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Blue Source's Annual Emission Reduction Credit Creation Report for Denbury  
Resources CO<sub>2</sub> Geologic Sequestration through Enhanced Oil Recovery  
Operations  
(January 2004 – March 2004)

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This Annual Emission Reduction Credit Creation Report supplements *Blue Source's Emission Reduction Credit (ERC) Protocol for Denbury Resources' CO<sub>2</sub> Geologic Sequestration through Enhanced Oil Recovery Operations* (the "Protocol"). This Annual Creation Report includes 1,034,911 emission reduction credits created during the period of January 1, 2004 through March 31, 2004.

Denbury Resources continues to purchase carbon dioxide from underground reserves at Jackson Dome located near Jackson, Mississippi. The underground-sourced CO<sub>2</sub> is transported to Little Creek and surrounding fields for use in enhanced oil recovery (EOR) operations. Instead of venting the CO<sub>2</sub> that is separated from the recovered oil to the atmosphere (as is the local practice), Denbury captures the vented CO<sub>2</sub> at Little Creek and surrounding fields and re-compresses and re-injects (i.e., recycles) it, at a higher cost than underground-sourced CO<sub>2</sub>, for EOR purposes in these oil fields. Denbury expanded its EOR operations in Western Mississippi with the addition of a compressor station similar to Little Creek at the West Mallalieu Field. West Mallalieu purchases underground-sourced CO<sub>2</sub> from Jackson Dome and uses underground-sourced CO<sub>2</sub> in combination with its own recycle CO<sub>2</sub> for its EOR operations. West Mallalieu is located 10 miles from Little Creek on the same oil reserve. The Protocol remains accurate in its description of Denbury's current operations with the addition of the West Mallalieu Field.

The net emission reductions for both Little Creek Field and West Mallalieu Field are calculated using the following equation from the Protocol:

$$\begin{aligned} \text{Net ERCs Created} &= \text{Baseline Emissions} - \text{Project Emissions} \\ &= (\text{GV} + \text{IND}_1 + \text{IND}_2 + \text{IND}_3 + \text{IND}_4) - \text{IND}_5 \end{aligned} \quad (\text{Equation 5-4})$$

where:

Net ERC	= Net emission reduction credit (expressed as tonnes CO <sub>2</sub> e);
GV	= Gross volume of recycle gas (based on difference between monthly metered volumes of total injected gas and gas obtained from Jackson Dome, and converted to tonnes CO <sub>2</sub> e on monthly basis);
IND <sub>1</sub>	= Indirect emissions that would have occurred from electricity usage by the chiller unit used to lower CO <sub>2</sub> gas temperatures to 60° F upstream of the pump (estimated as tonnes CO <sub>2</sub> e on a monthly basis);
IND <sub>2</sub>	= Indirect emissions that would have occurred from electricity usage by the pump used to increase CO <sub>2</sub> liquid pressures to 1300psig (estimated as tonnes CO <sub>2</sub> e on a monthly basis);
IND <sub>3</sub>	= Indirect emissions that would have occurred from fuel usage by the compressor engines used to increase CO <sub>2</sub> gas pressures to 1300psig (estimated as tonnes CO <sub>2</sub> e on a monthly basis);
IND <sub>4</sub>	= Indirect emissions that would have occurred from electricity usage by compressor engines at Little Creek and West Mallalieu used to increase CO <sub>2</sub> gas pressures to 2950psig (estimated as

tonnes CO<sub>2</sub>e on a monthly basis);  
 IND<sub>5</sub> = Indirect emissions associated with electricity usage to operate the recycle CO<sub>2</sub> compressors at Little Creek and West Mallalieu (estimated as tonnes CO<sub>2</sub>e on a monthly basis).

The Protocol is supplemented for this Annual Creation Report with Tables (5.2, 7.1) and Appendices (A, B).

**Table 5-2. Annual Net Emission Reduction Credit Summary (tonnes CO<sub>2</sub>e)**

<b>Calendar Year</b>	<b>2003 (Oct – Dec)</b>	<b>2004 (Jan –Mar)</b>	<b>Total For Creation Period (Oct 2003 – Mar 2004)</b>
<b>GV</b>	981,128	1,040,705	2,021,833
<b>IND<sub>1</sub></b>	14	15	30
<b>IND<sub>2</sub></b>	78	83	161
<b>IND<sub>3</sub></b>	427	453	879
<b>IND<sub>4</sub></b>	4,897	5,027	9,924
<b>Total Baseline</b>	986,545	1,046,282	2,032,827
<b>IND<sub>5</sub></b>	10,393	11,371	21,764
<b>Total Project</b>	10,393	11,371	21,764
<b>Net ERCs</b>	976,152	1,034,911	2,011,063

**Table 7-1. External Impact Emissions Summary (tonnes)**

<b>Calendar Year</b>	<b>2003 (Oct– Dec)</b>	<b>2004 (Jan –Mar)</b>	<b>Total For Creation Period (Oct 2003–Mar 2004)</b>
<b>NO<sub>x</sub></b>	3	5	8
<b>SO<sub>2</sub></b>	37	43	80
<b>Hg</b>	6.72E-05	7.77E-05	1.45E-04

## Appendix A

### Summary of CO<sub>2</sub>e Baseline, Leakages, and Emissions Credits

Table A-1	Summary of Baseline Emissions, Leakages, and Emission Reduction Credits for Little Creek Field
Table A-2	Summary of Baseline Emissions, Leakages, and Emission Reduction Credits for West Mallalieu Field
Table A-3	Summary of Emission Reduction Credits for the Project

**Table A-1. Summary of CO<sub>2</sub>e Baseline, Leakages, and Emission Reduction Credits for Little Creek (tonnes CO<sub>2</sub>e)**

Month - Year	Baseline Emissions						Leakages	Emission Reduction Credits
	Gross Volume (GV)	Avoided Emissions				TOTAL	TOTAL (IND <sub>5</sub> )	(ERC)
		(IND <sub>1</sub> )	(IND <sub>2</sub> )	(IND <sub>3</sub> )	(IND <sub>4</sub> )			
October 2003	264,446	4	21	115	1,671	266,257	2,008	264,249
November 2003	240,763	4	19	105	1,521	242,411	1,903	240,508
December 2003	269,911	4	22	117	1,705	271,759	1,831	269,928
January 2004	271,516	4	22	118	1,716	273,375	1,856	271,519
February 2004	256,315	4	20	111	1,619	258,070	1,798	256,272
March 2004	267,721	4	21	116	1,692	269,555	1,815	267,740
<b>Total Creation Period (Oct. 2003 – Mar. 2004)</b>	1,570,671	23	125	683	9,924	1,581,426	11,211	<b>1,570,215</b>

**Table A-2. Summary of CO<sub>2</sub>e Baseline Emissions, Leakages, and Emission Reduction Credits for West Mallalieu (tonnes CO<sub>2</sub>e)**

Month - Year	Baseline Emissions					TOTAL (IND <sub>5</sub> )*	Leakages	Emission Reduction Credits  (ERC)
	Gross Volume (GV)	Avoided Emissions						
		(IND <sub>1</sub> )	(IND <sub>2</sub> )	(IND <sub>3</sub> )	(IND <sub>4</sub> )*			
October 2003	65,343	1	5	29	0	65,377	1,378	64,000
November 2003	68,705	1	5	30	0	68,742	1,658	67,084
December 2003	71,961	1	6	31	0	71,999	1,616	70,383
January 2004	84,709	1	7	37	0	84,754	1,998	82,756
February 2004	75,954	1	6	33	0	75,994	1,836	74,158
March 2004	84,490	1	7	37	0	84,534	2,068	82,466
<b>Total Creation Period (Oct. 2003 – Mar. 2004)</b>	451,161	7	36	197	0	451,401	10,553	<b>440,848</b>

\*For conservative calculations, due to the slight differences between Little Creek and West Mallalieu Fields, IND<sub>4</sub> is not considered in the Baseline Avoided Emissions for West Mallalieu and IND<sub>5</sub> is considered to be the entire electricity use at the West Mallalieu Station

**Table A-3. Summary of Emission Reduction Credits for the Denbury Project**

<b>Month - Year</b>	<b>Emission Reduction Credits Little Creek</b>	<b>Emission Reduction Credits West Mallalieu</b>	<b>Emission Reduction Credits Denbury Project</b>
October 2003	264,249	64,000	328,248
November 2003	240,508	67,084	307,592
December 2003	269,928	70,383	340,311
January 2004	271,519	82,756	354,276
February 2004	256,272	74,158	330,430
March 2004	267,740	82,466	350,206
<b>Total Creation Period (Oct. 2003 – Mar. 2004)</b>	<b>1,570,215</b>	<b>440,848</b>	<b>2,011,063</b>



## Appendix B

### Denbury Resources Data Supporting Calculations

Table B-1.	Underground-Sourced and Recycled CO <sub>2</sub> Gas Volumes Data for Little Creek
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**Table B-1. Underground-Sourced and Recycled Gas Volumes Data for Little Creek (1,000 scf)**

<b>Month – Year</b>	<b>Underground-sourced CO<sub>2</sub> (from Jackson Dome)</b>	<b>Recycled CO<sub>2</sub></b>	<b>Total CO<sub>2</sub></b>
October 2003	2,720,562	4,095,838	6,816,400
November 2003	2,742,381	3,729,019	6,471,400
December 2003	2,927,424	4,180,476	7,107,900
January 2004	2,874,957	4,205,343	7,080,300
February 2004	2,660,375	3,969,895	6,630,270
March 2004	2,939,232	4,146,568	7,085,800
<b>Total</b>	<b>16,864,931</b>	<b>24,327,139</b>	<b>41,192,070</b>

**Table B-2. Underground-Sourced and Recycled Gas Volumes Data for West Mallalieu (1,000 scf)**

<b>Month – Year</b>	<b>Underground-sourced CO<sub>2</sub> (from Jackson Dome)</b>	<b>Recycled CO<sub>2</sub></b>	<b>Total CO<sub>2</sub></b>
October 2003	1,600,770	1,023,267	2,624,037
November 2003	1,612,500	1,075,928	2,688,428
December 2003	1,773,081	1,126,907	2,899,988
January 2004	2,037,099	1,326,540	3,363,639
February 2004	1,890,196	1,189,440	3,079,636
March 2004	1,931,005	1,323,108	3,254,113
<b>Total</b>	<b>10,844,651</b>	<b>7,065,190</b>	<b>17,909,841</b>

**Table B-3. Electricity Usage Data for  
Little Creek**

<b>Billing Date</b>	<b>kW-hr</b>
11/10/2003	5,328,000
12/10/2003	5,164,800
1/9/2004	5,174,400
2/10/2004	5,179,200
3/10/2004	4,929,600
4/13/2004	5,155,200

**Table B-4. Electricity Usage Data for  
West Mallalieu**

<b>Billing Date</b>	<b>kW-hr</b>
11/10/03	2,337,600
12/10/03	2,812,800
01/09/04	2,740,800
02/10/04	3,388,800
03/10/04	3,115,200
04/13/04	3,508,800

**Table B-5. Typical Recycle CO<sub>2</sub> Gas Analysis for Little Creek**

<b>Compound</b>	<b>Molecular Weight (m.w.)</b>	<b>Mole Percent (m.p.)</b>	<b>Mole Fraction (m.f.)</b>	<b>m.w. * m.f.</b>
methane	16.04	3.904	0.03904	0.626
ethane	30.07	0.942	0.00942	0.283
propane	44.09	0.449	0.00449	0.198
i-butane	58.12	0.11	0.00110	0.064
n-butane	58.12	0.276	0.00276	0.160
i-pentane	72.14	0.15	0.00150	0.108
n-pentane	72.14	0.135	0.00135	0.097
n-hexane	86.17	0.626	0.00626	0.539
carbon dioxide	44.01	92.955	0.92955	40.909
nitrogen	28.02	0.453	0.00453	0.127

total m.f. = 1.00000

Molecular weight = 43.11

**Table B-6. Typical Recycle CO<sub>2</sub> Gas Analysis for West Mallalieu**

<b>Compound</b>	<b>Molecular Weight (m.w.)</b>	<b>Mole Percent (m.p.)</b>	<b>Mole Fraction (m.f.)</b>	<b>m.w.*m.f.</b>
methane	16.04	4.27800	0.04278	0.686
ethane	30.07	0.96200	0.00962	0.289
propane	44.09	0.43700	0.00437	0.193
i-butane	58.12	0.09000	0.00090	0.052
n-butane	58.12	0.21900	0.00219	0.127
i-pentane	72.14	0.09600	0.00096	0.069
n-pentane	72.14	0.08300	0.00083	0.060
n-hexane	86.17	0.25100	0.00251	0.216
carbon dioxide	44.01	93.13700	0.93137	40.990
nitrogen	28.02	0.44700	0.00447	0.125

total m.f. = 1.00000

Molecular weight= 42.81