



Rogue Valley Soil Testing
It all starts with the soil

Horn Creek Hemp Co.
Whitney Murdoch
P O Box 532
Jacksonville OR 97530

April 2, 2020
541 941 3030
sales@horncreekhemp.com
Set 1

Zone 2 #9	Value in pp/m	General Value	Comments
pH	6.1	Slightly acid	Add dolomite lime
E.C.	.19	Slight low	To improve with added amendments
T D S	130	Good	
Nitrogen	2.5	Very low	See notes to raise nitrogen
Phosphorous	38	Weak low	See pages to add bone meal
Potassium	65	Very good	
Calcium	20	Low	
Magnesium	18	Low	
Humus	3	Sufficient	Soil has 5.25% organic matter
Sand %	50		
Silt %	30		Classic sandy loam Lacking nitrogen and
Clay %	20		slightly acidic..

All 13 samples had one common issue, that being low, to very low available nitrogen. Other basic readings varied from very good to very low. Read through all. Amending individual zones can be serviced by comparing the test results with the pages of information supplied to correct them. Basic texture of the samples is very common through out all tested. Should drain well and with amendments should all have good E.C. that being Electrical Conductivity, the ability of nutrients to travel from soil to plant roots. Hope this information serves as a support to your hemp growing.

Thank you
Michael Anzalone



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Set 2

Zone 5 #2	Value in pp/m	General Value	Comments
pH	6.4	Slight acid	Close to best aim point. See notes on pH
E.C.	.41	Very good	Will move nutrients well
T D S	280	Very strong	Very good texture for a strong C.E.C notes
Nitrogen	5	Low	Add blood meal or alternative see pages and notes
Phosphorous	38	Slight low	Help by adding bone meal. See page and notes
Potassium	90	Very good	
Calcium	24	Slight low	Will improve with phosphorus amendment.
Magnesium	20	Slight low	Will improve with phosphorus amendment.
Humus	3	Sufficient	Over 5# organic matter
Sand %	50		
Silt %	20		A low silt loam rich in nutrients
Clay %	30		Waiting for recommended amendments.

Zone 6 #3	Value in pp/m	General Value	Comments
pH	6.2	Slight acid	Not to go any lower Add dolomite lime
E.C.	.29	Well in range	
T D S	160	Very good	Will make best use of amendments
Nitrogen	2.5	Very low	Add blood meal or alternative to raise nitrogen
Phosphorous	85	Very good	
Potassium	65	Very good	
Calcium	28	Sufficient	
Magnesium	24	Sufficient	
Humus	2	Low	Less than 3% organic matter Add compost notes
Sand %	60		
Silt %	20		A sandy loam, low in clay. Low in silt wants to
Clay %	20		have compost to build silt

Zone 6 #4	Value in pp/m	General Value	Comments
pH	6.2	Slight acid	Not to go any lower Add dolomite lime
E.C.	.22	Slight low	Will improve with amendments
T D S	140	Sufficient good	
Nitrogen	3	Low	Add blood meal or alternative to raise nitrogen
Phosphorous	45	Slight low	Help by adding bone meal. See page and notes
Potassium	62	Good	
Calcium	23	Sufficient	Will improve with phosphorus amendment.
Magnesium	20	Sufficient	Will improve with phosphorus amendment.
Humus	2.5	Slight low	Just over 4% organic matter Add compost
Sand %	50		
Silt %	20		A sandy, low silt moderate clay loam
Clay%	30		



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Set 3

Zone 5 #1	Value in pp/m	General Value	Comments
pH	6.5	Very good`	Well into ideal pH for hemp
E.C.	.30	Very good	
T D S	200	Good	
Nitrogen	2.5	Very low	See notes and pages to add nitrogen
Phosphorous	45	Low	See page to add BLOOD MEAL
Potassium	70	Good	
Calcium	22	Slight low	Will improve with phosphorus amend
Magnesium	19	Low	Will improve with phosphorus amend
Humus	2	Weak	Only 3% organic matter. Notes to add compost
Sand %	55		
Silt %	25		A sandy, low silt moderate clay loam
Clay %	20		Basic OK wants nitrogen and compost

Zone 1 #8	Value in pp/m	General Value	Comments
pH	60	Slightly low	Add dolomite lime . Aim to pH closer to 6.8 notes
E.C.	.12	Low	Amendments to help
T D S	80	Low/sufficient	Amendments to help
Nitrogen	0	None available	Amend with blood meal or alternative C notes
Phosphorous	75	Very good	
Potassium	70	Very good	
Calcium	20	Low	Amendments to help
Magnesium	18	Low	Amendments to help
Humus	2	Weak	Only 3% organic matter. Notes to add compost
Sand %	55		A sandy, low silt moderate clay loam
Silt %	25		Basic OK wants nitrogen and compost
Clay %	20		

Zone 3 #11	Value in pp/m	General Value	Comments
pH	5.8	Acid soil	See notes to add dolomite lime
E.C.	.32	Very good	Will transfer nutrients well
T D S	230	Very good	Reads strong C.E.C
Nitrogen	1.5	Very low	Less than 2% organic matter Notes to amend
Phosphorous	38	Slight low	See notes page to add blood meal
Potassium	85	Very good	Normal in soils this side of the Cascades
Calcium	17	Weak	Will improve with phosphorus amend
Magnesium	12	Weak	Will improve with phosphorus amend
Humus	1	Weak	Less than 1.5% organic matter
Sand %	50		
Silt %	30		A sandy, low nutrient loam, waiting to be fed.
Clay%	20		



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Set 4

Zone 1 #10	Value in pp/m	General Value	Comments
pH	6..8	Excellent	Ideal aim point for hemp
E.C.	.14	Slight low	Raise for better transfer of nutrients
T D S	90	Slight low	
Nitrogen	0	None available	Add blood meal or alternative see notes how
Phosphorous	120	Strong	
Potassium	60	Good	
Calcium	22	Slight low	To improve with amendments
Magnesium	24	Slight low	To improve with amendments
Humus	3	Sufficient	5.25% organic matter
Sand %	50		
Silt %	35		Low clay, moderate silt sandy loam
Clay %	15		

Zone 3 #12	Value in pp/m	General Value	Comments
pH	6.2	Slightly low	Almost in hemp range. Add dolomite lime
E.C.	.15	Weak	Slow to transfer nutrients Amendments to help
T D S	120	Very good	Good basics for strong C.E.C.
Nitrogen	1	Very low	Add blood meal or alternative See notes
Phosphorous	51	Slight low	See page to add bone meal
Potassium	60	Good	
Calcium	18	low	Amendments to help
Magnesium	14	low	Amendments to help
Humus	3	Sufficient	Over 5.25% organic matter
Sand %	50		
Silt %	32		Low clay, moderate silt sandy loam
Clay %	18		

Zone 1 #7	Value in pp/m	General Value	Comments
pH	5.9	Acid soil	See notes and pages
E.C.	.9	Weak	Added compost and amendments to help
T D S	60	Sufficient	Added compost and amendments to help
Nitrogen	0	None available	Raising nitrogen will help other readings
Phosphorous	90	Very good	
Potassium	90	Very good	
Calcium	20	Low	Added compost for humus wil help low calcium
Magnesium	22	Low	
Humus	1	Very low	Less than 1.5% organic matter Add compost
Sand %	50		
Silt %	35		Low clay, moderate silt sandy loam
Clay%	15		



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Set 5

Zone 4 #5	Value in pp/m	General Value	Comments
pH	5.9	Acid soil	Add dolomite lime, see chart page for amount
E.C.	.10	Weak	Recommended amendmets to help
T D S	60	Low/ acceptable	Amendments to help
Nitrogen	0	None available	See pages on raising nitrogen
Phosphorous	90	Very good	
Potassium	101	Very good	
Calcium	18	Low	Added amendmets to help
Magnesium	17	Low	Amendments to help
Humus	1.5	Low	Less than 2% organic matter, dd compost notes
Sand %	50		
Silt %	30		A sandy, slight moderate low clay soil.
Clay %	20		Moderate silt, but low in nutrients

Zone 4 #6	Value in pp/m	General Value	Comments
pH	5.7	Acid soil	Add dolomite lime, see chart page for amount
E.C.	.8	Weak	Recommended amendmets to help
T D S	50	Low/ acceptable	Amendments to help
Nitrogen	0	None available	See pages on raising nitrogen
Phosphorous	90	Very good	
Potassium	90	Very good	
Calcium	18	Low	Added amendmets to help
Magnesium	17	Low	Amendments to help
Humus	1.5	Low	Less than 2% organic matter, dd compost notes
Sand %	50		
Silt %	30		A sandy, slight moderate low clay soil.
Clay %	20		Moderate silt, but low in nutrients

Zone #13	Value in pp/m	General Value	Comments
pH	5.5	Acid soil	Add dolomite lime, see chart page for amount
E.C.	.4	Weak	Recommended amendmets to help
T D S	20	Very low	Amendments to help with extra compost
Nitrogen	0	None available	See pages on raising nitrogen
Phosphorous	90	Very good	
Potassium	75	Very good	
Calcium	18	Low	Added amendmets to help
Magnesium	17	Low	Amendments to help
Humus	1.0	Low	Less than 1.75% organic matter, dd compost notes
Sand %	50		
Silt %	30		A sandy, slight moderate low clay soil.
Clay%	20		Moderate silt, but low in nutrients

Electrical Conductivity (EC)

EC stands for electrical conductivity, or the ability of a solution to conduct electricity. Electricity moves efficiently through water with high levels of salt present (high EC), and with more resistance through pure water (low EC). EC indicates how much dissolved salt is in a given sample. That's why EC is also referred to as TDS (total dissolved salts) or salinity (the amount of salts in a solution). All nutrients are salts, so EC is a measure of your total nutrients. Knowing your EC levels will help in plant production and monitoring of inputs. Moisture in soil that has a **high salt level will not move into the plant's roots**, causing drought symptoms, even when there is plenty of water present.

EC Meter Reading Interpretation

0.00 - 0.25 Very low - indicates probable deficiency. **Readings range from very low to**

0.25 - 0.75 Suitable for seedlings and salt-sensitive plants. Very good.

0.75 - 1.50 Desirable level for most Ag plants.

1.75 - 2.25 Reduced growth, leaf marginal burn.

Small Area pH Adjustment Tables for Dolomite Lime

Average amount of powdered Dolomite Lime in pounds per square yard for soils of average organic content to bring pH to 7.0 pH level

PH Test Result Show Soil @	Sandy Soil	Sandy Loam	Loam	Silt & Clay Loams
4.0	½ lb per sq yd	1 lb per sq yd	1.5 lb per sq yd	2 lb per sq yd
4.5	⅓ lb. per sq yd	⅓ lb. per sq yd	1¼ lb per sq yd	1¾ lb per sq yd
5.0	¼ lb per sq yd	½ lb per sq yd	1 lb per sq yd	1.5 lb per sq yd
5.5	¼ lb per sq yd	½ lb per sq yd	1 lb per sq yd	1.5 lb per sq yd
6.0	1/8 lb per sq yd	¼ lb per sq yd	½ lb per sq yd	1 lb per sq yd
6.5	1/8 lb per sq yd	¼ lb per sq yd	½ lb per sq yd	1 lb per sq yd
7.0	0	0	0	0
7.5	0	0	0	0
8.0				

Add dolomite lime to adjust the acid pH This works out to about 4.200 lbs per acre

HUMUS INTERPRETATION

The Humus Color Chart (1384) is labeled with values of 1, 2, 3, 4 and 5.

The results are interpreted as follows:

HUMUS OR ORGANIC MATTER IN SOIL

Humus Reading	1	2	3	4	5
Agricultural Soils	Low	Medium	High		
Garden-Greenhouse Soils		Low	Medium	High	
Organic Soils			Low	Medium	High

Adding organic humus will control the pH and E.C. Start with at least 2 -3 inches worked into the soil. On square yard of rich compost will cover 10 x 10 feet 3 inches deep

Blood Meal / Dried Blood

for more rapid nitrogen release

blood meal is sometimes not recommended for organic gardening because it can damage young tender plants in warm moist conditions see below.

Analysis - nitrogen 13.25, phosphorus 1.00, potassium 0.60.

Application And Rate - no more than 4oz per square yard at the time of planting.

Blood Meal is a very volatile application and should be applied in a one at a time use to plants rather than a general overall fertilizer. Over use of Blood Meal will evoke toxicity.

Apply at one half during the growing season. Stop blood meal once fruit is set. i.e. tomatoes or other vegetables reach their size. At this time of development phosphorus and potassium are needed to mature to harvest. Refer to your test report. If P and K are low, fertilize with bone meal and potash. Blood meal (N) is no longer needed.

Release Rate - rapid lasts up to 4 months.

Soil Reaction - acidic.

BLOOD MEAL IS USEFUL FOR

- Sprinkle over compost heap if high carbon content brown matter e.g. paper, chipped twigs, straw... etc, is in excess of nitrogenous green leafy matter.
- Can be incorporated to balance the carbon content when digging in a high carbon brown mulch - otherwise nitrogen is robbed from the soil.
- Use on nitrogen hungry greens:- broccoli, cabbage, cauliflower, kale, spinach, brussel sprouts; also lettuce, and on corn-cob ...
- Apply during the growing season.
- Also used to repel animals like deer and rabbits, but only effective if it remains dry. Suggest placing it in containers.

Action On Plants - the analysis shows that nitrogen is the major constituent of blood meal as it is a constituent of blood protein.

These blood proteins are rapidly broken down to ammonia by soil bacteria. In warm moist conditions that favor bacterial growth, blood meal decomposition can be too rapid. Ammonia may be released in large enough quantity to damage delicate roots. Plant roots absorb ammonia to take up nitrogen for building plant protein.

Therefore blood meal is useful for plants that add lots of green leafy growth.

As it is a fast acting organic feed, care should be taken not to apply too much, especially in warm moist conditions. Blood Meal could be used to effectively balance carbons in the compost heap or when digging in.

CAUTION

- Don't apply to seedlings.
- A fast acting organic feed and care should be taken not to apply too much. Rapid decomposition when conditions are warm and moist could be damaging.
- Don't apply to peas and beans and other legumes. They have root nodules with bacteria that fix atmospheric nitrogen.

Commercial Manure

Bagged manure from the garden center has been aged and processed to guarantee good texture and the absence of harmful E. coli bacteria associated with fresh animal waste. The most common source of commercial manure is cow manure, which contains less per-pound nitrogen than that of smaller farm animals, which is not usually available commercial. Bagged cow manure is found at most nurseries and costs much less than more difficult-to-obtain nitrogen fertilizers, such as bat guano. Because it is processed to a soil-like consistency, it also helps loosen up hard-packed soils. Bagged bat guano, though more expensive, contains up to 12 times the nitrogen of cow manure and is increasingly available from organic nurseries and mail order sources.

Farm Manure and Bedding

Using manure from your own or a neighbor's barn animal waste provides a free, steadily available source of nitrogen. In addition, you can often add the used bedding, which not only adds bulk to the soil or compost pile through the hay or sawdust, but provides nitrogen-rich urine as well as solid waste. Keep in mind, however, that manure needs to be aged at least three months before it is added to the garden.

Compost

By layering such nitrogen-rich elements as vegetable scraps, coffee grounds and grass clippings with carbon-rich hay or leaves in the compost pile, you can build a rich, organic fertilizer high not only in nitrogen, but in other elements as well. The disadvantage, of course, is that it takes weeks or months to turn compost into "black gold," depending on the size of the pile and how frequently it is turned.

Liquid Fertilizer

Liquid fish emulsion is usually sold in lightweight bottles containing directions on the amounts of the product to use per quart or gallon of water. Use it to bolster the growth of plants rather than to enrich the soil; fish emulsion is one of the fastest-acting nitrogen sources but its effectiveness lasts only two or three weeks. Think of it as a vitamin shot for your plants, rather than the steady diet of nitrogen which sources like manure and blood meal provide. For a free liquid fertilizer, place compost or manure in a burlap bag, add the bag to a clean trash can filled with water, and let it soak for several weeks. This "tea" provides the same quick boost to plants that liquid fish emulsion does. Liquid fertilizers work best if they are watered directly onto the plant foliage rather than the soil around the plants. Reapply every two to three weeks.

Meals

The "meals"—cottonseed meal, crab meal, blood meal, soybean meal, feather meal and others—are ground, processed materials which provide organic sources of nitrogen. Cost and availability may vary by region; gardeners close to a crab or chicken processing plant, for example, may find the corresponding meal products are much cheaper than those far away. All are either medium to slow release sources of nitrogen, with effectiveness ranging from six weeks to six months.

Cover Crops

Sow your gardens or fields with the "green manures" such as alfalfa, clover or annual rye nine months to a year in advance of planting. Till the crops into the soil in early spring, and plant after two to three months. Cover crops not only add nitrogen to the soil, but mine valuable nutrients from the subsoil. They also hold down weeds, loosen soil and prevent erosion.

Artificial Fertilizer

Perhaps the simplest forms of chemical fertilizers are those commonly sold as 10-10-10, 5-10-5, and so forth. The three numbers refer to the percentage of nitrogen, phosphorous and potassium, respectively, in each bag (i.e.; the first number represents the nitrogen content); the rest is simply filler material. These packages will tell you how much to use per square foot, depending on use—rose bushes as opposed to vegetable gardens, for example. Opinions differ on the safety of these fertilizers. Some people use them for all of their gardening needs, some just for ornamentals but not for edibles, while other fear their effects on the environment and avoid them altogether. As you might expect, not only do opinions differ wildly, but scientific opinions conflict as well.

To increase Phosphorous and Potassium
For all reading less than 75 ppm

Amounts of **bone meal** to add for phosphorous

Scatter bone meal on top of the field to add phosphorus to the soil. For every 1,000 square feet, **apply 30 pounds for severely deficient** soil, 20 pounds for moderately deficient soil and 10 pounds for slightly deficient soil. These soils certainly fall in the range of severely deficient. At 30 lbs per 1,000 square feet, suggest adding 1,300 lbs per acre

Adding Pot Ash for low Potassium **Potassium is OK**

Most organic method.

Add hardwood ash to increase both the potassium and magnesium. This will also raise the acidic soil's pH closer to neutral. **Sprinkle 1 to 2 lbs of ash per 100 square feet of growing. Or...6,000 lbs per acre.** Work into the soil to release potassium. As this may be less than practical, Adding Muriate of Pot Ash may be a more practical approach. See suggestions on label i.e. 140 pounds of Muriate of potash (0-0-60) per acre.

Amending these two parts of the soil alone will increase low readings on the other sub nutrients. Limestone or gypsum supply your garden soil with calcium. If your soil is acidic, adding limestone helps boost most vegetable crops by increasing alkalinity. For example, if your soil pH is below 5.5, add 2 to 3 pounds of dolomitic lime per 100 square feet to raise the pH. Apply to your local cooperative extension office for a soil test to determine its pH. Add the lime two to three months before planting your vegetables or other plants to allow time for the it to dissolve into the soil. Dig the lime into the soil to a depth of about 6 inches, and water the soil afterward to the same depth.

For soils that have a pH of 6.5 to 6.7, gypsum is a better choice for adding calcium, because it doesn't alter the soil's pH. Before planting your plants, spread about 1 to 2 pounds of gypsum per 100 square feet, and dig it into the soil.

Potassium moves freely from the root system toward the foliage at a plant's top leaves and branches. When the soil doesn't have enough potassium to supply the entire plant, the leaves of the plant begin to show the first symptoms. **The most common symptom of potassium deficiency is an area of yellowed tissue around some leaf edges.** Potassium deficiency can also cause entire leaves to develop a light-green color.

Plants suffering from potassium deficiency first begin to show symptoms on the leaves closest to the root system of the plant. In mild cases, the characteristic yellow discoloration takes the form of a band around the edge of each affected leaf. In some species, the discoloration around the edges of leaves can take the shape of spots instead of a band or stripe. As the symptoms progress the yellowed tissue dies and turns brown, spreading to more leaves farther up the plant. These symptoms often do not occur until four to six weeks after planting time.

Okay to add gypsum any time of year

Cannabis or hemp: 20 to 30 lbs. per 100 sq. ft. Twice per year

For hemp and cannabis application, also mix in compost or organic matter

Hemp/Cannabis do's and don't s

Always check the overall environmental conditions prior to passing judgment – soil around 6.4 to 6.8 pH – plenty of water, light, fresh air, loose soil, no water standing in pools.

When you begin your garden, develop a soil that works well for you. Start with just the soil you have .pH should balance around 6.5 to 7.0 for most cannabis plants Too much water can kill young Hemp/Marijuana plants. Following germination, allow the surface to get crusty. Stick your finger 3-4 inches under the soil, if no moisture, then water thoroughly. Sink water should sit open for 24 hours or more to release chlorine among other potentially harmful sediments.

Your soil contains plenty nutrients, **do not** add more of these with your watering schedule. When adding nutrients to your water, - apply *every other* watering. The vegetative stage likes more Nitrogen, and the flowering stage like more Phosphates and less Nitrogen. To begin growing, there is plenty

pH And hemp/marijuana Grown In Soil

When growing hemp or marijuana in soil the pH of the soil should be between 6.5 and 7.0. When growing in containers, a single pH reading for each container is recommended. When growing outdoors in a garden, it is best to take two or three pH measurements from different areas of the garden. If you have a large garden, you may have to adjust the pH in various parts of your garden to different levels. Check the pH once every one-two weeks. Unlike hydroponics where the nutrient solution is in a single reservoir and only needs to be checked once, a soil garden will get its nutrients from the soil it is growing in. Even a small garden that contains a few plants may have soil that varies in pH from one area to another.

Most fertilizers cause a pH change in the soil. Adding fertilizer to the soil almost always results in a more acidic (lower) pH. As time goes on, the amount of salts produced by the breakdown of fertilizers in the soil causes the soil to become increasingly acidic and eventually the concentration of these salts in the soil will stunt the plant and cause browning out of the foliage. Also, as the plant gets older its roots become less effective in bringing food to the leaves. To avoid the accumulation of these salts in your soil and to ensure that your plant is getting all of the food it needs, you can begin leaf feeding your plant at the age of about 1.5 months. Dissolve the fertilizer in water (worm castings mixed with water will work well for leaf feeding) and spray the mixture directly onto the foliage. The leaves absorb the fertilizer into their veins. If you want to continue to put fertilizer into the soil as well as leaf feeding, be sure not to overdose your plants.

Adjusting pH Of hemp/marijuana Grown In Soil

A good way to stabilize soil is to use dolomite lime (calcium-magnesium carbonate). Dolomitic lime acts slowly and continuously, so soil will remain pH stable for a few months. Using fine size dolomite lime is important, coarser grades can take a year or longer to work. You can find fine size dolomite lime at any well stocked garden supply center.

Dolomite lime has been used by gardeners as a pH stabilizer for many years. It has a pH that is neutral (7.0). When added to soil in the correct proportions, it will stabilize soil at a pH near 7.0.

When growing in containers, add one cup of fine dolomite lime to each cubic foot of soil. Mix the dry soil thoroughly with the dolomite lime, and then lightly water it. After watering, re-mix it and wait for a day or two before checking the pH. When growing in an outdoor garden, follow the dolomite lime manufacturer's instructions. *Lowering soil pH*: small amounts of composted leaves, cottonseed meal, or peat moss will lower the pH of soil. *Raising soil pH*: small amounts of hardwood ashes or crushed oyster/egg shells will help to raise the soil pH. Hydrated dolomite lime can also be used to raise the pH of soil. In containers, use no more than 1/8 cup of hydrated lime per cubic foot of soil (per application). Mix it into warm water, and then apply the water to the soil. When growing in an outdoor garden, follow the manufacturer's instructions. Wait at least a day or two before checking the pH level of soil after attempting to raise, lower or stabilize it. If adjustments still have to be made, use small amounts of whatever material you are using. Don't try to adjust the pH more than 0.1 every two days.

A few extra notes:

All samples read clean and free of any contaminants. No evidence of any pesticides. The major concern applying all samples is the slight acidity. Cannabis will do much better in a more neutral pH. A more neutral pH will better use of the very rich amendments now in the samples. A few tests show low available nitrogen and a few read too high in nitrogen. The real concern about too high available nitrogen is that it could cause a lock-out of calcium. An over load of nitrogen will only run off into ground water. Over all, all tests are healthy, strong and clean.

A brief explanation of EC, TDS and CEC

Total dissolved solids (TDS) is the amount of dissolved substances in solution. This measurement reads all the dissolved inorganic and organic substances in a liquid. ... For example, if you measured the conductivity of a glass of water and then add table salt, the conductivity will go up. Or simply put, the more organic nutrients in a soil, the richer the soil will be.

Cation exchange capacity (CEC) is the total capacity of a soil to hold exchangeable cations. CEC is an inherent soil characteristic and is difficult to alter significantly. It influences the soil's ability to hold onto essential nutrients and provides a buffer against soil acidification.

This is all tied together with the EC (electrical conductivity) test. As stated above, the more organic nutrients in a soil, the richer the soil will be. The better plants will grow whether it be corn, tomatoes or cannabis.



Pesticide report for Horn Creek Hemp
March 23, 2020

Tested for: Sample Zone 5 Bag 1
 Zone 1 Bag 8
 Zone 3 Bag 11

Found no differences when tested these three in comparison with random others.
Bag 1 tested one of the best pH readings of all

organophosphate
carbamate pesticides
toxic/heavy metals
or naturally occurring
acetylcholinesterase inhibitors

Normal amounts of iron and aluminum
Heavy metals i.e. lead, mercury etc. read too low to measure.
Consider this normal and safe.

thank you
Michael Anzalone