BREWSHEET v3.4 (2014-12-14)

user input calculated

| Brew | | | |
|--------------------|------------------|-----------------------|-------|
| Name: | Clorona | | |
| Brew Date: | 2017 February 19 | Collected (gal): | 10.50 |
| Rack Date: | | Racked (gal): | |
| Keg/Bottle Date: | 2017 March 30 | Kegged/Bottled (gal): | 10.00 |
| Estimated | | Actua | al |
| ABV (%): | 3.7% | ABV (%): | 4.7% |
| OG (SG): | 1.038 | OG (SG): | 1.040 |
| FG (SG): | 1.010 | FG (SG): | 1.005 |
| IBU: | 16.2 IBU: | | 15.1 |
| SRM: | 2.7 | SRM: | 2.6 |
| IBU/Gravity Ratio: | 0.43 | IBU/Gravity Ratio: | 0.37 |

| Grain | Pounds | Potential | SG Share | Color | % Bill |
|-----------------------|--------|-----------|----------|-------|--------|
| Pale Malt (2-Row) US | 12.00 | 1.036 | 0.027 | 2.0 | 79.73% |
| Carapils/Dextrine | 0.80 | 1.033 | 0.002 | 2.0 | 5.32% |
| Corn sugar (dextrose) | 2.25 | 1.043 | 0.009 | 0.0 | 14.95% |
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| Нор | Type | Ounces | Boil Time | Alpha % | IBU | % Bill |
|------------------|------|--------|-----------|---------|------|--------|
| Perle (GR) | P | 1.00 | 60 | 6.7% | 11.8 | 21.79% |
| Hallertauer (GR) | l P | 1.59 | 10 | 4.4% | 4.4 | 34.64% |
| Hallertauer (GR) | Р | 2.00 | 0 | 4.4% | 0.0 | 43.57% |
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| | Design Notes | |
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| Add corn sugar at T-20. | | |
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| Batch Size (gal): | 11.00 |
|--|-------|
| Grain Temperature (F): | 66 |
| Total Grain Weight (lbs): | 12.80 |
| Mash Mash Time (min): | 60 |
| Mash Time (min): Desired Mash Temperature (F): | 148 |
| Strike Water (gal): | 8.5 |
| Strike Temperature (F): | 16 |
| Mash Ratio (qts/lb): | 2.6 |
| Grain Absorption (gal): | 1.60 |
| Mash Volume (gal): | 9.5 |
| Mash-out Temperature (F): | 168 |
| Estimated First Runnings (gal): | 6.8 |
| First Runnings (gal): | 6.8 |
| First Runnings Gravity (Brix): | 10.70 |
| First Runnings Gravity (SG): | 1.042 |
| Sparge | |
| Desired Sparge Temperature (F): | 168 |
| Sparge Water (gal): | 6.3 |
| Sparge Water Temperature (F): | 172 |
| Estimated Second Runnings (gal): | 6.8 |
| Second Runnings (gal): | 6.8 |
| Second Runnings Gravity (Brix): | 4.00 |
| Second Runnings Gravity (SG): | 1.016 |
| Estimated Preboil Volume (gal): | 13.6 |
| Estimated Preboil Gravity (Brix): | 7.3 |
| Preboil Volume (gal): | 13.6 |
| Preboil Gravity (Brix): | 7.00 |
| Preboil Gravity (SG): | 1.02 |
| Extraction Efficiency (%): | 67% |
| Boil | _ |
| Boil Time (min): | 60 |
| Estimated Evaporation Loss (gal): | 1.46 |
| Hop Absorption (gal): | 0.1 |
| Volume Left in Kettle (gal): | 1.00 |
| Actual Evaporation Rate (gal/hr): | 0.9 |
| Actual Evaporation Loss (gal): | 0.97 |
| Original Gravity (Brix): | |
| Batch Size Efficiency (%): | 80% |
| Actual Efficiency (%): Fermentation | 849 |
| Primary Fermentation (days): | 14 |
| Primary Fermentation (days). | 52 |
| Gravity After Primary Fermentation (SG): | 3. |
| Temperature of Reading (F): | |
| Corrected SG: | |
| Secondary Fermentation (days): | |
| Secondary Fermentation (days). Secondary Fermentation Temperature (F): | 64 |
| Gravity After Secondary Fermentation (SG): | 0 |
| Temperature of Reading (F): | |
| Corrected SG: | |
| Tertiary Fermentation (days): | 28 |
| Tertiary Fermentation Temperature (F): | 32 |
| Final Gravity (SG): | 1.00 |
| Temperature of Reading (F): | 4 |
| Corrected SG: | 1.00 |
| Target Fermentation for Diacetyl Rest (%): | 50 |
| Target Gravity for Diacetyl Rest (SG): | |
| Calories per Pint: | 13 |
| 12 oz. Bottles Required: | 102 |
| Carbonation | |
| | |
| Bottling Temperature (F): | 2.60 |
| Volumes of CO2: | |
| | |
| Volumes of CO2: | |

| System Variables | |
|--|-------|
| Brewhouse Efficiency (%): | 70% |
| Volume in Hoses (gal): | 0.22 |
| Volume in Wort Chiller (gal): | 0.19 |
| Volume in HERMS Coil (gal): | 0.25 |
| Mash/Lauter Tun Deadspace (gal): | 0.14 |
| Strike to Sparge Volume Ratio (%): | 50% |
| Trub Loss (gal): | 0.16 |
| FWH IBU Factor (%): | 10% |
| Strike Temperature Factor (F): | 7 |
| Sparge Temperature Factor (F): | 4 |
| Estimated Evaporation Rate (gal/hr): | 1.46 |
| Leaf Hop Absorption Ratio (qts/oz): | 0.40 |
| Pellet Hop Absorption Ratio (qts/ oz): | 0.10 |
| Cooling Losses (%): | 4% |
| Hydrometer Correction (SG): | 0.001 |

| BJCP Style Guidelines | | | |
|-----------------------|-----------------------------------|--|--|
| Style: | Lite American Lager | | |
| Code: | 1A | | |
| OG: | 1.028-1.040 | | |
| FG: | 0.998-1.008 | | |
| IBU: | 8.0-12.0 | | |
| SRM: | 2.0-3.0 | | |
| ABV: | 2.8-4.2% | | |
| CO2: | 2.5-2.7 | | |
| | • | | |
| | Yeast Strain | | |
| Yeast Strain: | White Labs WLP940 (Mexican Lager) | | |
| Type: | Mexican Lager | | |
| | | | |

| Type: | Mexican Lage | er |
|--|-----------------|----------------|
| Attenuation (%): | 70-78% | |
| Actual Attenuation (%): | 89% | |
| Fermentation Temp (F): | 50-55F | |
| Flocculation: | medium | |
| | Required Amo | unts |
| Cell Count (billions): | | 590 |
| Vials (White Labs/Wyeast | :): | 8.7 |
| Dry Yeast (g): | | 29.6 |
| , | Yeast Starter/S | lurry |
| Vials (White Labs/Wyeast | :): | 2 |
| Date Yeast Produced: | | 2017 January 1 |
| Yeast Viability (%): | | 68% |
| Yeast Growth Rate: | | 4.35 |
| Yeast Innoculation Rate (| million/ml): | 22.64 |
| Starter Volume Required (ml); | | 7000 |
| DME Required (oz): | | 22.75 |
| Yeast slurry concentration (billion/ml): | | 2.5 |
| Non-yeast Percentage (% | a): | 20% |
| Yeast Slurry Required (m. | I): | 394 |

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| User Varial | DIES |
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| Batch S | caling | | | |
|---------------------------|--------|--------------|--------|--------|
| Desired OG: | | Total Weight | (lbs): | |
| Batch Size (gal): | | Total Bill: | | |
| Brewhouse Efficiency (%): | | | | |
| Grain | Pounds | Potential | Color | % Bill |
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| Poundage | | | | |
|-------------------------|-------|-------|--|--|
| Goal (lbs): | 12.00 | | | |
| Amount (lbs oz.f_oz): | 2 | 8.21 | | |
| Amount (lbs oz.f_oz): | 2 | 9.02 | | |
| Amount (lbs oz.f_oz): | 2 | 9.31 | | |
| Amount (lbs oz.f_oz): | 2 | 5.92 | | |
| Amount (lbs oz.f_oz): | 1 | 15.54 | | |
| Amount (lbs oz.f_oz): | | | | |
| Amount (lbs oz.f_oz): | | | | |
| Amount (lbs oz.f_oz): | | | | |
| Amount (lbs oz.f_oz): | | | | |
| Amount (lbs oz.f_oz): | | | | |
| Amount (lbs oz.f_oz): | | | | |
| Amount (lbs oz.f_oz): | | | | |
| Needed (lbs oz.f_oz): | 0 | 0.00 | | |

| Hydrometer Correction | | | | | |
|-----------------------|-------|--|--|--|--|
| SG: | 1.039 | | | | |
| Temperature (F): | 67 | | | | |
| Corrected SG: | 1.040 | | | | |

| Drive | | | |
|-------------------|-------|-------|--|
| DIA. | 7.90 | 10.41 | |
| Specific Gravity: | 1.031 | 1.040 | |
| Degrees Plato: | 7.70 | 10.06 | |

| Brix Ethanol Correction | |
|-------------------------|--|
| Original Brix: | |
| Current Brix: | |
| SG: | |

| | Brewing | Notes |
|--|---------|-------|
| /16: made two 3.5L starters. | | |
| /18: starters took a while to get going; still going; will have to pitch them entirely instead of cold | | |
| crashing and decanting. | | |
| /30: kegged; aroma and flavor are spot on; nice and clean; light and refreshing! | | |
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