



SGS NAJ, MINERAL SERVICES DIVISION  
 P.O. BOX 850  
 SOPHIA, WV 25921  
 TEL: (304) 255-0422  
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OVERBURDEN ANALYSIS

CUSTOMER: AMERICA'S ENERGY  
 HOLE #: B-4  
 CORED: 10/29/2009  
 REPORT DATE: 12/11/2009

TONS CaCo3 EQIV.PER  
 1000 TONS MATERIAL  
 AP NEUT T.S  
 POT. ABP

SGS BECKLEY LAB #	FROM DEPTH FT	TO DEPTH FT	DEPTH FT	Description	PASTE PH @ 25* C	1 GRAM DRY WT	TOTAL SULFUR	PYRITIC SULFUR	SULFATE	Se, Total ug/g	Se, Column mg/l	AMOUNT FROM SULFUR	AMOUNT PRESENT (TITR.)	AMOUNT NEEDED	AMOUNT EXCESS	FIZZ TEST
78906681	0.00	2.00	0.00	WEATHERED SANDSTONE	6.0	0.9933	0.01					0.22	6.3*		6.1	NONE
78906682	2.00	3.00	2.00	WEATHERED SANDSTONE	6.1	0.9960	0.01					0.19	4.5*		4.3	SLIGHT
78906683	3.00	5.85	4.17	SANDSTONE	7.2	0.9949	0.01					0.22	6.0*		5.8	NONE
78906684	5.85	8.70	7.02	SANDSTONE	7.5	0.9974	0.00					0.13	3.7*		3.6	SLIGHT
78906685	8.70	13.90	11.05	SANDSTONE	7.4	0.9980	0.00					0.03	5.0*		5.0	NONE
78906686	13.90	19.00	16.20	SANDSTONE	7.7	0.9977	0.01					0.22	6.0*		5.8	NONE
78906687	19.00	24.00	21.25	SANDSTONE	7.6	0.9977	0.00					0.13	6.3*		6.1	NONE
78906688	24.00	29.00	26.25	SANDSTONE	8.0	0.9975	0.00					0.06	4.5*		4.4	NONE
78906689	29.00	34.00	31.25	SANDSTONE	7.9	0.9972	0.01					0.22	3.8*		3.5	NONE
78906690	34.00	39.00	36.25	SANDSTONE	7.9	0.9984	0.01					0.28	23.7*		23.4	NONE
78906691	39.00	44.00	41.25	SANDSTONE	8.3	0.9988	0.01					0.25	10.0*		9.8	SLIGHT
78906692	44.00	49.00	46.25	SANDSTONE	8.3	0.9980	0.03					0.78	10.0*		9.2	SLIGHT

\* Peroxide Used

The Following Methods are Used:

Sobek\* 3.2.2 pg 45; Sobek 3.2.3 pg 47; Leco, IR decton; Sobek 3.2.9 pg 65;  
 Sobek 3.2.18 pg 91, Sobek 3.2.19 pg 95, Sobek 3.4.3 pg 122; ASTM D2492;  
 Munsell Color Chart\*; Sobek 2.2.3 pg 28; EACC Memo

Respectfully submitted,  
 SGS NORTH AMERICA INC.

Beckley Laboratory

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78906693	49.00	54.00	51.25	SANDSTONE	8.7	0.9983	0.02					0.47	123.1*		122.7	HIGH
78906694	54.00	59.00	56.25	SANDSTONE	8.3	0.9980	0.01					0.19	8.7*		8.5	SLIGHT
78906695	59.00	64.00	61.25	SANDSTONE	8.1	0.9972	0.00					0.06	5.0*		4.9	NONE
78906696	64.00	69.00	66.25	SANDSTONE	8.0	0.9974	0.00					0.09	5.0*		4.9	NONE
78906697	69.00	74.00	71.25	SANDSTONE	8.2	0.9980	0.02					0.50	3.5*		3.0	SLIGHT
78906698	74.00	75.10	74.30	SANDSTONE	8.0	0.9994	0.01					0.25	3.7*		3.5	NONE
78906699	75.10	79.00	76.80	SANDSTONE	8.1	0.9994	0.03					1.00	3.7*		2.7	SLIGHT
78906700	79.00	80.50	79.50	SANDSTONE	7.8	0.9984	0.03					0.78	3.5*		2.7	NONE
78906701	80.50	80.90	80.50	COAL 80.9 - 83.5	5.1	0.9923	3.69	3.59				112.19	7.6*	104.6		NONE
78906702	80.90	83.50	81.95	COAL 80.9 - 83.5	5.9	0.9921	4.18	3.12				97.50	5.0*	92.5		SLIGHT
78906703	83.50	86.15	84.57	SHALE	4.6	0.9928	1.22	1.21				37.81	7.5*	30.3		NONE
78906704	86.15	88.80	87.22	SHALE	6.0	0.9958	1.08	1.08				33.75	8.5*	25.2		SLIGHT

\* Peroxide Used

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 Sobek 3.2.18 pg 91, Sobek 3.2.19 pg 95, Sobek 3.4.3 pg 122; ASTM D2492;  
 Munsell Color Chart\*; Sobek 2.2.3 pg 28; EACC Memo

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78906705	88.80	91.40	88.90	88.8 - 94	6.6	0.9975	0.33	0.31				9.69	7.5*	2.2		NONE
78906706	91.40	94.00	92.45	88.8 - 94	6.4	0.9951	0.41	0.38				11.88	7.5*	4.4		SLIGHT
78906707	94.00	96.50	95.00	SHALE	6.9	0.9952	0.28					8.76	8.8*		0.0	NONE
78906708	96.50	99.00	97.50	SHALE	7.9	0.9942	0.26					8.01	9.5*		1.5	NONE
78906709	99.00	101.50	100.00	SHALE	7.8	0.9949	0.12					3.68	10.0		6.4	NONE
78906710	101.50	104.00	102.50	SHALE	7.5	0.9947	0.09					2.92	8.8*		5.8	SLIGHT
78906711	104.00	106.50	105.00	SHALE	7.3	0.9928	0.01					0.41	12.1*		11.7	NONE
78906712	106.50	109.00	107.50	SHALE	7.6	0.9953	0.02					0.69	12.5*		11.8	SLIGHT
78906713	109.00	111.50	110.00	SHALE	7.5	0.9959	0.02					0.53	11.0*		10.5	SLIGHT
78906714	111.50	114.00	112.50	SHALE	7.1	0.9945	0.03					1.04	10.0*		9.0	NONE
78906715	114.10	115.20	114.10	114-119 COAL 114.1-115.2 COAL, CLAYEY SHALE	7.4	0.9880	1.12	0.52				16.25	5.0*	11.2		SLIGHT
78906716	115.20	117.10	115.90	114-119 COAL 114.1-115.2 COAL, CLAYEY SHALE	6.6	0.9957	0.03					0.78	5.0*		4.2	NONE

Respectfully submitted,  
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*Kimberly E. Hartog*  
 Beckley Laboratory

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Member of the SGS Group



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78906717	117.10	119.00	117.80	114-119 COAL 114.1-115.2 COAL, CLAYEY SHALE	6.9	0.9931	0.03					0.88	7.5*		6.6	NONE
78906718	119.00	124.00	121.25	SHALE SANDSTONE	8.4	0.9996	0.00					0.09	5.0*		4.9	NONE
78906719	124.00	129.00	126.25	SANDSTONE	8.3	0.9997	0.00					0.03	3.7*		3.7	NONE

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