



35TH ANNUAL SDSU GEOLOGY ALUMNI FIELD TRIP

A LOOK AT THE TOLBARD FANGLOMERATE

AND THE LAWLOR TUFF, MIDWAY MOUNTAINS, CA

SATURDAY & SUNDAY MARCH 5TH & 6TH 2022

The 35th Annual SDSU Geology Department Field Trip/Campout will be in the Smoke Tree Valley, Midway Mountains and the Vinegre Wash areas south of Palo Verde. California. Camp is currently accessible by two-wheel drive vehicles. **For the field trip portions, 4WD vehicles with high clearance are REQUIRED! A stock Toyota 4WD SUV should not have any problems.** A little more than basic “drive through soft sand” experience will be handy as we will be on very steep, narrow and rough roads. We will do about a 50-mile loop from camp with stops in the Midway Mountains at the Miocene Tolbard Fanglomerate which has been faulted against a suite of volcanic rocks (Palo Verde Volcanics?). Detachment faults are thought to be responsible for the normal faults that were mineralized with manganese ore and mined during WW2. The second area we will visit is the controversial Bouse Formation in Vinegre Wash where a volcanic ash tuff (Lawlor Tuff) has been dated at 4.83 Ma. This same tuff has been found in the Amboy area along old route 66 about 100 miles to the northwest and was deposited in the upper layers of the Bouse Formation. The Bouse Formation is either a late Miocene-early Pliocene chain of lakes fed by the Colorado River or..... a late Miocene pre-Colorado River, tide-dominated marine setting at the north end of the Gulf of California..... depending on which side of the river you are on? The Saturday loop excursion will start at 9:30 from camp and return late afternoon if things go well. There will be a Saturday night campfire and drawing for students that join us. Sunday’s activities include the possibility of a several hour trip to the Big Maria Mountains to look at the famous attenuated Paleozoic section or we will look at a small “Red Bed” exposure west of Palo Verde. More information on these stops as field trip plans develop.

CAMPING: We will be “**Primitive Camping**” on 40 acres of private land in Smoke Tree Valley with a nice fire ring and cabana so bring everything you will need for the trip (we will provide more info on possible toilet options soon). It is a nice spot for telescopes if you have one!

DIRECTIONS TO CAMP: From the junction of northbound Hwy 78 and Ogilby Road (S34) proceed north, past the Border Inspection Station (which may or may not be open) for approximately 6 miles to the **MIDWAY WELL Road** turnoff and turn left. From Blythe/Palo Verde on southbound Hwy 78 go about 6.5 miles past the Walter's Camp turnoff to the **MIDWAY WELL Road** turnoff and turn right. You do not have much lead time between the sign and the turnoff so be very careful when making the turn! Follow Midway Well Road (it should be passenger car friendly but slow) about 4.6 miles, and it makes a sharp right turn. Go another 1.7 miles to the first good road and turn left on Smoke Tree Lane (sign is faded but there is a house on that corner and you cannot turn right). Go about 0.75 mile and look for a red reflector on the right, turn right there and go 0.25 mile until you hit a fence, turn right and then about 100 yards down the fence turn left into camping area. There is fuel in Palo Verde; however, I suggest you fill your tank in Blythe or El Centro on the way to be on the safe side. Watch for "SDSU Geology" signs at various points after leaving Hwy 78.

COMMUNICATIONS: There is spotty phone service in the camp area in Smoke Tree Valley. We will monitor FRS channel 4 (no tone) on Friday evening and Saturday morning. Call for the SDSU Geology Group but remember FRS has very limited range. For the Amateur Radio Operators or "Hams", we will monitor a repeater on Black Mt. north of Picacho State Park 147.120 + pl=103.5 (backup is 146.880 - pl = 162.2, also on Black Mt.) both are good from Ocotillo into camp. We also monitor National Simplex 146.520 Friday PM and Saturday AM. Call for Joe-N6SZO, Bill-K6GHN or Sue-KM6HLY.

All SDSU Geology Alumni, faculty, staff and students are encouraged to attend, especially students, as you will soon be alums, and this is a great opportunity to not only see interesting geology but also meet past alums and possibly get involved with geo-alumni activities!

As always....If any of you SDSU Geo-Alumni are interested in becoming involved with our Alumni Activities such as the Annual Banquet, Annual Field Trip, quarterly trash pickup or monthly Tuesday lunch/planning meetings or, if you have a special place in mind that would be good for a future Alumni Field Trip let me know and we can get you involved. **Please let me know if you think you will attend this trip as I will need to be forming a list to match up the 4WD vehicles with people that need rides.** Weather permitting there will be someone in camp Thursday evening and Sunday night for those that want to R & R a little and are not in a hurry to return to the Rat Race. So..... come on out and enjoy Smoke Tree Valley and the Midway Mountains with the SDSU Geology Alumni Group on their **35th Annual Field Trip!**

Questions????? Contact **Joe Corones**, SDSU Geology Alumni Field Trip Chairman,

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