

PRELIMINARY GEOLOGIC  
MAP OF THE VALLEY OF FIRE  
EAST QUADRANGLE, CLARK  
COUNTY, NEVADAThomas W. Muntean  
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2013

## QUATERNARY DEPOSITS

|                  |                              |
|------------------|------------------------------|
| Qdl              | Disturbed land               |
| Qlm              | Lake Mead deposits           |
| Qa               | Alluvium                     |
| Qe               | Eolian deposits              |
| Qoa <sub>1</sub> | Older alluvium (1)           |
| Qoag             | Older alluvium - gypsiferous |
| Qp               | Petrocalcic soil, undivided  |
| Qoa <sub>2</sub> | Older alluvium (2)           |

## TERTIARY SEDIMENTARY ROCKS

|      |   |
|------|---|
| Tmcu | Muddy Creek Formation; upper sandstone and conglomerate facies                      |
| Tmcl | Muddy Creek Formation; lower sandstone, siltstone, and gypsiferous siltstone facies |
| Tmcc | Muddy Creek Formation; lower coarse-grained facies                                  |
| Trs  | Red sandstone unit  |
| Trc  | Red sandstone unit - conglomerate facies  |
| Thl  | Horse Spring Formation - Lovell Wash Member   |
| Thr  | Horse Spring Formation - Rainbow Gardens Member                                     |

## TERTIARY IGNEOUS ROCKS

|    |                         |
|----|-------------------------|
| Tb | Basalt - flows          |
| Ti | Mafic rocks - intrusive |

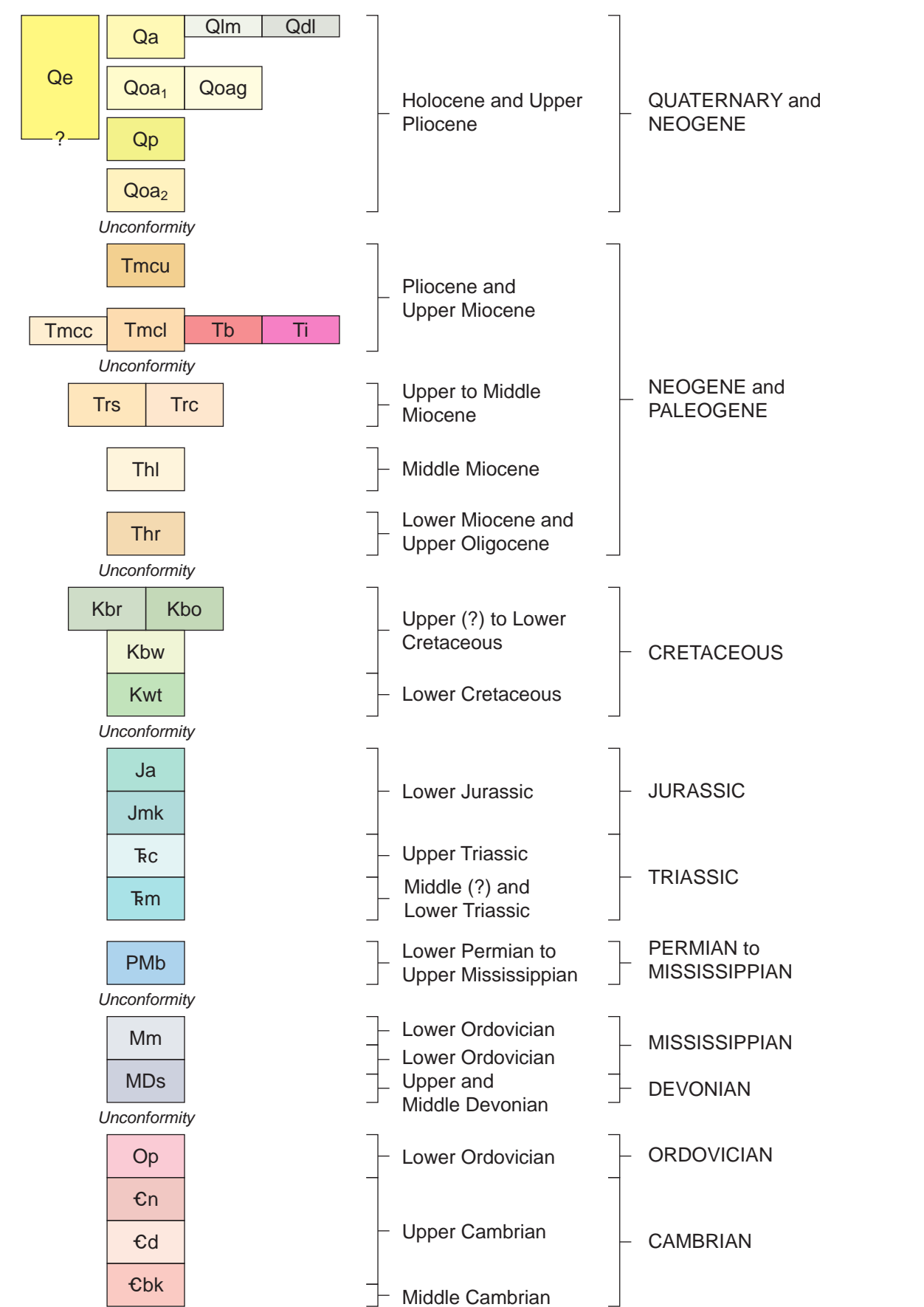
## MESOZOIC SEDIMENTARY ROCKS

|     |  |
|-----|--|
| Kbr | Baseline Sandstone - red sandstone member        |
| Kbo | Baseline Sandstone - Overton Conglomerate Member |
| Kbw | Baseline Sandstone - white sandstone member      |
| Kwt | Willow Tank Formation                            |
| Ja  | Aztec Sandstone                                  |
| Jmk | Moenave and Kayenta Formations, undivided        |
| Tc  | Chinle Formation                                 |
| Tm  | Moenkopi Formation                               |

## PALEOZOIC SEDIMENTARY ROCKS

|     |  |
|-----|--|
| Pmb | Bird Spring Formation                      |
| Mm  | Monte Cristo Limestone                     |
| MDs | Sultan Limestone                           |
| Op  | Pogonip Formation                          |
| Cn  | Nopah Formation                            |
| Cd  | Dunderburg Shale Member of Nopah Formation |
| Cbk | Bonanza King Formation                     |

See accompanying text for full unit descriptions and references for this map.



## Symbology (from FGDC-STD-013-2006)

Contact Solid where certain; dashed where approximate or inferred.

Normal fault Solid where certain; dashed where approximate or inferred; dotted where concealed; ball on downthrown side

Strike-slip fault Solid where certain; dashed where approximate or inferred; dotted where concealed; arrows indicate direction of relative motion

Oblique-slip fault Solid where certain; dashed where approximate or inferred; dotted where concealed; arrows indicate direction of relative horizontal motion; ball on downthrown side

Thrust fault Barb on upper plate

Reverse fault Rectangle on upthrown block

Fault Solid where certain; dashed where approximate or inferred; queried where uncertain; dotted where concealed

Anticline Large arrow shows direction of plunge; dashed where approximate or inferred; dotted where concealed

Syncline Large arrow shows direction of plunge; dashed where approximate or inferred; dotted where concealed

Strike and dip of bedding

Inclined

Strike-slip fault (in cross section) Minus, away from observer; plus, toward observer

Inclined

## Suggested Citation:

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This map was compiled from previous mapping by Bohannon (1983), Beard et al. (2007), Felger and Beard (2010) and from mapping conducted in 2006-2011. Supported by the AAPG Foundation Grants-in-Aid program, the Nevada Petroleum Society, and the UNLV Geoscience Department.

DRAFT Preliminary geologic map Has not undergone office or field review Will be revised before publication

Cartography and map production by Thomas W. Muntean

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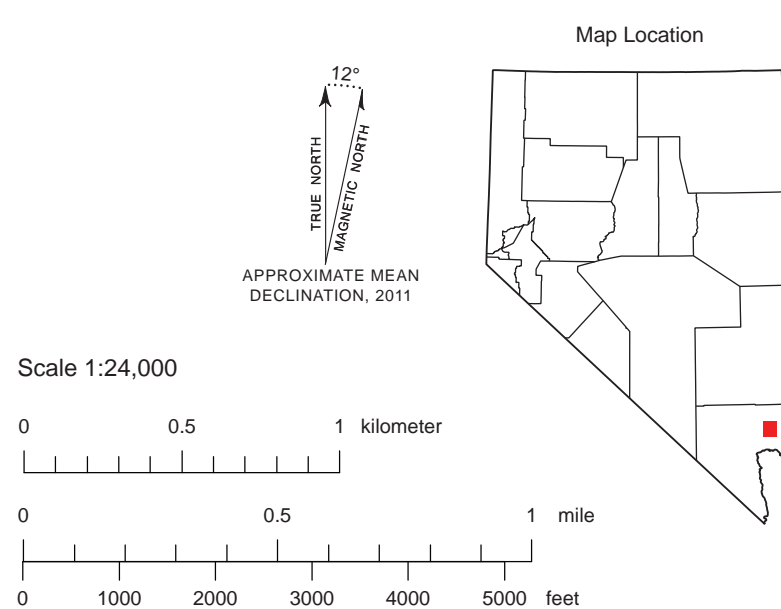
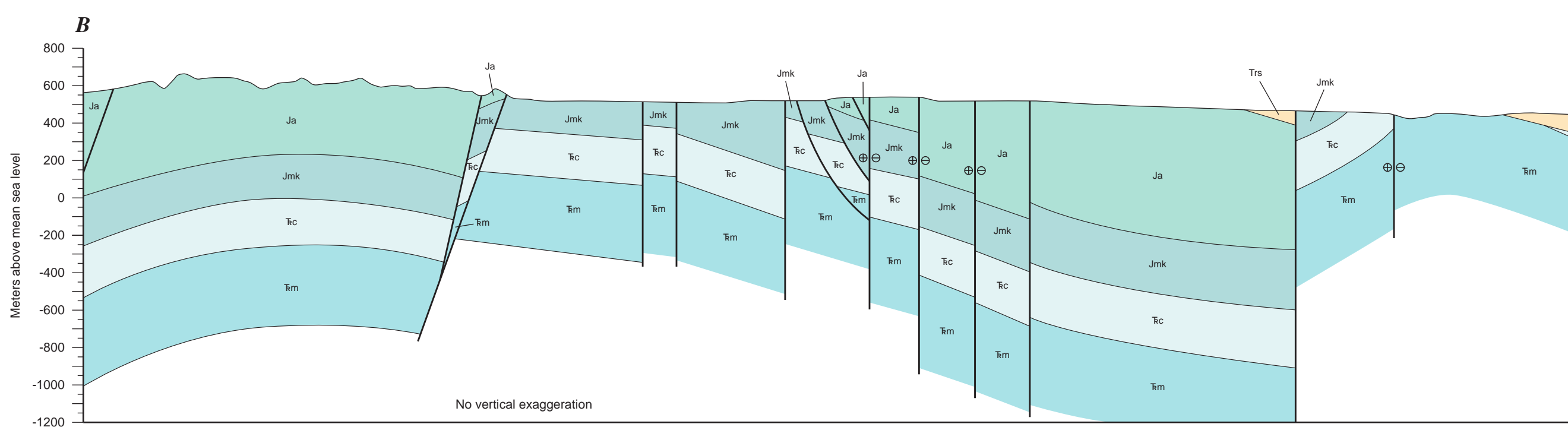
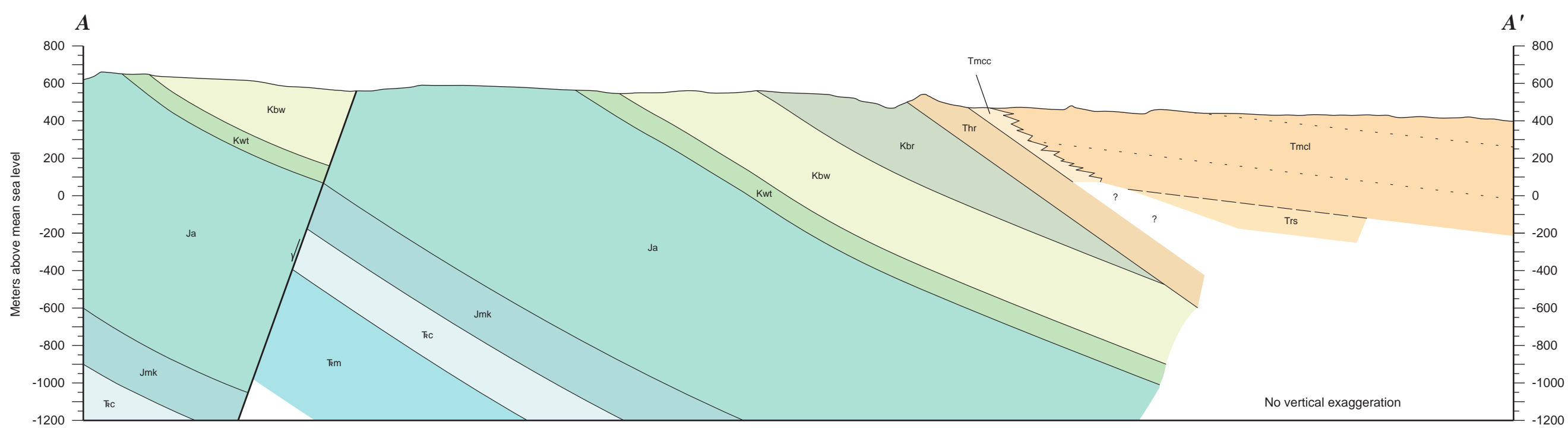
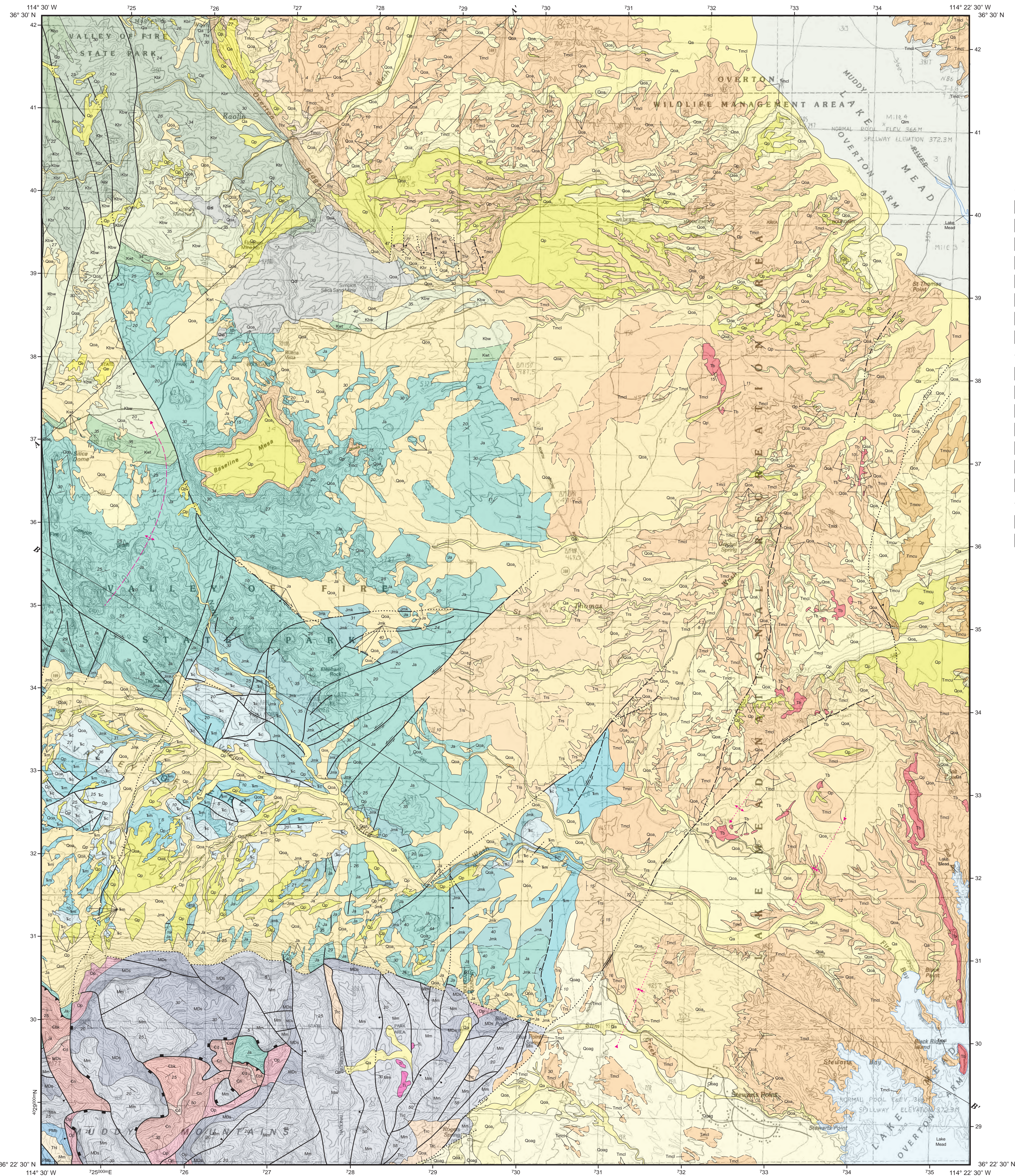
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Projection: Universal Transverse Mercator, Zone 11,

North American Datum 1927 (m)

Base map: U.S. Geological Survey Valley of Fire East

7.5' quadrangle (provisional edition 1984)

B'

800

600

400

200

0

-200

-400

-600

-800

-1000

-1200