

Guilmette Formation¹

Middle and Upper Devonian : Western Utah.

Original reference: T. B. Nolan, 1930, Washington Acad. Sci. Jour., v. 20, no. 17, p. 421-432.

C. W. Merriam, 1940, Geol. Soc. America Spec. Paper 25, p. 68-69. In Gold Hill region, varies in thickness from 1,400 feet to 890 feet within distance of 3 miles and is overlain either by Madison limestone of Lower Mississippian age or by Woodman formation of Upper Mississippian age. Overlies Simonson dolomite.

G. A. Cooper and others, 1942, Geol. Soc. America Bull., v. 53, no. 12, pt. 1, p. 1763, chart 4. Shown on correlation chart as Middle and Upper Devonian.

G. S. Campbell, 1951, Utah Geol. Soc. Guidebook 6, p. 21 (fig. 4), 22. In Confusion and House Ranges, underlies Pilot shale and overlies Sevy (?) dolomite. Thickness 1,200 feet.

G. W. Crosby, 1959, Brigham Young Univ. Research Studies, Geology Ser., v. 6, no. 3, p. 19-20, 52, pl. 11. In south Pavant Range, conformably underlies Cove Fort quartzite (new); conformably overlies Simonson dolomite. Thickness 570 feet. Middle Devonian.

Named for exposures in Guilmette Gulch, Gold Hill region.

Guilmette formation.

Middle Devonian: Western Utah (Gold Hill district).

T. B. Nolan, 1930 (Wash. Acad. Sci. Jour., vol. 20, No. 17, Oct. 19, pp. 421-432).

Guilmette fm.—Chiefly dol. but contains a number of thick ls. beds and several lenticular brownish sss. The most characteristic dol. is a fine-grained rock, dark to medium gray on fresh fracture, weathering lighter shades of gray and containing numerous vugs almost completely filled with white coarsely crystalline dol. Also contains striking dark dolomites filled with fragments of tubular corals. Thickness 890 to 1,200 ft. Is uncon. overlain by Madison ls. (early Miss.), and uncon. overlies Simonson dol. Named for exposures in Guilmette Gulch, Gold Hill region.

See also U. S. G. S. P. P. 177, 1934.

Guilmette fm.

1961

*Tschanz, C. M., and Pampeyan, E. H., Preliminary
geologic map of Lincoln County, Nevada: USGS Min.
Inv. Field Studies Map, MF-206
sheet 2

Mid. & Up. Dev.

Nevada

Guilmette Fm.

1962

*Whitebread, D. H., and others, Preliminary geologic map and sections of the Wheeler Peak quadrangles, White Pine County, Nevada: USGS Min. Inv. Field Studies Map MF-244.

Middle Devonian

E-central Nevada

Guilmette Fm.

1962

Langenheim, R. L., Jr., Nomenclature of the Late
Mississippian White Pine Shale and associated
rocks in Nevada: Illinois State Acad. Sci. Trans.,
v. 55, no. 2 Fig. 2, 3 (new name) S(253)
Acl

Sown in Fig. 3

Devonian

Eastern & Southern Nevada

Guilmette Fm.

1962

Baer, J. L., Geology of the Star Range, Beaver
County, Utah: Brigham Young University, Geol.
Studies, vol. 9, pt. 2

G(273)
B76rs

p. 32, map, Fig. 2, 3

Sevy(?) Dol., and Guilmette Fm. recommended in
place of Red Warrior Fm.

Middle Devonian

SW Utah

Guilmette

~~Guilmet~~ Fm. (geog. extended)

1962

Baer, J. L., Geology of the Star Range, Beaver
County, Utah: Brigham Young Univ. Geol. Studies,
v. 9, Pt. 2

G(273)

B76rs

p. 32, Fig. 2, 3

Recommended that this name and Sevy(?) Dol.
be used in place of Butler's Red Warrior
Ls in this area

Devonian

Beaver County
SW Utah

Guilmette Fm.

1963

Kellogg, H. E., Paleozoic stratigraphy of the southern Egan Range, Nevada: Geol. Soc. America Bull., v. 74, no. 6 (new names)

Plate 1

p. 696

Middle & Upper Devonian

SE Nevada

Guilmett Fm.

1963

Reso, Anthony, Composite columnar section of exposed Paleozoic and Conozoic rocks in the Pahrangat Range, Lincoln County, Nevada: Geol. Soc. America Bull., v. 74, no. 7 (new names)

Plates 1 and 2

p. 909

Two unnamed mbrs.

Senecan

Devonian

SE Nevada

Guilmett Fm.

1963

Hose, R. K., and Repenning, C. A., Geologic map
and sections of the Cowboy Pass NW Quadrangle,
Confusion Range, Millard County, Utah: USGS
Map I-378 (1:24,000)

Devonian

(subsurface)
W.-Cent. Utah

Guilmette Fm.

1963

Hose, R. K., Geologic map and section of the
Cowboy Pass NE Quadrangle, Confusion Range,
Millard County, Utah: USGS Map I-377

Devonian

W.-Cent. Utah

Guilmette Fm.

1963

*Hose, R. K., and Ziony, J. I., Geologic map and sections of the Gandy NE Quadrangle, Confusion Range, Millard County, Utah: USGS Misc. Geol. Inv. Map I-376. (1:24,000)

Devonian

W.-Cent. Utah

Guilmette Fm.

1963

Stokes, W. L., Geologic map of northwestern Utah:
Project of College of Mines and Mineral Industries,
Univ. of Utah. (1:250,000)

Legend for western half of state

Middle & Upper Devonian

NW Utah

Guilmette Fm.

1963

*Hose, S. K., Geologic map and sections of the
Cowboy Pass SE Quadrangle, Confusion Range, Millard
County, Utah: USGS Misc. Geol. Inv. Map I-391

Devonian

W.-Cent. Utah

Guilmette Fm.

1963

Hintze, L. F., Geologic map of southwestern Utah
(Scale 1:250,000): in pocket of Intermountain
Assoc. Pet. Geologists Guidebook, 12th Ann. Field
Conf. (on map - A project of Dept. Geol., Brigham
Young Univ.):

203(273)

qIn8f

SW Utah

Up. Dev.

Guilmette Fm.

1963

Blue, D. M., Stratigraphy of the Pilot Mountains,
Box Elder and Tooele Counties, Utah, and Elko
County, Nevada (abs.): GSA Spec. Paper 73

p. 28

G(200)

G29sp

Up. and Mid. Dev.

Pilot Mtns.
Utah & Nevada

Guilmette Fm.

1964

*Hose, R. K., and Ziony, J. I., Geologic map and sections of the Gandy SE quadrangle, Confusion Range, Millard County, Utah: USGS Misc. Geol. Inv. Map I-393

Dev.

(Subsurface)
W. Cent. Utah

Guilmette Fm.

1964

*Hose, R. K., and Repenning, C. A., Geologic map and sections of the Cowboy Pass SW quadrangle, Confusion Range, Millard County, Utah: USGS Misc. Geol. Inv. Map, I-390

Dev.

W.-Cent. Utah

Guilmette Fm.

1964

Woodward, L. A., Structural geology of central
northern Egan Range, Nevada: AAPG Bull., vol. 48,
no. 1

G(200)

Am3

p. 22-39

Table 1, Fig. 2. Material from unpublished
thesis.

Devonian

E.-Cent. Nevada

Guillmet Fm.

1962

*Dewes, H., Stratigraphy^{ic} and structural controls of mineralization in the Taylor Mining District near Ely, Nevada: USGS Prof. Paper 450-B. Map on p. B-2

(200)

qB

Devonian

SE Nevada

Guilmette ls.

1965

Brokaw, A. L., and Shawe, D. R., Geological map and sections of the Ely 3 SW quadrangle, White Pine County, Nevada: (1:24,000) USGS I Map 449.

M. Dev.

E. Cent. Nev.

1966

Guilmette Fm.

Bick, K. F., Geology of the Deep Creek Mountains,
Tooele and Juab Counties, Utah: Utah. Geol. &
Mineral. Survey, Bull. 77, May. (273)

p. 1-120 B

49

NW. Utah

M. Dev.

Guilmette Fm.

1966

Nelson, R. B., Structural Development of Northern-
most Snake Range, Kern Mountains, and Deep Creek
Range, Nevada and Utah: AAPG Bull., v. 50, no. 5,
May. p. 921-951

G(200)

Am3

931, 934

Snake Range-Kern Mt. sequence

E. Nev.-W. Utah

U. Dev.

Guilmette Fm.

1966

Clark, D.L. and Ethington, R.L., Conodonts and
Biostratigraphy of the Lower and Middle Devonian
of Nevada and Utah: Jour. Paleont., v. 40, no. 3,
May. p. 659-689 G(200)
J83p

666

U. Dev.

C. & W. Utah

Guilmette Fm. (upper)

1966

Scott, Robert, Origin of Chemical Variations
within Ignimbrite Cooling Units: Amer. Jour.
Sci., v. 264, no. 4, Apr.

p. 273-288

S(200)

275

Am48

Grant Range

Nev.

Paleoz.

Guilmette Fm.

1966

Miller, G. M., Structure and Stratigraphy of
Southern Part of Wah Wah Mountains, Southwest
Utah: AAPG Bull., v. 50, no. 5, May. G(200)
p. 858 -900 Am3

868

M-U. Dev.

SW. Utah

Guilmette Fm.

1966

Hose, R. K., Devonian Stratigraphy of the
Confusion Range, West-Central Utah: USGS
PP-550-B.

p. 36-41

(200)
qB

Dev.

EC. Nev. -
WC. Utah

Guilmette fm.

1966

Nelson, R. B., Structural development of northernmost Snake Range, Kern Mountains, and Deep Creek Range, Nevada and Utah: Am. Assoc. Petroleum Geologists Bull., v. 50, no. 5.

p. 934-935; fig. 1,4,5

M.-U. Dev.

Nev.--Utah

Guilmette Ls.

1966

Bauer, H. L. Jr., and others, Porphyry Copper Deposits in the Robinson Mining District, Nevada: in Geology of the Porphyry Copper Deposits, Southwestern North America: Arizona. Univ. Press, Titley, S. R. and Hicks, C. L. (ed.).

p. 235

203(270)
qT536g

Dev.

EC. Nev.

Guilmette Fm.

1967

Poole, F. G. and others, Devonian of the South-
western United States: Canada. Alberta Soc.
Petroleum Geologists, Internat. Symp. Dev.
System, Calgary, v. 1, (D.H. Oswald, ed.).

p. 879-912

335
qIn8p

883-4

Confusion Range
Pahranagat "

U. Dev.

N. Deep Creek Mts.
Nev.-Utah

Guilmette Is.

1967

Nadjmadabi, Siab^vash, Paleo-environment of the
Guilmette Limestone (Devonian) near Wendover,
Utah: Brigham Young Univ., Geology Studies,
v. 14, Dec.

p. 131-142

139 - meas. sec. & age

M.-U.
Dev.

Nev.-Utah

Guilmette Fm.

1967

Clark, D. L. and Ethington, R. L., Conodonts and
Zonation of the Upper Devonian in the Great Basin:
GSA, Mem. no. 103.

p. 1-94
7

G(200)
G29m

U. Dev.

W. Utah -
C. & E. Nev.

Guilmette Fm.

1967

Drewes, Harald, Geology of the Connors Pass
Quadrangle, Schell Creek Range, East-Central Nevada:
USGS FF-557.

p. 25

M-U. Dev.

EC. Nevada

Guilmette Ls.

1967

Brokaw, A. L., Geologic Map and Sections of the
Ely Quadrangle, White Pine County, Nevada: USGS
Geol. Quad. Map GQ-697.

M.-U. Dev.

EC. Nevada

Guilmette Fm.

1968

Moore, E. M., Tertiary Tectonics of the White
Pine-Grant Range Region, East-Central Nevada,
and some Regional Implications: GSA Bull., v. 79,
no. 12, Dec.

p. 1703-26, pl. 1 G(200)
1708 G29

Dev.

EC. Nev.

Guilmette Fm. (aband. locally)

1968

Gordon, J. E., O'Brien, K. G., and Langenheim,
R. L. Jr., Devonian Stratigraphy and
Biostratigraphy at Dutch John Mountain, Lincoln
County, Nevada: Illinois. Acad. Sci., Trans.,
v. 61, no. 3. S(253)

p. 233-46

Acl

235-6

Silverhorn Dol. concept
preferred

correlated with
Gold Hill District

M. Dev.

EC. Nevada

Guilmette Fm.

1968
pub.

Whitebread, D. H., Snake Range Decollement and
Related Structures in the Southern Snake Range,
Eastern Nevada: in Abs. for 1966, GSA Spec. Papers
101.

p. 345-6

G(200)
G29sp

Dev.

E. Nev.

Guilmette Ls.

1968

Brokaw, A. L. and Barosh, P. J., Geologic Map and Sections of the Riepetown Quadrangle, White Pine County, Nevada: USGS Geol. Quad. Map GQ-758.

M. Dev.

NE. Nev.

Guilmette Fm.

1968

Fritz, W. H., Geologic Map and Sections of the
Southern Cherry Creek and Northern Egan Ranges,
White Pine County, Nevada: Nev. Bur. Mines,
Map 35.

Dev.

EC. Nev.

Guilmette Fm.

1969

Whitebread, D. H., Geologic Map of the Wheeler
Peak and Garrison Quadrangles, Nevada and Utah:
USGS Misc. Inv. Map I-578.

M.-U. Dev.

EC. Nev.-

WC. Utah

Guilmette Fm.

1969

Baetcke, G. B., Stratigraphy of the Star Range
and Reconnaissance Study of Three Selected Mines:
Dissert. Abs., sec. B, v. 30, no. 5, Nov. 043
p. 2249 qD63

Dev.

Utah

Guilmette Fm.

1969

Nelson, R. B., Relation and History of Structures
in a Sedimentary Succession with Deeper Metamorphic
Structures, Eastern Great Basin: AAPG Bull., v. 53,
no. 2, Feb. p. 307-339
325 (Fig. 11)

G(200)
Am3

Dev.

Deep Creek Range
W. Utah-E. Nev.

Guilmette Fm.

1969

Langenheim, R. L., Jr., Campport, M. B., and Winter,
J. K., Geology, Stratigraphy, and Structure of the
West Range, Lincoln County, Nevada: WGA Ear. Sci.
Bull., v. 2, no. 3, Sept. p. 27-36

G(282)
qEa76

30, 31 - age

U. Dev.

SE. Nev.

Guilmette Fm.

1970

Baer, J. L., Geology of the Star Range, Beaver
County, Utah: Utah. Geol. and Mineral. Survey,
Bull. 86, Oct. (Abs.)

[unpub. thesis]

p. 13

(273)

B

see 1st pub. in Brigham Young Univ. Geol. Stud., v. 9,
no. 2, 1962)

pt. replaces Red Warrior & Mawitza Fms. (aband.)
of Butler, 1913

Dev.

SW. Utah

Guilmette Fm.

1970

Hyde, J. H. and Hutterer, G. W., Geology of Central
Grant Range, Nevada: AAPG Bull., v. 54, no. 3, Mar.
p. 503-521
513

G(200)

Am3

M. - U. Dev.

EC. Nev.

Guilmette Fm. (age)

1970

Chapman, J.S., Conodonts from the Manticoceras zone
(Devonian), Confusion Range, Millard County, Utah:
Utah. Geol. & Mineral. Survey, Bull. 86, Oct. (Abs.).
p. 34

(273)

B

U. Dev.

CW. Utah

Guilmette Fm.

1970

Thorman, C.H., Metamorphosed & Nonmetamorphosed
Paleozoic Rocks in the Wood Hills & Pequop
Mountains, Northeast Nevada: GSA Bull., v.81,
no.8, Aug.

p. 2417-2448

G(200)
G29

2424

M+U. Dev.

NE. Nev.

Guilmette Fm.

1970

El - Shatoury, H. M., Whelan, J. A., Mineralization
in the Gold Hill Mining District, Tooele County,
Utah: Utah. Geol. and Mineral. Survey, Bull. 83,
March. p. 1 - 37 (273)
7, 10(Fig. 3), 13 B

M. Dev.

NW. Utah

Guilmette Fm.

1970

Tschanz, C. M. and Pampeyan, E. H., Geology and
Mineral Deposits of Lincoln County, Nevada:
Nevada. Bur. Mines, Bull. 73. p. 1-187 S(275)
N 5

36, 40-age and corr.

M.-U. Dev.

SE. Nev.

1969

Guilmette Fm. (strat. ext.)

Langenheim, R.L. Jr.; Byrd, W.J.; Lamport,
M.B.; Winter, J.K., Geology of the West
Range and Ely Springs Range., Lincoln
County, Nevada: GSA Abs. with Progs., Cordill.
Sec., pt.-3, Mar. p.33 G(200)
G3a

identified in Silverhorn Dol.

Nev.

[Dev.]

Guilmette Fm.

1971

Hoggan, R.D., Paleocology of the Devonian
Guilmette Formation in Eastern Nevada: GSA
Abs. with Prog., v.3, no.6, Mar.
p. 388

G(200)
G3a

Dev.

E. Nev.

Guilmette Fm./Qtzite Mbr.

1971

Langenheim, R. L. Jr., Brackin, W. B.,
Granath, J. W., & Labotka, T. C., Geology
of the Bristol Pass Region and the Silverhorn
and Fairview Mining Districts, Lincoln County,
Nevada: Wyoming Geol. Assoc., Ear. Sci. Bull.,
v. 4, no. 3, Sept. p. 59-76 G(282)
67(Fig.2) Ea76

59(abs.)-formerly pt. Silverhorn Dol.?

62-Qtzite Mbr.

64

Dev.

SE. Nev.

Guilmette Fm. (300 ft.)

1972

Oversby, Brian, Thrust Sequences in the Windermere Hills
Northeastern Elko County, Nevada: GSA Bull., v. 83,
no. 9, Sept.

G(200)

G29

p. 2677-88

2679 (Fig. 3)

2680

Black Mt. Sequence

M. Dev.

NE. Nev.

Guilmette Fm. (assoc. with new name)

1973

(geog. ext to NV fr. UT)

Oversby, B., New Mississippian Formation in North-
eastern Nevada & Its Possible Significance: AAPG
Bull., v. 57, #9, Sept.
p. 1779-83

G(200)

Am3

under: Tripon Pass Ls. (new, f.p.)

Dev.

Windermere Hills,
NE. NV

Guilmette Fm. (800'-1,000')

1973

Thomson, K. C., Mineral Deposits of the Deep Creek Mountains, Tooele and Juab Counties, Utah: Utah Geol. & Mineral Survey, Bull. #99, June.

p. 1-76

(273)

7

B

lt. blue to dk. gray, weather tan
ls. & dol. w/ss.

M. Dev.

UT

Guilmette Fm. (max. 2115') [here geog. 1975
ext. to NV]

Hoggan, R. D., Paleocology of the Guilmette Formation
in Eastern Nevada and Western Utah: Brigham Young
Univ., Geol. Stud., v. 22, pt. 1, Sept. G(273)

p. 141-197, pl. in pocket B76rs
180-196...meas. secs.
143 & 156 (F. 3)...wide corr.
178...fossil equiv. to Beaverhill Lake Fm.
[Alberta & ND]

ls., dol., ss.

underlies: West Range Ls. or Pilot Sh. (both U. Dev.)

overlies: Simonson Dol. (M. Dev.)

Dey.

w. UT

e. NY

Guilmette Fm. (645 m)

1978

Luke, K.J., Corals of the Devonian Guilmette Formation from the Leppy Range near Wendover, Utah-Nevada: Brigham Young Univ. Geol. Stud. v. 25, pt. 3.

p. 83-98

G(273)

84 (F.1)..location map

B76rs

83..age based on Great Basin coral zones proposed by *Merriam, C.W., '73, USGS PP-799

under: Pilot Sh (U. Dev.)

over: Simonson Dol (M. Dev.)

(Givetian-Frasnian)

M. to U. Dev.

nw. UT

ne. NV

Guilmette Fm

1978

Stewart, J. H. and Carlson, J. E., Geologic Map of Nevada: Prepared by USGS with the Nevada Bureau of Mines and Geology (scale: 1:500,000) [most names are grouped in generalized age categories]

M(275)2
1978s

Dev

NV

Guilmette Fm

1980

Hintze, Lehi H. (compiler), Geologic Map of Utah:
UT Geological & Mineral Survey, scale 1:500,000.

(purpose: to update, since 1963, state use of stratig
names in Utah)

Dev

UT

Guilmette Fm (depos environ)

1984

Smith, S. M., and Bissell, H. J., Carbonate petrology and depositional environments of carbonate buildups in the Devonian Guilmette Formation near White Horse Pass, Elko County, Nevada: Brigham Young Univ, Geology Studies, v. 31, pt. 1, Dec G(273)
p. 117-139 [see also Williams & Bissell, p. 167- B76rs
186, Pequop Mtns, same vol.]

117..open-marine conditions prevailed during major platform subsidence that allowed carbonate bank and interbank pelletal shoals to form; age determined from guide fossils; very thick bedded, packstone is dominant, resting on medium-bedded wackestone & ms w/ interbedded dol platform carbonates

(Givetian-Frasnian)
Mid-Late Dev

c. Goshute Mtns
ne NV

Guilmette Fm (stratig restr)

1985

* Miller, D.M., Geologic Map of the Lucin Quadrangle,
Box Elder County, Utah: UT Geol. and Mineral
Survey, Dept. Natural Resources, Map # 78 (text).
p. 1-10

(273)

M322

p. 3-4 .. part assigned to: Tripson Pass Ls.

or

which was desig "shaly ls mbr" of the
Guilmette Fm by D.M. Blue, 1960 (thesis)

(miss)

map.. see

M(273)2

L963 m

Dev.

nw. UT

*Miller, D.M., and *Schneyer, J.D., Geologic map of the Tecoma Quadrangle, Box Elder County, Utah and Elko County, Nevada: UT Geol and Mineral Survey, Dept Nat Resources, Map 77 (text only) (273)
 p. 1-8 M322
 2..dark-gray, blue-gray, black see also map:
 cliff-forming ls, weathers light-gray to M(273)2
 white; well-bedded or laminated; fossiliferous; T227m
 sed breccia/soft sed slump features common
 unconf. under: Tripon Pass Ls (Early Miss)
 over: Simonson Dol (Early-Mid Dev)

(Givetian-Fammenian)
 Mid-Late Dev

Pilot Range
 nw UT, ne NV