Emerson Fault / Johnson Valley
Location

Date 03/20/2014 17

Project / Client Ge 111b Landers rupture 1992
Field trip

Scale

Thursday Morning meet @ 8 am
depart @ ~850 am

cool, hazy

objectives: get there!

210 east, 15 North, before Barstow

Bear Valley Road turn off

pick up toilet in Lucerne Valley

☆ Rob lost the white small Division vehicle Notebook when he went to recon the field site ~2 months ago.

Find it!

Location _____ Date 09/29/2014

Project / Client _____

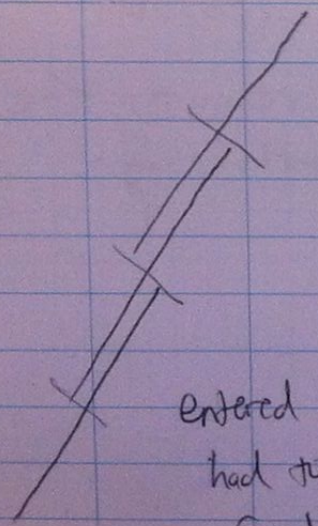
Electric Resistivity Survey

1:45 pm Thursday

Team: Mark S., Flavien H., Albane C.,
Ryan W., Bryan R.

West to East counting
clips don't lose parts.

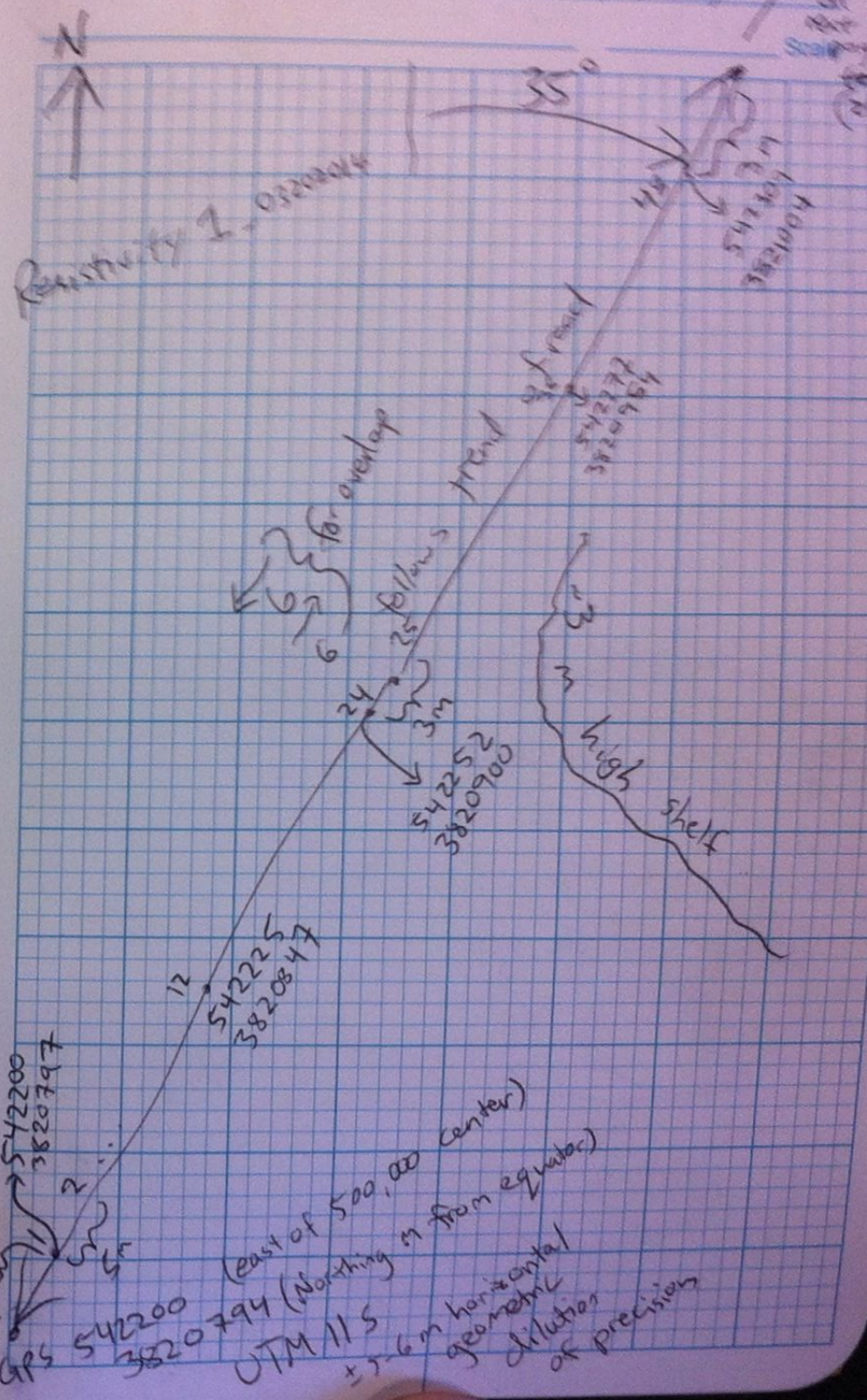
50% overlap



entered points into ArcMap
had to save a new file
Ge111_2014_2

Location _____ Date _____

Project / Client Electrical Resistivity survey



Location _____ Date _____

Project / Client _____

How to add GPS points to ArcGIS Geol 111. 2014_2

in Arc Catalogue

right click on "Resistivity_03202014.txt"

create feature class from Xy table

X Field 1

Y Field 2

Z Field none → choose shape file location & name

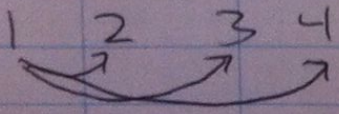
choose WGS1984 UTM 11 N coordinate system

Shows up under student Folder

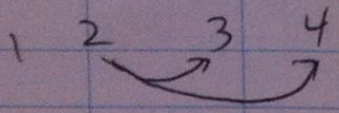
then drag and drop

"R1R2"

survey example goes



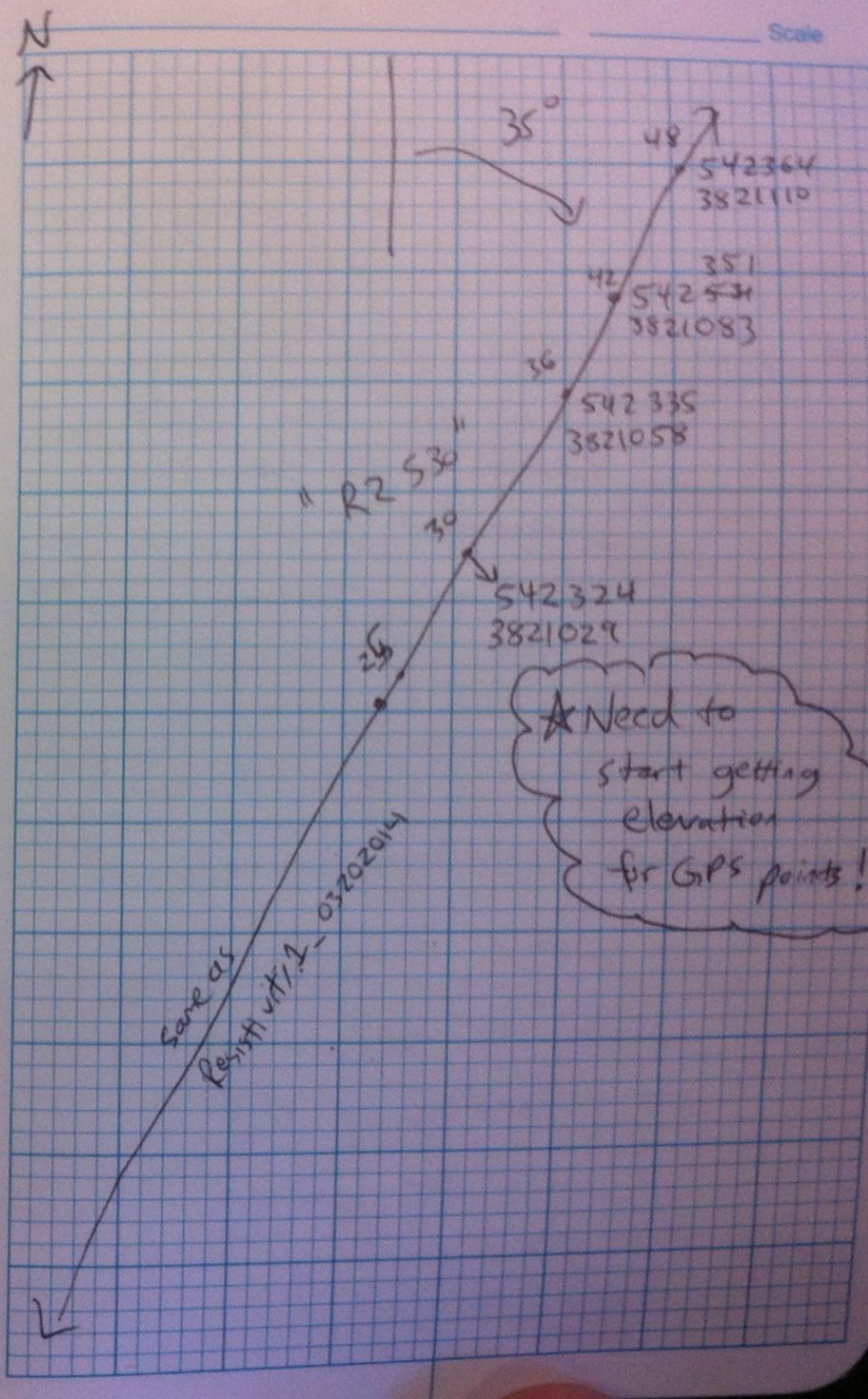
then



and so on... so you can unhook the 1st half & pack up B4 it's dark

Location Landers Emerson Fault Date 03/20/2014

Project / Client Resistivity2_03202014



Location Landers/Emerson Fault Date 03/21/2014

Project / Client

Friday ~8 am

Warm, clear, with a slight breeze (Rob says real winds are coming tomorrow)

objectives: ~5-6 resistivity surveys across the main fault rupture, along the road, ~~with the~~ centered along the fault trace

Betsy Gun -

RTK -

Us, (resistivity yesterday) will go with Rob to do seismic first

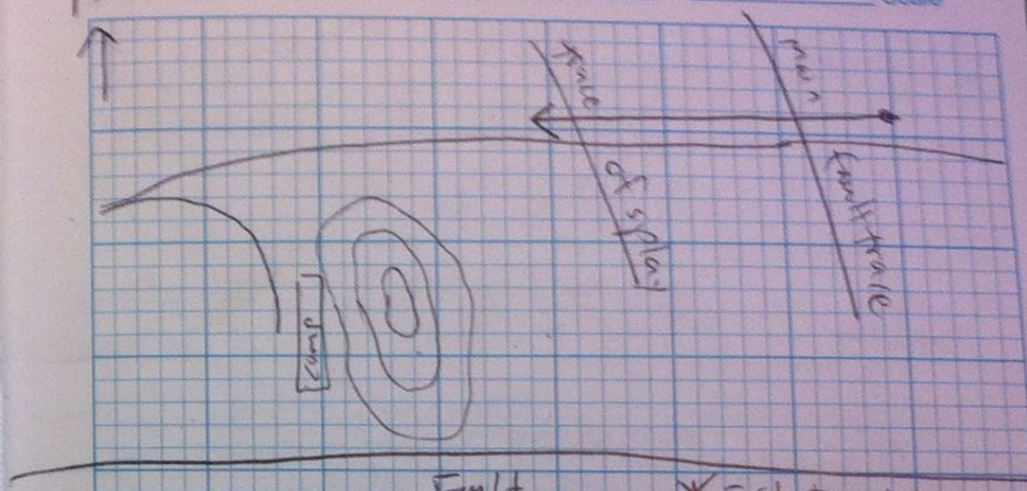
today working on valley side & ~~wor~~ proceeding up hill (roughly east to west)

* Far resistivity

Location Date

Project / Client

N No scale - purely schematic Scale



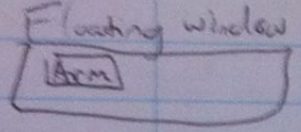
Location roughly same as resistivity yesterday Date 03/~~20~~21/2014

Project / Client Refraction Survey

Refraction Team: Rob C., Florian H., Kangchen B., Albert C. Ryan W.

Shooter: puts up one arm (2 foot deep holes (redig when done))

Controller: arm system one arm



shooter: shoots at will

Controller: touchdown (both arms up) if you see this negative (both arms down)

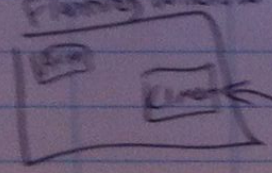
Shot at station 1, 13, ~~37~~ 25?

~~Save~~

① change file name first. File Filename "Friday 01"

② save

if you forget decline to save or else you overwrite the previous

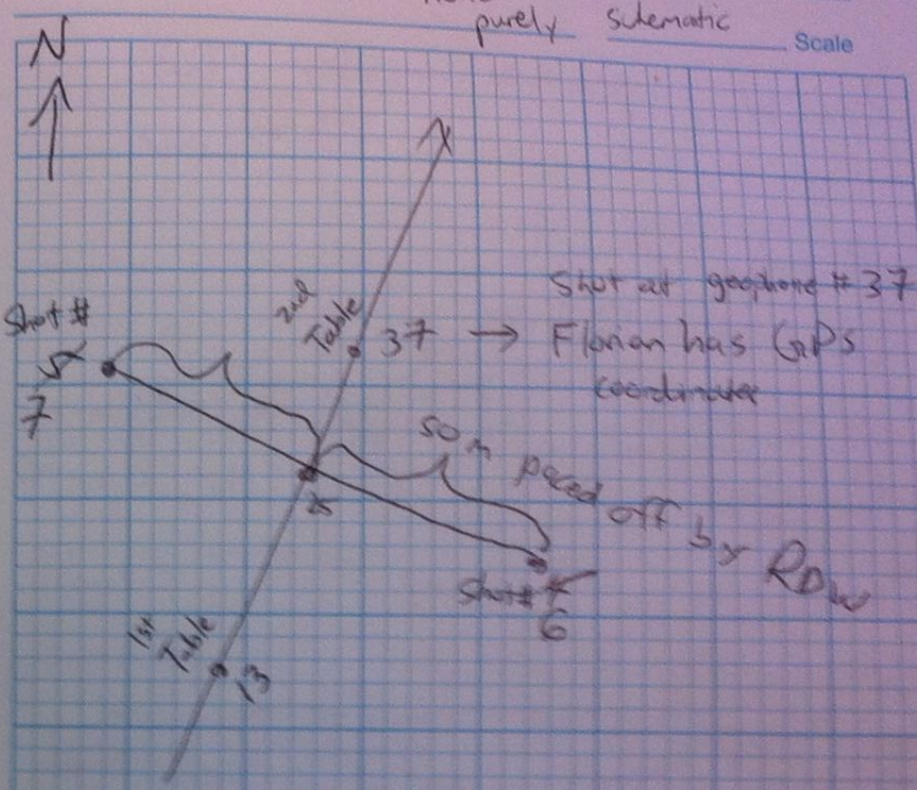


③ hit clear memory

Location Date 25

Project / Client

none - purely schematic Scale



Location _____ Date _____

Project / Client _____

Ryan W. operating computer for 2nd sequence

... Actually Florian H.

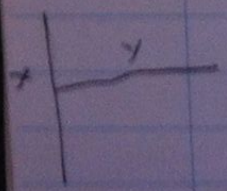
Lunch @ ~12 30 pm

on to resistivity w/ Kangchen B., Albert C., Daniel B., Mark S., Florian H., Ryan W.

we start the 4th survey

Gravity - always clamp/unclamp when moving, don't flip black rubber cap switch

- return to base station every hour or so for drift
- level X first then Y
- rotate egg heads style so no net rotation
- start your 1st measurement with enough wiggle room say if you are going over a mountain

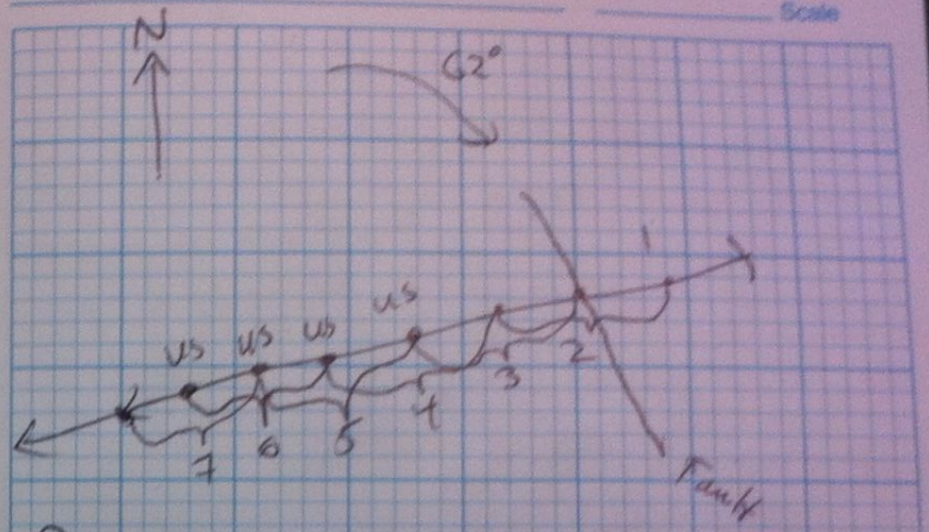


Location _____ Date _____

Project / Client _____

schematic

Scale



Road 4

Road 5

✱ note midpoint 176 might be a duplicate - Bryan R. & Daniel B. measuring

Location _____ Date _____

Project / Client _____

like 30 to start (± 50 off zero range)
- write down temp, voltage
- dynamic range

Saturday 03/22/2014

Cold, partly cloudy windy

Objectives: GPR
RTK
Gravitimeter
Magnetometer

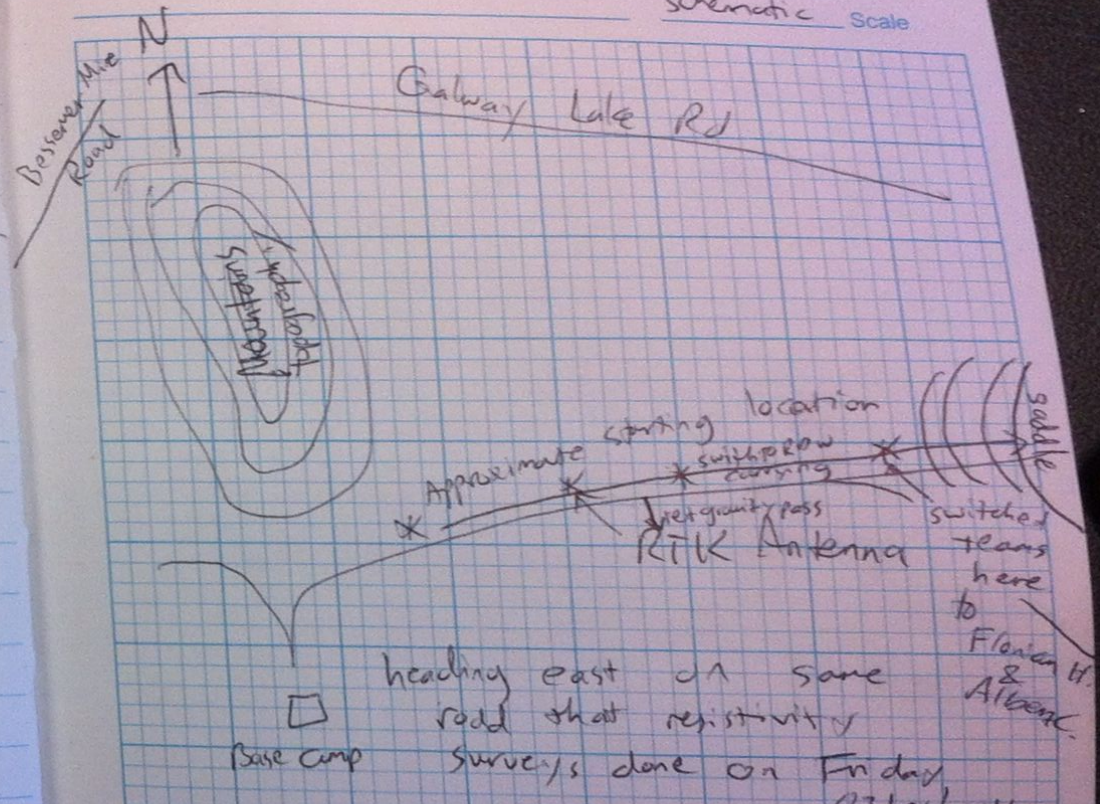
1st Magnetometer team: Ryan W., Daniel B., Kangchen B.

- Kangchen B. on 1st carry
- had to veer off road south to pass Gravity to cam ~~to pass~~ (after RTK antenna)
- I carried for awhile then switch (~10 am) teams ~~to~~ before reaching saddle end part of survey

Location Emerson Fault, Landers 1992 EQ Date 03/22/2014

Project / Client Magetometer survey

Schematic Scale



We saw a strong pulse in the magnetic profile when passing the RTK station
- Metal?
- Fault? (water? RTK is set up on fault trace)

Location Emerson Fault Leaders Hill ~~Swat~~ Date 03/22/2014

Project / Client South Road (E-W trend)

GPR survey

GPR - Rob C, Kangchen B., Ryan W.

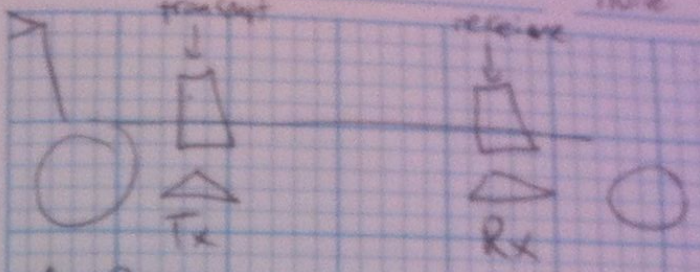
Stopped @ ~ 11:30 am

Location Date 03/22/2014

Project / Client South road

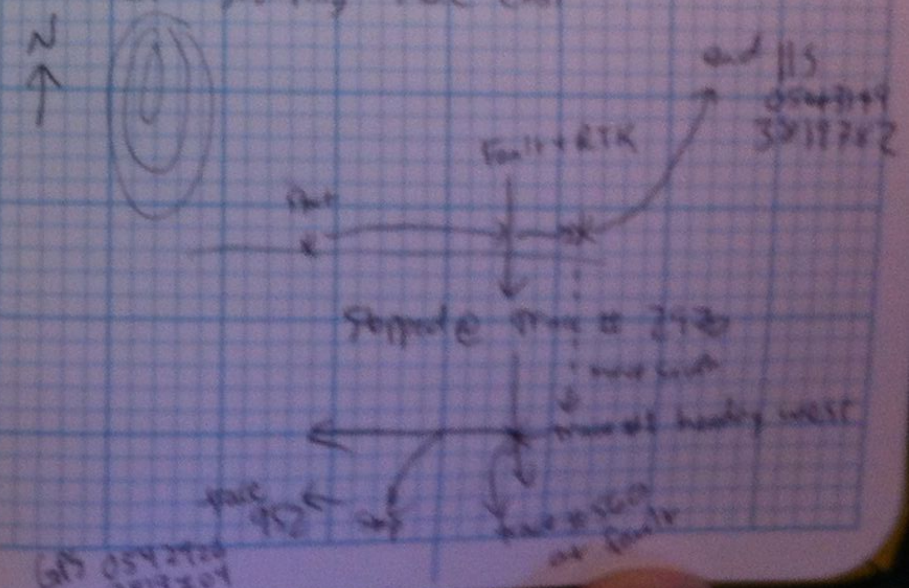
GPR - cart

Fwd/Rev Scale



★ Do not connect output! for Tx

starting coordinates: 11 UTM E 0542212 ±6m N 3819546

Rob C. said don't worry about elevation

★ same trace as magnetic profile, but starting more east