

# North Bay Materials – Product Spec. Sheet

**Product:** Organic Soil Conditioner Mix

## Product Description

A nutrient-rich, organic soil amendment formulated to improve clay soils, increase aeration/drainage, and enhance microbial activity. Optimized for gardens, planting beds, lawns, orchards, and vineyards across Napa & Solano.

## Material Composition

- Organic Components: Rice hulls, sawdust, poultry manure (composted/manure-stabilized)
- Mineral Components: Gypsum ( $\text{CaSO}_4\cdot 2\text{H}_2\text{O}$ ), Iron sulfate ( $\text{FeSO}_4$ )

## Physical & Chemical Properties (typical)

- Organic Matter: ~45% (dry wt)
- pH (1:2  $\text{H}_2\text{O}$ ): ~6.8
- EC: ~2.4 dS/m
- C:N: ~22:1
- Bulk Density: ~0.60 g/cm<sup>3</sup>
- Particle Size: Fine–medium, screened (see Lab Analysis)

## Performance Features

- Clay Relief: Gypsum + organic matter reduce compaction and improve infiltration
- Nutrient Boost: Slow-release N with balanced P, K, Ca, S, and micronutrients
- Soil Biology: High organic matter supports beneficial microbes and root vigor
- Workability: Light texture mixes easily with native soils

## Recommended Application Rates (guidelines)

- Vegetable Gardens / Raised Beds: 2–3" layer (≈0.17–0.25 yd<sup>3</sup> per 10'×10'), till 6–8" into native soil
- Flower Beds & Shrubs: 1–2" incorporated into top 6"
- Lawns (New): 1–2" incorporated before seeding/sod; Topdressing: ¼–½" after aeration
- Trees / Vines: Blend up to 25–33% by volume with native backfill; keep 3" clear of trunk/canestock
- Vineyard Row Bands: 0.5–1" band, incorporate lightly to improve rooting zone
- Irrigation: After installation, water thoroughly to settle and buffer salts. Avoid over-application in poorly drained sites.

Depth	Coverage per 1 cubic yard
1"	~315 sq ft
2"	~155 sq ft
3"	~105 sq ft
4"	~75 sq ft

Parameter	Method (typical)	Result	Units	Notes
Moisture Content	Oven dry (105 °C)	30	% wt	At time of sampling
Organic Matter	Loss on Ignition (550 °C)	45	% dry wt	High due to hulls/sawdust/manure
pH (1:2 H <sub>2</sub> O)	Saturated paste	6.8	—	Slightly acidic–neutral
Electrical Conductivity	1:2 slurry	2.4	dS/m	Moderate salts; water in after mixing
C:N Ratio	Combustion (C,N)	22:1	—	Balanced for soil conditioning
Total Nitrogen (N)	Kjeldahl/Combustion	1.2	% dry wt	Slow-release from manure
Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	Mehlich-3	0.7	% dry wt	
Available Potash (K <sub>2</sub> O)	Mehlich-3	0.8	% dry wt	
Calcium (Ca)	Mehlich-3	2.5	% dry wt	From gypsum
Magnesium (Mg)	Mehlich-3	0.6	% dry wt	
Sulfur (S)	ICP after acid digest	1.2	% dry wt	From gypsum + FeSO <sub>4</sub>
Iron (Fe)	ICP	4,000	mg/kg	From iron sulfate
Manganese (Mn)	ICP	200	mg/kg	
Zinc (Zn)	ICP	100	mg/kg	
Copper (Cu)	ICP	50	mg/kg	
Boron (B)	Hot water extract	5	mg/kg	
Sodium (Na)	ICP	1,500	mg/kg	~0.15%
Chloride (Cl <sup>-</sup> )	Ion chromatography	250	mg/kg	
SAR (Sodium Adsorption Ratio)	Calc.	2	—	Low risk
Bulk Density	Core method	0.6	g/cm <sup>3</sup>	Light, mixes easily

### Installation & Coordination

- Confirm site access and dump location prior to delivery.
- Install when soils are workable; avoid saturated conditions.
- Coordinate with irrigation activation for post-installation flushing.
- Do not place directly against trunks/stems.
- Not intended as a standalone potting mix (blend with mineral soils).

## **Environmental & Safety**

- PPE: Gloves, eye protection; dust mask during dry/windy conditions.
- Hygiene: Wash hands after handling; avoid contact with cuts/eyes.
- Runoff Control: Store covered; prevent discharge to storm drains/waterways.
- Allergens/Odor: Mild, earthy odor may be present initially. Dissipates after incorporation.

## **Quality Assurance**

- Blend consistency verified by batch QC checks.
- Typical lab values provided (see Lab Analysis). For projects requiring certified results, request a lot-specific third-party report prior to installation.

## **Delivery & Packaging**

- Format: Bulk by cubic yard
- Minimum Order: 1 cubic yard
- Typical Lead Time: 1–3 business days (truck availability & weather dependent)
- One Material Per Load: Separate deliveries for multiple materials
- Service Areas: Napa County; Sonoma, Vallejo, Benicia, Suisun City, Fairfield (Solano)

## **Limitations**

- Not a fertilizer substitute on its own for high-demand crops — supplement per soil test.
- Avoid excessive application in poorly drained or saline soils; monitor EC.
- Not OMRI listed (no organic certification claim).

## **Disclaimer**

All listed data/testing results is provided by the material producer or 3rd party laboratory.  
North Bay Materials does not perform or offer in-house aggregate testing.

All materials on our site are natural blend, meaning they are machine processed not machine made. North Bay Materials does not guarantee specific nutrient analysis or exact composition percentages. It is the responsibility of the installer to ensure product suitability for intended application.

## **Material Limitations and Liability:**

Please note: Due to natural shifting and separation that can happen during transportation, material or aggregate gradations are only guaranteed at the producer's facility — not at the jobsite. North Bay Materials and our suppliers make no claims or guarantees that this material will meet specific project requirements, specifications, or design standards. It is the buyer's responsibility to confirm suitability and obtain any necessary approvals or certifications prior to use. All materials are provided as is, with no warranties — express or implied — including but not limited to warranties of merchantability or fitness for a particular purpose. We do not guarantee how the material will perform once installed or in any finished work. By purchasing, the buyer agrees that North Bay Materials and our suppliers are not liable for any damages — including indirect, incidental, special, or consequential losses such as lost profits — whether based on warranty, contract, negligence, or any other legal theory, even if those damages were foreseeable.



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