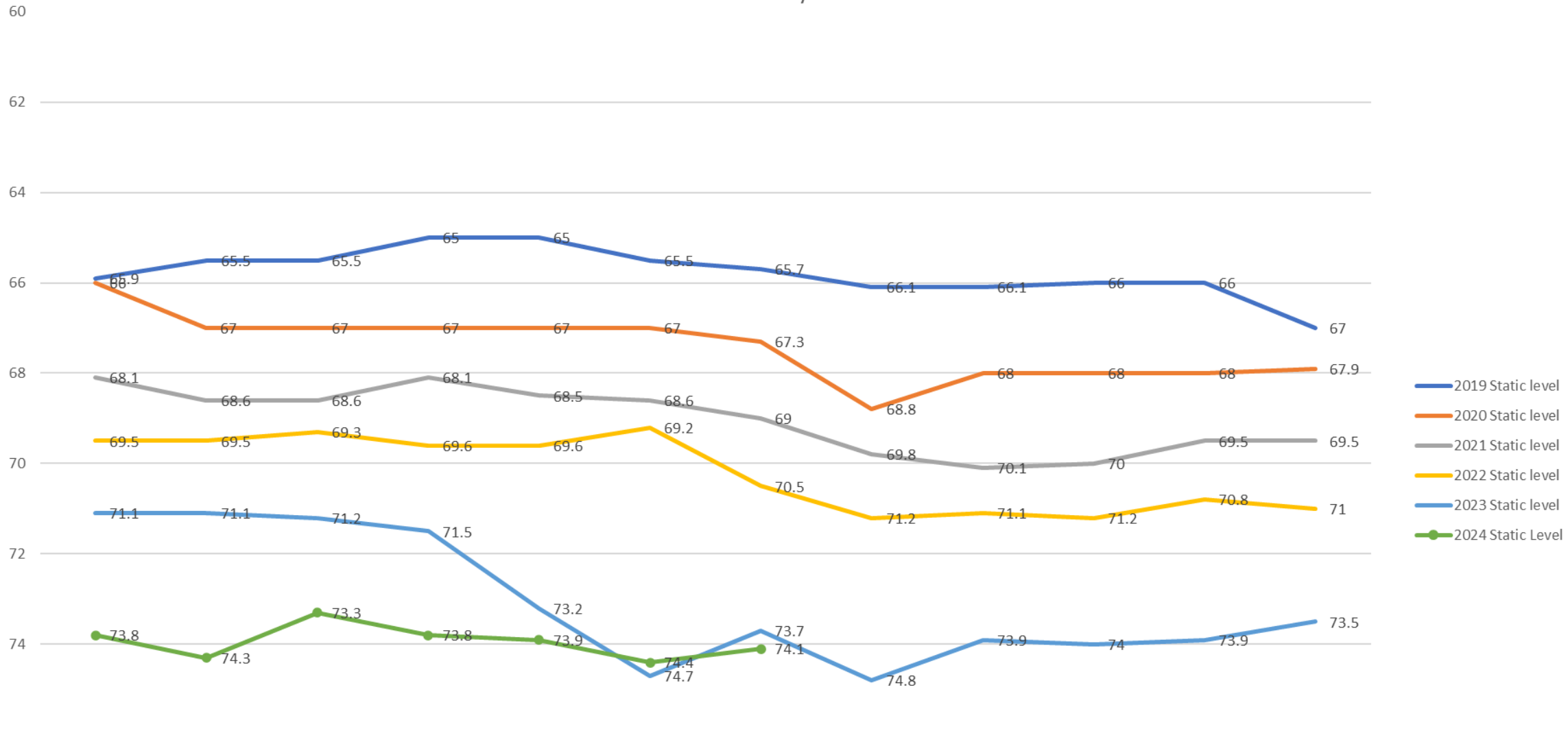
| | Jan | FEB | March | April | May | June | July | Aug | Sept | Oct | Nov | Dec |
|--------------------|------|------|-------|-------|------|------|------|------|------|------|------|------|
| 2019 Static level | 11.5 | 12.6 | 12.8 | 10 | 9.2 | 10.5 | 12 | 12.6 | 13.7 | 12.1 | 13.5 | 12.8 |
| 2020 Static level | 12.4 | 13.2 | 13.6 | 14 | 14 | 13.2 | 13.7 | 13.4 | 14.7 | 15.7 | 15.9 | 16.1 |
| 2021 Static level | 15.9 | 13 | 12.6 | 12.2 | 13.6 | 14.2 | 14 | 14.4 | 16.3 | 16.5 | 14.9 | 15 |
| 2022 Static level | 16 | 17.1 | 15.8 | 16.6 | 15.6 | 12.7 | 15.3 | 16.3 | 17.6 | 18.3 | 18.5 | 18.4 |
| 2023 Static level | 18.4 | 18.4 | 18.5 | 19.6 | 21 | 21.3 | 19.9 | 20.2 | 21.7 | 21.2 | 20.8 | 20.2 |
| 2024 Static Levels | 21 | 20.9 | 21 | 21.2 | 19.4 | 19.6 | 15.4 | 19.8 | 20.6 | | | |

Well 6 static level last 5 years



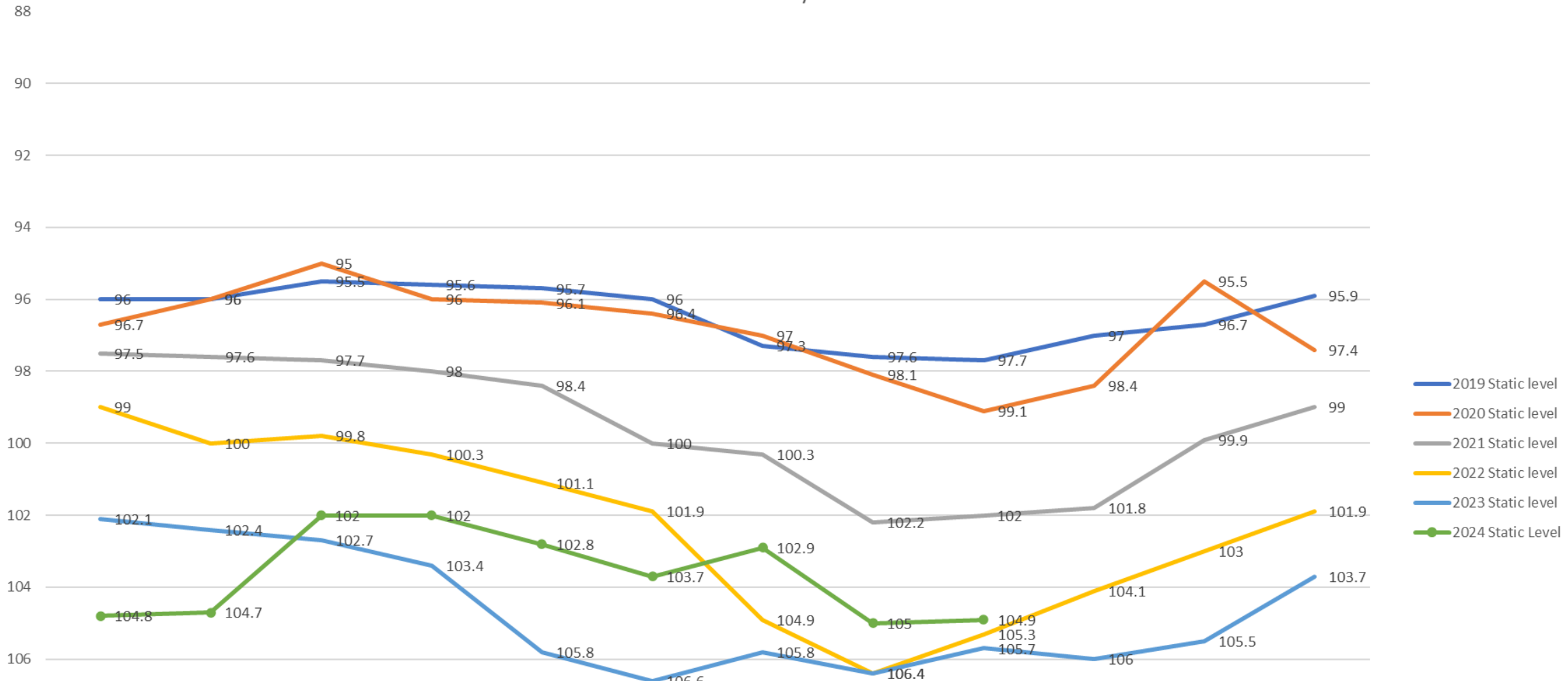
| | Jan | FEB | March | April | May | June | July | Aug | Sept | Oct | Nov | Dec |
|-------------------|------|------|-------|-------|------|------|------|------|------|------|------|------|
| 2019 Static level | 74.4 | 73.4 | 73.3 | 73 | 73.3 | 73.4 | 74.1 | 74.5 | 74.4 | 74 | 73.6 | 73.4 |
| 2020 Static level | 73 | 73 | 73 | 73 | 73.4 | 73.8 | 74.5 | 74.5 | 75.5 | 75.6 | 75 | 74.7 |
| 2021 Static level | 74.5 | 75 | 75 | 74.6 | 74.9 | 75.2 | 75.6 | 76.4 | 76.8 | 76.6 | 75.9 | 75.5 |
| 2022 Static level | 75 | 75.9 | 75.4 | 76 | 75.9 | 76.3 | 77.4 | 77.8 | 78.1 | 78 | 77.5 | 77.5 |
| 2023 Static level | 77.2 | 77.3 | 77.5 | 77.9 | 79.1 | 80.5 | 80 | 80.3 | 80.4 | 80.1 | 79.7 | 79.6 |
| 2024 Static Level | 80 | 79.9 | 79.7 | 81.1 | 81.2 | 81.8 | 81.1 | 82.5 | 82.7 | | | |

Well 8 static level last 5 years



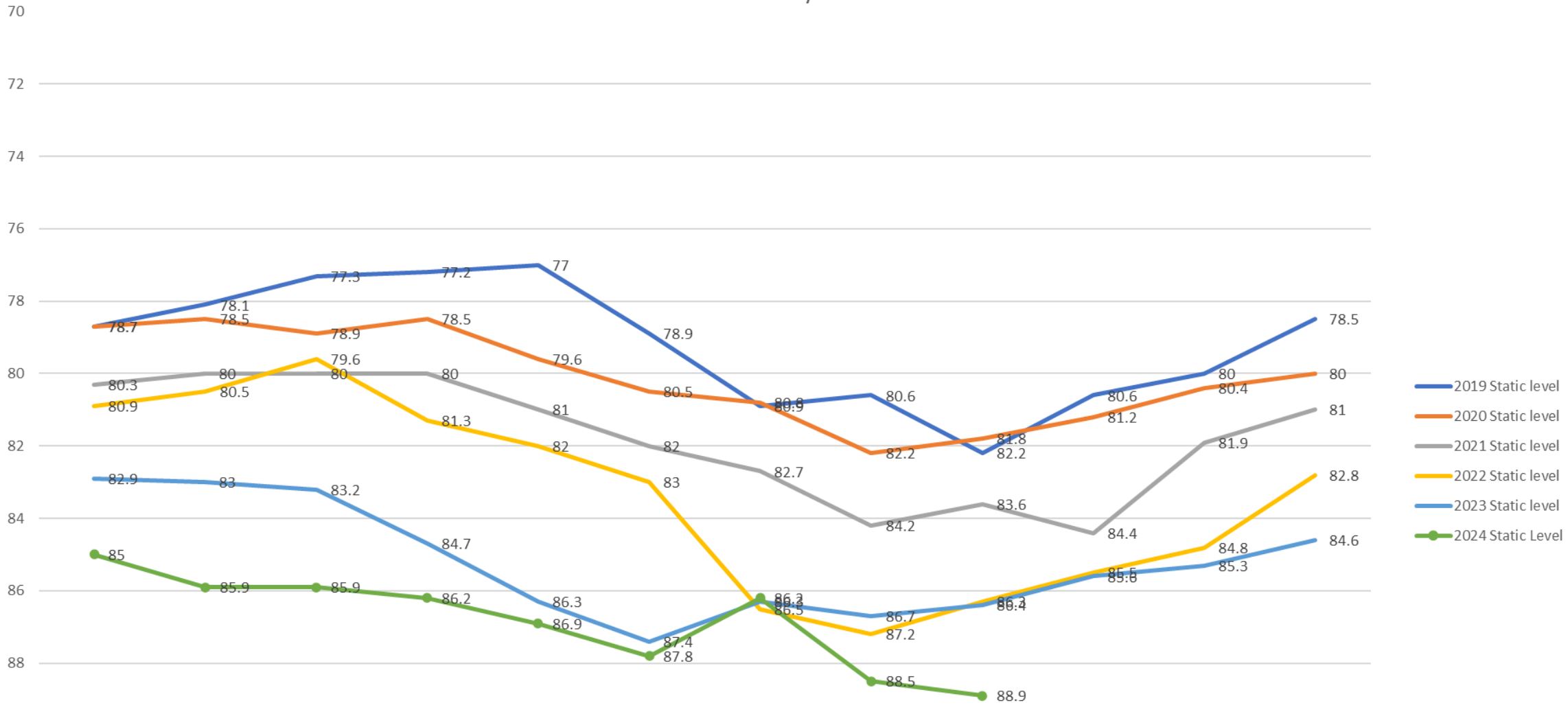
| | Jan | FEB | March | April | May | June | July | Aug | Sept | Oct | Nov | Dec |
|-------------------|------|------|-------|-------|------|------|------|------|------|------|------|------|
| 2019 Static level | 65.9 | 65.5 | 65.5 | 65 | 65 | 65.5 | 65.7 | 66.1 | 66.1 | 66 | 66 | 67 |
| 2020 Static level | 66 | 67 | 67 | 67 | 67 | 67 | 67.3 | 68.8 | 68 | 68 | 68 | 67.9 |
| 2021 Static level | 68.1 | 68.6 | 68.6 | 68.1 | 68.5 | 68.6 | 69 | 69.8 | 70.1 | 70 | 69.5 | 69.5 |
| 2022 Static level | 69.5 | 69.5 | 69.3 | 69.6 | 69.6 | 69.2 | 70.5 | 71.2 | 71.1 | 71.2 | 70.8 | 71 |
| 2023 Static level | 71.1 | 71.1 | 71.2 | 71.5 | 73.2 | 74.4 | 73.7 | 74.8 | 73.9 | 74 | 73.9 | 73.5 |
| 2024 Static Level | 73.8 | 74.3 | 73.3 | 73.8 | 73.9 | 74.4 | 74.1 | | | | | |

Well 9 static level last 5 years



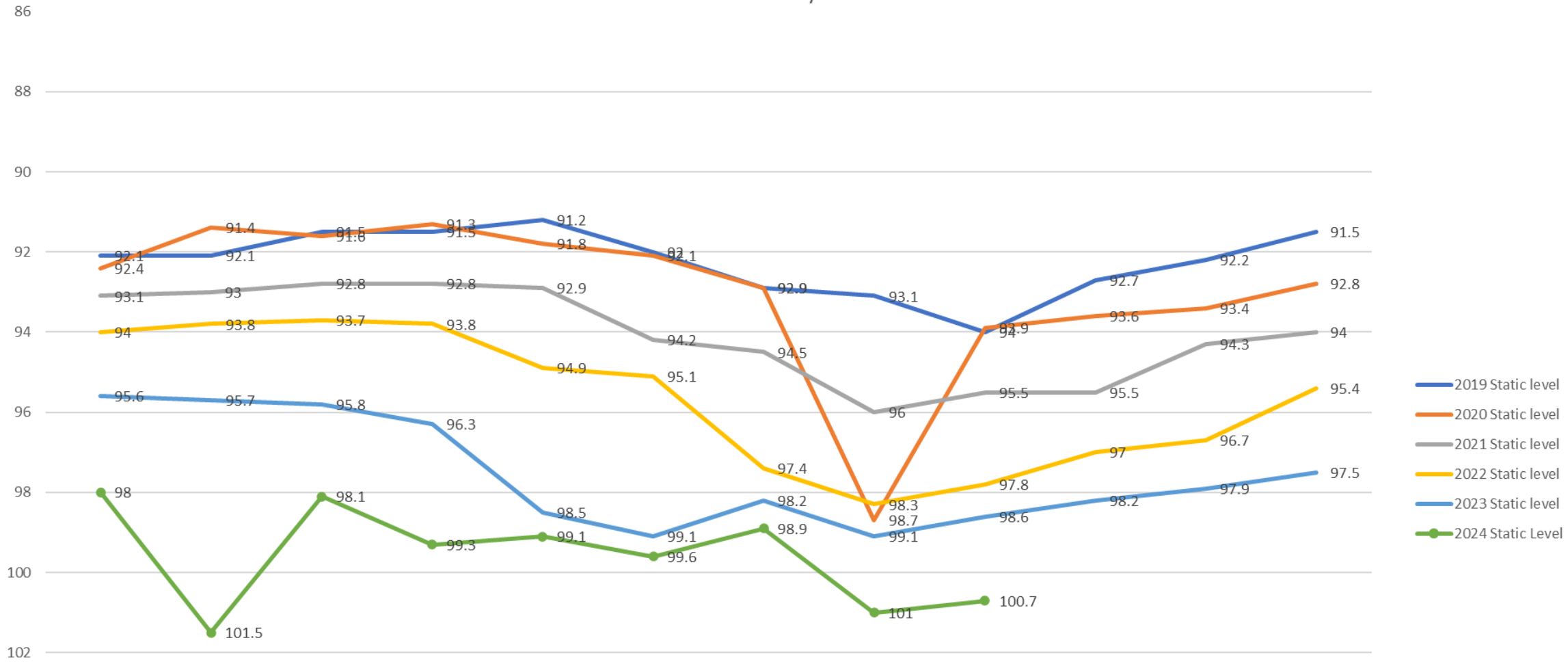
| | Jan | FEB | March | April | May | June | July | Aug | Sept | Oct | Nov | Dec |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2019 Static level | 96 | 96 | 95.5 | 95.6 | 95.7 | 96 | 97.3 | 97.6 | 97.7 | 97 | 96.7 | 95.9 |
| 2020 Static level | 96.7 | 96 | 95 | 96 | 96.1 | 96.4 | 97 | 98.1 | 99.1 | 98.4 | 95.5 | 97.4 |
| 2021 Static level | 97.5 | 97.6 | 97.7 | 98 | 98.4 | 100 | 100.3 | 102.2 | 102 | 101.8 | 99.9 | 99 |
| 2022 Static level | 99 | 100 | 99.8 | 100.3 | 101.1 | 101.9 | 104.9 | 106.4 | 105.3 | 104.1 | 103 | 101.9 |
| 2023 Static level | 102.1 | 102.4 | 102.7 | 103.4 | 105.8 | 106.6 | 105.8 | 106.4 | 105.7 | 106 | 105.5 | 103.7 |
| 2024 Static Level | 104.8 | 104.7 | 102 | 102 | 102.8 | 103.7 | 102.9 | 105 | 104.9 | | | |

Well 10 static level last 5 years



| | Jan | FEB | March | April | May | June | July | Aug | Sept | Oct | Nov | Dec |
|-------------------|------|------|-------|-------|------|------|------|------|------|------|------|------|
| 2019 Static level | 78.7 | 78.1 | 77.3 | 77.2 | 77 | 78.9 | 80.9 | 80.6 | 82.2 | 80.6 | 80 | 78.5 |
| 2020 Static level | 78.7 | 78.5 | 78.9 | 78.5 | 79.6 | 80.5 | 80.8 | 82.2 | 81.8 | 81.2 | 80.4 | 80 |
| 2021 Static level | 80.3 | 80 | 80 | 80 | 81 | 82 | 82.7 | 84.2 | 83.6 | 84.4 | 81.9 | 81 |
| 2022 Static level | 80.9 | 80.5 | 79.6 | 81.3 | 82 | 83 | 86.5 | 87.2 | 86.3 | 85.5 | 84.8 | 82.8 |
| 2023 Static level | 82.9 | 83 | 83.2 | 84.7 | 86.3 | 87.4 | 86.3 | 86.7 | 86.4 | 85.6 | 85.3 | 84.6 |
| 2024 Static Level | 85 | 85.9 | 85.9 | 86.2 | 86.9 | 87.8 | 86.2 | 88.5 | 88.9 | | | |

Well 11 static level last 5 years



| | Jan | FEB | March | April | May | June | July | Aug | Sept | Oct | Nov | Dec |
|-------------------|------|-------|-------|-------|------|------|------|------|-------|------|------|------|
| 2019 Static level | 92.1 | 92.1 | 91.5 | 91.5 | 91.2 | 92 | 92.9 | 93.1 | 94 | 92.7 | 92.2 | 91.5 |
| 2020 Static level | 92.4 | 91.4 | 91.6 | 91.3 | 91.8 | 92.1 | 92.9 | 98.7 | 93.9 | 93.6 | 93.4 | 92.8 |
| 2021 Static level | 93.1 | 93 | 92.8 | 92.8 | 92.9 | 94.2 | 94.5 | 96 | 95.5 | 95.5 | 94.3 | 94 |
| 2022 Static level | 94 | 93.8 | 93.7 | 93.8 | 94.9 | 95.1 | 97.4 | 98.3 | 97.8 | 97 | 96.7 | 95.4 |
| 2023 Static level | 95.6 | 95.7 | 95.8 | 96.3 | 98.5 | 99.1 | 98.2 | 99.1 | 98.6 | 98.2 | 97.9 | 97.5 |
| 2024 Static Level | 98 | 101.5 | 98.1 | 99.3 | 99.1 | 99.6 | 98.9 | 101 | 100.7 | | | |