

Gypsum

State of Oregon
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
702 Woodlark Building
Portland, Oregon

February 18, 1952

To: F. W. Libbey

From: R. S. Mason

Mr. L. L. Jackson was in the office last week and reported that a friend of his told him that there is a deposit of gypsum on Bear Creek a few miles almost due west of Roberts. ~~The~~ well is located on Alkali Flat and is supposed to be about 80 feet deep in solid gypsum, apparently selenite. This reported occurrence is several miles north of the Bear Creek deposit already written up in our files. Jackson has not been to the locality but says that samples of water-clear gypsum have been shown to him. He will let us know if he finds out anything more.

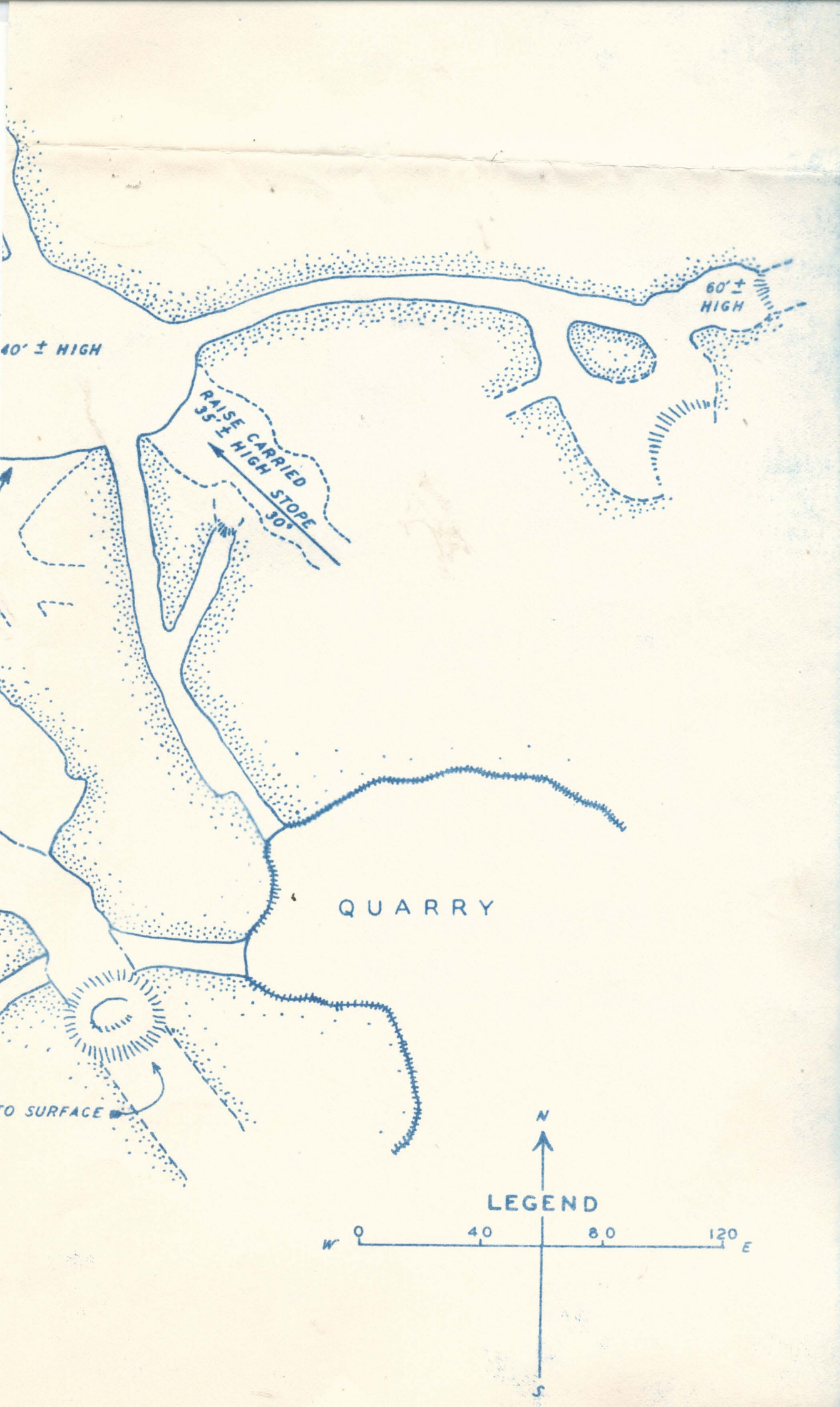
R.S.M.

RSM:lk



GYPSUM MINE

T. 13S., R. 45 E., S. 17-20 & 29
BAKER COUNTY, OREGON

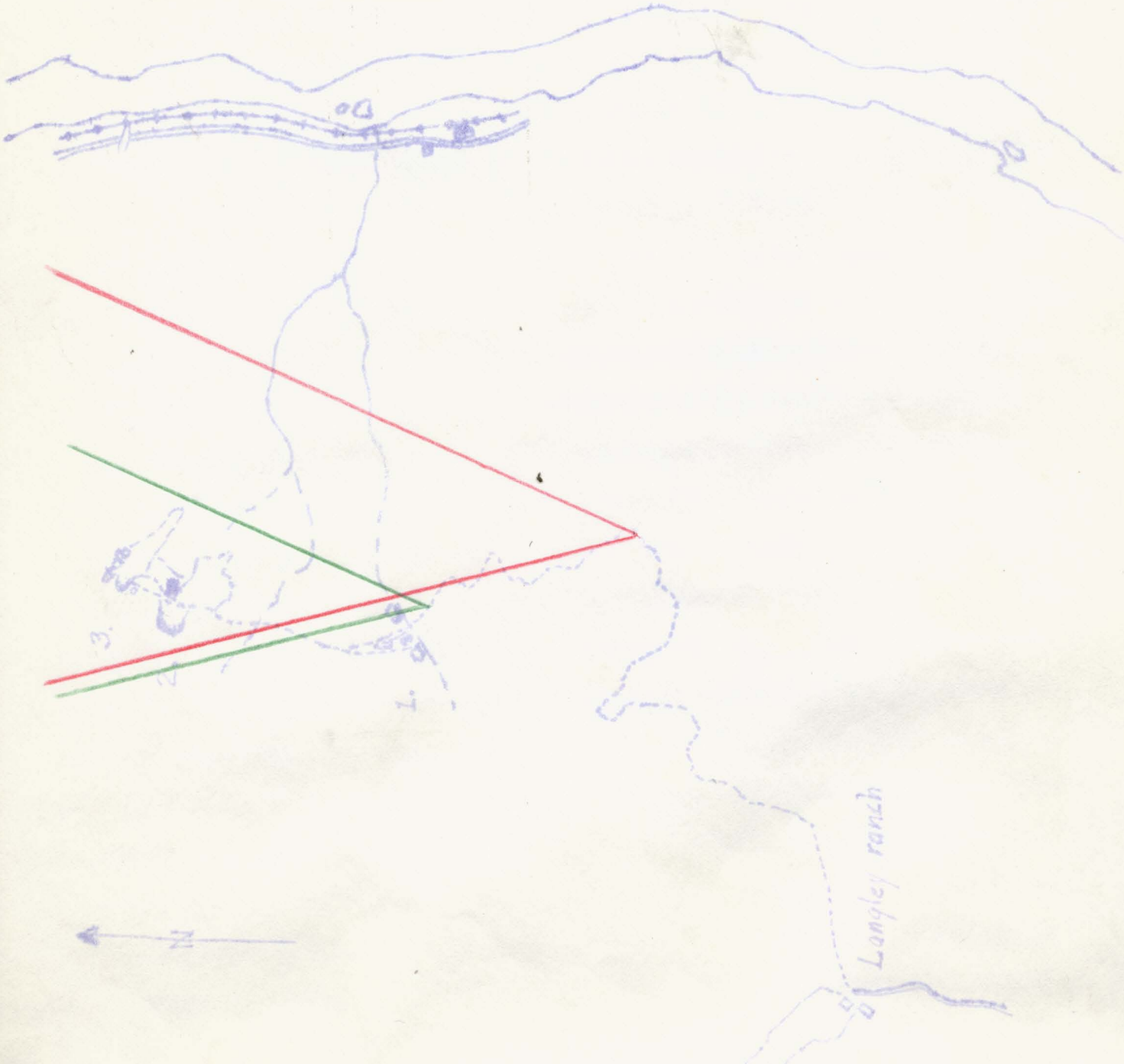




The mine workings as seen from two points on the trail.

In the picture showing the workings in the distance, illusion is such that the Snake River appears to be at a higher elevation than it actually is. The ridge which constitutes the west wall of the canyon as seen in the right half of the picture is perhaps a thousand feet above the river.

In the close-up picture, the workings shown include the two largest pits, which, due to the angle at which the picture was taken, appear as only one large one. Actually they are 600' apart measured from center to center of pits. The continuous dump spread around the hill between them serves to obscure the true individuality.





The #1 group of workings. This is one of the two sites which Lindgren might have seen at the time of his inspection in the 1890's, but the slacked dumps so thoroughly obscure the bedrock that it is not possible to confirm his section at this time. Some drifting may have been done here as suggested by dumps and what appear to be caved portals. However, such underground workings as may exist here are obviously meagre as compared with those at the other quarry sites.

In the picture taken looking to the southward, the gully just past the workings marks a fault. Livingstones Permain andesite complex occurs from this point south to where the trail first turns west and only skims of the "Gypsum Formation" are to be found on the hills above the trail. From this point south the "Gypsum Formation" is to be found to the west and at a much higher elevation.

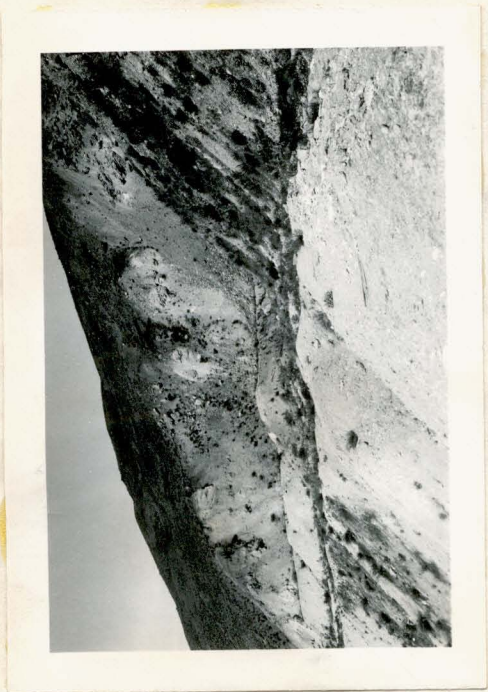




c.



b.



a.

Pictures a and b show the #2 pit which is the largest single pit on the property. It was impossible to set-up so as to get more than an oblique view, but some idea of size can be judged from the fact that the piles of waste on the quarry floor are higher than a man. In picture b the camera was situated on the crest and at the point of the foremost of these waste piles. Tramways on the quarry floor between piles give evidence of large scale underground operations here. Note the electric cable pole in the tramway in picture b.

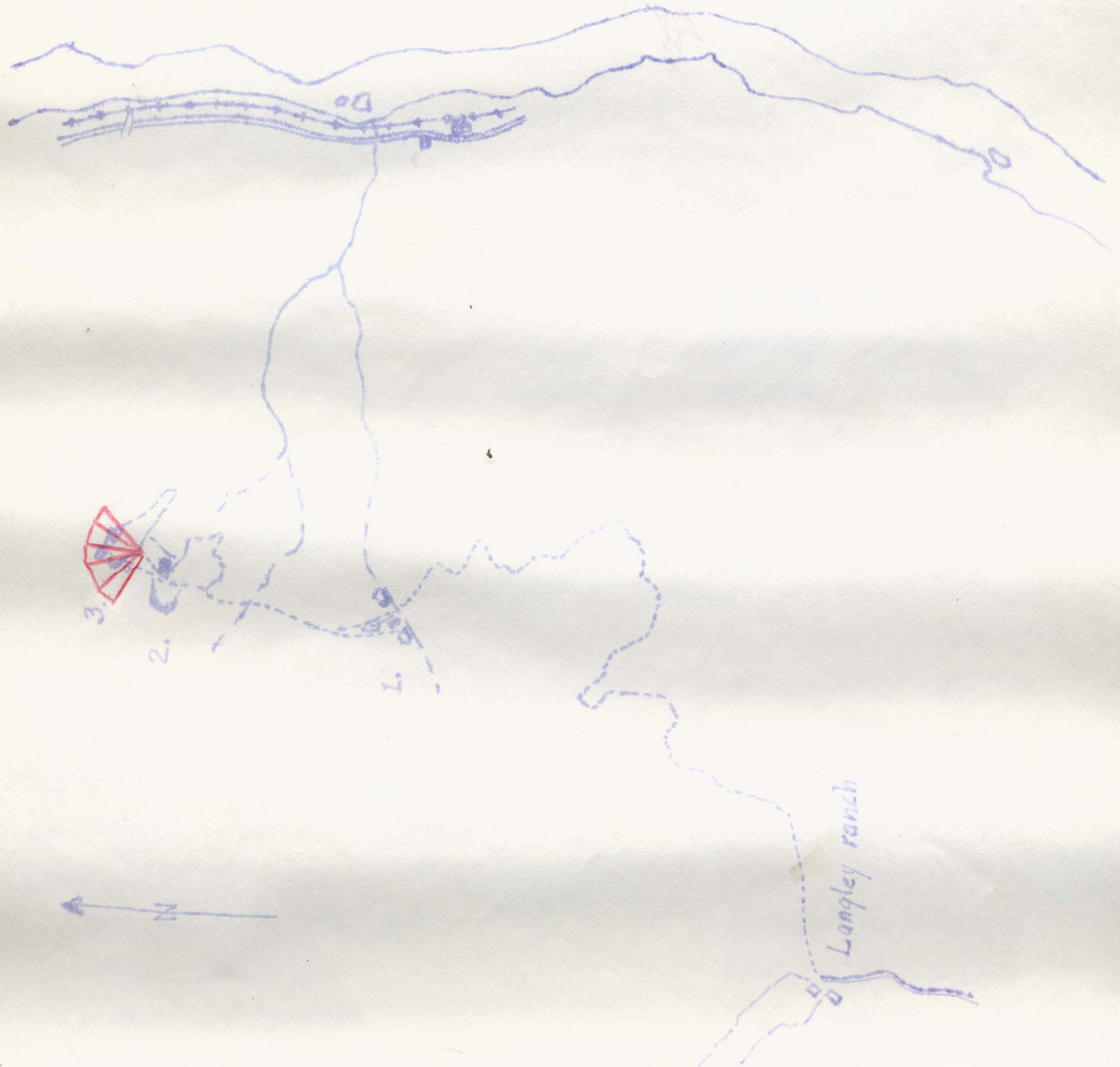
Picture c is taken looking directly down the route of the aerial tram. This bunker is situated within a stone-throw of the spot where picture b was taken, but the camera had to be tipped down sharply to get it. The white spot on the flat just above the tram head is spilled gypsum. Elevation of bunkers is 2950'; spilled gyp, estimated 2900'; processing plant (not to be seen in picture) is on the river bank at 2300'.





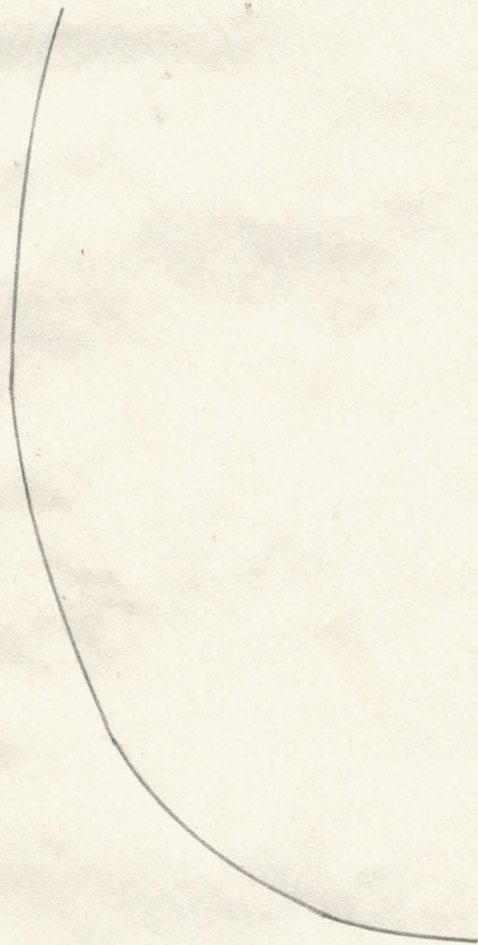
The #3 quarry. For proper perspective the picture should be bent to conform with the line drawn under it. A series of pits coalesce both laterally and vertically to comprise these workings. By reconstructing conditions to what they might have been at the outset of operations it is apparent that this may be the site examined by Lindgren for dimensions and strikes as in evidence then could conform in a general way to those reported by him. Subsequent operations, however, have revealed a complexity of steeper and varying strikes than noted by Lindgren, and at the same time the dumps from the higher pits and from the underground workings effectively obscure much of the lower portion of the section.

The cave on the hill at the extreme left of the picture is the cave shown on the map of the underground workings accompanying this report. The tunnel portal shown on the map is situated in the face of the adjacent quarry.

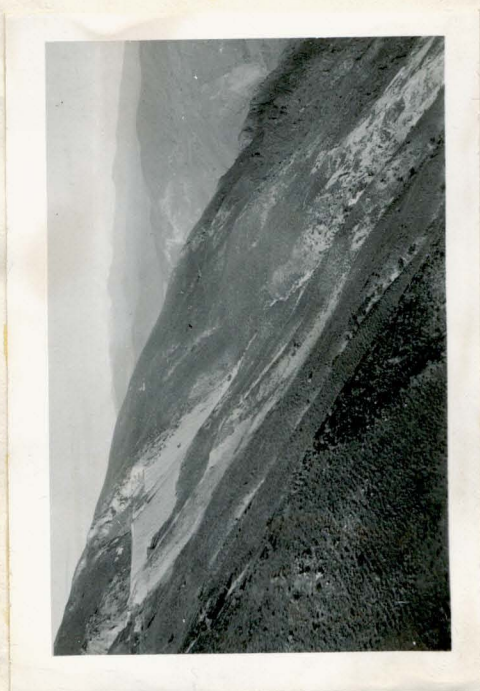




b.



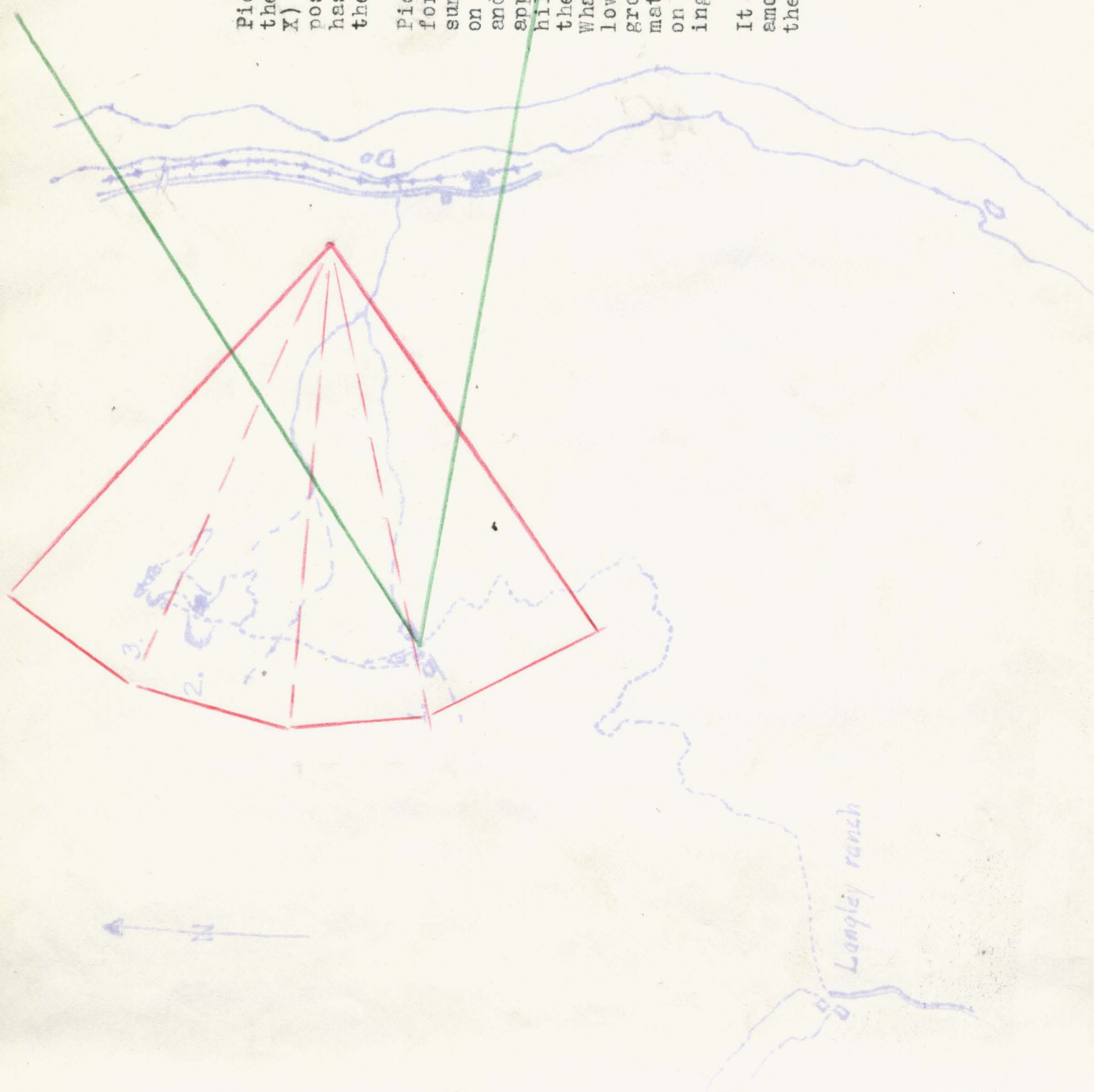
a.

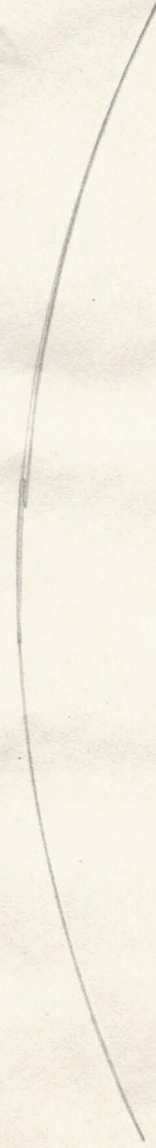


Picture a is the valley far below the workings but still 350' (Point X) above the river. This is composed of the "Gypsum Formation" which has slid, or faulted, or both, from the horizon of the workings.

Picture b is from the spot X on the foregoing picture. The spilled gypsum seen in a is above the sagebrushes on the hill in the left foreground, and from other vantage points, it appears that the mass comprising this hill is a fairly recent slide from the gypsum at the #2 and #3 workings. What appears to be workings in the lower right of picture c is in reality ground-up remnants of the "Gypsum Formation" smeared on the Permian rocks on the line between between said workings and this hill.

It is very probable that substantial amounts of gypsum have been lost to these slides.





General panorama from a bench above the mine workings. The track level of the main dumps is barely visible in this picture at the lowest level or point of the workings, and the elevation of this track is 4000'. The elevation of the summit of the ridge immediately back of this bench is 5000', which shows graphically just how much climbing Lindgren did ----" Near the summit --gently dipping beds" The generalizing old ----

Oh well, permission is granted in advance for the rewriting or ditching of this page as the picture doesnt add much to the report anyway, and I couldnt resist the opportunity of pointing this one out on Lindgren.

