PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-237
SHEET 1 OF 6
CONTRACTOR: Lang
CORE SIZE: 5" reverse circ.
LOGGED BY: J. Matlock
SCALE: 1" = 10'
ELEVATION:
BEARING:
INCLINATION: -90°
TOTAL DEPTH: 400'
COLLAR COORDINATES: N 747,000 E 1,126,400
STARTED:
COMPLETED:

COMMENTS:

AVE. CORE REC'Y/HOLE:

SECTION	ALTERATION: oxide	ALTERATION: silica	ALTERATION: sericite	ALTERATION: hornfels	FRACTURING	MINERAL	GEOLOGY	DESCRIPTIVE GEOLOGY
0–70								← Very little overburden, strong oxidation to 15 ft. No pyrite 0-15'
								HORNBLENDE DIORITE - Td Weak quartz-sericite-pyrite, fresh hornblende. Pervasive alteration.
								no chips collect from split
								← 1-2% disseminated pyrite
								contact
								DEADWOOD FM - Ꞓd Medium green hornfels, some brown
								no chips
								← 1-2% disseminated pyrite

DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % chemex AA	opt Au % chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver Au f.a. only
			1801			nf	nf	-10	—	—				—
			1802			.003	.003	-10	—	—				—
			1803			tr	nf	40	—	—				—
			1804			.005	nf	40	—	—				—
			1805			tr	nf	20	—	—				—
			1806			nf	tr	40	—	—				—
			1807			tr	nf	30	—	—				—
			1808			nf	nf	20	—	—				—
			1809			tr	nf	20	—	—				—
			1810			.010	.010	10	—	—				—
			1811			.005	nf	90	—	—				—
			1812			.005	.005	60	—	—				—
			1813			nf	nf	10	—	—				—
			1814			nf	nf	10	—	—				—

CORE SAMPLE INTERVALS & ASSAYS

The C. F. Haeckel Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-234
SHEET 2 OF 6
CONTRACTOR:
CORE SIZE:
LOGGED BY: J. Matlock
SCALE: 1"=10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES: N E
STARTED:
COMPLETED:

ALTERATION: oxide, silica, sericite, hornfels
FRACTURING
MINERAL: py
GEOLOGY

COMMENTS:

AVE. CORE REC'Y/HOLE:

DESCRIPTIVE GEOLOGY

← strong epidote carbonate

DEADWOOD FM - Ꞓd
Medium green to brown hornfels
7-10% dissem. & clot py 70'-80'
2-3% " " " 80'-95'
At 20-80' rock type uncertain due to strong silica alteration
contact (?)

HORNBLENDE DIORITE - Td
strong qtz-ser-py & silicification
contact

DEADWOOD FM - Ꞓd
Medium, brown hornfels.

← 2-3% py

← Thin diorite sill, 2-3% dissem. py

← 1% dissem. py

DRILLING INTERVAL | % CORE RECOVERED | CORE SIZE

CORE SAMPLE INTERVALS & ASSAYS

SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % Chemex AA	opt Au % Chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver. Au f.a. only
1815			nf	nf	-10	-	-				-
1816			.015	.015	100	-	-				-
1817			.005	.005	90	-	-				-
1818			.005	.005	60	-	-				-
1819			nf	nf	100	-	-				-
1820			.010	.010	50	-	-				-
1821			tr	nf	120	-	-				-
1822			.025	.025	400	.014	.010				.023
1823			tr	nf	30	-	-				-
1824			.005	nf	170	-	-				-
1825			tr	nf	60	-	-				-
1826			.008	.008	20	-	-				-
1827			nf	nf	20	-	-				-
1828			nf	nf	-10	-	-				-

The C. F. Haeckel Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood d, S.D.
HOLE NO: RDH-234
SHEET 3 OF 6

CONTRACTOR:
CORE SIZE:
LOGGED BY: J. Matlock
SCALE: 1" = 10'

ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:

COLLAR COORDINATES:
N E
STARTED:
COMPLETED:

COMMENTS:

AVE. CORE REC'Y/HOLE:

SECTION	ALTERATION: oxide	silica	sericite	hornfels	FRACTURING	MINERAL DU	GEOLOGY	DESCRIPTIVE GEOLOGY
140								Gray color DEADWOOD FM - Ꞓd -2-3% pyrite
								contact
145								HORNBLENDE DIORITE - Td
								Moderate - strong propyllitic alteration
150								3-5% disseminated & veinlet pyrite
155								
								contact
160								
165								← some pyrrhotite 3-5% of sulfides — DEADWOOD FM - Ꞓd
								Dark green hornfels
170								5-10% pyrite dissem. & in clots.
175								contact
								HORNBLENDE DIORITE - Td
								contact — moderate qsp alteration
180								← Some pyrrhotite — DEADWOOD FM - Ꞓd — Dk green hnfls.
								contact
185								
190								HORNBLENDE DIORITE - Td
								Strong propyllitic, dk green color
195								Carbonate present. Texture destroyed.
								7-10% clotty & dissem. pyrite
200								← 7-10% py; 7-10% pyrrhotite
205								DEADWOOD FM - QUARTZITE - Ꞓd
								Gray green color - not typical
210								7-10% pyrite veinlets

DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % chemex AA	opt Au % Chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver. Au $ only
			1829			nf	nf	30	–	–				–
			1830			nf	nf	20	–	–				–
			1831			nf	nf	40	–	–				–
			1832			nf	nf	40	–	–				–
			1833			nf	nf	30	–	–				–
			1834			tr	tr	20	–	–				–
			1835			.010	.010	10	–	–				–
			1836			.003	.003	20 60	–	–				–
			1837			nf	nf	60	–	–				–
			1838			nf	tr	40	–	–				–
			1839			.005	.005	50	–	–				–
			1840			.012	.012	60	–	–				–
			1841			.010	.010	160	–	–				–
			1842			.005	nf	60	–	–				–

The C. F. Haeckel Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-234
SHEET 4 OF 6
CONTRACTOR:
CORE SIZE:
LOGGED BY: J. Matlock
SCALE: 1" = 10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES:
N E
STARTED:
COMPLETED:

COMMENTS:

AVE. CORE REC'Y/HOLE:

SECTION	ALTERATION: oxide	ALTERATION: silica	ALTERATION: sericite	ALTERATION: hornfels	FRACTURING	MINERAL Au	GEOLOGY	DESCRIPTIVE GEOLOGY
210–280								DEADWOOD FM - QUARTZITE - Ed Gray-green color, not typical, 5-7% pyrite as disseminations and veinlets. Pyrite is 1-2% from 230-295' contact DEADWOOD FM - Ed Siltstone, dark brown hornfels. Very weak to no hornfels alteration at 260' contact HORNBLENDE DIORITE - Td moderate qtz-ser-pyrite alteration DEADWOOD FM - Ed

DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % JHMC	opt Au % SHMC	ppb Au % Chemex AA	opt Au % Chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver Au fa. only
			1843			tr	nf	-10						
			1844			nf	nf	-10						
			1845			nf	tr	20						
			1846			.005	nf	30						
			1847			nf	nf	10						
			1848			tr	nf	20						
			1849			.003	.003	30						
			1850			nf	tr	10						
			1851			tr	nf	-10						
			1852			nf	nf	10						
			1853			nf	nf	80						
			1854			.010	.010	60						
			1855			.063	.063	240						
			1856			tr	nf	20						

The C. F. Hoeckel Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-234
SHEET 5 OF 6
CONTRACTOR:
CORE SIZE:
LOGGED BY: J. Matlock
SCALE: 1" = 10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES: N E
STARTED:
COMPLETED:

SECTION | ALTERATION: oxide, silica, sericite, hornfels | FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE. CORE REC'Y/HOLE:

DESCRIPTIVE GEOLOGY

← probable thin sill of hornblende diorite

DEADWOOD FM. - Ꞓd

Black shale, little to no hornfels. Some dark brown, weak hornfels at 300' and at 320'. Some green hornfels.
Pyrite is 1-2% to 295', and <1% from 295'-310'.

} pyrite 2-5% disseminations & veinlets. and 1-2% from 320'-360ft.

DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % chemex AA	opt Au % chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver Au f.a. only
			1857			nf	nf	20						
			1858			nf	nf	60						
			1859			.005	.005	–						
			1860			.005	nf	10						
			1861			.018	.018	60						
			1862			nf	nf	-10						
			1863			nf	nf	-10						
			1864			nf	nf	30						
			1865			nf	nf	-10						
			1866			.020	.020	160						
			1867			.010	.010	10						
			1868			tr	nf	20						
			1869			.003	.003	20						
			1870			tr	nf	60						

The C. F. Hoeckel Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO.: RDH-234
SHEET 6 OF 6
CONTRACTOR:
CORE SIZE:
LOGGED BY: J. Matlock
SCALE: 1" = 10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES: N E
STARTED:
COMPLETED:

COMMENTS:

AVE. CORE REC'Y/HOLE:

SECTION	ALTERATION: oxide	silica	sericite	hornfels	FRACTURING	MINERAL: py	GEOLOGY
350							
355							
360							
365							
370							
375							
380							
385							
390							
395							
400							

DESCRIPTIVE GEOLOGY

DEADWOOD FM - Ꞓd
Dark brown to green hornfels

← Thin hornblende diorite sill - Td very altered, difficult to distinguish rock texture, pyrite 10%

← 70% pyrite only in Ꞓd.

contact

← locally 20% py

PRECAMBRIAN - P€

Schists & gneisses, some quartz-pyrite veining, average pyrite is 1% as veins & disseminations

SUMMARY: Hole collared in Td, strongly weathered but may have been weak to moderately altered - phyllic. Heavy Fe-stained at the collar and no oxide occurs below 35 ft. Overall pyrite content in Td is 1-2%, occurring as very fine disseminations and small clots replacing hornblende. Contact w/ Ꞓd at 35'. Deadwood is hornfelsed a med. green to brown with pyrite 1-2%. At 72.5' is sudden strong increase in pyrite now present as veinlets & irreg. clots. Rock type is Ꞓd with strong epidote and dk gray carbonate. Td again at 85', strong qtz-ser-py alteration of groundmass w/ a few plag. phenos. still identifiable. Only 2-3% py.-dissem. 95' - back into Ꞓd, 1-3% py. @ 144, Td with dark gray color, good plag, mod. propylitic alter. Td to 161 ft. from here to 185' = Ꞓd w/ strong py 5-10% as dissems. & veinlets & clots also up to 15% pyrrhotite. Another Td sill (?) @ 185-202', strong prop. alter - dk green, 5-7% py & 7-10% pyrrhotite, both as clots & irregular veinlets.

DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % Chemex A4	opt Au % Chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver Au fa. only
			1871			tr	nf	-10	-	-				-
			1872			nf	tr	10	-	-				-
			1873			.005	tr	60	-	-				-
			1874			tr	tr	-10	-	-				-
			1875			nf	nf	20	-	-				-
			1876			.005	.005	30	-	-				-
			1877			tr	nf	20	-	-				-
			1878			.010	.010	20	-	-				-
			1879			.010	nf	10	-	-				-
			1880			nf	tr	30	-	-				-

The C. F. Haeckel Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-233
SHEET 1 OF 5
CONTRACTOR: Lang
CORE SIZE: 5" reverse circ.
LOGGED BY:
SCALE: 1"=10'
ELEVATION: -
BEARING: -
INCLINATION: -90°
TOTAL DEPTH: 300'
COLLAR COORDINATES: N 746,850 E 1,125,790E
STARTED:
COMPLETED:

SECTION	ALTERATION: oxide	ALTERATION: silica	ALTERATION: sericite	FRACTURING	MINERAL: py	GEOLOGY	COMMENTS: / AVE. CORE REC'Y/HOLE:	DESCRIPTIVE GEOLOGY
0–30								Overburden 0-30'
30–70								Oxide zone = 25% limonite 30'-40', 5% @ 40'-45'. No oxide below 45'. HORNBLENDE DIORITE - Td. Moderate pervasive quartz-sericite-py alteration, 1-3% pyrite, some veinlets @ 35'-55'. Pyrite is 2-4% mostly disseminated 55-75'. ← Some thin quartz veinlets

DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	Au opt % SHMC	Au opt % SHMC	Au ppb % Chemex AA	Au opt % Chemex	Au opt % Union	%	%	COMPOSITE ASSAYS	Aver. Au f.a. only
			1741			.008	.008	420	.010	.020				–
			1742		No	Sample –		No	drilling	return				–
			1743			nf	nf	-10	–	–				–
			1744			nf	nf	-10	–	–				–
			1745			nf	nf	-10	–	–				–
			1746			tr	tr	50	–	–				–
			1747			nf	nf	60	–	–				–
			1748			.015	.015	30	–	–				–
			1749			nf	nf	10	–	–				–
			1750			.015	nf	60	–	–				–
			1751			tr	nf	50	–	–				–
			1752			.010	nf	130	–	–				–
			1753			tr	.005	40	–	–				–
			1754			nf	nf	60	–	–				–

The C. F. Mueller Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-233
SHEET 2 OF 5
CONTRACTOR:
CORE SIZE:
LOGGED BY: R. Graichen
SCALE: 1" = 10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES:
N E
STARTED:
COMPLETED:

SECTION	ALTERATION: Oxide	ALTERATION: Silica	ALTERATION: Sericite	ALTERATION: Hornfels	FRACTURING	MINERAL	GEOLOGY
70–140	none						

COMMENTS:

AVE. CORE REC'Y/HOLE:

DESCRIPTIVE GEOLOGY

Hornblende Diorite-Td
contact

DEADWOOD FM-Ꞓd

Gray-green hornfels, brown begins @ 120'
Pyrite - 2-5% at contact & averages roughly 1/2-1% throughout. Only about 20% of hornfels is brown at 135'

HORNBLENDE DIORITE-Td
3% dissem pyrite

DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % Chemex AA	opt Au % Chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver Au f.a. only
			1755			.005	nf.	60	–	–				–
			1756			nf	nf.	130	–	–				–
			1757			.005	.005	-10	–	–				–
			1758			tr	nf	60	–	–				–
			1759			nf	nf	50	–	–				–
			1760			nf	nf	20	–	–				–
			1761			nf	nf	10	–	–				–
			1762			nf	nf	10	–	–				–
			1763			nf	nf	-10	–	–				–
			1764			nf	nf	10	–	–				–
			1765			nf	nf	10	–	–				–
			1766			nf	nf	-10	–	–				–
			1767			nf	nf	-10	–	–				–
			1768			nf	tr	10	–	–				–

The C. F. Mueller Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood S.D.
HOLE NO: RDH-233
SHEET 3 OF 5
CONTRACTOR: R. Gracken
CORE SIZE:
LOGGED BY:
SCALE: 1" = 10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES: N E
STARTED:
COMPLETED:

ALTERATION: Oxide, Silica, Sericite, Pyrite
FRACTURING
MINERAL %
GEOLOGY

COMMENTS:

AVE. CORE REC'Y/HOLE:

DESCRIPTIVE GEOLOGY

SECTION: 140, 145, 150, 155, 160, 165, 170, 175, 180, 185, 190, 195, 200, 205, 210

HORNBLENDE DIORITE - Td

contact

NUMEROUS HORNBLENDE DIORITE SILLS in DEADWOOD SHALES.

Intensive, pervasive quartz-sericite-pyrite alteration of diorite. Some brown, mostly gray-greenish, weak hornfels of Ꞓd.

Pyrite about 3% @ 135'–155 and increases to 5% to 167'.

contact

← Thin qtz & py veinlets.

DEADWOOD FM - Ꞓd

← py vnlets

Some thin qtz & py veins, pyrite from tr to <1% py both as veinlets & disseminations.
Brown hornfels, bleaching along pyrite veins.

contact

HORNBLENDE DIORITE - Td

Intense qsp alteration
1-2% py disseminations & veinlets.

DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % Chemex NA	opt Au % Chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver Au f.a. only
			1769			nf	tr	10	–	–				–
			1770			nf	tr	10	–	–				–
			1771			nf	nf	30	–	–				–
			1772			nf	nf	10	–	–				–
			1773			nf	tr	120	–	–				–
			1774			tr	nf	460	.016	–				–
			1775			tr	tr	20	–	–				–
			1776			.005	.005	70	–	–				–
			1777			tr	nf	60	–	–				–
			1778			nf	nf	-10	–	–				–
			1779			nf	nf	10	–	–				–
			1780			nf	nf	20	–	–				–
			1781			tr	nf	20	–	–				–
			1782			.003	nf	50	–	–				–

The C. F. Mueller Co. Denver

PROJECT: Gilt Edge
LOCATION: Deadwood S.D.
HOLE NO: RDH-233
SHEET 4 OF 5

CONTRACTOR:
CORE SIZE:
LOGGED BY: R. Graichen
SCALE: 1" = 100'

ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:

COLLAR COORDINATES:
N E
STARTED:
COMPLETED:

SECTION: 210, 215, 220, 225, 230, 235, 240, 245, 250, 255, 260, 265, 270, 275, 280

ALTERATION: oxide, silica, sericite, hornfels

FRACTURING

MINERAL PY

GEOLOGY

COMMENTS:

AVE. CORE REC'Y/HOLE:

DESCRIPTIVE GEOLOGY

Pyrite @ 3-6% @ 210'-225' and only 2-4% in Ed but is 5-30% from 225'-265'

← Thin Ed interval, brown hornfels

HORNBLENDE DIORITE - Td

Intensive quartz-sericite-pyrite alteration

contact

PRECAMBRIAN SCHIST - PE

Pyrite is 1-3% in this unit disseminated & in veinlets.

DRILLING INTERVAL

% CORE RECOVERED

CORE SIZE

CORE SAMPLE INTERVALS & ASSAYS

SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au ~~%~~ SHMC	opt Au ~~%~~ SHMC	ppb Au ~~%~~ Chemex AA	opt Au ~~%~~ Chemex	opt Au ~~%~~ Union	%	%	COMPOSITE ASSAYS	Aver. Au f.a. only
1783			.035	.035	490	.020	.030				.030
1784			.015	.015	120	-	-				-
1785			nf	nf	50	-	-				-
1786			.025	.025	210	-	.010				.020
1787			.025	.025	130	-	.010				.020
1788			.005	nf	20	-	-				-
1789			.003	.003	10	-	-				-
1790			nf	nf	20	-	-				-
1791			tr	nf	10	-	-				-
1792			nf	nf	10	-	-				-
1793			nf	nf	-10	-	-				-
1794			nf	nf	-10	-	-				-
1795			nf	nf	-10	-	-				-
1796			nf	nf	-10	-	-				-

The C. F. Hoeckel Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-233
SHEET 5 OF 5
CONTRACTOR:
CORE SIZE:
LOGGED BY: R. Graichen
SCALE: 1" = 10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES:
N E
STARTED:
COMPLETED:

SECTION	ALTERATION: Oxide	ALTERATION: Silica	ALTERATION: Sericite	ALTERATION: hornfels	FRACTURING	MINERAL PY	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE. CORE REC'Y/HOLE:	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE
280								PRECAMBRIAN - PC 1-3% dissem. & veinlet pyrite				
285												
290												
295												
300												

CORE SAMPLE INTERVALS & ASSAYS

SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % chemex AA	opt Au % chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver Au f.a only
1797			nf	nf	10	–	–				–
1798			nf	nf	-10	–	–				–
1799			nf	nf	-10	–	–				–
1800			nf	nf	-10	–	–				–

The C. F. Mueller Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-232
SHEET 1 OF 5

CONTRACTOR: Lang
CORE SIZE: 5" rev. circ.
LOGGED BY: R Graichen
SCALE: 1" = 10'

COLLAR COORDINATES: N 746,650 E 1,124,990
ELEVATION:
BEARING:
INCLINATION: -90°
TOTAL DEPTH: 300
STARTED:
COMPLETED:

SECTION	ALTERATION: oxide	ALTERATION: silica	ALTERATION: sericite	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY
0							
5							overburden
10							
15							
20							
25							
30							
35							↑ No chips, collect from split
40							
45							HORNBLENDE DIORITE - Td Thin oxide coatings on a few thin fractures 50° to 85°. Pyrite is disseminated 1%. Pervasive propyllitic alteration
50							
55							
60							
65							
70							

AVE. CORE REC'Y/HOLE:

CORE SAMPLE INTERVALS & ASSAYS

DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE	SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % Chemex AA	opt Au % Chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	COMPOSITE ASSAYS: Aver. Au f.a. only
			1681			nf	nf	20	–	–				–
			1682			.015	.005	80	–	–				–
			1683			.005	.010	120	–	–				–
			1684						–	–				–
			1685			tr	nf	20	–	–				–
			1686			tr	nf	-10	–	–				–
			1687			nf	nf	-10	–	–				–
			1688			nf	tr	50	–	–				–
			1689			nf	nf	-10	–	–				–
			1690			nf	.100	10	–	–				–
			1691			nf	.010	-10	–	–				–
			1692			.005	nf	-10	–	–				–
			1693			tr	tr	20	–	–				–
			1694			nf	nf	10	–	–				–

The C. F. Hoeckel Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-232
SHEET 2 OF 5
CONTRACTOR:
CORE SIZE:
LOGGED BY: R. Graichen
SCALE: 1"=10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES: N E
STARTED:
COMPLETED:

SECTION: 70, 75, 80, 85, 90, 95, 100, 105, 110, 115, 120, 125, 130, 135, 140

ALTERATION: oxide, silica, sericite, hornfels

FRACTURING

MINERAL

GEOLOGY

COMMENTS:

AVE. CORE REC'Y/HOLE:

DESCRIPTIVE GEOLOGY

HORNBLENDE DIORITE - Td

Disseminated 1% pyrite
Pervasive propyllitic alteration,
fresh hornblende phenocrysts

← 10-15% pervasive silica flooding

contact

DEADWOOD FM - Ꞓd

No pyrite in Ꞓd. Dark and light green hornfels, some quartz veins
Deadwood is a siltstone

DRILLING INTERVAL | % CORE RECOVERED | CORE SIZE

CORE SAMPLE INTERVALS & ASSAYS

SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % chemex AA	opt Au % chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver. Au S.A. only
1695			nf	nf	10	–	–				–
1696			.002	.002	10	–	–				–
1697			nf	nf	10	–	–				–
1698			nf	nf	20	–	–				–
1699			nf	nf	80	–	–				–
1700			.005	.005	20	–	–				–
1701			nf	nf	10	–	–				–
1702			nf	nf	40	–	–				–
1703			tr	tr	40	–	–				–
1704			tr	nf	40	–	–				–
1705			.003	tr	80	–	–				–
1706			nf	nf	70	–	–				–
1707			.005	nf	80	–	–				–
1708			nf	nf	60	–	–				–

The C. F. Hoeckel Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-232
SHEET 3 OF 5

CONTRACTOR:
CORE SIZE:
LOGGED BY: R. Graeden
SCALE: 1" = 10'

ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:

COLLAR COORDINATES: N E
STARTED:
COMPLETED:

SECTION: 140, 145, 150, 155, 160, 165, 170, 175, 180, 185, 190, 195, 200, 205, 210

ALTERATION: oxide, silica, sericite, hornfels

FRACTURING

MINERAL

GEOLOGY

COMMENTS:

AVE. CORE REC'Y/HOLE:

DESCRIPTIVE GEOLOGY

DEADWOOD FM - Ꞓd

Brown and green hornfels 150'-175
(Thin green veins in brown)
Pyrite is disseminated and as hairline veinlets

contact

HORNBLENDE DIORITE - Td

contact

DEADWOOD FM - Ꞓd

Dark brown hornfels = biotite (?)

contact

← 75% oxidized no pyrite

← 25% oxidized no pyrite

QUARTZ PORPHYRY - Tp

Quartz feldspar porphyry
Strong pervasive argillic alteration
This unit has added potassium as biotite hornfels to the Deadwood Fm.

DRILLING INTERVAL

% CORE RECOVERED

CORE SIZE

CORE SAMPLE INTERVALS & ASSAYS

COMPOSITE ASSAYS

SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % chemex AA	opt Au % chemex	opt Au % Union	%	%		Avg Au g.a. only
1709			tr	nf	30	-	-				-
1710			nf	nf	-10	-	-				-
1711			tr	nf	30	-	-				-
1712			tr	tr	-10	-	-				-
1713			tr	nf	20	-	-				-
1714			.010	nf	100	-	-				-
1715			nf	nf	60	-	-				-
1716			.010	nf	20	-	-				-
1717			.005	.005	10	-	-				-
1718			tr	nf	-10	-	-				-
1719			.008	.008	20	-	-				-
1720			nf	nf	20	-	-				-
1721			nf	nf	10	-	-				-
1722			.005	nf	60	-	-				-

The C. F. Mueller Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-232
SHEET 4 OF 5
CONTRACTOR: Lang
CORE SIZE: 5"
LOGGED BY: R. Graichen
SCALE: 1" = 10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES: N E
STARTED:
COMPLETED:

SECTION: 210, 215, 220, 225, 230, 235, 240, 245, 250, 255, 260, 265, 270, 275, 280

ALTERATION: oxide, silica, sericite, hornfels

FRACTURING

MINERAL: py

GEOLOGY

COMMENTS:

AVE. CORE REC'Y/HOLE:

DESCRIPTIVE GEOLOGY

Quartz-Feldspar Porphyry - Tp.

← Trace pyrite

DEADWOOD FM - Ꞓd

Dark chocolate brown hornfels potassic alteration from contact at about 213' to 230', then hornfels is dull greenish color.

HORNBLENDE DIORITE - Td

Propyllitic alteration, trace pyrite

DEADWOOD FM - Ꞓd

Gray green hornfels of v.f.g. clastics. Coarse siltstone 265'-270' pyrite as 1% thin veinlets.

DEADWOOD FM QUARTZITE - Ꞓd

DRILLING INTERVAL

% CORE RECOVERED

CORE SIZE

CORE SAMPLE INTERVALS & ASSAYS

SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % Chemex AA	opt Au % Chemex	opt Au % Unim	%	%
1723			.010	.010	20	–			
1724			.005	nf	30	–			
1725			.005	tr	-10	–			
1726			.010	.010	50	–			
1727			.015	.015	260	–			
1728			.020	.020	210	–			
1729			nf	nf	110	–			
1730			.020	tr.	160	–			
1731			.012	.012	90	–			
1732			nf.	tr	50	–			
1733			.012	.012	360	.010	.010		
1734			.015	.015	120	–			
1735			.020	.020	220	–			
1736			nf	nf	–	–			

COMPOSITE ASSAYS

Ayer Au f.a. only

The C.F. Hoeckel Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-232
SHEET 5 OF 5
CONTRACTOR:
CORE SIZE:
LOGGED BY: R Gracchon
SCALE: 1"=10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES:
N E
STARTED:
COMPLETED:

SECTION	ALTERATION: Oxide	ALTERATION: Silica	ALTERATION: Sericite	ALTERATION: Manganese	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / DESCRIPTIVE GEOLOGY	AVE. CORE REC'Y/HOLE:	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE
280								DEADWOOD FM- Ed QUARTZITE Disseminated pyrite 2-3% 280'-295' and 5-10% @ 295'-300' No alteration apparent. Some black mineral present (?) (obviously this hole must be deepened) Bottom of Hole 300'				
285												
290												
295												
300												

SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % Chemex AA	opt Au % Chemex	opt Au % Unism	%	%	COMPOSITE ASSAYS	Aver Au f.a. only
1737			nf	nf	50						
1738			nf	nf	60						
1739			nf	nf	180						
1740			.030	.030	100						

The C. F. Mueller Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH 231
SHEET 1 OF 5

CONTRACTOR: Lang
CORE SIZE: 5" reverse circ.
LOGGED BY: R. Gracken
SCALE: 1" = 10'

ELEVATION: —
BEARING: —
INCLINATION: -90°
TOTAL DEPTH: 300'

COLLAR COORDINATES:
N 747,615 E 1,125,375
STARTED:
COMPLETED:

SECTION: 0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70

ALTERATION: oxide, silica, sericite

FRACTURING

MINERAL DIS: none left

GEOLOGY

COMMENTS:

AVE. CORE REC'Y/HOLE:

DESCRIPTIVE GEOLOGY

HORNBLENDE DIORITE - Td

Uniform texture hornblende diorite with hb phenocrysts several mm. long. Pervasive alteration mostly v. fg sericite & clays mask the rock texture to varying intensities. At 40' alteration increases, only a few fresh hb. remain; this occurs to 85 ft.

Very strong, pervasive oxidation 0'-50'
moderate oxide 50'-105'

DRILLING INTERVAL

% CORE RECOVERED

CORE SIZE

CORE SAMPLE INTERVALS & ASSAYS

SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % Chemex AA	opt Au % Chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver Au f.a. only
1620			tr.	nf	20	—	—				—
1621			nf	nf	40						
1622			nf	tr	70	—	—				—
1623			.005	.005	60	—	—				—
1624			.003	.003	40	—	—				—
1625			.015	.015	80	—	—				—
1626			tr	nf	70	—	—				—
1627			.010	.008	40	—	—				—
1628			nf	nf	-10	—	—				—
1629			.005	.005	40	—	—				—
1630			nf	nf	30	—	—				—
1631			nf	nf	10	—	—				—
1632			.015	.015	20	—	—				—
1633			.010	.005	50	—	—				—
1634			nf	nf	20	—	—				—

The C. F. Hoecker Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-231
SHEET 2 OF 5
CONTRACTOR:
CORE SIZE:
LOGGED BY: R. Graichen
SCALE: 1" = 10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES:
N E
STARTED:
COMPLETED:

SECTION | ALTERATION: oxide, silica, sericite | FRACTURING | MINERAL | GEOLOGY

COMMENTS:

AVE. CORE REC'Y/HOLE:

DESCRIPTIVE GEOLOGY

HORNBLENDE DIORITE - Td

← Trace pyrite 85'-115'. Strong pervasive argillic alteration with some rock pieces pervasively propyllitized & containing 1/2% pyrite, 85'-105'.

← Weak pervasive oxidation 105'-140'. Half of the rock chips are pervasively altered by propyllitic alteration with ~~dissem~~ 1/2% pyrite @ 105-140'.

contact

DRILLING INTERVAL | % CORE RECOVERED | CORE SIZE

CORE SAMPLE INTERVALS & ASSAYS

SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % chemex AA	opt Au % chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver Au f.a. only
1635			tr	.003	80	–	–				–
1636			tr	tr	90	–	–				–
1637			.008	.008	60	–	–				–
1638			.005	.010	40	–	–				–
1639			.030	.010	530	.005	.010				–
1640			nf	nf	60	–	–				–
1641			.010	.010	90	–	–				–
1642			.050	.045	210	–	–				.048
1643			.058	.058	330	.012	.080				.052
1644			.010	.010	110	–	–				–
1645			.015	.015	100	–	–				–
1646			.010	.010	30	–	–				–
1647			.007	.007	150	–	–				–
1648			tr.	.005	50	–	–				–

Thos. C. F. Moerkel Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-231
SHEET 3 OF 5
CONTRACTOR:
CORE SIZE:
LOGGED BY: R. Graichen
SCALE: 1" = 10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES:
N E
STARTED:
COMPLETED:

SECTION: 140, 145, 150, 155, 160, 165, 170, 175, 180, 185, 190, 195, 200, 205, 210

ALTERATION: oxide, silica, sericite, hornfels

FRACTURING

MINERAL

GEOLOGY

COMMENTS:

AVE. CORE REC'Y/HOLE:

DESCRIPTIVE GEOLOGY

Trace oxide on fractures — DEADWOOD FM - Ꞓd
Siltstone 150'-175'
← 1/2% dissem. py. Dark gray-green hornfels to med-gray weak hornfels
HB DIORITE SILL - Td
← Trace py
← Trace py
← Trace py
← 90% = gray green hornfels, 10% tan w/ tr. hem.
← Thin porphyry dike
← Possible fault, some fractures contain hematite red oxide
185'-200' rock type not definite.
@190'-205', 10% of rock chips are oxidized
contact
← 2% dissem pyrite
HORNBLENDE DIORITE - Td
Silicified 20% with disseminated pyrite

DRILLING INTERVAL

% CORE RECOVERED

CORE SIZE

CORE SAMPLE INTERVALS & ASSAYS

SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % chemex AA	opt Au % chemex	opt Au % Unizn	%	%	COMPOSITE ASSAYS	Aver. Au f.a. only
1649			nf	nf	10						
1650			.005	.005	80						
1651			tr	.010	20						
1652			nf	nf	-10						
1653			nf	tr	20						
1654			nf	nf	-10						
1655			nf	nf	30						
1656			.003	nf	30						
1657			tr	nf	20						
1658			tr	tr	40						
1659			.005	.005	–						
1660			nf	nf	20						
1661			tr	nf	10						
1662			.005	.006	20						

The C. F. Mueller Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-231
SHEET 4 OF 5

CONTRACTOR:
CORE SIZE:
LOGGED BY: R. Graichen
SCALE: 1"=10'

ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:

COLLAR COORDINATES:
N E
STARTED:
COMPLETED:

SECTION	ALTERATION: oxide	silica	sericite	hornfels	FRACTURING	MINERAL	GEOLOGY	COMMENTS: / AVE. CORE REC'Y/HOLE: / DESCRIPTIVE GEOLOGY	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE
210											
215								HORNBLENDE DIORITE - Td			
220								no chips collect from split			
225								← 1/2 of chips are moderate FeOx. Trace pyrite			
230								← weak silicification of diorite contact			
235								no chips collect from split.			
240								DEADWOOD FM - Ed No pyrite seen below 240 ft. Weak gray hornfels			
245											
250								no chips collect from reject			
255											
260								← Dark green hornfels			
265											
270								Trace qtz veins & a dark unknown mineral			
275								← 10% weak FeOX Some black hairline mineral veining			
280											

CORE SAMPLE INTERVALS & ASSAYS

SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au ~~%~~ SHMC	opt Au ~~%~~ SHMC	ppb Au ~~%~~ Chemex AA	opt Au ~~%~~ Chemex	opt Au ~~%~~ Union	%	%	COMPOSITE ASSAYS	Aver Au f.a. only
1663			tr	nf	10	–	–				–
1664			.003	.003	-10	–	–				–
1665			.003	.003	50	–	–				–
1666			.015	.015	120	–	–				–
1667			.020	.020	60	–	–				.020
1668			.015	.015	180	–	–				.015
1669			.030	.030	720	.024	.020				.026
1670			.020	.020	360	.010	.020				.018
1671			.020	.020	480	.010	.010				.015
1672			.020	.020	640	.012	.020				.018
1673			.035	.035	790	.020	.032				.031
1674			.020	.020	480	.012	.015				–
1675			.015	.015	420	.020	.010				–
1676			.015	.015	180	–	–				–

The C. F. Hoeckel Co., Denver

PROJECT: Gilt Edge
LOCATION: Deadwood, S.D.
HOLE NO: RDH-231
SHEET 5 OF 5
CONTRACTOR:
CORE SIZE:
LOGGED BY: R. Graichen
SCALE: 1"=10'
ELEVATION:
BEARING:
INCLINATION:
TOTAL DEPTH:
COLLAR COORDINATES:
N E
STARTED:
COMPLETED:

COMMENTS:

AVE. CORE REC'Y/HOLE:

SECTION	ALTERATION: oxide	ALTERATION: silica	ALTERATION: sericite	ALTERATION: hornfels	FRACTURING	MINERAL Py	GEOLOGY	DESCRIPTIVE GEOLOGY	DRILLING INTERVAL	% CORE RECOVERED	CORE SIZE
280											
285								DEADWOOD FM - Ꞓd Dark brown and pistachio hornfels.			
290											
295											
300								Bottom of Hole 300'			

CORE SAMPLE INTERVALS & ASSAYS

SAMPLE INTERVAL	% REC'Y./SAMP. INT.	ESTIMATED %	opt Au % SHMC	opt Au % SHMC	ppb Au % Chemex AA	opt Au % Chemex	opt Au % Union	%	%	COMPOSITE ASSAYS	Aver Au f.a. only
1677			.010	.010	50	–	–				–
1678			.005	nf	80	–	–				–
1679			.010	.020	100	–	–				–
1680			.005	.010	70	–	–				–

The C. F. Mueller Co. Denver