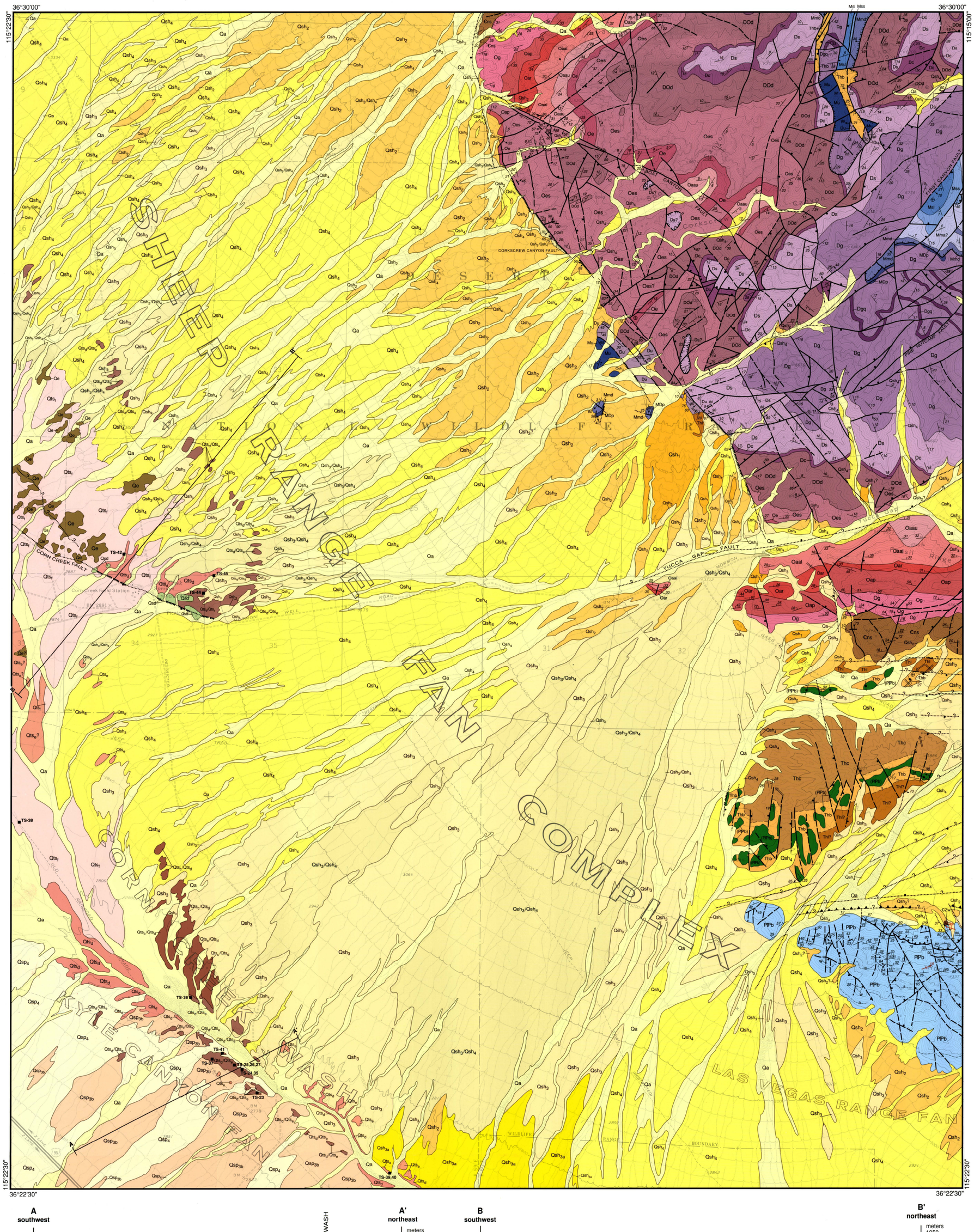
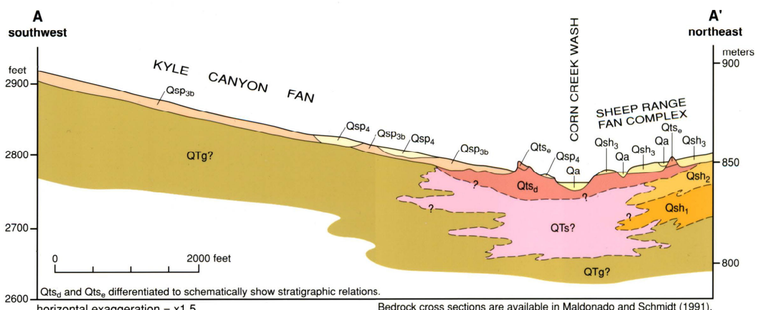
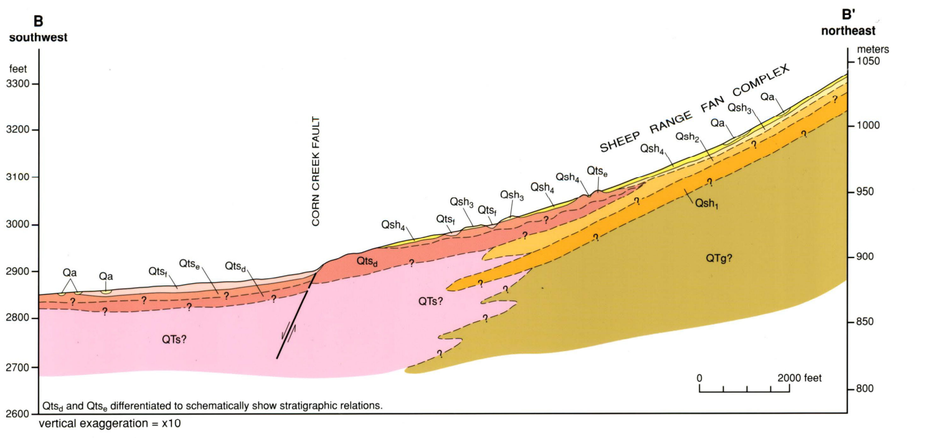
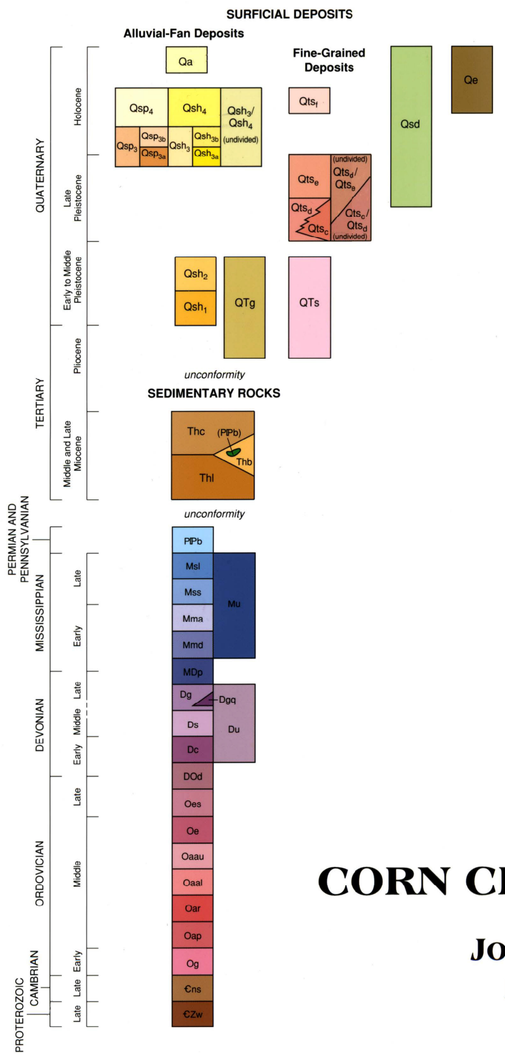




Bedrock cross sections are available in Maldonado and Schmidt (1991).





SURFICIAL DEPOSITS

Qsd **Spring mound deposits** Light- to medium-gray loose silt and hard mud; light-brown eolian sand occurring in mounds and caldrons. Contains dark-gray peat beds (black mats) as much as 15 cm thick. Locally contains 15- to 30-cm-thick spring tufa layers composed of carbonate-cemented mud and silt nodules. Ranges from late Pleistocene to modern; radiocarbon ages of latest Holocene (1,000 yr BP) and Qts_e age were reported in the Tule Springs Park Quadrangle (Bell and others, 1998), and Haynes (1967) obtained a date of 580±100 yr BP from a spring mound at Corn Creek Springs.

Qe **Eolian deposits** Well sorted eolian sand deposits, typically forming stabilized, vegetated dunes up to 7 m high. Overlies and interfingers with Qts_f. Minimal to no soil development. Middle to late Holocene age.

Alluvial-Fan Deposits

Qa **Alluvium of active washes** Dominantly pebble-cobble sandy gravel with layers of reworked silt from Qts units. Anastomosing bar-and-channel network; poorly to very poorly sorted; poorly to moderately stratified; nonindurated. No soil development. Subject to intermittent flooding. Exposed thicknesses less than 3 m.

Alluvial-fan deposits of the Spring Mountains (Qsp)

Coarse-grained alluvial-fan deposits originating from principal drainages along the eastern side of the Spring Mountains. In this quadrangle, includes poorly to moderately sorted, rounded to subangular, sandy pebble-cobble gravels of the Kyle Canyon alluvial fan. Derived from Paleozoic rocks to the west; the Kyle Canyon fan is dominated by Pennsylvanian Bird Springs Formation, but may also contain Cambrian to Mississippian assemblages. Clast compositions are more than 90% carbonate rocks with the remainder consisting of reddish to yellowish calcareous siltstones and sandstones and rare white quartzites. Mapped deposits are Holocene age in this quadrangle, but range from Pliocene(?) through Holocene in the adjacent Tule Springs Park Quadrangle.

Qsp_4 Fan and terrace remnants characterized by subdued to nearly fully smoothed bar-and-channel surface morphology, incipient to moderately packed desert pavement, weak to moderate rock varnish, and slight etching of surface carbonate clasts. Unit is generally inset 1-2 m below adjacent older Qsp_3 surfaces. Soils typically contain a 5-cm Av and a 35-cm Bk horizon exhibiting stage I carbonate development (1-mm-thick clast coatings). Contains undifferentiated areas of Qa.

Qsp_3 **Qsp_{3b}** **Qsp_{3a}** Fan and terrace remnants overlying and inset into Qts_a and older deposits. Undivided Qsp_3 is divided into older (Qsp_{3a}) and younger (Qsp_{3b}) units south of quadrangle. Qsp_{3b} is mapped in this quadrangle. Characterized by well-developed, tightly packed desert pavement, dark rock varnish, and moderately to strongly etched surface carbonate clasts. Unit is undifferentiated, but locally consists of multiple topographically inset levels and two subunits may be distinguished based on slight soil and surficial weathering differences. Unit typically contains a soil exhibiting a 5-cm Av horizon, 20-30 cm prominently reddened (7.5 YR 5/6 to 7.5 YR 6/4) Bw to Btj horizon, and 30+ cm Bk horizon (stage II to II+ with 2-10 mm thick clast rinds). Surficial clasts exhibit dark rock varnish, moderate etching, and are tightly packed in a desert pavement. Latest Pleistocene to early Holocene age. South of the quadrangle near Tule Springs Park, the older Qsp_3 subunit overlies organic beds radiocarbon dated at 11,000-12,000 yr BP (Bell and others, 1998); in this quadrangle, upper part of unit is younger than 10,000 yr based on ages from Qts_e (table 1).

Alluvial-fan deposits of the Las Vegas and Sheep Ranges (Qsh)

Coarse-grained alluvial-fan deposits originating from principal drainages in the Las Vegas and Sheep Ranges. In this quadrangle, includes poorly sorted, subangular to subrounded, sandy pebble-cobble gravels principally derived from Paleozoic rocks to the east. Clast lithologies of the Sheep Range fan complex are similar to Qsp with more than 90% carbonate rocks and the remainder consisting of reddish to yellowish calcareous siltstones and sandstones and here, commonly white quartzites. Lithologies of the Las Vegas Range fan are distinctly different and may be intermixed with Sheep Range lithologies in the southeast part of the quadrangle: 60% carbonate rocks and 40% brownish to yellowish calcareous siltstones and sandstones, dark red quartzites, and locally scattered aplitic and granitic rocks.

Qsh_4 Fan and terrace remnants characterized by subdued bar-and-channel surface morphology, incipient desert pavement, weak rock varnish, and slight etching of surface carbonate clasts. Equivalent to Qsp_4. Soils are typically A-C profiles with a 5-cm Av and a 35-cm Bk horizon exhibiting stage I carbonate development (1-mm-thick clast coatings). Mid- to late Holocene age. Contains areas of undifferentiated Qa.

Qsh_3 **Qsh_{3b}** **Qsh_{3a}** Fan and terrace remnants overlying and inset into Qts_a and older paleospring deposits; equivalent to Qsp_3. Undivided Qsh_3 is divided into older (Qsh_{3a}) and younger (Qsh_{3b}) units; only Qsh_{3a} mapped separately in this quadrangle. Characterized by well-developed, tightly packed desert pavement, dark rock varnish, and moderately to strongly etched surface carbonate clasts. Soil typically contains 5-cm-thick Av horizon, 20-30 cm prominently reddened (7.5 YR 5/6 to 7.5 YR 6/6) Bw horizon, and 30+ cm Bk horizon (stage II with 2-3 mm thick clast rinds). Together with Qsh_4 forms the principal part of the Sheep Range alluvial-fan surface. Included as upper part of unit Qts_a by Haynes (1967). Latest Pleistocene to early Holocene age; postdates 12,140±350 yr BP age on Qts_e (TS-40, table 1).

Qsh_2 Fan remnants characterized by well-developed, tightly packed desert pavement, dark rock varnish, and very strongly etched surface carbonate clasts. Typically well-dissected; near the mouth of Yucca Gap, unit occurs as flat-topped interfluvial remnants. Lighter in tone than Qsp_3 on aerial photographs due to more abundant calcrete clast litter on surface. Unit typically contains a soil exhibiting a 5-cm Av horizon, 20-40 cm prominently reddened (7.5 YR 6/4 to 7.5 YR 6/6) and well structured Bt horizon, and 100-150 cm Bkm horizon (stage III with a few thin laminae). Upper soil horizons erosionally stripped in some areas.

Qsh_1 Fan remnants characterized by deep dissection and discordant rounded remnants (ballenas), well-developed, tightly packed pavement dominated by whitish calcrete clast litter, and deeply etched surface carbonate clasts. Outcrops of massively cemented calcretes common; whitish tone on aerial photographs due to abundant calcrete clasts. Underlies and crops out in younger fan deposits at mouth of Yucca Gap. Unit typically contains a soil exhibiting a 3- to 5-m thick, massively cemented calcrete (stage V), with upper soil horizons erosionally stripped. Unit is commonly carbonate-cemented to depths of several meters.

QTg **Older alluvial-fan deposits, undivided** (in cross section only). Pebble to boulder gravel deposits and cemented fanglomerates. On the Sheep Range alluvial fan unit underlies Qsh_1 and Qsh_2; on the Kyle Canyon alluvial fan unit includes similar buried Qsp_1 and Qsp_2 deposits (Bell and others, 1998). Unit is coarse-grained facies of QTs.

Fine-Grained Deposits

Fine-grained alluvium of Tule Springs (Qts)

Paleospring, paludal, and fluvial deposits comprising extensive fine-grained valley-bottom fill in upper Las Vegas Valley; related to extensive groundwater discharge during glacial/pluvial periods (Quade, 1983, 1986; Quade and others, 1995). Originally believed to be largely lacustrine in origin and mapped as the Las Vegas Formation (Longwell and others, 1965; Haynes, 1967). In the Corn Creek Springs Quadrangle, deposits are correlated with Qts in the adjacent Tule Springs Park Quadrangle (Bell and others, 1998) and divided into four members (units C, D, E, and F) after Haynes (1967) and Quade (1983).

Qts_f **Unit F** Light-brown to gray sand, fine sandy silt, and mud largely reworked from older paleospring deposits; massive to thin-bedded. Deposits as much as 5 m thick are erosionally inset into older deposits along axis of upper Las Vegas Wash/lower Corn Creek Wash where they contain several 2- to 5-cm-thick organic (black mat) horizons. Mid- to late Holocene. Radiocarbon ages of 4,000-6,000 yr BP are reported by Haynes (1967) and Quade (1986) from the Corn Creek Springs area; ages of 1,170±80 and 6,310±105 yr BP were obtained in this study (table 1).

Qts_e **Unit E** Light-brown to yellowish-brown silt, fine sandy silt, and light-gray to gray organic mud; locally light-green clay. Typically 3-5 m thick, consisting of paleospring deposits and reworked Qts_c and Qts_d deposits; occurs in prominent channel fills in lower part of unit and as evenly bedded layers in upper part of unit. Overlies eroded Qts_d deposits and is overlain by Qsp_3 and Qsh_3 alluvial-fan deposits included in unit E by Haynes (1967). Thin-bedded (15-30 cm) to massive; commonly loose, fissile. No diagnostic soil distinguished, although indurated spring-related calcretes 15-30 cm thick occur locally. Contains numerous gray to dark-gray peat, charcoal, and organic-rich horizons (black mats) 10-15 cm thick; 1-m-thick organic mud zones with freshwater fossils, including small (1-3 mm) clams, gastropods, and snails and locally large (2 cm) snails, are common. In nearby areas, large vertebrate fossils include bison, mammoth, horse, deer, and camel (Mawby, 1967). Late Wisconsin to early Holocene age. Radiocarbon dated at 10,000-14,000 yr BP in this quadrangle (Haynes, 1967; Quade and others, 1998). In this study, radiocarbon ages of 9,300-12,900 yr BP were obtained (table 1).

Qts_d **Unit D** Typically light-gray to gray organic mud, but also includes very light-gray, light-brown, light-yellowish-brown, and light-green mud, silt, fine sandy silt, fine sand, and locally clay. Interbeds and lenses of well-sorted, cross-bedded, pebble-cobble gravel are common in Qts_d deposits exposed in deep cuts along Las Vegas Wash at the southern edge of the map. Exposed thickness is typically 3-4 m with a maximum of 8 m in deep wash cuts. Generally consists of uniformly massive to thick-bedded, flat-lying beds of hard mud dipping gently toward axis of valley; where consisting predominantly of silts and fine sands, the unit is thinly laminated and locally fissile. Unit is commonly characterized by a prominent 30- to 50-cm-thick cap of massive, cemented calcium carbonate (calcrete), but most exposures in the quadrangle are eroded and the cap is poorly preserved. Dark-gray mud layers contain 5- to 15-cm-thick layers of peat, disseminated charcoal, large mammal bones, and clams, gastropods, and snails similar to those in Qts_e. Distinguished from Qts_e deposits by presence of calcrete horizon and erosional unconformity separating the two units. Late Wisconsin age. Radiocarbon dated in the Tule Springs Park Quadrangle and other nearby areas at 14,000 to >30,000 yr BP (Haynes, 1967; Quade and others, 1995; Bell and others, 1998). Radiocarbon ages between 24,830±4,690 and 34,370±420 yr BP were obtained in this study (table 1).

Qts_c **Unit C** (mapped as undivided unit with Qts_d) Typically light-brown to brown mud; locally reddish- to yellowish-brown mud and clay. Exposed thickness is 3-5 m. Massive to thick (30-60 cm) bedded. Very hard in exposed outcrop. Fossil-poor. As mapped by Haynes (1967) in the Tule Springs Park Quadrangle, unit underlies most outcrops of Qts_d with the contact marked by a disconformity locally exhibiting a weakly developed carbonate (Bk) soil and occasionally carbonate nodules. Mapping in the main and tributary washes several kilometers south of the quadrangle, however, shows fossil-poor, brown Qts_c deposits grading laterally into fossiliferous, gray Qts_d deposits, indicating that the two units are similar in age.

QTs **Older fine-grained sediments, undivided** (in cross section only). Light-colored silt, fine sandy silt, mud, pebbly sand, and interstratified pebble-cobble gravel. Moderately to well cemented; contains multiple layers and lenses of strongly cemented calcrete. Upper part includes the Tule Springs units A and B of Haynes (1967). Forms a basin-fill sequence in upper Las Vegas Valley more than 250 m thick based on well log data south of quadrangle near Tule Springs Park.

SEDIMENTARY ROCKS

Horse Spring(?) Formation

Unit as revised by Bohannon (1984); in map area, these rocks were informally named the "Gass Peak formation" by Deibert (1989; Guth and others, 1988). Divided into conglomerate, breccia, and lacustrine rock members.

Thc **Conglomerate member** Gray to brownish-gray, poorly sorted, massive to vaguely thick-bedded, coarse conglomerate; moderately consolidated. Thick lower part contains matrix-supported boulders as much as 3 m across; thin upper part is better sorted and contains bedded, silty, cobble-pebble conglomerate. Detritus derived from local Late Proterozoic and Paleozoic sedimentary rocks. Includes a few thin beds of fluvially reworked white air-fall tuff that in most places contains large amounts of detrital gravel. Depositional top not exposed; much of upper part probably removed by erosion. Minimum exposed thickness is about 100 m, but member is probably thicker than 200 m.

(PP)b Thb **Breccia member** Large shattered and brecciated slide blocks enclosed in lacustrine beds and conglomerate similar to those of the lacustrine rock member. The slide blocks, as much as 500 m across, were derived from Paleozoic formations in adjacent range fronts. Upper and lower contacts of member arbitrarily marked to include slide blocks. Thickness as much as 125 m or more. Slide blocks of Bird Spring Formation (PP)b are shown on map in bright-green.

Thl **Lacustrine rock member** White and subordinate variegated red, yellow, and brown, laminated to thick-bedded, tuffaceous claystone and siltstone representing shallow-lake deposits; in places contains sandstone and subrounded pebble-and-cobble conglomerate composed of upper Paleozoic clasts not derived from adjacent ranges. South of Fossil Ridge, this thick, fluvial conglomerate is composed of subrounded clasts presumably derived from Devonian to Permian rocks formerly exposed somewhere north of Fossil Ridge. Some lakebeds are calcareous and gypsiferous; lakebeds contain sparse fossil plant debris, silicified wood fragments, mollusk shells, and ostracods. Subordinate thin limestone beds have algal-mat structure; limestone probably precipitated from warm groundwater from nearby springs. Also includes air-fall-tuff beds; some beds less than 1 m thick composed of light-gray siliceous glass shards, and beds as thick as 10 m composed of white, biotite-bearing pumice lapilli and ash. K-Ar biotite ages range from 16 to 12 Ma (Guth and others, 1988; Deibert, 1989). Base not exposed; exposed thickness about 200 m.

PPb **Bird Spring Formation** Medium- to dark-gray and yellowish-brown, thin- to thick-bedded limestone, silty limestone, and cherty limestone; contains nodular and thin- to thick-bedded chert. Locally fossiliferous; crinoid debris abundant. Unit forms alternating cliffs and slopes. Traces of bedding planes labeled a and w within the Bird Spring Formation on south slope of Castle Rock denote stratigraphic markers taken from aerial photograph. Unit, in places, is intensely brecciated adjacent to Gass Peak thrust fault. Top not exposed in map area, but Ebanks (1965) suggested exposed part of formation is about 1,700 m thick in Gass Peak area.

Siltstone and cherty limestone unit

Siltstone predominates over cherty limestone. Probably underlies Indian Springs Formation of Guth (1980, 1986) as mapped on west side of Sheep Range where the siltstone and cherty limestone unit is not recognized; "Indian Springs Formation" of Guth probably includes both the Indian Springs Formation and Chainman Shale of Webster(1969) according to A. L. Titus (written commun., 1989). East of Gass Peak thrust fault, the siltstone and cherty limestone unit may be equivalent to the siltstone member of the lower Chainman Shale at Kane Springs Wash (Duley, 1957) and may be age equivalent to the Bullion Member of the Monte Cristo Formation at Arrow Canyon. Regionally, to the north and northeast, the unit may correlate with the Peers Spring Formation (as restricted by Langenheim, 1962) of the Pahranagat Range (Reso, 1963) and with the Needle Siltstone Member of the Chainman Shale of eastern Nevada (Sandberg and others, 1980). To the west, the unit may correlate with the Perdido Formation (Langenheim and Tischler, 1960).

Msl **Cherty limestone** Medium-gray, crinoidal limestone rhythmically interbedded with dark-brown-weathering chert in beds 15 cm thick. Forms a cliff. May be tongue of Bullion Member of Monte Cristo Limestone. Top is eroded; minimum thickness about 105 m.

Mss **Siltstone** Tan to yellowish-brown, platy-weathering siltstone and calcareous siltstone containing sparse thin interbeds of gray limestone; uniformly thin bedded, 2- to 6-cm-thick beds; mostly poorly exposed, forms slope. Section contains two ledges, several meters thick, of thick-bedded, dark-gray limestone and black chert. Estimated thickness 90 m.

Monte Cristo Limestone

Correlative with the Joana Limestone as mapped by Guth (1980, 1986) in adjacent area to north. Divided into Anchor Limestone and Dawn Limestone Members.

Mma **Anchor Limestone Member** Medium-dark-gray, thin-bedded, cliff-forming limestone containing abundant chert nodules and bedded chert. Contains abundant crinoids and brachiopods; corals are common. Basal contact is gradational. Thickness about 220 m.

Mmd **Dawn Limestone Member** Medium-dark-gray, thick-bedded to massive, cliff-forming limestone containing sparse chert nodules. Crinoids are abundant; brachiopods and corals are common. Thickness about 60 m.

Mu **Siltstone and cherty limestone unit and Monte Cristo Limestone, undivided** Unit mapped in southwestern part of Sheep Range and in Long Valley area.

MDp **Pilot Shale** Pale-red, laminated to thin-bedded, slope-forming shale; lower part includes pinkish-gray quartzite that contains some chert clasts. Shale is commonly internally folded, and quartzite is brecciated along a bedding-plane fault; unit is tectonically thinned, and locally eliminated beneath a bedding-plane fault, in places juxtaposing overlying Dawn Limestone Member on underlying Guilmette Formation. Thickness about 15 m.

Dg **Guilmette Formation** Alternatively light- to dark-gray, thin-bedded to massive, cliff-forming limestone and dolomite. Contains several conspicuous thin quartzite beds (unit Dgq) in upper part of unit. Uppermost part is yellowish-gray, silty limestone; basal part is grayish-yellow, slope-forming silty dolomite. Contains stromatoporoids in thin zones in lower part. Correlative with the Devils Gate Limestone as mapped by Guth (1980) in adjacent area to north. Thickness about 490 m.

Dgq **Quartzite** White to pinkish-gray, slope-forming quartzite. Thickness up to 25 m.

Ds **Simonson Dolomite** Alternating medium-light-gray and dark-gray, massive dolomite and dolomitic limestone; contains brachiopods and a *Stringocephalus*-bearing bed in uppermost part. Strata form cliffs above and below a slope in middle part of formation. Basal part of formation is composed of moderate-red-brown- to white-weathering quartzite beds interbedded with dolomite; this basal part was mapped in adjacent area to north by Guth (1980) as the Oxyoke Canyon Sandstone Member of the now-abandoned Nevada Formation (Hose and others, 1982) and may also be correlative with Osmond's (1954) sandy member of the Sevy Dolomite. Simonson Dolomite in map area is correlative with all units (except the lowest member) of the Nevada Formation as mapped by Guth (1980) in adjacent area to north. Thickness about 190 m.

Dc **Cherty argillaceous rocks** Light-gray to light-olive-gray, silty, thin-bedded, slope-forming dolomite containing abundant chert; basal part weathers yellowish orange and olive. Probably correlative with Osmond's (1954) "cherty argillaceous member of the Sevy Dolomite," but F. G. Poole (written commun., 1986) suggested that member is not part of the Sevy Dolomite. In adjacent area to north, Guth (1980) mapped these strata as the Beacon Peak Dolomite Member of the now-abandoned Nevada Formation. Thickness about 30 m.

Du **Guilmette Formation, Simonson Dolomite, and cherty argillaceous rocks, undivided** Unit mapped in southwestern part of Sheep Range.

DOd **Dolomite** Unit consists of an upper light-gray dolomite, a middle medium-dark-gray cherty dolomite, and a lower light-gray dolomite that is silty at its base. This sequence is overlain in some areas by a medium-dark-gray, thin-bedded, cherty zone and an uppermost light-gray dolomite. Upper and middle part of unit probably correlative with part of the Sevy Dolomite. Most of lower part of unit correlative with the Laketown Dolomite, except the basal part which may be equivalent to the uppermost part of the Ely Springs Dolomite (F. G. Poole, written commun., 1987). Thickness about 280 m.

Oes **Ely Springs Dolomite** Dark-gray to black, massive cliff-forming dolomite; commonly mottled and fetid; chert nodules common in lower part. Thickness about 280 m.

Oe **Eureka Quartzite** White to brown, vitreous, thin-bedded to massive, cliff-forming quartzite. Thickness about 80 m.

Pogonip Group, Antelope Valley Limestone

Divided into upper and lower parts of Aysees Member, Ranger Mountains Member, and Paiute Ridge Member (Byers and others, 1961).

Oaau **Upper part of Aysees Member** Light-gray to yellowish-gray, slope-forming dolomite interbedded with seven limy siltstone beds that weather yellowish orange. Thickness about 110 m.

Oaal **Lower part of Aysees Member** Medium-gray, massive, cliff-forming dolomite; contains some chert nodules, abundant algal pisolites (oncoids), and large gastropods in upper part. Thickness about 110 m.

Oar **Ranger Mountains Member** Light-gray to moderate-reddish-orange, laminated to thin-bedded, slope-forming silty limestone and silty dolomite; commonly mottled. Basal part is silty limestone that weathers yellowish orange. Thickness about 145 m.

Oap **Paiute Ridge Member** Silty limestone and silty dolomite; chert nodules common. Upper part is medium to light gray and forms a slope near its base. Lower part is medium and dark gray to medium light gray and has basal part composed of silty limestone that weathers to a conspicuous yellowish-orange slope; locally, basal part contains a limy shale approximately 1 m thick that may be correlative with part of the Ninemile Formation (Ross, 1964). Thickness about 125 m.

Og **Goodwin Limestone** Medium-dark-gray, massive, cliff-forming dolomite; contains some chert nodules. Basal part is medium-dark-gray, thin-bedded, cherty, silty dolomite that weathers yellowish orange and forms a slope. Thickness about 220 m.

Nopah Formation

Divided elsewhere into two units: (1) the Smoky Member and (2) the Halfpint and Dunderberg Shale Members, undivided (Barnes and Christiansen, 1967). Only Smoky Member crops out in this quadrangle.

Cns **Smoky Member** Black, grayish-black, and light-gray, massive to thin-bedded, cliff-forming dolomite; characterized by alternating thick black and white bands on cliff faces; uppermost part of unit is grayish-black, thin-bedded dolomite containing abundant chert. Thickness about 300 m.

CZw **Wood Canyon Formation** Intercalated maroon, purple, brown, and green, thin-bedded, slope-forming siltstone, shale, sandstone, quartzite, and some dolomite.

SYMBOLS

Contact Dashed where inferred or approximately located due to poor exposures, dotted where concealed.

Normal fault Dashed where inferred or approximately located due to poor exposures; dotted where concealed; buttress contact where dotted combined with solid and dashed; queried where uncertain. Short arrow shows direction and amount of dip; long arrow shows trend and plunge of striae on fault surface; opposed arrows indicate relative direction of strike-slip movement; ball on downthrown side.

Thrust and superposed normal fault Dotted where concealed; queried where uncertain; teeth on upper plate. Arrow indicates direction and amount of dip; ball on downthrown side.

Detachment fault (late Tertiary) Low-angle normal fault; dashed where approximately located; queried where uncertain. Tics on upper plate. Arrow indicates direction and amount of dip.

Bedding-plane fault (late Tertiary) Tics on overlying strata.

Traces of bedding planes Traces identified on aerial photograph.

Strike and dip of bedding

Inclined — Vertical — Horizontal

Minor folds

Multiple folds, showing direction and amount of plunge of axis.

Syncline, showing direction and amount of plunge of axis.

Sediment transport directions

Direction measured–Determined from cross-beds, ripple marks, and inferred beta axis of slide blocks.

Single vein site–Shows strike and vertical attitude.

Multiple vein site–Attitudes are schematic.

^{14}C sample location for this study

TS-41

Table 1. Radiocarbon dates from Corn Creek Springs Quadrangle (this study)

Sample no.	Unit	Material dated	^{14}C age (yr BP)	Lab no.	Calibrated age** (yr ±1σ)
TS-21	Qts_e	Organic mud	10,100±170	GX-23083	11,678 +444 -670
TS-23	Qts_d	Large snails	24,830±4,690	GX-23084	***
TS-24	Qts_e	Organic mud	12,120±410	GX-23085	14,139 +575 -497
TS-25	Qts_e	Organic mud	12,970±730	GX-23086	15,389 +1,039 -1,106
TS-26	Qts_e	Organic mud	9,920±280	GX-23087	11,006 +972 -114
TS-27	Qts_e	Organic mud	10,230±390	GX-23088	12,105 +531 -1029
TS-35	Qts_e	Organic mud/disseminated charcoal	12,670±510	GX-23073	14,905 +817 -727
TS-36	Qts_d	Small snails	28,070±290	GX-23992*	***
TS-37	Qts_e	Charcoal	12,650±180	GX-23993	14,874 +324 -631
TS-38	Qts_f	Disseminated charcoal, organic mud	1,170±80	GX-23994	1,064 +107 -93
TS-39	Qts_d	Disseminated carbonized wood, organic mud	19,290±2,350	GX-24249	***
TS-40	Qts_e	Disseminated charcoal, organic mud	12,140±350	GX-24250	14,164 +494 -433
TS-41	Qts_d	Small snails	32,840±820	GX-24251*	***
TS-42	Qts_f	Detrital charcoal, carbonized wood	6,310 ±105	GX-24252	7,208 +72 -170
TS-44	Qts_e	Organic mud	9,940±180	GX-24253	11,065 +936 -145
TS-45	Qts_d	Small shells: organic mud	34,370±420	GX-24481*	***

* AMS date
** Ages calculated from Stuiver and Reimer (1993)
*** Beyond maximum calibration range

Scale 1:24,000

0 0.5 1 kilometer

0 0.5 1 mile

0 1000 2000 3000 4000 5000 feet

CONTOUR INTERVAL 40 FEET

Base map: U.S. Geological Survey
Corn Creek Springs 7.5' Quadrangle, 1974

Field work done in 1998.

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GEOLOGIC MAP OF THE CORN CREEK SPRINGS QUADRANGLE, NEVADA

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Florian Maldonado, and Dwight L. Schmidt

1999

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