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 WRRI; 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

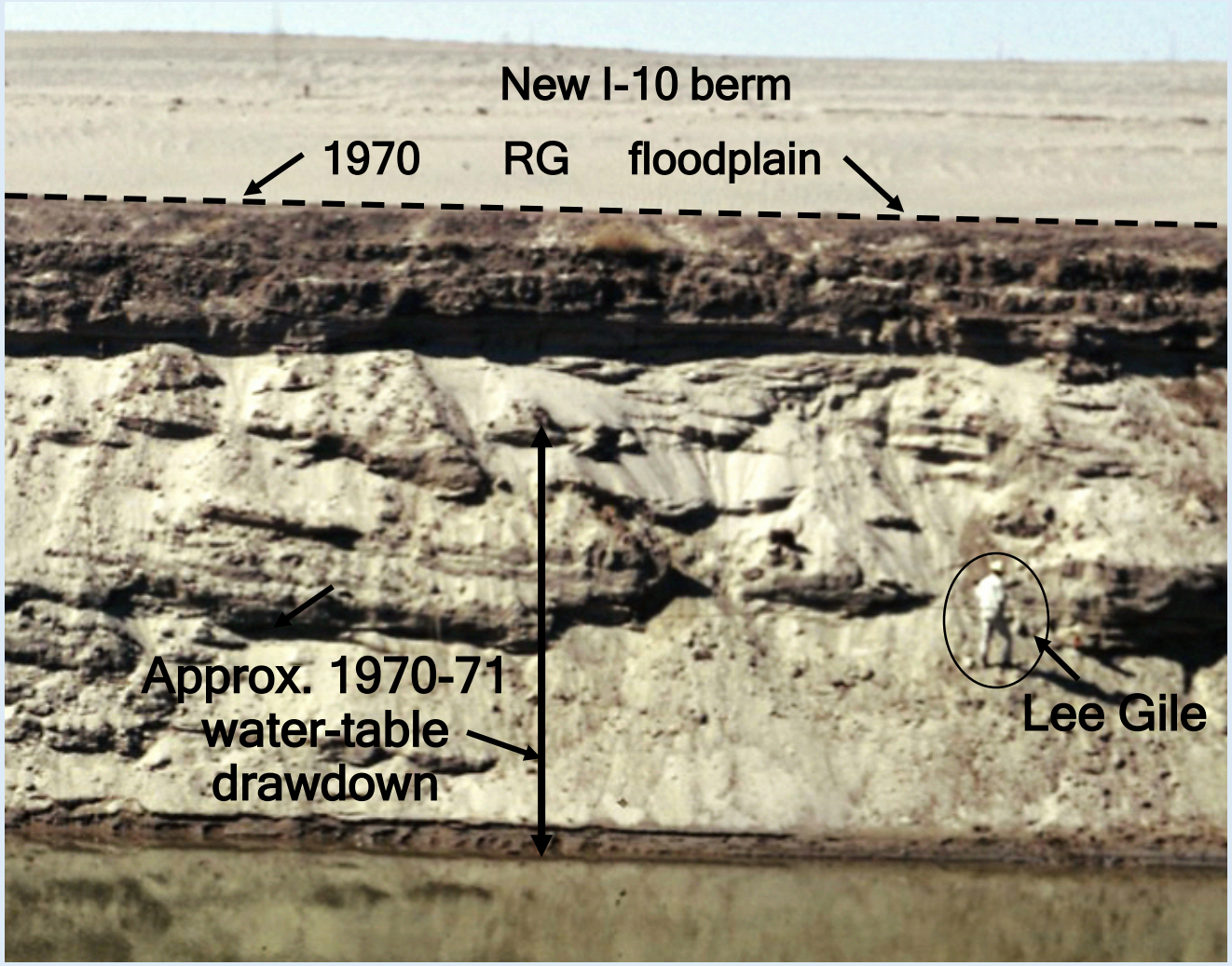
Pl. F6-1d (NMSU; 1983). Completed NMSU soil-moisture research excavation in piedmont-slope deposits derived from the Mount Summerford Area of the NE Doña Ana Mtns. About 33-ft (10-m) of HSUs-PA/USF1 (LFA 5), with multiple buried soils are exposed. *See* Pl. F6-1c for geomorphic setting

Pl. F6-6e (NM WRRI; 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 WRRI; 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% <2μ) 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 $\leq$ 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