

Product: SmartSoil Hydrogel

Research and Development

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TEST LOCATION: Golf course

☐ Tee Box ☐ Fairway ☐ Putting Green ☒ Nursery ☐ Rough ☐ HOA

4450 North Clubhouse Drive,

Somis CA 93066

(805) 485-4956

Curated by: Tim Paulson, Director of Agronomy

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TEST LOT: 500 sq ft (nursery)

GRASS/TURF: 419 Bermuda / Bent mix

Irrigation Source: Well water

Installation Date: 08/28/2023

SmartSoil Hydrogel: 9.13 lb.

(1 sq ft soil x 0.30oz gel)

Soil to gel ratio: 100 : 0.19

Post Rinse: Yes

Equipment Used:

- Installation: PetraTools HD5000 Sprayer
- Photography: DJI Fly Drone
- Soil Moisture: TDR Field Scout (Depth: 4.8")

TEST PARAMETERS:

- ☒ SURFACE RUNOFF CONTROL
- ☒ IRRIGATION REDUCTION
- ☒ INCREASE SOIL MOISTURE RETENTION
- ☒ RETENTION OF GREEN MASS
- ☐ GREEN MASS RECOVERY
- ☒ AID GERMINATION
- ☐ NUTRITION PROTOCOL
- ☒ SOIL STABILIZATION



August 28, 2023

Weather average: high/low: 77/59 **Rain:** 0 days

Irrigation: 100%

SmartSoil Hydrogel has been integrated into the 500 sq ft plot, outlined in purple.

The grass was shaved down to maximize the soil exposure. Post-installation rinse was performed.

Beginning on September 4th, the irrigation on the nursery lot is expected to be reduced by 50%.

Field inspection by: D. Kumuryan



September 5, 2023

Weather average: high/low: 77/58 **Rain:** 0 days

Irrigation: -50% effective **September 4, 2023.**

No supplemental irrigation.

Comments:

Field inspection by: D. Kumuryan



September 11, 2023

Weather average: high/low: 77/58 **Rain:** 0 days

Irrigation: -50% effective **September 4, 2023.**

No supplemental irrigation.

Comments:

Field inspection by: D. Kumuryan



September 19, 2023

Weather average: high/low: 77/58 **Rain:** 0 days

Irrigation: -50% effective September 4, 2023.

No supplemental irrigation.

Comments:

A strip of grass was removed from the nursery to repair damaged greens on the course.

Field inspection by: D. Kumuryan



September 25, 2023

Weather average: high/low: 77/58 **Rain:** 0 days

Irrigation: -50% effective September 4, 2023.

No supplemental irrigation.

Comments:

A strip of grass was removed from the nursery to repair damaged greens on the course.

Field inspection by: D. Kumuryan



October 2, 2023

Weather average: high/low: 74/55 **Rain:** 0 days

Irrigation: -50% effective September 4, 2023.

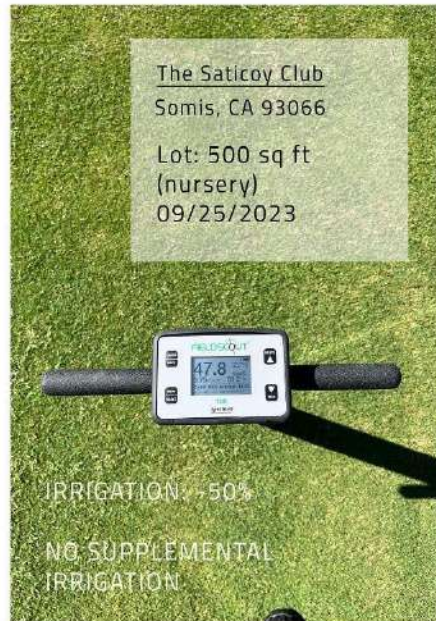
No supplemental irrigation.

Comments:

A strip of grass was removed from the nursery to repair damaged greens on the course.

Field inspection by: D. Kumuryan

soil moisture readings for weeks 4 and 5



Field inspection by: D. Kumuryan



**August 28, 2023
Installation**

☑ SURFACE RUNOFF CONTROL ☑ IRRIGATION REDUCTION ☑ SOIL MOISTURE RETENTION INCREASE ☑ GREEN MASS SUSTAINABILITY WITH ½ IRRIGATION

Irrigation reduced to 1/2 starting September 5th, 2023.



**October 2, 2023,
5-week report**

Field inspection by: D. Kumuryan

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Diana Kumuryan


Diana Kumuryan (Oct 5, 2023 15:44 PDT)

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Tim Paulson (Oct 5, 2023 17:34 PDT)

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