



CJO1409 – Crown Jewel Decaf Sumatra FTO Bener Meriah Gayo Mandiri Wet Hulled & Water Processed

March 26, 2021 | [See This Coffee Online Here](#)

Overview

This is a traditional home processed and wet hulled coffee from Sumatra, which was decaffeinated by Mountain Water Process and possesses both Fair Trade and Organic certifications.

The flavor profile is free of “decaf” processing flavors and maintains classic Sumatran elements like sage and pine while balancing them with sweetness and notes of lime, kiwi, vanilla, and milk chocolate.

Our roasters found the coffee easy to work with and predictable as a decaf roast. The beans will begin to look conventional in coloration around the middle of Maillard reactions.

When brewed, the coffee exhibits a wide range of traditional Sumatran flavor notes and clear acidity without any hint of decaf processing flavor. Both as espresso and drip the coffee shines, and proves malleable to the attentive barista who can easily shape its flavor with a few variables.

Taste Analysis by Sandra Loofbourow

First of all, this coffee doesn't taste like a decaf. Second, it doesn't really taste like a Sumatra – although it still has a lot of what we call “origin character.” Pour-overs are packed with pineapple, kiwi, sweet milk chocolate, and a pleasant pine or sage cooling note. On espresso it's thick and fudgy, sweet like vanilla and salted caramel, has the elegance of lemongrass, and finishes on a note of pineapple sherbet.

Source by Evan Gilman



The Bener Meriah Regency of Northern Sumatra's Aceh Province produces some of Indonesia's most notable coffees. While Mandheling might be a more common household name, coffees from Aceh / Gayo retain their popularity with distinct attributes of creamy body and heavy sweetness. Bener Meriah in particular has a good many quality-focused groups, with KSU Gayo Mandiri's 1218-member organization being one of the larger cooperatives in the area. Founded in 2008, they are also equipped to export their own produce after years of experience providing specialty coffee to the international market.

Some of Gayo Mandiri's crop is sold as 'Mandheling,' which denotes a flavor profile more than it does an origin. Mandheling coffees tend to be heavy and herbal, with the 'classic' Sumatran flavors of peat moss and molasses presenting themselves clearly. This is in counterpoint to lots labeled as Lintong (with a dry herbal character) or Gayo (heavy and creamy as described above), which are generally named not only for their flavor profile, but also for their origin. Of course there is always an exception to the rule in Indonesia, and some coffees labeled Lintong or Gayo are sourced from further afield, only blended for flavor profile and made export ready in these regions.

Not so in the case of this coffee; it's all grown and processed right in Bener Meriah. This is generally the case for coffees named for their regency. This coffee is collected from smallholder farmers who work on plots of 2.5 acres or less and process their coffee to the *gabah* (freshly pulped wet coffee at 40-50% moisture) or *labu* (partially dried parchment at about 25% moisture). This coffee is brought to Gayo Mandiri's facility, where it is wet-hulled at around 20-25% moisture, dried to 12% moisture, and made export ready. Their cooperative reinvests the dividends from certified coffees like this one to fund transportation infrastructure projects and has even funded their own ambulance service to provide emergency healthcare to the local community.

True to the fashion of Gayo coffees, this is a thick, creamy coffee with some of the herbal characteristics one would expect of Sumatran coffee, but also a touch of bright malic and citric acidity to balance out the heaviness.

Like all our Decaffeinated Crown Jewel selections, this coffee's caffeine is removed using a chemical-free process. Mountain Water provides us with this Royal Select decaffeinated option, and we find that water process decaffeinated coffees in general retain their origin characteristics and flavors incredibly well.

| | | | |
|------------------|---|---------------------|---|
| Grower: | Gayo Mandiri Cooperative members | Process: | Depulped by smallholders, wet hulled and sun-dried by Gayo Mandiri Mill |
| Region: | Bener Meriah Regency, Aceh District, Sumatra, Indonesia | Cultivar(s): | Bourbon, Typica, and Catimor |
| Altitude: | 1200 – 1350 masl | Harvest: | June – December 2020 |

Green Analysis by Chris Kornman

Analyzing decaffeinated coffees can present some interesting challenges to graders, most notably because the beans have been rehydrated and dried as part of the decaffeination process. This can – and often does – result in skewed moisture readings and off-color physical appearance. We've become accustomed to seeing brownish looking beans from Descamex's Mountain Water Process (as exemplified by this FTO Sumatra) and despite the odd



color, the beans processed in Veracruz in fact have a very normal roasting color once you make your way into Maillard reactions.

Beyond color, the coffee here showcases a wide range of screen sizes (albeit clustered mostly at 16+, so fairly large) and average looking density. The moisture is also quite moderate, a great sign for good post-decaffeination drying, while the water activity level is fairly elevated. While moisture and water activity *usually* interact in predictably corollary patterns, here we have an exception, almost certainly the result of the wet hulling and decaffeination processes.

The implication here is that while roasting should look *somewhat* normal, shelf-life preservation should be carefully managed, including sealing up your green after opening the package and keeping the coffee in a cool, dry place.

The green coffee carries both Fair Trade and Organic certificates, is delicious and responsibly sourced, and decaffeinated without chemicals. You could say these beans have it all. Well, except for the caffeine.

| Screen Size | Percent | Density |
|-------------|---------|-------------------------------|
| >20 | 16.36% | 684 g/L (free settled) |
| 19 | 22.28% | 717 g/L (Sinar) |
| 18 | 23.75% | |
| 17 | 19.29% | Total Moisture Content |
| 16 | 11.26% | 10.7% (Sinar) |
| 15 | 5.19% | |
| 14 | 1.67% | Water Activity |
| ≤13 | 0.20% | 0.637 @ 20.46C (Rotronic) |

Diedrich Analysis by Candice Madison

I don't think it's a shock to anyone who works in the coffee industry that a great decaf is highly prized by industry professionals. There really is only so much coffee people can drink in a day – at least physically, I'd drink it day and night if I could. Caffeine is an amazing compound and revered as such, but it's always a delight for me to find a coffee that is not just delicious, but one I can enjoy in the late afternoon, too.

I chose to ignore the origin of this coffee, and its first processing method and let the fact that this coffee had been through two fairly aggressive processing methods guide my profiling thoughts - gently does it. I also wanted to explore the coffee a little more, so chose to do two roasts. My intent going in was simple; what were the smallest changes I could make that would have a distinct impact on the flavor profile? I have long been delighted and amazed at how forgiving coffee can be – roasting off profile is never ideal, but blind cupping has revealed many a time that large errors I saw on the screen translated to almost imperceptible cup differences.



Of course, it depends on when and where in the roast process you make your errors, in much the same way that it depends on the same when you make your intentional changes. While I only wanted to make a couple of changes to the way I applied the airflow to the roast, I also wanted to make the curves as similar as possible ending as near to the same temperature as possible, and so would adjust the gas as necessary to affect that outcome.

I started both roasts at 360F. I went into the first roast normally, with low gas from the start until the turning point. However, I wanted to see whether the coffee could take convective speed from the start, so I turned the airflow to 50%. On this model of Diedrich, the airflow is controlled by an impeller that serves both the cooling tray and the drum, with a handle to operate the baffle that can be turned to three positions: 0, 50 or 100% airflow supply to the drum.

At the turning point, I turned the gas up to 90% and the air up to 100%, coasting up the hill of stage 1. Just before stage 2, I turned the airflow down to 50%, to preserve all the time that I could in stage 2, and at the advent of the coffee coloring, I turned the gas down 10%. I made no further changes until just before first crack, when I opened the air to 100% and lowered the gas to 20% in anticipation of the energy release. At a minute and sixteen seconds after first crack and at 395F, the coffee dropped with a development ratio of almost 14%.

As mentioned, the second roast was very similar. The charge temperature and gas application were the same, however, I kept the air completely closed (0%) until after the turning point, after which, I turned it up to 100%. I raised the gas to 90% at this point also, and then left it and everything else alone, until almost a minute after marking stage 2. I turned the gas down to 80% and the airflow to 50%. 10 degrees (around 360F) before first crack, I turned the gas to 20% and opened the airflow to 100%.

Although the slower of the two roasts by over 20 seconds, I managed to end at 2F less than the first roast. The stage ratio modulation chart at the bottom of the curves on the infographic indicate that there were only a couple of percentage points difference between each stage of the roast and the total duration difference between the roasts was only the extra 20 seconds we noted earlier. The similarity between the two profiles had me quite worried that I had been too delicate with my changes and it was with this apprehension that I approached the cups.

I have to say that although it was lovely and very drinkable, roast one just didn't kick it for me. The drinkability came from the delicious and distinctive note of Golden Delicious apples – clear as a bell! The first sip and I was transported back to lightly crisp, early fall afternoons playing in our yard and eating apples straight from the tree, warmed by the sun. And if I could write that as a flavor note I would! This flavor was complemented by a soft Meyer lemon acidity, a sweet melon note and a ribbon of caramel. But I wanted more, the body was light, but too light for that autumnal feeling the coffee left me with.

I wasn't disappointed, but I also felt like there was something missing, and there was! Although the roasts were so similar in feel and when looking at the data, it was obvious that blasting a more delicate coffee with convective air didn't give enough space and time for the necessary chemical reactions to take place. The heat transfer exchange seemed to be too quick for this coffee and left it hollow in comparison to its sister on the table. The second roast was a symphony of stewed apples and persimmon, almost as if a whole host of winter fruit had been roasted and blended into a sweet, sticky, jammy concoction. The Meyer lemon was still there, but with definite notes of kumquat and sweet lime. Traditional notes of bamboo and lemongrass added dimension and complexity that had been missing from the previous roast. And the body, what a difference! Syrupy, velvety, coating and smooth.



I cannot wait until this is on bar – long live the late afternoon cappuccino!!

Quest M3s Analysis by Evan Gilman

Unless otherwise noted, I follow a set standard of operations for all my Quest roasts. Generally, I'll allow the machine to warm up for 15 minutes until my environmental temperature reading is at least 250F, weigh out 150g batch size, and begin roasting when I've reached my desired charge temperature. [Read my initial post here](#) and my [updated post here](#).

Roasting decaffeinated coffee is always an adventure, but in this case I didn't need to stray too far from the beaten path to get some very tasty results. The difference here was that I treated this as the decaffeinated coffee that it is. When I roast wet hulled coffees I find that I need abundant heat up front, often with higher charge temperatures and heavy-handed heat application until Maillard. However, for this *decaf* Sumatra I was much gentler, using a lower charge temperature and ramping down heat evenly throughout the roast.

I started off with 7.5A heat and the lowest airflow possible with a charge temperature of 385F. At turning point, I increased heat application to 10A, after seeing that my temperature dipped all the way to 179F, a whopping 20F cooler than usual. After allowing this coffee to heat up to 275F and gain momentum, I introduced airflow to 3 on the dial at 4:15. It was pretty clear that this coffee was going to spend most of its time in drying stage, and I decided to lower heat application only at 300F / 4:55, quite a bit later than usual. My rate of rise show no signs of slowing down, and I reduced heat application further to 5A at 320F / 5:30, then increased fan speed to full at 345F / 6:15. Still chugging along as it was, I was wary of this coffee rushing through first crack, but dropped heat application to 0A at 385F / 8:10, about 20 seconds after first crack after a merciful but delayed drop in momentum.

My roast loss percentage on this coffee was a scant 10.9%, but this was a fairly dry coffee to begin with since it's decaffeinated. Even after spending nearly 17% of the roast in post-crack development, my drop temperature was below 395F (as I like it on the Quest M3s), and there wasn't a hint of roastiness in the cup. In fact, this coffee tasted phenomenally of ripe red apple and dutched cocoa with a touch of cedar. The aftertaste truly complemented the creamy mouthfeel, with slight lime acidity and just a hint of vanilla pipe tobacco aromatics.

As I write this, I am contemplating another cup of coffee. You can be sure it will be an AeroPress of this fine decaf, since I feel the partial-immersion method highlights the creaminess of this coffee. I might even break out my porous metal filter. I can definitely see this coffee doing well as an espresso, too – the flavors here would absolutely hold up to milk and would be lovely in a cappuccino. Give it a shot!

Ikawa Pro V3 Analysis by Nate Lumpkin

As of September 2020 we are running all Crown Jewel Analysis roasts on an Ikawa Pro V3, using the most recent app and firmware version on "closed loop" setting.



I don't have a lot of experience roasting decaffeinated coffee--we only have a decaf coming through the Crown every few months. I do know that I'm so addicted to coffee that I crave it at midnight, so I love that there's an opportunity to brew something delicious to replace the normal stuff.

As usual I ran this through the Ikawa V3 on our three standard profiles. The first hot and fast profile had notes of cucumber, lemon, herbal tea, sage, vanilla wafer, caramel, cookies and cream, vanilla, rooibos, and chocolate. However, I found it a touch too simple and cookie-like, and I believe this coffee's character shone through better on the following two profiles.

The extended Maillard profile showed notes of pear, apple cider, cucumber, honeydew melon, lime, honey, marshmallow, caramel, and a baker's chocolate finish. This was really delicate, sweet, and balanced. I found this profile very pleasant, and Chris preferred this roast over the others.

My favorite was the longer and cooler low airflow profile. I tasted notes of orange, tangerine, honeydew melon, kiwi, vanilla, malt, and rosemary. I thought this cup was bright and complex with hardly a hint of "decaf" flavor, and I loved the bright acids and sweet herb. Regardless, I definitely recommend a roast profile that gives the coffee a little more time to develop: either longer in the Maillard phase, or a longer, cooler roast overall.

You can download the profile to your Ikawa Pro app here:

Roast 1: [Crown Standard SR 1.0](#)

Roast 2: [Crown Maillard +30 SR 1.0](#)

Roast 3: [Crown 7m SR LowAF 2](#)

Brew Analysis by Elise Becker

I've extolled the virtues of decaf before, and I'll repeat here that I think some of the truest coffee appreciators out there are the drinkers of decaf, who seek out their coffee for the love of the coffee's flavors rather than the need for caffeine. I also believe decaf gets a bad reputation because of preconceived notions that decaffeinated coffees aren't delicious, and that doesn't have to be the case. When brewing this Sumatra FTO, I took into account that this is a coffee we'll likely be serving at The Crown's espresso bar in the future, and I put it through its paces both as a drip coffee as well as on our Tasting Room La Marzocco Linea PB for shots of espresso.

For the brewed cup, I used the Fellow Stagg brewer that we are currently using on our pour-over bar at The Crown. The cup turned out a delicious creaminess, along with clear tropical flavors such as kiwi and pineapple, while also staying true to some of the more delicious fresh herbal notes that this type of Sumatra is known for, such as a crisp hoppy pine note and a creamy milk chocolate finish to round out the body.

Pulled as an espresso, the coffee produced shots that were also prime examples of the origin. A clear note of lime on the front end developed into a sweet and delightfully rich flavor of black sesame ice cream topped off with a pleasantly fudgy mouthfeel and an impression of a sweet and mellow herbaceousness overall. As a drip coffee, this one shines with a tea-like capacity to carry delicate tropicals while also leaving you with a feeling of creaminess and chocolate. As an espresso, the shots are sure to be a unique standalone, as well as a decadent pairing with milk.



| Roast | Method | Grind (EK43S) | Dose (g) | H2O (g) | Ratio | Bloom (g) | Bloom (s) | Total Brew Time | TDS | Ext% |
|--------|----------|-------------------|----------|---------|-------|-----------|-----------|-----------------|------|-------|
| PR2722 | Stagg | 8 | 19 | 300 | 1:15 | 50 | 30 | 3:30 | 1.46 | 21.30 |
| PR2722 | Linea PB | Mazzer Superjolly | 18 | 38 | 1:2 | n/a | n/a | 0:31 | 9.18 | 20.19 |