Butterfield Overland Mail's Antelope Spring Station

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7-Mile Mesa (western side) ***C.A. Maedgen***

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Abstract

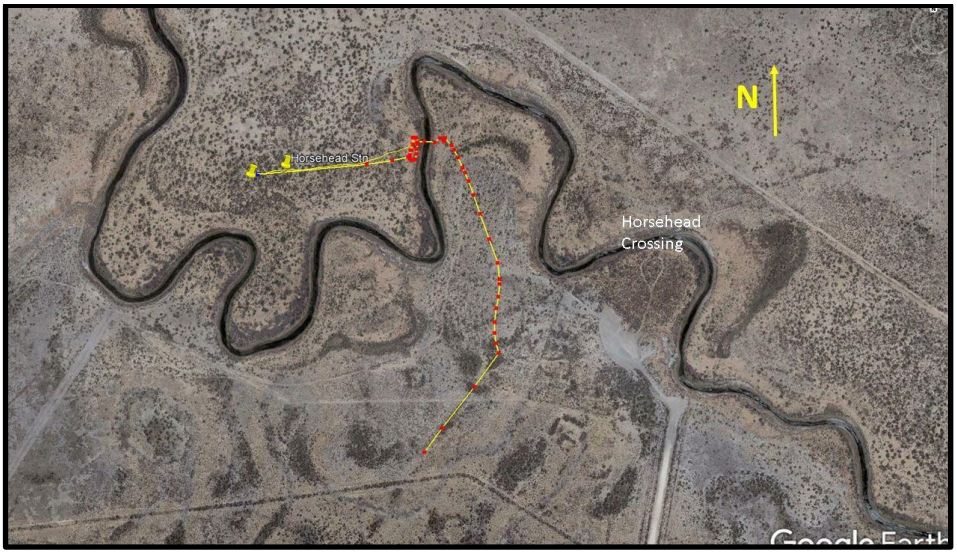
In August 1859, the Butterfield Overland Mail company decided to forego the northern route along the east side of the Pecos River to New Mexico and on through the Guadalupe Mountains to El Paso and begin operations from Horsehead Crossing across the Pecos River west to Fort Stockton. The change was made for several reasons: 1) to add Forts Stockton, Davis, and Quitman to the mail route; 2) better water sources; 3) more passengers/mail. To accomplish this, a new stagecoach station needed to be built. This station was never listed on the existing company schedules because it was added so late in the route's existence. It was given the name of the nearby spring – Antelope Spring Station, also known as Camp Pleasant (Pleasant probably the surname of the station manager). An archeological recording of this station was never conducted. In this recording, we will give a thorough description of the station, the layout, and all the work involved with this unknown historical site, as well as the stagecoach road that followed the Comanche Trail.

History

Coaches could not cross the muddy and deep Pecos River. So, they arrive at ferry points on either side of the river. Passengers and mail would be ferried across using a small skiff-type boat (Ely, Dearen). The skiff was probably connected to a rope line to keep it from being swept downstream by the strong current. The station continued to operate along this route and used this methodology from this point on.

To verify that the wagon road from the stage station was for the ferry crossing, a review of any wagon trail on the other side of the river was required. The result was that a wagon trail can be seen in historical satellite imagery departing the established Fort Stockton Road before it reaches Horsehead Crossing proper and heads straight to the west river bank, directly opposite from the wagon trail turnaround on the east side.

On the east side of the river, the road came from the stage station to a turnaround area. The coach drove along the riverbank in a kind of loop around and then back to the station.

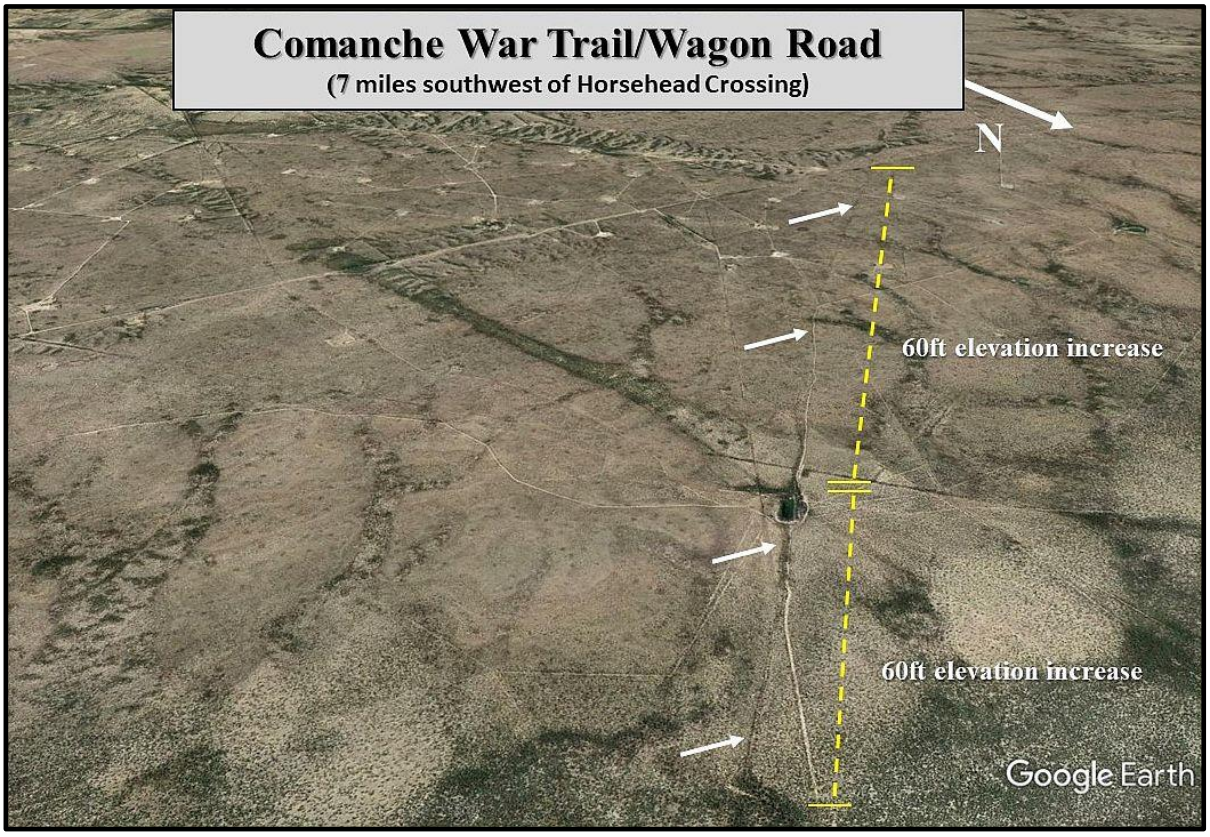


Roads from the Ft. Stockton road and stage station leading to opposite sides of the river

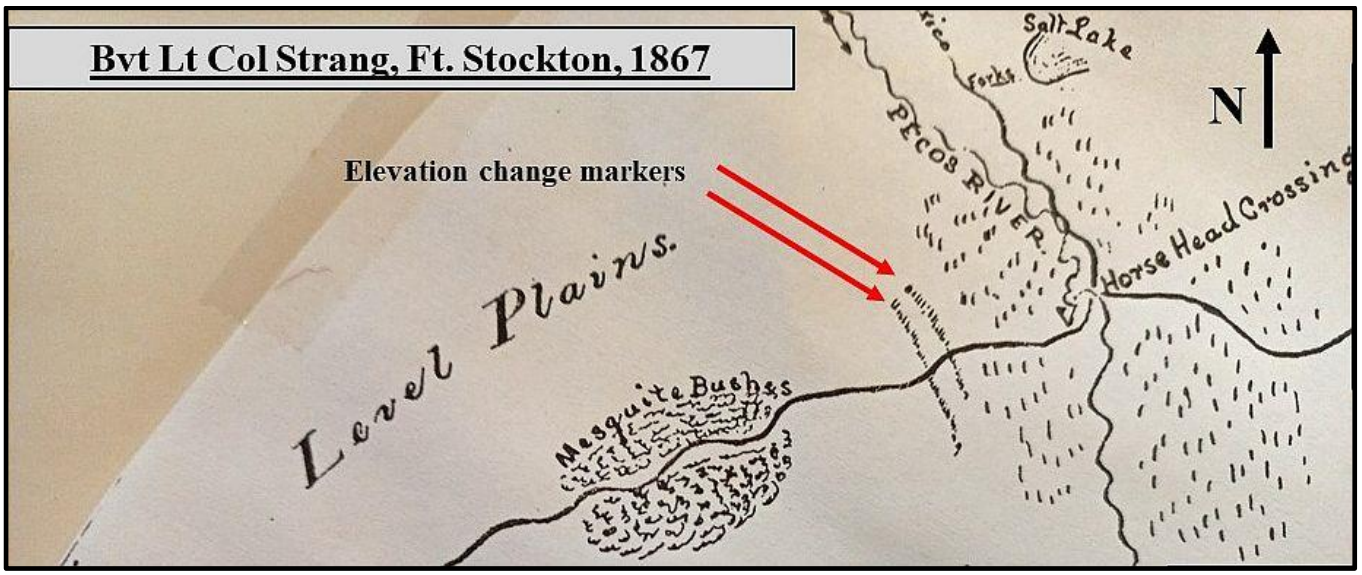
Fort Stockton Road

After the stagecoach left the river, it quickly merged into the Comanche Trail that had been used for the previous 70-plus years to run their stolen horse herds, usually in the spring, up to northern Texas. It then runs seven miles in a straight line west to a minor plateau. The Comanche Trail provided a ready-made road all the way to Comanche Spring, which is what Fort Stockton was built around. The trail leading to the plateau is approximately 30 feet wide and the six-foot wagon wheel ruts running down the middle can still be seen from above in some sections.

As the trail comes to the plateau, it climbs a wide draw leading 120 feet up to the flat before heading on to Fort Stockton. This draw makes an easy climb in two 60-foot sections.

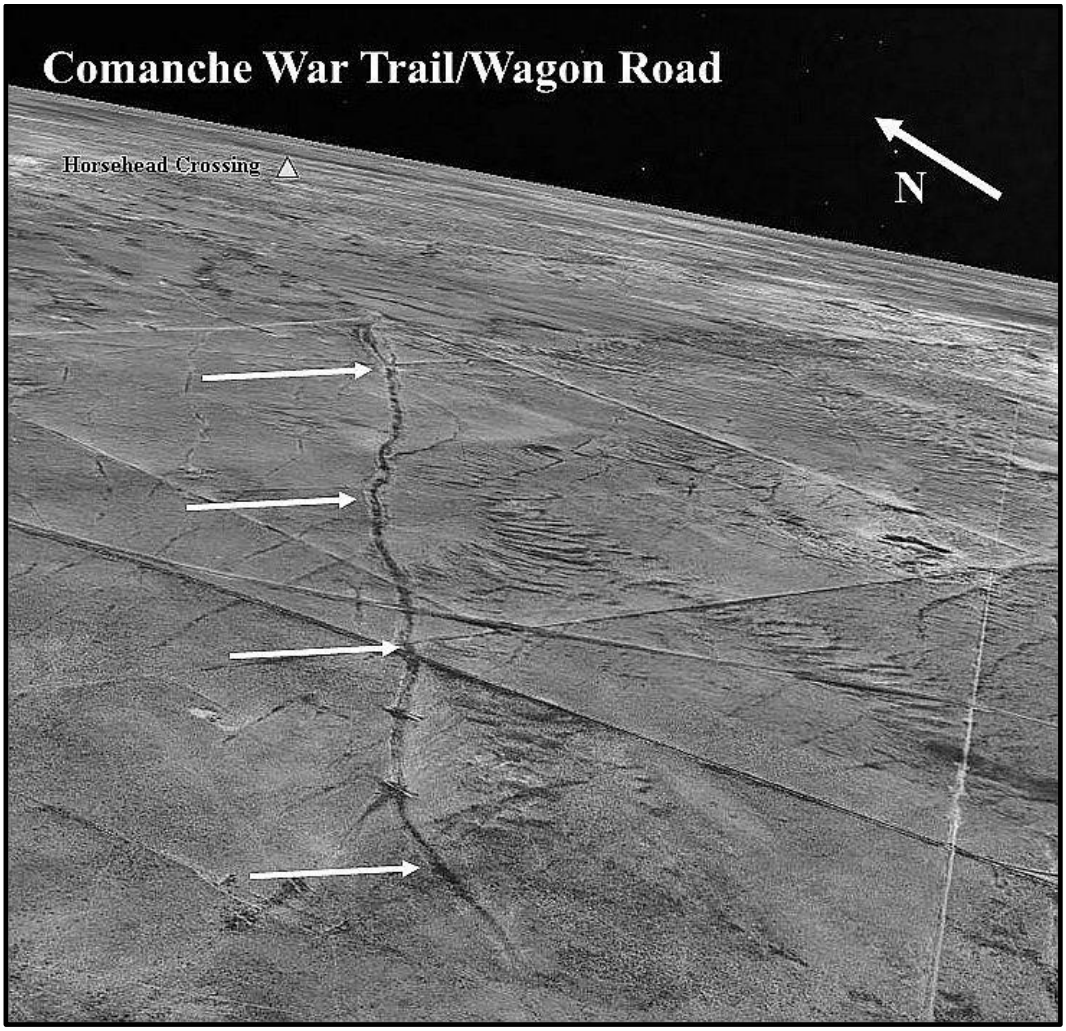


We can verify this is the correct road through an 1867 military map that annotates the two elevation changes at this point. Brevet Lieutenant Colonel E.J. Strang created the map during his expedition from Fort Stockton to Fort Chadbourne.



Original map from National Archives

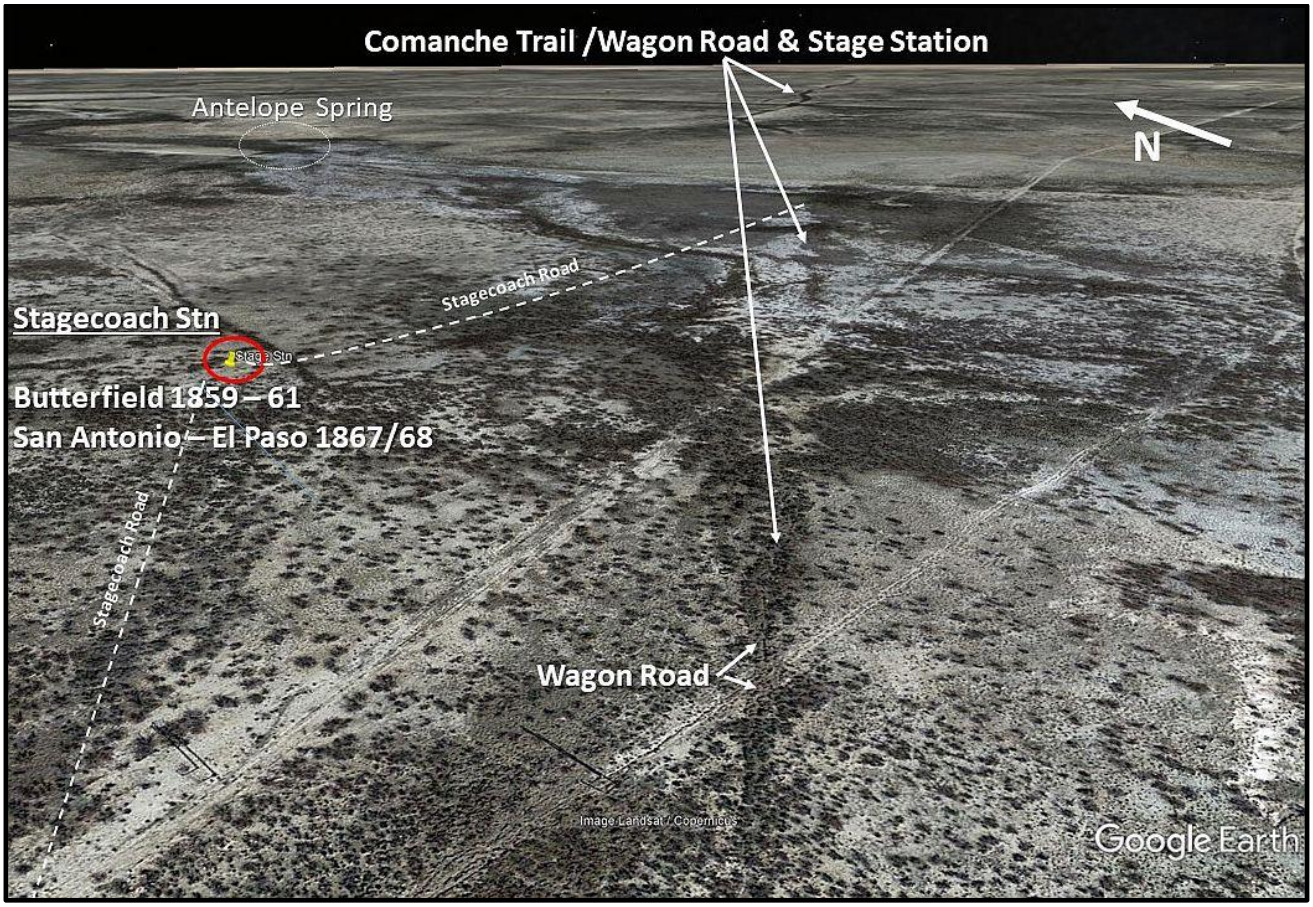
After the Comanche Trail moves onto the plateau proper, it becomes very apparent from above. The trail becomes wider, and the after-growth brush is thicker. The width ranges from 50 to 80 feet in this area, and the scar is very distinct. In a close-up view, you can also see the wagon road continuing down the middle.



Butterfield Trail From Horsehead Crossing (top left) Coming West.

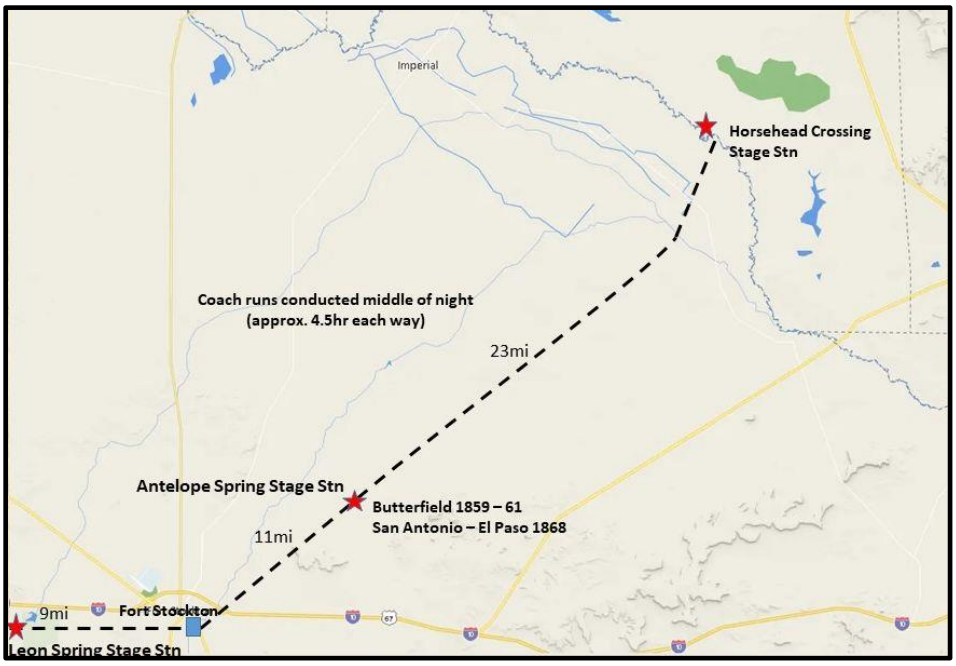
When it reached the plateau, they were 16 miles from the stagecoach station, making it a 23-mile one-way journey. This was always done in the middle of the night, arriving at the Pecos River around 3:00 a.m. and departing around 4:00 a.m. The stagecoach station was never listed on the existing company schedules because it was added so late in the route's existence. It was named after the nearby Antelope Spring.

Although the station is only 260 yards from the main wagon road, it was accessed from the main road via service roads to the north and south, forming a large triangle to and from the station. The northern service road is one-third of a mile, and the southern is a half mile.



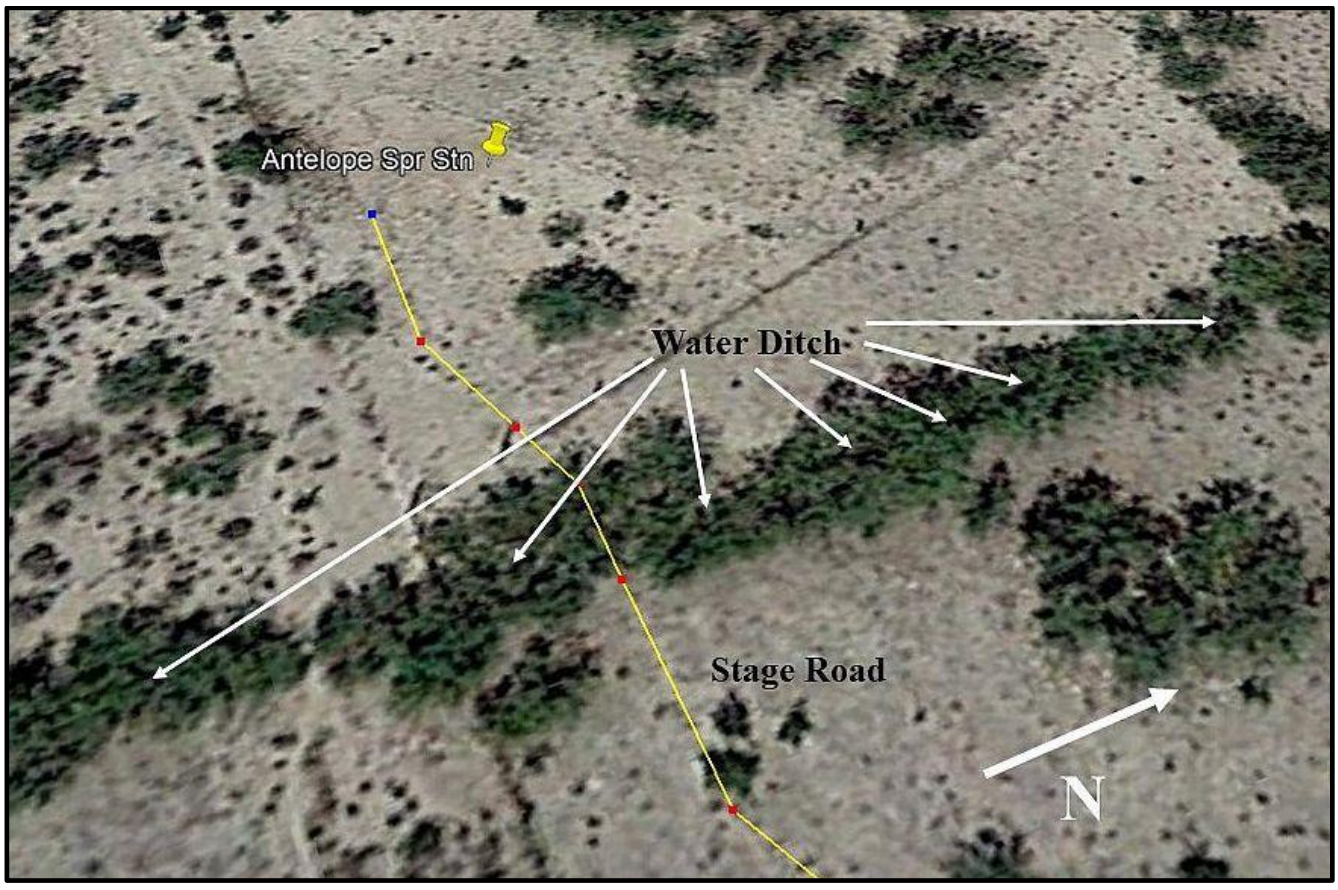
Main Wagon Road and Stagecoach Station

The location of this station is unusual, being just 11 miles from Fort Stockton and 23 miles from the Pecos River. It was undoubtedly chosen due to the spring. There was no other known water source on this road at the time, and the animals, stressed from such a long journey, were at the limit of their endurance for the round trip, even at a walking pace in the middle of the night, and resting/grazing at Horsehead Crossing. Another reason for this location is the distance between stations for changing mule teams. Fort Stockton was not an actual swing station. It was a drop-off and pick-up depot only. Leon Springs was the next actual swing stage station for the Butterfield route, being only nine miles from Fort Stockton. That makes the distance a proper 20 miles for a team changing station.

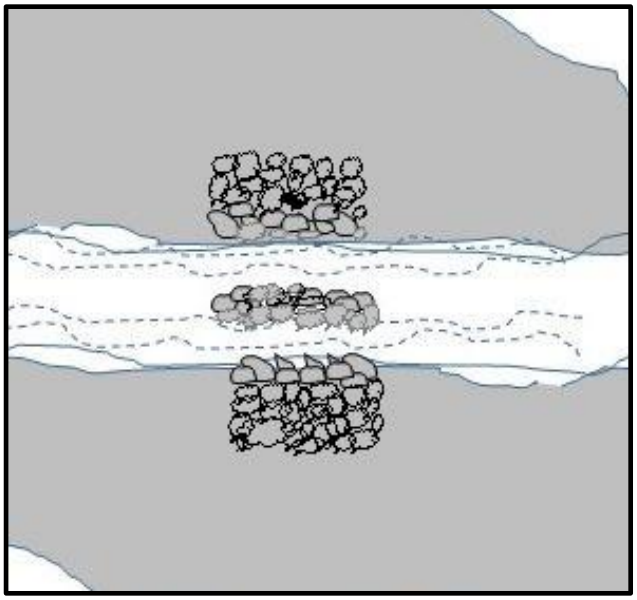


As the stagecoach came in or departed to or from the north, the road crossed a water ditch built from the spring runoff. This was an item of interest to determine exactly what they did to ensure an easy crossing and maintain the water flow through the ditch. The purpose of this ditch was to provide water for the station, which will be explained in detail in the next segment of the report.

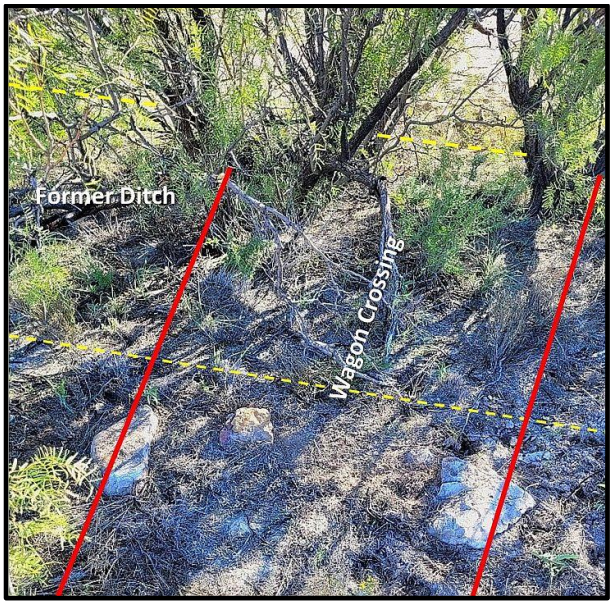
Although many of the wall stones had been bulldozed and pushed through this area to an eventual stone pile, we found several in-ground stones in a parallel line to the former water ditch on the south side of the ditch, exactly where the crossing was. Although the ditch is now filled in by vegetation growth and bulldozing, an aerial analysis of the core area (as shown in the image below, as a dark line in the middle of the bushes) indicates it was three feet wide. Thus, wagon wheels would have been able to cross with a line of stones on each side and a line of stones in the middle of the ditch, protecting the ditch structure and allowing water to flow through.



Stagecoach Road Coming From North Across Ditch

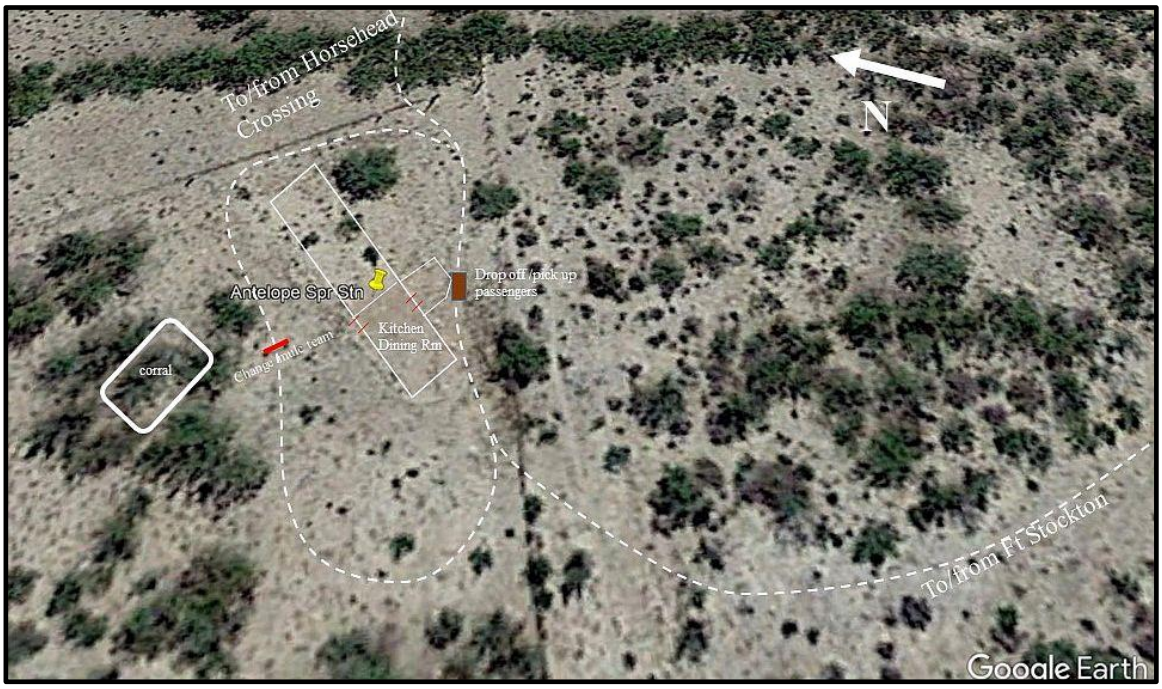


Probable Ditch Crossing Design



Wagon Crossing Point

The arrival or departure from the southern portion of the wagon trail did not cross over the ditch. Instead, they entered and exited south, skirting and avoiding the ditches. Both roads came to a stop on the south side of the building. On the south side of the building is the foundation for a large porch. It measures 4 x 3 yards, with a corner cut as an entrance step. This is where passengers were dropped off and picked up on departure. A trace of wagon tracks can be seen leading from the north across the ditch and from the south leading right up to the porch entrance. After dropping off passengers, the coach would be driven around to the other side of the building, near the corral, where the teams would be switched out.

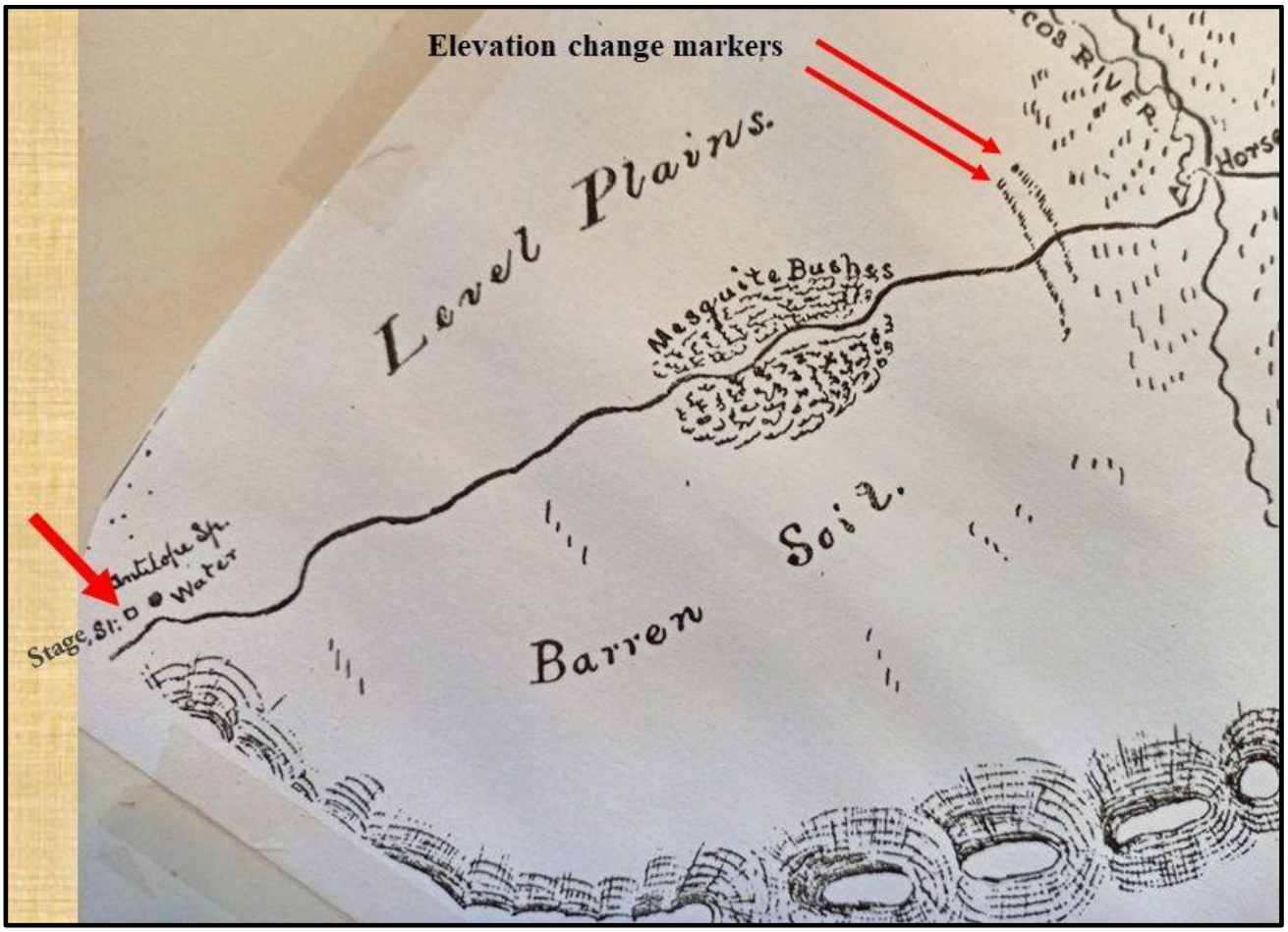


Entrance/Exit Roads Around Stage Stop

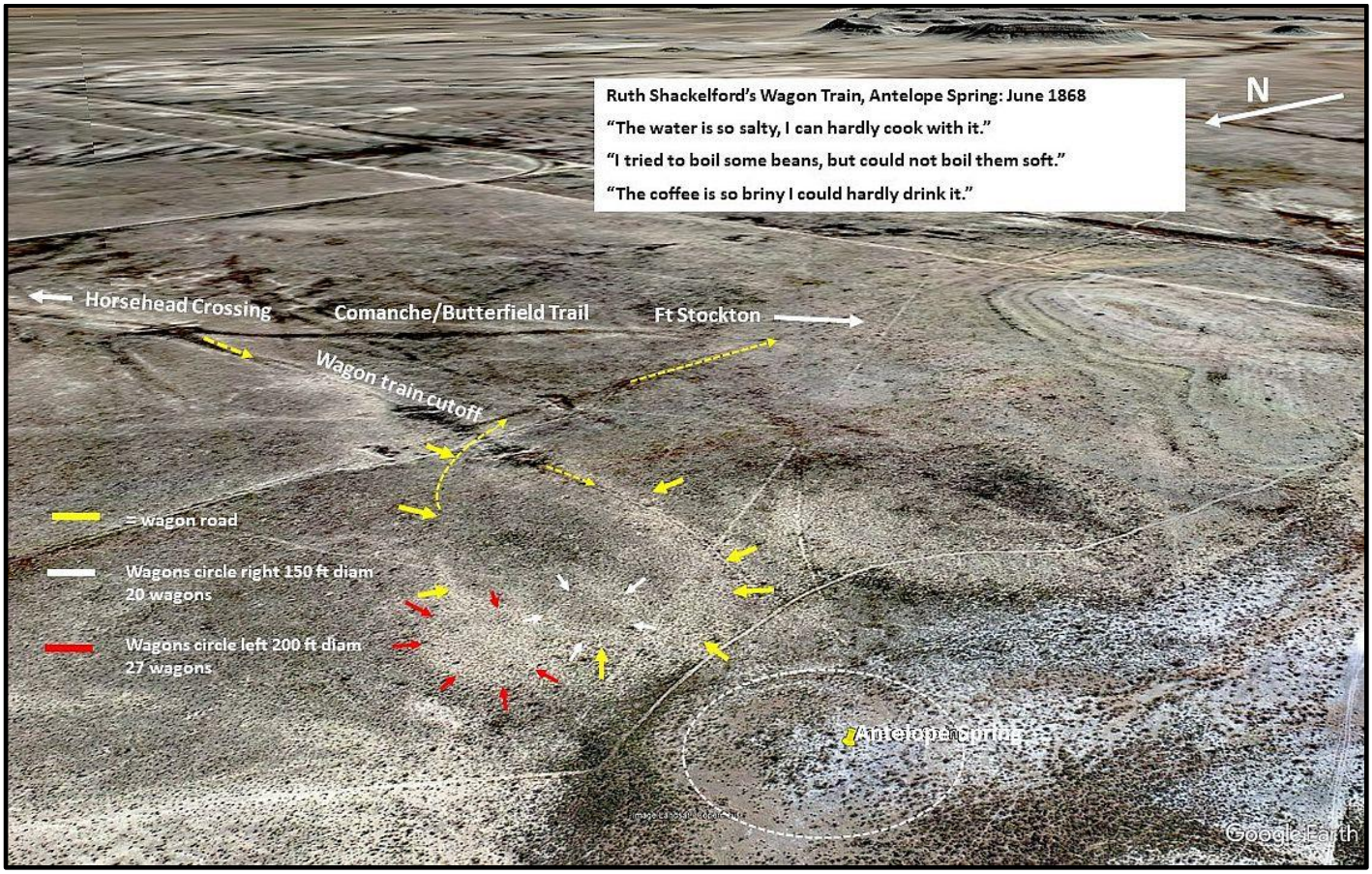
How To Get Clean Water

One of the most critical aspects of this station is how it provided drinkable water. The station was a short distance from Antelope Spring. Both a wagon train journal documented this spring in 1868 and a Fort Stockton military report by Lieutenant Colonel Thomas Hunt in 1869 (Ely). Brevet Lieutenant Colonel E.J. Strang annotated both the station and the spring on a topographic sketch map in 1867. His extremely accurate map shows the spring approximately 0.8 of a mile from the stagecoach station, which matches up with our Google Earth measurements. The wagon cutoff and wagon circles next to the pond-like spring can still be seen in satellite imagery.

Although later survey maps depict a nearby Bonita Springs, that spring did not exist at the time, and when the survey maps were created, Antelope Spring had dried up and was not depicted. Bonita Springs is now dried up as well. Wells and pumps now bring up all the water in this area.



Brevet LTC E.J. Strang Map 1867



Wagon Traveler's Cutoff Road to the former Antelope Spring

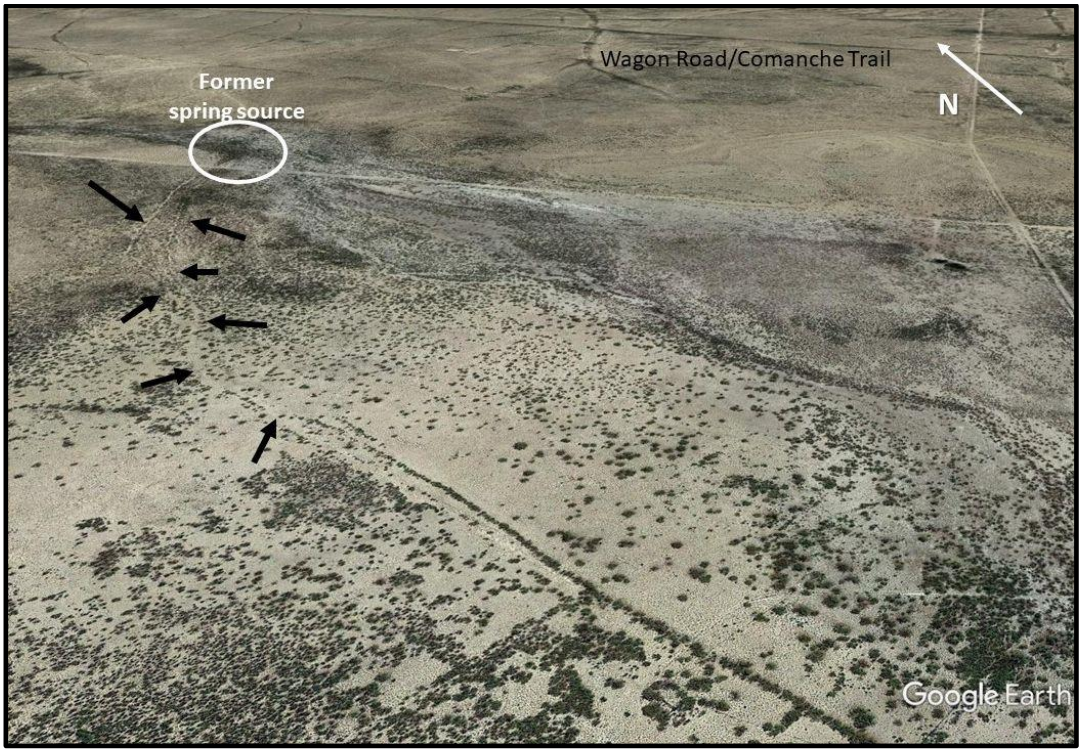
Note: the camping circular loop can still be seen.

Antelope Spring was known to be a very heavy alkaline water seep spring. According to the 1868 wagon train account, the water was "so salty" that they "could hardly cook with it." And the military report from that period indicated the spring was "very strong alkaline, grass the same." (Ely) Thus, this was a critical problem for station personnel to overcome, as it was the only known source of water at the time.

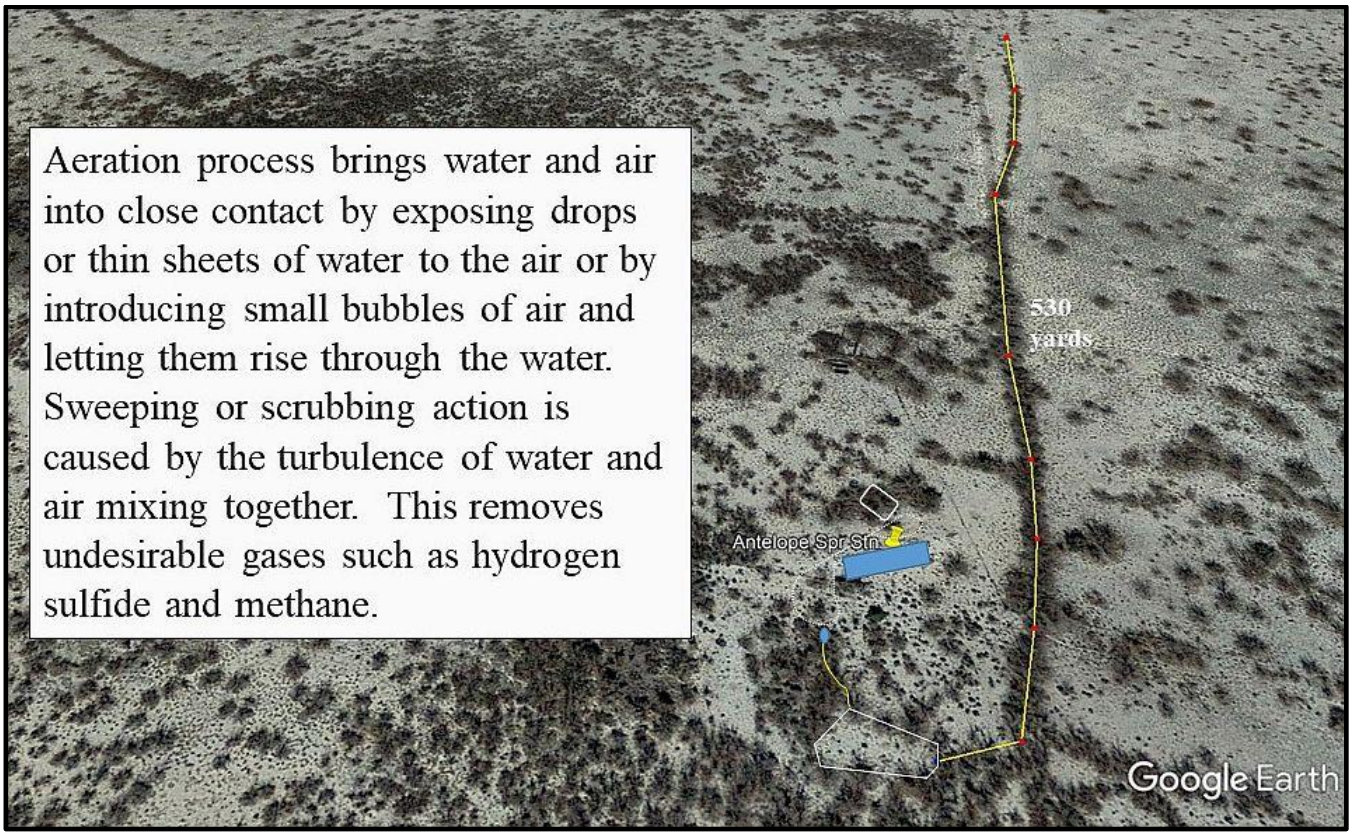
It appears the station location was chosen because of both the spring runoff direction and its distance from the spring runoff's wide swath. During a heavy rain period, the area needed to be far enough from the maximum runoff width to avoid flooding.

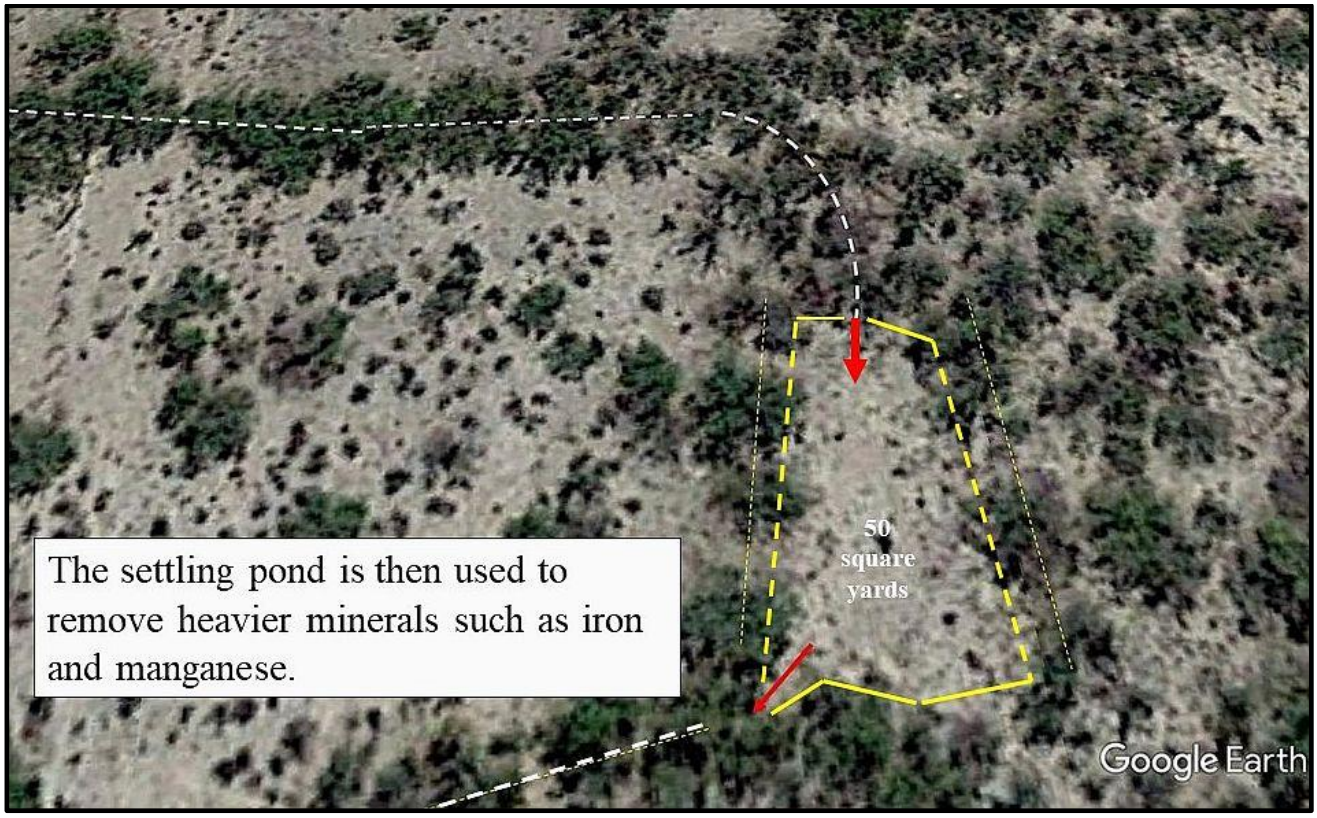
From a long line of bushes coming from the end of the spring gully runoffs, we determined that they dug the water ditch to tap into the spring's runoff water. The ditch runs 530 yards, past the station, and makes a 70-degree turn to flow another 15 yards into a holding/settling pond. The settling pond was 30 yards long and shaped like a trapezoid, expanding from 5 to 10 yards in width, totaling around 50 square yards. From the opposite end and a corner of the pond, another ditch ran 20 more yards to a final extraction pool. To this day, that extraction pool is still 18 inches below the surrounding surface. Although some of it is filled in and now covered with bushes, we estimate the extraction pond covered about 8 square yards and was probably

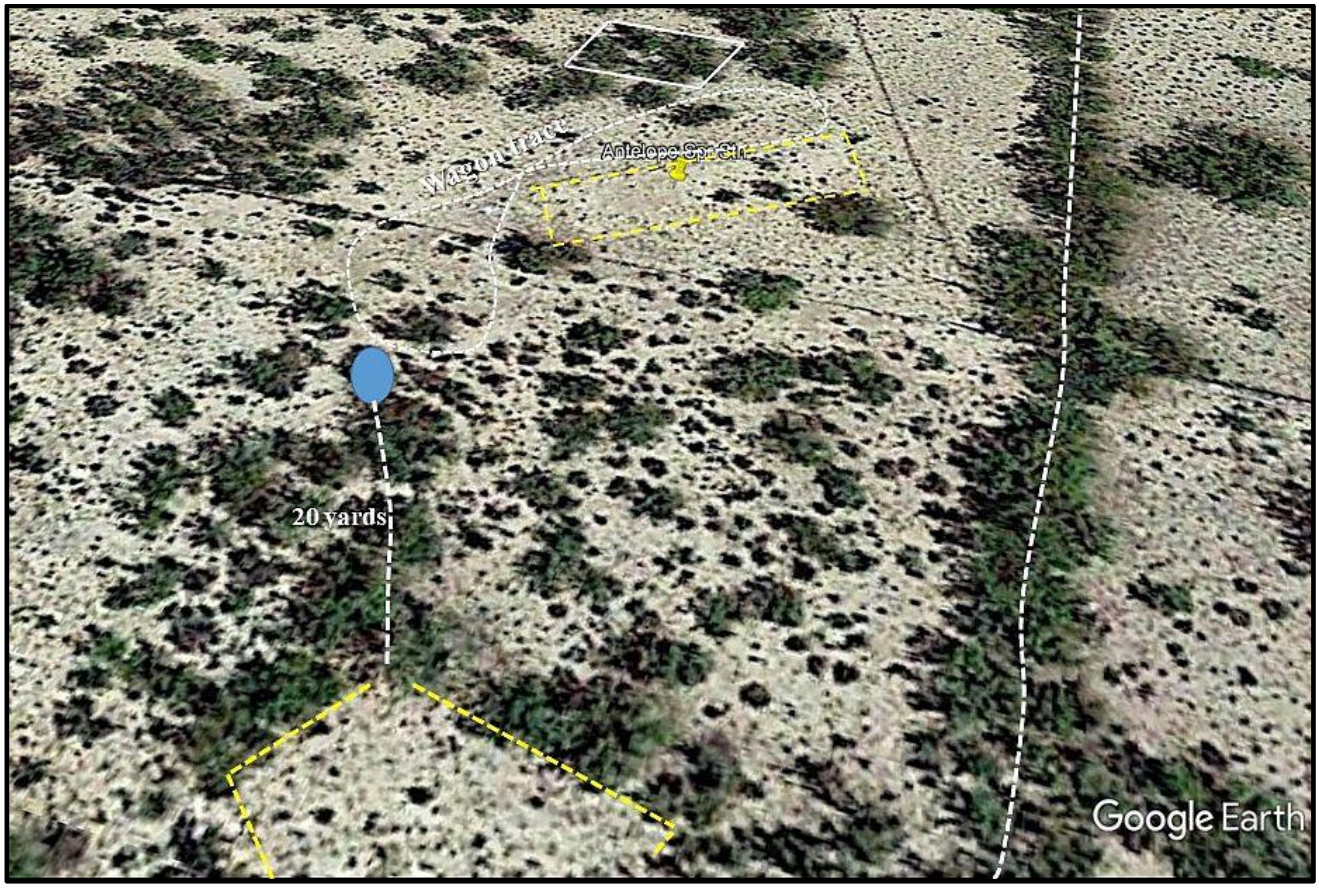
36 inches deep. The holding/settling pool has filled in, but to this day, no vegetation will grow on that soil. A wagon trail runs up to the extraction pool, makes a loop, and runs back to the back door of the station.



Looking From South To North, Antelope Spring Gully Runoff And Beginning Of Ditch



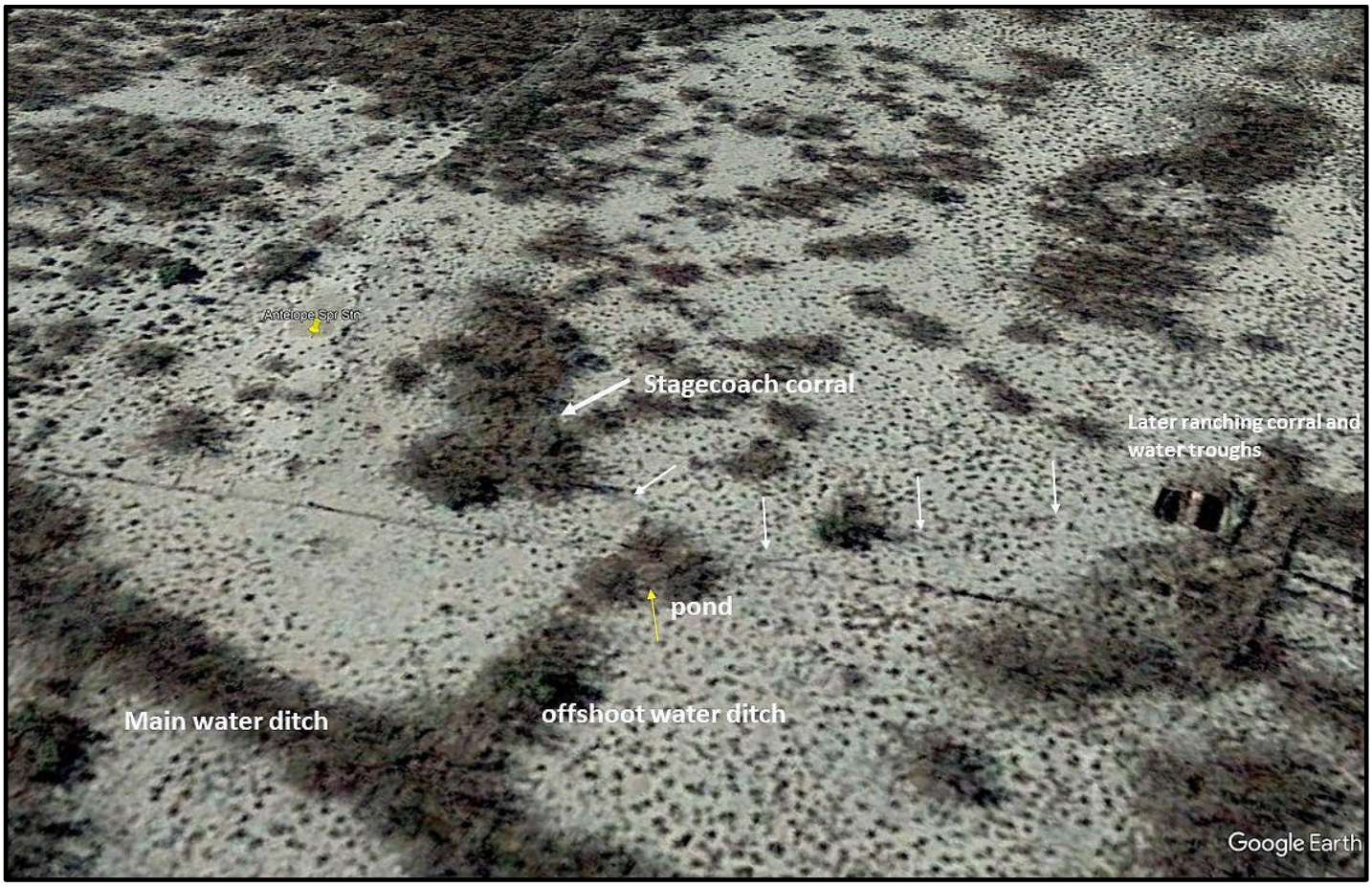




Final extraction pond with clean water

The ditch not only delivered water but also provided aeration, a well-known technique among ranchers in this area for cleaning highly alkaline spring and well water. In water treatment, the aeration process brings water and air into close contact by exposing drops or thin sheets of water to air, or by introducing small air bubbles and allowing them to rise through the water. Sweeping or scrubbing action is caused by the turbulence of water and air mixing. This removes undesirable gases such as hydrogen sulfide and methane. The scrubbing process caused by aeration turbulence physically removes these gases from the solution and allows them to escape into the surrounding air. The settling pond is then used to remove heavier minerals such as iron and manganese. (Aeration) If needed, further desalination filtration might have been used for human consumption. Two ancient methods could have been used. One was boiling water to steam and collecting the steam runoff, and the other was filtering the water with wool as a dipping wick, which was used as far back as ancient Greece to trap salt. (Desalination)

Before reaching the large settling pool beyond the station, there is one small offshoot ditch that is 20 yards long, running at a 90-degree angle off the main ditch. At the end of this offshoot ditch is a small pond. This



Offshoot Ditch To Animal Watering Pond

The pond at the end of the offshoot was very likely the one used to water the stagecoach station mules. It measures 5 x 7 feet and is only 35 feet from the station corral. A slight ground scaring can be discerned between the two areas. More recent ranch working pens are also nearby. Since the offshoot ditch does not go directly to the pens, it is reasonable to assume the rancher who constructed those pens did not create the ditch, but also used it in the later period of ranching. This last set of working pens was for the large 7D ranch, which changed hands several times around the turn of the century. Although these are now abandoned metal pipe working pens, they were referenced as used to cut the drift cattle out during the period of Mussey and Presnall ownership (1887–1890), and the location was said to be next to the old stage station. (Smith, Williams) A clear track can be seen leading from the pond 110 feet to a metal watering trough at the corral.

Two Stagecoach Lines, One Station

The area around the former building is littered with dishware and glass, much of it probably from a later period than the Butterfield Overland Mail, given the fancy designs and colored dishware. This analysis is based on our previous excavations of three abandoned Butterfield Stagecoach stations in West Texas that were never reconstituted as stations (Ashmore). All Butterfield-period dishware was very generic, with little design. Station managers were honing out very crude living conditions in a barren and hostile country at the time, and had little finances or wants for fancy dishware.

This more elaborate dishware can be explained by the fact that this station was reused after the Civil War by the San Antonio to El Paso Upper Road Stage Line, also referred to as the Ben Ficklin Stage Line. The contract was awarded in July 1867, but the first stage ran the Lower Road in October because the Upper Road was not yet ready. The Upper Road Stage Line used the same route to Fort Stockton as the old Butterfield Mail route. This means Antelope Spring Station was probably in the restoration stage beginning shortly after July 1867. The Upper Road line started in March 1868. On June 3, 1868, T. G. Williams, the agent in San Antonio, announced express mail service through to El Paso in 6½ days. The stage left San Antonio on Mondays, Wednesdays, and Fridays at 8 a.m. (Mullins).

However, the Indian problems became so acute at Horsehead Crossing (and probably at this location as well) during the 1867-68 period that the commander at Fort Stockton ordered a new river crossing to be created 35 miles downstream. The alternate location became known as Camp Melvin/Pecos Station. Camp Melvin was the military detachment stationed there. The new stagecoach crossing point was originally just upriver at a site nicknamed Ficklin's Ferry in the fall of 1868. Later, the entire operation moved to Pecos Station/Pontoon Crossing/Camp Melvin, one mile downriver. (Smith) So the Antelope Spring station was probably only in use for about 6 months, but it was likely occupied as it was being restored. It was not

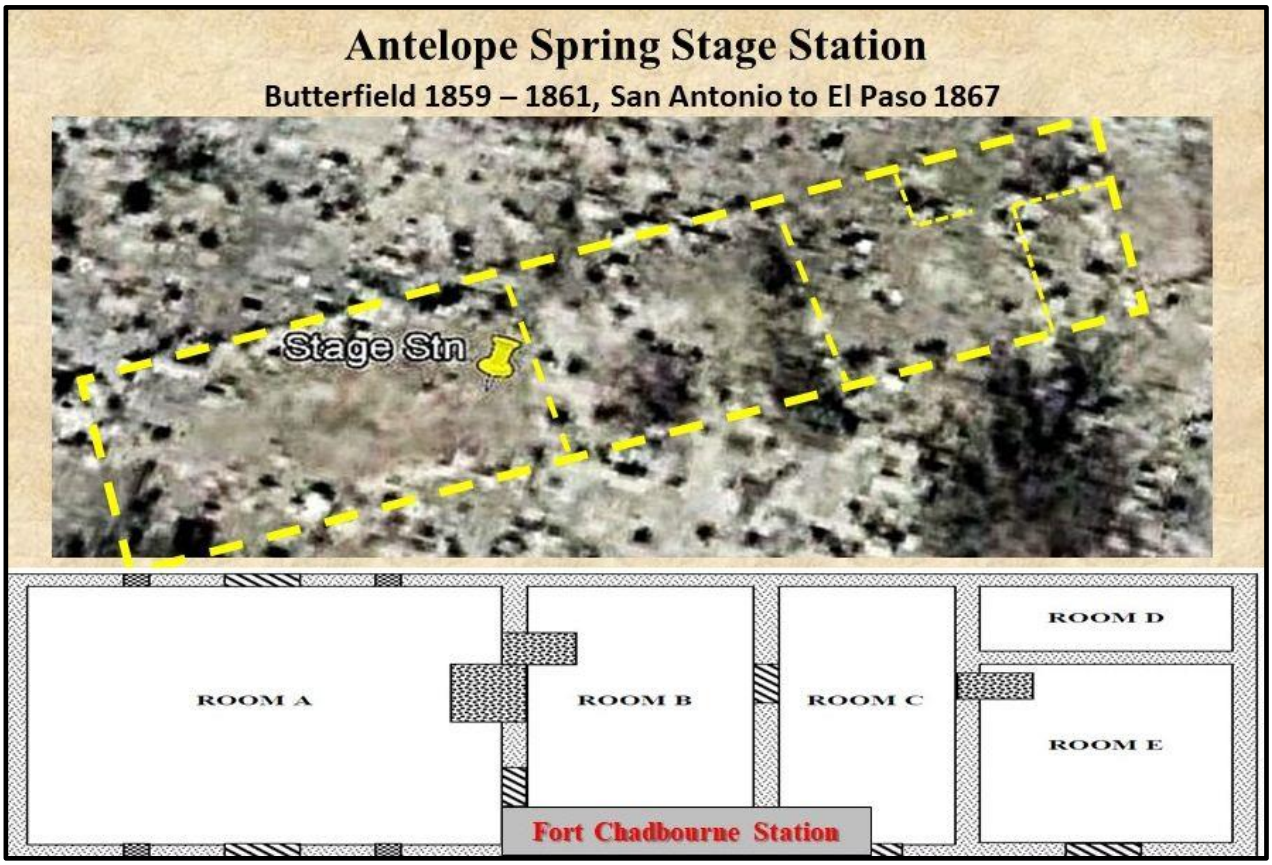
unprecedented to reuse a former Butterfield Station. Head of the Concho Station, Llano Estacado Station (renamed as Centralia Station), and Horsehead Crossing Station were also reused by this same stagecoach line.

We found one critical piece of evidence on our reconnaissance that supports this reuse theory. A small piece of stoneware was found in the middle of the station, in the room that was probably used to serve meals to passengers. This room is the same size and in the same location within the building as the one at Fort Chadbourne, which was found to have a similar passenger meal and kitchen area. The artifact is a small piece of stoneware with a maker's mark from the Clementson Brothers of Hanley, England. This maker's mark existed only from 1865 to 1910 (Birks). This fits perfectly for the period of the San Antonio to El Paso (Ben Ficklin) Stage Line's initial period of 1867/1868. This would have been a prized possession of the station manager and a regrettable accident, but very fortunate for our research.

Stoneware Found Within Station Walls

Station Construction

This station was constructed much like the station at Fort Chadbourne, which we excavated in 2008 (Riemenschneider). The Fort Chadbourne station was a major station on the Butterfield route. Antelope Spring construction appears to have used the same design. It was the same length, but five feet narrower. The internal rooms are also very similar in layout. Using conversions, we determined that the station was designed in yard measurements, a standard building measurement at the time. The folding yardstick was the most common tool for this type of work. For this reason, we use their yard-based measurement method throughout this report. The station measures 27 x 6 yards.



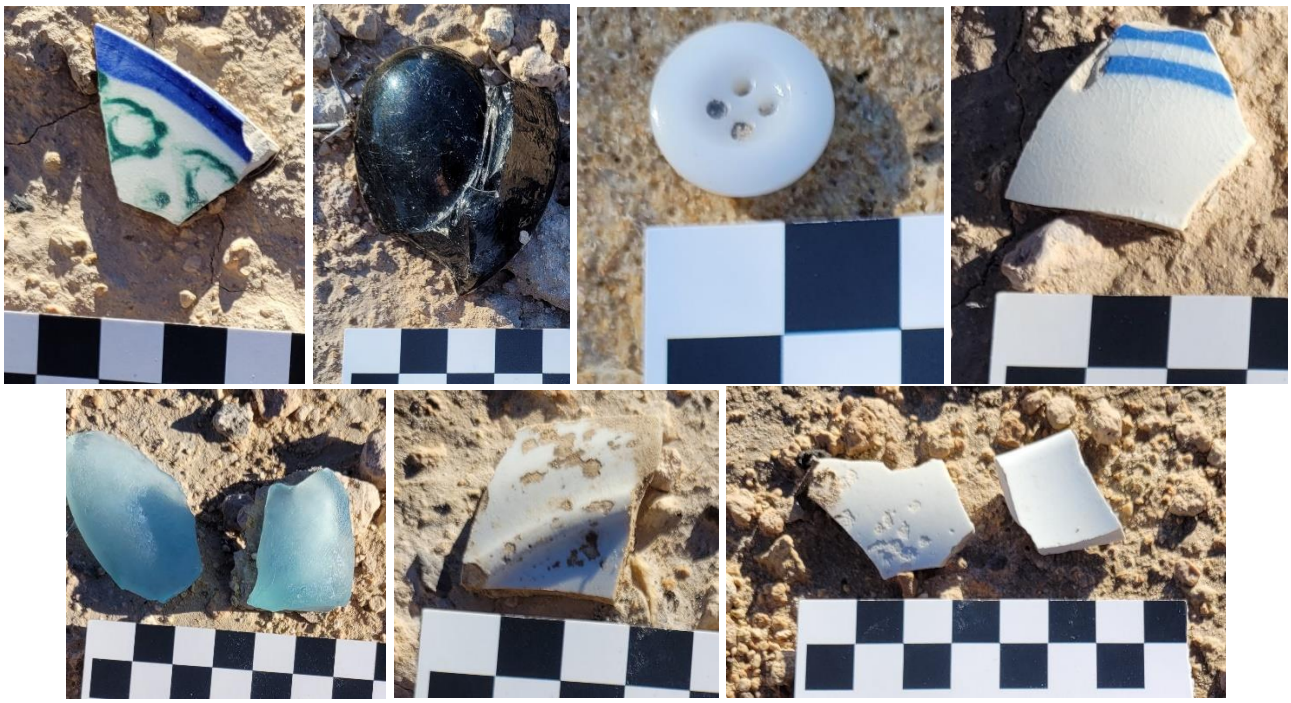
Comparison of Fort Chadbourne and Antelope Spring Stations

Passengers would have been dropped off at a south-side porch leading into the room listed in the Fort Chadbourne excavation layout as Room A. This is the same room where the critical piece of stoneware was found. Although only the base of the walls remains, a large pile of wall stones was piled 30 yards away and then abandoned at some time in the past. We found the stone pile mixed with many pieces of glass and dishware from the building, indicating that it had been bulldozed. Bulldozing was likely done post-WWII, when bulldozers became widely available through the army surplus market. In the late 50s, even though the nearby road may have been abandoned, the railroad was in operation and ran right by the site, a quarter mile away. This abandoned site was probably well-known to most people in the area at the time. The West Texas section of this railroad runs from San Angelo to Fort Stockton and eventually on to El Paso. It runs through all the major towns along the way and is still in use today. The family memory of the current owner is that the rail line was used by travelers walking the tracks to Fort Stockton.

Station wall stones were bulldozed into a pile

Artifacts

There are still numerous artifacts in and around the building's foundation. Much of it, however, was moved along with all the other stones into the stone pile nearby. The artifacts consist of dishware and glass from bottles. No metal detection was conducted at this site, but no surface metal objects were found. Many visitors have visited the site over the years, and there was probably much more in previous times.



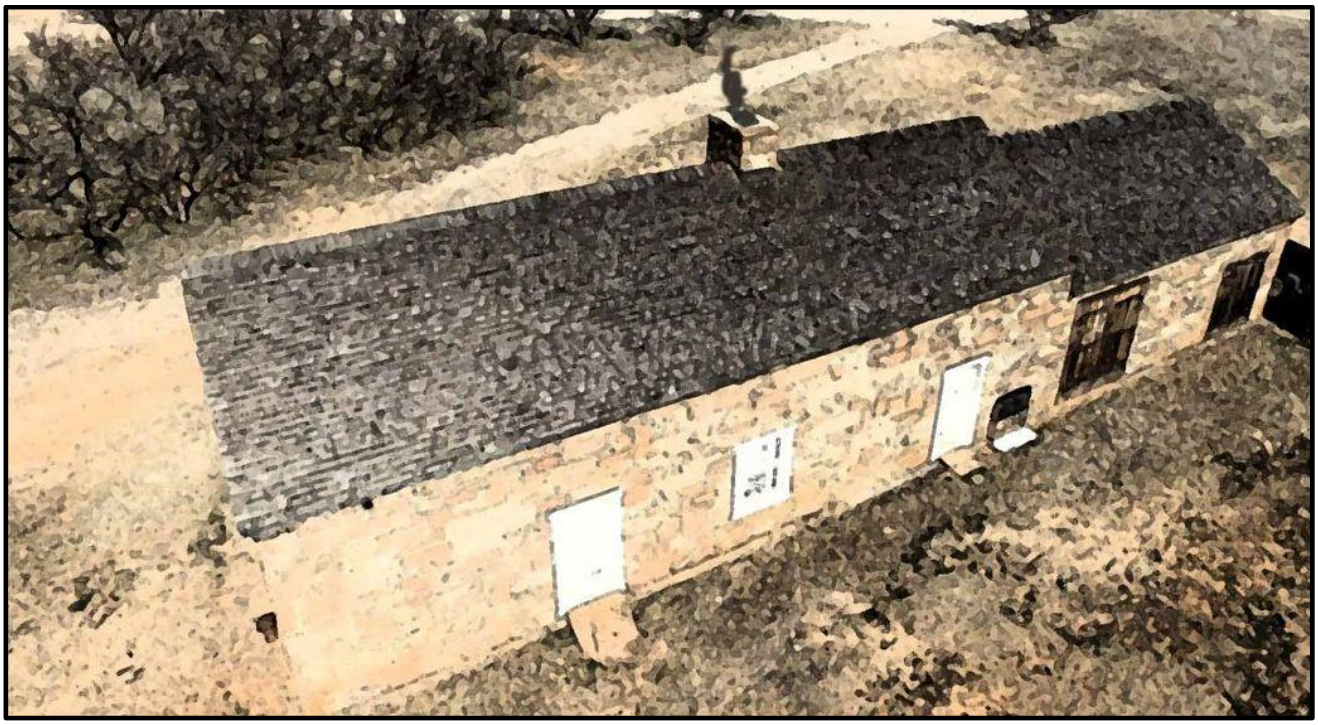
Antelope Spring Station Artifacts

Conclusion

We initially, I thought this station was a minor swing station, offering little to passengers as they made a quick mule team change. However, Antelope Spring Station was built with a significant effort. They used the design of the Fort Chadbourne station, which was a major station on the mail line. It was the same length and only slightly narrower. And it was made of large stones that had to be quarried and brought to the site. Secondly, they undertook a monumental water project to bring water to the site from a distance of just under a mile. The water ditch was approximately a yard wide and ran for 565 yards. They also constructed a large settling pond measuring 50 square yards and an extraction pond measuring about 8 square yards. All this was to ensure the alkaline spring water was sufficiently aerated for animals and humans. Once at the final destination, the water had to be bucketed into a wagon water barrel and moved to the station. We also found that this station's location fit well with the distance between fully outfitted stations, given that Fort Stockton

was only a pickup-and-drop-off depot at the fort. Thus, this was not a minor swing station, but a fully outfitted line station where passengers could rest and receive a meal.

The station operated as a Butterfield Overland Mail station for about 20 months before being closed, along with all the other stations, in April 1861 due to the onset of the Civil War. It was then revitalized to be a station for the San Antonio to El Paso Stage Line. This was another major undertaking, to be sure. Its first mail run for that stage line was in March 1868, only to be once again closed in the fall of that year as the U.S. Army ordered the river crossing to be moved from Horsehead Crossing to what became Pecos Mail Station/Pontoon Crossing/Camp Melvin.



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