

Peveril Meigs, Baja California Research Materials
1925 - 1979. MSS 530

Journal 5, 1927. May - June. Baja California.

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Peveril Meigs 3rd.
2121 Anacapa St.
Sta. Barbara
Calif.

1927
Field-Notes, 1.

Overall 5

Punta Santa Barbara
N. (land) (islet)
S. (land) (islet)
E. (land) (islet)
(legend, Eng., p. 4)

On big blue maps:

$$2\frac{1}{2} \text{ mi.} = 1''$$

$$275 \text{ yd.} = \frac{1}{16}''$$

$$550 \text{ yd.} = \frac{1}{8}''$$

With Horace Byers (?)

San Diego is 20 min. later than Berkeley in time.

Descanso is 1 min. " " S. Diego " "

Ensenada is 2 min. " " " " " "

San Quintin is 5 min. " " " " " "

El Rosario is 6 min. " " " " " "

Add 3% for "overage" time.

Mileage to start, St. Barbara.

Speedo. Day

7434

May 12, 1927

May 12. eve.	L. Elsinore Camp.	7,617	183	Clear, Warm.
May 13	Coronado Beach	7,815	198	Clear, Calm (12 M.)
May 14	Rosarito Plain " "	7,857	42	
	East.			
May 16	Camp South	7,863	6	Byers
May 17	Descanso Camp	7,879	16	
May 18	Las Salinas Camp.	7,892	13	
May 19	Punta Banda Camp.	7,944	49	
May 20	S. Diego	8,074	133	Byers
May 21	" "	8,124	50	
May 23	San Miguel	8,182	58	None Byers.
May 27	Camp in Cañon Buho	8,236	54	
May 28	Camp E. of La Jolla	8,275	39	
	Camp ... S. Diego			Byers
May 30	Sta. 20, Descanso	8431		Byers
June 1	Byg Trade Out.	8453	22	
	S. Diego			Byers left me?
June 5	Sta. 26 (S. of La Jolla)	8,617		
June 6	Sta. 27 Dog bite	8,639	22	Alone
" 8	Ensenada	8,685	46	
" 9	In + Ground "	8,697	12	
" 10	" " "	8,702	5	
" 11	" " "	8,711	9	
" 12	S. of Ensenada	8,725	14	
" 13	Bygone Lane	8,758	33	
" 14	San Antonio Arriba	8,771	13	
" 15	San Antonio del Norte	8,782	11	
	Eclipses (moon)			

Soil

Shells

Rocks

Veget.

Stg.

Leadings

1

89

26

2

27

30

32

Bridges out:

Rosarito

Descanso

On return, spend

3 days, in Guana Valley

2 hr., in Descanso gullies.

2 hr., on cliffs N. of Descanso: unconsol.

1½ days, in sliced country S. of Mesa Sec.

2 days, San José Indians.

2 days Encarnada + S.

1 day. Mass San José. (S. of St. Thomas)

San Antonio del Mar to San Isidro, via
coast. Then to Sycamore Flat, via
Cañon direct.

1927.

Compass, set for 15° Declin.
(15°)

May 13 (Fri.)

Escuime to San Diego, via Pala Mission.
(fine old mission, still with lots of Indians)
and Escondido.

Drove out to Coronado [covered]

Vegetation Vidua along R.R. embankment + road
hill, hard buff sand. Not in any loose
white sand.

May 14. Sat.

Sta. 1 6 mi. by road from Tijuana, side road
to right. N. Coronado Is., W. $70^{\circ} 5'$. Elev. Reading, ^{9:35} 1020', 11 A.M.

L.F. Smooth rounded hills all the way to the ocean.

Whitish ~~rock~~ (#1) with soil cover. Soil a bad shale,
cracked.

Vegetation Abundant, green grass, some 6" high, with
some other plants. 300 Yd. N., ^{Yucca} ~~Trapa~~, low Chenop.
legum. see #1.

Clim. 11 A.M. Sunny. Few low stratus clouds. Gentle W. wind.

~~Dot forming over Coronado Is.~~ Alto " in E.

Photo # 2, 1. ~~Dring~~ W. $20^{\circ} 5'$. From Sta. 1. F 16, $\frac{1}{50}$ "

(no tripod)

11:30 A.M. Coronados entirely obscured.

Sta. 2. Some — miles SW of Sta. 1. Still
rolling ridges. Elev. 740', reading. ^{6:55} 655' (14)
Small at Sta. 2 and some others seem
to be sand piles.

Houses

Material:

- △ Adobe.
- Wood: board + patten.
- Concrete.

- Good ■
- Indifferent □
- Bad. □

Roads

- Crushed
- Sidewalked

Age

Recent.

Old.

□ Vacant.
Yellow, center.

Use.

Mexican.

Bar. ■

~~Hotel.~~ Retail. ■

Hotel. ■

School. ■

Governmental (Public bldgs.) ■

Church. ■

Recreation. ■

Residence. ■

Factory (Mfg.) (Industrial) ■

Amer. Club (Club)

Red

Black

Yellow

Black.

Black

Green

Appendage

Structure

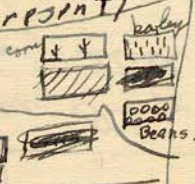
Land-util.

Residence (house present)

Truck-gardening.

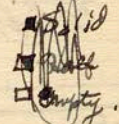
Park, etc.

Waste { □, or Arroyo
Sand



Color

- Red.
- Black.
- Green.
- Blue.
- Yellow.



Clim. 12:15 PM Wind freshening. Fog bank
readied the coast some 15 minutes ago.

Veget. Like Sta. 1, but more tuva & Jolla
clumps, + Chamise on hilltops

Cult. Half a dozen grazing cattle & as many
horses. 500 yd. N., in E-W canyon,
a small farmhouse.

Geog. $\frac{1}{2}$ mile S.W. of Sta. 2, Some dark brown
vesicular basalt occurs, at an elev. of 635' sea.

Sta. 3. 1 mi. S.W. of Sta. 2. Elev. reading ^{545'} ~~630'~~!

Geog. (#2) Vesicular basalt in a sort of projecting
curved boss. Depression W toward.
Smooth, low dunes.



Cult. At this ^{545'} ~~630'~~ elev., a shell-heap
50' wide and a foot, or less, deep every where.

Good valley road.



Difficult cañon road.



Good mesa road.



Fair upland road.



10 mi per hr

1st.

1st in station 1000

Mussels, clams, clipped shells, arrow point, pottery
(see #1). Looks like a reef of old sea level,
at end of formerly dry spit. $1\frac{3}{4}$ mi. from coast.

Geog Basalt on all hills within radius of a
mile N, S, + W. of Sta. 3. Basalt $125'$ thick
Sta. 4. Over a gray sandstone (#3). (Contact found
clearly in arroyo) ~~hard~~ sandstone. Basalt contact, $415'$
 $500'$.

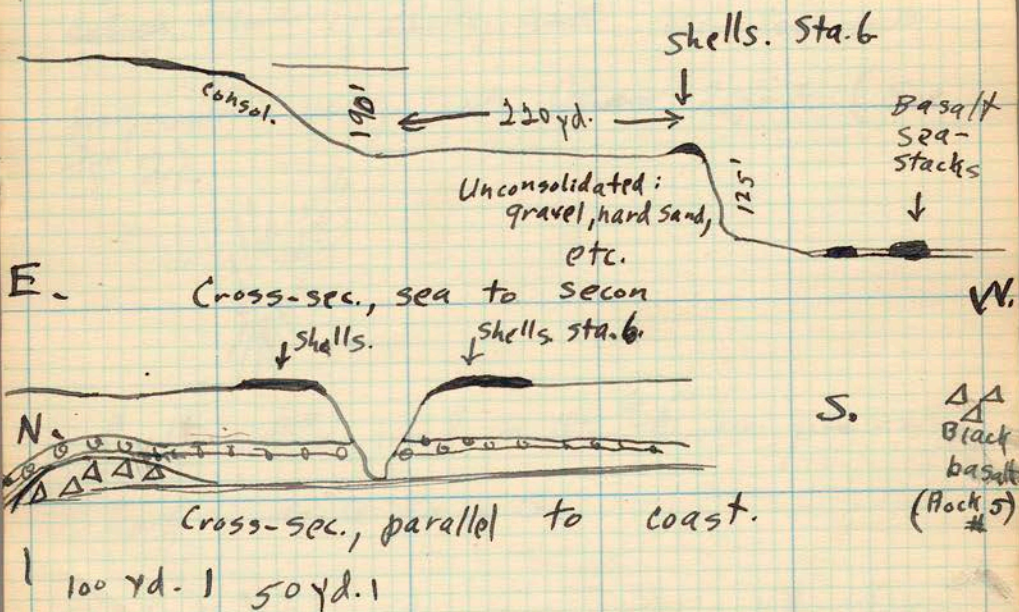
L.F. On the whole, fairly level ridges.

L.F. going W. from Sta. 4, immediately
over a quite level ~~area~~ "meas" of large
gravel fragments. Another basalt outcrop of
basalt at $410'$ a mile W. of Sta. 4, to W. road
 100 yd.

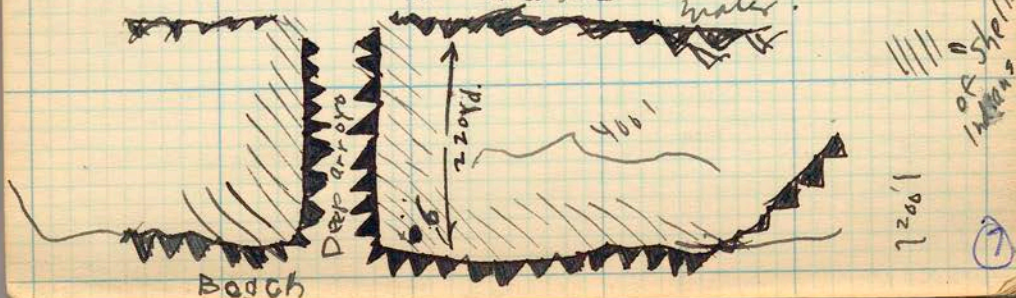
Sta. 5 On edge of marine terrace, elev. $405'$
 ^{$370'$}
Overlooking lower terrace. Steep front. Rock (#4)
of river near top looks like old granite?

Sta. 6 Top of lower cliff. $130'$
 $215'$ facing.
Geog. Whole cliff of unconsolidated material.
veg. Vidua, large + small, abundant at top.
Calc. Stenandrus shell - heaps, both sides of
deep arroyo. Oysters, limpets + mussels, barnacles,
clips.

Sea level, ~~85!~~ 3 P.M.



The ^{black} basalt is clearly underlying this part of the coast, though exposed in cliffs only here & there, for there is a shelf ^{of it} extending some distance out into the water.



At Sta. 6, & across the ravine, from it, the
cliffs are lined on both sides at the top with
~~thin~~ deposits of shells, with abundant rock
fragments: very clearly *Helium* deposits. (See
2).



Cult. The road on the ^{lower} terrace goes only
half a mile N. & S.

Photo # X², 2. From Sta. 5, facing N. W. Foggy.
f 11, $\frac{1}{25}$ " Lower terrace from upper
terrace.

May 15. Sunday.

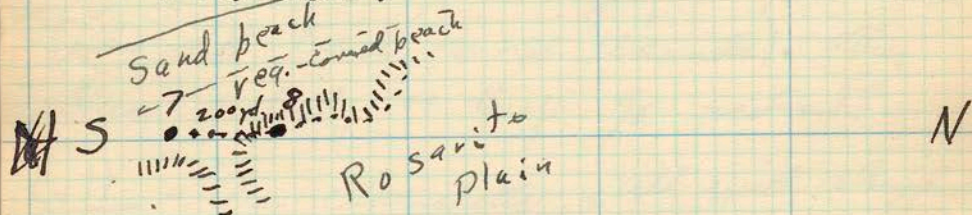
Sta. 7.

Camp 125 yd. from ocean, on grass-covered sandy low terrace, seaward from Rosarito plain.

Surv. 7:30 A.M. sea-level, 52' (reading)

" " Camp, 72' (reading)

Thus camp is 20' above sea-level.



Sta. 8. ^{78'} 130' (reading). On first, above terrace:

Cliff
L.F. edge of Rosarito Plain. Small-clam deposits, all along edge; also fine mussel fragments, many colored chips of rocks. Charred. Fragments of grey pottery.

L.F. Cliff trends N 15° W.

Veg. Rosarito Plain covered with wild barley & much wild mustard. Patches of "candelillo" cactus. Mussel along edge of cliff just N. of Sta. 7.

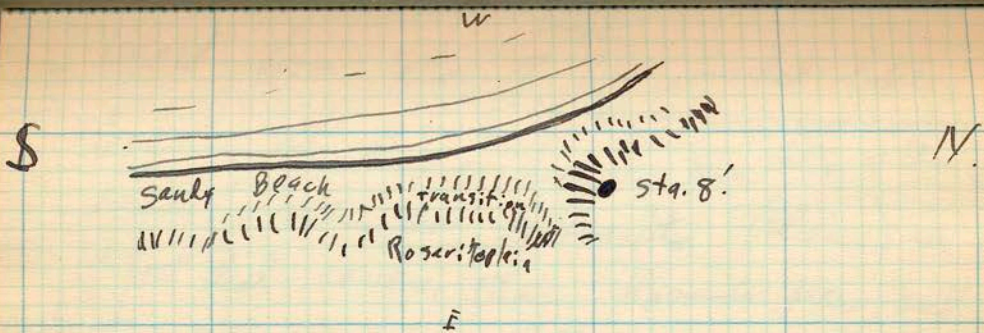
Cuck. The usual houses on the plain: Some 50.

L.F. The Plain (Rosario) is very level, with ~~some~~ steep-sided cañons, & many shallow (5 ft. deep), sinuous channels, curved ^(500 yd. inland from cliff.) in profile, and covered entirely with wild barley; 20 yd. across. (Like old tilled marsh channels). They deepen gradually as they go westward.

Cult. The clamshells, still with ~~shipped~~ ~~stone~~ stone chips, extend inland from the cliffs some 400 yd., in varying degrees of thickness. Not connected with the channels or cañons especially.

Veget. Wild rice only near the edge of ~~the~~ cliffs; not inland. Wild barley & mustard hold sway there.

Surv. Sta. 8! Less transition zone from cliff to sea, & less beach. Sea-level reading: 65' (9:30 A.M.). Some ^{flashed} rock outcrops on lower Geog. beach. So westward that no good samples obtainable; apparently igneous.

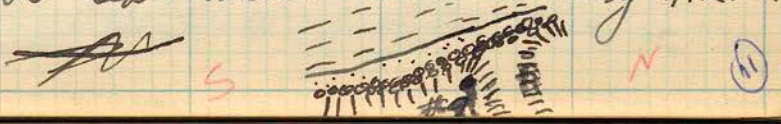


At Sta. 8, beach runs N. 40° W.
Substr. Sta. 8, 45' above sea-level. Cleveland
Cult. shells, clam & oyster, line the cliff-top.
 Clips, too.

(Anthrop. #3 contains mussels, clams, clips,
 pottery, ~~the~~ bone, and perhaps an arrow point.
 Picked up along a quarter of a mile of
 cliff-top. Very few bones. #4 is a bone
 picked up along this same stretch of cliff,
 1/4 mi. N. of Sta. 7.)

Cult. More bones: 25.

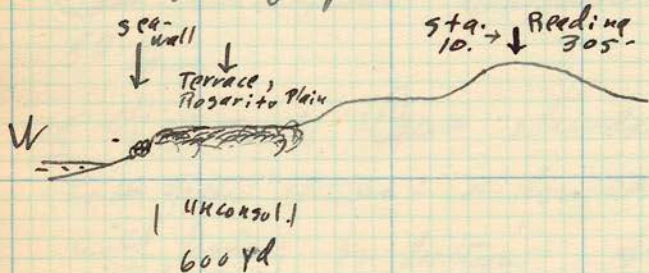
Sta. 9 Country sinking more & more. Rosario
 plain is now only 20' above sea level at
 the top of the cliff. Plain goes right up to
 edge of cliff. At foot of cliff, a sea-wall of
 pebbles right against cliff. High tide reaches
 the pebble sea-wall. Beach trending N. 28° W.



L.F. Inland from sta. 9, ^{600 yd.,} low rounded hills
begin. The terrace between the hills & the
beach (a continuation of Rosarito Plain) is
a good deal sandier than Rosarito plain, and
Cult. there are no Indian shell deposits anywhere
near sta. 9. (15' inside ridge on terrace
near sta. 9.)

Veget. Along the foot of the hills, on the terrace,
is a 150 yd. strip of wild mustard,
8' high, and so dense that it makes
penetration extremely difficult. On hills, wild barley
begins again. On hills, also, alfalfa.

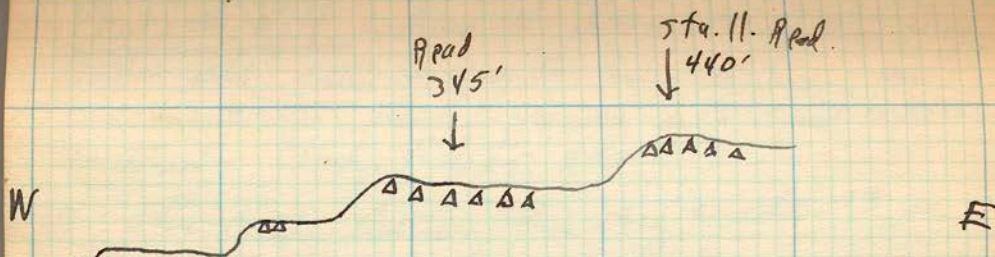
Geog. A whitish rock, like #1, seems to make up
the hills; exposed only in small holes and
surface fragments. Adobe cracked soil again



Sta. 10 to sea-shore, $-2\frac{1}{2}^{\circ}$.

" " to Rosarito house, 5.20° E.

Other ridges (E-W) of similar hills to Sta. 10
to M. (N)



Red sandstone again outcrops at a 100' lower level.
 Photo # A₂, 3. Bays in tall, unshaded. Bright cloudy.
 F 7.7, $\frac{1}{25}$ ", 10'.

12 Noon.

Elev., sea-level: 50'

Sta. 12. Red vicinior local outcrops along
 the cliffs, with a loose layer
 above it ~~#5~~ #6' thick, and a 3' layer of
 soft yellow sandstone + gravel above it, & unconsolidated
 sandy stuff above it (in steep cliffs).

1:50 P.M. Sea-level, 55'

Sta. 13 Again at sea-cliff. Reading 110', 2:30 P.M.

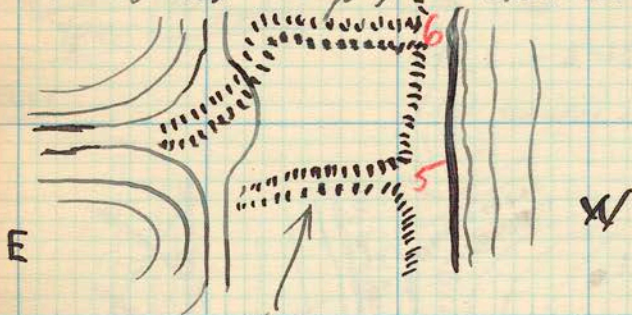
Geog. The cliffs here are of loose gravel, with dirt
 (sandy) in between. #5 type just at the very
 bottom. Gravel sex-well.

L.F. The land seems to sink a little toward the E,
 before the hills are reached.

Surr Coronados, N. Island, bear from Sta. 13 N. 80° W.

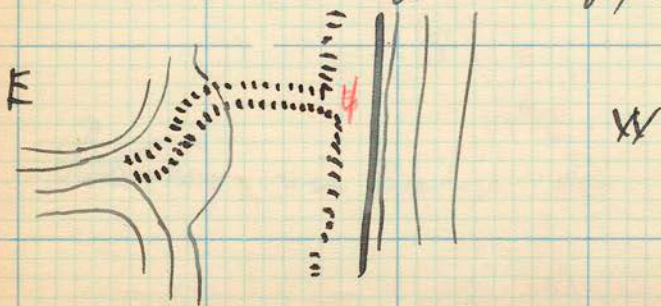
Photo # A², 4. Looking W. down one of the large
 canyons that cuts across the lower terrace, in
 unconsolidated dark sandy silt ~~hard~~ ^{soft} ~~spending~~
 material. Cloudy. F 11, 25, 25'

The canyon between this one + sta. 13 is
 the outlet of a good sized, back running
 valley, whose general floor (except for the
 interbedded arroyo) is level with the terrace.



The arroyo of the photo

Photo # A², 5. North arroyo N. (some 150 yd.).
 Looking E - 100'. 65' deep, $\frac{2}{3}$ way from
 sea to hills. Red "loam" only 10' in bottom.
 Rest unconsol. Offset to left, also north to east.



270 yd. farther, another similar canyon emerging from
 a valley, but not offset to left. Then, next indicat

~~Sta. 14~~

Top of first series of hills. A

Sta. 14

fairly flat, good semi-wild - barley, 1 1/2' high.

Reading 285'

Sta. 4 is W. 32 1/2° S. of Sta. 14.

Sta. 15

On cliff overlooking sea. Unconsolidated stuff.

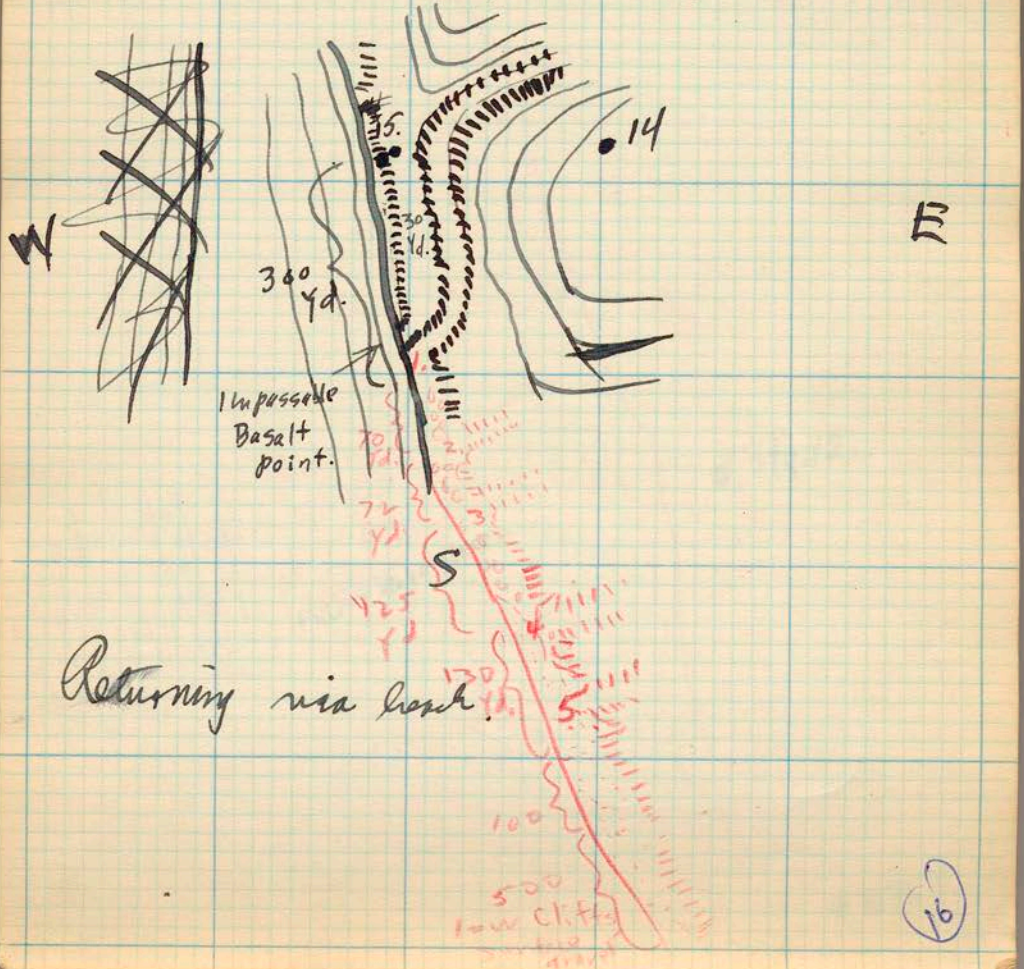
180' reading.
V.P.M.

Sta. 4 is N. 62° E. of Sta. 15

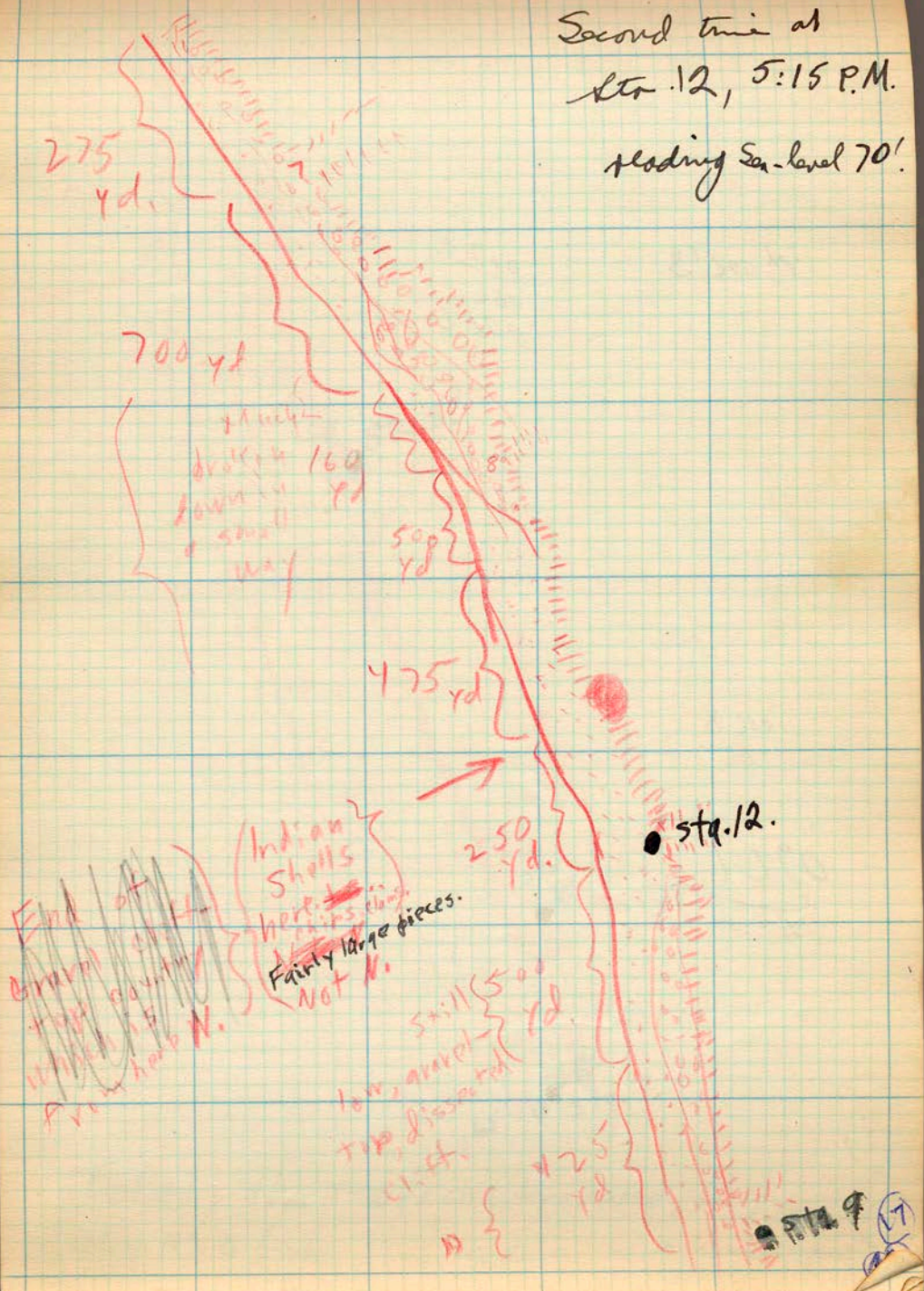
Sta. 6 is N. 71 1/2° W. of " " " (About 1 mi. N.?)

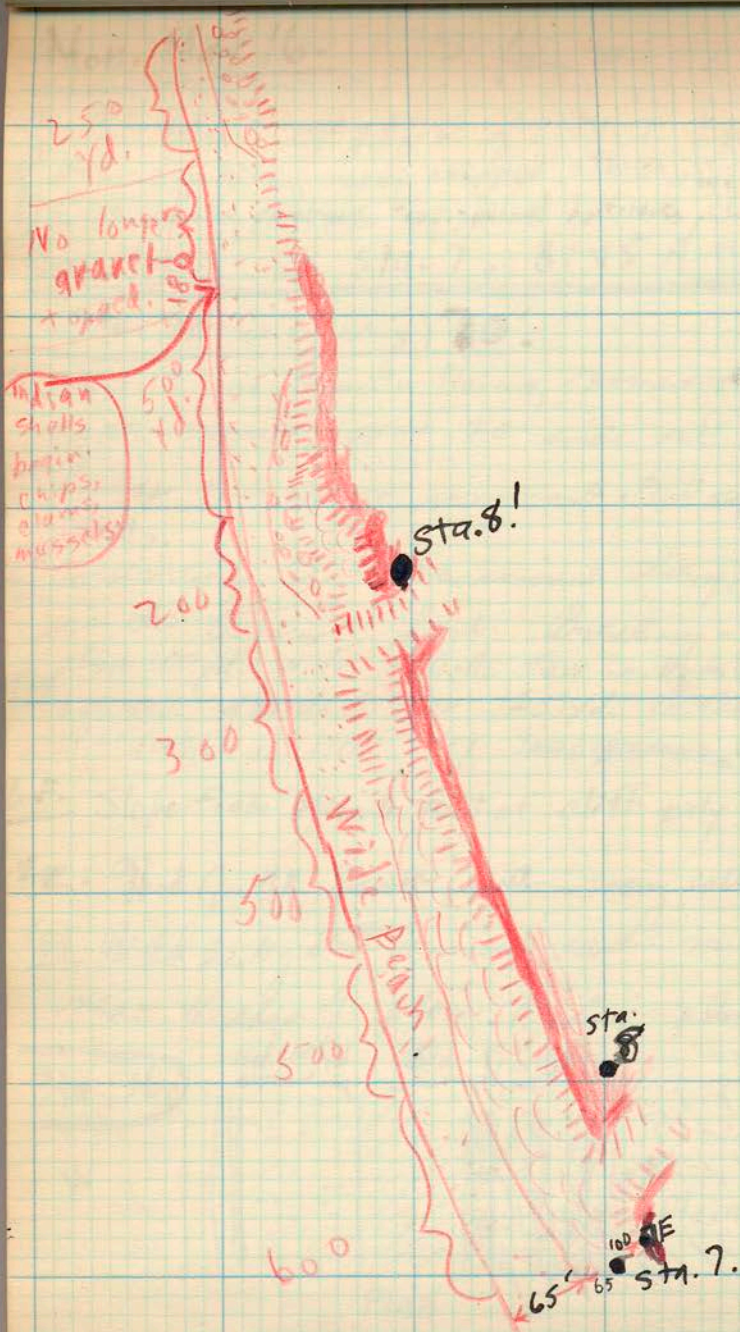
Surv.

N. Isl., summit is W. 4 1/2° N. " " "



Second time at
 Sta. 12, 5:15 P.M.
 reading Sea-level 70'





Total, above beach traverse, 4.9 miles.
 (adding 10% to figures, in accordance with measured prod.)

18

Mon. May 16-

S. from sta. 7.

S. Cliffs 100yd. E. of sta. 7. Excellent Indian shell-deposits. many chipped stones, finely broken clams + mussels, pottery frag.; burned half-ricks, charcoal.

Sea-level op. sta. 7, 8:45 A.M., ca 35'

Sta. 7E is (reading) 70'

Just E., on Rosarito Plains, numerous vidua-gravel earth mounds, some 20' wide and 2 1/2' high.

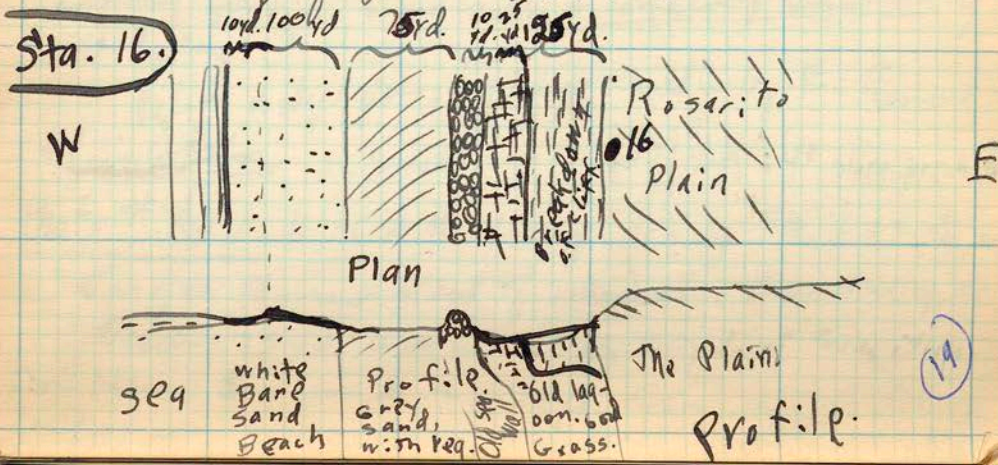
Perhaps just avian remnants. Not esp. abundant in shells.

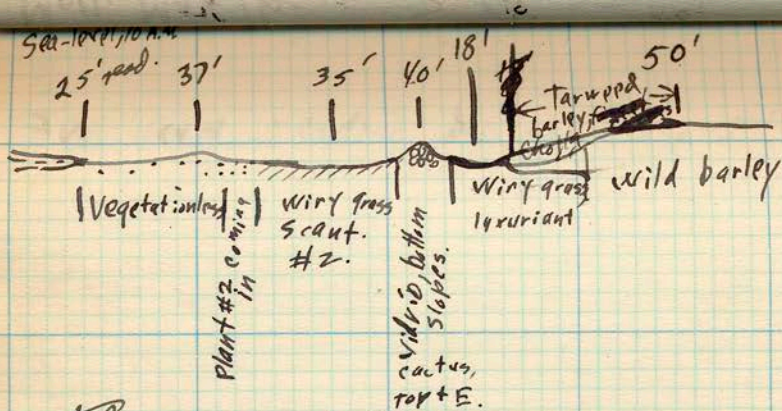
L.F. Continuing S., occasional large embayments in the terrace front. Breaking-down strip about 100yd. wide. Shells few in breaking-down strip, but are abundant for 125 yd. in from edge of cliff (which is here very insignificant + gradual.)

L.F. Slope from plain to foot of cliff only 4° (opp. boat.)

2E: Herd of 90 horses, with many colts, seen at 9:30 A.M.

veg: Wild barley still dominant, with much ^{sand.} pitahaya near W. edge of plain. Vidua abundant.





This profile indicates rising coast, with an abandoned pebble sea-wall + lagoon behind, with the beach being still encroached upon by pioneer plants. Cynops up to 10' in dia., tuna thickets, + small pitahaya grow on the east slope + top of the old sea-wall, between the pebbles.

Photo # A6. 10:30 A.M. Cloudy. On old sea-wall, facing S. 16° E. f 22, $\frac{1}{4}$ ", 25'.

The bottom of the old lagoon has occasional bare patches of dried mud, fringed with ^{yellow-button (#2)} ~~tarapped~~ Wiry grass. (Fresh water mud.) Upper slope of lagoon, both sides, has wild barley: luxuriant. Entrance of lagoon indicated by horses spitting out of it, + no salt, + completely surrounded by wild barley.

Vibrio at edge of plain, + ^{small} pitahaya. Wild barley E. Horweed + ~~fringe cholla~~ on breakdown slope of cliff: 40° slope breakdown.

Photo # A7. 11:15 A.M. Cloudy. Facing SW. f 22, $\frac{1}{4}$ ", 25'.

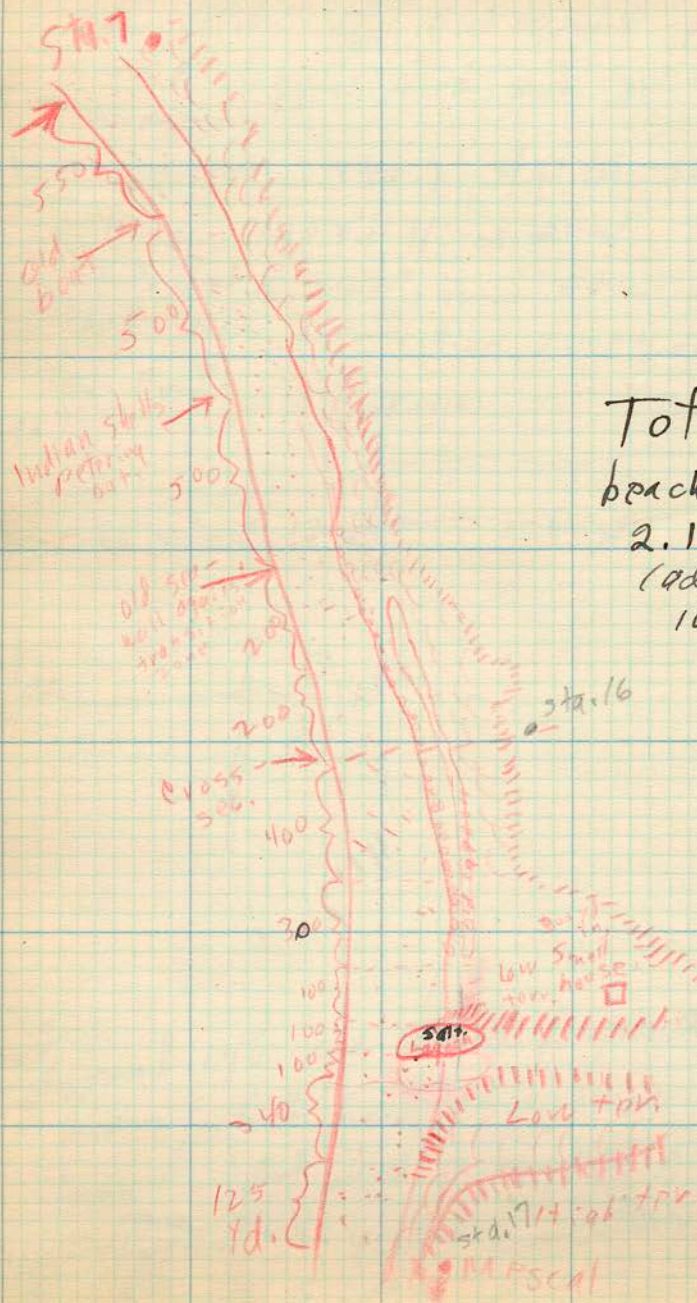
Part of the N-most stand of mescal. Elev. 9 ft. 30'.

Beach 75 yd. wide here. Only 20 yd. of transition.

First Mescal S., (except the S.), 150 yd. from edge of low embayment.

(AP)

Back along beach.
 Sea-level reading, by mescal, 5'



Total, this
 beach traverse,
 2.14 miles
 (adding usual
 10%)

Romero R. limit
 N. of Bent Rock

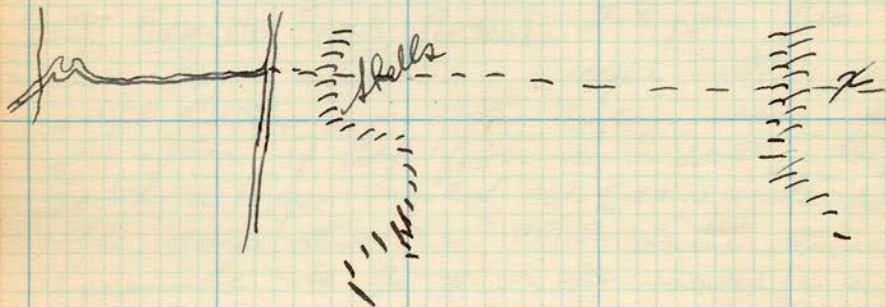
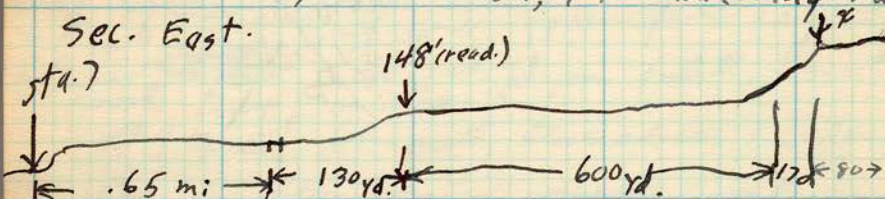
Veget. #3: various types of *Vilvrio* from same locality, same time, at sta. 7. The lilled type had closed up (3:15 P.M.) and the biggest had not yet bloomed this season.

Surv. Sealevel, sta. 7, 4 P.M. reading 35!

Cult. House 300 Yd. N. of road.

Side road, to sta. 7, runs .65 mi. W. from main road. Elev. intersection, 4:10 P.M. reading 122!

Sec. East.



Cult. Around 148' are shell fragments (~~of~~^{clay}) finely broken, with hard stone chips. No pebbles. Usually Indian. Extend 60 yd. E., 30 yd. W. of 148!

Veget. Bottle plant. Yellow ~~sun~~ (small). Some thin clumps.

Surv. N 1/2 Cox, S. 70° W., down 30. House from 7
Elev. W.

Geog. at 3.2 from ~~lower~~ fork, basalt
(red vesicular) began to make up the lower terrace.
no longer unconsolidated. at 4.6 we turned off
to the right & camped at

Sta. 18.

Tues. May 17.

^{near} 6:50 A.M. Sea-level reading near Sta. 18, 70'

L.F. 400 yd. N. of Sta. 18, another cañon, also cut in the
solid near red basalt. Cañon 90 yd. across at top
Elev. of basalt terrace (top of cañon), reading 110'
(7:10 A.M.)

Cult. Starting just S. of this cañon, & extending
along edge of cliff abundant mussel & limpet deposits,
brinkly broken, with stone chips.

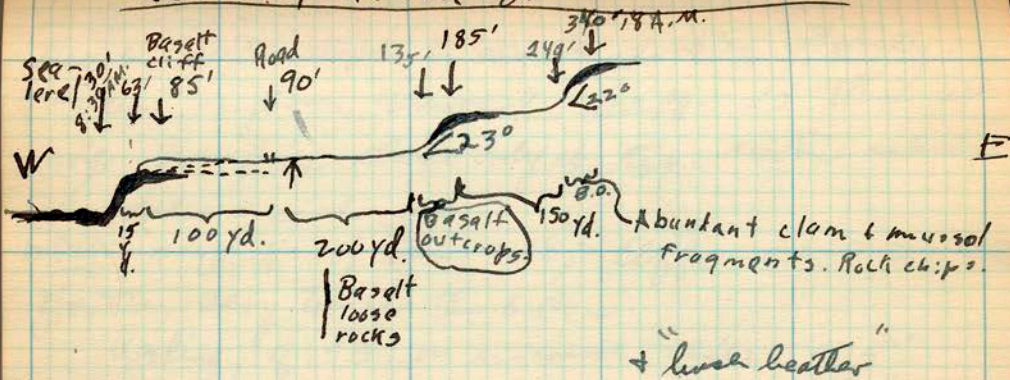
L.F. Great basalt sea-caves, stacks, etc. along base.
absolutely no beach

Zoo. Abundant mussels, sea-anemones, Crabs in the
pools & natural basins of water.

Veget. Alder's close to edge of cliffs, & tarweed. Wild
horley on level mesa. Mesquite particularly clustering
around the seaward tops of the cañons, where
sides are breaking down somewhat.

Small pitahaya and lupinose very abundant
on the S.-facing slopes of the cañons.
L.F. 150 yd. N., similar cañon, and also visible N. 24

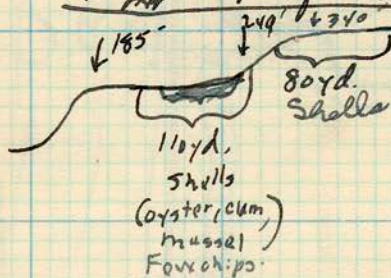
Sec. along N. Side of Cañon 18.



Veg. On the face of the ~~face~~, small pitahaya, is abundant. On trail, wild barley & tarweed.

L.F. From the top (340') the fairly level, unbroken country stretches E., with Table Mt. in back, and another level between 340 + Table Mt.

Cult. The Indian shell deposits shown are only along the upper ^{part} & top of Teras. No pebbles.



L.F. Arrow just ~~E.~~ of road indicates large ~~mussel~~ clam fragments, with pebbles: clearly naturally laid.

L.F. Cliff just N. of cañon 18 has some 72' of unconsolidated material (pebbles, shells, sandy dirt), which have been cut back some 15yd., leaving a broad shelf.

SEA-level, 8:30 A.M., 30'.

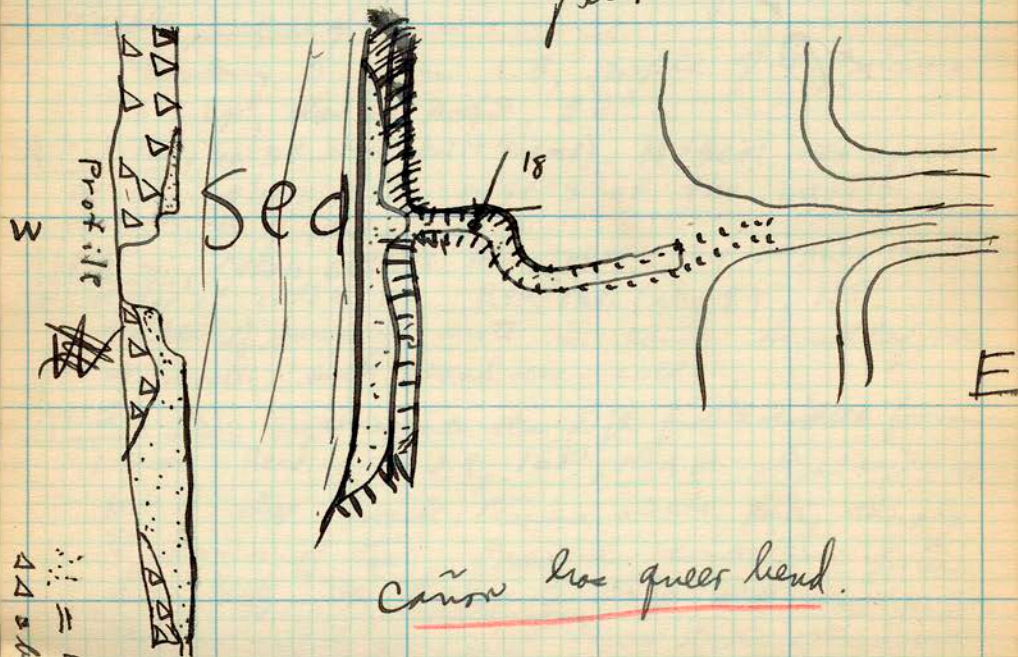
(15)

5. of Cañon 18. Abundant ^{clam} clam + ^{mussel} mussel
 deposits, with chips + small pebbles. Partially
 Indian anyhow. Unconsol. stuff 25' thick at
 edge, but fine shells only at top; another indication
 of Indians as source.

Geog. 100 yd. N. of Cañon 18, cliffs are unconsolidated
 from the very top to the bottom.

Reading, 8:45, on unconsol. cliffs, 105'

Geog. 200 yd. N., basalt begins to come in at
 the bottom again. Beach 50 yd. wide from basalt
 to basalt: some 400 yd. long altogether. Big cañon
 cuts thru rock terrace E. phase.



Cañon has queer bend.

••• = sand

△ = Unconsol.

Sea-level, 9 A.M., 40'

(rb)

Rosquito Creek. ; 3.7 min. from Rosio River
~~Agua Jeta~~ 3.1 " " Santa Elena

Hedding 5. from Sta. 18.

6907. At .5 from 18, unconsolidated capping observed at top of cliffs. At .7, capping 20' thick of mineral. Beach well. Road 130 yd. from sea-cliffs. 20 yd. beach.

Veget. *Adiantum* (3 kinds) + mescal at edge of cliffs. Small trees - sand patches on cliff-top have Δ mescal + *Adiantum*. Terrace, + patches of wild barley, on terrace floor.

Cult. Indian shells in narrow strip. Clam, mussel, chips. Pine.

L.F. .8, cañon, which cuts through back terrace.

Surv. Reading on road at .7, 100', 9:30 A.M.

At 1.3 mi., high isolated cliff about 300 yd. E. of road: looks like columnar basalt. Reading, 9:40 A.M., 130'.
Pebbly surface of terrace.

Looking S. from 1.3, profile of high terrace: 3° to top; slope of profile, 28°.

At 1.7 mi., house being built (frame). Mescal now appears on the slopes of the risers of the basalt terraces, E. of road.

At 1.9 mi., cañon cutting back-terrace. Big barnlike structure at edge of cañon W. Reading (at 1.9), 115'.
Trickle of running water in cañon. Small lagoon at mouth, with sand sea-well.

At 2.9 mi., right opposite the high profile sighted from 1.3 mi. Reading, at 2.9, 165', 10 A.M. Road right at foot of steep profile. Terrace slope fairly sharply to sea-cliff tops. Mescal continuous from sea-cliff top to top of steep cliff slope profile.
Medium nitro along road. Flower heather with mescal.

Sea-cliffs 200 yd. W. of road here. Elev. road, 93'.

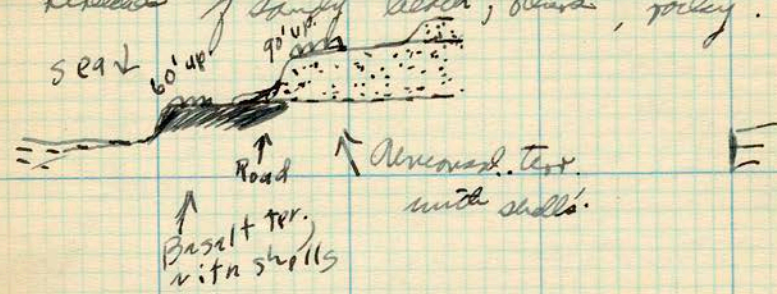
Cliffs of vesicular basalt (blackish). No beach. 5' unconsol. top. Small embayment + beach 200 yd. S. : 150 yd. long (27)

Cult. Small mussel, clam, abalone, Clipa debris.
veg. Orange parasite on "flower leather" profusely.
Zoo. Shells in road: large: mussel, limpet, 1 sea-urchin;
 some pebbles.

At 3.6. Rgd. 140!
 Broken-up country. Unconsolidated
 stuff very thick: some 60' abalone,
Cult. Profuse shells, ~~very~~ fine. Mussel, Oyster. Abalone
 Clipa. Right by road, 75 yd. from sea-cliff,
 on second terrace. Much mescl.

L.F. The terrace has become so small as to
 be just vestigial, and it is eaten into by
 erosion much, so rock is somewhat tortuous.

Cult. At top of cliffs of lower terrace (basalt) more
 shells: clam, abalone, mussel. Some Clipa.
 Straggles of sandy beach; others, rocky.



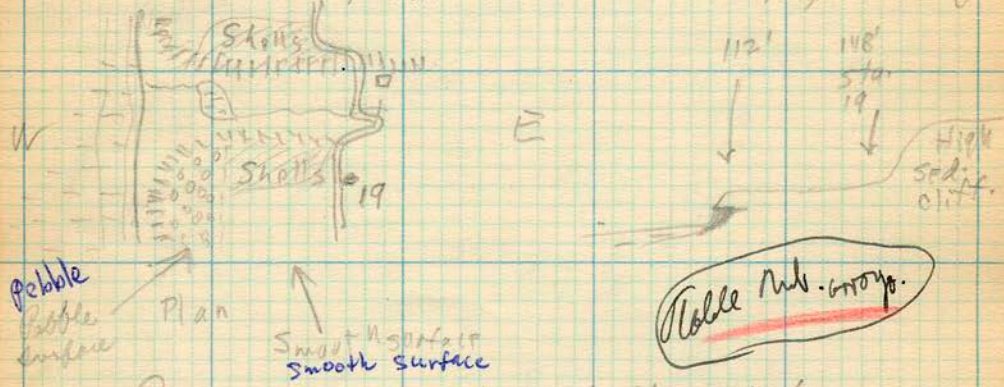
At 4. mi mescl on terrace & in canons steps. Instead,
 Cholla, little pitchops.

At 5 mi. small patch of mescl on cliffs by sea, but
 more N+S. 3 Acres cult. land (corn) at this point
 on terrace between road & sea. Much mescl.
 Cliff terrace fairly smooth, and 150 yd. wide but
 for occasional canons, dried basals.

S. of 5 mi, broad valley, .1 mi. wide sandy bottom.
 trickle of water. Small house & garden patch. (20)

S. of valley (s. edge) CLIFF 125 yd. W. of road & high terrace E. Edge of cliff, 112' road. Beach cleft, with 15' gravel & other uncoral.

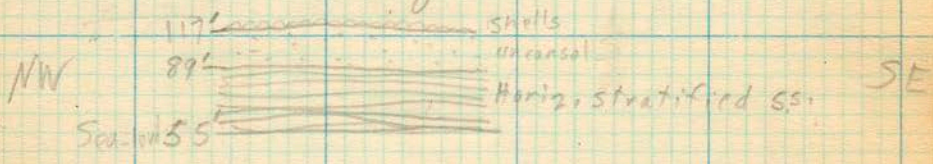
Two Indian shells. Coast line S. 70° E.
 Sta. 19 A few fine mussel fragments by the S. Valley "chick-top" some on M "chick-top", too.



Reading, Sta. 19, 11:30 A.M., 148'

High Schimentary Terrace right E.

At .4 mi. from Sta. 19, an isolated beach has little itself above the terrace just W. of the road. At 1.4 mi., a cross-section has an exposure of massive sandstone some 10' below the terrace level. Hills to C, still gently rounded on subbase. Sea-cliffs 90 yd. W. of 1.4.



Sec. of cliffs W. of 1.4.

Shells are Oyster, mussel, & rock chips.
 Sea level, 1000 ± 5'

(M)

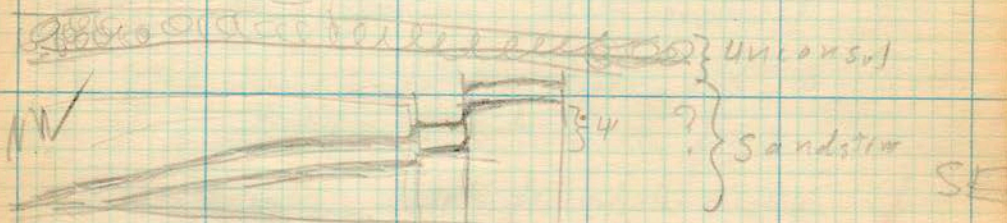
These sandstone cliffs (yellowish, etc.) (Key, bottom) weather out most distinctly, in an irregular, irregular and porous. Diff. layers of unequal hardness. Great overlying ones.

Photo # 4, 8. 1 P.M. Bright sunny. f 16, $\frac{1}{25}$ " 25'

Sandstone cliffs at mouth of Little Cañon by 1.4 mi.

Photo # A, 9. 11:55 A.M. From sandstone core looking seaward. f 22, $\frac{1}{3}$ " 25'. Bright sunny.

Photo # A, 10. 1:45 P.M. Peculiar portholes in the sandstone on a shelf. f 27, $\frac{1}{25}$ " 25'.
Sandstone



Beautiful little fault in the sandstone. At least 4' throw. They showed off a sewer, 300 (d. n. of Little Cañon).

Photo # 3, 1. "Mussel tracks" in the sandstone shelf. f 11, $\frac{1}{25}$ " portrait attached (4'). 2:15 P.M. Also figured they represent patches of musk.

At 3.0 mi. Been seeing three much -
crack ~~bedrock~~ ^{unconsolidated} with yellow sandstone
below. Above, small cones.

20 yds. } Reading, bottom of cone (all unconsolidated), 175'
" " } stop " " (all unconsolidated), 230'
So at least 55' of unconsolidated.

100 yds. E of road, yellow sandstone higher than alluvium



At 4.2 mi., down in lower level, but still
bedrock unconsolidated. Reading 165', 3 P.M.

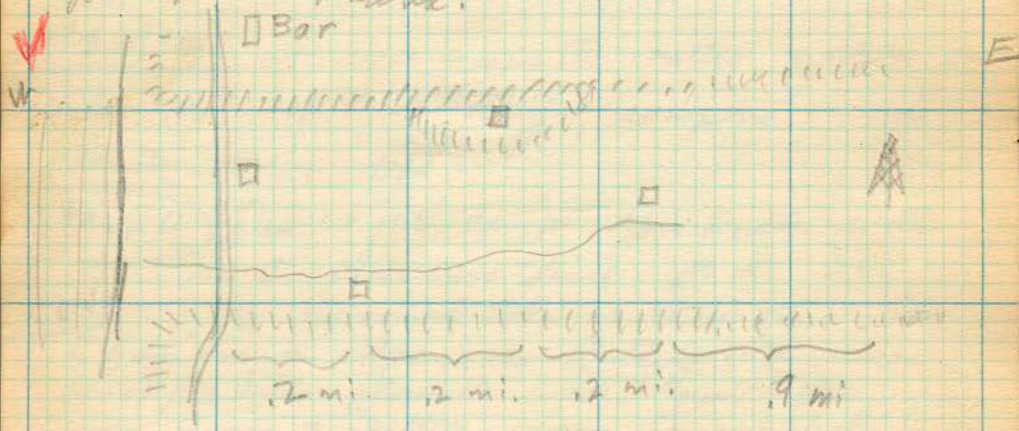
1/2 mi. 2d mustard has been with us for the last mile.

At 4.3 mi. Bar + dance-hall, just on N. bank
of Meadow Arroyo; "Valencia Beach";
rather new bldg. The bar-tenderess informed
us that the petroler operations are going on
a couple of miles up the valley. They get
water from the arroyo. (31)

Oil-well drill, reading, 190', 3:45 P.M., 1 1/2 miles
Meadow valley. They are down 600', have been
drilling 3 mi. The soft valley fill was 450'
out the side. In the last month they have

been in a terribly hard "blue slide" as they call it. They have expensive equipment: rotary drill, good tools, etc. They burn coal, all of which they truck in from the north. In about middle of valley.

Cult. Three regular inhabited ranch-houses between derrick + road + cult. land. On the arroyos is very small, + most of valley is good farming land.



Water running quite abundantly in arroyos. Valley .8 mi across.

On 1.6 mi from Milens Bar, we cut to road



← 125 yd → * 175 ft. →

Sand-dune,
Veg.-covered
Cliff, down
39°

yellow sand. Spices appear on dune, for first time, due to physiologic's Hypoxia.

Reading, Sea level, 130', 4:20 P.M.
North Canyon east of 1.6 in right hand
Best line about 300 yds. N. of point where
turn it.

At 2.5 mi., Descanso Valley begins. Turns on
N. side of valley, E. of road; S. side of valley,
E. of road, deeper descent.

At 2.9 mi. we were across the valley & took a
side road up the valley, camping mi.
from the main road.

Sta. 20 Our night's camp. Considerable water
in the Descanso River: At Sta. 20,
cutt. An informant tells us that there are
8 families in Descanso Valley. He raises
beans, which flourish well. Most of them feed
raise horses & cattle. Some people of the valley
differ as to which Calvo ruin was the
Mission.

veg. Sycamore & Willow trees, wild barley, wild
mustard. Our informant says that wild barley
makes excellent feed when green & tender,
but is bad for the horses when dry & hard-
headed.

L. F. The river runs in a fairly narrow arroyo.

Wed. May 18. In Descanso Valley.

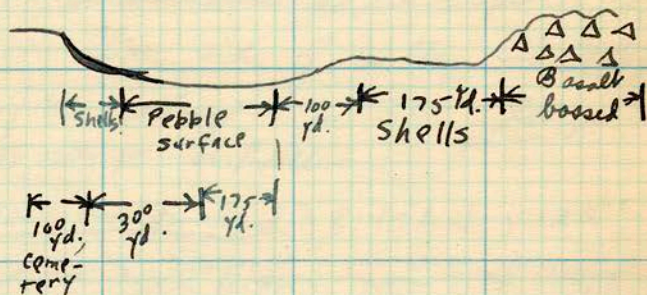
Reading, Sta. 20, 7:30 A.M., 105'.

L.F. Smooth, steep ridge on S. side of Valley sp. Sta. 20, elev 345' at 7:45 A.M.

Cult. Abundant clam + mussel fine fragments + rock chips here (345'). Clearly Antioch, 125 yd. N-S axis; 175 yd. E-W.
See Anthro. # 5

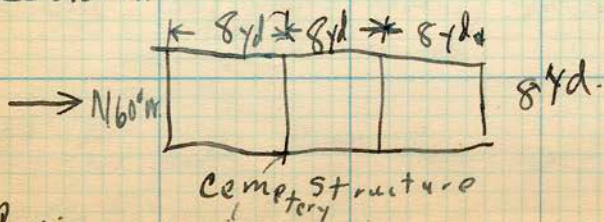
L.F. Outcropping, steep basalt ridge begins 100 yd. E. of this point, + some 100' higher. Lowest shelves on W, N, + S side of 345'.

Profile along ridge, S. side Descanso Valley



Cult. The cemetery is ^{half-} enclosed in a thick adobe wall. shells all around, with chips. Cem. on N. side of ridge.

Veg. Abundant long nitro in the cemetery: nowhere else around.

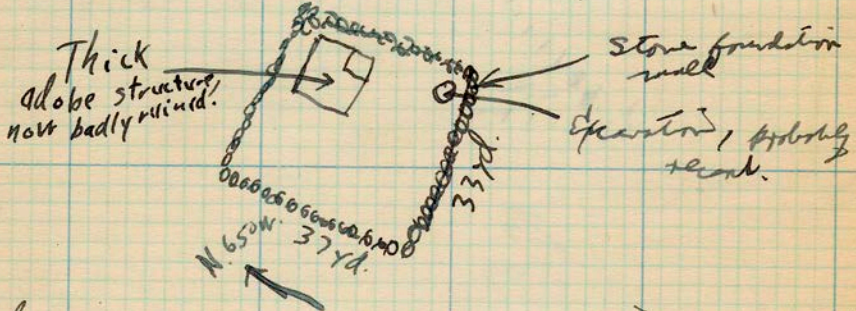


Walls 2 1/4' thick

Reading, 270'.

(34)

100 yd. N.W. of this century ruin, is another vestigial ruin. Abundant fine shells around it, and thick pieces of pottery; also in the enclosure fragments of pottery.



A few yards south of the enclosure is an arched way, ~~now~~ apparently the source of their adobe. On edge of very steep slope overlooking valley to N.
 Veg. Big nitro or ~~small~~ ~~of~~ ~~in~~ adobe walls. shells in wells.
 (Bearing to ruin on other side of valley, is N. 320°)
 The slope N. of the rectangle is 38°; large rounded basalt outcrop or boulders.
Reading at lagoon (about sea-level), 8:45 A.M., 125'
 The N. structure is S. 70° E. from main road 100 yd. S. of valley edge.
 (35)

Plaster remnants on inside of S. wall (N. exposure).

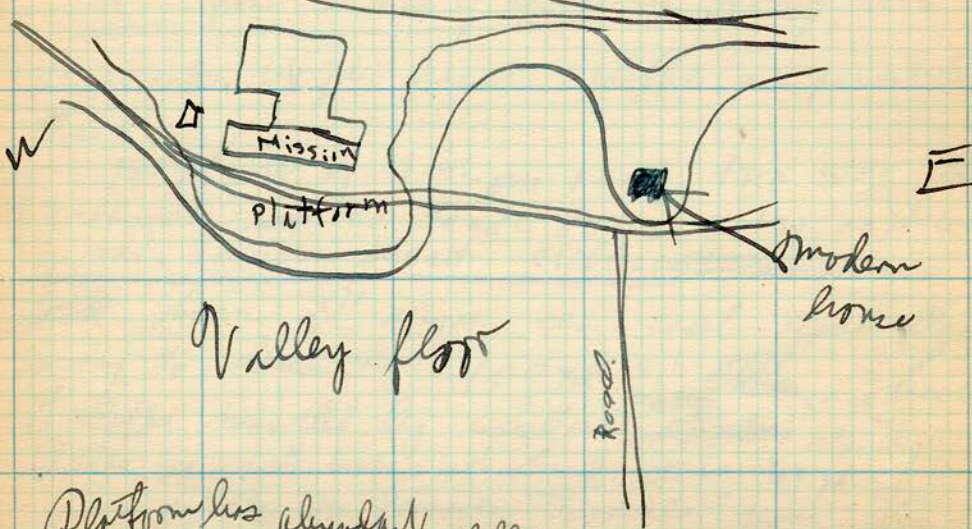
Bed tilts here + there.

Photo # B, 2. The Descanso Mission. f 22, $\frac{1}{10}$,"
facing S. Bright sunny.

The mission has a little elliptical platform
in front of it, as usual, some 50 yd. wide.

veg The large vitrification is abundant on the old ruins.
Medium vitrification on top of mission walls at one place,
and on platform S. of belly. Small vitrification on platform,
too.

Photo # R, 3. Vitrification (small, medium, + large)
on top of wall, Descanso Mission.
Bright sunny. f 16, $\frac{1}{25}$," 6'.

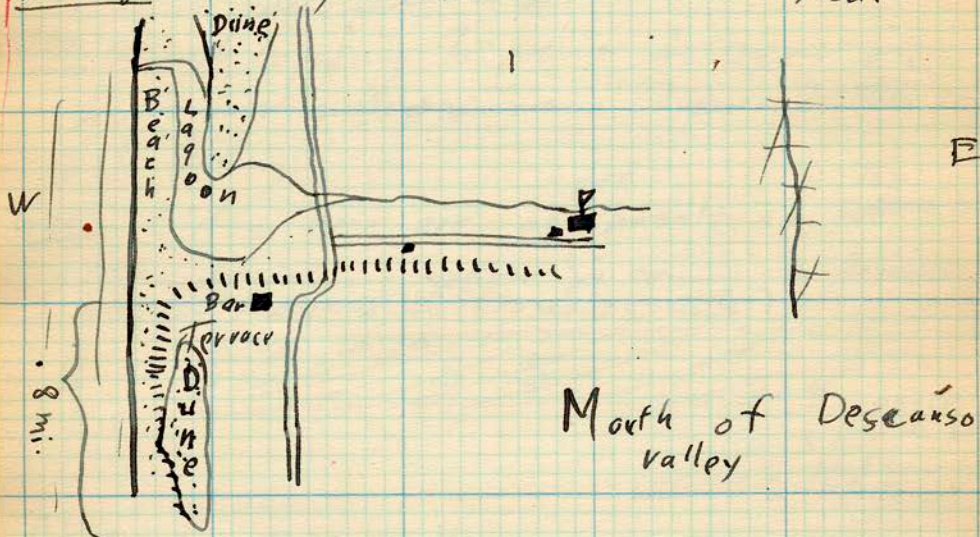


Platform has abundant shells.

.3 mi. from Sta. 20 (W.), is a schoolhouse, with 20 pupils: wood + adobe building.

Geog. Basalt rock outcrops on S. side of valley here.

At .6 from Sta. 20, side road strikes main road.



At .8 from S. side of Descanso Valley, sand dune ends. High basalt cliffs are present to the E.

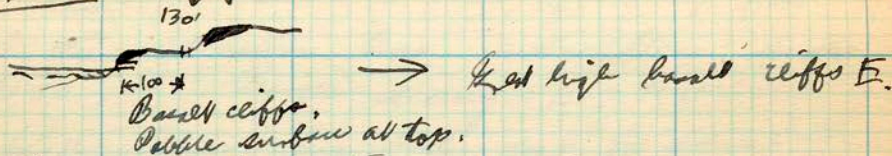
180 yd. W. of .8 mi. on road, the sea-cliffs are found, ~~the~~ the sand-dunes being replaced by red, vesicular basalt cliffs, ~~at the~~

~~at~~ from O' above sea-level gradually rising to some 25' 400 yd. S. ~~There are~~ back of cliffs mantled by excellent ~~soil~~ soil; pebble sea-wall beach: no sand. ~~at~~ 400 yd. S. some pebbles on terrace; "Paruro" pass. Victor

veg. along road + along sea-cliff top.
cult. no shell-heaps by cliff.

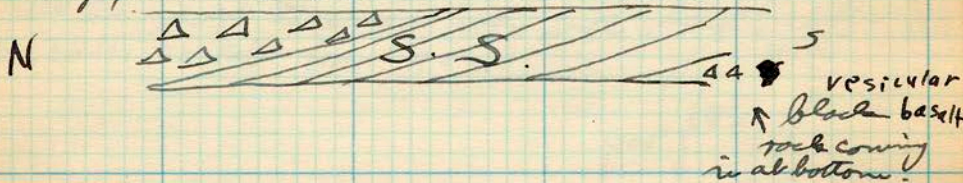
At 1.3 mi.

Read 210' Road, 11:50 A.M.



veg. Mould requiring to come in again on headlands & valleys corners. "Flower leather" or 210' level.

Geog. Cliffs here are of ^{red} basalt in ~~bottom~~ ^{top} part, but sandstone (yellow) is coming in beneath, very gently dipping N. (some 20' thick)



At 1 mi., Halfway House.

Geog. Here, red vesicular basalt above & black vesicular basalt below the yellow sandstone is clearly seen in the sea-cliffs. The sandstone was laid on top of the black, but a cave in the black is filled with S.S.

Spring of good water in the yellow S.S. here. yellow S.S. some 20' thick.

Cult. Profuse shells (fine mussel) & chips at top of cliffs.

Read, top cliffs, 147', 12:15 P.M.

At 2.7 mi., by cliffs on point ahead of short side road.

Geog. Cliffs Basalt N.; sandstone, S. at 2.7, basalt overlying sandstone. Sandstone has therefore worn out in many places leaving hard basalt, except, so there are

Many caves & arches.

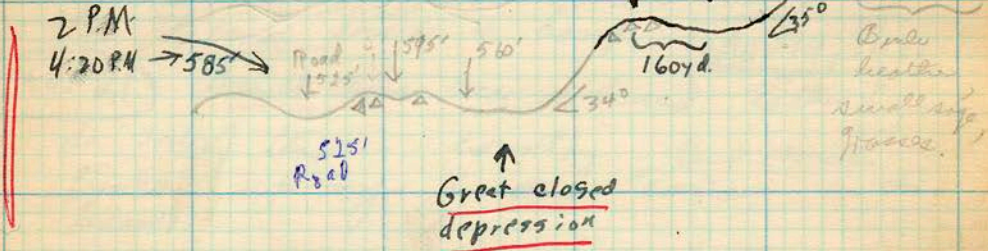
Photo # 3, 4 shows such an arch, of basalt, from which the sandstone has worn from under. f 16, 50", 100'. Bright sunny. 1:15 P.M.

Cult. On top of this arch, and for some distance N., there are deep Indian mussel deposits, with clams (+ limpets).

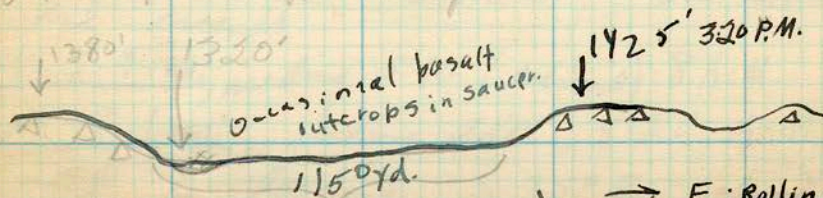
Veg. *Adiantum* abundant. Mesquite getting abundant.

At 3.4 mi., road leaves the coastal terrace, and after much twisting, reaches its highest point at 4.5 mi., reading, 525' at 2 P.M.

At this point there are very high basalt cliffs E., cliffs up 16 1/2° from 4.5 mi.



at 1380' (3 P.M.) a gently rounded plain, dropping to a great ^{basin} ~~depression~~ on the other side.



Grassy saucer yellow effect. → NE

High bush heather, wild lilac, & sage.

Due W. of 1425' is a Cañon notch

440

The W. side of the lower terraces due N.

Car from cairn, $S. 66^{\circ} W.$ Cairn, 1340' read.

At 4.8 two little water-filled sag-pools by road.

At 6.8 ~~the~~ Almitos: small cañon, with a trickle of running water, + bar. ~~Three~~ ~~cliff-~~ ~~we~~ ~~get~~ ~~down~~ ~~into~~ ~~terrace~~ ~~again~~ ~~here~~.

At 7.2 Indian skulls visible at cliffs: mussels.

At 9.2 S. side of San Miguel Valley. Much water.

At 2.8 from S. side of San Miguel is La Selva, a lagoon with a couple of families around it; raising corn & beans. ~~At~~ We leave terrace again here.

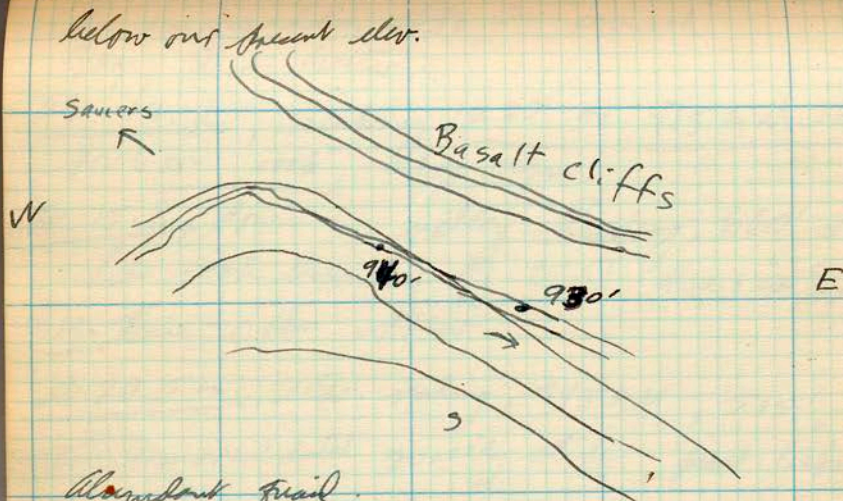
At 3. we take a side road to the left up La Selva cañon & camp. MAY 19, THUR.

Sta. 21 Basalt cliffs near at hand. To the S., a sort of terrace country, but much broken up by inactive cañons in the basalt.

At 4.9 mi., edge of Jarray ~~table~~ Cañon: a cañon with the marsh tone of a little cultivated & cultivable land at the bottom: maybe an acre. Bar on slope. Road leaves the terrace level and ascends.

At 5.9 mi., reading 590' (summit) 8 A.M.

At 8.1 mi., reading 940', 8:20 A.M., the road is heading $S. 35^{\circ} E.$, ~~down~~ ^{up} a W valley (on N. S. D.) with high basalt cliffs on S. side of Valley. To the N.E., and along the road N., are extensive "sauceas": plateau country,



- Abundant trail.
- At 8.5 mi. we are open in the valley floor, good grass, as usual. Horses.
- At 9.4 mi. the road bends sharply E. and ascends the basalt cliffs (at a somewhat broken-down place, not as high as the mesa crest just N.). Reading, 1355' at 8:45 A.M.
 W. Wild lilac, fine sage.
- At 10.1 mi. we are on top of the mesa (not at highest point). Reading, 1355' at 8:45 A.M.
 W. Wild lilac, fine sage. Basalt.
- At 11.1 mi. we have crossed another "saucer" and are on the S. ridge, reading 1235' Basalt.
- At 12.6 mi. we are in another saucer (similar to the S.M.) Basalt. Reading 1105' at 9 A.M. Road running S. 54° E.
- At 13.6 mi., reading 1285'. To N 65° E, a really very extensive curving plain, green with grass now! (42)
 To S 20° E, the high unconform. section.
- At 13.6 mi., Basalt on ridge. Some trail opening on

The unconsolidated stuff is seaward.

Req., bush hedges.

At 14.2, reading 1280' at 9:15 A.M. "highest point on road", says sign.

at 15.8, down in valley. Reading, 660' at 9:25 A.M. side road branches off to E. here, in side canyon.

Req. Pine-oaks appear.

at 20.5 mi., elev. reading, 9:45 A.M., 515', still in the unconsolidated gravelly stuff, just before dropping to the coast.

Req. For some distance, dwarf buckeye has been present, the leaves all a bright orange color now.

At 22.4 mi., down on the terrace again.

Road for Guadalupe branches off here. Elev., 60' reading, 10 A.M. Little customs guard.

~~at 24~~

at 27 mi. from Guadalupe fork, reading, 65'. Terrace some 300 yd. wide. Small rivulet.

No shells on cliff-top.

Geog. Cliffs of fine-grained, rather sandstone. gravel & upstanding sandy soil on top.

Occasional gardens.

at 2.3 mi., no shells. Basalt forms the sea-cliff again.

at 6. mi., Vidal's statue in Ensenada.

(43)

Ealdsberry, U.S. Consul "patern" says road goes to San Ignacio since the 15th. of this month.

He also says Jap conveyer opp. Guadalupe road. Also, Club Internationale is working again.

at 7.3 mi. from Escanaba, steep drop from the Escanaba plain mesa to broad lower valley. Reading at top, 170', 2 P.M.

at 7.5 mi. (foot of cliff) 95' cliff uncovered.

at 10.7 mi. we took road W. from main road.

at 14.9 mi. we reached the Santa Paula ledge, near La Grulla Gun Club, & turn up toward the Point.

at 17.8 mi., the lygon passed, sea-level reading 35', at 3:30 P.M. Remains fold wharf here.

at 18. mi., fisherman's wooden shack.

at 18.2 mi., up on terrace. Reading, 140', 3:40 P.M.

Colt. Abundant fine shells & stone chips: mussel, alalone, scallop, clam, mother-of-pearl shell. (See Ant. #7)

Geog. cliffs are of some 20' uncovered. on top of yellow smooth sandstone.

N.G. Colnett weed, wild barley (sparse), a few medium ferns.

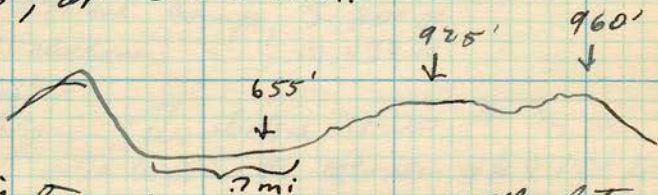
Back to road fork by 18.1. Took left fork next.

at 20.2 mi., 960', at 4:50 P.M.

at 20.6 mi., 925', at 5 P.M. Profuse Silurian shells (see Ant. #8) & some chips. Mussel & alalone. veg. Mussel (scattered), fire sage, hick leaflets.

(W 20.5 mi. road branches; we took right)
(branch, down main ridge.)

At 21.2 down on another terrace. Reading,
655', at 5:15 P.M.



This terrace in form of a saddle between two
higher peaks, but open on both sides. Basalt outcrop
in terrace.

At 21.3, more profuse shells on this 655' terrace

At 22.2, down on a lower terrace, just S. of
the last. Reading, 520'. Basalt outcrop.

At 22.3, camp. Read, 490', at 5:40 P.M.

Sta. 22

300 yd. farther W., road ends, by cliffs. Abundant
shells from 50 yd. N. of Sta. 22 to edge of
cliffs.

May 20. Fri. 5:45 A.M. road 529'

6:05 A.M., road 990'; Sta. 22 bears S. 18° E. edge of terrace
remains.

at 6:15 A.M., continuing NW, reading 1125'

at 6:20 A.M., slickensiding appears (see sample) in
place, trending N. 70° W., with various dips. Ifty
near the N. side of the ridge, which is one steep
slope clear to the bay. Just above this spot very
distinct fossiliferous, with fragments of rocks
in a cement of entirely different material. (45)

Cerro Banda : reached the cairn at top

at 6:45 A.M. : reading ~~1430'~~ (Bar); 1388' (mine);
1390' mine

From summit, bearings to :

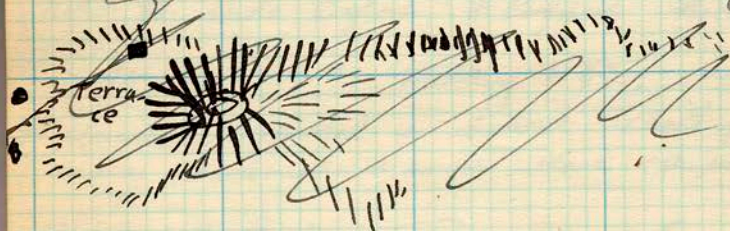
1st. abalone camp, S. 30° E.

2nd. abalone " , N. 43° W.

abalone camp

↓ #2

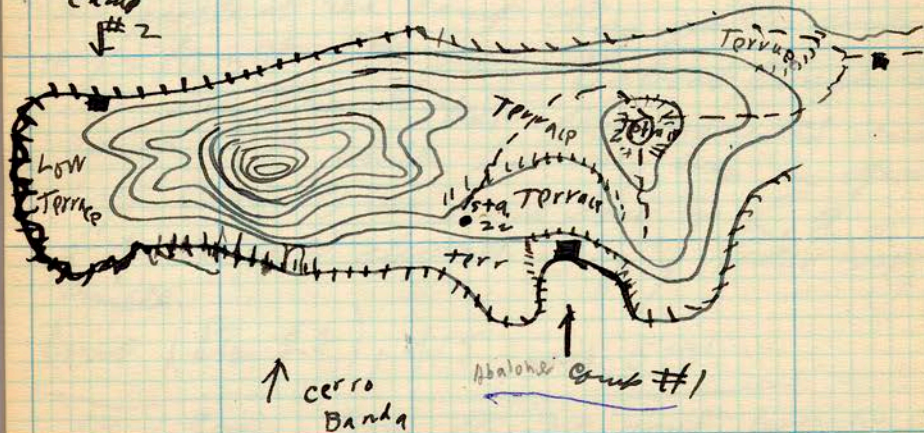
The abalone camps are in use. #2 sent
out a boat to the islands NW + $1\frac{1}{2}$ down from
Cerro Banda



W

Abalone
camp
#2
↑
Cerro
Banda

E
Pishomana
cut
↓



(216)

Very steep rocky slope. W. of the end of the
prink, ~~rocks~~ & stacks, with masking seals, numerous.
Rob N top, see sample. barrels

Photo B, 5. 7:30 A.M. Dull cloudy, f 77, $\frac{1}{25}$, 100'.

Facing about NW from Cerro Bordo. Lower terrace + abalone camp #2.

veg. On Cerro top, mescal, "lusk-heather", siancay
niva, small pitahaya

Return

The peninsula is pronouncedly asymmetrical, with N. side highest, + stepped terraces on S. side.

N 7:35 A.M., reading 1185', on terrace somewhat abundant mussel + abalone shell fragments, fine, many blackened, + some stone chips.

Photo # B, 6. ~~Three of the fishermen~~ ^(about 8:30 am?) Japs at the abalone camp #1. (They usually have contagious smiles). f 77, $\frac{1}{10}$, 15'. Cloudy.

20 people at the camp. They got the abalones right from the little bay, by boat, though camp has been there 4 years. Not connected with camp #2, which has only been in operation 1 yr. Every 3 mo. send boat to L. A. or S. D. to sell abalones. Drying racks very simple.

Camp (Sta. 22), 9:15, read 513'.

N 1.9 mi. from Sta. 22 road branches off to abalone camp #1.

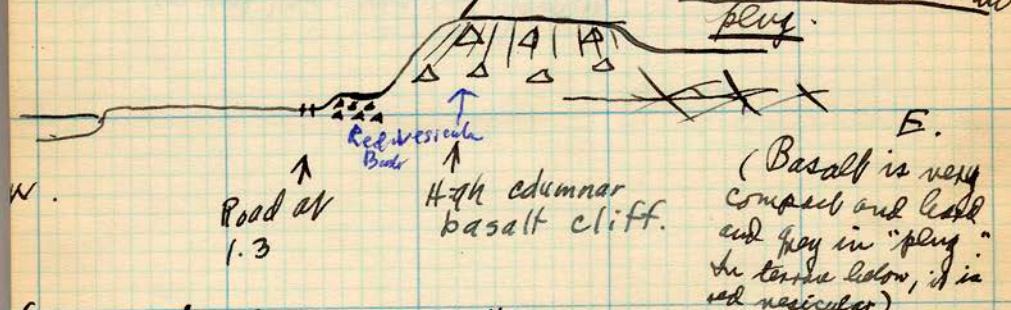
N 4.6, back by old wharf. Sea-level reading, 130', at 10:15 A.M.

Photo # C, 1. (Just preceding) f 22, $\frac{1}{4}$ " terraces just
 E. of Cerro Bordo (N. of alalone camp).
 Photo # C, 2. Alalone camp bay. f 22, $\frac{1}{4}$ "
 dull.

Mon., May 23. Down S. again.

(altitude to
 5. D. 1930)

At 1.3 from Sta. 18, we inspected the
 Columnar basalt cliffs E. of the road. At the
 N. end of ~~the~~ a series of high basalt cliffs.
 (The hills look like sites of the road just N. of
 Rosario Plains are basalt.) Looks like a volcanic
 plug.



Geog. N. "Talle Mt." arroyo, about a 300'
 section:

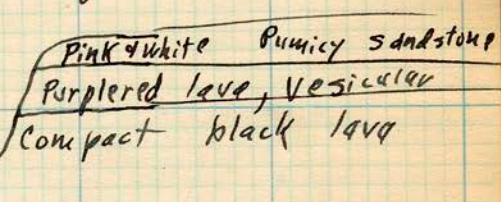


Photo # C, 3. The sandstone cliffs at 1.4 mi
 S. of Sta. 19. Concretions (hard layers) rapid.

Photo # C, 4. Basalt cliffs and little "slice blocks",
 looking S. from point in road from which we made
 section across. $\frac{1}{2}$ " f 32, color filter. Sunny.

Photo # 5. In San Miguel valley.
Near the hot springs location. A soil
mound, stripped from the ground during high
waters and piled up. Left is downstream.



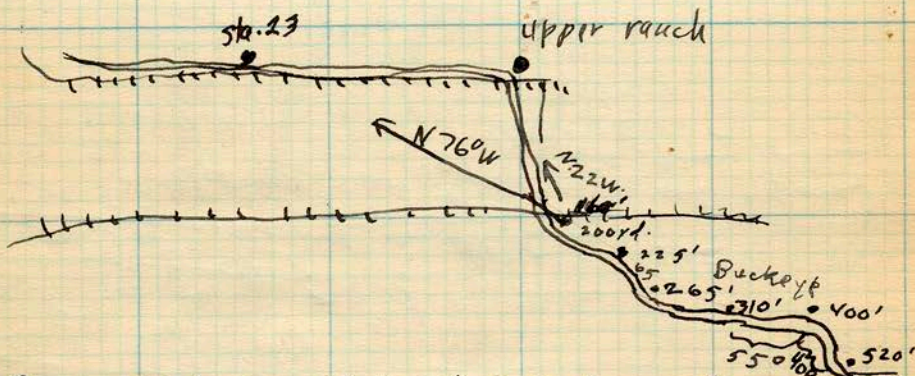
A common feature in the
valley. F22, to "25'.

May 24. Tues.

Camp at San Miguel:

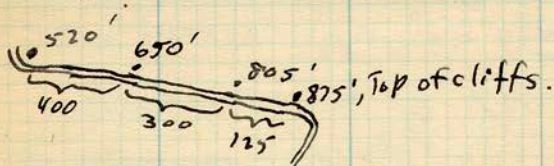
Sta. 23 (Camp. went down to 41° lat night.
Bright clear weather.)

Veg. On slope by Sta. 23, ~~some~~ dwarf linkage,
still in leaf, tho' turning yellow.



From 310', Sta. 23 is N. 84° W., and upper ranch is N. 6° W.

Photo # 6. Looking W. from 310', San Miguel Valley. Stop 11, $\frac{1}{25}$ " color. Survey. 8:30 A.M.



As for 520', an area of sage and kern lettuce. From 650', San Jose Cr. mouth bears N. 15° E.

Photo # 11. San Jose Cr. mouth, from 875', San Miguel. Amm. 9 A.M. f22, $\frac{1}{4}$ " color.

S. 7875' beyond valley from 875', upper ranch bears N 75° W.; San Jose Cr. mouth in S° W.

(50)

Sta. 1 to 2, S. 25° W, 320 yd.

Sta. 1. to A (ridge W.), S. 60° W.

" to B (Ridge W. rd) S. 23° W.

" to C. (Knoll in field) S. 10° W.

" to D (S. spot) S.

Sta. 2 to 3, S. 90° W, 700 yd.

" to E (E. edge valley) S. 23° E.

" to A S. 82° W.

Sta. 3 to C, S. 35° E, 40 yd.

Road here running N to W. sharp.

Valley floor, smooth, low pass, above. Side
scarps, locally, Chomier bench.

C. to D, S. 20° E.

3 to 4, S. 130° W, 466 yd.

F - bed in higher cliff.

G - On small ridge W. of 4, 25 yd.

G to F, N. 80° W.

4 to 5, S. 90° W, 560 yd.

5 (bottom of E. sloping small) to 6, S. 120° E, 370 yd.

(4 to 5, Chomier + red interosse and cats + pass)

6 to D, S. 140° E.

6 to F, N. 1130° W. (big break in S. high cliff.)

S. of 5 another pass (plain),
titled NE.

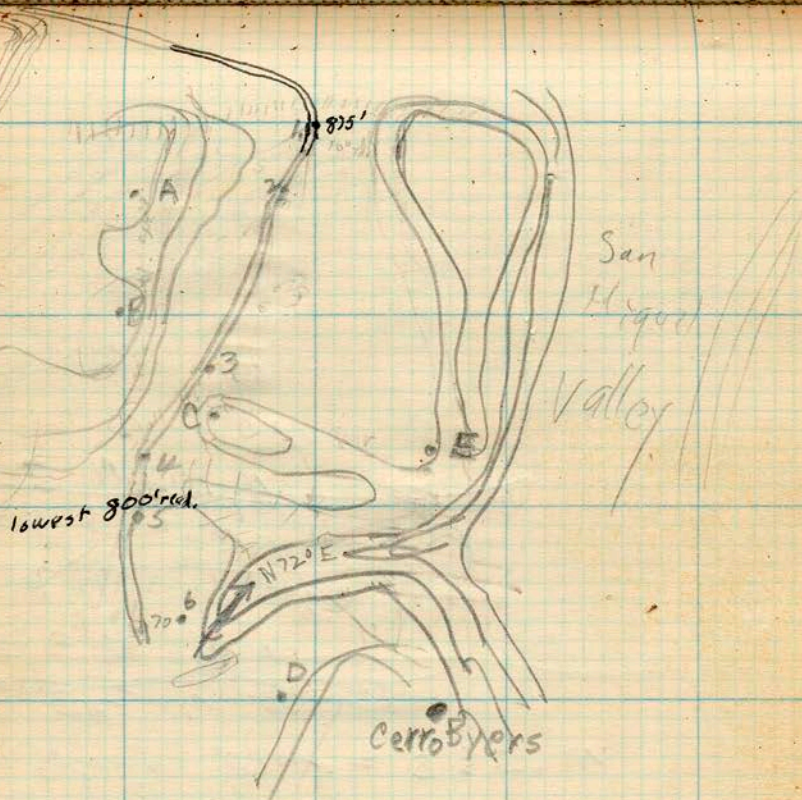


Photo # 52, + 53. Photos from Cerro Byers (as one looks it) facing N & E.

Shows the contact of basalt mass & metamorphic gills above + E. Basalt layer on sandstone.

3 Peaks, part mass, is visible E 5° S, from Cerro Byers.

Photo # 54. The gitter then which I made the traverse.

From Cerro Byers, facing N. Fair Sun. 1 P.M. f16
75.

D to S, #40 W, from C to B, 1000 yd.

D to F is N. 36° W.

" to Q " N. 42° W.

" to H " N. 56° W.

" to I " N. 68° W.

" to 7 " S. 30° W., 450 yd.

Dis 50' above

plain, slope

D to plain is 260

7 to A = N 46° W

7 to I = N 60° W.

7 to 8 S. 86° W., 325 yd.

S. of here, the series of patterns continues

a declination - Colonia Russ is at

8 to Colonia Russ (?) = S. 35° W.

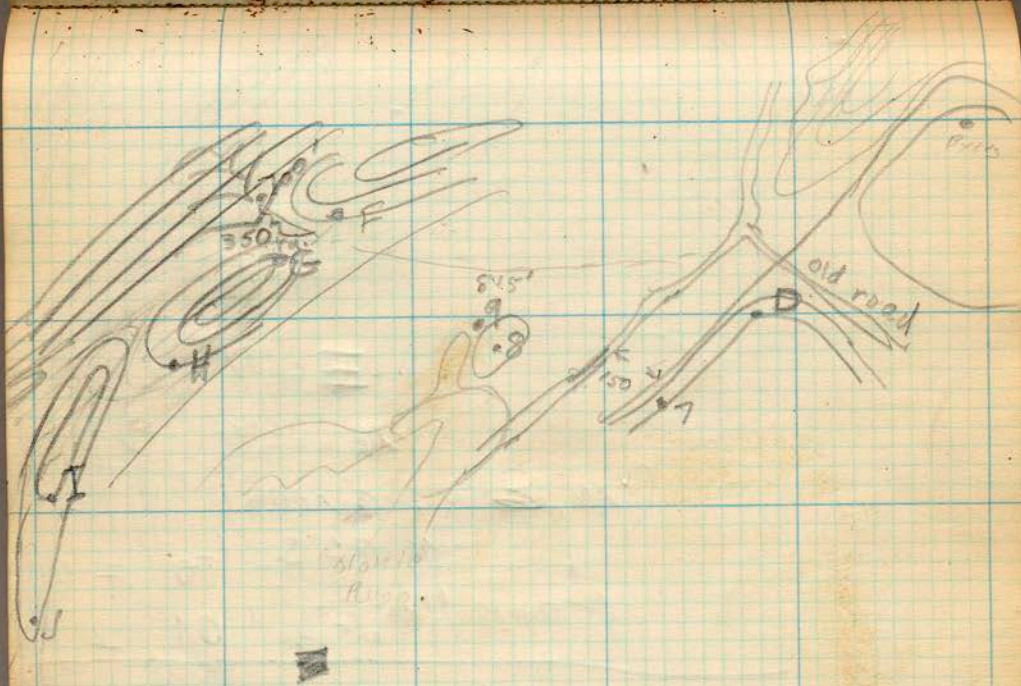
" to F N. 21° W. ~~210 yd.~~

" to G, N. 27° W.

" to 9, N. 28° W., 120 yd.

9 to J S. 32° W., 1120 yd.

9 to I N. 54° W.



Russian

Russian boy tells us that there are 3 families
 in Colonial Russ. Plenty of good wheat land. We are
 making more families, but they emigrated, due to
 the loneliness. Normally all these platters
 were cultivated. Discontented, he says, for food is very expensive
 here in Mexico.

Q to M = S. 4° ~~W~~
Q to N = S. 22° W.
Q to O = S. 6° W.
Q to P = S. 15° W.

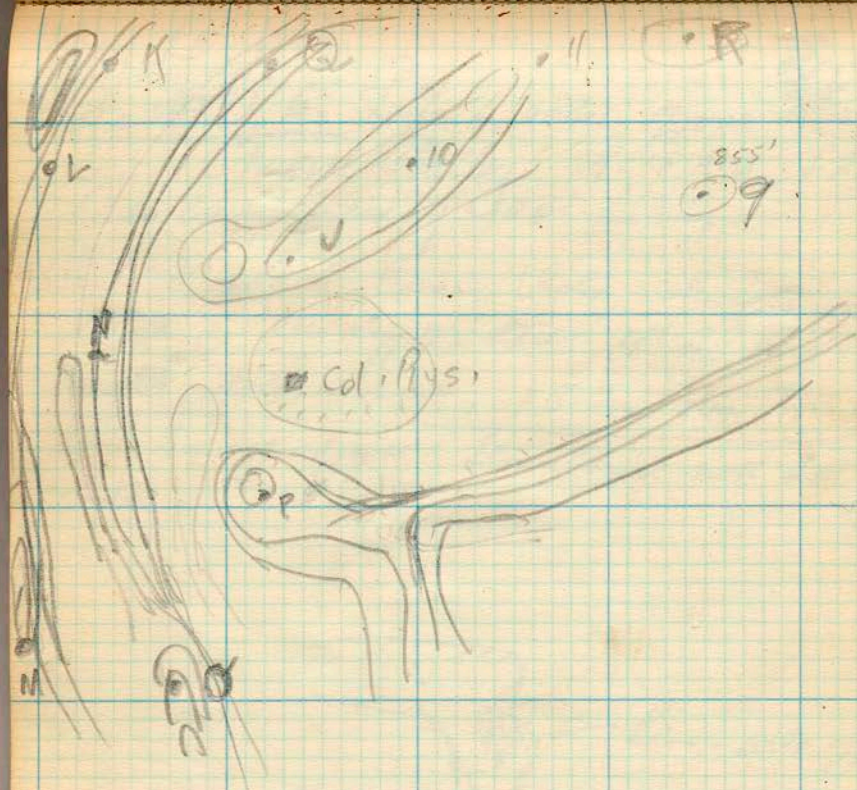
J to X = S. 34° W.
J to L = S. 27° W.

" m = S. dip 2°.
" n = S. 12° W. dip 0°.
" o = S. 4½° E. dip 1½°.
" p = S. 18° E. dip 0°.

" to Col. Run house. S. 10° W. Down 2½°.
" to q, dip 1½°.
" to Q, S. 85° W.

" to F q. 30° W 3200 yd.

" to 10, N. 3° W, 400 yd.
10 to Q, S. 70° W.
J to 11, 1800 yd. (N. 3° W.)
11 to G, N. 33° W.
11 to R, N. 45° E.



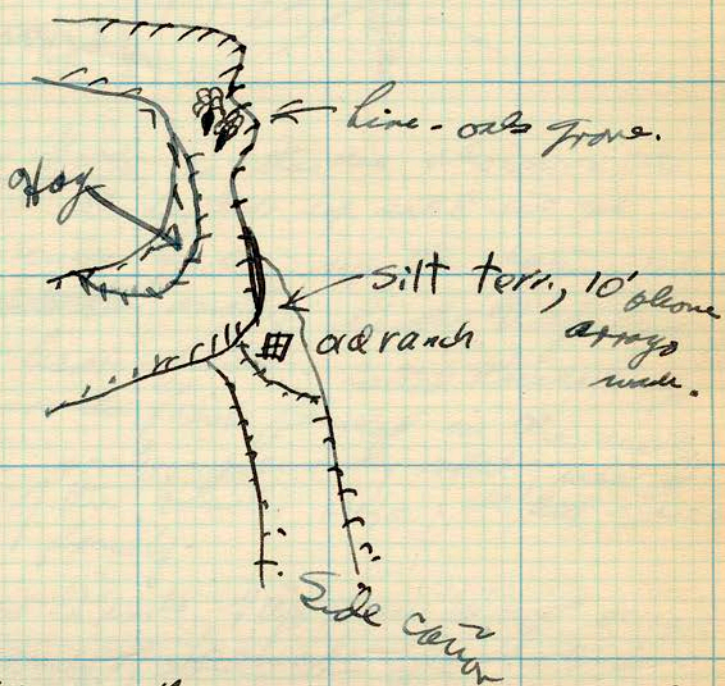
Top of big point, mouth of
 canyon, 500' deep.

Photo # 5, 6, 4 P.M. facing W. in San Miguel
 valley. Underneath sand turf. (22, 1/4)
 sand turf.

May 25. Wed.

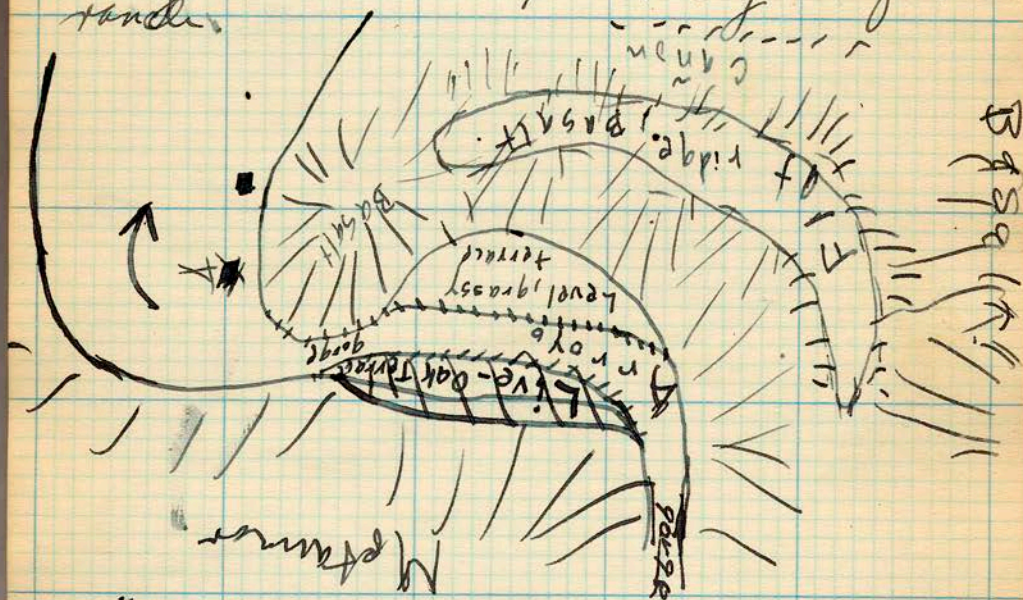
Photo # D, 6. Linc - oak grove ~~3~~ ³ mi. up
San Miguel Valley. 9:15 A.M., f22, 1/2", 25!
Oak have spread of 100' funny.

cut. Old ranch-house (pole, shingle roof)
with a eucalyptus trees 4' in dia., and
an old grape-vine, 15" in dia. trunk
still bearing grapes. Stone-lined well 20' deep to
water.



cut. Two miles up the side ~~side~~ ^{side} canon there
is said to be another ranch, American.

By turning ^{turn in} San Miguel Valley E. of last
ranch.



"Rancho Viejo" is the one shown on the
map. We followed up until we got
2 or three miles further up the cañon, where
there is ~~another~~ another. Rancho Viejo has
very extensive bean-fields. Called "Rancho Viejo"
because it was the first founded in the valley.
The other ranches, previously noted, was
also a part of the Rancho Viejo: all ~~but~~ were in
the same family.

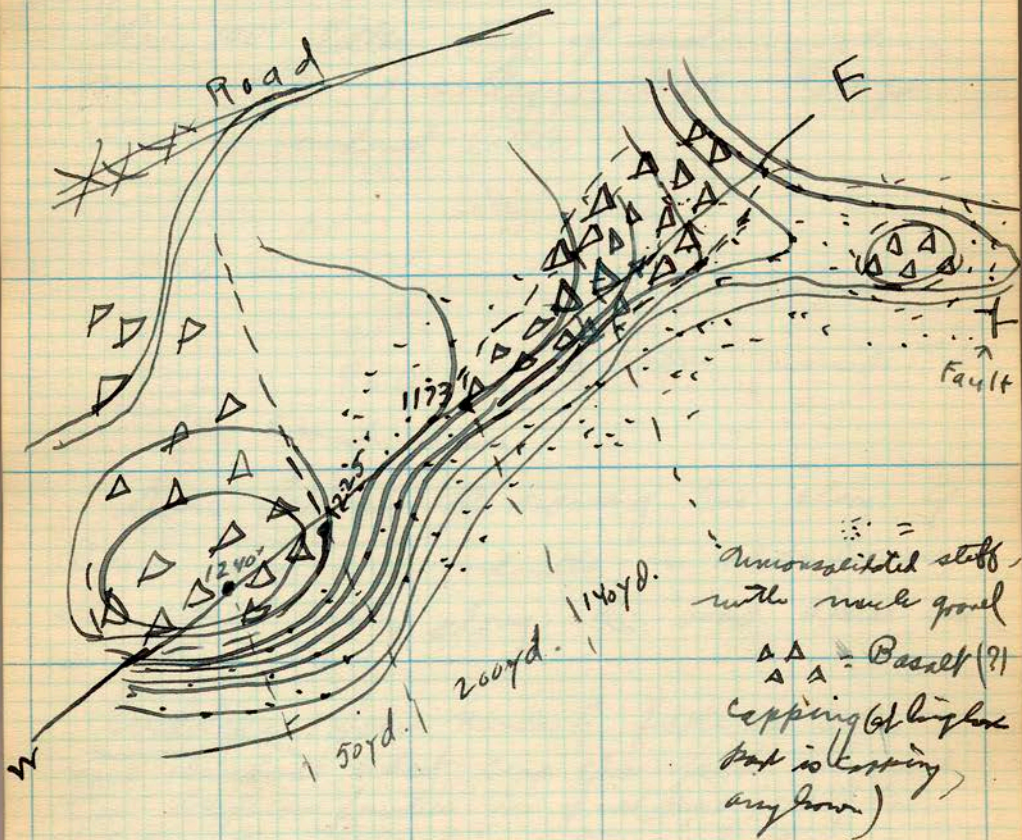
The upper Rancho Viejo house is now occupied
by a family of Spaniards: from Santander.
They talk Castellano: Román Diez is the
man's name: has wife & two children.

Clim. On May 22, Sunday, a frost in the night
withed the leaves of some of the corn at Rancho Viejo.

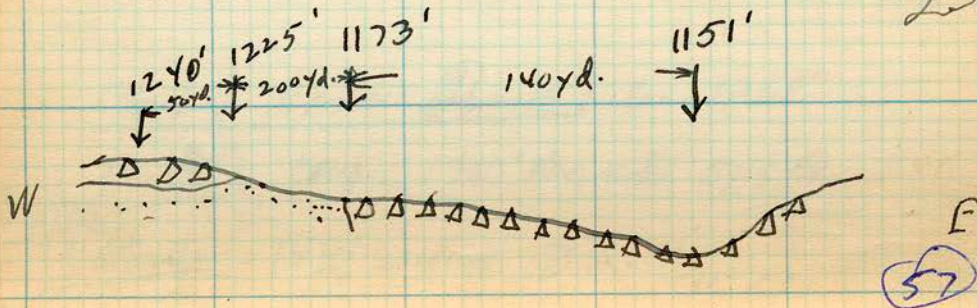
(53)

May 26. Thur.

Cliff-edge S.W. of El Tiro.



Basalt peaks least S. 15° E. from 1151'; 300yd. away



At 64.2 mi., Cañon bottom: basal capping over
soft stuff still.

Valley where we turn in to Guadalupe:

el. 100': little ridge of metamorphics
in middle of valley, 15' high. Arroyo
thus has widened little.

3.6 mi. out of valley, 815'

5.2 mi. W down valley, bottom 710'

5.2 mi., divide, 1000'

7.2 mi. 850', ^{Rural houses} ^{the granite rock}
^{country} ^{pile}
2 ranch-houses.

San Antonio the name of this place. 9
Russian families, & windmills, in adobe houses,
all grouped together along the road. Raisin bears
as well as wheat.

Guadalupe. Same number of people as before. A
most abundant wheat crop this year. There are
three Mexican families in Guadalupe, one of them
including the "Delegats"; and two, schoolteachers. The
well (not near arroyo) has water 20' down: good.

Head of Cañon Buzo: el. 1260'

May 22. ^N ^{22.5}, camp. 1380' el., red, 5:15 P.M.
Valleates: 1430' setting 3 A.M.

In Vallecitos, the ~~Cienega~~^{swamp} is above the road,
in some places & has overflowed eroding the road terribly and
making a bad mud hole to cross: all since last
year. Metamorphia around the Valley, from some places.

Vallecitos Ranch is occupied by a ranch
of Americans at present. Anderson's owns
the valley, & is trying to get \$80,000
for it. This year it is wonderfully fertile,
though the last four years it has been
very dry. This winter (Feb. 10) a three
seven-day rain flooded the valley, and
eroded a lot at the lower end. Cattle feed
in the meadows. Sometimes the Russians
rent the margins & produce 10,000 sacks
of wheat in a year.

Pear, lime, pomegranate, pepper trees
at the Vallecitos ranchohouse.

A couple of old ruined ranchohouses in
the valley. La Cienega 10 miles farther.

Russians are unpopular.

Water in Vallecitos well over 10 feet
this year.

Crossroads Mexicali, Tijuana. Road. 42 mi.

The Cañon bottom here, about $\frac{3}{4}$ mi. wide,
is a dark sand. An open, park landscape of
big mesquite trees. Striking ^{woolsock} woolsock granite
ridges on E. side; bush-covered (metamorphia) ridges on W. side.

At 44.6 mi. from Encanada, road has climbed out of La Ciénaga, + is at high point, reading 1808', at 10:45 A.M. This level is all of pebbles: a pebble hill.

Just down the road, elev. rest. 1843': a small old terrace very new.

Photo # 5, 7. Facing N. looking over marine plain, same level (1843') as here. f 22, $\frac{1}{8}$ " ; elev: avg.

Just S. 55° W. of 1843', across cañon is apparently a small terrace remnant in a cañon, some higher or lower.

Big double peak, 5.76° + 5.85° W of here; up 6' from 1843'.

At 48.4 mi. from Encanada, stop for lunch. Elev. reading at 1:30 P.M., 970'. Down from grade from gravel. All has been gravel to here on this side. On S. side of valley, high valley sides of hard material, and long low spur of gravel extending out into valley. At 48.8 mi., "strawberry-schist", very hard, outcrops. Mesquite trees continue. Mapal on the S.-facing slope.

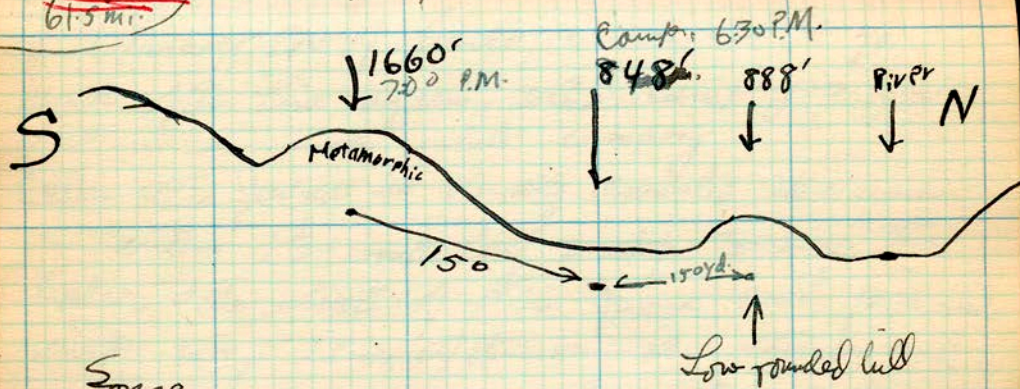
At 49.7 mi., granite workable hills begin to line the valley on the north side again.

Photo # 5, 8. Woodstock hill in the valley, (de las Palmas) at 49.3. 3 P.M. f 16, $\frac{1}{5}$ " ; facing the sun.

Photo # 5, 9. Bignaya clump, very typical, at 53. mi. Valle de las Palmas. 3 P.M. Sunny. f 11, $\frac{1}{5}$ " ; 8'

(60)

Camp at 848' road, 6:30 P.M.
61.5 mi.



Some yuccas.

At 7:00 P.M., fog rolling in from sea, also, a white mantle of clouds on mts. to E.

May 28, Sat.

Zoo: Last night the coyote sat at the foot of the little hill some 25 yd. from camp and looked at us.

Back, camp, 7:30 A.M., 842'.

N 73.9 mi., tuff (?) begins to appear in a cliff by the road. White, with all its particles very angular, and some fragments of rocks 3 inches in diameter imbedded in it. The hills ahead seem to be very largely made up of it.

Red basalt also appears, apparently above the tuff.

Photo # 5-10. Jonathan + Elizabeth Lawes, w. American
Beach, San Diego. F 77, $\frac{1}{50}$, 10'. 3 P.M.

(61)

May 29. Sunday.

Running low of funds, we decided to go south of the line again, where camping is free, and I can work while camping.

Cult. Tia Juana is horribly crowded. We were in a line $1\frac{1}{2}$ miles long ~~waiting~~ crossing the border. The streets of Tia Juana were jammed with cars, 7 lines of them in the street, and it took us nearly an hour to get thru town. Darkness in every stage, men and women, and every one of the dozens of saloons packed full.

We camped on a side road branching east 6.1 mi. south of the line. .55 mi. up side road.

Sta. 24 Elev. read, 6:30 P.M., 1048!

~~Hagerston~~

L.P. We are on a level remnant of a mesa, checking up pretty well with other level areas around.

Geog. } A thin gravel surface.
Soil. }

Veget. Tall, bushy "heather", 4' high, is predominant on the level uplands, with some "wild lilac" & "tree holly".

Read 8 A.M. next day, 985!

May 30 Mon.

Headed E. from camp. Road 985!

8:10 A.M., reading, E. of camp, up on higher level, still gravelly + high heather, 1170!

Two distinct landscapes, with dividing line running E-W:

- ① High mesa, of tuff covered with a thick layer of gravel. The gravel flat tops + gentler slopes, covered with "high heather" ^(monte) formation. ^{steep canyons} _{all not used.}
- ② L. plus, rolling grasslands, of gentle slopes, dunes, and very little wash. Of tuff. Grazed and cultivated to wheat. Alluvium in valley bottoms, or colluvium, for slopes are red flint. Gallies only in the major valley bottoms.

(Headed at 8:40, E. of camp.)

Photo # 6, 1. Facing WNW, viewing ^{gravel} ^{high heather} ^{monte} ^{mesa} country - f 22, 15", bright sunny. 9 A.M.

In #1 landscape, the side of the canyons, in tuffey stuff, have frequent eroded gashes, covered visible as white spots. Cover of grassy rubble plant, esp. Some of pebbles cemented together very firmly. Valley canyons next to Tijuana Valley has N. W. trend.

(63)

1 mile down cañon 825', reading, ~~to~~ 10:40 A.M.,
700'. Evidence of very great erosion these
last winter rains.

Back at Sta. 24 at 11:15 A.M. Red 780'

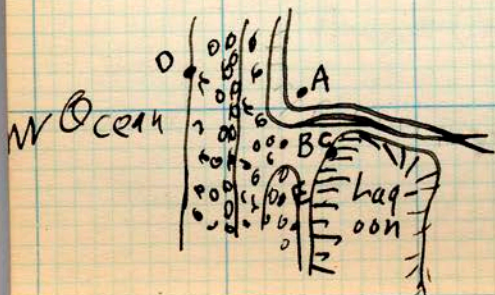
The road that runs E. from camp ends in a
little clearing $\frac{1}{2}$ mi. east, where firwood was
brought. Just a wood road. The "light heater"
is used for wood, and, especially, a Madroño-
bark wild-bolly leaf wood, which grows
a couple of inches in diameter. In the
grassy valleys in the ① landscape, it
appears as the park-like tree dotted here &
there. This mess covering is a real
"morte", tough to get through.

Landscape ① extends W. of main road,

At 7.3 mi. from the line, landscape ① ends, &
② begins on main road.

At 7.85 mi., side road W., of the first sec., branches
W.

Descanso Valley N. side, at 30.8 mi. from the
line. NW edge of morte:



- 20' 3" A = Sand terrace cliff,
overlying sandstone
(SS very soft; contains pebbles)
- 5' 18" B = morte lagoon
outlet.
- 0' 5' 10" C = level of lagoon
- 0' D = level 3:15 P.M.
- 16' E = regular sea-level

Sta. 20
(20)
May 31,

Descanso Valley camp. Read, 3:45 P.M., 1927.

June 1, 1927, Thursday. Up at 5:45. Working at Descanso

H. y.
dr.
09-
ra-
phy.

Descanso R. measurements 1 mi. from sea, opp. Sta. 20.
Pebble bottom. 6:15 A.M.
7" deep in middle, av. 4". 8' wide.
Small sticks floats 50' in 50".
Thus, 32 ft. inches per sec., uncorrected, or $2\frac{2}{3}$ cu. ft. per sec.

Sta. 20, 7:30 A.M., read 9' lev. (83' too low)

S. of Sta. 20, soft fine shale up to 241' high, with dry bog depressions with tar - mud & soft grass.

L.F. Talus slope, foot of basalt cliff, 27°

Sea-level, 11:30 A.M. 0'

Camp, 12 58' (Corrected lev.)

Photo # 6, 3. ^{f 22.4°, 100' dist. long. 3 P.M.} At 60', in Descanso Valley (C. of Camp).

There is a high terrace, 12' straight up above the gravelly
eroded bottom. Of sandy silt. A great embankment here
was cut during the Autumn 7 day rain says
Ames, who knew nearby. He estimated 8 acres as having
been removed here. If the good sandy silt, part of it
already floated. The eroded hollow shows the action
of the water, which filled the valley from side to side.
On a 60', there is a stretch where the terrace surface
is worn down a foot by the flood. Once affects the
remaining bank to be removed in the next big flood.

Soil sample #1. Mussels (loosely embedded) at 6'-8' below surface in
the silt wall.
This terrace last year (dry) raised a fine cut of floor, say 12'
of how the silt mudbank grows as much as 12' high (I
measured it) and very loose.

Cult. Ames runs Rancho Viejo, San Miguel. Moved to Descanso
just to send his son to school. Only the school between
the place & Rosarito is at Rosarito, 2 mi. inland.
The main station in Descanso & San Miguel is

67

Done without irrigation.

Photo # 6, 4. Facing S. 10° W. f 20, 25. 10-20 ft. long.
From hill 260. Two houses & one well north, across
field of wheat - "60' embankment of arroyo.

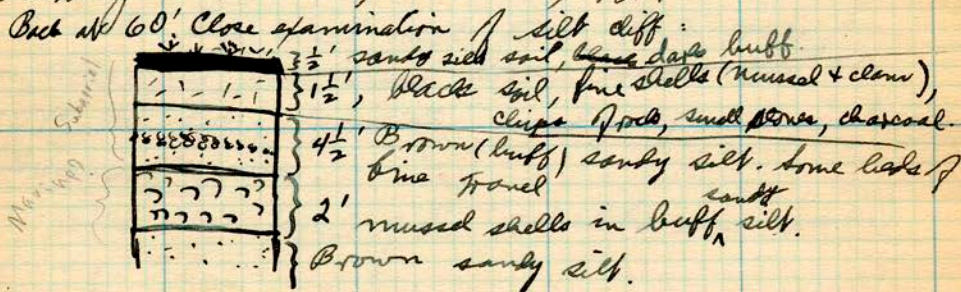
Photo # 6, 3. Facing S 80° W. from hill 260. f 20,
1". Chas. Dominguez.

"Machado" is the common name of Deccano.
The old man is over 70, and the brothers have
little garden of their own in the valley; leaf Potogee.

June 1, 1927. Wed. Up at 5:10.

Reading at Sta. 20, 7:15 A.M., 92'.

Back at 60'. Close examination of silt diff:



Close to the bank, some standing water, & horribly soft mud, letting one sink right down.

Above the upper house, the arroyo is narrow & stony practically all the way. No silt terrace to speak of.

As indicated on the map, just before the bend to the gorge, there is an old adobe house, with leaky roof, on the terrace at mouth of left bank side cañon. A good permanent spring flows down this side cañon. a 25' square reservoir of stone (no cement) built, and irrigation little leads E. from it. Below irrig little,

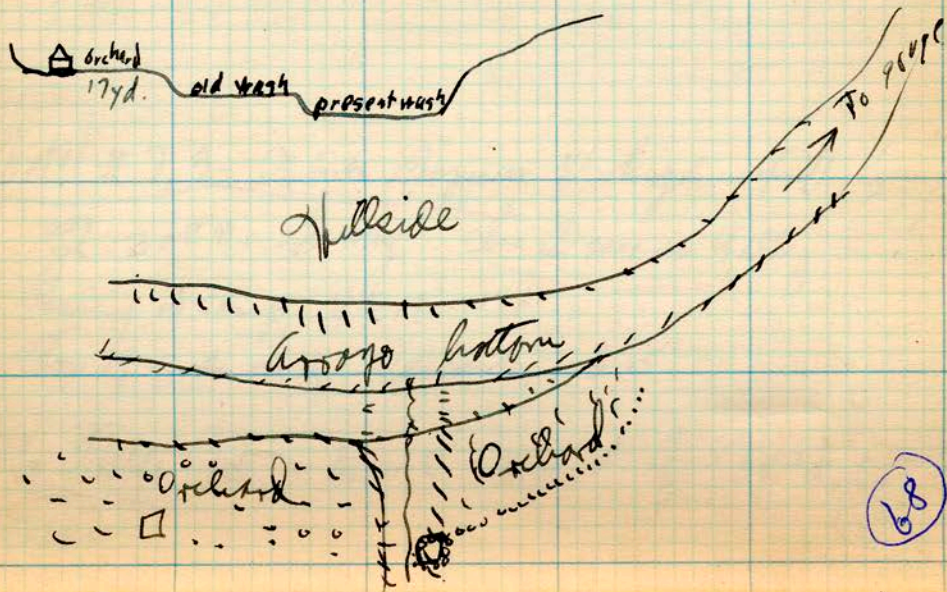
on both sides of little stream, half a dozen good-sized
 plus trees, many vines, some grapes, and, especially,
 an ~~area~~ of grape-vines, very old, one of them 12"
 (measured) in diameter ~~1/2~~ above the ground.

Purple small peas. Pink prunings. ~~Large~~
 large fig trees. All fruit trees + vines laden
 with fruit, though they now receive no water.

Live-salps fill the stream course (N. fairy
 slope). No live vines here now.

Apricots. One small apple tree. Pink roses.
 The house has several dozen ~~broken~~ ^{red} tiles
 over the door, apparently used as repairing. Indicated
 presence of palms.

Evidently some of the orchard has been washed
 away.



Large stone masonry 2 1/2' long under the big pipe -
vine (vine stretches for 50'. Now decayed.)

Remains of masonry stone foundation, now without
abacus, by ~~old~~ abaca house.

Man in fastest up house, now 55 yrs. old, says
the vine ~~tree~~ were big when he could be no bigger
enough to remember.

Remnants of very old terra by the reservoir.

Photo # 6, 6. Bright sunny. 25! f 11, 1/15. Old
12" pipe-vine by old cottage. 12:30 P.M.

Horse grazing on nearby hill.

Wild ^{grass} etc on favorable spots on adjacent hill.

Photo # 7, 1. The house. Bright sunny. f 16, 1/25.

Photo # 7, 2. ~~at~~ Piles of silt 22' high opposite the
fruit house. f 11, 1/25: facing sun. Sunny.

As indicated on map, another spring on N facing slope
below fruit house. Open line across the fruit house
streambed, its bottom is unexcavated. Little stone down
possibly now broken trees & boulders in hole by
spring: oak hill in back.

Photo # 7, 3. White Pozzias 11' high. f 11, 1/25, 1/15.

2:30 P.M. Sunny. In Desconso Valley

Reading at camp, 4 P.M.: 130'

Top of grade out of Desconso, : 275'

To Table Mt.: turn E. just S. of Rosario
Cerro.

Unit to 2, SE, 650 yd., up shady line - ~~see~~
canyon, tall hatter in hills (most)
2 to 3, 52° E, 450 yd. Read 487. Then road angles up
Grassy slope begins \uparrow S. side of canyon (20' above bottom)

3 to 4, 515° E, 275 yd. Read 560.
4 to 5, 560° E, 400 yd. Read 705. 6:45 } Gravel on
flatter slopes.
5 to 6, $N 80^{\circ}$ E 1100 yd. Read 1020' 7 AM. Forward drizzle Table Mt.
Moats, tops of hills, sides.

Crossing rolling SS country.
Low chemiso. Much grass. Grass dry, very common, with grass & low weed.

6 to 7. E. (S. end Table Mt.) 450 yd. Read 1085'. Same to look
6 to ~~North Table Mt.~~ Spring in white
550' tall. Cattle down.

6 to central peak, Mt. Sales (as Christen it.) 520° E

6 to (E) Coronel higher peak, between Mt. Sales & Table Mt. 540° E.

7 to 8 $N. 80^{\circ}$ E. 450 yd. Read 1210'. (S. end Table Mt.)

8 to house $N. 65^{\circ}$ E. 450 yd. Read 1350', 8 A.M. Pine
+ scruboak + barley, wheat, beans, oats, rye, etc.

9 to 9, $N 30^{\circ}$ E., Read 1545', 8:15 A.M. A flat 200 yd. in
dia. on mt. slope. The wind.

~~Unit to 10, N 30° E, 450 yd. Read 1700', 9:15 A.M.~~

Unit 7 1807 1807

June 2, 1927. Trip at 4:30 A.M.

Drive to Table Mt. (About 8 mi. from the east station)

Reached auto (with road), 6:15 A.M. 390'

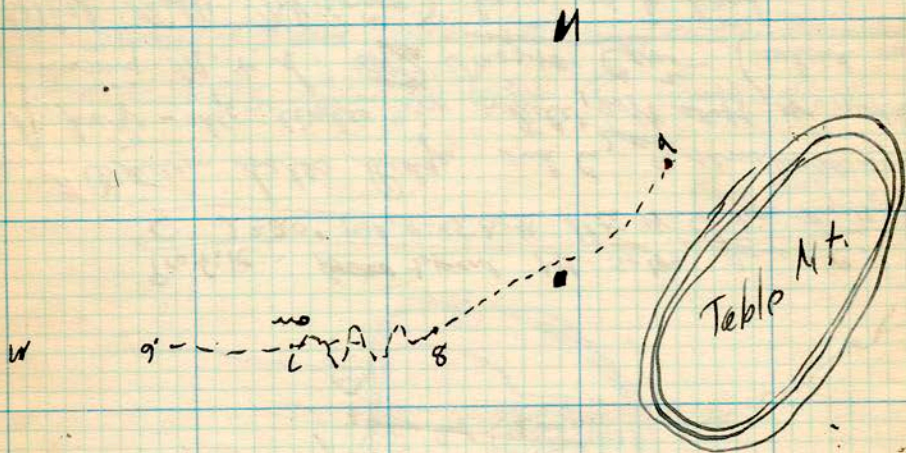
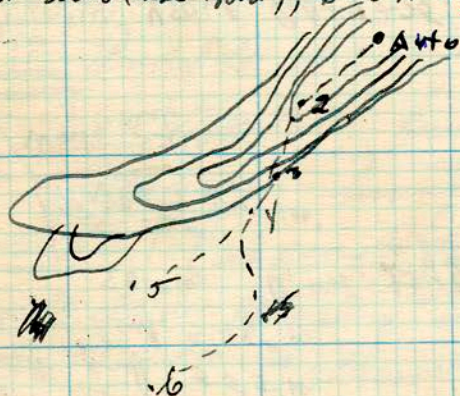


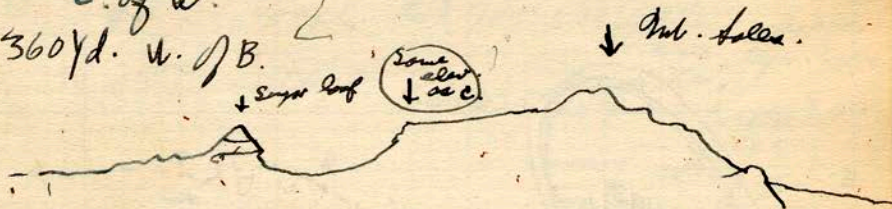
Photo # 7, 4 mi. S.W. from Sta. 6. F 11, 50."

7 A.M. Sunny.

(96)

Looking E. from B. ^{East table mt.} Broken hills, with relay
 small valley pattern base & top. N. 55° E. to N. 36° E.
 across a broad valley, appears a small caliche
 plateau, lower $1\frac{1}{2}^{\circ}$ from B. Monte Country on
 hills C. of B.

C is 360 yd. W. of B.



Profile ~~from~~ toward Mt. Sales from C.

C 2320' ^{red}, 9:45 A.M. White W. C dips slightly NE.

L.F. Between Sales Ridge and C, a remarkable series
 of knife-edge divides in white, ^{yellow} soft stuff, & valleys
 running N. + S. ~~The~~ Monte Cenozo (which we
 called Table Mt. Cenozo) has a sharp head.

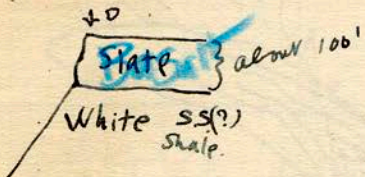
C to Mt. Sales S. 10° W.

C to Sugar Loaf S. 8° E.

C to small pond S. 55° W.

C to Monte head S. 46° W.

C to D S. 80° W. D, ^{red}, 2340'. About 1700 yd



C to E, N. 60° W. 450 yd. Red 2275'

E to F, S. 74° W.

D to G, N.W. 360 yd

Photo # 7, 5. Same. Color. f 22, $\frac{1}{2}$ "

Calus slope N. and Table Mt. (all ways to top), 34°

Table Mt. Reached top at 8:45 A.M., by a cairn. [2 1/2 hrs. work]

Photo # 7, 6. Table Mt., facing W. from point
650 yd. E. of cairn. Sunny. 9 A.M. f 16, $\frac{1}{25}$, $\frac{1}{25}$

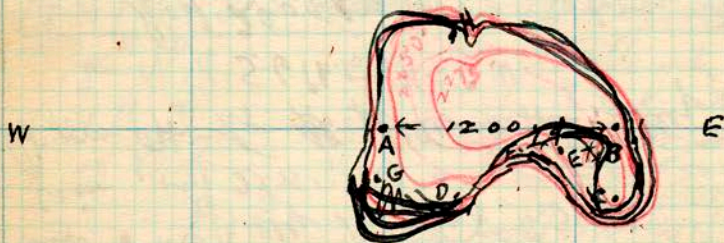
Geog. Slates (?) (see sample) ^{very} gasterose abundantly
all over the table. Standing straight on end
where stratification is degradable.

The table is three cells.

Peak 9 A.M., 1400 yd. E. of table, 2275'

Vegetation of fine grass, interspersed with toraxoid,
and a very open formation of leash-leashes.

[A is cairn?]



A - 2235' (11 A.M.)

C - 2320' (9:45)

D - 2240'

E - 2275'

400 yd. E. of A, 2275', 9 A.M.

1100 yd. W. from 2265'

(71)

Photo # 7,7. 10 A.M. Facing E. Slope at C, on
Table Mt. f 16, $\frac{1}{25}$, 25'. Sunny. Windy.

Photo # 7,8. 10:15 A.M. Facing S. 50 W. from C,
showing the profile of false ridge, sketched above.
f 22, $\frac{1}{25}$, 25'.

Clim. Temp. at C, 10 A.M., 57°. SW fresh breeze.

L. 2. The most inland mesa remnant seen from C is
directly in line with high cone shown to E on
map: about halfway there.

Photo # 7,9. Stop 11, $\frac{1}{50}$. Spotted cloudy. The Table
Mt. farmhouse, from N. slope; facing SW.

Photo # 7,10. f 11, $\frac{1}{50}$, 1:30 P.M. Spotted cloudy. Table
Mt., from stop 6.

Auto: 2 P.M. Acc. Reading # 395'

- 3 W, H, A.
- 8 W, R.
- 2.4 W, R.
- 3.3 W, R.
- " " H, A.
- 4.6 R, W (2)

- W = wooden house
- R = pt. side of road (L, left)
- A = abandoned.
- Mileage measured from Table Mt.
- Elmore road.

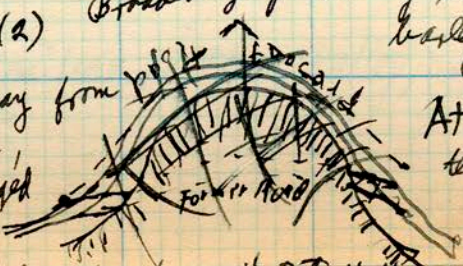
Broadening of Valley here, with much
wash.

All the way from stop
-6 to here,

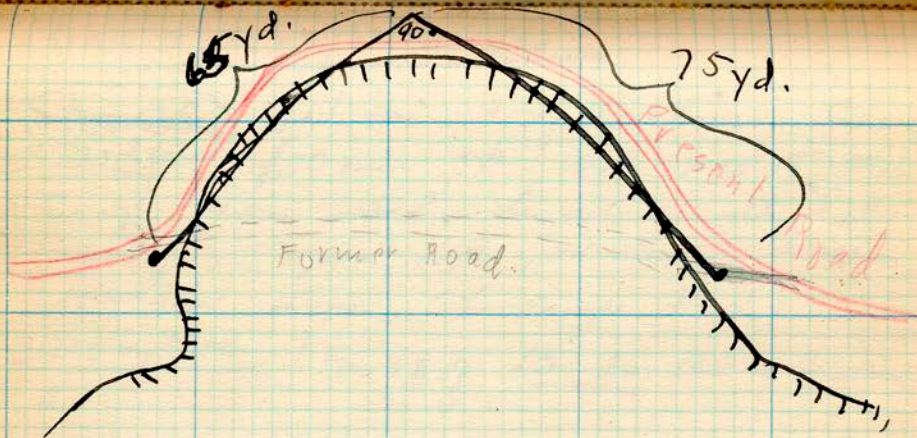
there has averaged

~100 yd. strip

3 leaves, etc. in or along, also from 4.0 to 4.4.



At 4.6, road leaves
the valley.



Place at 3.4 miles, where last Feb. rain washed away much land in Toro Valley; 3.4 to 3.5 mi.

Photo # 8, 1. Toro Valley. 3.6 mi. 8 fence posts hanging ~~from~~ in air since last rain. Some 15' from bank. f 8, $\frac{1}{25}$ " 100'. Against Sun. 4 P.M.

^{under} Indian shell on ~~at~~ site ^{on} from 3.2 to 3.7.

5.3 W, R, in crops.

5.6 : main rock shaded, opposite above outfit, N. of Roscito Cañon.

Thus, 5 families in the valley, all in board + batten houses.

[Byers left
in San Diego]

(73)

June 5, 1927, Sunday.

~~Sta. 26~~ 8.1 mi. S. of the line. Camp
Sta. 26. 1.00 mi. up side road to the
E. of main road. In a smooth "daly"
valley, of grass with, on steeper slopes
occasional tuna. (Landscape # 2)

June 6, Mon. 1 mi. S of Sta. 26. Still in landscape
2.

Baro. 9 A.M., read 1210'.

Soil light colored Adobe.

Veg. Soft grasses, with Chamiso on slopes which
are being eroded.

Geog. a very light, nearly unconsolidated sandstone (?)
stratified & tuffey. Extensive area of wild mustard.

L.F. Bently rounded hills & dale.

Cult. Half a dozen horses grazing. Occasional areas of
barley on gentle slopes. Much more seems
feasible.

Read op. Sta. 26, 940', 9:30 A.M.

<u>Clim.</u>	Altitude	Wind	Time	Temp.	Notes
Bright sunny all the while.	920'	at wind NW, ^{Temid}	9:45 A.M.	80°	
	855'	Wind: N.E., "	10:00 A.M.	82°	(.6 mi. seaward)
	790'	Wind NW, fresh.	10:15 A.M.	76°	(.9 mi. SW) of last.
	445'	" " "	10:30 A.M.	71°	(2.1 mi. SW.)
	80'	" " "	10:45 A.M.	66°	(.6 mi. SW: by E. of Sta. 7)
	12'	" " "	11:00 A.M.	66°	(Sta. 7: .6 mi.)
	-15'	" " "	11:05 A.M.	60°	(sea-level W.)
			Temp. of water, same time	63°	

Geog., L.F. at 920', Arroyo represented by a mere depression in
the adobe 20' wide and about 2½' deep in the center: all adobe.
No sand arroyo at all in the valley.

Geog. L.F. At point where side road crosses the
canyon (.8 mi. from Sta. 26), canyon is 6' wide +
2 1/2' deep, with vertical sides + good bottom. Lies
in an old post-growth gentle depression.

At 8.0 mi. from Sta. 7 branch:

Clim. Strong N. W. wind.

Read: 98! 1 P.M.

Cult. Profuse mussel + clam fragments, + shells.

1:15 P.M. Personal Alone.

Bitten by dog at Santa Elena.

Camp at W. side of "El Cerito".

Sta. 27

Clim 5:00 P.M. 66°, strong NW wind. (clear).

L.F. El Cerito is of basalt. Gullies to the sea
show sections of soft shale, dipping strongly
W.

Veget. Very abundant cholla formation here.

Small vibrio also abundant in old food tracks
(it shuts its flower at night.)

Also, Chenopodium, but occasional low lychnis.

Photo # 8, 2. Pub. halls, from "El Cerito"

6:45 P.M. "Gipfel funkelt." f 11, 1 1/2"

Photo # 8, 3. Looking N. from El Cerito. 6:45 P.M.

Sun has set. Clouds (just forming) f 11, 1/2"

Zoo. At 8 P.M. I heard sea-lions barking
on rocks, a few hundred yd. S. of Sta. 27!

(75)

June 7, Tues. Sta. 27, Elev., 42'

Read, 7:45 A.M. 92'

Sea-level, " , 50'

The Ascent of Mt. Sales.

Mt. Sales bears N. 57° E. from Sta. 27.

Left Sta. 27 at 8 A.M. Hiked up cañon first N. of Santa Clara, thru chamiso veg.

8:30 A.M.

Read. 357'

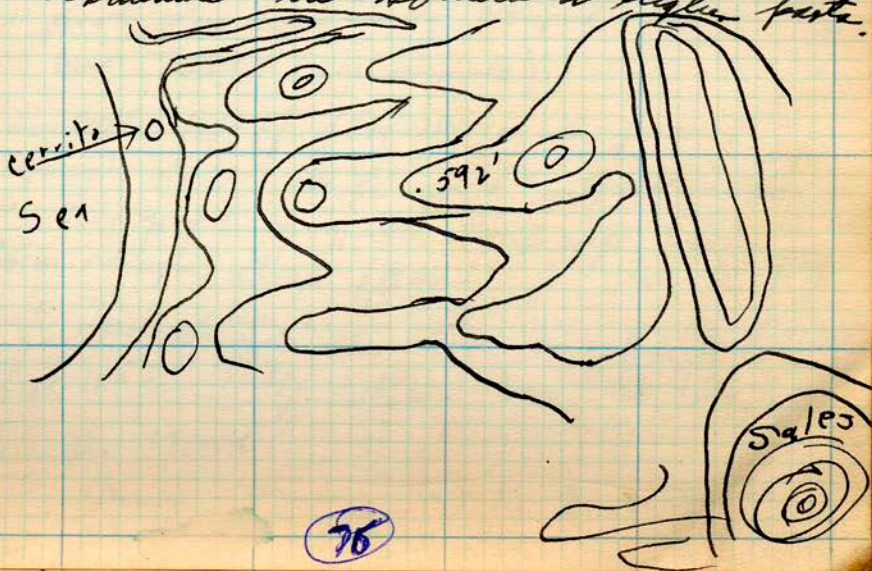
Clim: Temp. 70°. Wind S. 10° W. (Blowing up valley). Little clouds, scattered stratus, above & W.

9 A.M. On Ridge, S. side of cañon.

Read. 592'

Clim. Temp. 70°. Wind: ~~S. 10° W.~~ 5.35 E. light. Clouds: disappearing. Wind toward Descanso.

Land scape. Sea-ward, N. & S. the country is made up of parallel ridges & cañons, sloping seaward, largely of sedimentary material. Just back of the coastal terrace the ridges terminate in somewhat higher parts.



9:20 A.M. In next cañon S. live-~~oak~~ trees. (Dying.)
Read 493'

Geog. Ridge to N. is gravel on top of soft sandstone.
Veg. Fairly numerous yucca among the clammers
here. ~~Wild~~ ~~the~~ ~~meat~~ still abundant on
slopes.

Geog. 10' - , probably oryx (2' deep) in cañon.
Cult. half dozen cattle seen 15' up.
Oxen traces at this live-~~oak~~ zone.

Photo # 8, 4. Quail's nest, with 14 eggs. Portrait
attach. $\frac{1}{2}$ 11, $\frac{1}{2}$ 5, 6. Spring. In a clump of
"yellow daisy" $\frac{1}{2}$ mother quail stayed on nest
until I stopped at the bank.

9:50 A.M. On ridge S. flat valley (not top yet).
Bottom of gravel, 761', red.

10 A.M. Top of gravel ridge.

Read: 892'. (Gravel then 131' thick)

The gravel slope was largely occupied by a very
fine bush-leaved (see sample).

L.F. Very little left of flat upper surface. Long
consequent ridge, knife-edged + gravel-capped.

10:20 A.M. Been going E. on gravel knife edge. Here, grey
~~red sandstone~~ outcrops. Read, 1050'

10:30 A.M. (E) ~~Red sandstone~~. Also outcrops on next ridge N. (Not
S) Read 1155'. Ridge between here + ~~red~~, talus, gravel.

Veg. ~~Turned~~. yucca.

10:45. E. Breccia continues, but E, gravel. ~~It enters into~~
Read 1274' 77 ~~shale~~, ~~under~~
~~steep~~ - slope ~~gravel~~

Photo # 8, 5. Facing N80° W from 1274'. Gravel cones.

Behind former gravel ridge, the white deposits N. of Pinto Canyon, still further, the grassfields of landscape # 2. F 2, 1/25". Bright sunny, 11:40 A.M. 1370' Read. On top of gravel.

Photo # 8, 6. Facing N. 30° E. from Sta 1370'

toward Uchile mt. Two distinct terrace levels visible below the top, on the upper of which is Proboscis orchid. There is a third level just above the Pinto Valley arroyo. This is not counting the hill step. The farmhouse level is the same as here. The lower level has purple with flowers. Sunny, F 25, 1/25".

11:20 A.M. Read 1372'. Soft grey ss outcropping, dipping S. - W. - W. - W. - W. - W. below.

11:30 A.M. Read 1470'. Top of gravel. against base of Mt. Dale # 2 rock. (On small peak).

11:45 A.M. On side of main mt. Read 1611'. N. mt. - main outlier, Soles # 3, Chief grandmothers.

12 Noon Read 1870'.

Columnar rock, dx. plate # 4.

Summit: 12:40 P.M. Read 2390'

2181' : live oak grove.

11:45 Temp., live oak grove, 76°. NW breeze.

1:45 " " " " 74° " " "

veg. Orange parasite, (dodder) on black sage.

78

20: The lin. - oak zone is much frequented by boxes.
7 of them jumped up & ran away when I came.
veg. Oxhills on the line oaks. Many young line - oaks.
200, Numerous birds here.

veg. The whole slope of Mt. Sales up inside &
came back when trunk - almost long fire. Black
stems everywhere, indicate a former growth of mountain.
The tiny bush - heather is, & take it, just a new
growth of the old plants.

Mt. Sales #5 rock sample: material on top, & in the
10-acre line - oak shelf.

Photo # 8, 7. Facing S. from Mt. Sales Oak
Horse, across Diogenes & Dacryo Hallii White
card - dense of Dacryo visible. Clouds forming
at brow of high mesa visible. F 22, $\frac{1}{4}$, color
2:30 P.M. ↓ Mt. Sales.

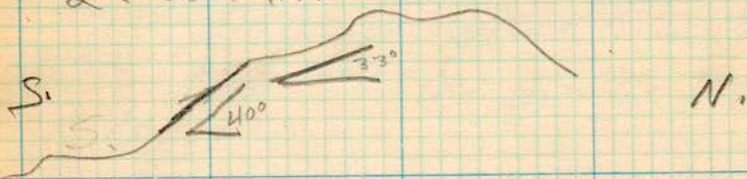
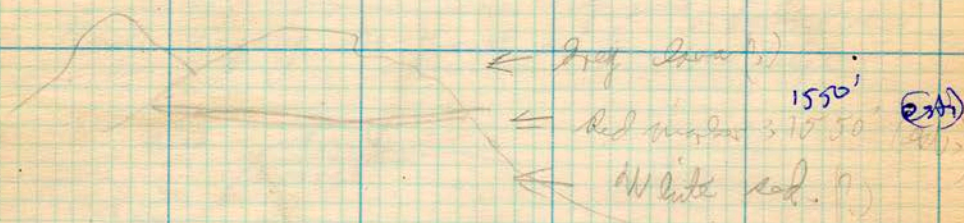


Photo # 8, 8. Mt. Sales, from line-oak Rd,
facing W. 2:15 P.M. Sunny. Facing W.
F 22, $\frac{2}{25}$.

Photo # 8, 9. N. slope Mt. Sales, facing W. Sunny. 3 P.M.
Burned mountain. F 32, $\frac{1}{4}$, 100'.
79



View of hills. Labeled from N.
 Photo # 8.10. Specia in bloom. Y.P.M.
 f 1, $\frac{3}{100}$, 15'

4:25 P.M. 584' read. 2nd ridge S. of mesa

Cult. ridge: Canyon Clams + Oysters + rock clipper
 Sandstone (coarse, rounded) across base.

Geog: On little knob at N. end of ridge, gravel occurs on top to a thickness of a few feet. Bottom of knob, yellow SS.

5 P.M. Read 360' on gravel-topped knob SE of Sta. 27.

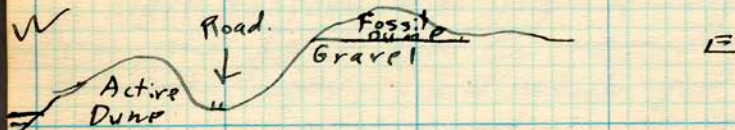
Sta. 27, 5:15 P.M. Read 106'. [Actual elev. 42'] [50' about 62' in the height of Mt. Sales. 2,348' net.]

JUNE 8, 1927, Wed.

Read, Sta. 27, 8 A.M.

El Cerrito, 8:15 A.M., 182'. El Cerrito has entirely fresh (see sample), not comparable to anything else around. Looks like old plug. Very steep. (520, N. side.)

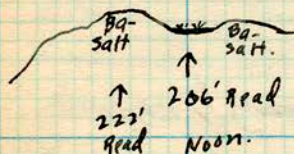
Descauso Valley, N. Side. E. of road, fossil dunes
20' thick lying on gravel surface 400' long.



The gravel mesa less clomiso on it: wind-shore
lunch-leather,

Clim. 11 A.M. Clouds still forming over high
mesa next to sea S. of Descauso. At-S. strip only
some few hundred yd. wide, on brow.

At 12.3 mi² from Sta-27, in sliced country. Small pond,
with standing water, to N. of road.



Ensenada. Eucalyptus grove.

Clim. 6 P.M. Wind, light, S10°W.

Temp. 59°.

June 9, 1927, Thur.

(81)

Cult. Ensenada was active at 5 A.M. today, as
seen from line-oak groves, with well-pulleys
clicking as people began drawing water
for watering their gardens. A Chinese truck-

Get:

Temp. data.

Rainfall distribution.

Prod. Rainfall, 1915 on.

City water.

Panorama of Escondido (Lutz, San Diego).

Plate of Descanso fruit ranch.

Elev.

Gas

Max. Elev

Stat of Escondido.

paper 5. of the Eucalyptus zone is watered
by means of watering - ~~from~~ ^{can} balanced by
a shoulder balance, the Chinaman watering
two rows at a time.

Dave Goldbaum kept regular records of
crops, and found that the normal rainfall,
distributed right, would ensure good crops.

9.16" one year resulted in half-crops.
7+, failure (complete). 11", good crops.

L.F. Descanso Valley. The old fruit-orchard

he says was formerly much more extensive, the
arroyo being only some 15' wide when he
^{coll.} passed through in 1894. He is convinced
that it was of the ~~time~~ ^{work} of the friars. The
terrace extended quite a distance in front of the
house, in fruit trees. ~~The big vine at that~~
~~time he thought covered $\frac{1}{2}$ acre. Machado~~
lived there then.

Ensenada.

L.F. The arroyo changed its course a great deal
this last year, says Goldbaum.

Clim. No observations have been kept here lately,
"as the temp. hardly ever varies much
anyhow", says Goldbaum. Rainfall has, however,
been noted.

Portirio Diaz Park, NE side, 11:45 A.M. 72°. Set.

9 stratus cloudy. Strong W wind.

12 noon. 70° (Sun behind a cloud)

12:20 P.M. 74° (Sun out again.)

1:10 " 70° (S. cloudy)

Nonamendata:

My "Ind. Sales" should be "Méjano". My "Super-leaf" should be "El Corral".

Clim. Windily, about 3:30 P.M., the overcast sky of Ensenada cleared up from the west, though the East is still cloudy. Bright, warm sunshine here now.

Cact. Beautiful view of Ensenada from the "cerro" just north of town, which can be driven up by approaching from the east (the north).

Cact. Post-office moved in the last two weeks. Also, there is no longer a little "Adriana" pill-leaf just outside of Ensenada; the only one now is on the outskirts of San Juan.

Clim. Sta. 28. (In back of Camp Robinson)

5 P.M. 65° N 70° W wind.

6 P.M. 62° " " "

Veget. Sta. 28. Much Chamiso, with much black sage. Wild rose on gentle slopes some, wild lilac abundant on N-facing slope, and S-facing slope with much tarweed.

June 10, 1927. Fri.

Clim. 3:20 A.M. rain. Wind, E. Temp. 57°

Max. 58° Min. 55°

10:45 A.M. Saddle where road reaches top of Cerro Robinson
420' red. (160' lift.)

1) A.M. Sta. 28, 160'. 66°, Max., 69°. Noon, 62°. 5:30 W. breeze

Highest wood'sack hill, read 338, 3:30 P.M.

N 42° E, + 2 1/2° up from it, is a high granite cone.

On cat (300 yd. NW, on road) Read 227.

Worked on Ensenada map.

June 11, 1927. Sat. (yesterday eve)

By self + M.H.

Pers. After drinking 6 1/2 glasses of gin + Damiana at Goldsberry's (M. S. Counsel), and then, with him + — + "George" two more glasses of the same at a saloon, I was too far gone to enjoy the vivacious "ladies of pleasure" whom we really want to see for an evening's dance. A glass of food beer on top of that, and I decided I had better leave while I was still able (never again will I mix drinks!). I managed to make six blocks to my car, and drove automatically to camp, where I unrolled my bedding, climbed in, and knew no more until I felt pain in my face at 1:15 A.M., whereupon I crawled under the car and spent the rest of the night sleeping soundly there. Woke up refreshed in the morning + cooked a light breakfast of bacon, eggs, + coffee, which, with bread, I ate. Never been drunk before, + never will be again, but it was an interesting experience, and I still have my \$45.00 in my pocket, thanks to having slept at camp instead of somewhere in Ensenada. And I certainly did sleep soundly.

Clim. Did not hang up thermometer last night, due to reasons above - given. Fine rain at 1:15 A.M., lasting intermittently about an hour. (Calm) At 7:30 A.M., temp 66°, with the gentle land breeze just being replaced by a gentle sea-breeze. At 8 A.M. Temp 62°, lowered because of sea-breeze (bivalve breeze, now) sunny. Windy.

(84)

Cult. The new gambling joint of Encenada (opposite the Green Mill) is spied by some of the inhabitants to be a bad thing for the town, as it gets all the money of the town. Ajal, Dave Goldbaum was pretty tickled to have it start up here.

Origin of Encenada. (Goldberry). As a cattle-collecting (huilas) center. Sausal + San Sto. Thomas + Real del Castillo had previously been the centers. The English Company first built the town, though: the wooden stores with the false fronts; and it was they who laid out the town.

Clim. 9 A.M. 62°. Faint sun. Nimbus clouds. Road, Sta. 28, 251, at
Real del Castillo 2 min. NE of road fork, 733'. 10:30 A.M., 700'

Pers.: saw watch by sea-breeze this A.M. Right with 2 min.!

Photo # 9, 1, Encenada, from hill 738', facing

. Bright cloudy here, faint sun over bay. ~~Photo~~

Photo # 9, 2. Same, facing slightly higher & to left.

Gr. $\frac{1}{2}$ ". 11:30 A.M.

Real 738'. S. $12\frac{1}{2}^{\circ}$ W. (17° declin.) from here to ^{NE} coast.

Len.

S. 36° W. to cone 738', ^{3045 ft., 735 to 738} + another similar cone between the two.

S. $35\frac{1}{2}^{\circ}$ E. to NE. limit of wheat field (main one).

S. $43\frac{1}{2}^{\circ}$ E. to first granite cone E. of wheat field.

S. $20\frac{1}{2}^{\circ}$ W. to confluence of the two arroyos. The left-hand arroyo is deeper, & has water in it.

S. 28° W. to pine-covered, red metamorphic peak across valley.

Hill 738' + the small hills on all sides are covered with Quercus: thickets: flower hestler, black sage, etc. The higher ridges on all sides have mounds on their summits.

Gr. 9. The metamorphics quite definitely overlie the Forster.

Clim. 12: noon.

SW, ~~strong~~ breeze. Heavy-looking nimbus clouds, except W. of a line running N-S thru Ensenada. Elevation of base of clouds, 9300, 10000, (19000)

12:30 P.M. Road 760' on hill 738'

12:55 P.M. Road 290'. 66° temp., 72° mox. Wind 10.304
(0.000)

2:30 P.M. Road 291'. 70° temp. Still heavy clouds

Cañon N of hill 738' (where I made temp. readings) is narrow, with ^{concrete} silt terraces + narrow arroyos (possibly).

veg. In cañon bottom, profuse white poppies, one measured 13' high. Also abundant growth of young sycamores (the old ones: used for wood). Yellow pines, or "mild-wind" [dollar].

Pers. Teresa Preciados lives in old 2-story wooden house ca. N. of Consul's on Ave. Ruiz: 5 children, she oldest. Another family, 4. She claims to be tallest girl in Ensenada (May-be 5'4") (The Mexican girls are chapparras.)

JUNE 12, 1927. Sunday.

Sta. 28. Road 321', 12:36 P.M.

" " " 333', 3 P.M.

Sta. 2a 1/2 mi. S. of Ensenada. Internat. Ave. path

all this way. Turned off road, + camped here. veg. + LF terrace of ^{brown} sandy soil, with

(86)

Tall "wild lilacs" + tomatoes + purple-flower
soft gray limestone ^{+ grass} ("old wash" formation I dub it).

Just south, over a 6' drop, is a recent, white-
sand drape, without grass, but with tomatoes
dominating. To the east is still another
terrace, higher, of gravel.

June 13, 1927. Mon.

N. reservoir, Santo Tomás Valley road 660', 11 A.M.

Cult. The ^{man} "jag" of Sto. Tomás says that although
there was abundant rain this year, the
crops were poor: beans have a disease, he
says. Sto. Tomás does not try to raise
wheat. The barley did well. But there is
abundance of hay this year. ^{mostly} the hilly land is
too ~~is~~ covered with abundant grass.

Sta. 30 2 mi. out of Sto. Tomás (S.) Elev. about
1000'

Veget. A fairly level area near road, "wild plum" +
luxuriant grass.

1:20 P.M. Top of hill just S. of Sto. Tomás:

Peak 1750'. The hill is metamorphic,
with schist on the top, and a light-colored metamorphic
rock on the rest. Slope of hill 1750', 35°

The peak ridge, containing Oct. 1936 is very
rough and with V-valleys + ridges. The valley
in between has a narrow sandy drape, with
apparently no soil terrace. Occasional line-rails
clumps. Oct. 1936, base 5.32° W. from hill 1750'. (87)

Vegetation. All the mt. slopes (hill 1750' to Mt. 1936') are covered with Chamisa (flower-leaved predominating) up to about 1700 feet. Above that, more formation prevails.

More does not go down so far on S. slopes, but is further down on distinctly N. slopes. No bare canyon walls.

L.F. SE from 1750', peaks, conspicuous, up 2°. Country in between 1750' & it, mountainous, but not ~~like~~ in regular ridges, ^{not as steep,} like 1936' ridge. Some sort of Vegetation as here.

NE of Sto. Tomás valley, high mts.; as high, in fact, that I cannot see over them from hill 1750'.

Photo #9,3. Mt. 1936', from 1750'. Facing S. 33° W. Bright sunny, but somewhat fading sun. 1:45 P.M. f 22, $\frac{2}{25}$.

Photo #9,4. Facing S. 55° E. from Hill 1750'. f 22, $\frac{3}{50}$. Sto. 30 just visible. Sto. Tomás Valley at left.

L.F. The road runs along small semi-flats, part of a general undulating level among the rounded hills all sides.

Two Night-hawk (?) sitting on two brown-spangled eggs, right on the hard ground.

At the abandoned above grade - ^{from scrub} terrace
limestone widens somewhat, and there is a ~~small~~ terrace
100 yd. or so wide. Sycamore trees in the ~~small~~ ^{valley} ~~array~~.
Read 1420', 3 P.M.

Bearing, $S 58^{\circ} E$. to conspicuous peak up 20' from
Sta. 1750'.

Veg. Abundant grass, some hills, & *Escoba Amarga*
on the terrace.

L.F. Array narrow, but has shifted position once
or twice, slicing up terrace.

Cult. Several cattle herds about. Whence comes
their water?

L.F. ~~for almost imperceptible gradation from one corner to~~
~~the next 5 or 6 mi. from abandoned level).~~ ^{the}
~~peak floor is continuous.~~

At 9 mi. from Sta. Tomás, 4 P.M., read 1420'.

L.F. In a considerable basin, surrounded by steep
rounded hills, metamorphic. NE to Sta. 1750' SE hill.

Veg. Low clomies, incl. low sage as well as
flower heather.

Soil. Sandy silt.

Cult. Where "hays for Joe" joins the main road,
a nice ranch, with peas, beans, & horses. (The
some of the cows I just saw, I guess.)

Read, just up grade from corner of the ranch,

read 1484', 4:45 P.M.

L.F. Country to $N + E$ of here is red & rough. ^{to high peak,}
 $N 80^{\circ} E$.

Sycamore Grove, read 44.8 mi. from Encarnada.

Sta. 31) by grade. 5:45 P.M., read 640'

There is a creek here, which starts running below the main road crossing a hundred yards or so. Side road to right bears sign: "San Vito, 1.2 miles."

200 Many doves, larks, & quails, in consequence of the water. Also cattle. No other signs of habitation this year.

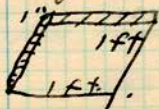
Pers. I shot dove (#9 shot).

Beautiful full moon; I write by it.

June 14, Tues.

Pers. At 3 A.M. last night I heard whistling approach, + a Mexican woke by, stopping for a chat. He was head for Encarnada, from Guadalupe (1 mi. down cañon). He says the road from here to San Vito is possible by maquina.

Hdr. Stream abt. 6' wide, 1' deep, slip goes 50' in 75".
Or, $\frac{1}{3}$ sq. ft. cross section (4 ft. - wide) per second.



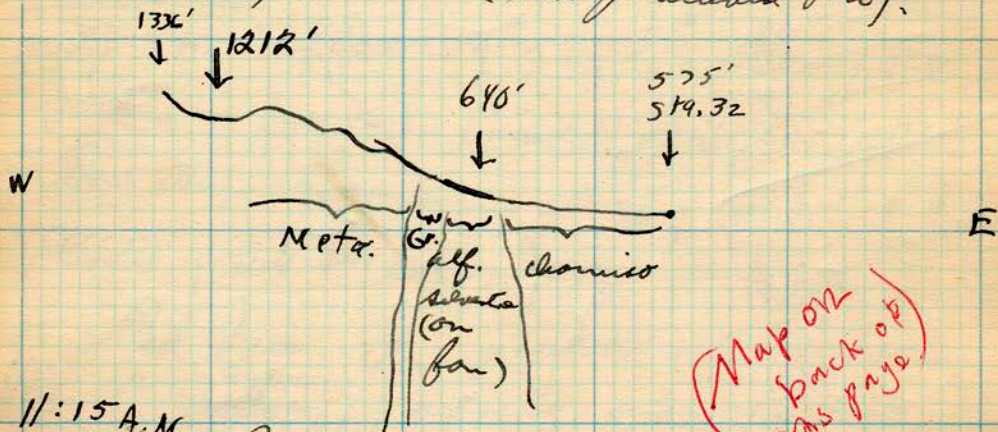
or $\frac{1}{3}$ cu. ft. per sec.

Read 45 mi., camp- 48.5 mi., s.v. route Woolpack begins (a little off it, to rt. of road.) 48.8 mi., road branch to San Joints. 50.00: the N. half of San Vito. 7 mi. straight stretch crossing bridge. (99)

At 57.8 mi., 10 A.M., in ^{upper} San Antonio Plain,
 read 565', by road.

Sta. .15 mi. farther N. (from road), read 575'.
 32

10:40 A.M., read 640' (base of alluvial fan).



11:15 A.M.: Read 1212'. Sta. 32, down $6\frac{1}{2}$ o

11:30 A.M.: Read 1336'. In the shade of a ~~tree~~ cypress!

veg. The spurs running down from the main ridge are ~~tree~~ cypress-clad on the N-facing slopes, from near the top to the bottom. On S-facing slopes, Chonico. On the ~~ridge tops~~ spur divides, + somewhat down N. side, more of the stuck. Grown Cypress



○ = more
 † = cypress
 ~ = Chonico

Sec. N45 across the spur.

The ~~tree~~ cypress are some 6" in dia. 4' above ground, + 20' high.

(21)

N.

S. Vicente

Valley
or
Mts. plain?

9°

Mts

Red Face

33
15
2

1 mi.

Low granite

1.2 mi.

Mar Sh

Pepper
quartz

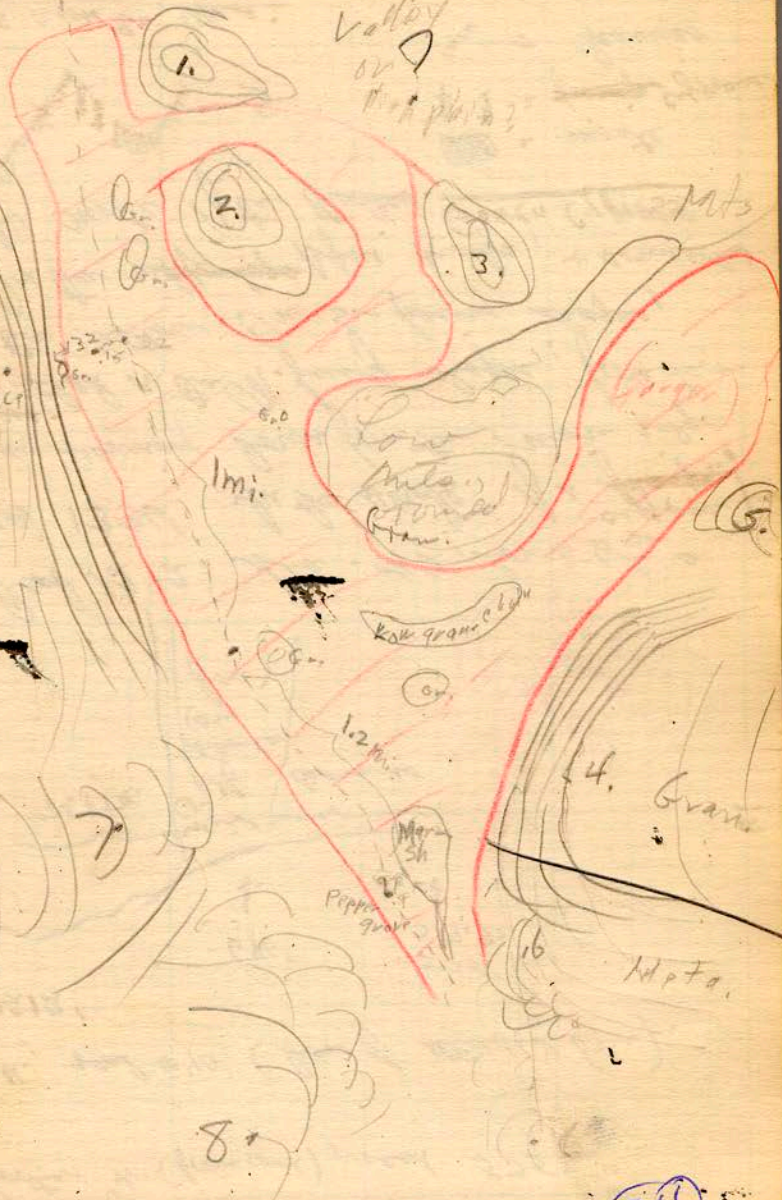
4. Granite

Adpta.

8°

S

9 1/2



12 Noon: read 1502' on conspicuous base, red
rock surface. Down $7\frac{1}{2}^{\circ}$ to Sta. 32, + N63°E. to
Sta. 32.

Photo # 9, 5. Facing S82° W (toward Sierra S. P.
Mister) from "red face". F22, $\frac{1}{3}^{\circ}$ + Sunny. 1 P.M.
~~Just~~^{express} in foreground. Cumulus base (?) clouds.
Clim. These attain maximum size, not over S. P.
Mister, but over Sierra Jerez.

At "Red Face" the vegetation is a mixture
veg. of ~~forest~~^{express}, madroño, and "high leather":
"mountain moor" & ~~forest~~^{express}, in other words:
dense & very hard to navigate.

Geog. The rock here, & on the next nose down,
is a breccia. (See sample, "Red Face"), hard &
rounded by exfoliation

Red Face	to	San Vicente N. 7° E.	Down.	2°	
"	to	Cerro #1 N. 33° E.	"	$\frac{1}{2}^{\circ}$	(S. end)
"	to	Cerro #2 N. 50° E.	"	0°	(with S. slope Sta. 11)
"	"	#3 N. 72° E	Up.	$\frac{1}{4}^{\circ}$	
"	"	into #4 S. 61° E.	Up	1°	
"	"	Half Dome, #5 S. 74° E	Up.	1°	
"	"	Foot of camp, this side of Sta. 32,		100	

(9)

2:35 P.M. - Top of Cerro San Antonio: read 1871'

The hardest climb I ever made. Among rocks
(madroño + high leather 6'-15' high). Clotter rippel.
Top of Cerro San Antonio:

Vegetation: Low ^{eypress} ~~forest~~ (8'-10' high) and monte
of madroño, high leather, + "mild bully": very
unpleasant.

Geog. (See specimen)

Coastward from Cerro San Antonio: is bully
broken country, with ridge tops somewhat
uniform + level, perhaps; steep rounded peaks
here + there. Mostly monte, with ^{eypress} ~~forest~~, +
S. exposure of clivis.

Wind, at 3 P.M., gentle N 70 W.

No clouds, except E. over Onto. + E. ahead,
+ N. fog mounting over the broken country.

Soil had been a loamy residual one all way up.

Cult. Not a sign of any sort of trail all the way
up Cerro San Antonio, except perhaps on the E.
slope up to about 800', a ^{eypress} ~~forest~~ - wood trail up a
cañon.

Vegetation. Thank God, whole S. slope of Cerro San Antonio
has been cleared by fire. Little ^{eypress} forest
just coming in again.

(93)

Photo # 9,6. Moon in total eclipse. Scorpio
to the right. 12:30 A.M. $f 7.7+$, 2 min. (est.)

Pers. I made perfect circuits this time, giving
me much exultation.

The eclipse of the moon scheduled for tonight
was perfect. The moon was full, and
the last plain was illuminated brightly. At
about 11:30 (?) I awoke & noticed that the
eclipse had begun. At 12:30 the eclipse
was total, and again I felt grated. I even
took a photo of it.

June 15. Wed.

Photo # 9,7. Facing S. 66° W. from Sta.
32. (Upper San Antonio Plain) Red-face bore
rock on distant hill. Jumps, mounds, & ~~and~~
Chernis formations shown on these bounding
hills. Chernis in foreground, too. Bright
sunny. 11 A.M. Clouds just retreating behind
^{Cerro} San Antonio. (Cerro San Antonio not visible, but
just beyond visible ridge). $f 22, \frac{3}{50}, 100' (?)$.

Pers. This morning, took off both front subsets,
cleaned & reassembled the bearings, & adjusted
wheels again, for these had gotten to be considerable
play. Outer right bearing slightly broken (2 rollers).
Finished taking bearings.
Shaved shaved

Sta. 32 to hill #1 N20°E. up 2 1/2°.

" " " " #2 N.44°E. up 3 1/2°.

" " " " #3 N.75°E up 3°

" " " " #4 S.49°E. up 2 1/2°

" " " " #5

" " " " Red Face S.63°W. up 7 1/2°

" " " " #6 S.15°E. up 1 1/4°

" " " " #7 S.14°W up 4 1/4°

" " " " #8 S.2°W up 1 1/2°

" " " " #9 N.55°W up. 5 1/4°

(Refer to map. p. 91 1/2)

To main road, N.57°E. .15 mi.

Road (.15 away) # S.12°E to #6

" " # S.20°E, direction of road (cont.)
(Road .55 mi.)

1 mi. S 20°E of Sta. 32, (up road). Road 1.45 P.M., 6.48.

Bearing to Corro #3 N.58°E

" " Corro #4 S.55°E

" " (Half dome) #5 S.67°E

" " #6 S.11°E

" " #7 S.83°W

" " #8 S.12°W

" " #9 N.40°W

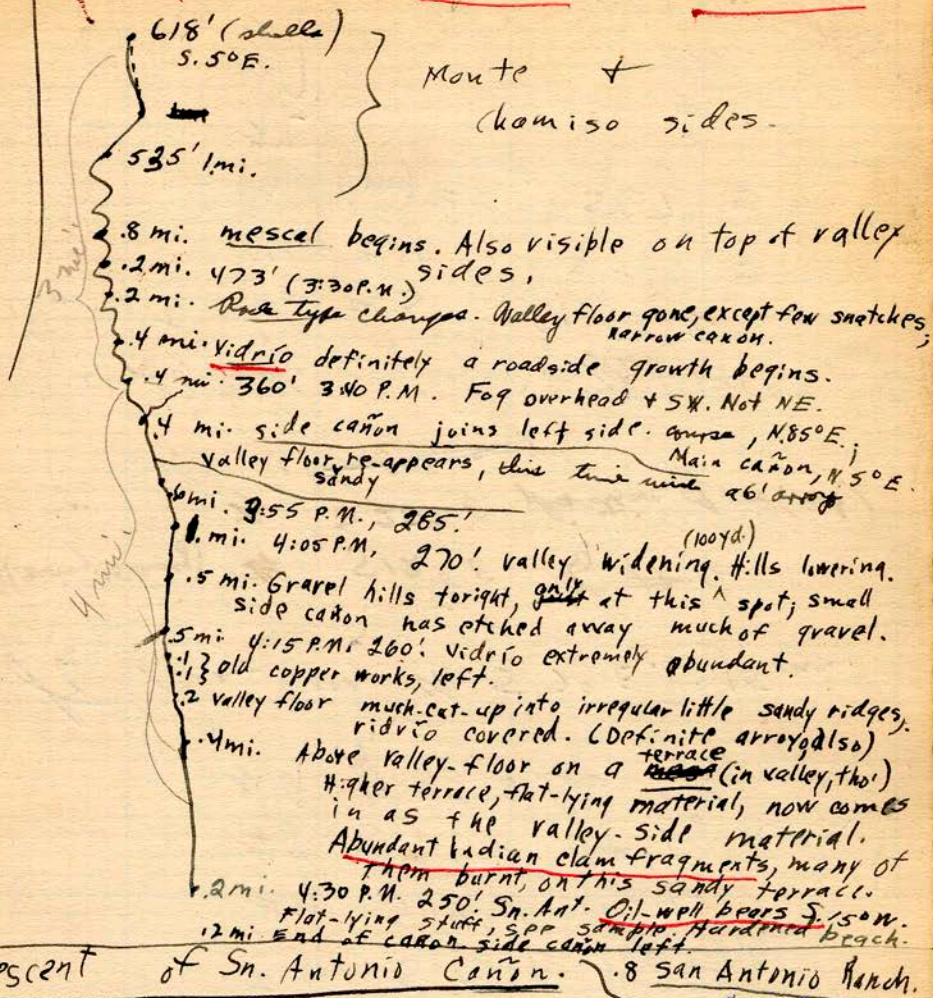
" " Red-dome S.80°W

" " Corro - gate S.10°W

(95)

Mileages
are
from
last
stop.
Elev.
taken
every
mile.

60.6 mi., nearly head of cañon. 618'; 2259 M.



Descent of Sn. Antonio Cañon. 8 San Antonio Ranch. 6:40 P.M.

No arrays. Marsh grass, low, frequent. Occasional small stables where valley floor has been cut into a few feet.

952

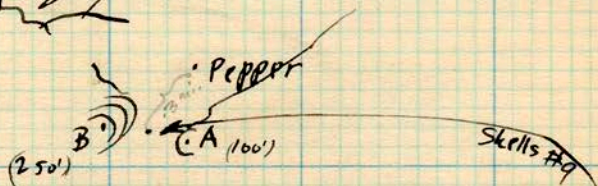
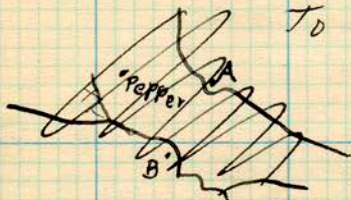
Numerous cattle ⁽⁶⁰⁾ at Pepper-grove & Read, 2 P.M. 610'

Pepper-grove to mesa guarding the Cañon

To A - S. 30° W.

To B - S. 39° W.

To Cerro #4 S. 69° E.



Water-level in well, 35' below surface.

Windmill working vigorously, + tons overflowing.

Excellent water.

(TP. 95 1/2 + across stubs)

Cult. 3 mi. S. of Pepper-grove, at very head of Cañon
(Read 618' at 2:25 P.M.; 622' at 3 P.M.), on an
old silt, + angular fragment ^(surface) fox, some 15' above
the ~~valley floor~~ ^{valley floor} bottom (and soaps in here completely veg.-covered),
are Indian shells. My specimen (#9, autho.)
was obtained from depth of 2" to 1 1/2' - or fox as
I went down; at this depth, the shells were sticking
out of the sides. Not very numerous. About 40 yd.
diameter, they are found. Some chond, too. (I
did not include surface shells, which are numerous,
in my sample.)

Read, San Antonio Ranch, 6:40 P.M., 300'

cloudy.

(96)

David Ellbaum
Get copy of Byronic Code.

Also, photos.

Mexican Magazine
Witchhead + Lonergan

266