0009

ACT/002/004

AMAX COAL WEST, INC. #2

A Subsidiary of AMAX Coal Industries, Inc.
165 South Union Blvd., Suite 1000
P. O. Box 280219
Lakewood, CO 80228-0219
Phone # (303) 980-2300
FAX # (303) 980-2303

FAX COVER SHEET

DATE: 11/17/93

TO: Paul Baker

FROM: Richard Allison

MESSAGE

Number of copies including cover sheet 12

Inter-Mountain Laboratories, Inc.

2506 West Main Street
Farmington, New Mexico 87401
Tel. (505) 326-4737

NOV 16 1993

To all of our Customers:

As of October 1, 1993, our Corporate Headquarters in Sheridan, Wyoming, will centralize all invoicing. Invoices will no longer be sent to you, but will instead be sent to your Accounts Payable Department from our Corporate Office. To minimize any inconvenice or confusion that this may cause, your reports will be accompaned by a "packing slip", itemizing the analyses that you requested and the costs. The packing slip is not a request for payment, but for your internal use only.

Thank you for your understanding and patience in the transition. Please feel free to call Fran Armenta or me if there are any questions or comments regarding the new procedure.

Sincerely,

Charles Ballek
Laboratory Manager
IML - Farmington

cc: IML - Corporate HQ

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

PS#93122

***** PACKING SLIP *****

INTER-MOUNTAIN LABORATORIES, INC.
2506 WEST MAIN STREET
FARMINGTON, NEW MEXICO 87401

11/08/93

(505) 326-4737

Amax Coal Co (Belle Ayr Mine)
POB 3039
Gillette, WY 82716-3039

03 0000571
B.O.030-00-68162

Attn: Richard Allison

SALES CODE	DESCRIPTION	SAMPLE ID	LABORATORY ID		PRICE	AMOUNT
199999	Analytical Suite pH,EC,SAR,MA,CF	Sowbelly Project	31972-31988	17.0	54.00	918.00
199999	Analytical Suite OM%,NP,N03,CEC,Sol B,T-Se		31972-31988	17.0	64.00	1088.00
199999	Analytical Suite 1/3 Bar,15 Bar,Bulk Density Available water capacity Calc.-no charge		31972-31988	17.0	60.00	1020.00

PS #93122 Rcd. 10/18/93

RECEIVED / REVIEWED BY:

X _____

Inter-Mountain Laboratories, Inc.

2506 West Main Street | Farmington, New Mexico 87401 | Tel. (505) 326-4737

E.I.S./ AMAX COAL
Helper, Utah
MINE: Castle Gate
LOCATION: Sowbelly Project

DATE SAMPLED: October 12, 1993
DATE REPORTED: November 3, 1993

Lab No.	Location	Depths	pH	EC mmhos/cm @ 25°C	Saturation %	Calcium meq/l	Magnesium meq/l	Sodium meq/l	SAR	Coarse Fragments %	Sand %	Silt %	Clay %	Texture
31972	SOW BELLY #1	0-0	7.7	0.67	31.3	3.02	1.57	1.51	1.00	13.9	42.7	33.7	23.6	LOAM
31973	SOW BELLY #2	0-0	7.2	0.37	24.3	2.60	0.37	0.39	0.32	0.2	70.0	19.1	10.9	SANDY LOAM
31974	SOW BELLY #3	0-0	7.5	1.50	32.9	4.04	4.96	4.08	1.92	14.7	40.9	35.5	23.6	LOAM
31975	SOW BELLY #4	0-0	7.8	0.61	29.1	2.07	2.08	1.71	1.19	19.1	42.7	34.6	22.7	LOAM
31976	SOW BELLY #5	0-0	8.0	0.80	33.1	1.95	3.07	2.07	1.31	22.3	35.5	39.0	25.5	LOAM
31977	SOW BELLY #6	0-0	7.3	3.86	34.4	14.4	23.5	7.28	1.67	30.8	37.3	35.4	27.3	CLAY LOAM
31978	PREP PLANT #1	0-0	7.7	0.86	22.7	2.00	1.77	4.12	3.00	34.4	60.9	21.8	17.3	SANDY LOAM
31979	PREP PLANT #2	0-0	7.5	1.21	24.1	4.25	4.17	2.28	1.11	29.1	66.4	19.1	14.5	SANDY LOAM
31980	PREP PLANT #3	0-0	7.8	0.73	22.4	1.47	1.04	4.32	3.86	30.4	64.5	21.0	14.5	SANDY LOAM
31981	PREP PLANT #4	0-0	7.8	0.55	23.2	1.92	1.04	3.10	2.55	31.6	55.5	26.3	18.2	SANDY LOAM
31982	PREP PLANT #5	0-0	8.0	0.52	21.3	1.04	0.47	3.67	4.22	33.9	73.6	14.6	11.8	SANDY LOAM
31983	PREP PLANT #6	0-0	7.4	0.49	24.2	2.23	1.35	1.12	0.84	31.1	73.6	13.7	12.7	SANDY LOAM
31984	PREP PLANT #7	0-0	7.4	1.25	26.2	3.08	2.04	6.08	3.80	32.5	69.1	18.2	12.7	SANDY LOAM
31985	PREP PLANT #8	0-0	7.7	0.88	25.3	1.46	1.30	5.26	4.48	45.0	64.5	20.0	15.5	SANDY LOAM
31986	PREP PLANT #9	0-0	7.6	1.26	27.3	2.36	3.38	5.97	3.52	36.3	50.0	31.8	18.2	LOAM
31987	PREP PLANT #10	0-0	7.1	4.27	25.2	25.5	15.5	19.8	4.38	48.8	71.8	13.7	14.5	SANDY LOAM
31988	PREP PLANT #11	0-0	7.3	1.57	26.1	7.02	7.36	3.12	1.16	42.0	58.2	25.4	16.4	SANDY LOAM

Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage, Exch= Exchangeable, Avail= Available

Inter-Mountain Laboratories, Inc.
2506 West Main Street Farmington, New Mexico 87401 Tel. (505) 326-4737

E.I.S./ AMAX COAL
Helper, Utah
MINE: Castle Gate
LOCATION: Sowbelly Project

DATE SAMPLED: October 12, 1993
DATE REPORTED: November 3, 1993

Lab No.	Location	Depths	Organic Matter %	Neut. Pot. t/1000t	Nitrate-Nitrogen ppm	Boron ppm	CEC meq/100g	Total Selenium ppm
31972	SOW BELLY #1	0-0	1.9	58.9	3.46	0.42	14.7	0.35
31973	SOW BELLY #2	0-0	0.2	22.1	3.42	0.10	4.64	<0.10
31974	SOW BELLY #3	0-0	1.9	79.2	2.95	0.54	15.5	0.35
31975	SOW BELLY #4	0-0	1.5	97.6	2.90	0.52	12.8	0.30
31976	SOW BELLY #5	0-0	1.3	97.6	2.89	0.54	12.2	0.35
31977	SOW BELLY #6	0-0	2.6	95.5	2.54	0.44	15.7	0.45
31978	PREP PLANT #1	0-0	1.7	103.	3.17	0.70	8.74	0.25
31979	PREP PLANT #2	0-0	3.4	102.	3.62	0.66	15.3	0.30
31980	PREP PLANT #3	0-0	5.4	100.	2.78	0.56	7.62	0.50
31981	PREP PLANT #4	0-0	2.0	99.9	2.79	0.52	9.26	0.15
31982	PREP PLANT #5	0-0	4.1	101.	2.85	0.24	5.88	0.25
31983	PREP PLANT #6	0-0	2.5	101.	3.43	0.32	7.10	0.35
31984	PREP PLANT #7	0-0	4.2	101.	4.03	0.86	8.38	0.50
31985	PREP PLANT #8	0-0	3.4	102.	2.48	0.54	10.4	0.40
31986	PREP PLANT #9	0-0	1.5	102.	3.15	0.40	9.06	0.15
31987	PREP PLANT #10	0-0	1.5	81.4	2.66	0.54	18.1	1.30
31988	PREP PLANT #11	0-0	3.0	102.	3.14	0.64	18.8	0.35

Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neut. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage, Exch= Exchangeable, Avail= Available

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Lab No.	Location	Depths	pH	EC mmhos/cm @ 25°C	Saturation %	Calcium meq/l	Magnesium meq/l	Sodium meq/l	SAR	Coarse Fragments %	Sand %	Silt %	Clay %	Texture
31987	PREP PLANT #10	0-0	7.1	4.27	25.2	25.5	15.5	19.8	4.38	48.8	71.8	13.7	14.5	SANDY LOAM
31990	31987(DUP)	0-0	7.1	4.20	25.2	24.6	14.8	19.3	4.35		71.8	14.6	13.6	SANDY LOAM
31979	PREP PLANT #2	0-0	7.5	1.21	24.1	4.25	4.17	2.28	1.11	29.1	66.4	19.1	14.5	SANDY LOAM
31991	31979(DUP)	0-0	7.5	1.21	24.3	4.59	4.42	2.37	1.12		64.5	21.0	14.5	SANDY LOAM

Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage, Exch= Exchangeable, Avail= Available

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E.I.S./ AMAX COAL
Helper, Utah
MINE: Castle Gate
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DATE SAMPLED: October 12, 1993
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Lab No.	Location	Depths	Organic Matter %	Neut. Pot. t/1000t	Nitrate-Nitrogen ppm	Boron ppm	CEC meq/100g	Total Selenium ppm
31987	PREP PLANT #10	0-0	1.5	81.4	2.66	0.54	18.1	1.30
31990	31987(DUP)	0-0	7.5	81.4	2.60	0.56	18.4	1.25
31979	PREP PLANT #2	0-0	3.4	102.	3.62	0.66	15.3	0.30
31991	31979(DUP)	0-0	3.4	102.	4.08	0.70	16.0	0.30

Abbreviations used in acid base accounting: T.S.= Total Sulfur, AB= Acid Base, ABP= Acid Base Potential, PyrS= Pyritic Sulfur, Pyr+Org= Pyritic Sulfur + Organic Sulfur, Neut. Pot.= Neutralization Potential
Miscellaneous Abbreviations: SAR= Sodium Adsorption Ratio, CEC= Cation Exchange Capacity, ESP= Exchangeable Sodium Percentage, Exch= Exchangeable, Avail= Available

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

AVAILABLE WATER CAPACITY

Lab Name: INTER-MOUNTAIN LABS, INC. Contract: E.I.S. - AMAX COAL CO.

Lab Code: IML - F Case No. N/A SAS No.: N/A SDG No.: N/A

Matrix (Soil / Water): SOIL Date Received: 10/18/93

Level (Low / Medium): LOW

LAB ID	OTHER LAB ID	CLIENT	1/3 BAR PERCENT MOISTURE	15 BAR PERCENT MOISTURE	BULK DENSITY	AVALABLE WATER CAPACITY
31972A			17.5	8.9	1.35	11.6
31972B			17.7	9.3	1.23	10.4
31973A			7.3	3.1	1.34	5.6
31973B			7.3	3.0	1.42	6.1
31974A			17.8	10.2	1.68	12.8
31974B			17.6	9.4	1.60	13.2
31975A			16.4	8.0	1.53	12.9
31975B			17.0	7.9	1.50	13.7
31976A			17.6	9.6	1.59	12.8
31976B			17.3	9.2	1.48	12.0
31977A			16.2	8.8	1.55	11.5
31977B			16.0	8.7	1.44	10.5
31978A			12.3	5.5	1.82	12.4
31978B			12.2	5.4	1.37	9.3
31979A			11.2	5.1	1.30	8.0
31979B			11.9	5.0	1.34	9.3
31980A			12.5	5.0	1.31	9.9
31980B			12.3	5.0	1.17	8.6

Reference:

Methods of Soil Analysis, Monograph #9, American Society of Agronomy, 1965.

-Method 30 - 4 Bulk Density Clod Method

-Method 19 - 2 Field Capacity (1/3 Bar)

-Method 19 - 3 Wilting Point (15 Bar)

-Method 19 - 4 Available Water Capacity

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

AVAILABLE WATER CAPACITY

Lab Name: INTER-MOUNTAIN LABS, INC. Contract: E.I.S. - AMAX COAL CO.

Lab Code: IML - F Case No. N/A SAS No.: N/A SDG No.: N/A

Matrix (Soil / Water): SOIL Date Received: 10/18/93

Level (Low / Medium): LOW

LAB ID	OTHER LAB ID	CLIENT	1/3 BAR PERCENT MOISTURE	15 BAR PERCENT MOISTURE	BULK DENSITY	AVALABLE WATER CAPACITY
31981A			13.4	6.3	5.40	38.5
31981B			13.7	6.0	4.60	35.5
31982A			9.8	4.2	5.90	33.1
31982B			10.6	4.2	4.20	27.0
31983A			10.4	4.3	1.29	7.9
31983B			10.2	4.1	1.41	8.6
31984A			13.3	5.6	1.24	9.6
31984B			13.4	5.6	1.30	10.2
31985A			15.3	6.3	1.40	12.6
31985B			15.3	6.3	1.39	12.5
31986A			15.0	5.9	1.44	13.1
31986B			14.7	5.9	1.58	13.9
31987A			13.5	5.4	1.19	9.7
31987B			13.9	5.3	1.26	10.9
31988A			15.0	6.1	1.44	12.9
31988B			15.3	5.9	1.39	13.1

Reference:

Methods of Soil Analysis, Monograph #9, American Society of Agronomy, 1965.

-Method 30 - 4 Bulk Density Clod Method

-Method 19 - 2 Field Capacity (1/3 Bar)

-Method 19 - 3 Wilting Point (15 Bar)

-Method 19 - 4 Available Water Capacity

303 980 2303
NOV 17 '93 15:01 AMAX COAL [illegible]EWOOD 303-980-2303 P.10/12

801 - 472 - 3814

imi Inter-Mountain Laboratories, Inc.

E.I.S.
4855 N Spring Glen Rd
Helper, Ut 84526

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location
E.I.S / Castle Gate Coal AMAX	Sowbelly Project and Prep Plant

Sampler: (Signature)	Chain of Custody Tape No.
Todd Welty	

ANALYSES / PARAMETERS

Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers	Remarks
Castle Gate Coal					17 total bags	Also Please Send more Chain of Custody Forms and Adress Labels.
Sowbelly #1	10/12					Need to
Sowbelly #2	"					Know-What
Sowbelly #3	"					Type & Amount
Sowbelly #4	"					of Fertilizer
Sowbelly #5	"					to Add —
Sowbelly #6	"					Please-Rush
Prep Plant #1	"					Amax will Pay extra
Prep Plant #2	"					
Prep Plant #3 #4	"					Thanks
Prep Plant #5 #6	"					Mel
Prep Plant #7 #8	"					
Prep Plant #9 #10	"					
Prep Plant #11	"					

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Todd Welty	10-13-93	4:30	Paul S Towell	10-18-93	12:00 PM
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by laboratory: (Signature)	Date	Time

Inter-Mountain Laboratories, Inc.

- ☐ 1633 Terra Avenue, Sheridan, Wyoming 82801, Telephone (307) 672-8945
- ☐ 1714 Phillips Circle, Gillette, Wyoming 82716, Telephone (307) 682-8945
- ☑ 2506 West Main Street, Farmington, NM 87401, Telephone (505) 326-4737
- ☐ 1160 Research Dr., Bozeman, Montana 59715, Telephone (406) 586-8450
- ☐ 11183 SH 30, College Station, TX 77845, Telephone (409) 776-8945
- ☐ 3304 Longmire Drive, College Station, TX 77845, Telephone (409) 774-4999

14590