

**BREWSHEET v2.0 (2010-06-17)**

| Batch            |                    |                  |       |
|------------------|--------------------|------------------|-------|
| Brew Name:       | Soul Stripper IPA  |                  |       |
| Bottle Top Code: | Calories per Pint: | 201              |       |
| Estimated OG:    | 1.068              | Actual OG:       | 1.061 |
| Estimated FG:    | 1.017              | Actual FG:       | 1.015 |
| Estimated IBU:   | 64                 | Actual IBU:      | 67    |
| Estimated SRM:   | 9                  | Actual SRM:      | 9     |
| Brew Date:       | 09/11/10           | Collected (gal): | 11.20 |
| Rack Date:       | 09/18/10           | Racked (gal):    | 9.80  |
| Bottle Date:     | 09/25/10           | Bottled (gal):   | 9.25  |

| BJCP Style Guidelines |              |
|-----------------------|--------------|
| Style:                | American IPA |
| Code:                 | 14B          |
| OG:                   | 1.056-1.075  |
| FG:                   | 1.010-1.018  |
| IBU:                  | 40.0-70.0    |
| SRM:                  | 6.0-15.0     |
| ABV:                  | 5.5-7.5%     |
| CO2:                  | 1.5-2.3      |

| Inventory     |  |
|---------------|--|
| Bottles:      |  |
| Gallons:      |  |
| Date Checked: |  |

| Efficiency      |     |
|-----------------|-----|
| Brewhouse:      | 73% |
| Batch Size:     | 66% |
| Into Boiler:    | 84% |
| Into Fermenter: | 67% |

| Yeast Strain            |                                 |
|-------------------------|---------------------------------|
| Yeast Strain:           | White Labs WLP007 (English Ale) |
| Type:                   | English Ale                     |
| Attenuation (%):        | 70-80%                          |
| Actual Attenuation (%): | 76%                             |
| Fermentation Temp (F):  | 65-70F                          |
| Flocculation:           | medium-high                     |

| Yeast Amounts                |       |
|------------------------------|-------|
| Cell Count (billions):       | 512   |
| Vials (White Labs/W/yeast):  | 4.4   |
| Dry Yeast (g):               | 26    |
| Starter Volume (mL):         | 5250  |
| DME Required (oz):           | 18.38 |
| Vials Required (w/ Starter): | 1.0   |

| ON BREW DAY   |  |
|---|--|
| Heat 9.18 gallons of strike water to 166F                       |  |
| Add grain and mash at 152F for 60 minutes                       |  |
| Mash-out with 5.03 gallons at 210F, mix and hold for 10 minutes |  |
| Vorlauf and collect first runnings (approx. 10.43 gallons)      |  |
| Add 4.16 gallons at 195F to lauter tun and sparge               |  |
| Vorlauf and collect second runnings (approx. 4.16 gallons)      |  |
| Boil for a total of 90 minutes with the following hop schedule: |  |
| 2.25 oz. Centennial @90 minute(s)                               |  |
| 2.25 oz. Cascade @30 minute(s)                                  |  |
| 1.5 oz. Centennial @30 minute(s)                                |  |
| 2 oz. Cascade @5 minute(s)                                      |  |
| 2 oz. Columbus @5 minute(s)                                     |  |
| 4 oz. Cascade @0 minute(s)                                      |  |
| 2 oz. Columbus @0 minute(s)                                     |  |

| Summary                                   |  |
|---|--|
| Soul Stripper IPA                         |  |
| -----                                     |  |
| Batch Size: 11.00 gal (14.60 gal preboil) |  |
| Estimated OG: 1.068 SG (actual: 1.061 SG) |  |
| Estimated FG: 1.017 SG (actual: 1.015 SG) |  |
| Estimated IBUs: 64 (Tinseth; actual: 67)  |  |
| Estimated Color: 9 SRM (actual: 9 SRM)    |  |
| Brewhouse Efficiency: 73% (actual: 66%)   |  |
| Boil Time: 90 minutes                     |  |

| Grains: |                               |
|---------|-------------------------------|
| 24.75#  | Pale Malt (2-Row) US (87.61%) |
| 1.75#   | Caramel/Crystal 60L (6.19%)   |
| 1.75#   | Red Wheat (6.19%)             |

| Grain                | Pounds | Potential | SG Share | Color | % Bill |
|----------------------|--------|-----------|----------|-------|--------|
| Pale Malt (2-Row) US | 24.75  | 1.036     | 0.059    | 2.0   | 87.61% |
| Caramel/Crystal 60L  | 1.75   | 1.034     | 0.004    | 60.0  | 6.19%  |
| Red Wheat            | 1.75   | 1.039     | 0.005    | 1.5   | 6.19%  |

| Brewing                       |       |                                   |       |
|-------------------------------|-------|-----------------------------------|-------|
| Batch Size (gal):             | 11.00 | Estimated First Runnings (gal):   | 10.43 |
| Total Grain Weight (lbs):     | 28.25 | Desired Sparge Temperature (F):   | 170   |
| Grain Temperature (F):        | 81    | Sparge Water (gal):               | 4.16  |
| Mash Ratio (qts/lb):          | 1.30  | Sparge Water Temperature (F):     | 195   |
| Mash/Lauter Deadspace (gal):  | 0.25  | Estimated Preboil Volume (gal):   | 14.60 |
| Total Water Needed (gal):     | 18.38 | Boil Time (min):                  | 90    |
| Desired Mash Temperature (F): | 152   | Evaporation Rate (%):             | 13%   |
| Strike Water (gal):           | 9.18  | Estimated Evaporation Loss (gal): | 2.85  |
| Strike Temperature (F):       | 166   | Trub Loss (gal):                  | 0.75  |
| Grain Absorption (gal):       | 3.53  | Volume Left in Kettle (gal):      | 0.00  |
| Mash-out Temperature (F):     | 151   | Actual Evaporation Rate (%):      | 12%   |
| Mash-out Water (gal):         | 5.03  | Actual Evaporation Loss (gal):    | 2.75  |

| Hop        | Alpha % | Ounces | Boil Time | IBU  | % Bill |
|------------|---------|--------|-----------|------|--------|
| Centennial | 9.1%    | 2.25   | 90        | 29.4 | 8.49%  |
| Cascade    | 4.6%    | 2.25   | 30        | 10.7 | 8.49%  |
| Centennial | 9.1%    | 1.50   | 30        | 14.1 | 5.66%  |
| Cascade    | 4.6%    | 2.00   | 5         | 2.5  | 7.55%  |
| Columbus   | 14.5%   | 2.00   | 5         | 7.8  | 7.55%  |
| Cascade    | 4.6%    | 4.00   | 0         | 0.0  | 15.09% |
| Columbus   | 14.5%   | 2.00   | 0         | 0.0  | 7.55%  |
| Cascade    | 4.6%    | 5.50   | dry       | 0.0  | 20.75% |
| Columbus   | 14.5%   | 3.50   | dry       | 0.0  | 13.21% |
| Amarillo   | 8.6%    | 1.38   | dry       | 0.0  | 5.19%  |
| Amarillo   | 7.5%    | 0.13   | dry       | 0.0  | 0.47%  |

| Gravity               |       | Collections            |       |
|-----------------------|-------|------------------------|-------|
| Potential OG:         | 1.093 | First Runnings (gal):  | 8.60  |
| OG:                   | 1.058 | SG of First Runnings:  | 1.076 |
| OG Temperature (F):   | 81    | SG Temperature (F):    | 149   |
| Corrected OG:         | 1.061 | Corrected SG:          | 1.095 |
| SG at Racking:        | 1.021 | Second Runnings (gal): | 6.10  |
| SG Temperature (F):   | 66    | SG of Second Runnings: | 1.011 |
| Corrected SG:         | 1.022 | SG Temperature (F):    | 161   |
| FG:                   | 1.015 | Corrected SG:          | 1.033 |
| FG Temperature (F):   | 60    | Estimated Preboil SG:  | 1.069 |
| Corrected FG:         | 1.015 | Preboil Volume (gal):  | 14.70 |
| Potential ABV (%):    | 8.9%  | SG of Preboil Volume:  | 1.042 |
| Actual ABV (%):       | 6.0%  | SG Temperature (F):    | 142   |
| IBU to Gravity Ratio: | 1.11  | Corrected SG:          | 1.058 |

| Diacetyl Rest                   |       | Carbonation               |      |
|---------------------------------|-------|---------------------------|------|
| Target Fermentation Completion: | 75%   | CO2 Volume:               | 2.25 |
| Target SG for Diacetyl Rest:    | 1.027 | Bottling Temperature (F): | 38   |
|                                 |       | Priming Sugar (oz):       | 3.63 |
|                                 |       | DME (oz):                 | 5.08 |
|                                 |       | Forced Carbonation (lbs): | 8.6  |

| Notes  |  |
|--|--|
| 09/25: kegged at 1.013 SG (A) for 78% attenuation and at 1.016 SG (B) for 74% attenuation.       |  |
| 09/27: carbed and shook kegs at 23 PSI for 3 mins; waited 2 hours; purged; carbed at 8.6 PSI.    |  |
| 10/1: tasted this "young" at Artobefrest; wow, what a great pungent citrusy aroma; it was a hit! |  |
| Nice maltiness, but the focus was all on the hops, particularly the aroma.                       |  |

A clone of Ska Modus Hoperandi IPA.  
 ABV: 6.8%; IBU: 65; SRM: 7  
 Used WLP007 from a friend's yeast cake.  
 First runnings refrac reading = 22.7 plato (1.096) - close!  
 Second runnings refrac reading = 7.6 plato (1.030) - close again!  
 Preboil refrac reading = 13.7 plato (1.056) - close yet again!  
 OG refrac reading = 14.6 (1.060)  
 Off OG due to smaller first runnings collection (too much volume in mash tun)  
 Racked into two 5 gal carboys; with dry hops, they were too small (hence the low collections)  
 09/18: moved fermenters to ambient temp (78F) at racking.

| Extra Variables                  |    |
|----------------------------------|----|
| 12 oz. Bottles Required:         | 94 |
| Primary Fermentation Temp. (F):  | 66 |
| Secondary Fermentation Temp (F): | 66 |

**Yeast:**  
 White Labs WLP007 (English Ale) (English Ale)

**Mash/Sparge Schedule:**  
 Single Infusion, 152F; Batch Sparge  
 Mash for 60 min at 152F w/ 9.18 gal of water at 166F  
 Mashout w/ 5.03 gal of water at 210F; hold for 10 min  
 Batch sparge w/ 4.16 gal of water at 195F; hold for 10 min

**Fermentation Schedule:**  
 Primary Fermentation: 7 days @66F