TRACK SURFACE DATA

The **California Horseracing Board (CHRB)** launched the **Racing Safety Project (RSP)** in 2010 to enhance racehorse and rider safety through standardized track monitoring and evaluation. CHRB Safety Stewards conduct ongoing inspections and collect data from racetracks and backstretch areas.

A critical component of the RSP is the **weekly evaluation of the racing surface**, which focuses on three primary measurements: pad compaction, turf firmness, and surface characteristics.

1. Pad Compaction (Hardness)

The first step is assessing the compaction, or hardness, of the track's **pad**, the compacted layer beneath approximately **3 to 3½ inches of loose sand and surface amendments (the cushion).** This subsurface layer provides structural stability for the racing surface.

Pad firmness is measured using a **Clegg Impact Soil Tester (Clegg hammer)**, providing quantitative data to monitor trends and identify potential safety concerns.

2. Turf Firmness

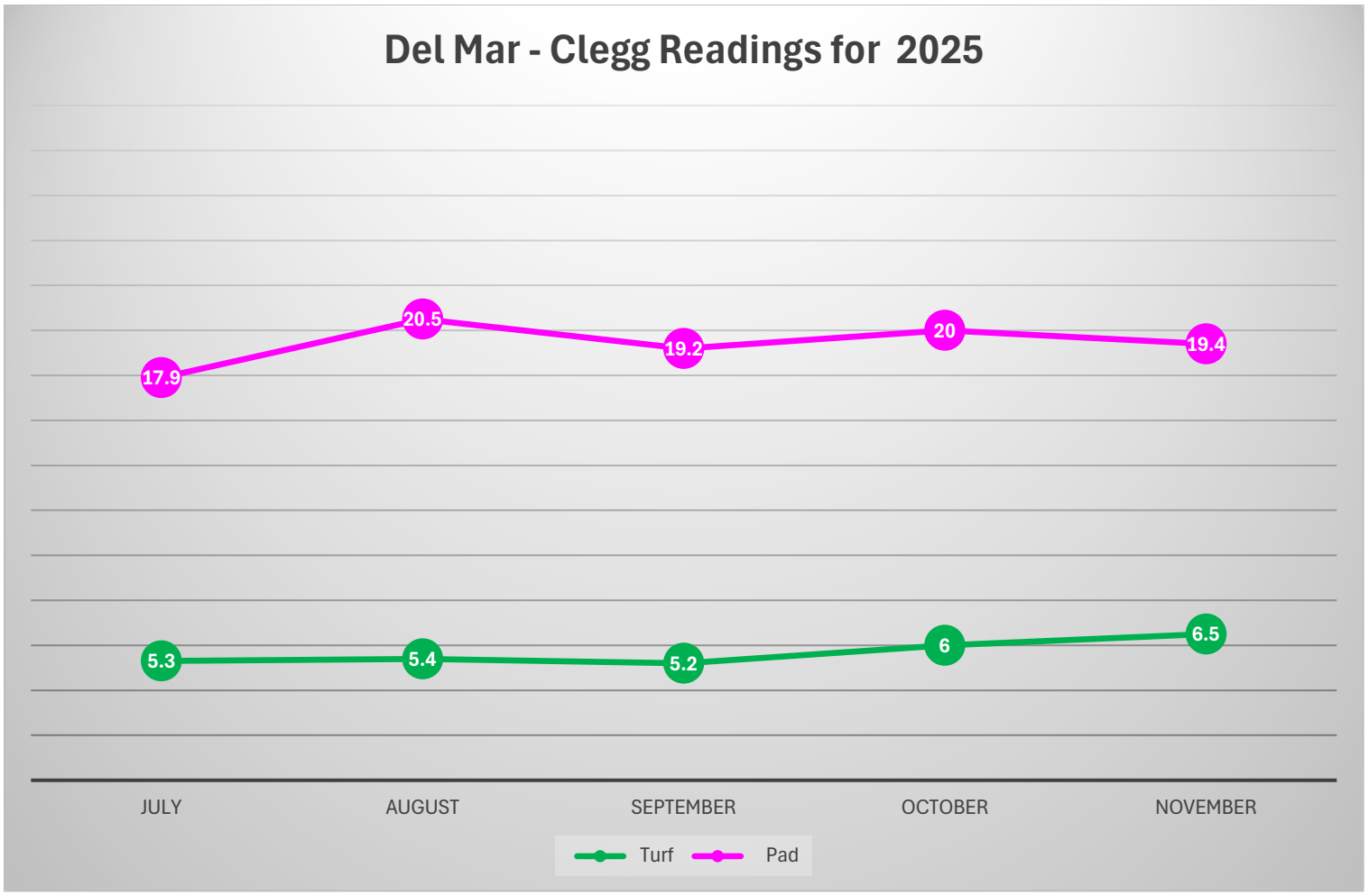
For **turf courses**, firmness readings are taken concurrently with pad measurements. Turf firmness is affected by **weather, mechanical practices (aeration, irrigation), and grass type**. These measurements ensure consistent and safe racing conditions.

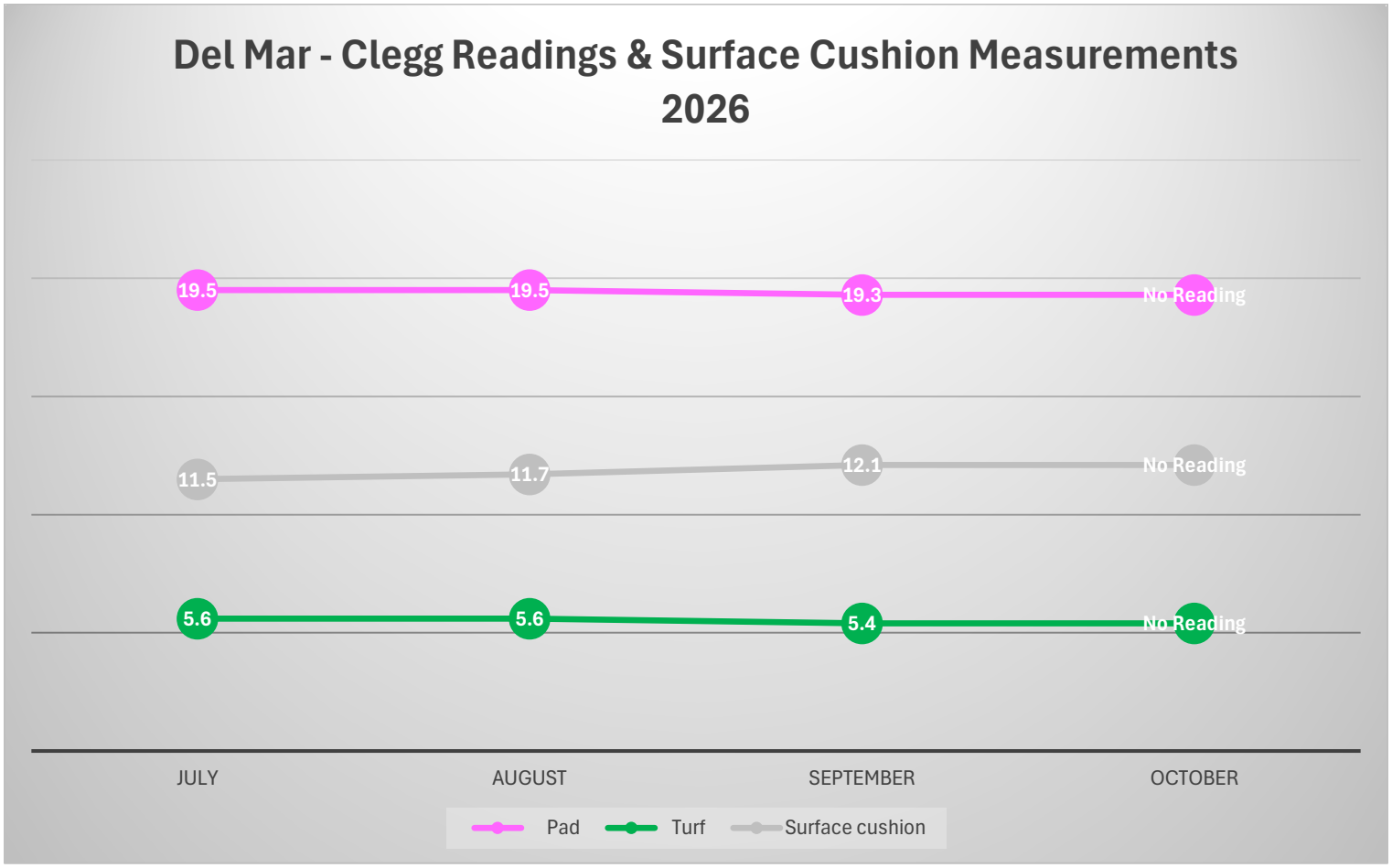
3. Surface Characteristics (Moisture, Silt, and Clay)

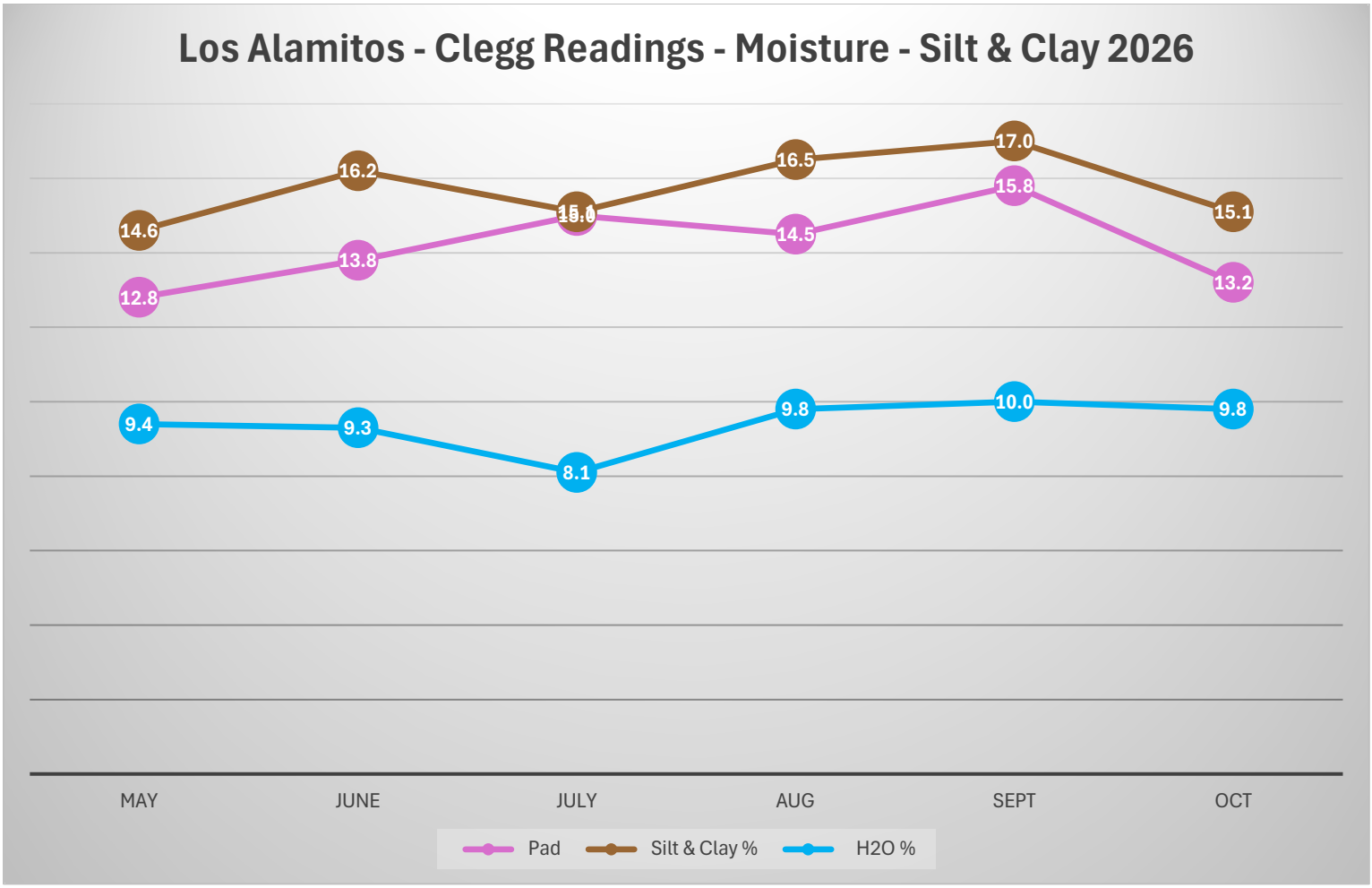
The final evaluation focuses on the **surface layer**, combining moisture and particle composition, which influence track consistency, cushion performance, drainage, and mechanical behavior.

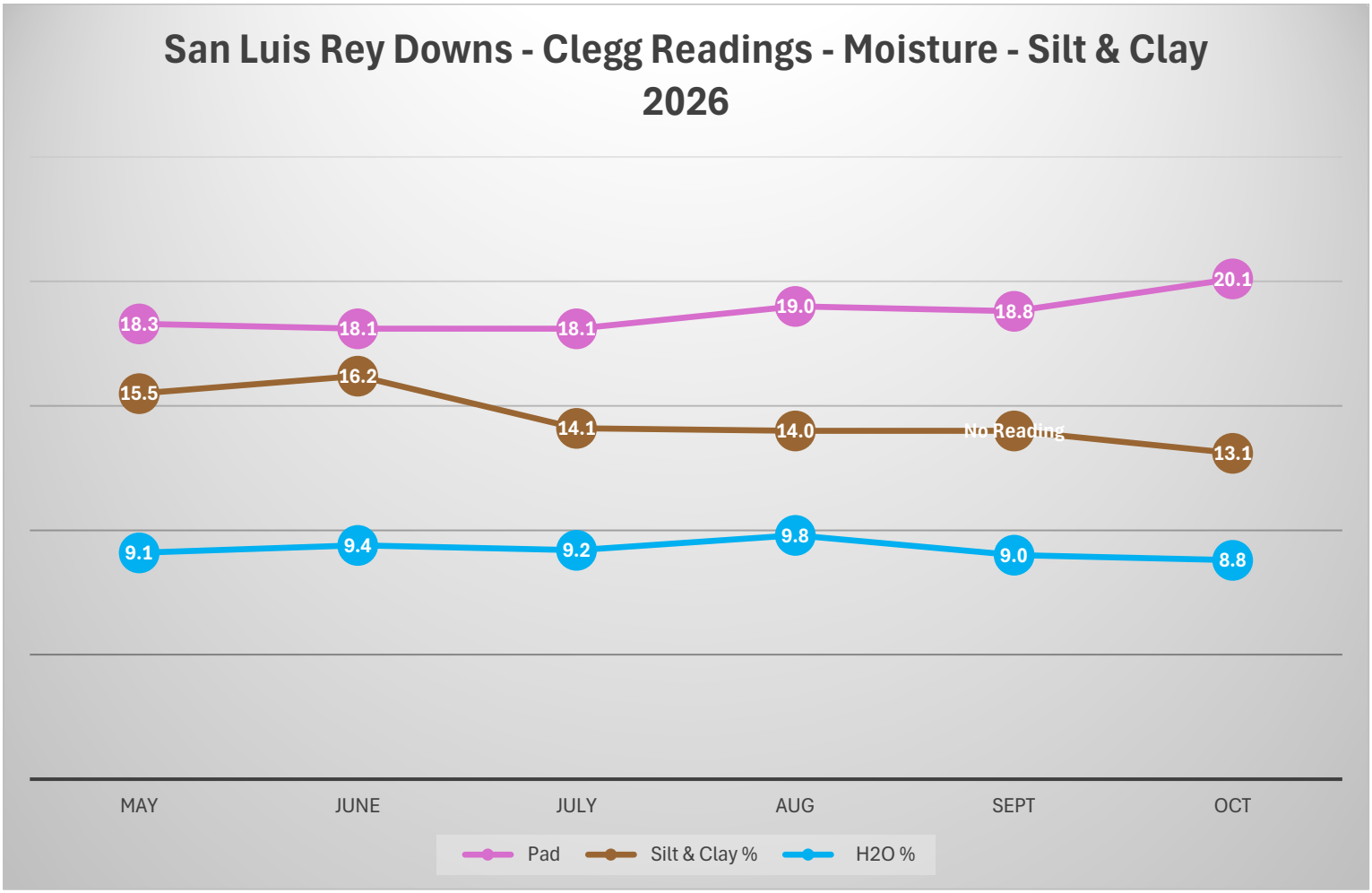
- **Moisture Content:** Weekly samples are collected at consistent times and locations, then analyzed using **ASTM D2216**, the standard method for determining water content in soil.
- **Silt and Clay Content:** Samples are collected every two weeks and tested following **ASTM C117**, determining the proportion of fine particles (smaller than **75 microns**) to assess drainage and binding properties.

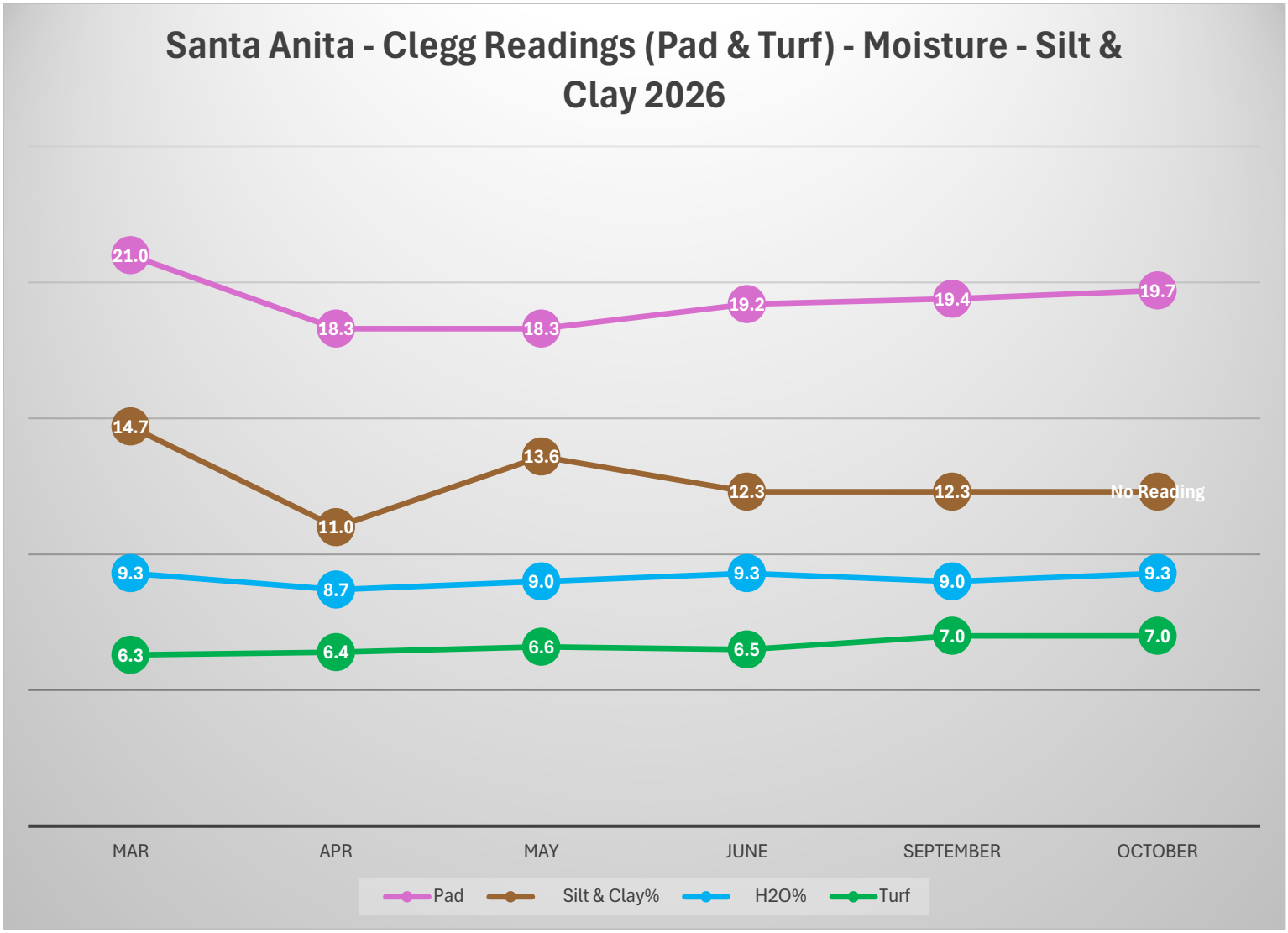
Together, these measurements provide a structured, data-driven approach to maintaining a safe and consistent racing surface under the Racing Safety Project.


Del Mar - Clegg Readings for 2025
17.9
20.5
19.2
20
19.4
5.3
5.4
5.2
6
6.5
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVERMBER
Turf
Pad


Del Mar - Clegg Readings & Surface Cushion Measurements 2026
19.5
19.5
19.3
No Reading
11.5
11.7
12.1
No Reading
5.6
5.6
5.4
No Reading
JULY
AUGUST
SEPTEMBER
OCTOBER
Pad
Turf
Surface cushion


Los Alamitos - Clegg Readings - Moisture - Silt & Clay 2026
14.6
16.2
15.1
16.5
17.0
15.1
12.8
13.8
14.5
15.8
13.2
9.4
9.3
8.1
9.8
10.0
9.8
MAY
JUNE
JULY
AUG
SEPT
OCT
Pad
Silt & Clay %
H2O %


San Luis Rey Downs - Clegg Readings - Moisture - Silt & Clay 2026
18.3
18.1
18.1
19.0
18.8
20.1
15.5
16.2
14.1
14.0
No Reading
13.1
9.1
9.4
9.2
9.8
9.0
8.8
MAY
JUNE
JULY
AUG
SEPT
OCT
Pad
Silt & Clay %
H2O %



Updated 11/03/2026