MEMORANDUM

To: Brian Hunt, Frank Davis

From: Tom Grimshaw

Subject: Dahlstrom Ranch Field Visit, September 16, 2016

Thanks to both of you for the excellent Dahlstrom Ranch field trip yesterday. From my standpoint, we accomplished all of the objectives of the trip, and more.

The main purpose of the trip was to observe outcrops in the northern part of the Ranch in order to refine previous geologic mapping as well as my photogeology initiative. The Cretaceous bedrock units – formations – (Edwards, Georgetown, Del Rio, and Buda) were observed, as was the complex faulting of the Balcones Fault Zone on the Ranch. I believe the most significant stops after we met at the gate at 10:45 a.m. may be summarized as follows.

- Signed in at the kitchen of the Ranch main facility (Attachment A)
- Walked north to visit Persimmon Cave. Noted Edwards or Georgetown outcrop at cave mouth (Attachment B)
- Traveled west to road leading south of Carpenter Hill. Observed Edwards at gate,
 Georgetown going north up the hill, and Del Rio near the pond area. Split into two groups. Brian went west to check outcrops near the large pond; Frank and Tom returned to the Ranch facility and visited with the foreman.
- Frank and Tom photographed a sinkhole on the road leading south from Carpenter Hill (Attachment C).
- Brian photographed a small spring in Del Rio on Carpenter Hill below the water tower (Attachment D).
- Met at Horseshoe Sink. Photographed the pond at the sink and the recharge crevice in the Georgetown formation, located north of the pond (Attachments E and F)
- Drove north from Horseshoe Sink and confirmed Edwards on the west side of an apparent fault. Turned around at entry gate off FM967
- Returned to Ranch facility. Stopped to photograph cave gate over "Road Sink" on the way (Attachment G).
- Photographed field investigators Brian Hunt and Frank Davis (Attachment H). Left Dahlstrom Ranch about 2:15 p.m.

A revised geologic map is being prepared based on yesterday's visit and outcrop inspections.

Before we met at the gate at 10:45 am, Brian and I met in the office about a few items and looked at outcrops before Frank arrived. The following notes apply.

- The Mountain City mapping and reporting work that is on Dropbox for sharing between Brian and Tom was reviewed.
- Tom introduced a new set of air photo stereo pairs that were taken in 1953 at a scale of 1;69,000, which appear to be a valuable addition to the mapping effort.
- Field stops were made in the area north of the Dahlstrom Ranch gate around the hill with the Buda cap on Del Rio outcrop. Georgetown outcrops were confirmed from previous field visits by Brian.

Also, Brian and I met in his office after the field trip to review the findings of the trip and needed updates to the geologic mapping.

Please let me know of any needed changes or additions to this outline of our field trip.

Thank you again for a productive (and fun!) visit to the field!

Attachment A. Dahlstrom Ranch Facility



Attachment B.
Persimmon Cave



Attachment C.
Sinkhole on West Side of Road Leading South of Carpenter Hill



Attachment D.

Small Spring in Del Rio on Southwest Side of Carpenter Hill



Attachment E. Horseshoe Sinkhole



Attachment F.
Recharge Point North of Pond in Horseshoe Sink



Attachment G.
Cave Gate over Road Sink



<u>Attachment H.</u>
Dahlstrom Ranch Field Investigators Brian Hunt (Left) and Frank Davis

