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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: SIL MURK MUDSTONE

ALTERNATE NAMES:

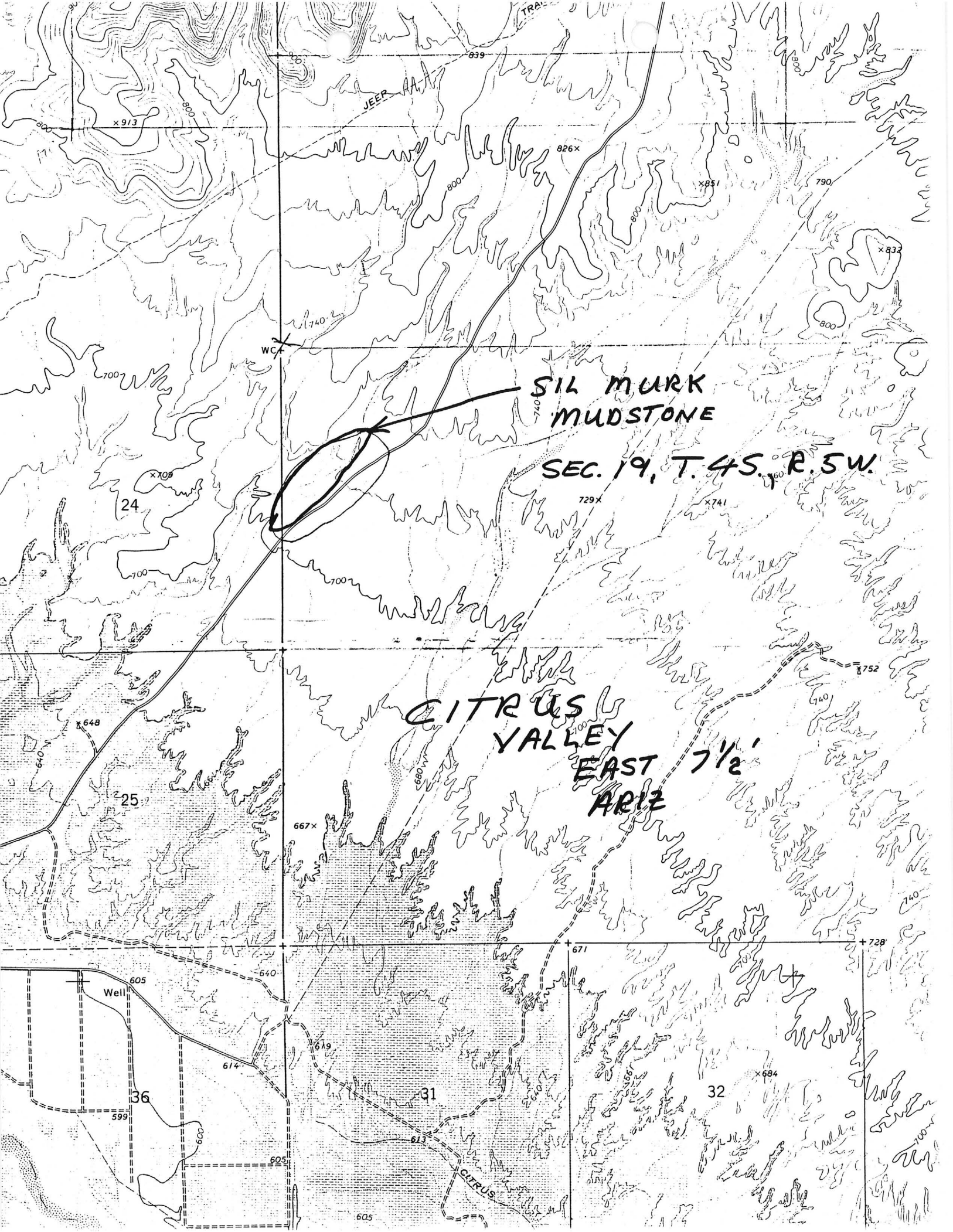
MARICOPA COUNTY MILS NUMBER: 794

LOCATION: TOWNSHIP 4 S RANGE 5 W SECTION 19 QUARTER NE  
LATITUDE: N 33DEG 04MIN 00SEC LONGITUDE: W 112DEG 49MIN 11SEC  
TOPO MAP NAME: CITRUS VALLEY EAST - 7.5 MIN

CURRENT STATUS: RAW PROSPECT

COMMODITY:  
CLAY

BIBLIOGRAPHY:  
ADMMR SIL MURK MUDSTONE FILE  
ABG&MT OFR 79-1, 1979 P 66



SIL MURK  
MUDSTONE

SEC. 19, T. 45. R. 5W.

CITRUS  
VALLEY  
EAST 7 1/2'  
ARIZ

x 973

839

JEEP

826x

x 851

790

x 832

800

wc

740

700

24

700

25

x 648

640

CITRUS VALLEY

EAST 7 1/2'  
ARIZ

752

640

667x

660

740

Well

36

599

600

614

619

31

CITRUS

605

605

671

728

32

x 684

700

FDVS.12

Arizona Department of Mines and Mineral Resources

MINE AND PROSPECT FIELD VISIT DATA SUMMARY

COMMODITIES: Clay

MILS ID No.: New

DATE: Jan 12,1990

ENGINEER: Ken Phillips & Nyal Niemuth

INFORMATION FROM: Field visit

PROPERTY SUMMARY

I. MINE NAME: Sil Murk Mudstone

II. LOCATION: T 4S R 5W SEC(S): NE Sec 19 (Proj)

ELEV.: 720 COUNTY Maricopa TOPO QUAD. Citrus Valley East

DIRECTIONS: MAP ATTACHED Yes

III. OWNERSHIP: Data not available

IV. PROPERTY AND HOLDINGS: Data not determined

V. PAST PRODUCTION-NOTED, KNOWN, PROBABLE, UNKNOWN, NONE: None

VI. CURRENT STATUS: Raw Prospect

VII. WORKINGS: None

VIII GEOLOGY AND MINERALOGY: DEPOSIT TYPE: Devitrified unwelded tuff or mudstone

LENGTH: 1500' 15' thick STRIKE DIP

HOST ROCK: Sil Murk Formation

ECONOMIC MINERALS: Possible clay uses

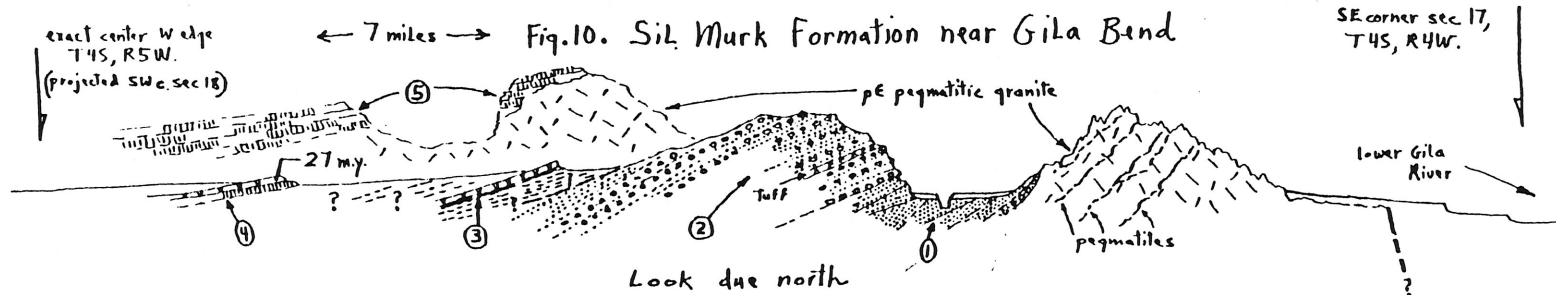
COMMENTS: Overlain by thin layer of basalt. One small sample taken. Has caliche zones

Sheet 2 of 2

**IX. EQUIPMENT ON SIGHT:** None

**X. SAMPLING: NOTE TYPE IF ANY, DRILLING?** ADMMR 28317 approx. 4 oz of clay  
for ceramic testing

⑤ hills in perspective view - not above ③ and ④.



Southern part of Sil Murk Fm of T5S, R5W described and mapped by Heindel and Armstrong (1763).

① Red-brown fairly well sorted arkosic sandstones, non-calcareous. Large scale cross-beds (thicknesses 10-30') mostly of trough type noted. Sands underlain by thin red-brown conglomerate with angular clasts, seen to be depositional with vertical contact upon pE granites. Most ss beds finely laminar, some display 1/2"-3" thick graded beds, indicative of fluvial action. Sandstones interpreted to represent aeolian and fluvial (prograding deltaic?) settings. Thickness of sandstones in (projected) sec 24, T4S, R5E is 500-1000' by dip calculation.

dips of 20-40° SW

② Fanglomerate, locally fingering with, locally deposited on irregular surface cut on the sandstones. Composed of a lower 50' thick massive debris flow, and 1000-2000' of debris-mudflows dominated section, with minor fluvial sands and channel gravels. Debris flow matrix and fluvial sands both greatly resemble the lower sandstone unit. The lower 1000' of section is red-brown color, and contains one 4' thick devitrified air-fall tuff bed. Fluvial imbrication in general points strongly towards S and SW. Further south, Heindel suggests a section composed of 100' of red arkosic sandstone of flood plain origin, overlain by ~1500' of red and an upper gray fanglomerate.

In general, the sandstones and fanglomerates dip 30-40° to SW, but strike directions swing more E-W in NW 1/4 T4S, R5W.

dips of 5-10° SW

③ Low relief cuesta held up by dacitic welded tuff w eutaxitic structure and 4' of basal black vitrophyre, and underlain by light colored cobbly mudstones which do not resemble lower fanglomerates. Dips to SW and W at 5-15°.

④ Low relief cuesta held up by welded rhyolite or dacite tuff and directly underlain by a basaltic andesite. Tuff has been dated by Eberly & Stanley (# 99) as 27 ± 3.8 my. These units dip ~6° to the SW, but are separated from rest of section by slope-covered areas. General dips of ③ and ④ conform to extensive thick flow sequences in hills to the NW (⑤) which can be seen to be depositional on pE granites in SW 1/4 T3S, R5W where Sil Murk beds are totally missing. These similar structural attitudes prompted Heindel to suggest that his upper volcanic Sil Murk beds are totally missing. These similar structural attitudes prompted Heindel to suggest that his upper volcanic Sil Murk Fm (③ & ④) may be part of the extensive volcanic terrain to the NW, and separated from his lower Sil Murk sediments (① & ②) by a 5-15° angular discordance. Eberly & Stanley's K/Ar date clearly applies to the upper volcanic sequence, and is only a minimum number on the lower sediments.

Note: A series of K/Ar dates on rocks of ⑤ series 5-30 miles north by Showatra, et al (1976) produce 17-21 my ages, although locally dips on these younger rocks may be 0-25°.