I transferred to the Idaho Panhandle in August 1975 to fill a Forest Service job as the Idaho Panhandle National Forest (Land) Surveyor. Being eager to hit the project running I coordinated with our Forest staff as to where they needed Forest boundaries located immediately and in the next few years. Our timber staff identified a planned timber harvest in the “Lightening Creek” area as a top priority for the next fiscal year. There was a large parcel subdivision of private lands in Section 23 and the Forest Service wanted to make sure they did not harvest any timber on private lands in the area. The project was located about S. 70° E., 20 miles “as the crow flies” from Sandpoint, Idaho. The following slides will walk us through my initial trip to the field and the first General Land Office (GLO) corner I located/remonumented in preparation for the Forest Service boundary location, marking and posting project.
Plat of the first GLO Township in this area and the setting of the corner to Sections 13, 24, 23, and 24 of T. 56 N., R. 2 E., Boise Meridian, Idaho.
Index of GLO surveys for T. 56 N., R. 2 E. and enlargement of Section 23.

1896
U.S. Deputy Surveyor in many Idaho locations and Mayor of Pocatello, Idaho. GLC survey started on my birthday 48 years before I was born. Oscar Sonnenkalb was a
NOTE the unusual sequence of section lines being surveyed as shown on the INDEX DIAGRAM.

Index page, description of instruments used on survey, and solar/Polaris astronomic observations to determine the "True Meridian."
JUNE 1896

The setting of the monument for the corner of Sections 13, 14, 23, and 24. A granite stone, 14 x 12 x 6 ins., 9 ins. in the ground. ""3 notches on S., and one notch on E. edges with 4 bearing trees as accessories."

The setting of the monument for the corner of Sections 13, 14, 23, and 24. A granite stone, 14 x 12 x 6 ins., 9 ins. in the ground. ""3 notches on S., and one notch on E. edges with 4 bearing trees as accessories."
A 1904 survey completes the north line of Section 24 and states that he found the corner for Sections 13, 14, 23, and 24 to be set "as per record."
The completion of the remaining sections of T. 56 N., R. 2 E. by Godfrey Sperring in 1910.
Enlarged view of subject area.
Sperling began his survey at our subject corner (Sec. cor. 13, 14, 23, 24) but found the original monument missing in 1910. See next slide for enlargement of corner description.
Read the details.

**May 18, 1910**

Witnessed and described by the survey.

On the 6.5 and I noted on the E. edge.

14', 22' and 24', mark with 2 notches.

From the ground, for 0.0. or 0.0. 12',

Boulder, 18x18x10 ins. 12 in. in

Good condition. I set a granite

the bearing trees which are plain and

at point, or. as determined from

where I find our stone missing.

I begin at cor. or. sees. 12', 14', 22' end.
The survey line between Section 13 and 14 by Sperling in 1910.
Homestead Entry Surveys (HES) are often good sources for reestablishing "lost" corners of the Public Land Survey System (PLSS). In this case, or when moving a PLSS monument to another location, consider moving a PLSS monument to another location.
The section subdivisional corners established when this HES become the official subdivisional corners of Section 14 for future use.
The HES tie to the corner of Sections 13, 14, 23, and 14.

August 10, 1917
How many readers of this survey case have calculated “Lats., Longs., and areas” using a DMD (Double Meridian Distance) – or a Peters Table, or a slide rule, or a Monroe Double 60, or a Curta...
The Master Title Plat (MTP) is an essential starting point for tracking the deed back to the original Patent.
An enlargement of Sections 13, 14, 23, and 24. Also notations of landowners connected to the subject corner.
This slide and the following 10 slides will explain the rationale for "MOVING AN ORIGINAL GLO MONUMENT" that was found firmly in the ground.
A marked granite rock, buried alongside the iron pipe/boss cap set in the late fall of 1976, and three of the four scribed bearing trees. I suspected the granite stone may not have been properly located or set in 1896. The granite stone may not have been in the location it was originally set in 1896.
...by midwall being broken and moved some time after the 1917 HES survey.

Grooves are on the west end of the south face of the stone. Ground that was used to decrease clockwise from its recorded position 1/2 the 3 east-southeast original bearing here.

Discharge distance between the northwest horizontal and the northwestern original bearing here and moved the two vertical distances from the northwestern original bearing here and moved the two vertical distances from the northwest horizontal on the east.

1. Therefore, I reversed the record distance between the northwestern and the northwestern.

2. It is apparent that a distance recording error was either made in the field closest to the original 1896 record.

3. The record in the 1917 HES survey, the position was found to closest corner.

A corner position was first determined by using the record bearings and distances.
Yours truly,

I would be glad to assist in any manner possible, and for you to remove the
scare and put it back in its original position would be a service to our profession.

I can only wonder of the terrible possibility of this corner being moved to
conform with the original breakdown, which was in gross error.

I am sure I could place the corner within a foot or so in the position of its
original.

I remember the corner from my first visit and one little yellow plate bearing
the words in evidence.

L. F. X.

The local firm had a reputation of high-level supervision and after I had
required to make a final, "legal" decision. The legal challenge for the professional surveyor. Occasionally, the courts and

each case has its own peculiarities, and a legally acceptable solution remains property corner. A "good look" answer does not exist for every survey problem.

may be maintained two corner positions—let's one section corner and one

is easily resolved. It may seem further negotiations must follow. One solution

is that all drafted lines to move a corner to its "original" location. the problem

summarizing surveying decisions.

is the manner and permanency of documentation of the existing circumstances

how to respond to a surveyor's proposals and conclusions of most importance

work. It is imperative that all involved parties be contacted and provided adequate

location is important and essential to the success of a professional surveyor's

and modifying conflicting evidence. and formulating a legally acceptable corner

subsection legal property The principle of locating the best available evidence,

has been used to mean witnessed in is position for more than 20 yr. and (2) had been used to

Conclusion. It is a very difficult decision (at least) to move an original corner
30
A bird's-eye view of the location of portions of Sections 13, 14, 23, and 24.
Presenting:

Matt Kurchinski,
PLS, BLM Cadastral Surveyor
This presentation involves one PLSS corner and the evidence evaluation that took place in order to come to a conclusion or decision. Much of this discussion relates to CHAPTER 6 of the Manual. A word of caution: There may be as many different opinions regarding the evidence and conclusion presented here as there are surveyors in the room! And that is OK. The intent with this presentation is not to convince anyone on one position over another but rather to illustrate that we may never know exactly what may have happened at a corner. However, we (surveyors) need to be able to objectively analyze the evidence, come to a conclusion, and document the record and what is found on the ground.

One of the things that gets stressed in many BLM Cadastral offices is: document the evidence and decision. The corner presented here is one PLSS corner and the evidence evaluation that took place that involved a conflict between the record and what was found on the ground.
Outline of presentation

- Brief history of corner
- Present the physical corner evidence as described in the official record vs. found
- Present the measurements record vs. found
- Present the possible theories and solutions
- Present the decision

Outline
The west boundary of the township was also surveyed at the same time. Also play a part in the discussion is the corner of sections 30 and 31. The adjoining section corners will be referred to in the discussion. The line of interest is the line between sections 30 & 31 and the main corner of the section lines were run west to east. The township closes against the Utah-Colorado Boundary Line. Section lines were run west to east May 8, 1917.

HISTORY: Thomas Rathbone and Howard Mason surveyed T. 30 S., R. 26 E., 5th P.M., Utah August 1, 1916. Plat was approved May 8, 1917.

We are looking at the duplicate plat from the GLO Records website. As with most survey corner presentations, the beginning is a good place to start.
Thomas Rathbone and Howard Mason surveyed T. 30 S., R. 25 E., SLB&M, Utah, to the west, at the same time, July 17 – September 9, 1916; Plat was also approved May 8, 1917. You can see the location of our area of interest in relation to this township.
This is a panoramic image of the two townships surveyed by Rathbone and Mason in 1916. Rathbone and Mason surveyed the township to the west at the same time, July 17 – September 9, 1916; both plats approved May 8, 1917.

You can see the location of our area of interest.
As it turns out, a close look at the index diagrams for each township tells us that Thomas Rathbone is listed as the surveyor running the lines and setting the monuments of our interest. The next slide shows more clearly which lines were ran by each surveyor.
Enlarging portions of each index diagram shows more clearly the lines ran in red and the lines ran in black. Notice that the colors are reversed between Rathbone and Mason between the two townships.
Enlargement of section 31. Let's look at the evidence in the original record(s) for the mile between sections 30 and 31. The section corner on the west boundary of the township (NW of Sec. 31) was monumented with an iron post and 4 BTs taken.
The corner of sections 29, 30, 31, and 32 was monumented with an iron post, set in a crevice of rock and 4 BTs taken.
From the NE corner of Section 31, Rathbone runs West on a random line setting a temporary 1/4 corner at 40 chains. This is how most east-west section corners are set to true line for this falling. This is how most east-west section lines were usually run in order to determine the true line bearing and distance.
After correcting to true line, Rathbone runs easterly (N. 89°54' E.) 40 chains (midpoint).
It is interesting to note that no topo calls are made on the first 40 chains of line.

And finally, the sixth at 69.00. Leave sagebrush, enter timber.

The fifth at 66.00 chs. Trail.

The fourth at 63.80 chs. Swale.

The third at 62.50 chs. Road.

The second at 55.40 chs. Leave timber, enter sagebrush.

The first is at 49.70 chs. Enter timber.

Moving on true line easterly, several topo calls are made:

The section line concludes at 80 chains at the sec. cor.
We have now seen the information for the section line including the corners established and topography calls noted in the official GLO record. Nothing in the record seems unusual for this mile of line. Pretty standard.

Now, fast-forwarding to the 2009-2012 timeframe...the County Surveyor had been out to this corner and was suspicious about this corner position based on the evidence they found.
In 2009 the County Surveyor discovered the corner monument in this condition. Cap markings match the record. Let's examine the photos for the physical characteristics of the corner evidence in 2009 and included in a report submitted to BLM Cadastral. The County Surveyor provided a few photos of the monument that were actually taken.
In 2009 the County Surveyor discovered the corner monument in this condition: The 36” iron post was set 26” in the ground in 1916. Hmm – looks more like 26” above ground and bent.
In 2009 the County Surveyor discovered the corner monument in this condition. A mound of stone may have been built around the iron post. However, no mention of a mound is noted in the original 1916 corner description. The iron post is also bent.
In 2009 the County Surveyor found both bearing trees. One of two bearing trees found in 2009 by County Surveyor.

I believe this may be the record NE BT based upon my read of the scribe marks. “30”
In 2009 the County Surveyor found both bearing trees. Another of the two bearing trees found in 2009 by County Surveyor.
As mentioned, in March 2012 the County Surveyor sent BLM a report including a diagram of their field findings and requested BLM to take a look at this corner monument as they felt it may have been possibly moved. They felt it may have been moved.

This is a good diagram of the corner issue. We will dive into this more, but the County Surveyor analyzed the evidence and noted:

+ The found ¼ corner GLO monument is very close to the record midpoint position (+/- 1 foot in east-west direction)
+ A corner position determined from record distance-distance intersection from the BTS falls (suspiciously) 1 chain west of the found GLO monument and in a graded area.

BLM County Surveyor Diagram
1/4 section corner
+/- 1 foot of midpoint
1 chain
That is the information we had available before receiving the formal survey request from the field office.

Generally speaking, BLM doesn’t resurvey/subdivide sections without any Federal interest.

Before moving on to the BLM resurvey:
The Master Title Plat (MTP) for this township indicates there is Federal interest. As you can see, this ¼ sec. cor. controls both private and Federal interest lands in the area.

[SIDENOTE: The MTP notes those lands that are Federal interest and those lands that have "left" the Government. The MTP does NOT "track" current ownership of private lands.]

As you can see, this ¼ sec. cor. controls both private and Federal interest lands in the area.
The familiar land status looks like this when colored. The Federal interest ("BLM") is yellow.

BLM's survey commenced October 29, 2014 and completed November 13, 2014.

This diagram shows the lines to be surveyed and monumented.

Official Cadastral Survey requested by BLM Field Office to have the Federal lands surveyed and corners monumented.

This diagram includes the Special Instructions to surveyor authorizing the BLM survey.
Getting back to our analysis, here we have an aerial image of the area with survey information overlaid. First, after recovering both section corners, the section line was found by both the County and BLM to measure 79.96 chains (80 chains recorded). No significant discrepancy.

Second, at the time BLM surveyors visited this corner, the original 1916 GLO monument had disappeared, but the mound of stone was still in place.
ORANGE: relationship of MOS and BTs correlate well with one of the bearing trees.

BLUE: Record distance-distance intersection places the corner in a graded area, and does
common position at all.

RED: The record bearing and distances from the bearing trees do not correlate a
MOS:
GREEN DOT: The midpoint of the section line falls 5° W, 7 links (4.9 feet) from the
evidence in 2014 (BLM):

Enlarged diagram of the NW corner of Sections 30 and 31 showing the existing corner
This brings us to THE BIG QUESTION: Where was the corner originally set?
As described in the County Surveyor’s survey request, this corner is problematic because, as described in the County Surveyor’s survey request, this corner is problematic because the calculated point lies 66.7 feet west of the found GLO monument in a mound of stone. 1. The original GLO brass cap monument is 66.7 feet west of the found GLO monument in a mound of stone. The calculated point lies 66.7 feet west of the found GLO monument in a mound of stone.

2. The original GLO monument was bent (as seen in the photographs accompanying the County Surveyor’s survey request), probably from being hit by a large piece of machinery.

3. There is no common point using the bearing and distances from the bearing trees in the official field notes of the 1916 survey to determine the original location of the corner.

4. A distance/distance intersection is calculated using the 1916 bearing trees in the official field notes of the 1916 survey to determine the original location of the corner.

5. The bearing trees in the official field notes of the 1916 survey to determine the original location of the corner.
Chapter 6: Resurveys and Evidence

Here are a few citations that apply to our situation:

...
I believe we have a corner. Although maybe we have something in the gray area between existent and obliterated? 6-11 and 6-12: Evidence of monument or accessories — had monument in MOS; have accessories. However, there is conflict between evidence and record calls.

6-13: We do have material discrepancies in evidence and record calls.

6-14: Do we have a pattern of discrepancies that would indicate the recorded evidence is unreliable? 6-17: Prove a corner by substantial direct evidence or collateral evidence. Direct evidence (BTs) should be given more weight than collateral (topo calls).
I believe we have an existent core, although maybe we have something in the gray area between existent and obliterated?
6-23: Use topo calls to prove or disprove questionable evidence of the corner or its position.
With the Manual sections reviewed, maybe evidence at other corners can help us to identify a pattern or give some more insight into the conflicting evidence.
Were there any other original corners recovered with existing bearing trees? Maybe there is evidence of a pattern in the 1916 survey of the bearing tree measurements not correlating to a common point? We will look close at one other corner here. The 1916 section corner one-quarter mile east was recovered in 2014 with all four BTs existing. The one thing noticeable is that the iron post was found in a mound of stone. The 1916 notes describe the monument as being set 26 ins. in a crevice of rock. (?) The 2014 record shows no significant discrepancies between the 1916 record bearings and distances to BTs at least not like those at the ¼ cor.
Existing Bearing Trees recovered.

A quick study of the 2014 survey notes reveals at each of the corners indicated, the recovered bearing trees match the 1916 record bearings and distances within reason. The other corners either did not have trees taken in 1916 or they were dead/down at the time of the 2014 survey.

This element alone wouldn't be enough to prove/disprove a corner, but may help (could be an indicator of the character of survey made).
The green MOS symbol indicate a MOS was described in the 1916 field notes. Enough to prove/disprove a corner, but may help (could be an indicator of the character of survey made). This element alone wouldn't be enough to prove/disprove a corner; but may help (could be an indicator of the character of survey made).

MOUND OF STONE (MOS) Comparison of the 1916 and 2014 field notes. This element alone wouldn't be
4 corners with MOS in 1916 and MOS in 2014.

4 corners with MOS in 2014.

2009-14.

Again comparing evidence found with record. Remember, no MOS mentioned at our ¼ but was found in

1916 IP 24" in ground

2014 IP in MOS

1916 IP 26" in ground

2009 (2014) IP in MOS

1916 IP w/MOS east

1916 MOS north

E1/4 s31

1916 IP in MOS

W1/4 s31

1916 IP in MOS

N1/4 s30

1916 IP in MOS

The green MOS symbol indicates a MOS was described in the 1916 field notes.

RED = In 2014, 4 additional corners were found with MOS that were not described in 1916.

GREEN = The 1916 corners described with MOS (4) were found to have MOS in 2014.

MOUND OF STONE (MOS) Comparison of the 1916 and 2014 field notes.

MOUND OF STONE (MOS) Comparison of the 1916 and 2014 field notes. This element alone wouldn't be
Note lack of calls along west 7/8 mile bet. Secs. 30-31. That portion actually run?

Rough sketch of topo calls made in the 1916 survey of the section lines.
Note lack of calls along west 1/2 mile bet. Secs. 30-31. That portion actually run?

Rough sketch of topo calls made in the 1916 survey of the section lines.
Topo calls along section line bet. secs. 30 and 31.

The distances look pretty good. The biggest difference is at "Leave Timber" of 0.60 chains.

RED = 1916 record distances
GREEN = 2014 distances

This could be due to interpretation of tree edge in 2014 as road had been built.
Thoughts?
Ideas?
Questions?
The following slides are just a few possibilities. As you can imagine, the possibilities of what really may have happened are too numerous to illustrate. What could explain the situation?
1) Ran full mile (random & true) – would have caught 1 chain error and set corner at midpoint. Doesn't explain BT's.

This possibility offers: the monument was originally set at midpoint in 1916. Rathbone ran the full mile (random & true) catching any measurement errors, setting the monument at midpoint as per the record indicates. Later the monument was hit by machinery(?), bending the IP. This doesn't explain the discrepancies of the BTs. Not sure the BT measurements can be explained other than a mistake was made.
This possibility offers: the monument was originally set at the "BT point" (41 chs) in 1916 due to bad measurement. Rathbone stubbed out the half mile making a measurement error in the last 10 chains. This doesn't explain the discrepancies of the BTs. Not sure the BT measurements can be explained other than a mistake was made.
This possibility offers: the monument was originally set at the "BT point" (41 chs) in 1916 due to bad measurement. Rathbone "stubbed out" the half mile mark, catching the error on return and moving the monument to midpoint. Then later, the monument was hit and bent.
What was the decision/outcome?

With all of the evidence evaluation and possible explanations...
Three options were considered to determine the location of the corner to be reestablished/remonumented:

1. Mound of stone (that formerly held the bent, but original 1916 iron post; very close to record midpoint)?
Three options were considered to determine the location of the corner to be reestablished/remonumented:

1. Mound of stone (that formerly held the bent, but original; 1916 iron post; very close to record midpoint)?
2. Determined from BT accessories using record distances (1 chain west of record midpoint)?
3. Bearing trees?
Three options were considered to determine the location of the corner to be reestablished/remonumented:

1. Mound of stone (that formerly held the bent, but original 1916 iron post) very close to record midpoint?
2. Determined from BT accessories using record distances (1 chain west of record midpoint)?
3. Calculate a midpoint position (proportion)?

Footnote: Is this a lost corner? OBLITERATED? EXISTING?
Illustration of the 3 options.
The corner was determined at the:

1. MOS (w/ GLO in 2009)
RATIONALE FOR DECISION

1. The location of the mound of stone that is present, and which formerly held the original 1916 GLO iron post (as witnessed by the County Surveyor), matches the topographic calls in the field notes of the 1916 survey. [Manual 6-23, 6-26]

2. The mound of stone more closely represents the midpoint of the line between the southwest corner and the southeast corner of section 30 than a point calculated at the distance/distance intersection from the two bearing trees. [Manual 6-12, 6-13, 6-14]

3. The mound of stone lies suspiciously close to exactly one chain distance easterly of a point determined at the distance/distance intersection from the bearing trees—the midpoint of the distance from the southwest corner and the southeast corner of section 30. [Manual 6-14]

4. Although the mound of stone currently at the corner location does not appear to be embedded or sufficiently weathered as a mound set in 1916 would be, this is most likely due to the mound having been partially destroyed inadvertently by machinery or vehicles. The bending of the iron post would have occurred at the same time.

Self explanatory.
The reason for the corner determination placed in the official field note record.
Final record for the 2014 BLM survey.

The reason for the corner determination placed in the official field note record.
The end.

1916 survey plot over Google Earth imagery.

THANKS FOR YOUR ATTENTION.
THE MOVING CORNER TREE.

ST. GEORGE, UTAH
FOR THE UCLS CONFERENCE,
BLM, PLS, CFEDS
PREPARED BY JASON LIGHTBOWN

MOVING A CORNER TREE SLOWLY

A MONUMENT SLIDING SLOWLY
Let's start from the beginning. The original survey by Frank W. Campbell in 1882.
The original corner for sections 3, 4, 33 and 34 was a basalt stone (16x10x6 ins.) with two willows and two firs marked as bearing tree accessories.
1954 Corbitt: Corbitt finds a stone at the intersection of fences. The dimensions do not match the original. Has the corner been moved or was a new stone marked?
Measuring out from this BT. along the bearing N. 30 E. as given in the original field notes, I found a 28" Fir tree to be growing where the corner should have been located. Therefore I set a 1" pipe with cap marked 6 T 7 S R 3 E. 33-34 1954 2414 4-3 WC where the stone was found in the corner of the fence adjacent to the 28" Fir tree. The original evidence of the accessories show a different position, that a 28 in. diam. fir now occupies. He sets the pipe at the position of the stone and references the tree, calling it a corner tree but marking it a bearing tree. Therefore I set a T 6 & 7 S R 3 E. 33-34 1954 2414 4-3 WC where the stone was found in the corner of the fence adjacent to the 28" Fir tree. Therefore I set a 1" pipe with cap marked 28" Fir tree to be growing where the corner should have been. 38.28 Ft. as given in the original field notes, I found a 28" Fir tree at this BT. along the bearing N. 30 E.
Dependent Resurvey, by Lynn M. Roseberry, under Group No. 460, Oregon, approved and accepted in 1965.
Enlargement of a portion of the 1965 Dependent Resurvey plat.
Corner point is occupied by a fir marked by Campbell. Corner of 3, 4, 33, and 34 was determined from original evidence. Remains of the two firs and 55 on the tree facing.

A fir, 27 in. Chum, changes 5, 13 ft. 7 in. Older, 74 in. Chum, changes 3 ft. 15 in. 7 ft. Older.

A fir, 15 in. Chum, changes 5, 11 ft. 7 in. Older.

Another fir, 3 ft. 15 in. 74 in. Chum, changes 3 ft. 11 in. Older.

A fir, 3 ft. 20 in. Chum, changes 5, 47 ft. 48 in. Older, 20 ft. 48 in. Chum, changes 2 ft. 27 in. Older.

Another fir, 9 ft. 6 in. Chum, changes 5, 3 ft. 8 in. Older, 9 ft. 6 in. Chum, changes 2 ft. 8 in. Older.
Call out the Corbitt Pipe as a Witness Corner.

Additional Bearing Trees.

Additional Information about the Corbitt Monument:
1992 Forestry Tech corner card. These cards have been really valuable sources of information for recovery of evidence over the years.
The core tree has blown down and a DT was capped and treated.
We found the pipe lying on the ground and propped it up for the picture. Someone stood the tree back up? Proceeded to turn in bearing trees. Found the Capped stump easily. But it did not match record bearings and distances well or record distance well as it was off by about 3 ft. different and in the wrong quadrant...maybe a transposed error in the notes?

We calculated a point using record bearing and distance from the capped stump per the 1992 corner card. We found other trees that did not seem to match record bearings and distances well or match record bearings well. Proceeded to turn in bearing trees. Found the Capped stump easily.
From the calculated position off the capped fir stump we began to find decayed stumps that matched record date better, but some scribe marks would really seal the deal.
We cut open one of the stumps that matched record for a tree marked by Roseberry.
EUREKA! Every corner searchers dream!
The tripod is over the true corner point established from record bearings and distances from the found accessories.
This scenario was not a very technical problem, and anyone paying attention would have made the same discovery, but it was a lesson learned for me about thinking about the record while at a corner. Sometimes we are in "go mode" and turn in accessories and move on but we need to slow down a little and think it through when we are at the corner. Try to be thinking about how I will write this up. How would we describe this situation?
My field note: All of the accessories matched within about a 1 foot locus so the corner was determined from record bearing and distance to all the found accessories.
Enlarged portion of my field note description.
The rest of the description of findings and actions.

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[Image of a table or diagram from the document]
A Monument Sliding Slowly

Overlooking Green Peter Reservoir.
Special Instructions diagram show several corners that fall in the reservoir. We will be talking about the 1/4 sec. cor. of secs. 20 and 29, also, the Resurvey of subdivision of section lines in section 20.
Tuers and Paisley, BLM Cadastral Surveyors, reestablished the 1/4 sec. cor. of secs. 20, 29, and 29 in 1980. Under Group 2908, the special instructions called for a dependent resurvey of the S 1/2 of the N/S centerline of Sec. 20, reestablishing the 1/4 sec. cor. of secs. 20.
Record vs. measured to the found RMs. RMs not disturbed. Distances getting longer...over a foot to the NW RM, few tenths to the NE RM, and the angle between these two bearings is getting smaller...indicating the corner has moved to the south.
A few tenths is what I typically match Tuers 1980 work. Measured to record differed by over 1 foot. Distance-distance differed by only .3 feet.

Retracing the S 1/2 of the N/S centerline supports the idea the boulder has slid to the south by a few tenths.
Slowly moving boulder ... how do we write this up?
Restoring the survey by Frank A. Tuers and Ronald E. Paisley in 1980

From the point for the 1/4 sec. cor. of secs. 20 and 29 reported by Tuers and Paisley in 1980, add the marks 79.20 ft. TO COR. 2018. (Record, N. 76° 36' 02" E., 79.20 ft. dist.).

An iron post, 2 1/2 ins. diam., firmly set, projecting 5 ins. above ground.

An iron post, 2 1/2 ins. diam., firmly set, projecting 5 ins. above ground.

Green Peter Reservoir below the ordinary high water mark where it is impractical to set a monument.

Not monumented.
From this point, a point established in a hillside in a boulder 6 x 5 ft. 2 ft. high, with top marked by brass tablet 3 ins. diam., cemented in a drill hole in a boulder 6 x 5 ft. 2 ft. high. From this point, a point established at the 1/4 sec. cor. of secs. 20 and 29, by Tuers and Paisley.

The marks on the label except the date and add the marks. 2018. Removed the recovery RMs and the retrace ment of the S. half of the N. and S. center line of sec. 29.

Note: The boulder that the tablet was set in is seasonally under water and situated on top of and surrounded by loose rock on a steep slope. It appears that the boulder is gradually sliding S. downhill based on the distances from the recovered RMs and the retracement of the S. half of the N. and S. center line of sec. 29. Removed the marks on the tablet except the date and added the marks: AM 2018.