

December 18, 2016

MEMORANDUM

To: Brian Hunt
Copy: Frank Davis
From: Tom Grimshaw
Subject: Dahlstrom Ranch Second Field Visit, December 15, 2016

I believe that our second field trip to the Dahlstrom Ranch was very successful. The main objective was primarily to extend checks of outcrops and other geologic features southward from the area covered in our first trip (see memos dated September 16 and December 4) to Onion Creek. This objective was accomplished as planned. We made the stops shown below (after signing in at the ranch house) from about 9:15 AM to 12:30 PM. The stop locations are shown in a 1958 air photo in Attachment A.

Stop 1. Just Inside Entrance Gate

Nearby outcrop of Edwards or Georgetown. Altered condition indicates proximity to nearby fault.

Open field to east underlain by Georgetown. Possible thin layer (or veneer of colluvium) of Del Rio at surface.

Stop 2. Outcrops and Rockpile

Identified probable Georgetown further south than currently mapped. Will require map adjustment.

Stop 3. Large Sink Southwest of Ranch House

Large area with small pond in southwest portion of sink.

Highly modified with embankment around the perimeter, nearby water well for filling the impoundment, a connecting pipeline, and a permanent dock.

Apparently built for recreational purposes by the Dahlstrom family.

Photographs in Attachment B.

Stop 4. Subtle Sink Southwest of Large Sink

Confirmed doline features with a brief stop.

Stop 5. Outcrops on North Side of Onion Creek.

Walked upstream along small cliff face primarily to look for evidence of large faults; none were seen.

Observed marly bed overlain by competent burrowed limestone beds continuously along the extent of the outcrop.

Small-scale structural disturbances seen, including gently dipping beds and small-displacement falls.

Concluded the outcrops were of Edwards limestones.

Photos of crops and small fault with excellent slickensides in Attachment C.

Stop 6. Outcrops on South Side of Onion Creek

Further downstream from above Stop.

Again walked along the cliff face looking for evidence of large fault; none were seen.

Concluded outcrops Edwards limestone strata extending downstream to Barber Falls.

Stop 7. Small Sink Feature on East Side of Property

Confirmed small sinkhole

Took photos shown in Attachment D

These field observations have resulted in several changes to the geologic map previously submitted (memo of December 3). The revised map and associated mapped air photos are in preparation.

I recommend that in the near future we take a similar trip to the portion of Dahlstrom Ranch south of Onion Creek.

Attachment A.

Dahlstrom Ranch Field Stops, December 15, 2016 on 1958 Air Photos (Two Photos)

215 1372MCS USAF 15APR58 11400FT AF-58-4 ROL 1-3

234

58004

1-3

1

2

3



53.96 mm

12.67

52445

215 1372MCS USAF 15APR58 114.0FT AF-58-4 ROLL-3

58004

266

3

4

7

5

6



Attachment B.

Modified Large Sink Southwest of Dahlstrom Ranch House



Pond shown is in southern part of the sink. Embankment around the sink is shown in the foreground and behind the pond.



Inactive dock shown in background. Discharge pipe from water well for filling the impoundment is shown in the foreground.



Water well for filling the modified sinkhole. The wellhead is just to the right of the tank. The water line leading to the sink extends from the wellhead in the other direction and toward the discharge pipe in the above photo.

Attachment C.

Outcrop and Small Fault in Edwards Strata on North Side of Sink Creek



Brian Hunt is standing near the Edwards outcrop. Note the marl zone in lower part of the outcrop and resistant burrowed limestone in upper part. The contact is just above Brian's waist line.



Small-displacement normal fault with slickensides on the hanging wall side of the fault.
Photo courtesy of Brian Hunt.

Attachment D.

Small Sink near East Boundary of Dahlstrom Ranch

