

Part F6—Plates F6-1 to F6-3 Series. Land-Surface Photographs of Representative Hydrostratigraphic Units (HSUs) and Lithofacies Assemblages (LFAs) in Post-Santa Fe Group Basin- and Valley-Fill Deposits

Plates F6-1a to F6-1f (Slides 114-119). Post-SFG Hydrostratigraphic Units and Lithofacies Assemblages in the Southern Jornada Basin

PL. F6-1a (USDA-SCS; 6/1963). Exposure of Middle Pleistocene arroyo-channel gravel (HSU-VAO, LFA 6) in N bank of Fillmore Arroyo. The deposit is capped with a thin stage-IV petrocalcic soil. Photo site about 1-mi (1.6 km) SE of Tortugas Mtn. in the SJB-Talavera Subbasin. *See* Pls. F3-2c and F4-3a for specific site location



**PL. F6-1b (NM
WRRRI; 5/23/2012).
NMSU Soil-pit
exposure of Middle
Pleistocene fan-
piedmont gravel
(HSU-PAO, LFA 6).
The deposit is
capped with a thin,
stage-IV petrocalcic
soil. Photo site about
0.5 mi (0.8 km) E of
the NE Doña Ana
Mtns. in the SJB-
Isaacks Ranch
Subbasin.**



Pl. F6-1c (NM BMMR; 8/1982). Initial NMSU Soil-Moisture Research Proj. excavation in piedmont-slope alluvial deposits. HSUs-PA/USF1 (LFA 5), with multiple buried soils, are exposed in 33-ft (10-m) trench. The photo site is in the SJB-Isaacks Ranch Subbasin; and the Mount Summerford (NE Doña Ana Mtns.) sediment-source area is in the background. *See* Pl. F6-1d for trench detail



Pl. F6-1d (NMSU; 1983). Completed NMSU soil-moisture research excavation in piedmont-slope deposits derived from the Mount Summerford Area of the NE Doña Ana Mtns. About 33-ft (10-m) of HSUs-PA/USF1 (LFA 5), with multiple buried soils are exposed. *See* Pl. F6-1c for geomorphic setting



**Pl. F6-6e (NM
WRRRI; 5/24/2007).
Floor of Isaacks
Lake playa, with the
San Agustín and
northern Organ
Mtns. on the eastern
skyline (Pls. F2-8,
F3-2a and F4-3b).
See Pl. F5-6f for
more-detailed view
of Vertisol exposed
in USDA-NRCS
trench in foreground**

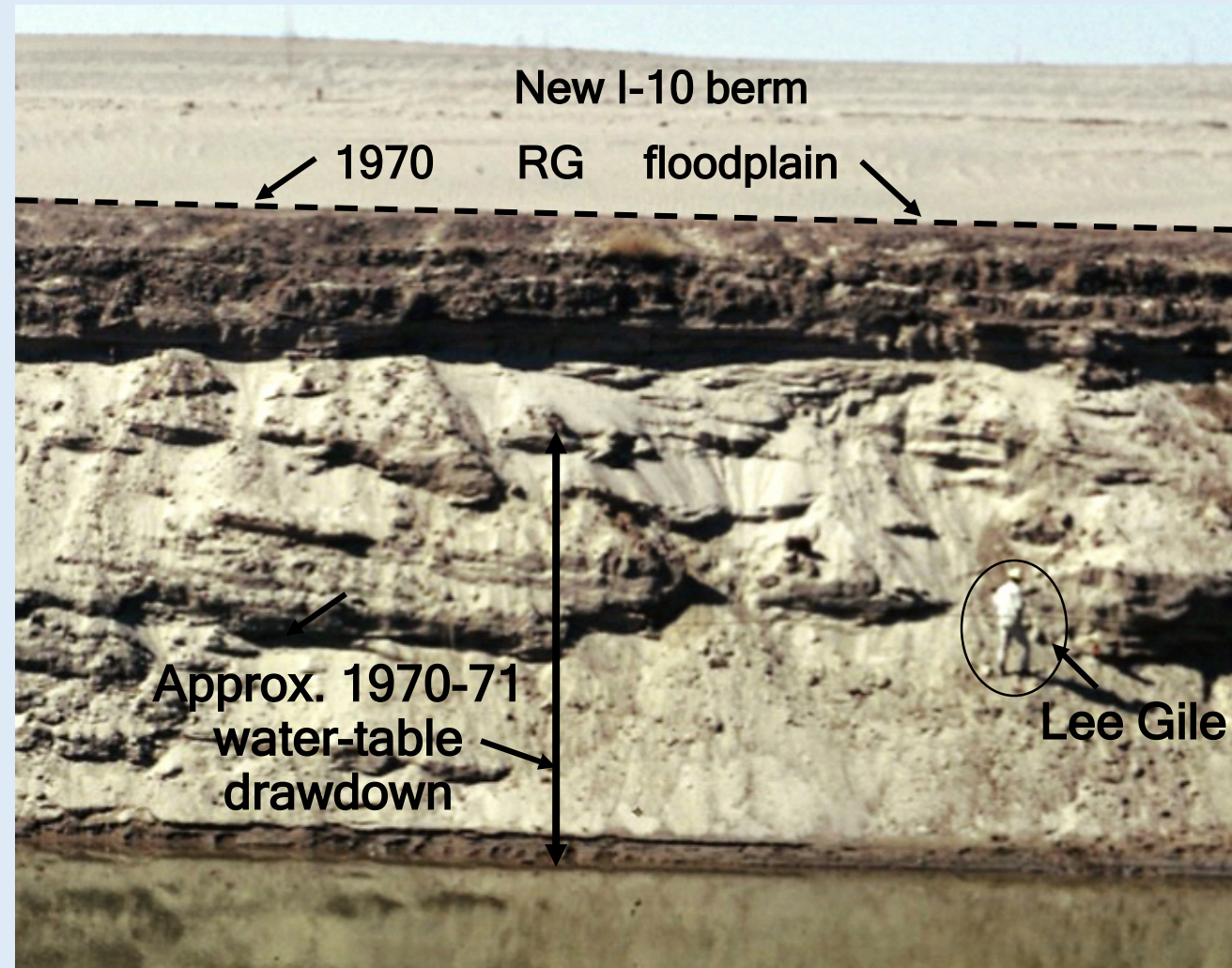


**Pl. F6-1f (NM
WRRRI; 5/24/2007).
Detail of Pl. F6-1e
trench exposure of
Vertisol in Isaacks
Lake playa, with
2-m tape. Soil
structure reflects
high shrink-swell
properties of clay-
rich ($>60\%$ $<2\mu$)
playa sediment**



**Plates F6-2a and F6-2f (Slides 121-126).
Representative Exposures of Late Quaternary
Hydrostratigraphic Units and Lithofacies
Assemblages in the Inner Mesilla Valley**

Pl. F6-2a (USDA-SCS; 3/1971). Historic RG-channel deposits exposed in Burn Lake (I-10) borrow-pit. *See* Pl. F2-8 for site location, and Pls. F6-2b to 2d for lower pit details



**Pl. F6-2b (USDA-SCS;
3/1971). Lee Gile (~6 ft,
2 in) photographing
lower part of the Burn
Lake borrow-pit
exposure of Rio Grande
channel deposits (HSU-
RA, LFA a2; *see* Pls. F6-
2a, 2c and 2d). Photo site
about 1.5-mi (2.5-km) N
of La Mesilla at NE edge
of I-10 (Pls. F1-6, F2-8)**



PL. F6-2c (USDA-SCS; 3/1971). Fragment of *cottonwood* log in the HSU-RA channel deposit (*LFA a2*) exposed in the Burn Lake borrow pit near photo-site Pl. F6-2b. The ^{14}C age of the sampled wood is ≤ 200 yrs



Pl. F6-3d (USDA-SCS; 3/1971). LFA a2 detail in HSU-RA, pebbly-sand deposit exposed in the Burn Lake (I-10) borrow pit near photo-site Pl. F6-2b. *See* Pls. F1-5 and F1-6, F2-8



Pl. F6-2e (NM WRRI; 4/1996). Late Quaternary (mostly Holocene) Fillmore Arroyo-channel fill (VAY, LFA b) exposed in excavation at SE edge of the NMSU Campus. The northern Organ Mtns. are on the NE skyline. *See* Pl. F6-2f for exposure detail, and Pl. F3-2c for site location information



**Pl. F6-7f (NM BMMR;
4/1996). Detail of
Fillmore Arroyo-channel
fill (HSU-VAY, LFA b) at
the Pl. F5-7e photo site.
Rock hammer in near
the contact of Late
Quaternary arroyo
alluvium on the Upper
SFG-Camp Rice Fm
(USF2). *See* Pl. F1-7 for
information on basic
LFA a and *b*
relationships**



1-ft (30-cm)
rock hammer