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T & G GREENALL ; Hall St Brewery St Helens

Bitter Beer , March 23Rd 1863

OG : 1.063 Racking Gravity : 1.016 F.G : 1.013

IBU : 58 – 60

ABV: 6½ %

MALT

Pale Ale Malt 70 %

(Chevalier / Constable)

Pale Ale Malt (as above , @ 6.5 ebc 30 %

MASHING

1St Mash Heat: 148 Fahrenheit @ 2.413 L/KG

(at mash in , until + 30 minutes)

2Nd Mash Heat : Raise at + 30 Minutes to 152-3 Fahrenheit , at a ratio of 1.650 L/KG (@ + 30 - + 120)

3Rd Mash Heat : 158 Fahrenheit @ + 120 - +150 minutes , @ 1.705 L/KG

Set Taps / Start Run Off @ + 150 minutes .

SPARGING

Sparge @ + 160 - +165 Minutes and at a ratio , of 3.700 L/KG
at 165 – 170 Fahrenheit .

COPPER & HOPS

A 1½ Hour Boil , with the first charge @ + 0 minutes ,
2Nd charge @ + 35 Minutes , and a third @ + 65 – 70 Minutes.

HOPS :

FIRST CHARGE;

| | |
|------------|----------------|
| Cluster | 10 IBU @ 1.052 |
| Mittelfruh | 10 IBU @ 1.052 |

SECOND CHARGE

| | |
|------------|----------------|
| Mittelfruh | 20 IBU @ 1.055 |
|------------|----------------|

THIRD CHARGE

| | |
|---------------------|----------------|
| Fuggles | 10 IBU @ 1.061 |
| (Preferably French) | |
| East Kents | 5 IBU @ 1.061 |
| Bramling Cross | 3 IBU @ 1.061 |

YEAST & PITCHING etc ;

Pitch with a Lancashire type strain @ 59 Fahrenheit ,

At 4.25 g/litre @ 1.063 , and allow no higher than 66 Fahrenheit ,
Rouse 24 hours after pitching , and every 10 hours afterwards until
1.023 .

Stop fermentation by cooling to 60 Fahrenheit @ 1.020, the to 58
Fahrenheit .

And give a final rouse @ 1.018 when @ 58 , and allow a 2 day
diacetyl rest @ 58 before racking to a barrel.

RACKING & MATURATION

Rack @ 1.016 , at 57-58 F , and add (25 L brew) , racking hops as below ;

East Kents 8 g

Mittelfruh 8 g

Mature for a minimum of 1-1½ months for DRAUGHT consumption , and 2 months for a bottled product before bottling , then age for a minimum of 1 month before q.c !!

Mature in cask as above , but only add the finished product finings a minimum of 48 hours before drinking , rolling the container well before stillaging.

FININGS : Copper : say 8 – 12 g @ +120 – 125 minutes into the boil

Barrel : Do a finings test .