

May 11, 2017

MEMORANDUM

To: Brian Hunt
From: Tom Grimshaw
Subject: Preliminary Geologic Map of the Middle Portion of the Mountain City
Quadrangle

Please find in Attachment A five sheets (segments) that provide a preliminary geologic map of the middle one-third of the Mountain City Quadrangle. The geologic mapping has been accomplished jointly with field trips and air photo examination. The five segments include three that cover the quadrangle and two (partially mapped) that cover the segments to the west and east of the boundaries of the quad.

Although the Mountain City Quadrangle has been mapped previously, this initiative seeks to take the mapping to another level of accuracy through the use of good pre-development (1958) air photos and extensive outcrop visits. Also, as the surface mapping of the quad is completed, the information in BSEACD's extensive subsurface database is planned to be incorporated. The ultimate objective is a 1:24,000 geologic map in the style of the US Geological Survey and Bureau of Economic Geology augmented with subsurface data. The mapping in this memo is intended to be illustrative, with the hope that a final map maybe prepared in GIS directly from the mapping on the air photos.

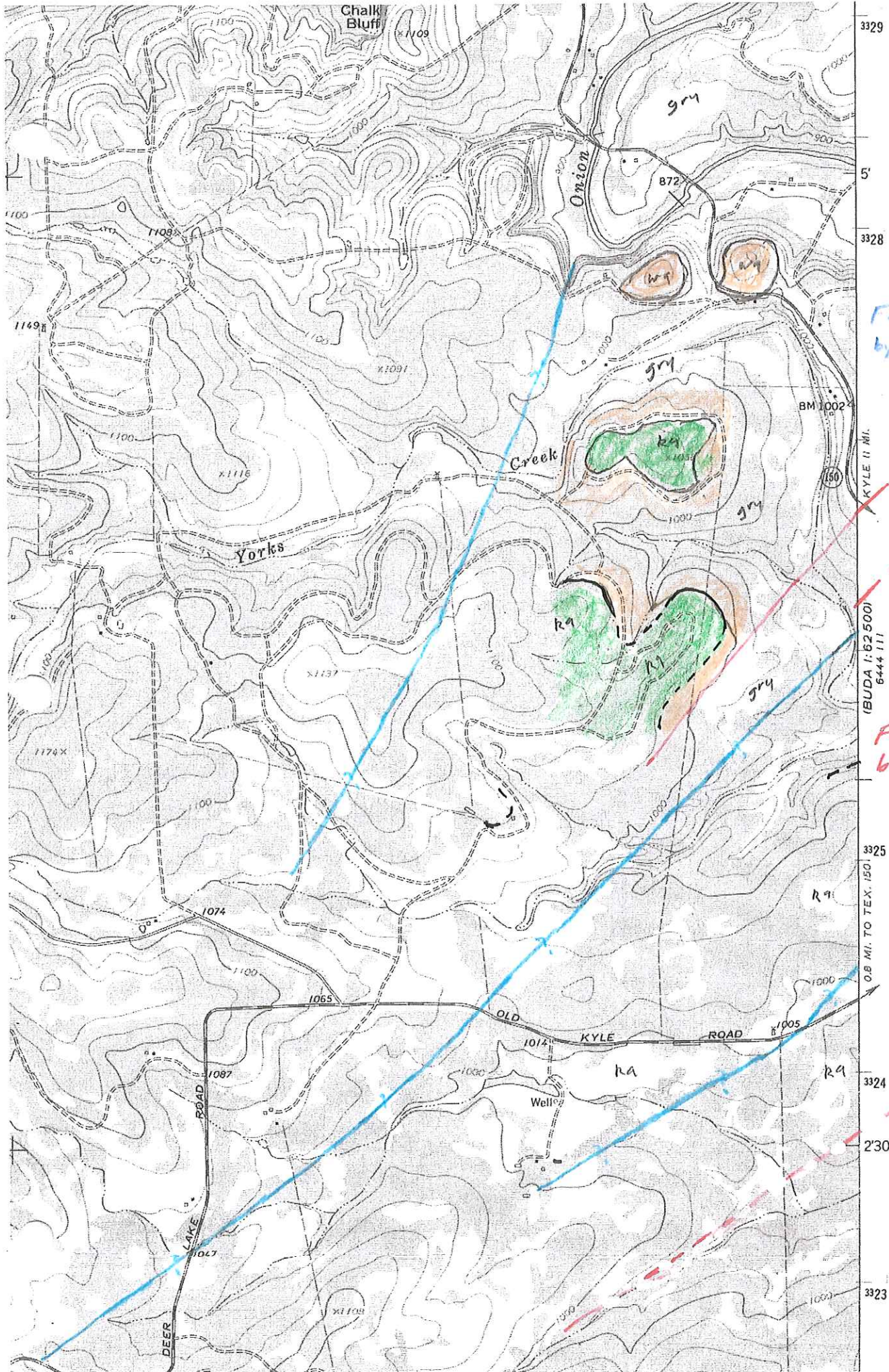
Although overall outcrop patterns shown in earlier mapping appear in this map, there are many differences in detail essential to a geologic map at this scale. Previous joint field trips and mapping have included the Glen Rose – Walnut – Edwards succession along though western edge of the quad, at the Rutherford and Dahlstrom Ranches, and of the Tyler tract at the eastern edge. The middle segment of the five sheets is in an area underlain almost entirely by the limestones of the Edwards and has not yet been mapped in detail. This area, which includes the Sky Ranch and Ruby Ranch tracts, will be studied in more detail in future field trips. Besides filling in this gap of the middle segment, future field trips are planned to check the mapping in the area of step faults south of Onion Creek.

The next portion of the Mountain City Quadrangle that will be presented is proposed to be the lower one-third of the quadrangle. This mapping will comprise remapping with greater precision and additional insights from the mapping in my 1976 dissertation.

I look forward to discussing this mapping in a future meeting. Please let me know if you have any questions or concerns.

Attachment A.

Five Segments of Geologic Map of the Mountain City Quadrangle



Driftwood

Faults mapped by E.J. Colton

Faults mapped by Grimshaw

KYLE 11 MI.

(BUDA 1:62,500)
6444 111

0.8 MI. TO TEX. 1501

2'30"

3323

5'

3328

BM 1002

100

1000

1000

1000

1005

1000

1000

1000

Chalk Bluff

Onion Creek

Creek

Yorks

DEER LAKE ROAD

OLD KYLE ROAD

Well

gry

872

gry

ka

gry

ra

ra

gry

ra

ra

ra

x1108

x1091

x1137

1149

1174X

1074

1065

1087

1027

1014

1000

1000

1000

3329

3328

3325

3324

3323

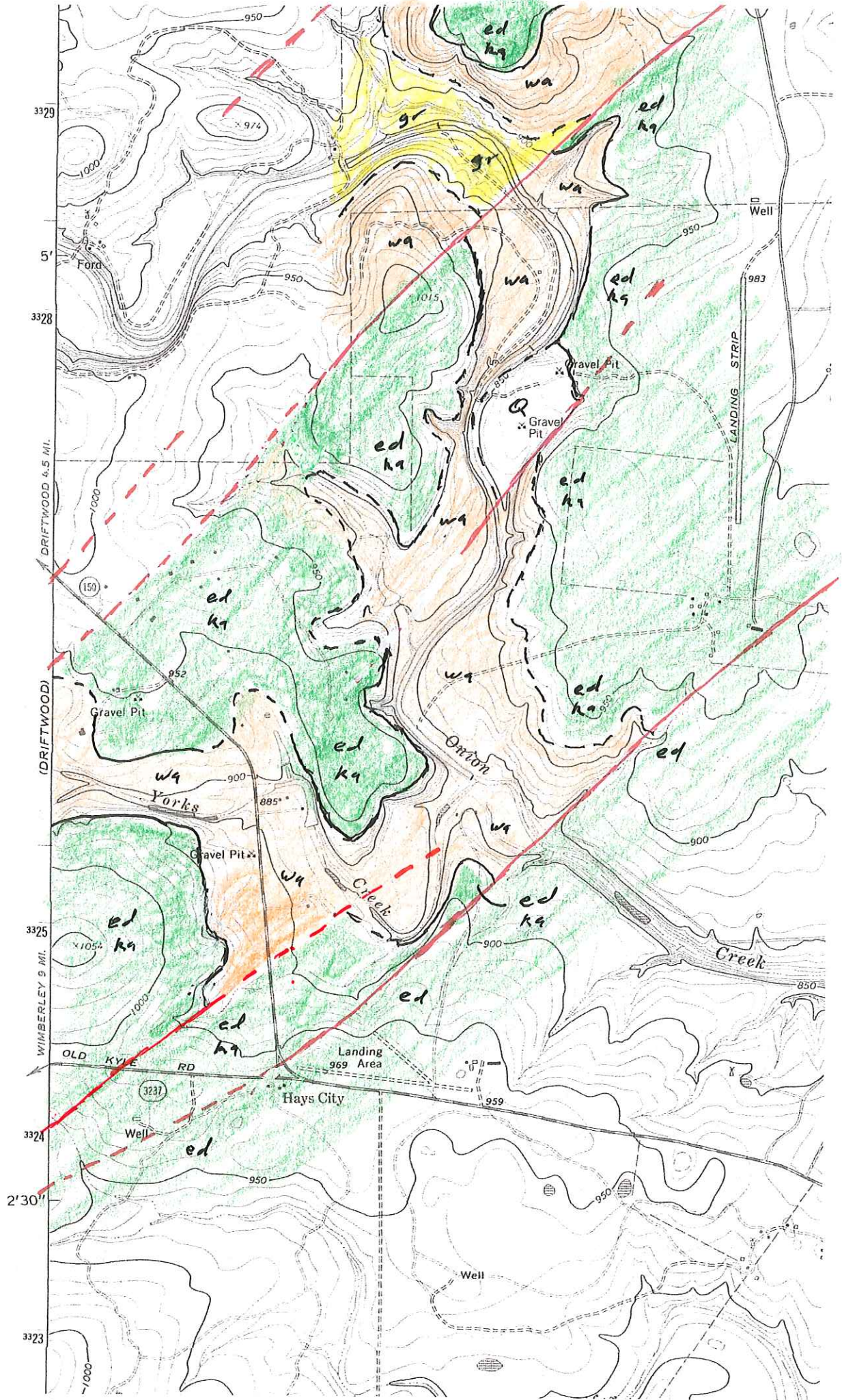
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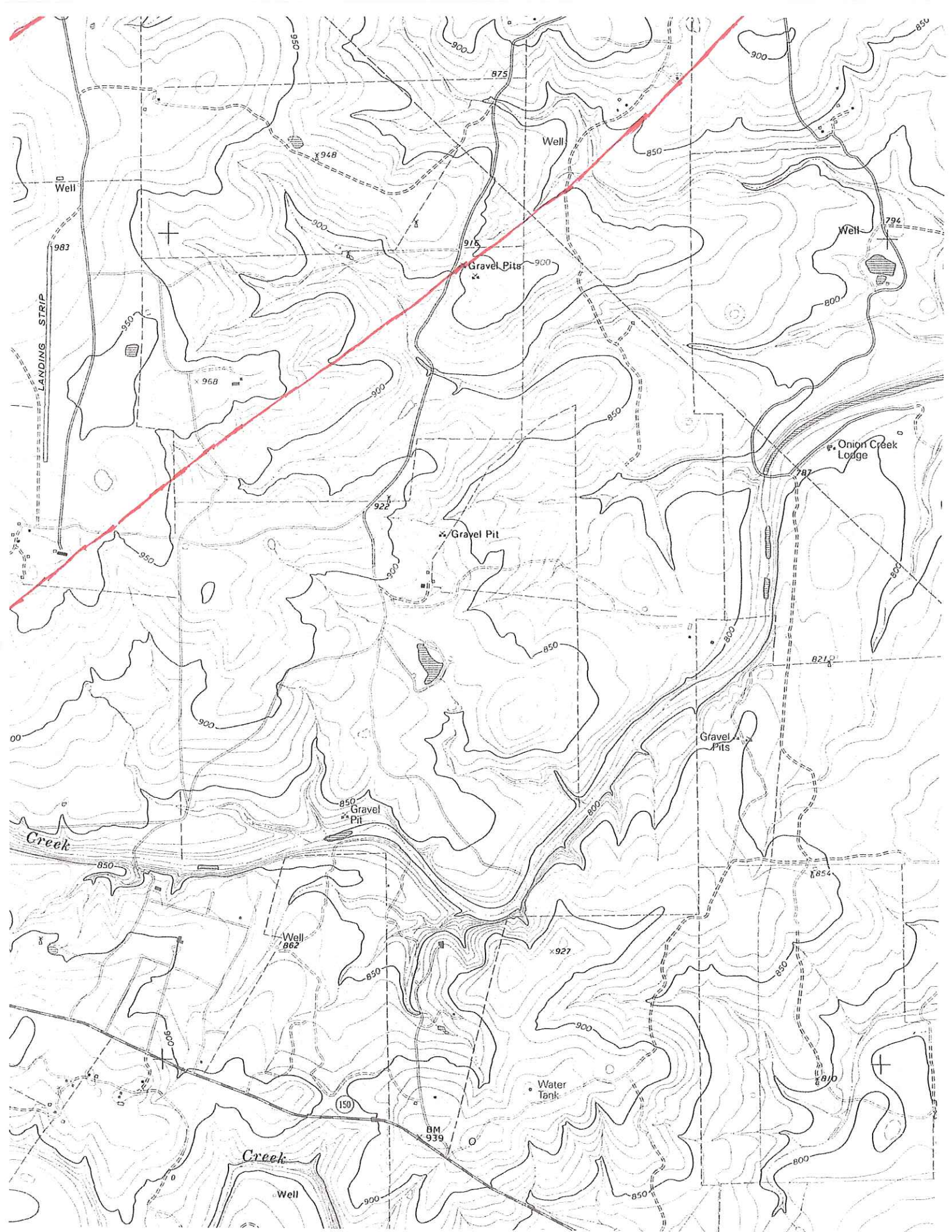
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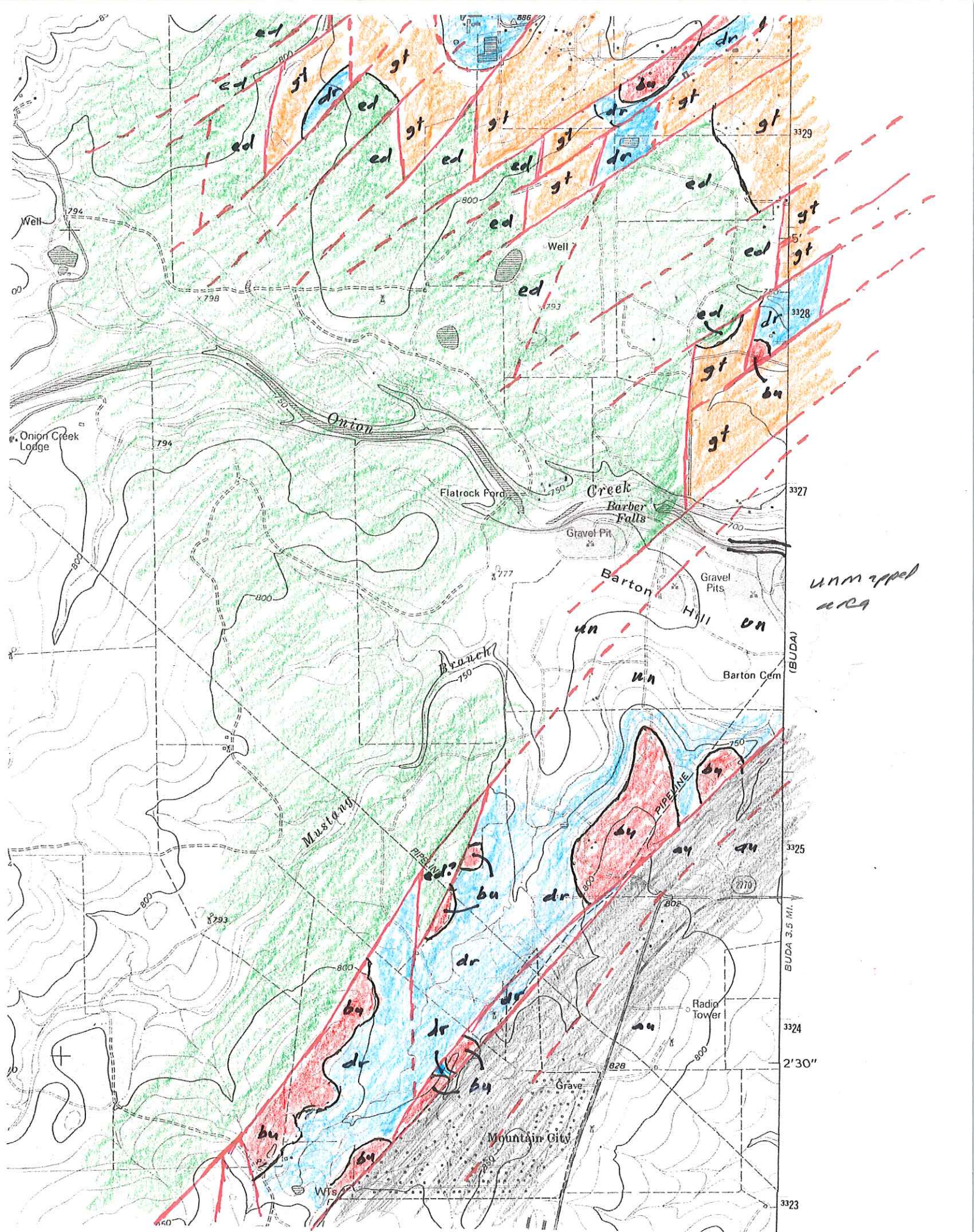
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unmapped
area

(BUDA)
BUDA 3.5 MI.

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