Energy Reserves Group

0120 0043

item 76

Mineral Co. General File

MEMORANDUM

To: Ruffin I. Rackley

Date: November 24, 1981

From: Earl W. Abbott

Subject: Property Evaluation, Project Termination and Land Release of the Mount Montgomery Project

INTRODUCTION

The Mount Montgomery Project area is located approximately 35 miles southeast of Hawthorne, Mineral County, Nevada, in T. 3 N., R. ~~52~~ E. 32 The property consists of 22 claims and is part of the Nevada Gold Joint Venture between Energy Reserves Group and U. S. Minerals Exploration. A BLM Wilderness Study Area surrounds the prospect, but the main area of interest is excluded. Previous workings in the area include an approximately 500' long adit, called the Noquez Mine, and many small prospect pits and dozer trenches excavated in the 1940's It is reported that mercury was the main mineral sought with several flasks produced.

GEOLOGY

The geology of the Mount Montgomery Project area consists of an eroded window of steeply dipping Ordovician Palmetto Formation uplifted by northeast trending faults. Minor northwest trending faulting also occurs, as seen in the Noquez Mine. This window is encompassed by unconformably overlying Tertiary and Quarternary volcanic extrusive rocks, lake bed sediments and alluvium. Within the window, paleohydrothermal activity with gold mineralizing potential is evidenced by silicification and clay alteration localized along the footwall of a northeast trending fault. No alteration is observed in the overlying Cenozoic rocks.

MINERALIZATION

Previous to acquisition by ERG, Gary Grauberger reported good gold anomalies from the area in the range of .01 to .175 oz/ton. Repeated sampling by ERG personnel have failed to find significant gold anomalies. A total of four holes for 1510 feet were drilled by ERG with disappointing results, only one intercept of .013 oz/ton gold.

CONCLUSIONS

Although it is apparent that hydrothermal fluids have ascended along the northeast trending fault, these fluids primarily deposited mercury rather

than gold. No samples collected by ERG personnel in the potential host rocks contain detectable gold. It is not likely that an economic gold deposit exists in this area and the project should be terminated.

Earl W. Abbott

Earl W. Abbott
EWA:RMM

Approved: _____
Ruffin I. Rackley

Approved: _____
Robert A. Brooks

CONE GEOCHEMICAL INC.
810 Quail Street, Suite I
Lakewood, Colorado 80215
(303) 232-8371

Copy to ~~R. Mark Bailey~~ DAVE McLEAN

JUN 1 - 1981

Job # 1449
28-May-81
Page 1

ANALYTICAL REPORT

Mr. Mark Bailey
Energy Reserves Group, Inc.
12 Glen Carran Circle
Sparks, NV 89431

PO #
Project:
MM

SAMPLE NUMBER	PPM MO	PPM AG	PPM AU	PPM AS	PPM SB	PPM HG
9849	18	3.4	<.02	132	9	12.6
9850	9	4.4	0.32	327	15	11.2
40701	103	1.8	<.02	426	21	8.24
40702	22	7.0	<.02	124	10	4.07
40703	1080	3.4	<.02	426	9	3.03
40704	6	5.8	<.02	16	2	0.53
40705	3	1.4	<.02	87	5	0.48
40706	7	3.8	<.02	27	25	0.66
40707	7	2.2	<.02	65	10	12.4
40708	14	1.9	<.02	126	15	0.04
40709	39	1.6	<.02	141	36	0.02
40710	12	6.5	<.02	483	12	0.90
40711	10	3.4	<.02	172	5	2.23
40712	7	3.9	<.02	81	5	10.6
40713	2	8.2	<.02	15	2	3.35
40714	6	2.5	<.02	112	6	2.23
40715	4	5.5	<.02	37	7	0.17
40716	4	4.9	<.02	32	9	0.24
METHOD	A.A.	A.A.	A.A.	A.A.	A.A.	A.A.
DIGESTION	4Acid	4Acid	AqRes	AqRes	AqRes	
PRECISION	20%	20%	20%	20%	20%	30%

Energy Reserves Group

MEMORANDUM

To: Earl W. Abbott

Date: November 24, 1981

From: Dave A. McLean

Subject: Property Evaluation, Project Termination and Land Release of the Mount Montgomery Project

Follow up sampling by R. Mark Bailey and Dave A. McLean on May 9, 1981, failed to reveal any detectable gold in the system on this property. Sampling concentrated on altered thin-bedded siltstone and shales of the Ordovician Palmetto Formation, although a few samples were taken in massive to thick-bedded chert and limestone (also Palmetto Formation) in the vicinity of the Noquez Mine.

A basin and range-type normal fault of the west side of the property was interpreted as a feeder structure due to the presence of jasperoidal breccia along part of its trace. Locally both the quartzites and shales/siltstones dip into this structure.

Of 18 total samples taken, only one contained any detectable gold. This sample came from the Noquez Mine and ran .32 ppm Au. This sample came from a shear zone in punky, bleached limestone near the end of the adit. The limestone was cut by calcite veins and contained moderate limonite stain. Two other shear zones with similar alteration in the mine did not contain any gold.

Trace-element analysis (As, Sb, Hg) reveal anomalous mercury (>1ppm) and arsenic (>100ppm) in much of the system. Values range from .02-12.6 ppm Hg and 15-483 ppm As. Antimony values are not high (range from 2-36 ppm). Silver values are slightly elevated and range from 1.48-2 ppm. Molybdenite was anamolous (>10 ppm) in 8 out of the 18 samples, it ranges from 2-1080 ppm. The significance of this is unknown but it is likely associated with tertiary mafic to intermediate intrusives in the general area.

Although there are anomalous amounts of mercury and arsenic over much of the area of potential host rocks, the lack of detectable gold in the system warrants that no further work be done on this property and that the property be dropped.

Dave McLean (RMM)

Dave A. McLean
DAM:RMM

Earl W. Abbott

Ruffin I. Rackley

Robert A. Brooks

M O U N T M O N T G O M E R Y P R O J E C T

MINERAL COUNTY, NEVADA

PROGRESS REPORT

Report By: R. Mark Bailey
Energy Reserves Group, Inc.
#12 Glen Carran Circle
Sparks, Nevada 89431

MOUNT MONTGOMERY PROJECT

TABLE OF CONTENTS

MAPS AND CROSS-SECTIONS

INTERPRETATION AND RECOMMENDATION

The Palmetto Formation in the Mount Montgomery Project area exhibits weak permeability except in a few altered zones. Alteration, both silicification and argillization, are present in moderate amounts. Geochemical sampling of the area has been contradictory with Gary Grauberger reporting high gold, silver and trace elements results whereas Steve Dubyk found no detectable gold with weakly anomalous trace elements. Drilling results showed only minor traces of gold (.001 - .002 oz/ton gold) in altered host rock. The drilling program was curtailed because of the onset of winter, however, and considerable untested ground remains. I recommend that a high grade rock chip sample program be carried out to check the validity of the previous sample data. If no significant gold anomalies are found, I recommend the property be dropped. If significant gold anomalies are found, I recommend trenching with further, more detailed geochemical sampling to delineate drill targets in previously untested areas.

INTRODUCTION

The Mount Montgomery Project area is located approximately 35 miles southeast of Hawthorne, Mineral County, Nevada in T3N, R52E. The property consists of 22 claims and is part of the Nevada Gold Joint Venture between Energy Reserves Group and U.S. Minerals Exploration. A BLM Wilderness Study Area surrounds the prospect, but the main area of interest is excluded. Previous workings in the area include an approximately 500' long adit, called the Noquez Mine, and many small prospect pits and dozer trenches excavated in the 1940's. It is reported that mercury was the main mineral sought with several flasks produced.

GEOLOGY

The geology of the Mount Montgomery Project area consists of an eroded window of steeply dipping, NE striking Ordovician Palmetto Formation uplifted by NE trending basin and range faulting (Geologic Map and Cross-section A-A'). Minor NW trending faulting also occurs, as seen in the Noquez Mine. This window is encompassed by unconformably overlying Tertiary and Quarternary volcanic extrusive rocks, lake bed sediments and alluvium. Within the window, paleohydrothermal activity with gold mineralizing potential is evidenced by silicification and clay alteration localized along the footwall of a NE trending basin and range fault. No alteration is observed in the overlying Cenozoic rocks.

The Palmetto Formation consists locally of interbedded siltstone, shale, chert, massive quartzite (often calcite cemented) and limestone (Lithologic Section). The shales and siltstones, which are very thin bedded and somewhat permeable, are seen to be a possible host for disseminated gold mineralization deposited from ascending hydrothermal solutions. A fairly large NE trending belt of these thin-bedded rocks occurs which is almost 1000' wide and several thousand feet long. If gold mineralization is present large tonnages could exist.

ALTERATION

Hydrothermal alteration in the area occurs as silicification and argillization within the Palmetto Formation. Silicification occurs in several forms: 1) as highly iron oxide Jasperoid breccia along the footwall of a NE trending normal fault near the center of the property and 2) as milky white to green and brown replacement of siltstone and shale, some of which is recrystallized and contains sulfides. Clay alteration is present primarily upslope and updip from the silicified breccia zone mentioned above and along the Noquez Mine structure. Siltstone and shale are bleached and very punky with some areas iron oxide stained. Both types of alteration are locally intense in the siltstones and shales, but lacking in the quartzite and chert units except for an occasional iron oxide stained fracture.

MINERALIZATION

Gary Grauberger has collected geochemical sample data which indicates that highly anomalous gold, silver, arsenic and antimony exist on the Mount Montgomery prospect (Appendix I). Several notable results include a high of .175 oz/ton gold with many samples in the range of .01 to .085 oz/ton gold. Highly anomalous arsenic values over 1000 ppm are seen. A high of 330 ppm silver was noted. Mercury is also distinctly anomalous. These results would indicate that a strong, mineral rich hydrothermal system existed in the area.

Followup sampling by Steve Dubyk, however, found no detectable gold and only slightly anomalous arsenic (87 ppm), antimony (32 ppm) and silver (6.3 ppm) (Appendix II). Also, geologic mapping showed that many of Grauberger's samples were either mislocated or taken from alluvial debris. Further, very careful sampling is required to resolve this discrepancy.

DRILLING

In December 1980, trenching, road building and drilling were conducted by ERG at the Mount Montgomery Property. Four rotary holes were drilled for a total footage of 1510'. The location of this work was restricted by the interference of a BLM Wilderness Study Area which encompasses the area. The most prospective area was not drilled. We now have approval to drill this area if further drilling is indicated by sampling.

DRILLING RESULTS

The drilling that was completed was of moderate value with only two of the four holes intersecting potential disseminated gold host rock of the Palmetto Formation (Appendix III). These holes, MM-3 and M-4, were both placed near the iron oxide stained, jasperoid breccia zone. Both holes contained similar interbedded siltstones, quartzites and cherts with occasional limy layers. Clay alteration with bleaching was scattered in the siltstone layers. Hole MM-3 was unique in exhibiting fairly abundant chalcopyrite and other dark sulfides in several zones. All holes exhibited only trace gold mineralization except for Hole MM-1 which encountered 10' of .013 oz/ton gold @ 120-130' near the contact between alluvium and weathered volcanic rocks. The significance of this anomaly is unknown.

APPENDIX I

U. S. MINERALS EXPLORATION COMPANY

SAMPLE RESULTS

GARY L. GRAUBERGER

Mineral Assay Office, Inc.

ASSAY CERTIFICATE

ASSAYERS & CHEMISTS

E. S. GATES, JR., PRES.
P. O. BOX 275 MINA, NEVADA 89422
PHONE: 702-573-2236

Mr. Gary Grauberger
P. O. Box 619
Hawthorne, Nevada 89415

April 25, 19 72

WE HEREBY SUBMIT THE RESULTS OF ASSAYS MADE ON THE FOLLOWING SAMPLES:

OFFICE No.	SAMPLE MARK	GOLD OZ. PER TON	SILVER OZ. PER TON	Copper Cu PPM
		.1 = 3ppm		
		2.5ppm		
37,690	SR - 1	0.085	0.34 10ppm	
37,691	SR - 2	0.035 1ppm	0.23 7ppm	
37,692	SR - 3	0.055 2ppm	0.27 8-9	
37,693	SR - 4	0.020	0.28 8-9	
7,694	SR - 5	0.005	0.22 7	
37,695	SR - 6	0.065	0.16	
37,696	SR - 7	0.010	0.28	
37,697	SR - 8	0.015	0.31	
37,698	SR - 9	Trace	0.26	
37,699	SR - 10	Trace	0.17	
37,700	CJ - 1	Trace	0.17	85
37,701	LZ - 2			25
37,702	LZ - 3			17

By E. S. Gates Jr.
Assayer

Mineral Assay Office, Inc.

ASSAY CERTIFICATE

ASSAYERS & CHEMISTS

E. S. GATES, JR., MGR.
BOX 275 MINA, NEVADA 89422
PHONE: 702-573-2236

Mr. Gary Grauberger
Box 619
Hawthorne, Nevada 89415

May 4, 1972

WE HEREBY SUBMIT THE RESULTS OF ASSAYS MADE ON THE FOLLOWING SAMPLES:

OFFICE NO.	SAMPLE MARK	GOLD OZ. PER TON	SILVER OZ. PER TON	Gold PPM
37,739	SS - 1	Trace		Trace
37,740	SS - 2	0.175		5.999
37,741	SS - 3	0.045		1.5426
37,742	SS - 4	0.030		1.0284
37,743	SS - 5	0.060		2.0568
37,744	SS - 6	0.005		0.1714
37,745	SS - 7	Trace		Trace
37,746	SS - 8	0.050		1.714
37,747	SS - 9	0.015		0.5142
37,748	SS - 10	Trace		Trace
37,749	SS - 11	0.035		1.1998
37,750	SS - 12	0.035		1.1998
37,751	SS - 13	0.010		0.3428
37,752	SS - 14	Trace		Trace
37,753	SS - 15	0.010		0.3428
37,754	SS - 16	0.030		1.0284
37,755	SS - 17	Trace		Trace
37,756	A - 1	0.005		0.1714

By E. S. Gates Jr.
Assayer

ROCKY MOUNTAIN GEOCHEMICAL CORP.
1491 E. 7TH STREET • RENO, NEVADA 89502 • PHONE: (702) 323-3610
RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 72-9-23R
Foreign Job No.: -
Invoice No.: 4440

Date: May 23, 1972

Client: Conoco
Box 7608
Reno, Nevada

Client Order No.: None

Report On: 25 Rock & Pulp Samples

Submitted by: O. J. Roman

Date Received: May 15, 1972

Analysis: Copper, Molybdenum, Lead, Zinc, Gold, & Silver

Analytical Methods: Molybdenum analysis determined colorimetrically. All other analyses determined by atomic absorption.

Remarks: None

cc: Enclosed
RMGC
File

Recheck of my samples... by Conoco

GMF:dkw

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc
360	1.15%	13	20	440

Rocky Mountain Geochemical Corporation
Reno, Nevada May 23, 1972

ND : - None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client Conoco Date May 23, 1972 RMGC Job No. 72-9-23R

Sample No.			ppm Gold	ppm Silver
351			-0.1	1
352			8.8	330
353			-0.1	3
354			-0.1	5
355			2.2	4
356			7.4	3
357			-0.1	-1
358			-0.1	-1
359			-0.1	-1
360			0.2	3
361	SR	1	4.2	3
361	SR	2	1.1	1
		3	1.1	6
		4	0.4	-1
	SR	6	0.1	-1
	SS	2	7.1	6
		3	1.2	3
		4	0.6	-1
		5	0.5	-1
		8	1.3	11
		10	-0.1	-1
		11	1.3	4
		12	0.7	5
		16	0.9	-1
361	SS	19	-0.1	-1

Conoco Samples

recheck of my pulps

By Gary M. Fechko

Gary M. Fechko

ROCKY MOUNTAIN GEOCHEMICAL CORP.

Rocky Mountain Geochemical Corporation
Reno, Nevada May 23, 1972

ROCKY MOUNTAIN GEOCHEMICAL CORP.
P. O. BOX 337 • 1323 W. 7900 SOUTH • MIDVALE, UTAH 84047 • PHONE: (801) 255 3558
MIDVALE OFFICE

Certificate of Analysis

RMGC Numbers
Local Job No.: 72-10-40SL
Foreign Job No.: 72-9-23R
Invoice No.: SL 8002

Date: June 9, 1972

Client: Continental Oil Company
P.O. Box 7608
Reno, Nevada

Client Order No.: None

Report On: 24 samples

Submitted by: CONOCO

Date Received: June 1, 1972

Analysis: Arsenic & Mercury

Analytical Methods: Arsenic determined colorimetrically. Mercury done by mercury vapor detector.

Remarks:

cc: Enc.
File- Reno
File- SLC (2)

LRR:ktg

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client CONOCO Date June 9, 1972 RMGC Job No. 72-10-40SL-C

Sample No.	ppm Arsenic	ppb Mercury
351	120	215
352	5	+7500
353	310	315
354	-5	1200
355	+1000	555
356	+1000	895
357	70	100
358	100	-5
359	-5	100
SS-2	+1000 ✓	910
SS-3	+1000 ✓	695
SS-4	+1000 ✓	85
SS-5	+1000 ✓	140
SS-8	+1000 ✓	325
SS-10	10 ✓	60
SS-11	+1000 ✓	60
SS-12	+1000 ✓	1310
SS-16	+1000 ✓	60
SS-19	+1000 ✓	585
SR-1	+1000 ✓	770
SR-2	+1000 ✓	110
SR-3	+1000 ✓	60
SR-4	+1000 ✓	75
SR-6	+1000 ✓	155

By Lawrence R. Reid
Lawrence R. Reid

ROCKY MOUNTAIN GEOCHEMICAL CORP.
SALT LAKE CITY, UTAH • RENO, NEVADA • SPOKANE, WASHINGTON • TUCSON, ARIZONA

APPENDIX II

ENERGY RESERVES GROUP, INC.

SAMPLE RESULTS

STEVE DUBYK

GEOCHEMICAL INC.
810 Quail Street, Suite I
Lakewood, Colorado 80215
(303) 232-0371

Job # 1064
19-Dec-80
Page 1

ANALYTICAL REPORT

Mr. Earl Abbott
Energy Reserves Group, Inc.
1746 Cole Blvd., Suite 250
Golden, CO 80401

PO #
Project: MM

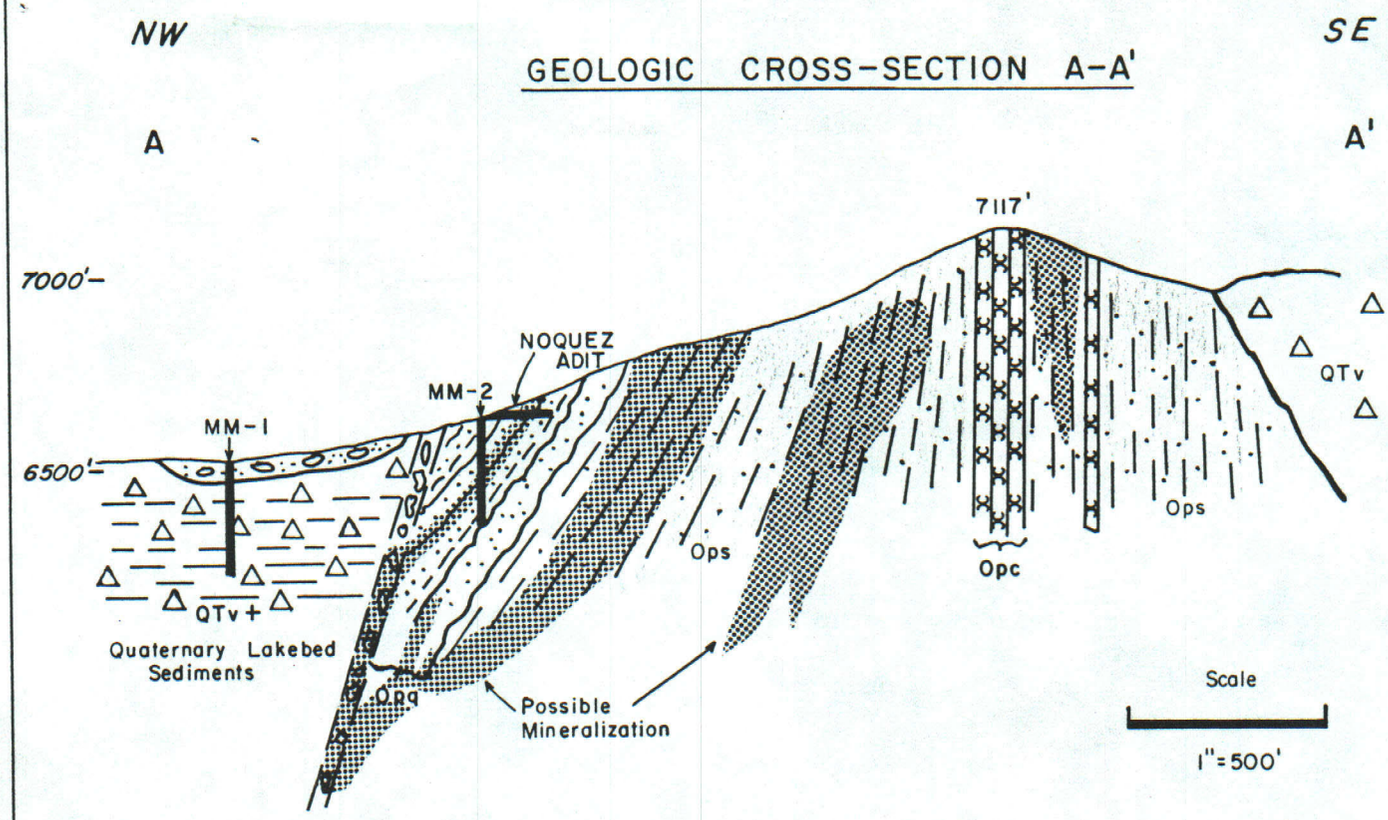
SAMPLE NUMBER	PPM MO	PPM AG	PPM AU	PPM AS	PPM SB	PPM HG
AG-1	<1	1.3	<.02	26	20	0.28
AG-2	10	1.7	<.02	69	43	0.16
AG-3	<1	1.8	<.02	13	8	0.32
AG-4	3	6.3	<.02	53	32	2.97
AG-5	3	2.0	<.02	59	17	0.49
AG-6	2	0.8	<.02	11	5	0.7%
AG-7	<1	3.6	<.02	87	25	12.67
AG-8	<1	5.2	<.02	15	7	1.05
AG-9	2	2.3	<.02	9	4	0.16
AG-10	<1	2.3	<.02	40	8	1.03
METHOD	A.A.	A.A.	A.A.	A.A.	A.A.	A.A.
DIGESTION	4Acid	4Acid	AqRes	AqRes	AqRes	
PRECISION	20%	20%	20%	20%	20%	30%

APPENDIX III

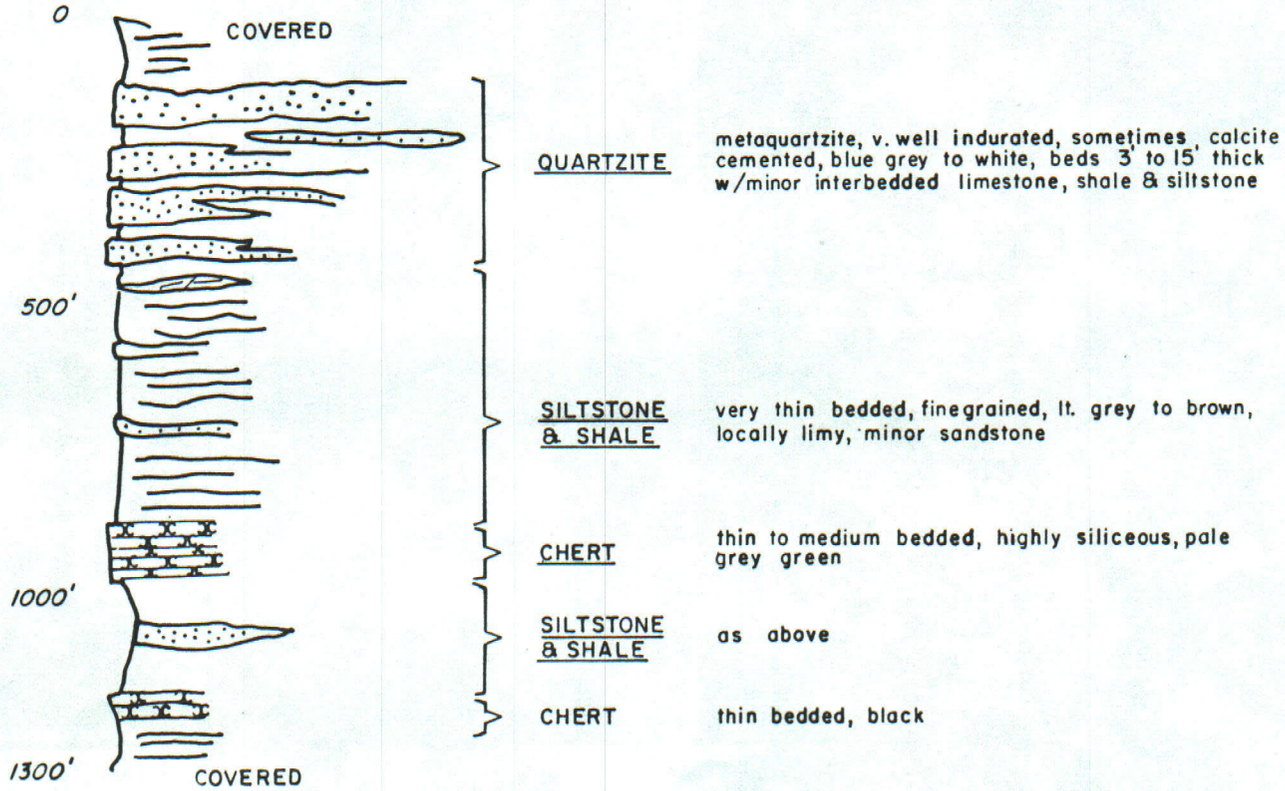
ENERGY RESERVES GROUP, INC.

DRILL HOLE LITHOLOGY LOGS WITH ASSAYS

GEOLOGIC CROSS-SECTION A-A'



SCHEMATIC LITHOLOGIC COLUMN OF PALOMETTO FORMATION ON THE MM PROPERTY.



ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-1

Page 1 of 3

____ ¼, ____ ¼, SEC. _____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Bailey & Kleiner
Type Drill:
Hole size:
Contractor: Boyles Bros.

Hole No. MM-1
Date Started: 12-4-80
Date Completed:
Total Depth: 270'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
						Lost circ. at 260'
0	10	.001	.04		Alluvium - qtzt. opalite. silic. gossan. light tan color limestone,	
					surface Fe ox present . Water used. Also with sandy clay gray orange.	
10	20	.002	.05		As above but with trace limestone, very bad cavings.	
20	30	.001	.05		As above with minor volcanic debris and some punky light colored,	
					partly silic. shale.	
30	40	.003	.05		As above.	
40	50	.001	.03		As above.	
50	60	.002	.03		As above.	
60	70	.002	.02		As above.	
70	80	.002	.02		Lost circulation - used water & foam. As above with silic. breccia	
					frags., pyrox., rich volcanics, no limestone. Pale brown (5 yr. 5-5/2)	
80	90	.002	.02		Lost circulation - used foam. As above with broken qtz. crystals in	
					silic. breccia frags., quite abundant volcanics. Dark yellow brown.	
90	100	.002	.02		Dry. Cemented alluvium with abundant volcanic lithic tuffs..	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-1
Page 2 of 3

____ ¼, ____ ¼, SEC. _____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Bailey & Kleiner
Type Drill:
Hole size:
Contractor: Boyles Bros.

Hole No. MM-1
Date Started: 12-4-80
Date Completed:
Total Depth: 270'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
						Lost circ. at 260'
100	110	.002	.02		No water or foam used - dry samples. More competent - possible bedrock	
					contact.	
110	120	.002	.02		As above.	
120	130	.013	.02		Color change 125-130' bright red clay (volcanic & qtz.) Lakebed clays	
					with litic clasts or litic, heavily fe-oz stained altered ash flow tuff.	
130	140	.003	.02		Quite pure red clay as above.	
140	150				No circulation, no sample.	
150	160	.002	.02		Red clay as in 130-140'.	
160	170	.002	.04		As above.	
170	180	.002	.04		As above.	
180	190	.002	.02		Lithic clast rich clay as above but greyish red (10 R 4-1/2).	
190	200	.002	.02		As above but mod. brown (5 yr 3/4).	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-1
Page 3 of 3

____ ¼, ____ ¼, SEC. ____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Bailey & Kleiner
Type Drill:
Hole size:
Contractor: Boyles Bros.

Hole No. MM-1
Date Started: 12-4-80
Date Completed:
Total Depth: 270'

Ave. Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
						Lost circ. at 260'
200	210	.001	N.D.		Clay, fe-ox stained, mod. brown (5 yr. 3/4).	
210	220	.001	N.D.		As above with litic. clasts.	
220	230	.001	.02		As above.	
230	240	.001	N.D.		As above but mod. red brown (10 R 4/6)/	
240	250	.001	N.D.		As above but with abundant white silic. frags. with qtz. phenos.	
250	260	.001	.06		Silicified breccia or ash flow tuff, pale red (10 R 6/2), abundant qtz. phenos, med. oxidized pyrite (?). Possible contact w/Palmetto Formation.	
260	270				No sample.	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-2
Page 1 of 3

____ ¼, ____ ¼, SEC. _____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Bailey & Kleiner
Type Drill:
Hole size:
Contractor: Boyles Bros.

Hole No. MM-2
Date Started: 12-6-80
Date Completed:
Total Depth: 240'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
						Hard Material
0	10	.002	.08		Qtz, punky yellow (5 Y 6/4), actually red, green-grey yellow chips,	
					aphanite to bimodal poorly sorted fine-coarse-grnd.,qtz.veining,mod.Fe-ox.	
10	20	.002	.06		As above but yellow-grey (5 Y /2), w/n.-mod. fe-ox & moderate clay.	
20	30	.001	.07		As above but pale red(10 R6/2) qtz. & clay ash flow tuff(?) or clay	
					altered veining, blue grey coarse-grnd. qtz., yellow-grey aphanite qtz.	
30	40	.001	.12		Qtz., med.grey (N5), coarse-med grnd. subrdd, thick vuggy qtz. veins	
					(large phenos), tr. fe-ox.	
40	50	.002	.07		Qtz. as above w/jasperoid of highly fe-ox stnd, aphanite qtz, mod-abund	
					Fe-ox, qtz vein, tr. pyrite w/possible sphalerite intrusions.	
50	60	.001	.04		Qtz. med. grey (N5), some grey-green to grey-red, coarse-med. grnd,	
					subrdd., qtz. veins, tr.-mod. fe-ox.	
60	70	.001	.07		As above w/tr. thick aphanite,fe-ox veining, tr pyrite, tr-mod Fe-ox.	
70	80	.001	.05		As above w/fe-ox veining and pyrite, tr. fe-ox.	
80	90	.001	.04		Qtz., mod. red-orange (10 R6/6), as above but highly fe-ox stain. Qtz.,	
					med. grey (N5) as above from 70-80'.	
90	100	.061	.02		As above w/mod. fe-ox.	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-2
Page 2 of 3

____¼, ____¼, SEC. _____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Bailey & Kleiner
Type Drill:
Hole size:
Contractor: Boyles Bros.

Hole No. MM-2
Date Started: 12-6-80
Date Completed:
Total Depth: 240'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
100	110	.001	.06		Qtz., med. lt. grey (N6) as above w/mod. fe-ox.	Hard Material
110	120	.001	.02		As above w/tr. fe-ox.	
120	130	.001	.03			
130	140	.001	.03			
140	150	.001	.03			
150	160	.001	.05			
160	170	.001	.02		Calc. cemented qtz., lt. olive grey (5Y6/1), poorly to well strd, coarse to fine-grnd., mod. fe-ox, dark manganese or specular hem. spotting & veining.	
170	180	.001	.02		Calc. cemented qtz. as above but mod. yellow-brn. (10 5/4) to grey mod-abund. lim. stning., calc. veining.	
180	190	.001	.05		As above w/tr manganese oxide and abund. irridescent fe-ox.	
190	200	.004	.76		As above but lt. olive grey (5Y6/1), mod-fe-ox except abund. spec. hem. & hem on fairly abund. large (to 3/4") qtz. crystals.	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-2
Page 3 of 3

____¼, ____¼, SEC. _____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Bailey & Kleiner
Type Drill:
Hole size:
Contractor: Boyles Bros.

Hole No. MM-2
Date Started: 12-6-80
Date Completed:
Total Depth: 240'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
					60-100'	Hard Material
200	210	.001	.04		As in 90-100'.	
210	220	.001	.05		Qtz. with calc. cement, v. fn. grd. LS. olive gray (5Y4/1), well stnd., fn.grnd. qtz., fn.grnd dark grey L.S., fe-ox stnd, calc. w/abund. qtz. crystals, minor bleached fn. grnd. L.S.	
220	230	.001	.02		Calc. cemented qtz. L.S., med. grey (N5), poor-well stnd, coarse to v. fn. grnd, somewhat recrystallized minor to mod.fe-ox.	
230	240	.003	.02		Recrystallized LS., qtz. med. drk grey (N4), v. fn. grnd, dark, LS. w/some recrystallization, possible intrusive, minor (20%) silicified LS. With mod-minor Fe-ox & tr. (1/16") oxide pyrite cubes.	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-3
Page 1 of

____ ¼, ____ ¼, SEC. ____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Bailey & Kleiner
Type Drill:
Hole size:
Contractor: Boyles Bros.

Hole No. MM-3
Date Started: 12-10-80
Date Completed:
Total Depth: 500'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
0	10	.001	.16		Siltstone, dusky yellow (5Y6/4), v.fn.grnd, thinbdd, somewhat punky & argillaceous, mod.-abund.surface related fe-ox, tr. pyrite cavities, non-efv	
10	20	.001	.04		Siltstone & qtz., yellow gray (5Y7/2),70% siltstone as above, 30% qtz., fn.-med. grnd. Fe-ox primarily along fracs.indicator surface origin.	
20	30	.001	.04		Punky silstone, yellow-grey (5Y7/2),(40%), silc. fe-ox breccia dusky red (40%) (5R3/4), & qtz. veining 20%.	
30	40	.001	.04		Altered argillite & breccia colored as above. Thinbdd. argillite is silicified w/sericite veining, 70%, hem stnd. silic.breccia 30%.	
40	50	.001	.04		As above.	
50	60	.001	.05		Qtz. & silic. argillite, pale olive (10 Y 6/2), v. fn. grnd. qtz. to silic. thinbdd. argillite, minor-mod. fe-ox.	
60	70	.001	.08		As above.	
70	80	.001	.12		As above with tr. clay and qtz. veining.	
80	90	.001	.06		Qtz. with minor silic. argillite, yellow-grey (5Y7/2), bleached w/minor clay, v. fn. grnd., minor-mod. fe-ox, some silic. chips w/abund. fe-ox.	
90	100	.001	.07		Qtz. to silic. argillite & clay, yellow-grey (5Y7/2)bleached v.fn.grnd. to aphanitic qtz. to silic. argillite 80%, white clay 10%, Fe-ox stained silic. frags.	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-3
Page 2 of 5

____ ¼, ____ ¼, SEC. ____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Bailey & Kleiner
Type Drill:
Hole size:
Contractor: Boyles Bros.

Hole No. MM-3
Date Started: 12-10-80
Date Completed:
Total Depth: 500'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
100	110	.001	.06		As 90-100' but w/only tr. white to yellow clay and somewhat punky.	
110	120	.001	.05		As above but w/50% frags. w/abund. fe-ox.	
120	130	.001	.10		As above but dusky yellow (5Y 6/4).	
130	140	.001	.17		As above but predominantly (80%)med.fn.grnd. qtz. mod. fe ox.	
140	150	.001	.02		As above but yellow grey w/minor-mod. fe-ox.	
150	160	.001	.03		Silic.punky argillite, qtz., chert, clay lt. olive brn. (5Y5/6), thinbdd, punky-silic., argillite, mod.-heavy Fe-ox (80%) v. fn. med. grnd. qtz., mod-abund. fe-ox(13%), black banded chert (5%), 2% clay.	
160	170	.001	.06		As above w/o chert.	
170	180	.001	.02		Qtz. to silic. argillite, lt.olive brn. (5Y5/6), v.fn.grnd. to aphanitic qtz. to silic. argillite, mod. fe-ox.	
180	190	.001	.02		Qtz. silic. argillite to chert, punky argillite, lt.olive brn. (5Y5/6), v. fn. grnd.-aphanitic qtz. to silic. argillite chert, mod-abund. fe-ox 85%, bleached punky to silicified w/streaks of hematitic stain.	
190	200	.001	.02		Qtz. to silic. argillite w/possible minor intrusive, lt.olive brn.(5Y5/6), thinbdd.,v.fn.grnd. qtz. to silic.argill.w/mod-abund.fe-ox w/some oxidized frag. w/large (1/4")pyrite phenos & dissem. pyrite,tr. qtz. veining 85% intrusive (?) fe-ox stnd, silic., dark fe-ox or minor phenos.	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-3
Page 3 of 5

___ ¼, ___ ¼, SEC. ___, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Bailey & Kleiner
Type Drill:
Hole size:
Contractor: Boyles Bros.

Hole No. MM-3
Date Started: 12-11-80
Date Completed:
Total Depth: 500'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
200	210	.001	.02		Qtz. to silic. and punky argillite, dusky yellow (5 Y6/4), as in 190-200' w/tr. intrusive(?), mod-abund. fe-ox, tr. calc. cementing.	
210	220	.001	.02		As above w/ 10% intrusive (?), abund. fe-ox, no (efv).	
220	230	.001	.02		As above w/tr. intrusive (?) and minor qtz. veining.	
230	240	.001	.02		As above.	
240	250	.001	.02		Qtz. to silic. argillite, lt. olive gray (5Y5/2), fn. grnd.to aphanite, mod. fe-ox and tr.-mod., mn-ox, tr. qtz veining, mod. calc. cementing and veining.	
250	260	.001	.04		As above.	
260	270	.001	.02		As above but w/qtz. veining containing pyrite, mod fe-ox w/ both lim, and hem, strng., minor efv calc.	
270	280	.001	.02		Qtz.to silic.argillite w/qtz. veining, mod red (5R5/4), minor thinbedding, med.-v.fn.grnd., silic. abund. hem staining & abund. qtz. veining containing diss. pyrite, tr. efv calc.	
280	290	.001	.06		Qtz. w/minor Qtz. veining, Gray orange (10 Yr.7/4), med.-fn.grnd.,silic. mod.-bund. lim. & hem. strng., tr. pyrite non-efv.	
290	300	.001	.02		Qtz. w/bund. qtz veining, mod. yellow-brn.(10YR5/4), no thinbedding,tr.-v. fn. grnd., recrystallized, abund. chalcopyrite, w/cubes to 3/8" 3%, abund. spec. hem. oxidized pyrite cubes,3%, abund. fe-ox, mod. calc. cementing, copper staining.	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-3
Page 4 of 5

____ ¼, ____ ¼, SEC. ____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Bailey & Kleiner
Type Drill:
Hole size:
Contractor: Boyles Bros.

Hole No. MM-3
Date Started: 12-11-80
Date Completed:
Total Depth: 500'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
300	310	.001	.02		As in 290-300' but light olive brn. (5Y5/6), 2%chalcopyrite, mod. efv, calc., no copper staining.	
310	320	.001	N.D.		As above but lt. olive gray (5Y5/2), minor qtz. veining very efv.	
320	330	.001	N.D.		Limy. qtz. to silic argillite, lt. olive gray (5Y5/2), some thinbedding, fn.,grnd.-aphanite,mod.qtz.veining,mod.pyrite & chalcopyrite 1-2%,mod. Fe-ox.(efv).	
330	340	.001	N.D.		As above w/minor pyrite <1%.	
340	350	.001	N.D.		As above.	
350	360	.001	N.D.		As above but dark yellow brown (10 YR.4/2), mod-abund. lim.stng.	
360	370	.001	N.D.		As above w/mod. (~1%) pyrite diss. tr. veining & mod-abund. thinbedding, mod. efv.	
370	380	.001	N.D.		Siltstone, mod. yellow brown (10YR4/2), thinbedding, silic., mod-abund. fe-ox (lim.), tr., pyrite, tr., efv. calc.	
380	390	.001	N.D.		As above w/tr. qtz. veining.	
390	400	.001	N.D.		As above.	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-3
Page 5 of 5

___ ¼, ___ ¼, SEC. ___, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Bailey & Kleiner
Type Drill:
Hole size:
Contractor: Boyles Bros.

Hole No. MM-3
Date Started: 12-12-80
Date Completed:
Total Depth: 500'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
400	410	.001	.02		Siltstone to qtz., mod. yellow brown (10YR5/4), as in 390-400'.	
410	420	.001	.02		As above but mod. efv.	
420	430	.001	.24		As above.	
430	440	.001	.04		As above but w/mod. pyrite & chalcopyrite (<1%) localized along permeable thinbedded zones.	
440	450	.001	N.D.		As above but gray orange (10 YR7/4) & appears to be rextallized, mod.-abund. fe-ox.	
450	460	.001	N.D.		As above w/minor recrystallization & Lt. olive brown (5Y5/6).	
460	470	.001	N.D.		As above w/minor qtz. veining.	
470	480	.001	.04		As above w/mod.-minor pyrite (1/2%).	
480	490	.001	N.D.		As above.	
490	500	.001	N.D.		As above.	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-4
Page 1 of 5

____¼, ____¼, SEC. _____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Mark Bailey
Type Drill:
Hole size:
Contractor: Boyles Bros

Hole No. MM-4
Date Started: 12-12-80
Date Completed:
Total Depth: 500'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
0	10	.001	.04		Over burden-Qul. mod. yellow brown (10YR5/4). non-efv.	
10	20	.001	.05		Overburden - Qul, as above.	
20	30	.001	.15		Clay altered ash flow tuff or clay altered Ord. Palmetto, pink hem. lt. brown (5YR5/6).	
30	40	.001	.11		Thinbedded, hem. stnd. Ord. Palmetto shales w/some qtz., mod. yellow brown (10YR5/4).	
40	50	.001	.07		Thinbedded Ord. Palmetto, fe-ox stnd., some clay dark yellow orange (10YR6/6) siltstone.	
50	60	.001	.09		As above,interlayered hard and soft zones. Gray orange pink (5YR7/2).	
60	70	.001	.10		As above but mod. yellow brown (10 YR 5/4).	
70	80	.001	.12		Clayey & qtz. veined altered Ord. Palmetto, siltstone yellow brown green, tr. pyrite thinbedded mod yellow brown (10YR5/4).	
80	90	.001	.10		Qtz. dusky yellow (5Y 6/4) to med gray (N5), coarse to fine grained, poorly sorted, recrystallized, tr. pyrite, mod. fe-ox.	
90	100	.001	.09		As above but lt. olive gray (5Y5/2) w/some heavy fe-ox on frags.,minor qtz. veining, tr. clay.	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-4

Page 2 of 5

____¼, ____¼, SEC. _____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Mark Bailey
Type Drill:
Hole size:
Contractor: Boyles Bros

Hole No. MM-4
Date Started: 12-13-80
Date Completed:
Total Depth: 500'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
100	110	.001	.12		As in 90-100' w/tr. pyrite.	
110	120	.001	.12		Qtz. as above but some diss. pyrite.	
120	130	.001	.12		As above. Thinbedded, mod. fe-ox stnd., altered to punky Op siltstone, yellow gray (5Y7/2).	
130	140	.001	.07		As above but more competent w/some silic.,v.thinbedded dusky yellow (5Y6/4).	
140	150	.009	.08		As above.	
150	160	.001	.06		As above w/minor intbedded qtz.	
160	170	.001	.07		Op qtz., lt. olive gray (5Y5/2), mod. fe-ox stnd., tr.-mod. pyrite or frags. & other dark sulf. med-coarse grnd, rextallized.	
170	180	.004	.07		As above w/diss. pyrite, fe-ox stnd.	
180	190	.002	.03		As above, tr. copper staining or chlorite(?).	
190	200	.001	.03		Altered, thinbedded, punky, mod. fe-ox stnd. argillaceous siltstone Op, yellow gray (5Y7/2).	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-4
Page 3 of 5

____ ¼, ____ ¼, SEC. ____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Mark Bailey
Type Drill:
Hole size:
Contractor: Boyles Bros

Hole No. MM-4
Date Started: 12-13-80
Date Completed:
Total Depth: 500'

Ave. Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
200	210	.001	.08		Qtz. & minor thinbedded argillaceous Op siltstone, lt. olive brn(5Y5/6), coarse-med.grnd.,rextallized, mod-abund. fe-ox tr. pyrite.	
210	220	.001	.02		Interbedded Qtz. (50%) as above & thinbdd., punky clay altered (50%) Op. mod-abund., fe-ox, dusky yellow (5Y6/4), minor qtz. veining.	
220	230	.001	.04		As above but Qtz. 60%, punky, altered thinbedded 40%.	
230	240	.001	.06		Thinbedded, slightly altered siltstone 80%, qtz. 20% (Op), mod.-abund. fe-ox stnd., tr. pyrite, dusky yellow (5Y6/4).	
240	250	.001	.02		Thinbedded, slightly altered argillaceous siltstone (Op), mod-abund. fe-ox staining. Dusky yellow (5Y6/4).	
250	260	.001	.04		As above but lt. olive brown (5Y5/6).	
260	270	.001	.03		As above but a bit more punkish altered (10% clay).	
270	280	.001	.04		As above q/some interbedded qtz., mod. fe-ox, tr. pyrite.	
280	290	.001	.06		As above but lt. olive gray (5Y5/2) and abund. fe-ox staining.	
290	300	.001	.04		As above.	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-4
Page 4 of 5

____ ¼, ____ ¼, SEC. _____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Mark Bailey
Type Drill:
Hole size:
Contractor: Boyles Bros

Hole No. MM-4
Date Started: 12-13-80
Date Completed:
Total Depth: 500'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
300	310	.001	.02		Intbdd. calc. cemented qtz. (60%) & thinbdd., punky clay altered (40%)	
					Op, mod-abund. fe-ox, yellow gray (5Y7/2) mod. efv.	
310	320	.001	.04		Intbdd. calc. cemented qtz. & argill. siltstone, lt.gray (N7),recrystallized	
					med.grnd. qtz. w/tr.diss. sulfides 80%,thinbdded argill.siltstone,	
					lt.brn. v.fn. grnd. mod. fe-ox stnd., mod.efv.	
320	330	.001	.02		As above but w/tr. argill. siltstone, minor-mod. fe-ox.	
330	340	.001	.02		Intbdd. qtz. (70%) & thinbdd, slightly punky altered shale (30%),	
					mod-abund. fe-ox, tr. pyrite, yellow gray (5Y7/2).	
340	350	.001	.02		As above but qtz. 60%, thinbdd., sl. punky clt. 40%, mod.-abund. fe-ox.	
					tr. pyrite, silicification (?).	
350	360	.001	.03		Int.bdd. qtz. 70%, thinbdd. slight punky 30%, tr. pyrite.	
360	370	.001	.11		Thinbdd (?) Abund. contamination - water to foam. No sample taken.	
370	380	.001	.06		Intbdd. qtz. 70% & thinbdd. slightly altered Op 30%, mod-abund. fe-ox.	
					tr. pyrite contamination (?), pale olive (10Y6/2) mod. efv.Some clay galls 10%	
380	390	.001	.06		As above but w/o clay galls, abund. fe-ox.	
390	400	.001	.04		Qtz. 40% & silic. siltstone 60%, tr. pyrite, mod-abund. fe-ox otherwise	
					as above.	

ENERGY RESERVES GROUP ROTARY DRILL LOG

Hole No. MM-4

Page 5 of 5

____¼, ____¼, SEC. _____, T 3N, R 52E.

Project: Mount Montgomery
County: Mineral County
State: Nevada
Claim: AG

Logged by: Mark Bailey
Type Drill:
Hole size:
Contractor: Boyles Bros

Hole No. MM-4
Date Started: 12-13-80
Date Completed:
Total Depth: 500'

Ave.Grade Au
Collar Elev:
Bearing:
Inclination:

From Feet	To Feet	Assays Oz/T Au	Assays Oz/T Ag	Symbol	Geologic Description and Remarks	Drilling Remarks
400	410	.001	.02		Rextallized qtz. 50%, silic. shale 50%, lt. olive brn. (5Y5/6), qtz.	
					veining, tr.pyrite or marcasite,mod-abund. fe-ox, minor efv.	
410	420	.001	.03		As above but w/mod. fe-ox & tr. mod. sulfides.	
420	430	.001	.02		As above but 40% qtz., 60% silic. shale, v. thinbdd., tr.-mod. fe-ox.	
					Olive gray (5Y3/2), tr.-mod. (~1% sulfides), tr. efv.	
430	440	.001	.04		V. fn. grnd. qtz. to silic. siltstone, olive gray (5Y3/2), minor-mod.	
					fe-ox, mod ~1% (sulfides), tr. efv. calc.	
440	450	.001	.05		As above but lt. olive gray (5Y5/2), mod. efv. calc.	
450	460	.001	.03		As above.	
460	470	.001	.03		As above but w/tr. efv. calc.	
470	480	.001	.06		As above.	
480	490	.001	.02		As above but lt. olive brown (5Y5/6) w/mod.-abund. fe-ox staining.	
490	500	.001	.03		As above but olive gray (5Y3/2), w/mod. fe-ox and mod. 1-2% sulfs.	
					concentrated on fractures.	