Contractor: Lang | Coordinates: | Project: | Hole No.:
Drill Type: | Casing Depth: | State: | Sheet 3 of 4
Hole Size: 5½ | Bearing: N45W | Inclination: -60 | Date Started: 9/8/87 | Property: Gilt Edge
Collar Elev.: | Final Depth: 600 MD | Date Completed: 9/9/87 | Hole Surveyed:

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL % SULFIDES (vol %)	ROCK TYPE & STRUCTURE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	ROCK TYPE	GEOLOGIC NOTES: DESCRIPTION (MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE)	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veintill, Replacement) / TYPE
				350-355		Tdmtp	245-600 Dakota Maid Trac Porph (cont.)	55-582 Sulphides (cont.
								(325- 1-2% FeS_2 diss.
								slight increase in aggregates of FeS_2 1% or less
				370-375				
				395-400		9/8 5:00PM 9/9 5:30AM	405 change bit	
5:00 P.M. 9/8 Trip-out of Hole for bit 405'							(410-415) dk gr waxy material present <1% see occasional and seperate chips of quartz, not in matrix - poss vein material	
6:00 A.M 9/9 Trip in hole w/fresh bit 7:00 on bottom air leak in drill string not enough press. to drill with. Tripping out to find leak 7:50 found bad pipe 60-80' from end of string. Inner tube shot. Tripping back in 8:30 Drilling @ 405'				420-425			(420-445) phenocrysts becoming smaller but more frequent ½ mm	
							435-445? poss. Tqtp	(435-440) occurrence of steel blue metalic mineral w/ FeS_2 est <1%
				445-450			445) phenocrysts back to 1-2mm back to Tdmtp?	(445-475) slight increase in FeS_2 2-3% as aggregates + vein fillings
				470-475			(470-) matrix going from lt gray/yellowish to darker grays	(475-490) 3%-4% primarily aggregate FeS_2
							(480-485) note occurrence of apparent zenolith also purple mineral 1mm x ½mm, poss florite also jade green alteration in association w/ FeS_2	
				495 500			(490-495) increase in mafic rocks ~1% of sample note presence of copper colored flecks, disseminated in some chips	(490-582) 1% disseminated
							(495-) lt. colored porph w/ slight greenalt.	
				520-525		↓		

DRILL CUTTING LOG

Logged by:

Contractor: Long | Coordinates: | Project: | Hole No.: B-40

Drill Type: | Casing Depth: | State: | Sheet 4 of 4

Hole Size: 5½ | Bearing: N45W | Inclination: -60 | Date Started: 8/8/87 | Property: Gilt Edge

Collar Elev.: | Final Depth: 600 MD | Date Completed: 9/9/87 | Hole Surveyed:

GRAPHIC LOGS

DISTANCE (feet)	ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL % SULFIDES (vol %)	ROCK TYPE & STRUCTURE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	DOWN HOLE LOCATION: ELEVATION
	123 123 123 123 123 123 123				
				525-530	
				545-550	
				570-575	
				595-600	

GEOLOGIC NOTES

ROCK TYPE	DESCRIPTION (MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE)	MINERALIZATION (DISTRIBUTION: Massive, Disseminated, Veinlitt, Replacement; TYPE)
Tdmtp	245- Dakota Maid Porph (Cont.)	55-582 Sulphide (cont.)
	cont. (495-) lt green alt. 2% lt color porph	cont. (490-582) 1% disseminated FeS2
		582-585 Sulphide/Oxide mix 20% oxide coated chips, orange
		585-600 Sulphide 2-3% disseminated very minor aggregate (595-600) 6-7% diss + agg.
2:00PM 9/9/87	— EOH —	
	7 Quik Gel	
	2 Cement	
	out of hole 3:00	
	3:15 pull csg.	

DRILL CUTTING LOG

Logged by:

SHMC

9/8/87

BROHM MINING CORP
P.O. BOX 485
Deadwood, So. Dak

PAGE 1 OF ____

SAMPLE NUMBERS	ANALYSE FOR	TYPE	ASSAY	CHEM	REMARKS
B-41 0-5 thru 30-35	Au 1 Assay Ton	DC	✓		52 Samples ⇒ B-41
35-40					Sample Missing 9/8/87 R.J.M
40-45 thru 260-265					
B-43 0-5 thru 280-285					57 Samples 9/10/87 R.J.M
B-45 0-5 thru 280-285					57 Samples 9/10/87 R.J.M
B-40 0-5 thru 595-600					120 Samples 9/9/87 T.M.
B-42 0-5 thru 360-365					73 Samples 9/12/87 T.M.M
B-44 0-5 thru 595-600					120 Samples 9/12/87 wet from 425-600 TMM
B-46 0-5 thru 330-335					67 Samples 9/13/87 dry TMM
B-48 0-5 thru 395-400					80 Samples 9/13/87 TMM
B-50 0-5 thru 340-345					69 Samples 9/15/87 TMM
B-52 0-5 thru 260-265					53 Samples 9/15/87 TMM
B-54 0-5 thru 595-600					120 Samples 9/17/87 wet 345-600 TM
B-56 0-5 thru 510-515					103 Samples 9/17/87 TMM
B-55 0-5 thru 595-600					120 Samples 9/19/87 210-600 wet TMM
B-49 0-5 THRU 595-600		PULPS	✓		120 SAMPLES 9/21/87 (MET TEST SAMPLES)
B-59 0-5 thru 595-600		DC			120 SAMPLES 9/24/87 TMM
B-60 0-5 thru 480-485					97 SAMPLES 9/24/87 TMM
B-61 0-5 thru 560-565					113 Samples 9/25/87 TMM 1/4 wet 345-600
B-47 0-5 thru 10-15		Pulps			151 Samples 9/30/87 - pulps
25-30 thru 760-765					from Bondar-Clegg
B-51		Pulps			
B-53		Pulps			
					TOTAL SAMPLES

REJECTS SAVE ____ DISCARD ✓

PULPS SAVE ✓ DISCARD ____

R= rock
C= core
DC= drill cut.
S= soil
SS= stream seds.
W= water

SEND RESULTS TO ADDRESS ABOVE

GEOLOGIST T. J. MacLeod

Contractor LANG | Coordinates | Project | Hole No. B41

Drill Type DRILTECH DYOK (RC) | Casing Depth 10' | State SOUTH DAKOTA | Sheet 1 of 2

Hole Size 5½" | Bearing | Inclination 90° | Date Started 9.8.87 | Property GILT EDGE

Collar Elev. | Final Depth 265' | Date Completed 9.8.87 | Hole Surveyed 9.8.87

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK TYPE & STRUCTURE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	GEOLOGIC NOTES: ROCK TYPE	DESCRIPTION: MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinfill, Replacement)	TYPE
				0-5		Ttp	0-33 TERT. PORPHORY	L	
				10				H	1-2
				15					
				20					
				20-25					
				30					
				35		Edh	33-164 CAMBRIAN DEAD HORNFELS	L	1-2 1-2
				40				N	
				45					
				45-50				2-5	
				55					
				60					
				65					
				70					
				70-75					
				80					
				85					
				90					
				95					
				95-100					
				5					
				10				Sulfide Tr. crystalline: fractured	
				15					
				20					
				120-125					
				30					
				35				Sulfide 2-5 crystalline: fractured	
				40					
				45					4-6%
				145-150				sulfides 5-7% crystal: fractured	
				55					
				60				Sulfide Tr-1 crystalline: fractured	rocks N fractured
				65		Ttp	164-187 TERT. PORPHORY		
				70					
				170-175					

Oxidation 5-20%

MIX: oxidation 1-3%, sulfidation 1-2%

SULFIDES TR-5%

SULFIDES 5-7%

SULFIDES TR-1%

DRILL CUTTING LOG

Logged by: CMFM

BROWN MINING CORP.
~~Newmont Exploration Ltd.~~

Sheet of

Hole No.

INTERVAL		Percent Recovery	ASSAYS Assay values shown as ppm unless noted otherwise									COMPOSITE ANALYSES Assay Values shown as ppm unless noted otherwise								ESTIMATES OF MINERALOGY Based on assay sample intervals						
From	To		Sample No.								Weighted Averages	Composite No.								Total Sulfide	py					oxidation
																				Vol. %	Vol. %	Vol. %	Vol. %	Vol. %	Vol. %	Vol. %

Logged by:

Newmont Exploration Ltd.

Contractor LANG
Drill Type DRILTECH DYOK
Hole Size 5 1/2
Collar Elev.

Coordinates
Casing Depth 10'
Bearing — Inclination 90°
Final Depth 265'

Project
State SOUTH DAKOTA
Date Started 9.8.87
Date Completed 9.8.87

Hole No. B41
Sheet 2 of 2
Property GILT EDGE
Hole Surveyed 9.8.87

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK TYPE & STRUCTURE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	GEOLOGIC NOTES: ROCK TYPE	DESCRIPTION: MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinfill, Replacement)	TYPE
				175-180			TERT PORPHORY [illegible]		
				185					
				190		Edh	187-203 CAMBRIAN DEAD HORNFELS [illegible]		[illegible]
				195					
SULFIDE 5-9%				195-200				5-9% [illegible]	
				5		Edq	203-212 CAMBRIAN DEAD QTZTE [illegible]	1-4% [illegible]	
				10					
				15		Etp	212-220 TERT. PORPHORY [illegible]		
				20				Qtz [illegible] TR	
SULFIDE 1-4%				220-225		Edq/Edh	220-230 CAMBRIAN DEAD QTZTE/HORNFELS [illegible]		Qtz VALET N
				30					
				35		PE	230-250 PRE CAMBRIAN (SOIL) [illegible]		
				40				[illegible]	
				45				[illegible]	
SULFIDE N-TR				245-250				[illegible]	
				55		PEs	250-265 PRE CAMBRIAN (SCHIST) BLK		
				60				[illegible]	
				260-265					
				EOH @ 265'					

DRILL CUTTING LOG

Logged by: CMFM

Newmont Exploration Ltd.

Sheet of

Hole No.

INTERVAL		Percent Recovery	ASSAYS Assay values shown as ppm unless noted otherwise										COMPOSITE ANALYSES Assay Values shown as ppm unless noted otherwise								ESTIMATES OF MINERALOGY Based on assay sample intervals						
From	To		Sample No.									Weighted Averages	Composite No.								Total Sulfide	py					oxidation
																					Vol. %	Vol. %	Vol. %	Vol. %	Vol. %	Vol. %	Vol. %

Logged by:

Newmont Exploration Ltd.

GILT EDGE MINE EXPLORATION DEPARTMENT

DRILL HOLE # R87-344 [redacted] ASSAY METHOD FIRE ASSAY LAB SHMC

N. 746182.2 E. 1127955.9 ELEV. 5494.0

AZ. — DIP 90 TD 265

FROM	TO	RCK CD	OZ/T AU	OZ/T AU CK	OZ/T AG	ORE TYPE
0	5	20				OXIDE
5	10					
10	15					
15	20					
20	25					
25	30					(28)
30	35	(33)				SULFIDE
35	40	15				
40	45					
45	50					
50	55					
55	60					
60	65					
65	70					
70	75					
75	80					
80	85					
85	90					
90	95					
95	100					
100	105					
105	110					
110	115					

FROM	TO	RCK CD	OZ/T AU	OZ/T AU CK	OZ/T AG	ORE TYPE
115	120	15				SULFIDE
120	125					
125	130					
130	135					
135	140					
140	145					
145	150					
150	155					
155	160					
160	165	(164)				
165	170	20				
170	175					
175	180					
180	185	(187)				
185	190	15				
190	195					
195	200					
200	205	(203)				
205	210	14 (212)				
210	215	20				
215	220					
220	225	14				
225	230					
230	235	12				
235	240					
240	245					
245	250					

FROM	TO	RCK CD	OZ/T AU	OZ/T AU CK	OZ/T AG	ORE TYPE
250	255	12				SULFIDE
255	260					
260	265					
265	270					
270	275					
275	280					
280	285					
285	290					
290	295					
295	300					
300	305					
305	310					
310	315					
315	320					
320	325					
325	330					
330	335					
335	340					
340	345					
345	350					
350	355					
355	360					
360	365					
365	370					
370	375					
375	380					

B41

Sample No.	Au	Ag	Sample No.	Au	Ag	Sample No.	Au	Ag	Sample No.	Au	Ag
[illegible]	tr		[illegible]	[illegible]		[illegible]			585-590		
[illegible]	tr		[illegible]	.010		[illegible]			590-595		
[illegible]	.005		[illegible]	.005		[illegible]			595-600		
[illegible]	tr		[illegible]	.010		[illegible]			600-605		
[illegible]	tr		[illegible]	.010		[illegible]			605-610		
[illegible]	tr		[illegible]	tr		[illegible]			610-615		
30-35	.005		[illegible]	.005		430-435			615-620		
35-40	tr		[illegible]	.005		[illegible]			620-625		
40-45	.020		[illegible]	.005		440-445			625-630		
45-50	.010		[illegible]	.005		[illegible]			630-635		
50-55	.010		[illegible]	tr		[illegible]			635-640		
55-60	tr		[illegible]	.005		[illegible]			640-645		
60-65	tr		[illegible]	tr		[illegible]			645-650		
[illegible]	tr		[illegible]			[illegible]			650-655		
70-75	.005		270-275			[illegible]			655-660		
75-80	tr		[illegible]			475-480			660-665		
80-85	tr		[illegible]			[illegible]			665-670		
85-90	nf		285-290			485-490			670-675		
90-95	.005		[illegible]			[illegible]			675-680		
95-100	.005		[illegible]			495-500			680-685		
100-105	.005		300-305			500-505			685-690		
105-110	.005		305-310			505-510			690-695		
110-115	.010		310-315			510-515			695-700		
115-120	.005		315-320			515-520					
120-125	.005		320-325			520-525					
125-130	.010		325-330			525-530					
130-135	.005		330-335			530-535					
135-140	tr		335-340			535-540					
140-145	tr		340-345			540-545					
145-150	.010		345-350			545-550					
150-155	.010		350-355			550-555					
155-160	.005		355-360			555-560					
160-165	.005		360-365			560-565					
165-170	.010		365-370			565-570					
170-175	.005		370-375			570-575					
[illegible]	.005		[illegible]			[illegible]					
180-185	.005		380-385			[illegible]					
185-190	.010		385-390								
190-195	.010		[illegible]								
195-200	.005		[illegible]								

ASSAYER [signature]

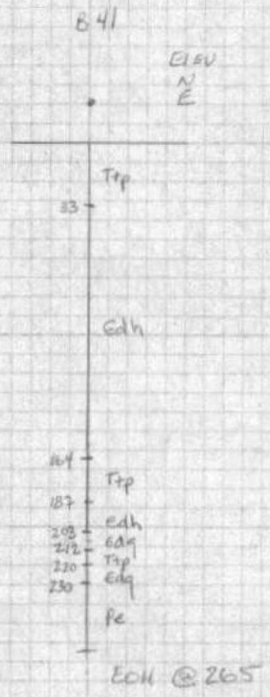
Strawberry Hill Mining Co, Assay Divisi[illegible]

[illegible]

BY CMFM DATE 9.8.87 SUBJECT GILT EDGE 641 SHEET NO. 1 OF 1

CHKD. BY DATE GEOLOGIC SECTION JOB NO.

SCALE 1" = 100'



K+E ALBANENE® GUIDE LINE 10 5741 10 X 10 TO THE INCH
KEUFFEL & ESSER CO. MADE IN U.S.A.

SHMC

9/8/87

BROHM MINING CORP
P.O. BOX 485
Deadwood, So. Dak

PAGE 1 OF ____

SAMPLE NUMBERS	ANALYSE FOR	TYPE	ASSAY	CHEM	REMARKS
B-41 0-5 thru 30-35	Au 1 Assay Ton	DC	✓		52 Samples ⇒ B-41
35-40					Sample Missing 9/8/87 R.S.M
40-45 thru 260-265					
B-43 0-5 thru 280-285					57 Samples 9/10/87 R.J.M
B-45 0-5 thru 280-285					57 Samples 9/10/87 R.J.M
B-40 0-5 thru 595-600					120 Samples 9/9/87 T.M.
B-42 0-5 thru 360-365					73 Samples 9/12/87 T.M.M
B-44 0-5 thru 595-600					120 Samples 9/12/87 wet from 425-600 TMM
B-46 0-5 thru 330-335					67 Samples 9/13/87 TMM
B-48 0-5 thru 395-400					80 Samples 9/17/87 TMM
B-50 0-5 thru 340-345					69 Samples 9/15/87 TMM
B-52 0-5 thru 260-265					53 Samples 9/15/87 TMM
B-54 0-5 thru 555-600					120 Samples 9/17/87 345-600 wet TMM
B-56 0-5 thru 510-515					103 Samples 9/17/87 365-515 wet TMM
B-55 0-5 thru 595-600					120 Samples 9/19/87 210-600 wet TMM
B-49 0-5 THRU 595-600		PULPS	✓		120 SAMPLES 9/21/87 (MET TEST SAMPLES)
B-59 0-5 thru 595-600		DC			120 SAMPLES 9/24/87 TMM
B-60 0-5 thru 480-485					97 SAMPLES 9/24/87 TMM
B-61 0-5 thru 560-565					113 Samples 9/25/87 TMM 44 wet 345-565
B-47 0-5 thru 10-15		Pulps			151 Samples 9/30/87 - pulps
25-30 thru 760-765					from Bondar-Clegg
B-51		Pulps			
B-53		Pulps			
					TOTAL SAMPLES

REJECTS SAVE ____ DISCARD ✓

PULPS SAVE ✓ DISCARD ____

R= rock
C= core
DC= drill cut.
S= soil
SS= stream seds.
W= water

1091

SEND RESULTS TO ADDRESS ABOVE

GEOLOGIST T. J. MacLeod

Hole No. B-41

Sample No	Au	Ag	Sample No	Au	Ag	Sample No	Au	Ag	Sample No	Au	Ag
0-5	tr		200-205	.010		400-405			585-590		
5-10	tr		205-210	.010		405-410			590-595		
10-15	.005		210-215	.005		410-415			595-600		
15-20	tr		215-220	.010		415-420			600-605		
20-25	tr		220-225	.010		420-425			605-610		
25-30	tr		225-230	tr		425-430			610-615		
30-35	.025		230-235	.005		430-435			615-620		
35-40	tr		235-240	.005		435-440			620-625		
40-45	.020		240-245	.005		440-445			625-630		
45-50	.010		245-250	.005		445-450			630-635		
50-55	.010		250-255	tr		450-455			635-640		
55-60	tr		255-260	.005		455-460			640-645		
60-65	tr		260-265	tr		460-465			645-650		
65-70	tr		265-270			465-470			650-655		
70-75	.005		270-275			470-475			655-660		
75-80	tr		275-280			475-480			660-665		
80-85	tr		280-285			480-485			665-670		
85-90	nf		285-290			485-490			670-675		
90-95	.005		290-295			490-495			675-680		
95-100	.005		295-300			495-500			680-685		
100-105	.005		300-305			500-505			685-690		
105-110	.005		305-310			505-510			690-695		
110-115	.010		310-315			510-515			695-700		
115-120	.005		315-320			515-520					
120-125	.005		320-325			520-525					
125-130	.010		325-330			525-530					
130-135	.005		330-335			530-535					
135-140	tr		335-340			535-540					
140-145	tr		340-345			540-545					
145-150	.010		345-350			545-550					
150-155	.010		350-355			550-555					
155-160	.005		355-360			555-560					
160-165	.005		360-365			560-565					
165-170	.010		365-370			565-570					
170-175	.005		370-375			570-575					
175-180	.005		375-380			575-580					
180-185	.005		380-385			580-585					
185-190	.010		385-390								
190-195	.010		390-395								
195-200	.005		395-400								

ASSAYER [signature]

Strawberry Hill Mining Co, Assay Divisi[illegible]

[illegible], Deadwood, [illegible] 57732

Contractor Lang | Coordinates | Project Gilt Edge | Hole No. B-40

Drill Type Driltech D-40-K | Casing Depth | State | Sheet 1 of 4

Hole Size 5½ | Bearing N45-W Inclination -60 | Date Started 9/8/87 | Property

Collar Elev. | Final Depth 600' MD | Date Completed 9/9/87 | Hole Surveyed

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK TYPE & STRUCTURE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	ROCK TYPE	GEOLOGIC NOTES: DESCRIPTION (MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE)	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinfill, Replacement) / TYPE
6:00 adjust rig loc. spud. set csg. trouble getting csg to drive straight.				0-5		Fill	Fill mix of quartz porph. and light colored hornfels	0-29 Oxide pervasive lt. orange coating
				20-25				
							29-123 ∈ Deadwood Hornfels	29-55 Oxide/Sulphide Mix
						29 Edh	primarily gray, very small % of brown	(29-35) oxide coating on ~10% of chips sulphides as aggregate, 2-3%
							(80-85) increasing disseminated FeS_2 gives	(35-40) oxide coating 40-45% of grains
9:20 begin to drill				45-50			hornfel textural appearance of porph.	minor diseminated sulphide, <.5mm in size
								(45-55) oxide 10%
							(90-100) lt. gray in color, FeS_2 alteration almost looks like porph. phenos.	55-582 Sulphides 4-5% diss. aggr. + vienlets
				70-75			(100-105) dark gray to brown (5%) hornfels	(90-100) much disseminated FeS_2 10%
								(100-105) 2% FeS_2
				95-100			(105-110) hornfel w/diss. sulphide/looks almost like porph	(105-110) 15% FeS_2 as disseminated cryst. .5mm to 1mm
				120-125		123 Tdmtp	123-127 Dakota Maid Tray. Porph.	(110-145) 1-2% FeS_2
						127 Edh	first occurrence of obvious feldspar cryst. and cleavage	
							127-245 ∈ Deadwood hornfels (dk gray to brown)	
								(145-150) 10%
				145-150			(145-150) lt. gray - increase diss. FeS_2	
							(150-175) dk gray - brown	(150-175) 2-3%
							(175-195) lt gray/increase in FeS_2 mixed with darker hornfels	(175-195) 10-11%
				170-175				

DRILL CUTTING LOG

Logged by: [illegible]