



Smithsonian Institution

Smithsonian Institution Archives

G. Arthur Cooper - Field notes, 1964

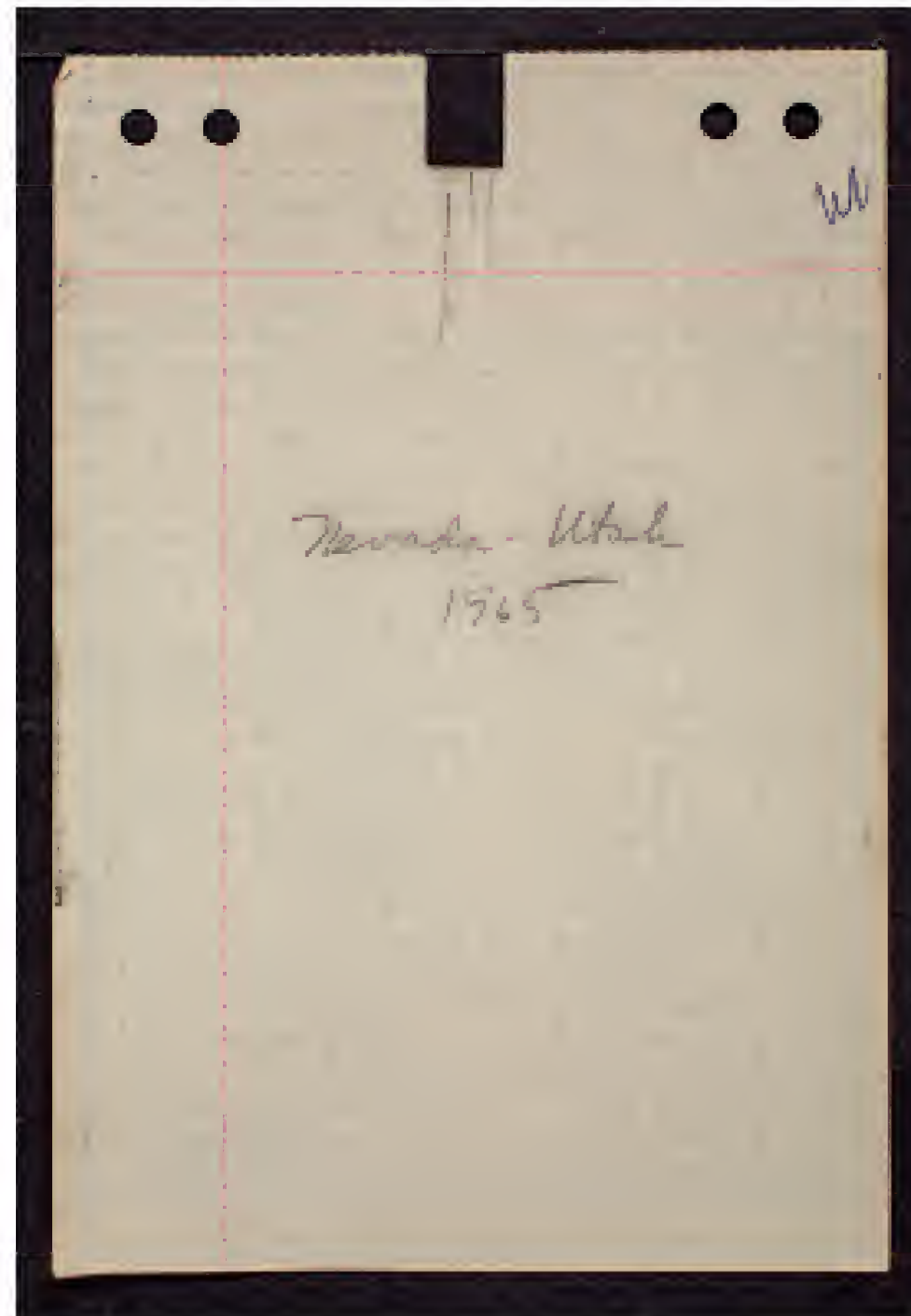
Extracted on Oct-12-2015 09:35:02

The Smithsonian Institution continues to research information on its collections and is thankful to the digital volunteers who helped to transcribe this material. We look forward to using the work they created to further enrich our collections.

- Before you incorporate this material into a for-profit publication or online project, please contact the Smithsonian Institution Archives;
- Please leave source and copyright information as is and avoid obscuring these details in the material;
- Do not post this document as a whole to a social media site, such as a blog, Facebook page, Twitter feed, etc;
- Researchers: if you deposit this material, please let Smithsonian Institution Archives know where the material is deposited so that we can guide the community members to it.

Contact the Smithsonian Institution for the current status of this project and related material. To see this project online - or other transcription projects - please visit [here](#).

Nevada-Utah
1965

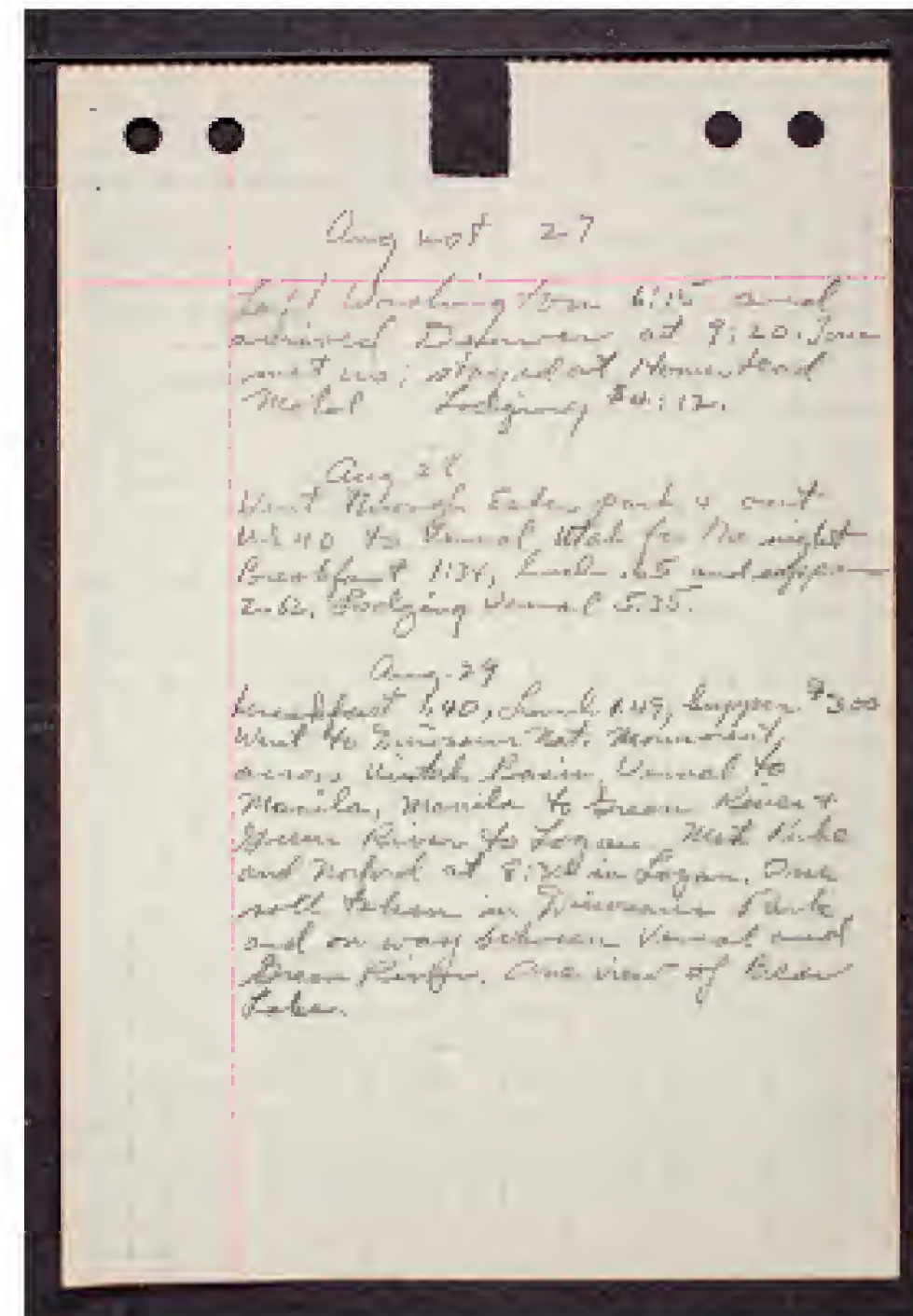


G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

August 27
Left Washington 6:15 and arrived Denver at 9:20. Jove met us; stayed at Homestead Motel. Lodging \$4.12.

August 28
Went through Estes park & out US 40 to Vernal Utah for the night. Breakfast 1:34, lunch, .65 and supper 2.62. Lodging Vernal 5.35

August 29
Breakfast 1.40, Lunch 1.49, Supper 3.00. Went to Dinosaur Nat. Monument, across Uintah Basin, Vernal to Manila, Manila to Green River & Green River to Logan. Met Rube and Norford at 8:30 in Logan. One roll taken in Dinosaur Park and on way between Vernal and Green River. One view of Bear Lake.



Aug 27
Left Washington 6:15 and
arrived Denver at 9:20. Jove
met us; stayed at Homestead
Motel Lodging \$4.12.

Aug 28
Went through Estes park & out
US 40 to Vernal Utah for the night
Breakfast 1:34, Lunch .65 and supper
2.62. Lodging Vernal 5.35.

Aug 29
breakfast 1.40, lunch 1.49, supper 3.00
Went to Dinosaur Nat. Monument,
across Uintah Basin Vernal to
Manila, Manila to Green River &
Green River to Logan. Met Rube
and Norford at 8:30 in Logan. One
roll taken in Dinosaur Park
and on way between Vernal and
Green River. One view of Bear
Lake.

G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

Aug 30,

Green Canyon

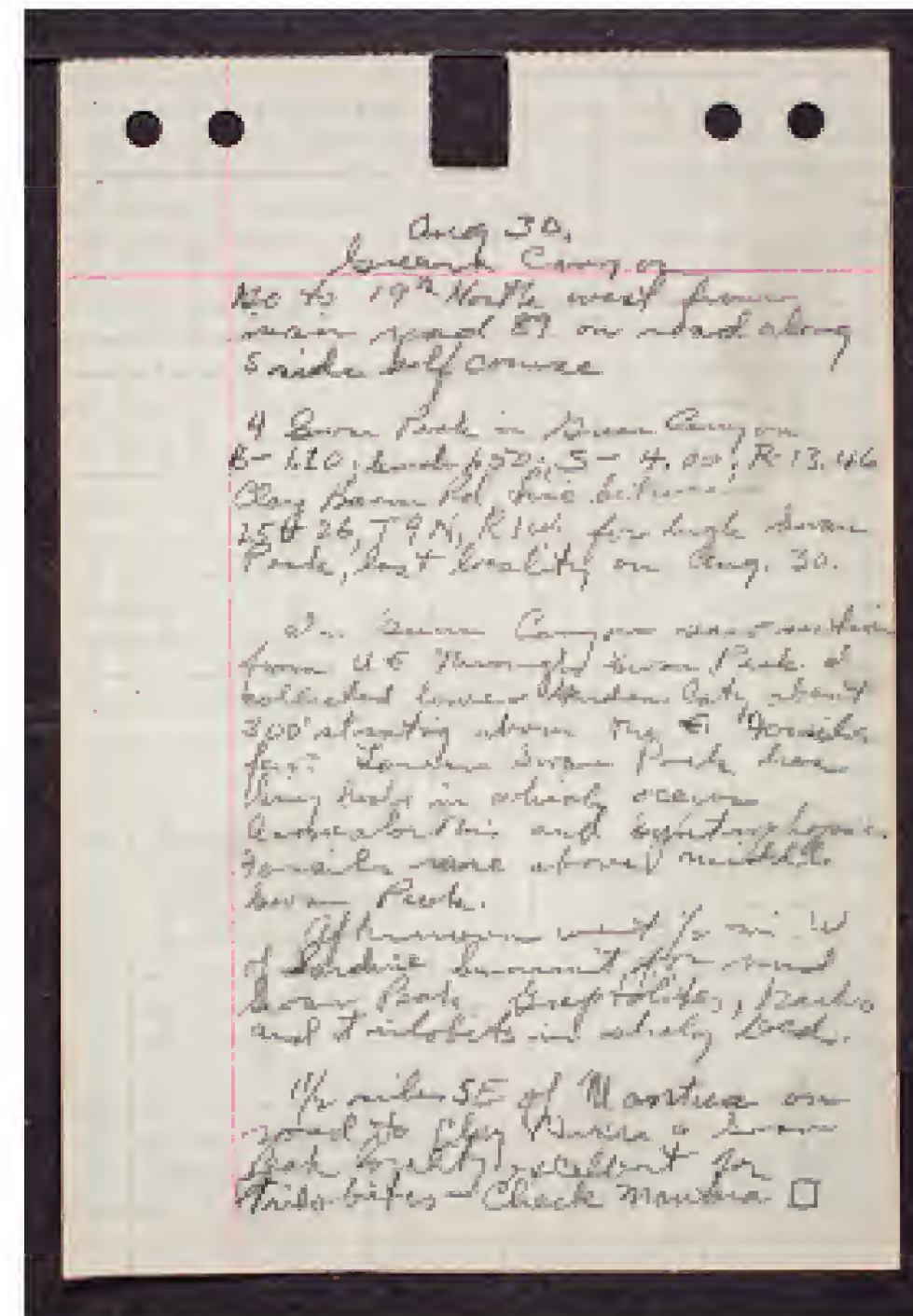
Go to 19th North west from main road 89 on road along S side golf course.

4 Swan Peak in Green Canyon B- 1.20, Lunch 1.50, S-4.00. R -13.46.
Clay Basin Rd, Line between 25-26, T9N, R1W, for high Swan Peak, last locality on Aug. 30.

In Green Canyon saw section from UE through Swan Peak. I collected home - Garden City about 300' strating. above The E. fossils few. Lower Swan Peak has limey beds in which occur Anomalorthis and Syntrophopsis. Fossils rare above middle Swan Peak.

Afternoon went 1/2 mi W of Sardine Summit for mid Swan Peak. Graptolites, bracho and trilobites in shaly beds.

1 1/2 miles SE of Mantua on road to Clay Basin & Swan Peak locality excellent for Trilobites - Check Mantua



G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

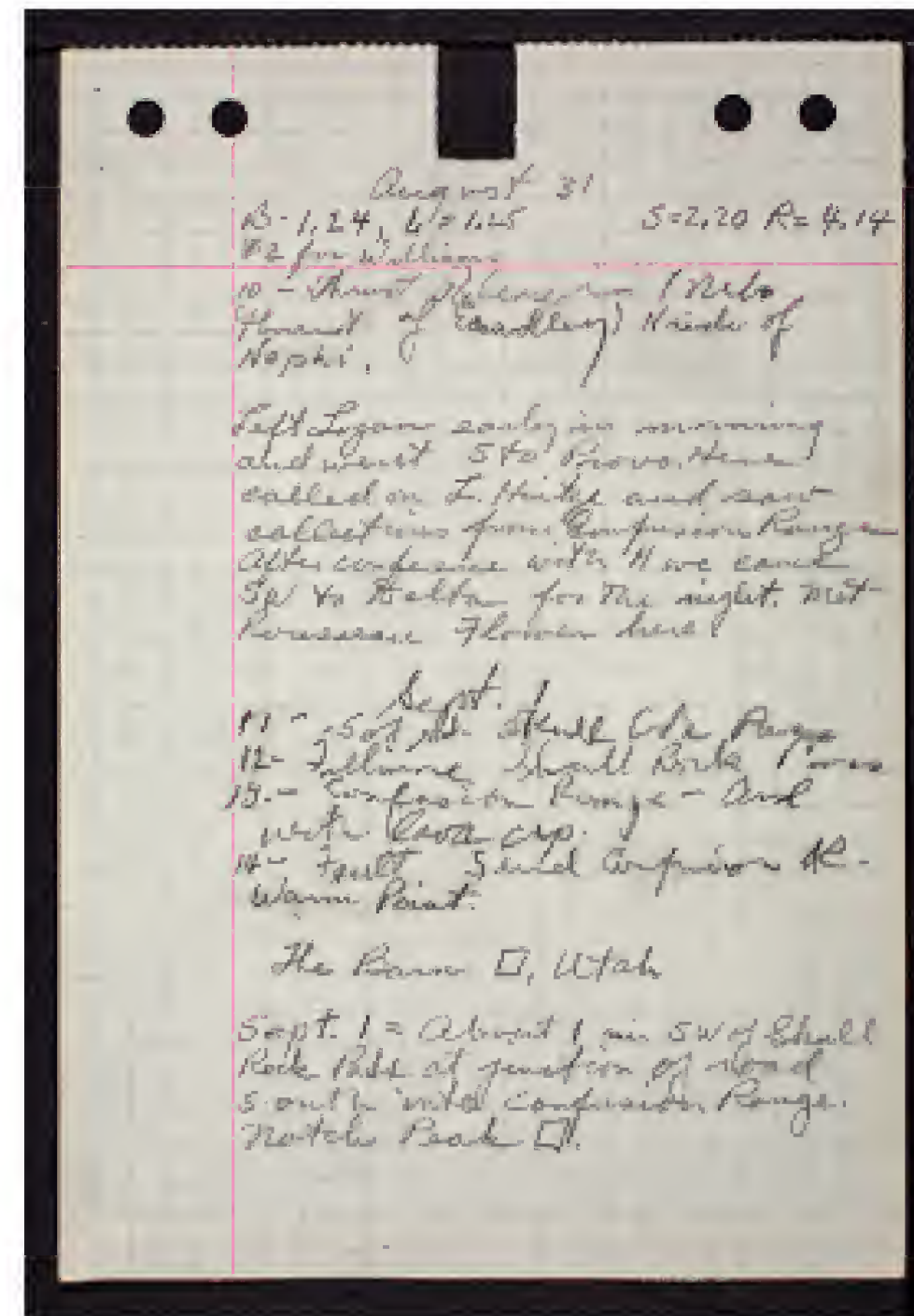
August 31
B - 1.24, L = 1.25 S = 2.20 R = 4.14
\$2 for Williams
10 - Thrust Paleozoic (Nebo Thrust of [Eerdley?]) N side of Nephi.

Left Logan early in morning and went S to Provo. Here called on L. Hintze and saw collections from Confusion Range. After conference with H we came SW to Delta for the night. Met Rousseau Flower here.


Sept. 1
11 - .5 of rd. Skull [Rock?] Pass
12 - Fillmore Skull Rock Pass
13 - Confusion Range - And with lava cap.
14 - Fault S end Confusion R. Warm Point

The Barn [image of square], Utah

Sept. 1 = About 1 mi. SW of Skull Rock Pass at junction of road South into Confusion Range. Notch Peak [image of square].



G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

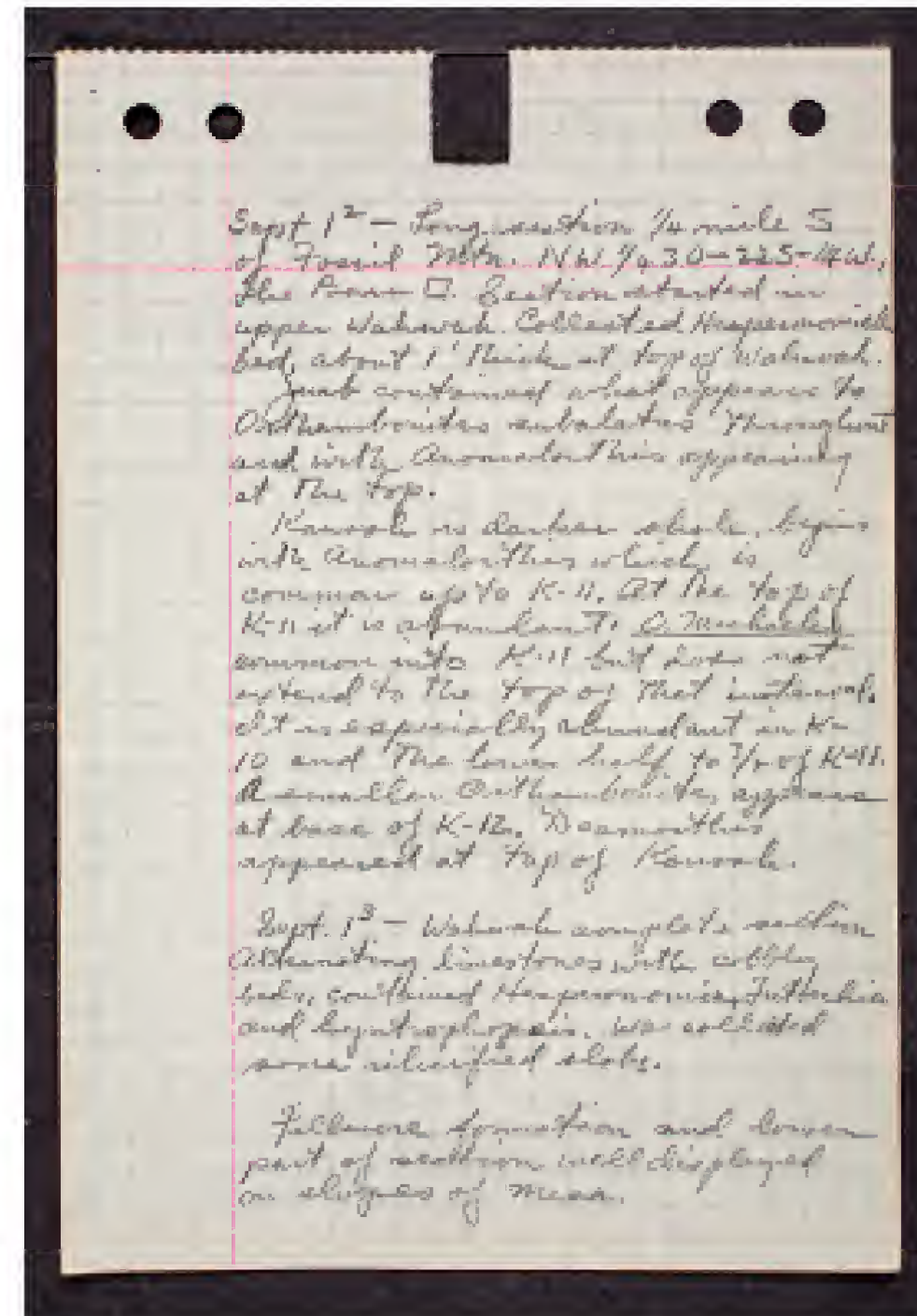
Sept 1² - Long section 1/4 mile S of Fossil Mtn. NW 1/4 30-225-14W., The Barn . Section started in upper Wahwah. Collected Hesperonomiella bed, about 1' thick at top of Wahwah.


[?] contained what appears to Orthambonites subalatus throughout and with Anomalorthis appearing at the top.

Kanosh is darker shale, begins with Anomalorthis, which is common up to K-11. At the top of K-11 it is abundant. O. Michaelis common into K-11 but does not extend to the top of that interval. It is especially abundant in K-10 and the lower half to 3/4 of K-11. A smaller Orthambonites appears at base of K-12. Desmorthis appeared at top of Kanosh.

Sept 1³ - Wahwah complete section Alternating limestones with cobbly beds, contained Hesperonomia, Tretbechia? and Syntrophopsis. We collected some silicified slabs.

Fillmore formation and lower part of section well displayed on slopes of Mesa.



Sept 1² - Long section 1/4 mile S of Fossil Mtn. NW 1/4 30-225-14W., The Barn . Section started in upper Wahwah. Collected Hesperonomiella bed, about 1' thick at top of Wahwah. [?] contained what appears to Orthambonites subalatus throughout and with Anomalorthis appearing at the top. Kanosh is darker shale, begins with Anomalorthis which is common up to K-11. At the top of K-11 it is abundant. O. Michaelis common into K-11 but does not extend to the top of that interval. It is especially abundant in K-10 and the lower half to 3/4 of K-11. A smaller Orthambonites appears at base of K-12. Desmorthis appeared at top of Kanosh.

Sept. 1³ - Wahwah complete section Alternating limestones with cobbly beds, contained Hesperonomia, Tretbechia and Syntrophopsis. We collected some silicified slabs.

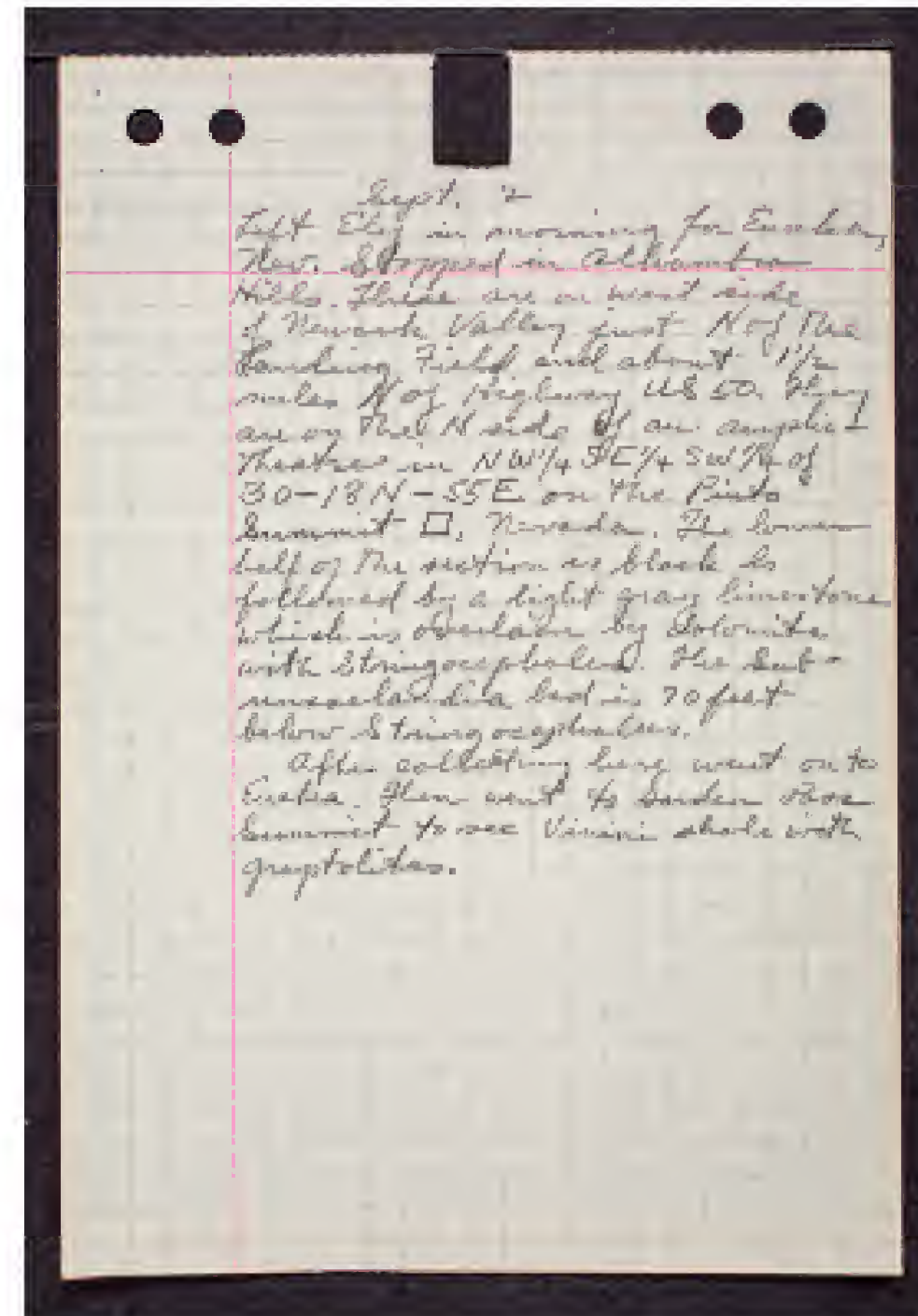
Fillmore formation and lower part of section well displayed on slopes of mesa.

G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

Sept. 2

Left Ely in the morning for Eureka, Nev. Stopped in Alhambra Hills. These are on West side of Newark Valley just N of the Landing Field and about 1 1/2 miles N of Highway US 50. They are on the N side of amphi-Theatre in NW 1/4 SE 1/4 SW 1/4 of 30-18N-55E on the Pinto Summit , Nevada. The lower half of the section is black ls. followed by a light gray limestone which is overlain by dolomite with Stringocephalus. The Subrensselandia bed is 70 feet below Stringocephalus.

After collecting here went on to Eureka. Then went to Garden Pass Summit to see Vinini shale with graptolites.



Sept. 2
Left Ely in morning for Eureka,
Nev. Stopped in Alhambra
Hills. These are on west side
of Newark Valley just N of the
Landing Field and about 1 1/2
miles N of Highway US 50. They
are on the N side of an amphi-
theatre in NW 1/4 SE 1/4 SW 1/4 of
30-18N-55E on the Pinto
Summit , Nevada. The lower
half of the section is black ls.
followed by a light gray limestone
which is overlain by dolomite
with Stringocephalus. The sub-
rensselandia bed is 70 feet
below Stringocephalus.
After collecting here went on to
Eureka. Then went to Garden Pass
Summit to see Vinini shale with
graptolites.

G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

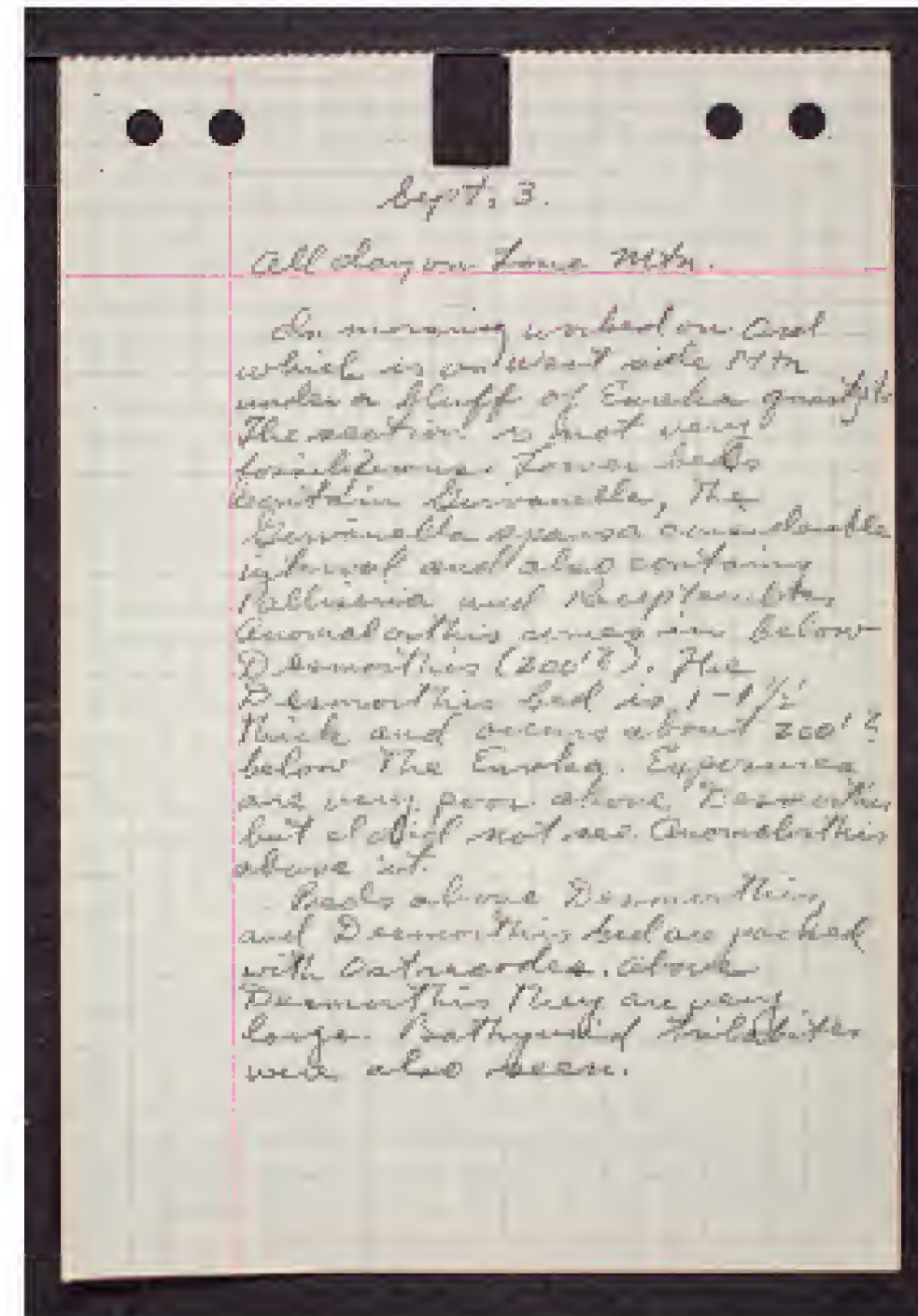
Sept. 3.

All day on Lone Mtn.

In morning worked on Oral which is on West side Mtn under a bluff of Eureka quartzite. The section is not very fossiliferous. Lower beds contain Girvanella, The Girvanella spans a considerable interval and also contains Pallisana and Receptaculites

Anomalorthis comes in below Desmorthis (200'). The Desmorthis bed is 1-1 1/2' thick and occurs about 200' below the Eureka. Exposures are very poor above Desmorthis but I did not see Anomalorthis above it.

Beds above Desmorthis, and Desmorthis bed are packed with Ostracodes. Above Desmorthis they are very large. Bathyrud trilobites were also seen.

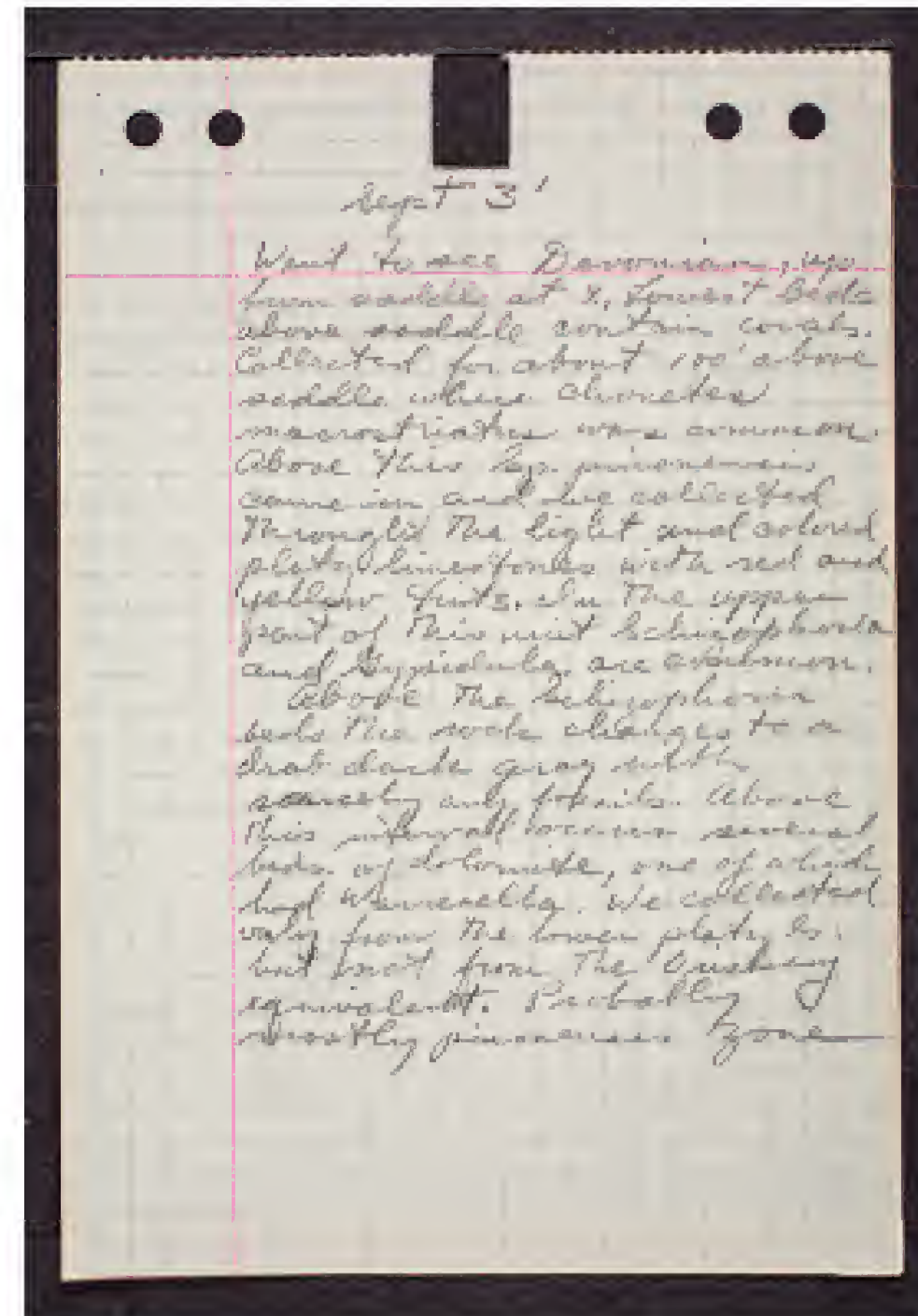


G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

Sept 3'

Went to see Devonian, up from saddle at x, Lowest beds above saddle contain corals. Collected for about 100' above saddle where clionetes macrostriatus was common. Above this Sp. pinonensis came in and we collected through the light and colored platy limestones with red and yellow tints. In the upper part of this unit Schizophoria and Gypsidula are common.

Above the Schizophoria beds the rock changes to a drab dark gray with scarcely any fossils. Above this interval occurs several beds of dolomite, one of which had Warrenella. We collected only from the lower platy ls. but not from the Oriskany equivalent. Probably mostly pinonensis zone



Sept 3'

Went to see Devonian, up from saddle at x, Lowest beds above saddle contain corals. Collected for about 100' above saddle where clionetes macrostriatus was common. Above this Sp. pinonensis came in and we collected through the light and colored platy limestones with red and yellow tints. In the upper part of this unit Schizophoria and Gypsidula are common. Above the Schizophoria beds the rock changes to a drab dark gray with scarcely any fossils. Above this interval occurs several beds of dolomite, one of which had Warrenella. We collected only from the lower platy ls. but not from the Oriskany equivalent. Probably mostly pinonensis zone

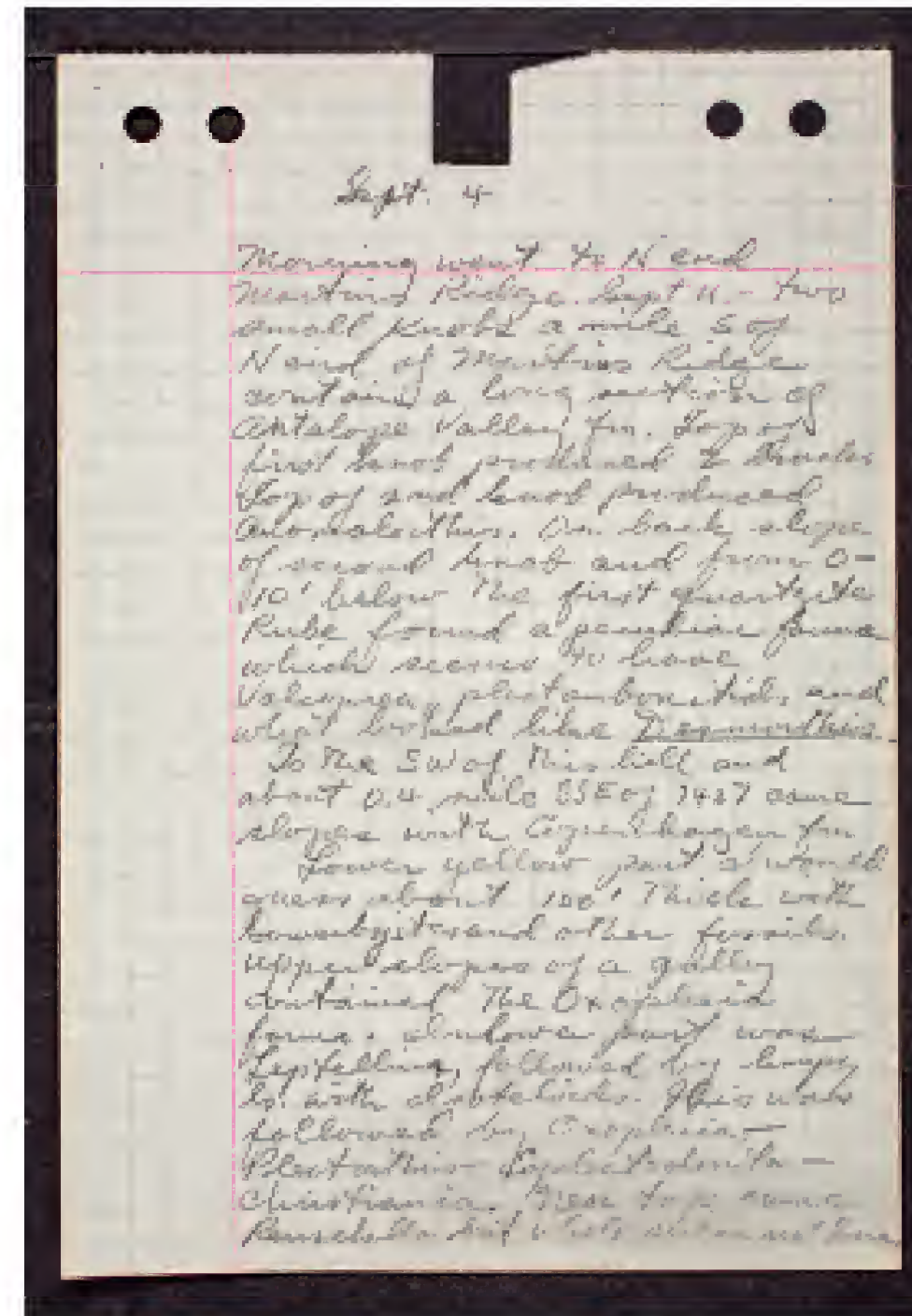
G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

Sept. 4

Morning went to N end Martins Ridge. Sept 4. - two small knobs a mile S of N end of Martins Ridge contains a long section of Antelope Valley fm. Top of first knob produced 2 brachs. Top of 2nd knob produced Anomalorthis. On back slope of second knob and from 0-10' below the first quartzite Rube found a peculiar fauna which seems to have Valcourea plectambonitids and what looked like Desmorthis.

To the SW of this hill and about 0.4 mile SSE of 7427 came slopes with Copenhagen fm.

Lower yellow part I would guess about 100' thick with Sowerbyites and other fossils. Upper slopes of a gully contained the Oxoplesia forma. In lower part was Leptellina, followed by lumpy ls. with Isoteloids. This was followed by Oxoplesia - Plectonithis - Eoplectodonta - Christiania. Near top came Reuschella but whole section not there.



Sept. 4
Morning went to N end
Martins Ridge. Sept 4. - two
small knobs a mile S of
N end of Martins Ridge
contains a long section of
Antelope Valley fm. Top of
first knob produced 2 brachs
Top of 2nd knob produced
Anomalorthis. On back slope
of second knob and from 0-
10' below the first quartzite
Rube found a peculiar fauna
which seems to have
Valcourea plectambonitids and
what looked like Desmorthis.
To the SW of this hill and
about 0.4 mile SSE of 7427 came
slopes with Copenhagen fm.
Lower yellow part I would
guess about 100' thick with
Sowerbyites and other fossils.
Upper slopes of a gully
contained the Oxoplesia
forma. Lower part was
Leptellina, followed by lumpy
ls. with Isoteloids. This was
followed by Oxoplesia -
Plectonithis - Eoplectodonta -
Christiania. Near top came
Reuschella but whole section not there.

G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

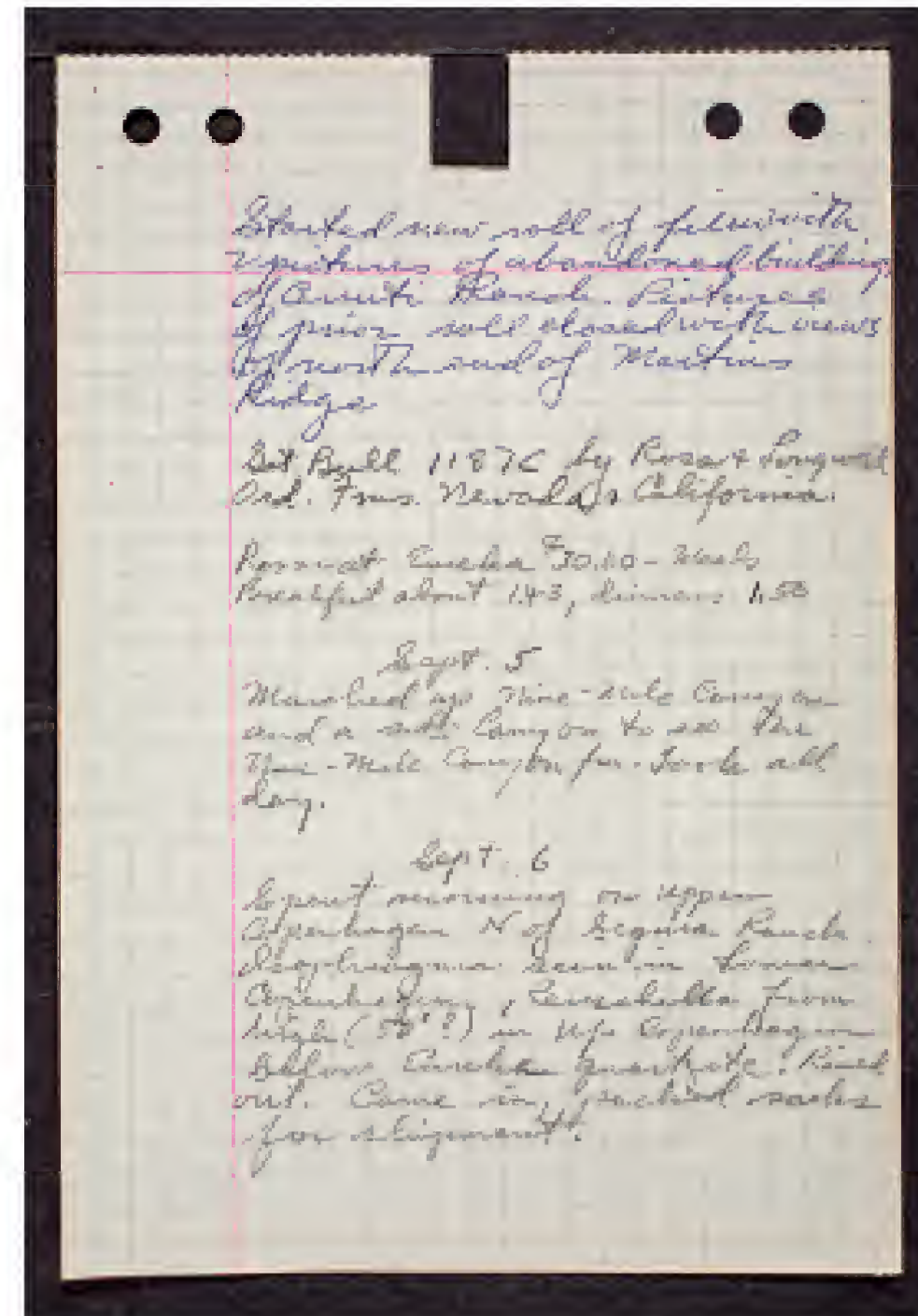
Started new roll of film with 2 pictures of abandoned buildings of
[[Curti?]] Ranch. Pictures of prior roll closed with views of north end of
Martins Ridge

Set Bull 1187C by Rosa & Longwell
Ord. Fms. Nevada & California.

Room at Eureka \$30.00 - Meals
Breakfast about 1.43, dinners 1.58

Sept. 5
Marched up Nine-Mile Canyon and a side Canyon to see the Nine-Mile
Canyon fm. Took all day.

Sept. 6
Spent morning on Upper Copenhagen N of Sequia Ranch.
[[Isophagma?]] seen in Lower Copenhagen, Renschella from high (50°
?) in Up Copenhagen below Eureka quartzite. Rained out. Came in,
packed sacks for shipment.



Started new roll of film with
2 pictures of abandoned buildings
of Curti Ranch. Pictures of
prior roll closed with views
of north end of Martins
Ridge

Set Bull 1187C by Rosa & Longwell
Ord. Fms. Nevada & California.


Room at Eureka \$30.00 - Meals
Breakfast about 1.43, dinners 1.58

Sept. 5
Marched up Nine-Mile Canyon
and a side Canyon to see the
Nine-Mile Canyon fm. Took all
day.

Sept. 6
Spent morning on upper
Copenhagen N of Sequia Ranch.
Isophagma seen in lower
Copenhagen, Renschella from
high (50°?) in Up Copenhagen
below Eureka quartzite. Rained
out. Came in, packed sacks
for shipment.

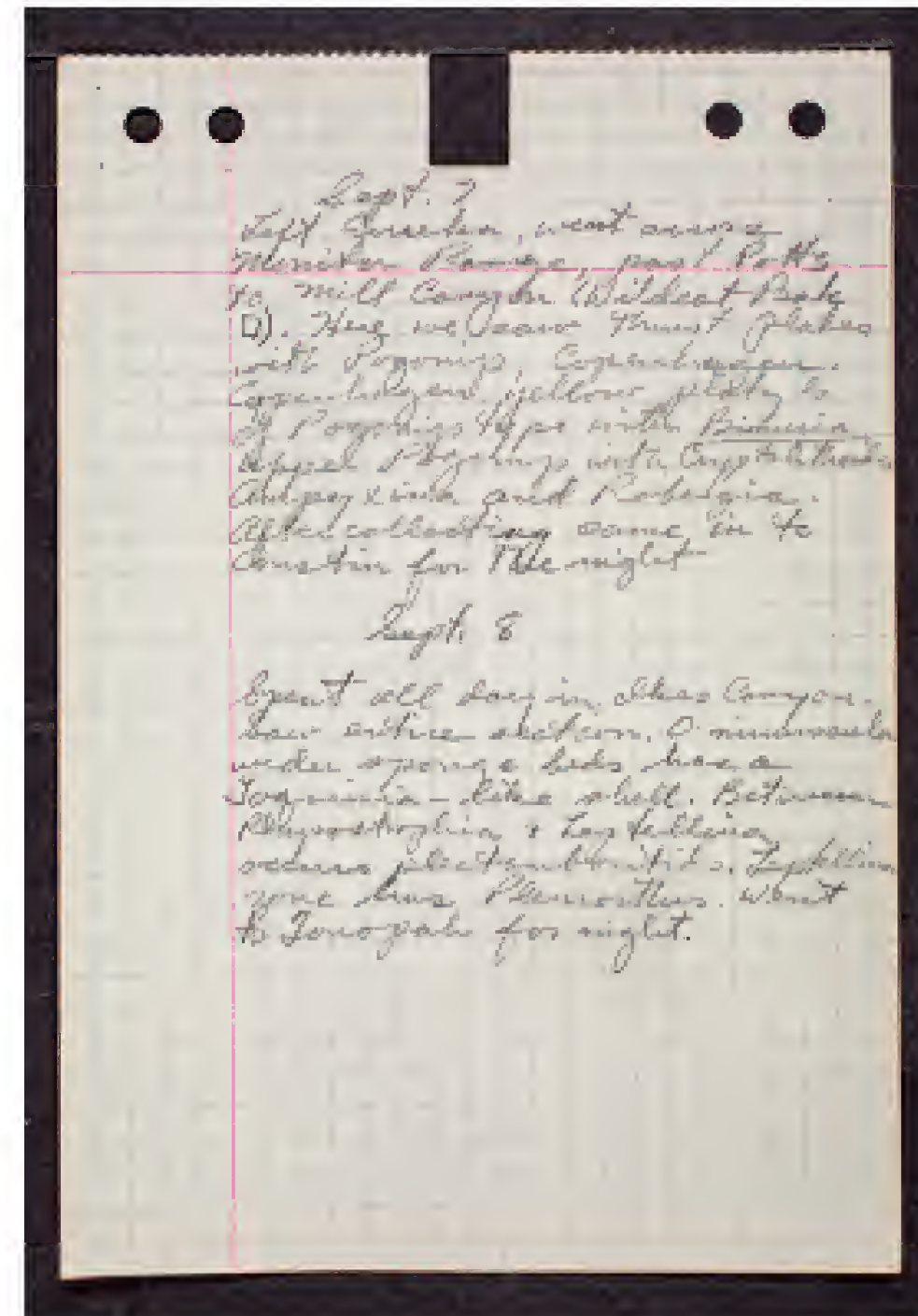
G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

Sept. 7

Left Eureka, went across Monitor Range, past Potts to Mill Canyon (Wildcat Peak ). Here we saw thrust plates with Pogonip, Copenhagen. Copenhagen yellow platy ls of Pogonip type with Bimuria upper Pogonip with Cryptolithoides Ampyxina and Robeigia. After collecting came in to Austin for the night.

Sept. 8

Spent all day in Ikes Canyon. Saw entire section. O. minuscula under sponge beds has a Toquimia-like shell. Between Rhysostrophia & Leptellina occurs plectambonitids. Leptellina zone has Pleurorthis. Went to Tonopah for night.



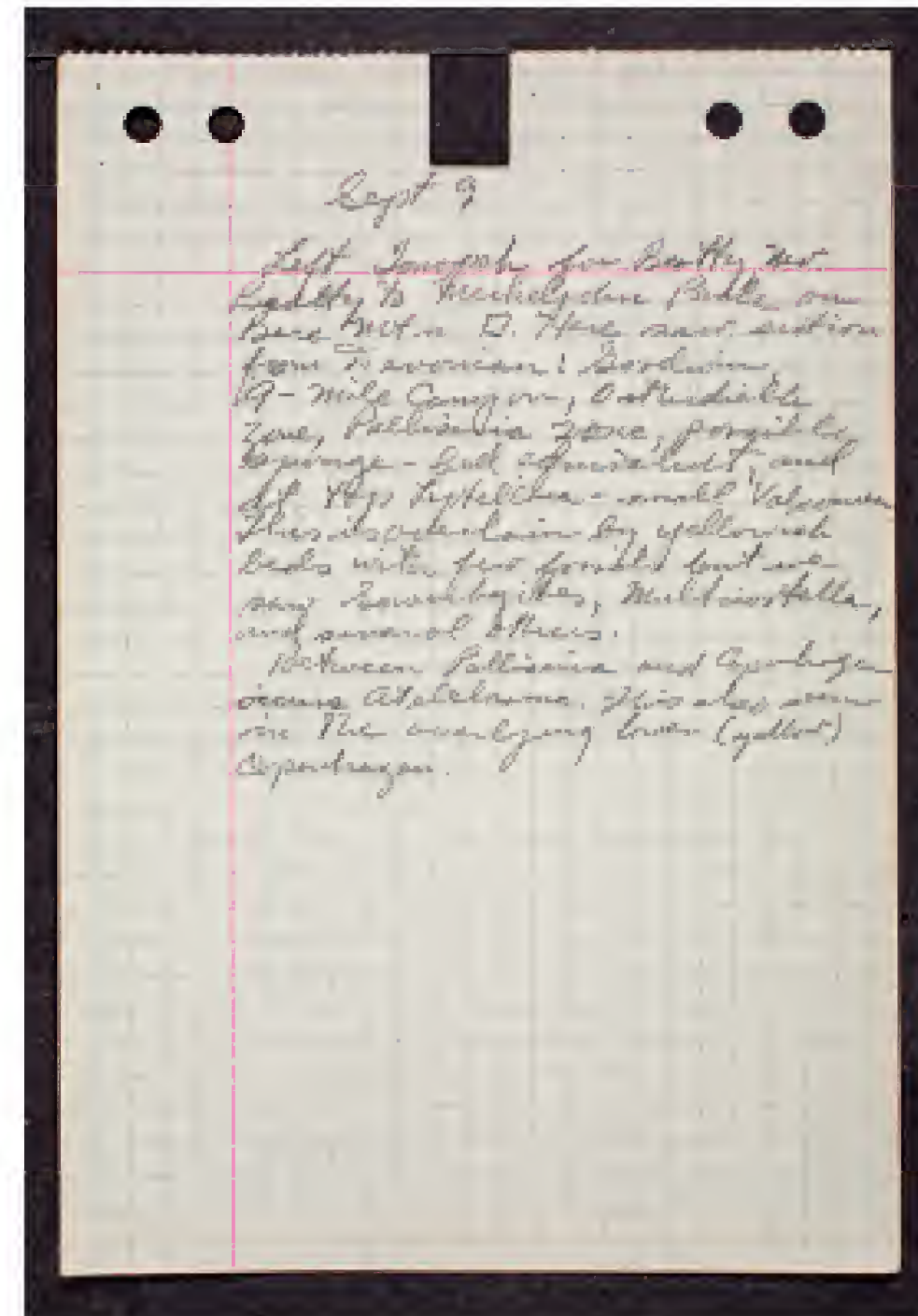
Sept. 7
Left Eureka, went across
Monitor Range, past Potts
to Mill Canyon (Wildcat Peak
□). Here we saw thrust plates
with Pogonip, Copenhagen.
Copenhagen yellow platy ls
of Pogonip type with Bimuria
upper & Bimuria with Cryptolithoides
Ampyxina and Robeigia.
After collecting came in to
Austin for the night.

Sept. 8
Spent all day in Ikes Canyon.
Saw entire section. O. minuscula
under sponge beds has a
Toquimia-like shell. Between
Rhysostrophia & Leptellina
occurs plectambonitids. Leptellina
zone has Pleurorthis. Went
to Tonopah for night.

G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

Sept 9

Left Tonopah for Beatty Nev. Beatty to Meiklejohn Peak on Bare Mtn
[[image of square]]. Here saw section from Devonian: Goodwin 9-Mile
Canyon, [[Orthidiella?]] Zone, Pallisonia Zone, possible sponge - bad
equivalent, and at top Leptellina - small [[Valecrocea?]] This is overlain
by yellowish beds with few fossils but we saw Sowerbyites,
Multicostella, and several others.
Between Pallisonia and Copenhagen occurs Atelelasma. This also seen
in the overlying lower (yellow) Copenhagen.



Sept 9
Left Tonopah for Beatty Nev.
Beatty to Meiklejohn Peak on
Bare Mtn. Here saw section
from Devonian: Goodwin
9-Mile Canyon, Orthidiella
Zone, Pallisonia Zone, possible
sponge - bad equivalent, and
at top Leptellina - small
Valecrocea. This is overlain
by yellowish beds with few
fossils but we saw
Sowerbyites, Multicostella,
and several others.
Between Pallisonia and Copenhagen
occurs Atelelasma. This also seen
in the overlying lower (yellow)
Copenhagen.

G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

Sept. 10

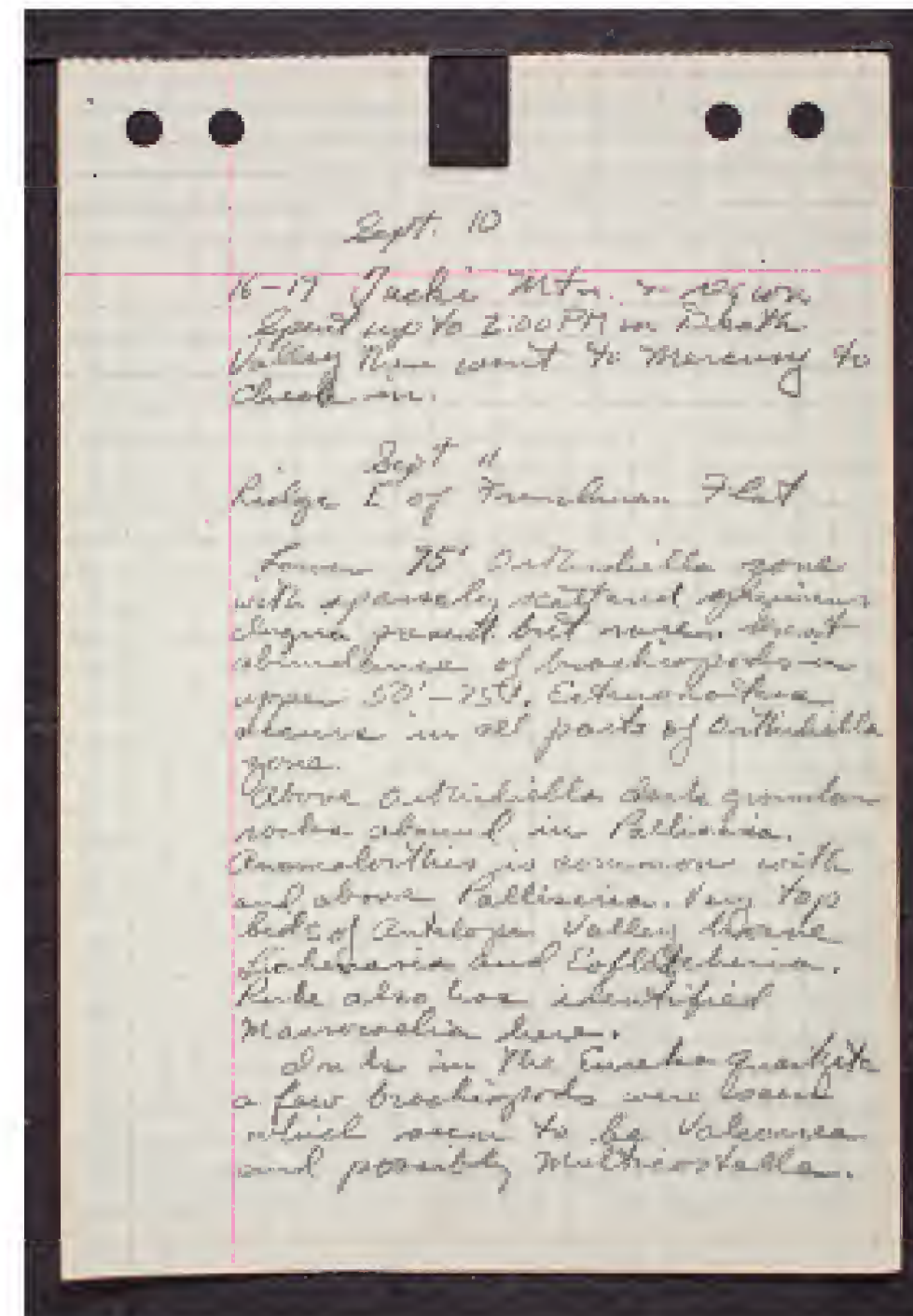
16-17 Tucki Mtn. & region
Spent up to 2:00 PM in Death Valley then went to Mercury to check in.

Sept 11
Ridge E of Frenchman Flat

Lower 75' Orthidiella zone with sparsely scattered specimens. Ingridia present but rare. Great abundance of brachiopods in upper 50'-75'. Ectenonotus occurs in all parts of Orthidiella zone.

Above Orthidiella dark granular rocks abound in Palliseria. Anomalorthis is common with and above Palliseria. Very top beds of Antelope Valley have Lichenaria and Eofletcheria. Rube also has identified Macrocoelia here.

In ls in the Eureka quartzite a few brachiopods were seen which seem to be Valcourea and possibly Multicostella.



Sept. 10
16-17 Tucki Mtn. & region
Spent up to 2:00 PM in Death Valley then went to Mercury to check in.

Sept 11
Ridge E of Frenchman Flat

Lower 75' Orthidiella zone with sparsely scattered specimens. Ingridia present but rare. Great abundance of brachiopods in upper 50'-75'. Ectenonotus occurs in all parts of Orthidiella zone.

Above Orthidiella dark granular rocks abound in Palliseria. Anomalorthis is common with and above Palliseria. Very top beds of Antelope Valley have Lichenaria and Eofletcheria. Rube also has identified Macrocoelia here.

In ls in the Eureka quartzite a few brachiopods were seen which seem to be Valcourea and possibly Multicostella.

G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02

Sept. 12

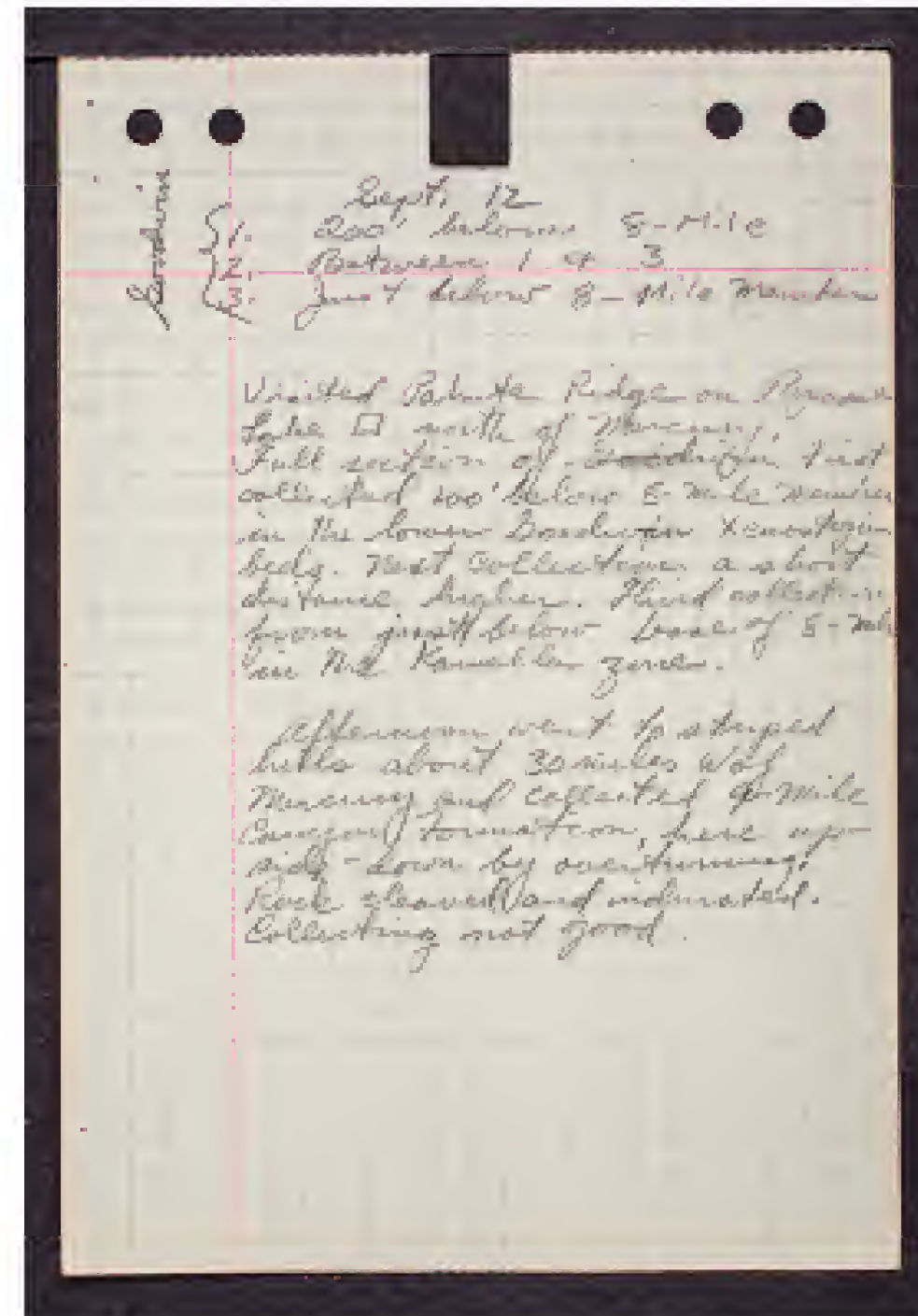
[[written sideways]] Goodwin [[/sideways]]

- { 1. 200' below 8-Mile
- { 2. Between 1 & 3
- { 3. Just below 8-Mile Member

Visited Pahute Ridge on Papoose Lake [[drawing of open box]] north of Mercury.

Full section of Goodwin. First collected 200' below 8-Mile Member in the lower Goodwin Xenostegium beds. Next collection a short distance higher. Third collection from just below base of 8-Mile in the Kainella zone.

Afternoon went to striped hills about 30 miles W of Mercury and collected 9-Mile Canyon Formation, here up-side-down by overturning. Rock cleaved and indurated. Collecting not good.



G. Arthur Cooper - Field notes, 1964
Transcribed and Reviewed by Digital Volunteers
Extracted Oct-12-2015 09:35:02



Smithsonian Institution

Smithsonian Institution Archives

The mission of the Smithsonian is the increase and diffusion of knowledge - shaping the future by preserving our heritage, discovering new knowledge, and sharing our resources with the world. Founded in 1846, the Smithsonian is the world's largest museum and research complex, consisting of 19 museums and galleries, the National Zoological Park, and nine research facilities. Become an active part of our mission through the Transcription Center. Together, we are discovering secrets hidden deep inside our collections that illuminate our history and our world.

Join us!

The Transcription Center: <https://transcription.si.edu>

On Facebook: <https://www.facebook.com/SmithsonianTranscriptionCenter>

On Twitter: [@TranscribeSI](https://twitter.com/TranscribeSI)

Connect with the Smithsonian

Smithsonian Institution: www.si.edu

On Facebook: <https://www.facebook.com/Smithsonian>

On Twitter: [@smithsonian](https://twitter.com/smithsonian)