



SGS NA, MINERAL SERVICES DIVISION  
 P.O. BOX 850  
 SOPHIA, WV 25921  
 TEL: (304) 255-0422  
 FAX: (304) 255-0417

OVERBURDEN ANALYSIS

CUSTOMER: AMERICA'S ENERGY  
 HOLE #: B-3  
 CORED: 11/4/2009  
 REPORT DATE: 12/11/2009

TONS CaCo3 EQIV.PER 1000 TONS MATERIAL		
AP	NEUT POT.	T.S 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
78906649	0.00	2.00	0.00	WEATHERED SANDSTONE	5.8	0.9920	0.02					0.66	8.8*		8.1	NONE
78906650	2.00	4.00	2.00	WEATHERED SANDSTONE	6.5	0.9930	0.01					0.16	5.0*		4.9	NONE
78906651	4.00	6.00	4.00	WEATHERED SANDSTONE	6.5	0.9949	0.01					0.22	5.0*		4.8	NONE
78906652	6.00	8.00	6.00	WEATHERED SANDSTONE	7.0	0.9966	0.01					0.16	6.0*		5.9	NONE
78906653	8.00	9.00	8.00	WEATHERED SANDSTONE	7.4	0.9957	0.01					0.19	7.5*		7.3	NONE
78906654	9.00	14.00	11.25	SANDSTONE	7.5	0.9974	0.03					0.81	8.5*		7.7	NONE
78906655	14.00	19.00	16.25	SANDSTONE	8.5	0.9987	0.01					0.16	16.2*		16.0	NONE
78906656	19.00	24.00	21.25	SANDSTONE	8.7	0.9976	0.00					0.06	22.5*		22.4	NONE
78906657	24.00	29.00	26.25	SANDSTONE	8.3	0.9982	0.00					0.13	11.0*		10.9	NONE
78906658	29.00	34.00	31.25	SANDSTONE	8.4	0.9994	0.03					0.84	8.7*		7.9	NONE
78906659	34.00	39.00	36.25	SANDSTONE	8.1	0.9984	0.00					0.03	7.5*		7.5	SLIGHT
78906660	39.00	44.00	41.25	SANDSTONE w/ COAL STAINERS	8.0	0.9998	0.00					0.06	5.0*		4.9	NONE

\* Peroxide Used

The Following Methods are Used:

Sobek\* 3.2.2 pg 45; Sobek 3.2.3 pg 47; Leco, IR detection; Sobek 3.2.9 pg 65; Minerals Services Division  
 Sobek 3.2.18 pg 91, Sobek 3.2.19 pg 95, Sobek 3.4.3 pg 122; ASTM D2492; P.O. Box 850, Sophia, WV 25921  
 Munsell Color Chart\*; Sobek 2.2.3 pg 28; EACC Memo

Respectfully submitted,  
 SGS NORTH AMERICA INC/

Beckley Laboratory



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78906661	44.00	47.00	45.25	SHALE-CLAY	5.9	0.9942	0.08					2.61	13.5*		10.9	NONE
78906662	47.00	49.00	47.75	SHALE-CLAY	6.7	0.9937	0.08					2.42	17.6*		15.1	NONE
78906663	49.00	52.00	50.25	SHALE	6.4	0.9953	0.09					2.86	14.5*		11.7	NONE
78906664	52.00	54.00	52.75	SHALE	6.5	0.9943	0.23					7.32	16.1*		8.8	NONE
78906665	54.00	57.00	55.25	SHALE	6.8	0.9944	0.34					10.56	15.0*		4.5	NONE
78906666	57.00	59.00	57.75	SHALE	5.7	0.9865	1.55	1.50				46.88	10.1*	36.8		NONE
78906667	59.00	64.00	59.60	COAL - 40*	7.2	0.9979	2.54	1.54				48.13	5.0*	43.1		SLIGHT
78906668	64.00	67.00	65.25	SHALE	6.4	0.9948	0.83	0.75				23.44	2.0*	21.4		NONE
78906669	67.00	69.00	67.75	SHALE	7.0	0.9975	0.77	0.77				24.09	16.0*	8.1		NONE
78906670	69.00	72.00	70.25	SHALE SANDY SHALE	7.3	0.9975	0.16					4.98	10.0*		5.0	NONE
78906671	72.00	74.00	72.75	SHALE SANDY SHALE	7.5	0.9977	0.03					1.00	12.0*		11.0	NONE
78906672	74.00	77.00	75.25	SANDY SHALE	7.5	0.9976	0.02					0.66	12.5*		11.8	NONE

\* Peroxide Used

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Sobek\* 3.2.2 pg 45; Sobek 3.2.3 pg 47; Leco, IR detection; Sobek 3.2.9 pg 65; Minerals Services Division  
 Sobek 3.2.18 pg 91, Sobek 3.2.19 pg 95, Sobek 3.4.3 pg 122; ASTM D2492; P.O. Box 850, Sophia, WV 25921  
 Munsell Color Chart\*; Sobek 2.2.3 pg 28; EACC Memo

Respectfully submitted,  
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Member of the SGS Group



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78906673	77.00	79.00	77.75	SANDY SHALE	7.5	0.9971	0.02					0.56	12.5*		11.9	NONE
78906674	79.00	82.00	80.25	SANDY SHALE	7.8	0.9989	0.01					0.41	12.0*		11.6	NONE
78906675	82.00	84.00	82.75	SANDY SHALE	7.9	0.9994	0.02					0.72	14.5*		13.7	NONE
78906676	84.00	87.00	85.25	SHALE	7.9	0.9991	0.03					1.03	30.5*		29.5	NONE
78906677	87.00	89.00	87.75	SHALE	7.8	0.9984	0.03					0.88	11.2*		10.4	NONE
78906678	89.00	91.50	90.00	89-94.5 COAL @ 91' - 93' RECOVERED 16"	7.7	0.9984	0.04					1.13	12.0*		10.8	NONE
78906679	91.50	94.00	92.50	89-94.5 COAL @ 91' - 93' RECOVERED 16"	7.3	0.9952	2.27	0.71				22.19	7.5*	14.7		SLIGHT
78906680	94.00	99.00	95.25	SANDSTONE	9.2	0.9994	0.00					0.13	6.3*		6.1	NONE

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 Sobek 3.2.18 pg 91, Sobek 3.2.19 pg 95, Sobek 3.4.3 pg 122; ASTM D2492  
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