

U. S. DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY

MAP AND CHECKLISTS OF U. S. GEOLOGICAL SURVEY  
JURASSIC AND CRETACEOUS MACROFOSSIL LOCALITIES,  
NORTHERNMOST DIABLO RANGE, CALIFORNIA

BY

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U.S. GEOLOGICAL SURVEY

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## INTRODUCTION

In support of U. S. Geological Survey mapping in the Bay Area region, this macrofossil checklist has been compiled from the U. S. Geological Survey Mesozoic collections from the Diablo Range north of the San Jose 1:100,000 sheet (north of latitude 37°30'). This report is the latest in a series of Open-File Reports pertaining to the Bay Area project, with previous checklists covering USGS Mesozoic localities in the Santa Cruz Mountains and vicinity (Elder and Miller, 1989) and the San Jose 1:100,000 quadrangle (Elder and Miller, 1990). All collections have been either initially identified or reviewed by the authors. This compilation covers but a small portion of the material available for the map sheet, as many other Mesozoic collections from this area are housed at the California Academy of Sciences, where the Stanford University collections also now reside, the University of California, Berkeley, and the Los Angeles County Museum.

In order to facilitate easier reading of the faunal checklists, the localities have been divided into three separate lists based on age. Tables 1 through 3 list the age, taxonomic, and quadrangle abbreviations used in the fossil checklists found in Tables 4 through 6. Table 4 lists the fossil localities and corresponding fossils present in rocks of Late Jurassic (Tithonian) through Valanginian age. Although the only age diagnostic fossil at some localities is *Buchia* sp., which ranges from Oxfordian through Valanginian, there is no evidence of rocks older than Tithonian age in the map area. Table 5 is a checklist for localities of Albian through Coniacian age; no fossil localities are known from the Hauterivian through Aptian Stages in this area. Although a possible *Desmoceras* at locality M6191 may be as old as late Aptian, this ammonite specimen is most likely younger in age. Table 6 lists localities and fossils of Santonian through Maastrichtian age. The Late Jurassic to Valanginian locality M1014 (Plate 1, map number 48) found in a cluster of Maastrichtian map numbers (26, 26, 27) is a float block that was probably derived from a fault sliver of basal Great Valley sequence adjacent to the Tesla fault, which lies immediately to the southwest of these localities. Localities lacking age diagnostic taxa have been placed in the age group with which they most likely belong based on known geology and stratigraphy of the area. Map numbers representing one or more fossil localities are plotted on Plate 1, with the map numbers of each age group designated by a different symbol. Exact locality information is listed in the appendix.

## REFERENCES

- Elder, W.P., and Miller, J.W., 1989, Checklist of Mesozoic macrofossil localities in the Santa Cruz Mountains and vicinity: U. S. Geological Survey Open-File Report 89-543, 8 p., 3 tabs., 1 pl.
- Elder, W.P., and Miller, J.W., 1990, Checklists of Jurassic and Cretaceous macrofauna from U. S. Geological Survey Collections within the San Jose 1:100,000 map sheet, California: U. S. Geological Survey Open-File Report 90-534, 27 p., 5 tabs., 1 pl.

**Table 1. Age abbreviations used in Tables 4 through 7.**

| <b>Abbreviation</b> | <b>Age or Other</b> |
|---------------------|---------------------|
| Cret                | Cretaceous          |
| Maas                | Maastrichtian       |
| Camp                | Campanian           |
| Sant                | Santonian           |
| Con                 | Coniacian           |
| Tur                 | Turonian            |
| Cen                 | Cenomanian          |
| Alb                 | Albian              |
| Apt                 | Aptian              |
| Val                 | Valanginian         |
| Berr                | Berriasian          |
| Jur                 | Jurassic            |
| Tith                | Tithonian           |
| E                   | Early               |
| M                   | Middle              |
| L                   | Late                |
| Prob                | Probably            |

**Table 2. Fossil identification abbreviations used in Tables 4 through 7.**

| <b>Abbreviation</b> | <b>Meaning</b>              |
|---------------------|-----------------------------|
| X                   | Present                     |
| --                  | Absent                      |
| <i>cf.</i>          | Comparable to               |
| <i>aff.</i>         | Affinities with             |
| ?                   | Questionable identification |

**Table 3. Quadrangle abbreviations used in Tables 4 through 7.**

| <b>Abbreviation</b> | <b>Quadrangle Name</b> | <b>Scale</b> |
|---------------------|------------------------|--------------|
| AL                  | Altamont               | 1:24,000     |
| ANS                 | Antioch South          | 1:24,000     |
| BRE                 | Brentwood              | 1:24,000     |
| CDM                 | Cedar Mtn              | 1:24,000     |
| CL                  | Clayton                | 1:24,000     |
| DIA                 | Diablo                 | 1:24,000     |
| DU                  | Dublin                 | 1:24,000     |
| HA                  | Hayward                | 1:24,000     |
| LTC                 | Lone Tree Creek        | 1:24,000     |
| MI                  | Midway                 | 1:24,000     |
| NI                  | Niles                  | 1:24,000     |
| OE                  | Oakland East           | 1:24,000     |
| SOL                 | Solyo                  | 1:24,000     |
| TAS                 | Tassajara              | 1:24,000     |

## APPENDIX

Map Locality Number: 1; USGS Mesozoic Locality: M5101  
Field Identifier: None; Collector: Dorothy Radbruch, 1967;  
BARTD tunnel, Berkeley Hills. Elevation: 800 ft, 244 m;  
Township: 1S; Range: 3W; Projected sec. 7.  
Alameda County, California, Oakland East 1:24,000 quadrangle.

Map Locality Number: 2; USGS Mesozoic Locality: M4002  
Field Identifier: 19/3W-18A1; Collector: Dorothy Radbruch, 1965;  
East end of quarry northeast of Lake Temescal. Elevation: 750 ft, 229 m;  
Township: 1S; Range: 3W; Section: 11; SE/SE extended quarter.  
Alameda County, California, Oakland East 1:24,000 quadrangle.

Map Locality Number: 3; USGS Mesozoic Locality: M945  
Field Identifier: MD-2; Collector: E. H. Pampeyan, 1958;  
Base of Mt. Zion. Elevation: 650 ft, 198 m;  
Township: 1N; Range: 1W; Section: 14; SE/SW quarter.  
Contra Costa County, California, Clayton 1:24,000 quadrangle.

Map Locality Number: 4; USGS Mesozoic Locality: M5605  
Field Identifier: 70-MD-4; Collector: David L. Jones, 1970;  
Back Creek. Elevation: 750 ft, 229 m;  
Township: 1N; Range: 1W; Section: 24; SW/SW quarter.  
Contra Costa County, California, Clayton 1:24,000 quadrangle.

Map Locality Number: 4; USGS Mesozoic Locality: M5606  
Field Identifier: 70-MD-5; Collector: David L. Jones, 1970;  
Back Creek. Elevation: 800 ft, 244 m;  
Township: 1N; Range: 1W; Section: 24; SW/SW quarter.  
Contra Costa County, California, Clayton 1:24,000 quadrangle.

Map Locality Number: 5; USGS Mesozoic Locality: M5602  
Field Identifier: 70-MD-1; Collector: David L. Jones, 1970;  
Donner Canyon. Elevation: 950 ft, 290 m;  
Township: 1N; Range: 1W; Section: 25; Ctr. of N half.  
Contra Costa County, California, Clayton 1:24,000 quadrangle.

Map Locality Number: 5; USGS Mesozoic Locality: M5603  
Field Identifier: 70-MD-2; Collector: David L. Jones, 1970;  
Donner Canyon. Elevation: 950 ft, 290 m;  
Township: 1N; Range: 1W; Section: 25; Ctr. of N half.  
Contra Costa County, California, Clayton 1:24,000 quadrangle.

Map Locality Number: 5; USGS Mesozoic Locality: M5604  
Field Identifier: 70-MD-3; Collector: David L. Jones, 1970;  
Donner Canyon. Elevation: 950 ft, 290 m;  
Township: 1N; Range: 1W; Section: 25; Ctr. of N half.  
Contra Costa County, California, Clayton 1:24,000 quadrangle.

Map Locality Number: 5; USGS Mesozoic Locality: MD-F1  
Field Identifier: MD-F1; Collector: E. H. Pampeyan, 1958;  
Donner Canyon. Elevation: 970 ft, 296 m;  
Township: 1N; Range: 1W; Section: 25; Ctr. of N half.  
Contra Costa County, California, Clayton 1:24,000 quadrangle.

Map Locality Number: 6; USGS Mesozoic Locality: M691  
Field Identifier: 59CL1; Collector: Ivan Colburn, 1959;  
At mine west of Mt. Diablo Mine. Elevation: 1150 ft, 351 m;  
Township: 1N; Range: 1E; Section: 29; SW/NE quarter.  
Contra Costa County, California, Clayton 1:24,000 quadrangle.

Map Locality Number: 6; USGS Mesozoic Locality: M946  
Field Identifier: 59-CL-1; Collector: Ivan Colburn, 1959;  
At mine west of Mt. Diablo Mine. Elevation: 1150 ft, 351 m;  
Township: 1N; Range: 1E; Section: 29; SW/NE quarter.  
Contra Costa County, California, Clayton 1:24,000 quadrangle.

Map Locality Number: 7; USGS Mesozoic Locality: M1553  
Field Identifier: IPC375; Collector: Ivan Colburn, 1959;  
Head of Irish Canyon. Elevation: 1580 ft, 482 m;  
Township: 1N; Range: 1E; Section: 22; NE/NE quarter.  
Contra Costa County, California, Antioch South 1:24,000 quadrangle.

Map Locality Number: 8; USGS Mesozoic Locality: M1552  
Field Identifier: IPC371; Collector: Ivan Colburn, 1959;  
Unimproved road north of Sunshine Camp. Elevation: 1400 ft, 427 m;  
Township: 1N; Range: 1E; Section: 22; NW/NW quarter.  
Contra Costa County, California, Antioch South 1:24,000 quadrangle.

Map Locality Number: 9; USGS Mesozoic Locality: M1163  
Field Identifier: 59-AS-1; Collector: David L. Jones, 1959;  
South of mouth of Curry Canyon. Elevation: 800 ft, 244 m;  
Township: 1S; Range: 1E; Section: 4; SE/NW quarter.  
Contra Costa County, California, Antioch South 1:24,000 quadrangle.

Map Locality Number: 9; USGS Mesozoic Locality: M1554  
Field Identifier: None assigned; Collector: David L. Jones, 1959;  
Float in Curry Canyon. Elevation: 800 ft, 244 m;  
Township: 1S; Range: 1E; Section: 4; N half.  
Contra Costa County, California, Antioch South 1:24,000 quadrangle.

Map Locality Number: 10; USGS Mesozoic Locality: M947  
Field Identifier: IRC382; Collector: Ivan Colburn, 1960;  
West of Marsh Creek Road in unsurveyed area. Elevation: 300 ft, 91 m;  
Township: 1N; Range: 2E; Section: 28; NE/SW extended quarter.  
Contra Costa County, California, Brentwood 1:24,000 quadrangle.

Map Locality Number: 11; USGS Mesozoic Locality: M948  
Field Identifier: IRC847; Collector: Ivan Colburn, 1960;  
Float on stream bottom west of Windy Point. Elevation: 1000 ft, 305 m;  
Township: 1S; Range: 1E; Section: 17; NW/NE quarter.  
Contra Costa County, California, Diablo 1:24,000 quadrangle.

Map Locality Number: 12; USGS Mesozoic Locality: M859  
Field Identifier: None; Collector: Dorothy Radbruch, 1960;  
Intersection of Joaquin Miller Rd. & Skyline Blvd. Elevation: 950 ft, 290 m;  
Township: 1S; Range: 3W; Section: 34; NW proj. sec. quarter.  
Alameda County, California, Oakland East 1:24,000 quadrangle.

Map Locality Number: 13; USGS Mesozoic Locality: M944  
Field Identifier: IRC838; Collector: Ivan Colburn, 1960;  
Riggs Canyon. Elevation: 900 ft, 274 m;  
Township: 1S; Range: 1E; Section: 22; NE/SW quarter.  
Contra Costa County, California, Tassajara 1:24,000 quadrangle.

Map Locality Number: 14; USGS Mesozoic Locality: M1015  
Field Identifier: 25/3W-13K2; Collector: Dorothy Radbruch, 1960;  
South of Sequoyah Country Club. Elevation: 400 ft, 122 m;  
Township: 2S; Range: 3W; SE corner of quadrangle.  
Alameda County, California, Oakland East 1:24,000 quadrangle.

Map Locality Number: 14; USGS Mesozoic Locality: M1016  
Field Identifier: 25/3W-13H2a; Collector: Dorothy Radbruch, 1960;  
South of Sequoyah Country Club. Elevation: 400 ft, 122 m;  
Township: 2S; Range: 3W; SE corner of quadrangle.  
Alameda County, California, Oakland East 1:24,000 quadrangle.

Map Locality Number: 15; USGS Mesozoic Locality: M924  
Field Identifier: 2S/3W-131-4; Collector: Dorothy Radbruch, 1960;  
Golf Links Road. Elevation: 300 ft, 91 m;  
Township: 2S; Range: 3W; SE corner of quadrangle.  
Alameda County, California, Oakland East 1:24,000 quadrangle.

Map Locality Number: 16; USGS Mesozoic Locality: M6186  
Field Identifier: 659; Collector: Whitely, 1973;  
Unimproved dirt rd. S of Hayward Blvd. Elevation: 600 ft, 183 m;  
Township: 3S; Range: 2W; Section: 25; Middle of N line.  
Alameda County, California, Hayward 1:24,000 quadrangle.

Map Locality Number: 17; USGS Mesozoic Locality: M6275  
Field Identifier: 134; Collector: R. Haltenhoff, 1974;  
Between Gold Creek & Tehan Canyon at gravel pit. Elevation: 600 ft, 183 m;  
Township: 3S; Range: 2W; Section: 14; NE quarter.  
Alameda County, California, Dublin 1:24,000 quadrangle.

Map Locality Number: 17; USGS Mesozoic Locality: M6276  
Field Identifier: 135; Collector: R. Haltenhoff, 1974;  
Between Gold Creek & Tehan Canyon at gravel pit. Elevation: 600 ft, 183 m;  
Township: 3S; Range: 2W; Section: 14; NE quarter.  
Alameda County, California, Dublin 1:24,000 quadrangle.

Map Locality Number: 18; USGS Mesozoic Locality: M6493  
Field Identifier: 2AB20; Collector: Peter Brink, 1975;  
Intersection of jeep trails at Tolman Peak. Elevation: 1000 ft, 305 m;  
Township: 4S; Range: 1W; Section: 5; Middle E line.  
Alameda County, California, Niles 1:24,000 quadrangle.

Map Locality Number: 19; USGS Mesozoic Locality: M6492  
Field Identifier: 6AB20; Collector: Peter Brink, 1975;  
Southernmost major tributary of Stonybrook Canyon.  
Latitude: 37° 36.75' N; Longitude: 122° 57.10' W; Elevation: 600 ft, 183 m;  
Township: 4S; Range: 1W; Section: 3; SE/SE quarter.  
Alameda County, California, Niles 1:24,000 quadrangle.

Map Locality Number: 20; USGS Mesozoic Locality: M6562  
Field Identifier: 1729; Collector: James Hill, 1976;  
Gravel pit west of town of Niles. Elevation: 50 ft, 15 m;  
Township: 4S; Range: 1W; Section: 17; SE proj. sec. quarter.  
Alameda County, California, Niles 1:24,000 quadrangle.

Map Locality Number: 21; USGS Mesozoic Locality: 7069  
Field Identifier: 121; Collector: E. L. Ickes, 1910;  
Railroad cut east of Altamont. Elevation: 750 ft, 229 m;  
Township: 2S; Range: 3E; Section: 21; NE/SE quarter.  
Alameda County, California, Tesla 1:62,500 quadrangle.

Map Locality Number: 22; USGS Mesozoic Locality: M6190  
Field Identifier: 77; Collector: R. Haltenhoff, 1973;  
Reservoir at mouth of tributary of Sinbad Creek. Elevation: 1200 ft, 366 m;  
Township: 3S; Range: 1W; Section: 23; SW/NE quarter.  
Alameda County, California, Dublin 1:24,000 quadrangle.

Map Locality Number: 23; USGS Mesozoic Locality: M6189  
Field Identifier: 74; Collector: R. Haltenhoff, 1973;  
East side of Pleasanton Ridge. Elevation: 1420 ft, 433 m;  
Township: 3S; Range: 1W; Section: 25; NW/NE quarter.  
Alameda County, California, Dublin 1:24,000 quadrangle.

Map Locality Number: 24; USGS Mesozoic Locality: 23515  
Field Identifier: f-197; Collector: G. D. Robinson, 1951;  
Hollis Canyon Road 0.13 mi. E of junction with Eden Canyon Road.  
Elevation: 400 ft, 122 m; Township: 3S; Range: 1W.  
Alameda County, California, Hayward 1:24,000 quadrangle.

Map Locality Number: 25; USGS Mesozoic Locality: 7440  
Field Identifier: None assigned; Collector: A. T. Schwennesen, 1911;  
East side of Mitchell Ravine. Elevation: 1250 ft, 381 m;  
Township: 3S; Range: 3E; Section: 31; NW/NW quarter.  
Alameda County, California, Tesla 1:62,500 quadrangle.

Map Locality Number: 26; USGS Mesozoic Locality: 7037  
Field Identifier: 84; Collector: R. W. Pack, 1910;  
East side of Mitchell Ravine. Elevation: 1000 ft, 305 m;  
Township: 3S; Range: 4E; Section: 31; SE/NW quarter.  
Alameda County, California, Tesla 1:62,500 quadrangle.

Map Locality Number: 27; USGS Mesozoic Locality: M7445  
Field Identifier: 78CT522; Collector: Connie Throckmorton, 1978;  
Dry tributary of Corral Hollow.  
Latitude: 37° 37.90' N; Longitude: 121° 33.40' W; Elevation: 800 ft, 244 m;  
Township: 3S; Range: 3E; Section: 32; NW quarter.  
Alameda County, California, Midway 1:24,000 quadrangle.

Map Locality Number: 28; USGS Mesozoic Locality: M6191  
Field Identifier: 83; Collector: R. Haltenhoff, 1973;  
Head of Tehan Canyon. Elevation: 1040 ft, 317 m;  
Township: 3S; Range: 1W; Section: 14; SW/SW quarter.  
Alameda County, California, Dublin 1:24,000 quadrangle.

Map Locality Number: 29; USGS Mesozoic Locality: M6188  
Field Identifier: 38; Collector: R. Haltenhoff, 1973;  
Santos Ranch Road. Elevation: 1080 ft, 329 m;  
Township: 3S; Range: 1W; Section: 24; NE/NW quarter.  
Alameda County, California, Dublin 1:24,000 quadrangle.

Map Locality Number: 30; USGS Mesozoic Locality: 7034  
Field Identifier: 81; Collector: R. W. Pack, 1910;  
West side of small strike valley. Elevation: 800 ft, 244 m;  
Township: 4S; Range: 5E; Section: 24; NW quarter.  
San Joaquin County, California, Solyo 1:24,000 quadrangle.

Map Locality Number: 31; USGS Mesozoic Locality: 7441  
Field Identifier: None assigned; Collector: A. T. Schwennesen, 1911;  
Start of Jeep trail from Hospital Creek. Elevation: 800 ft, 244 m;  
Township: 4S; Range: 5E; Section: 27; NW/SE quarter.  
San Joaquin County, California, Lone Tree Creek 1:24,000 quadrangle.

Map Locality Number: 31; USGS Mesozoic Locality: M1057  
Field Identifier: F-9; Collector: Marshall Maddox, 1960;  
Start of Jeep trail from Hospital Creek. Elevation: 800 ft, 244 m;  
Township: 4S; Range: 5E; Section: 27; NW/SE quarter.  
San Joaquin County, California, Lone Tree Creek 1:24,000 quadrangle.

Map Locality Number: 32; USGS Mesozoic Locality: M1059  
Field Identifier: F-14; Collector: Marshall Maddox, 1960;  
Hospital Creek at mouth of Hospital Canyon. Elevation: 700 ft, 213 m;  
Township: 4S; Range: 5E; Section: 27; SE/SW quarter.  
San Joaquin County, California, Lone Tree Creek 1:24,000 quadrangle.

Map Locality Number: 34; USGS Mesozoic Locality: M1060  
Field Identifier: F-15; Collector: Marshall Maddox, 1960;  
West of windmill in Hospital Creek at county line. Elevation: 600 ft, 183 m;  
Township: 4S; Range: 5E; Section: 25; SW/NW quarter.  
Stanislaus County, California, Solyo 1:24,000 quadrangle.

Map Locality Number: 35; USGS Mesozoic Locality: M1065  
Field Identifier: F-4; Collector: Marshall Maddox, 1960;  
Ridge south of Hospital Creek. Elevation: 1300 ft, 396 m;  
Township: 4S; Range: 5E; Section: 26; SE/SW quarter.  
San Joaquin County, California, Lone Tree Creek 1:24,000 quadrangle.

Map Locality Number: 36; USGS Mesozoic Locality: M1063  
Field Identifier: F-18; Collector: Marshall Maddox, 1960;  
Ridge E of Hospital Canyon and S of Sphur Gulch. Elevation: 900 ft, 274 m;  
Township: 4S; Range: 5E; Section: 34; NW/NW quarter.  
San Joaquin County, California, Lone Tree Creek 1:24,000 quadrangle.

Map Locality Number: 37; USGS Mesozoic Locality: M1034  
Field Identifier: None assigned; Collector: David L. Jones, 1960;  
East side of Hospital Creek. Elevation: 900 ft, 274 m;  
Township: 4S; Range: 5E; Section: 34; SW/NW quarter.  
San Joaquin County, California, Lone Tree Creek 1:24,000 quadrangle.

Map Locality Number: 37; USGS Mesozoic Locality: M1064  
Field Identifier: F-1; Collector: Marshall Maddox, 1960;  
East side of Hospital Creek. Elevation: 900 ft, 274 m;  
Township: 4S; Range: 5E; Section: 34; SW/NW quarter.  
San Joaquin County, California, Lone Tree Creek 1:24,000 quadrangle.

Map Locality Number: 38; USGS Mesozoic Locality: M1062  
Field Identifier: F-17; Collector: Marshall Maddox, 1960;  
Northeast of Cedar Spring Gulch. Elevation: 1550 ft, 473 m;  
Township: 4S; Range: 6E; Section: 31; SE/NW quarter.  
Stanislaus County, California, Solyo 1:24,000 quadrangle.

Map Locality Number: 39; USGS Mesozoic Locality: M1061  
Field Identifier: F-16; Collector: Marshall Maddox, 1960;  
Northeast of Cedar Spring Gulch. Elevation: 1650 ft, 503 m;  
Township: 4S; Range: 6E; Section: 31; SW/NW quarter.  
Stanislaus County, California, Solyo 1:24,000 quadrangle.

Map Locality Number: 40; USGS Mesozoic Locality: M1066  
Field Identifier: F-6; Collector: Marshall Maddox, 1960;  
Ridge northeast of Ingram Creek. Elevation: 1050 ft, 320 m;  
Township: 5S; Range: 6E; Section: 8; NW/NE quarter.  
Stanislaus County, California, Solyo 1:24,000 quadrangle.

Map Locality Number: 41; USGS Mesozoic Locality: M1058  
Field Identifier: F-13; Collector: Marshall Maddox, 1960;  
Small gully on northwest side of Ingram Canyon. Elevation: 400 ft, 122 m;  
Township: 5S; Range: 6E; Section: 3; NE/NE quarter.  
Stanislaus County, California, Solyo 1:24,000 quadrangle.

Map Locality Number: 41; USGS Mesozoic Locality: 7033  
Field Identifier: 80; Collector: E. L. Ickes, 1910;  
North side of Ingram Creek about 1 mi. above mouth.  
Township: 5S; Range: 5E; Section: 4; NW quarter.  
Stanislaus County, California, Solyo 1:24,000 quadrangle.

Map Locality Number: 42; USGS Mesozoic Locality: M6413  
Field Identifier: 74-2; Collector: Jan Bauder, 1974;  
Float from side of hill west of Arroyo Mocho. Elevation: 3200 ft, 976 m;  
Township: 5S; Range: 4E; Section: 6; SW/NE quarter.  
Alameda County, California, Cedar Mtn 1:24,000 quadrangle.

Map Locality Number: 43; USGS Mesozoic Locality: M6453  
Field Identifier: 75-51; Collector: Jan Bauder, 1975;  
Head of gully to Sweet Springs. Elevation: 3100 ft, 945 m;  
Township: 4S; Range: 4E; Section: 31; SE/SW quarter.  
Alameda County, California, Cedar Mtn 1:24,000 quadrangle.

Map Locality Number: 44; USGS Mesozoic Locality: M1551  
Field Identifier: LSJU3357; Collector: David L. Jones, 1957;  
Northeast bank of Arroyo del Valle Creek. Elevation: 745 ft, 227 m;  
Township: 4S; Range: 2E; Section: 11; NW/SE quarter.  
Alameda County, California, Tesla 1:62,500 quadrangle.

Map Locality Number: 45; USGS Mesozoic Locality: SU2735  
Field Identifier: None? LSJU locality 2735; Collector: L. W. Funkhouser, 1948;  
Northeast bank of Arroyo del Valle Creek. Elevation: 745 ft, 227 m;  
Township: 4S; Range: 2E; Section: 11; NW/SE quarter.  
Alameda County, California, Tesla 1:62,500 quadrangle.

Map Locality Number: 46; USGS Mesozoic Locality: 7068  
Field Identifier: 119; Collector: R. W. Pack, 1910;  
South of northerly turn of Patterson Pass Road. Elevation: 1500 ft, 457 m;  
Township: 3S; Range: 3E; Section: 13; SE/NE quarter.  
Alameda County, California, Tesla 1:62,500 quadrangle.

Map Locality Number: 47; USGS Mesozoic Locality: 7038  
Field Identifier: 85; Collector: R. W. Pack, 1910;  
Crest of divide between Arroyo Seco and Corral Hollow. Elevation: 1600 ft, 488 m;  
Township: 3S; Range: 3E; Section: 26; Center.  
Alameda County, California, Tesla 1:62,500 quadrangle.

Map Locality Number: 48; USGS Mesozoic Locality: M1014  
Field Identifier: None assigned; Collector: Dana Clark, 1960;  
Float from tributary of Mitchell Ravine. Elevation: 1000 ft, 305 m;  
Township: 3S; Range: 4E; Section: 31; SW/NW quarter.  
San Joaquin County, California, Tesla 1:62,500 quadrangle.

Map Locality Number: 49; USGS Mesozoic Locality: M8765  
Field Identifier: 18; Collector: Unknown;  
Crest of ridge east of Hospital Creek. Elevation: 1720 ft, 520 m;  
Township: 4S; Range: 5E; Section: 33; Ctr N line NW/SE quarter.  
San Joaquin County, California, Lone Tree Creek 1:24000 quadrangle.

Map Locality Number: 50; USGS Mesozoic Locality: 7035  
Field Identifier: 82; Collector: R. W. Pack, 1910;  
Cliff on S side of Hospital Creek. Elevation: 500 ft, 152 m;  
Township: 4S; Range: 5E; Section: 24; Ctr W half.  
San Joaquin County, California, Solyo 1:24,000 quadrangle.

Map Locality Number: 51; USGS Mesozoic Locality: 7036  
Field Identifier: 83; Collector: R. W. Pack, 1910;  
About 1/2 mi. NE of Elder Spring. Elevation: 1200 ft, 366 m;  
Township: 4S; Range: 5E; Section: 5; Ctr W line.  
San Joaquin County, California, Lone Tree Creek 1:24,000 quadrangle.

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TABLE 4

| Map number | Locality identifier | Quadrangle abbreviation | Age              | <i>Buchia</i> sp. | <i>Buchia crassicoilis solida</i> (Lahusen) | <i>Buchia elderensis</i> (Anderson) | <i>Buchia piochii</i> (Gabb) | <i>Buchia uncioides</i> (Pavlov) | Ammonite indet. | <i>Neocomites</i> sp. | <i>Phylloceras? contrarium</i> Imlay and Jones | <i>Serpula</i> sp. |
|------------|---------------------|-------------------------|------------------|-------------------|---|-------------------------------------|------------------------------|----------------------------------|-----------------|-----------------------|--|--------------------|
| 1          | M5101               | OE                      | Cret?            | x                 |   |                                     |                              |                                  | x               |                       |  | x                  |
| 2          | M4002               | OE                      | L Jur or E Cret  |                   |   |                                     |                              |                                  |                 |                       |  |                    |
| 3          | M945                | CL                      | Tiuh             |                   |   | x                                   | x                            |                                  |                 |                       | x  |                    |
| 4          | M5605               | CL                      | Tiuh             |                   |   | x                                   | x                            |                                  |                 |                       |  |                    |
| 4          | M5606               | CL                      | Tiuh             |                   |   |                                     |                              |                                  |                 |                       |  |                    |
| 5          | M5602               | CL                      | Berr             |                   |   |                                     |                              | x                                |                 |                       |  |                    |
| 5          | M5603               | CL                      | Tiuh             |                   |   |                                     | x                            |                                  |                 |                       |  |                    |
| 5          | M5604               | CL                      | Tiuh             |                   |   | x                                   |                              |                                  | x               |                       |  |                    |
| 5          | MD-F1               | CL                      | Tiuh             |                   |   |                                     | x                            |                                  |                 |                       |  |                    |
| 6          | M691                | CL                      | Berr             |                   |   |                                     |                              | x                                |                 |                       |  |                    |
| 6          | M946                | CL                      | Berr             |                   |   |                                     |                              | x                                |                 |                       |  |                    |
| 12         | M859                | OE                      | Tiuh             |                   |   |                                     | x                            |                                  |                 |                       |  |                    |
| 14         | M1015               | OE                      | Tiuh             |                   |   |                                     | x                            |                                  |                 |                       |  |                    |
| 14         | M1016               | OE                      | Val              |                   | x   |                                     |                              |                                  |                 |                       |  |                    |
| 15         | M924                | OE                      | Tiuh?            |                   |   |                                     | ?                            |                                  |                 |                       |  |                    |
| 16         | M6186               | HA                      | Berr - Val       |                   |   |                                     |                              |                                  |                 |                       |  |                    |
| 20         | M6562               | NI                      | L Jur or E Cret? | ?                 |   |                                     |                              |                                  |                 | x                     |  |                    |
| 48         | M1014               | MI                      | L Jur or E Cret  | x                 |   |                                     |                              |                                  | x               |                       |  |                    |

Table 4. Taxonomic checklist for Late Jurassic through Valanginian macrofossil localities in the northernmost Diablo Range.

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