



**Holocene  
Raleigh  
NC**

**Solar  
Calculation  
Form**

**Holocene # :**  
**Date :** 3/10/2011  
**Agent # :**

**Agent :** Holocene, LLC  
**Name :** Raleigh, NC

**Project :** Bryan Center  
**Name :** Durham, NC  
: DHW loads

: **Proprietary Information**  
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**Weather Data:** RALEIGH      35.87      **Tilt :** 30      **S. Azm :** 0

**Heating Loads and Solar Equipment**

Domestic Hot Water			Space Heating	
Well Temp	Gal/Day	Output Temp	Btu/DD	
	4710	122	0	
Collector	Number	Total Area	Storage Gals	Tank Gals
AE32	60	1796.4	3177.5	2000

**Solar Contribution to Loads**

Month	Degree Days	DHW Load Mbtu	Space Htg. Load Mbtu	Total Load Mbtu	Solar Energy Mbtu	Solar Fraction	Energy per Coll. Mbtu
Jan	808	83.3	0	83.3	26.05	0.31	0.43
Feb	644	76.7	0	76.7	29.24	0.38	0.49
Mar	457	83.6	0	83.6	40.52	0.48	0.68
Apr	193	77.5	0	77.5	43.16	0.56	0.72
May	47	76.4	0	76.4	44.28	0.58	0.74
Jun	0	70.6	0	70.6	43.14	0.61	0.72
Jul	0	69.8	0	69.8	43.74	0.63	0.73
Aug	0	68.2	0	68.2	42.24	0.62	0.70
Sep	9	66.4	0	66.4	38.21	0.58	0.64
Oct	189	71.2	0	71.2	37.81	0.53	0.63
Nov	414	73.4	0	73.4	28.80	0.39	0.48
Dec	695	79.7	0	79.7	24.55	0.31	0.41
<b>Totals</b>	<b>3456</b>	<b>896.86</b>	<b>0.00</b>	<b>896.86</b>	<b>441.74</b>	<b>0.49</b>	<b>7.36</b>

**Solar Performance Graph**

**Annual Yield**  
**49.25%**



