

North Bay Materials – Product Spec. Sheet

Product: Organic Soil Conditioner Mix
Product ID: NBM-SOIL-505

Product Description

Our Raised Bed Potting Mix is a nutrient-rich, ready-to-use blend designed for planter boxes, vegetable gardens, and raised bed installations across Napa, Vallejo, Benicia, St. Helena, Calistoga, Angwin, Green Valley, and Cordelia. Formulated with equal parts loam, steer manure, and soil conditioner, this soil provides balanced fertility, drainage, and aeration for strong root development and long-lasting results.

Material Composition

- 1/3 Loam Soil –stable mineral base with excellent water-holding capacity
- 1/3 Steer Manure –natural nitrogen and organic matter for fertility
- 1/3 Soil Conditioner –improves drainage, structure, and aeration

Physical & Chemical Properties (typical)

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- Organic Matter: ~40–45% (dry wt)
- pH (1:2 H₂O): ~6.5–6.9 (slightly acidic–neutral)
- EC: ~2.0–2.5 dS/m
- C:N Ratio: ~20–22:1
- Bulk Density: ~0.55–0.65 g/cm³
- Particle Size: Fine–medium, screened

Performance Features

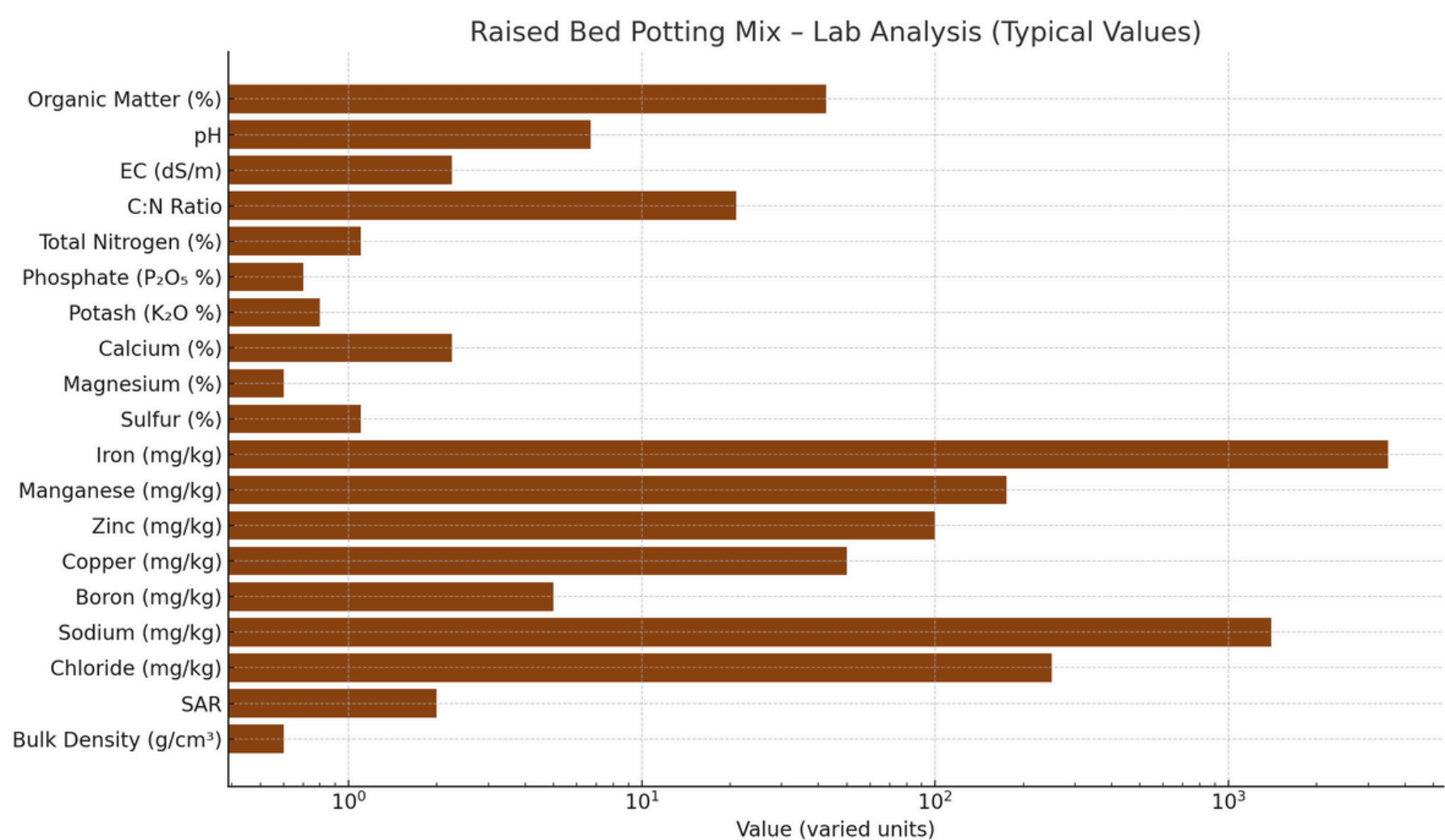
- Balanced Fertility: Loam + manure + conditioner supply a steady release of nutrients for vegetables, herbs, and flowers.
- Soil Biology: Rich organic matter supports microbial activity and root vigor.
- Drainage & Aeration: Conditioner prevents compaction and promotes healthy root development.
- Workability: Easy to spread and incorporate, blends smoothly into raised beds and planter boxes.
- Sustainability: Locally blended with natural materials, minimizing need for synthetic fertilizers.

Recommended Application Rates (guidelines)

- Raised Beds / Planter Boxes: Fill beds directly with mix; 2–3 ft depth recommended for vegetables.
- Vegetable Gardens: Apply 2–3" layer (~0.20 yd³ per 10'×10') and till into top 6–8" of native soil.
- Flower Beds & Shrubs: Incorporate 1–2" into top 6" for improved structure and fertility.
- Lawns (New): Incorporate 1–2" before seeding or laying sod; for topdressing, apply ¼–½" after aeration.
- Trees & Vines: Blend 25–30% with native backfill, keeping 3" clearance from trunk/canestock.
- Vineyard Row Bands: Apply 0.5–1" band into row to improve rooting zone and soil tilth.
- Irrigation: Water thoroughly after installation to settle soil and buffer salts; avoid over-application in poorly drained sites.

Planter Bed Size	Cubic Yards Needed
8x4x1.5'	~ 1.75 yd ³
8x4x2'	~ 2.25 yd ³
10x4x1.5'	~ 2 yd ³
12x4x1.5'	~ 2.5 yd ³
12x6x2'	~ 5.5 yd ³

Parameter	Method (typical)	Result	Units	Notes
Moisture Content	Oven dry (105 °C)	Varies	% dry wt	At time of sampling
Organic Matter	Loss on Ignition (550 °C)	~40–45	% dry wt	From manure + conditioner
pH (1:2 H ₂ O)	Saturated paste	6.5–6.9	–	Slightly acidic–neutral, good for vegetables
Electrical Conductivity	1:2 slurry	2.0–2.5	dS/m	Moderate salts, water in after mixing
C:N Ratio	Combustion (C,N)	~20–22:1	–	Balanced for soil conditioning
Total Nitrogen (N)	Kjeldahl/Combustion	~1.0–1.2	% dry wt	From steer manure
Available Phosphate (P ₂ O ₅)	Mehlich-3	~0.6–0.8	% dry wt	From manure + conditioner
Available Potash (K ₂ O)	Mehlich-3	~0.7–0.9	% dry wt	Supports root and fruit development
Calcium (Ca)	Mehlich-3	~2.0–2.5	% dry wt	From soil conditioner minerals
Magnesium (Mg)	Mehlich-3	~0.5–0.7	% dry wt	Contributes to chlorophyll production
Sulfur (S)	ICP after acid digest	~1.0–1.2	% dry wt	From conditioner + manure
Iron (Fe)	ICP	~3,000–4,000	mg/kg	Naturally present from organic matter
Manganese (Mn)	ICP	~150–200	mg/kg	Micronutrient for enzyme activity
Zinc (Zn)	ICP	~80–120	mg/kg	Essential for growth hormones
Copper (Cu)	ICP	~40–60	mg/kg	Trace micronutrient
Boron (B)	Hot water extract	~4–6	mg/kg	Supports flowering & fruiting
Sodium (Na)	ICP	~1,200–1,600	mg/kg	Low–moderate
Chloride (Cl ⁻)	Ion chromatography	~200–300	mg/kg	Safe levels
SAR (Sodium Adsorption Ratio)	Calc.	~2	–	Low risk
Bulk Density	Core method	~0.55–0.65	g/cm ³	Light, mixes easily



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: Marin County, Sonoma County; Napa, Vallejo, Benicia, Suisun City, Fairfield (Solano)

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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