Site Report

Report Name	Smith Home
Report Date	3/2/2009 3:06:37 PM
Declination	-14d 59m
Location	HILLSBORO, NH, Zipcode: 03244
Lat/Long	43.123 / -71.914
Weather Station	CONCORD, NH, Elevation: 344 Feet
Site distance	22 Miles
Report Type	Thermal
Array Type	Fixed
Tilt Angle	43.12 deg
Ideal Tilt Angle	43.12 deg
Azimuth	180.00 deg
Ideal Azimuth	180.00 deg
Collector Make	American Solar Works
Collector Model	ASW52B
Collector Area	26.5 Sq. Feet
Collector Count	4
Total Collector Area	106.2 Sq. Feet
Solar Fraction	0.72
Annual Production	11.5 Million BTU
Propane Cost	$2.78 per gallon
Propane Saved	125.31 gallons
Collector Fluid	Water
Layout Configuration	SinglePicture
Layout Point Count	1

Notes: Site Analysis for Thermal install

System Picture Layout

Layout Type Single Picture
Layout Point Count 1

Thermal Energy Cost Savings

Energy Source Used to Heat Water

Energy Source	Propane
Energy Cost	$2.78 per gallon
Total Propane Saved	125.31 gallons

Estimated Monthly Savings

January	$24.98
February	$26.46
March	$30.97
April	$32.45
May	$34.18
June	$33.51
July	$35.83
August	$35.50
September	$30.81
October	$25.73
November	$19.77
December	$18.17
Annual Savings	$348.36

Notes: Site Analysis for Thermal install

Thermal Data Input Assumptions

Estimated Average Daily Hot Water Usage (gallons/day)

January	59.45
February	59.45
March	59.45
April	59.45
May	59.45
June	59.45
July	59.45
August	59.45
September	59.45
October	59.45
November	59.45
December	59.45

Other Assumptions

Tank Temperature	134.96 °F
Water Supply Temperature	55.04 °F
Main Tank Volume	100 Gallons
Secondary Tank Volume	0 Gallons
Heat Exchanger Efficiency	70.00 %

Notes: Site Analysis for Thermal install

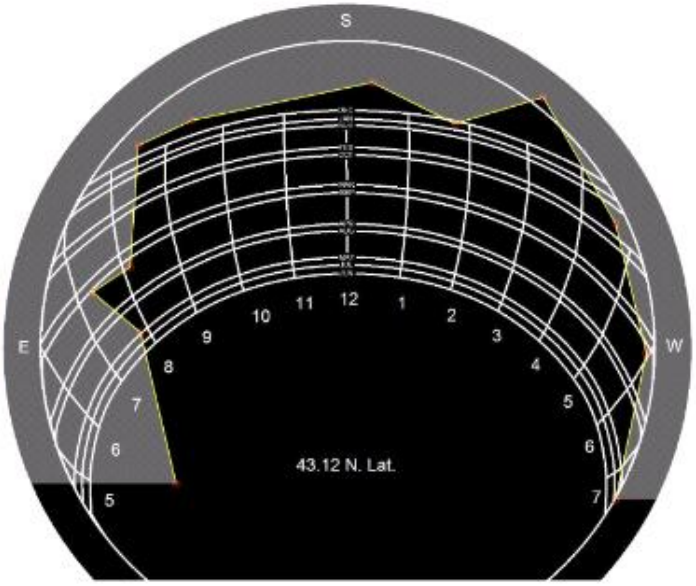
Solar Site Analysis Report

Image File SPA_sample.jpg

Solar Obstruction Data

Month	Unshaded % of Ideal Site Azimuth=180 Tilt=43.12	Actual Solar Rad w/ Shading Azimuth=180.0 Tilt=43.12 KWH/m^2 /day	Solar Hot Water Actual Cost Savings Propane $2.78/gallon	Solar Hot Water Solar Fraction Azimuth=180.0 Tilt=43.12	Solar Hot Water Produced Azimuth=180.0 Tilt=43.12 MMBTU	Solar Hot Water Demand Azimuth=180.0 Tilt=43.12 MMBTU
January	95.00%	3.61	$24.98	0.61	0.8	1.4
February	94.00%	4.29	$26.46	0.71	0.9	1.2
March	93.00%	4.53	$30.97	0.75	1.0	1.4
April	96.00%	4.91	$32.45	0.81	1.1	1.3
May	94.00%	4.96	$34.18	0.83	1.1	1.4
June	94.00%	5.01	$33.51	0.84	1.1	1.3
July	94.00%	5.21	$35.83	0.87	1.2	1.4
August	95.00%	5.16	$35.50	0.86	1.2	1.4
September	93.00%	4.52	$30.81	0.77	1.0	1.3
October	91.00%	3.59	$25.73	0.62	0.8	1.4
November	93.00%	2.88	$19.77	0.50	0.7	1.3
December	92.00%	2.63	$18.17	0.44	0.6	1.4
Totals	**93.82%**	**51.28**	**$348.36**	**0.72**	**11.5**	**16.0**
	Unweighted Yearly Avg	**Effect: 92.76% Sun Hrs: 4.27**				

Notes: [None]



Summary Report

Solar Obstruction Data

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Notes: Site Analysis for Thermal install