TRA-DET INC.
P.O. BOX 2019
WHEELING, WV 26003-0219
(304) 547-8094
FAX: (304) 547-8097

SHIPPING ADDRESS
2596 BATTLE RUN ROAD
TRIADELPHIA, WV 26059-9609

LABORATORY ANALYSES

American Energy Corporation
43521 Mayhugh Hill Rd. Twp Hwy 88
Beallsville, OH 43716
Attn: Mr. Fred Blumling

25-Jan-09

By: William Flanagan
TraDet, Inc.

Company: American Energy Corporation
Source: U13-2
SWL/Flow: 0.4 cfs
Date & Time Sampled: 01-08-09 1300
Analysis Number: 0901154

Sample Type: Pre-permit D0425-13
Sampled By: QES (KS)
Date & Time Received: 01-09-09 0900

Field pH, S.U. 7.58

PARAMETER	CONCENTRATION	DATE & TIME ANALYZED	ANALYST	METHOD	PQL
Total Acidity (as $CaCO_3$)	<5 mg/L	01-14-09 1323	WB	2310B (4 [2]	5 mg/L
Total Alkalinity (as $CaCO_3$)	82 mg/L	01-12-09 1038	WB	2320B [2]	5 mg/L
Total Iron	0.1 mg/L	01-20-09 1744	TW	3111B [1]	0.1 mg/L
Total Manganese	<0.1 mg/L	01-20-09 1744	TW	3111B [1]	0.1 mg/L
Total Aluminum	<0.5 mg/L	01-23-09 1215	TW	3111D [1]	0.5 mg/L
Total Suspended Solids	<6.7 mg/L	01-13-09 1800	MM	2540D [2]	6.7 mg/L
Hardness (as $CaCO_3$)	100 mg/L	01-21-09 1145	TW	2340 C [1]	5.0 mg/L
Sulfate (as SO_4)	42 mg/L	01-20-09 0900	KW	D516-02 [4]	5.0 mg/L
Specific Conductance	246 µmhos/cm	01-09-09 1545	LW	120.1 [3]	10.00 µmhos/cm
Nitrate	0.45[J] mg/L	01-09-09 1330	LW	352.1 [3]	0.1 mg/L

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PQL: Practical Quantitation Limit
[1] Standard Methods, 18th Edition [2] Standard Methods, 20th Edition [3] US EPA [4] ASTM [5] EPA SW846

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SHIPPING ADDRESS
2598 BATTLE RUN ROAD
TRIADELPHIA, WV 26059-9309

LABORATORY ANALYSES

American Energy Corporation
43521 Mayhugh Hill Rd. Twp Hwy 88
Beallsville, OH 43716
Attn: Mr. Fred Blumling

25-Jan-09

By: William Thompson
TraDet, Inc.

Company: American Energy Corporation
Source: D13-2
SWL/Flow: 1.36 cfs
Date & Time Sampled: 01-08-09 1310
Analysis Number: 0901155

Sample Type: Pre-permit D0425-13
Sampled By: QES (KS)
Date & Time Received: 01-09-09 0900

Field pH, S.U. 7.28

PARAMETER	CONCENTRATION		DATE & TIME ANALYZED	ANALYST	METHOD	PQL	
Total Acidity (as $CaCO_3$)	<5	mg/L	01-14-09 1323	WB	2310B (4 [2]	5	mg/L
Total Alkalinity (as $CaCO_3$)	41	mg/L	01-12-09 1038	WB	2320B [2]	5	mg/L
Total Iron	0.1	mg/L	01-20-09 1744	TW	3111B [1]	0.1	mg/L
Total Manganese	<0.1	mg/L	01-20-09 1744	TW	3111B [1]	0.1	mg/L
Total Aluminum	<0.5	mg/L	01-23-09 1215	TW	3111D [1]	0.5	mg/L
Total Suspended Solids	<6.7	mg/L	01-13-09 1800	MM	2540D [2]	6.7	mg/L
Hardness (as $CaCO_3$)	100	mg/L	01-21-09 1145	TW	2340 C [1]	5.0	mg/L
Sulfate (as SO_4)	32	mg/L	01-20-09 0900	KW	D516-02 [4]	5.0	mg/L
Specific Conductance	150	µmhos/cm	01-09-09 1545	LW	120.1 [3]	10.00	µmhos/cm
Nitrate	0.72^J	mg/L	01-09-09 1330	LW	352.1 [3]	0.1	mg/L

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LABORATORY ANALYSES

American Energy Corporation
43521 Mayhugh Hill Rd. Twp Hwy 88
Beallsville, OH 43716
Attn: Mr. Fred Blumling

25-Jan-09

By: William Slingan
TraDet, Inc.

Company: American Energy Corporation
Source: D13-3
SWL/Flow: 1.0 cfs
Date & Time Sampled: 01-08-09 1410
Analysis Number: 0901156

Sample Type: Pre-permit D0425-13
Sampled By: QES (KS)
Date & Time Received: 01-09-09 0900

Field pH, S.U. 7.54

PARAMETER	CONCENTRATION		DATE & TIME ANALYZED	ANALYST	METHOD	PQL	
Total Acidity (as $CaCO_3$)	<5	mg/L	01-14-09 1323	WB	2310B (4 [2]	5	mg/L
Total Alkalinity (as $CaCO_3$)	35	mg/L	01-12-09 1038	WB	2320B [2]	5	mg/L
Total Iron	0.4	mg/L	01-20-09 1744	TW	3111B [1]	0.1	mg/L
Total Manganese	<0.1	mg/L	01-20-09 1744	TW	3111B [1]	0.1	mg/L
Total Aluminum	<0.5	mg/L	01-23-09 1215	TW	3111D [1]	0.5	mg/L
Total Suspended Solids	<6.7	mg/L	01-13-09 1800	MM	2540D [2]	6.7	mg/L
Hardness (as $CaCO_3$)	100	mg/L	01-21-09 1145	TW	2340 C [1]	5.0	mg/L
Sulfate (as SO_4)	30	mg/L	01-20-09 0900	KW	D516-02 [4]	5.0	mg/L
Specific Conductance	145	µmhos/cm	01-09-09 1545	LW	120.1 [3]	10.00	µmhos/cm
Nitrate	0.87^J	mg/L	01-09-09 1330	LW	352.1 [3]	0.1	mg/L

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TRIADELPHIA, WV 26059-9609

LABORATORY ANALYSES

American Energy Corporation
43521 Mayhugh Hill Rd. Twp Hwy 88
Beallsville, OH 43716
Attn: Mr. Fred Blumling

25-Jan-09

By: William Thompson
TraDet, Inc.

Company: American Energy Corporation
Source: D13-4
SWL/Flow: 16.2 cfs
Date & Time Sampled: 01-08-09 1430
Analysis Number: 0901157

Sample Type: Pre-permit D0425-13
Sampled By: QES (KS)
Date & Time Received: 01-09-09 0900

Field pH, S.U. 7.85

PARAMETER	CONCENTRATION		DATE & TIME ANALYZED	ANALYST	METHOD	PQL	
Total Acidity (as $CaCO_3$)	<5	mg/L	01-14-09 1323	WB	2310B (4 [2]	5	mg/L
Total Alkalinity (as $CaCO_3$)	61	mg/L	01-12-09 1038	WB	2320B [2]	5	mg/L
Total Iron	0.1	mg/L	01-20-09 1744	TW	3111B [1]	0.1	mg/L
Total Manganese	<0.1	mg/L	01-20-09 1744	TW	3111B [1]	0.1	mg/L
Total Aluminum	<0.5	mg/L	01-23-09 1215	TW	3111D [1]	0.5	mg/L
Total Suspended Solids	<6.7	mg/L	01-13-09 1800	MM	2540D [2]	6.7	mg/L
Hardness (as $CaCO_3$)	100	mg/L	01-21-09 1145	TW	2340 C [1]	5.0	mg/L
Sulfate (as SO_4)	30	mg/L	01-20-09 0900	KW	D516-02 [4]	5.0	mg/L
Specific Conductance	183	µmhos/cm	01-09-09 1545	LW	120.1 [3]	10.00	µmhos/cm
Nitrate	0.41[J]	mg/L	01-09-09 1330	LW	352.1 [3]	0.1	mg/L

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2598 BATTLE RUN ROAD
TRIADELPHIA, WV 26059-9309

LABORATORY ANALYSES

American Energy Corporation
43521 Mayhugh Hill Rd. Twp Hwy 88
Beallsville, OH 43716
Attn: Mr. Fred Blumling

25-Jan-09

By: William Thomas
TraDet, Inc.

Company: American Energy Corporation
Source: U13-1
SWL/Flow: 0.2 cfs
Date & Time Sampled: 01-08-09 1404
Analysis Number: 0901158

Sample Type: Pre-permit D0425-13
Sampled By: QES (KS)
Date & Time Received: 01-09-09 0900

Field pH, S.U. 7.71

PARAMETER	CONCENTRATION		DATE & TIME ANALYZED	ANALYST	METHOD	PQL	
Total Acidity (as $CaCO_3$)	<5	mg/L	01-14-09 1323	WB	2310B (4 [2]	5	mg/L
Total Alkalinity (as $CaCO_3$)	45	mg/L	01-12-09 1038	WB	2320B [2]	5	mg/L
Total Iron	0.6	mg/L	01-20-09 1744	TW	3111B [1]	0.1	mg/L
Total Manganese	<0.1	mg/L	01-20-09 1744	TW	3111B [1]	0.1	mg/L
Total Aluminum	<0.5	mg/L	01-23-09 1215	TW	3111D [1]	0.5	mg/L
Total Suspended Solids	<6.7	mg/L	01-13-09 1800	MM	2540D [2]	6.7	mg/L
Hardness (as $CaCO_3$)	81	mg/L	01-21-09 1145	TW	2340 C [1]	5.0	mg/L
Sulfate (as SO_4)	29	mg/L	01-20-09 0900	KW	D516-02 [4]	5.0	mg/L
Specific Conductance	153	µmhos/cm	01-09-09 1545	LW	120.1 [3]	10.00	µmhos/cm
Nitrate	0.22^J	mg/L	01-09-09 1330	LW	352.1 [3]	0.1	mg/L

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TRA-DET INC.
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SHIPPING ADDRESS
2593 BATTLE RUN ROAD
TRIADELPHIA, WV 26059-9609

LABORATORY ANALYSES

American Energy Corporation
43521 Mayhugh Hill Rd. Twp Hwy 88
Beallsville, OH 43716
Attn: Mr. Fred Blumling

25-Jan-09

By: William Flynn
TraDet, Inc.

Company: American Energy Corporation
Source: D13-1
SWL/Flow: 0.4 cfs
Date & Time Sampled: 01-08-09 1424
Analysis Number: 0901159

Sample Type: Pre-permit D0425-13
Sampled By: QES (KS)
Date & Time Received: 01-09-09 0900

Field pH, S.U. 7.77

PARAMETER	CONCENTRATION		DATE & TIME ANALYZED	ANALYST	METHOD	PQL	
Total Acidity (as $CaCO_3$)	<5	mg/L	01-14-09 1323	WB	2310B (4 [2]	5	mg/L
Total Alkalinity (as $CaCO_3$)	30	mg/L	01-12-09 1038	WB	2320B [2]	5	mg/L
Total Iron	1.4	mg/L	01-20-09 1744	TW	3111B [1]	0.1	mg/L
Total Manganese	<0.1	mg/L	01-20-09 1744	TW	3111B [1]	0.1	mg/L
Total Aluminum	<0.5	mg/L	01-23-09 1215	TW	3111D [1]	0.5	mg/L
Total Suspended Solids	8.0	mg/L	01-13-09 1800	MM	2540D [2]	6.7	mg/L
Hardness (as $CaCO_3$)	81	mg/L	01-21-09 1145	TW	2340 C [1]	5.0	mg/L
Sulfate (as SO_4)	21	mg/L	01-20-09 0900	KW	D516-02 [4]	5.0	mg/L
Specific Conductance	119	µmhos/cm	01-09-09 1545	LW	120.1 [3]	10.00	µmhos/cm
Nitrate	0.64^J	mg/L	01-09-09 1330	LW	352.1 [3]	0.1	mg/L

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LABORATORY ANALYSES

American Energy Corporation
43521 Mayhugh Hill Rd. Twp Hwy 88
Beallsville, OH 43716
Attn: Mr. Fred Blumling

25-Jan-09

By: William Slayton
TraDet, Inc.

Company: American Energy Corporation
Source: D13-5
SWL/Flow: 3.0 cfs
Date & Time Sampled: 01-08-09 1430
Analysis Number: 0901160

Sample Type: Pre-permit D0425-13
Sampled By: QES (KS)
Date & Time Received: 01-09-09 0900

Field pH, S.U. 8.00

PARAMETER	CONCENTRATION		DATE & TIME ANALYZED	ANALYST	METHOD	PQL	
Total Acidity (as $CaCO_3$)	<5	mg/L	01-14-09 1323	WB	2310B (4 [2]	5	mg/L
Total Alkalinity (as $CaCO_3$)	30	mg/L	01-12-09 1038	WB	2320B [2]	5	mg/L
Total Iron	0.2	mg/L	01-20-09 1744	TW	3111B [1]	0.1	mg/L
Total Manganese	<0.1	mg/L	01-20-09 1744	TW	3111B [1]	0.1	mg/L
Total Aluminum	<0.5	mg/L	01-23-09 1215	TW	3111D [1]	0.5	mg/L
Total Suspended Solids	11	mg/L	01-13-09 1800	MM	2540D [2]	6.7	mg/L
Hardness (as $CaCO_3$)	100	mg/L	01-21-09 1145	TW	2340 C [1]	5.0	mg/L
Sulfate (as SO_4)	25	mg/L	01-20-09 0900	KW	D516-02 [4]	5.0	mg/L
Specific Conductance	121	µmhos/cm	01-09-09 1545	LW	120.1 [3]	10.00	µmhos/cm
Nitrate	0.56^J	mg/L	01-09-09 1330	LW	352.1 [3]	0.1	mg/L

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CENTURY MINE MARCH 13

PRE-PERMIT

Chain Of Custody Record

Customer Name: CENTURY MINE
Address:

Person to Contact: FRED BLUMLING
Billing Address:
Date of Sample Shipment:
How Shipped:

740-782-1767 QES
740-782-1905 QES FAX
304-547-9094 TRADET LAB
304-547-9097 TRADET FAX
Sampler: Quality Environmental Services, Inc. (QES)

SAMPLE LOG AND ANALYSIS REQUEST

Lab Use: Lab #	Sample Identification	Containers # and Type	Date	Time	pH / [redacted]	Analysis Requested		YES/NO BACTERIA TEST
		1-500 ML-NP 1-125 ML-HNO_3				FLOW	SWL	
1154	U13-2	"	1/8/09	1300	7.58	.4 CFS		
1155	D13-2	"	"	1310	7.28	1.36 CFS		
1156	D13-3	"	"	1410	7.54	1.0 CFS		
1157	D13-4	"	"	1430	7.85	16.2 CFS		
1158	U13-1	"	"	1404	7.71	.2 CFS		
1159	D13-1	"	"	1424	7.77	.4 CFS		
1160	D13-5	"	"	1430	8.00	3.0 CFS		

Relinquished by: (signature) Kurt Stubbs — Date & Time: 1-8-09 @ 1700
Relinquished by: (signature) Jean Rudnick — Date & Time: 1-9-09 @ 0900
Received for laboratory by: (signature) M. McKinch — Date & Time: 1-9-09 0900

Inventory Check: Yes / No
Preservative Check: Yes / No
Temperature Upon Arrival: 6.6 °C

Comments:

AEC 13413