

Record of Survey

Sugar Cadastral Survey / Plumas National Forest

NARRATIVE

History:

The exterior boundary of Township 21 North, Range 9 East, MDM, CA, was originally surveyed by Arthur W. Keddie, under GLO Contracts dated August 23, 1869 and August 12, 1870, approved March 21, 1871 and July 20, 1872, respectively. The township subdivision was originally surveyed by D.C. Hall, under GLO Contract dated July 5, 1881, approved March 13, 1883. There are numerous GLO / BLM Amended and Supplemental plats approved between 1886 and 2002.

Mineral Survey (MS) No. 133 (Pioneer P.M.) was originally surveyed by Charles W. Hendel, approved May 1, 1873. Original field notes for MS133 are not available from the BLM. A Memorandum from the Director to the State Supervisor, Sacramento, California, dated June 22, 1960, states the requested files "are missing...". Said memorandum further states, correctly, that the field notes are cited in the Patent.

Mineral Survey No. 434 (Highland Mary) was originally surveyed by Charles W. Hendel, approved April 3, 1874.

Mineral Survey No. 3235 (Excelsior P.M.) was originally surveyed by L. D. Davis, approved March 5, 1894.

Mineral Survey No. 4215 (Challenge P.M., et. al.) was originally surveyed by Henry B. Budd, approved October 13, 1905.

Sec. 14 was resurveyed, along with a portion of MS 133, and subdivided by Albert H. Devoe, LS 3079, recorded in 1962, and filed as a Record of Survey with the County Clerk's; 2-RS-75 in Plumas County, and 2-RS-16 in Sierra County.

Certain sec. cors. and portions of numerous Mineral Surveys were resurveyed by James W. Edwards, LS 3185, in 1979, and filed as Record of Survey 6-RS-2 thru 6 with the Sierra County Clerk.

A portion of MS 4215 was resurveyed by Albert H. Devoe, LS 3079, in 1979, and filed as Record of Survey 6-RS-21 with the Sierra County Clerk.

A portion of MS 133 and the quarter-sec. cor. of secs. 13 and 14 was resurveyed by Brad Langer, LS 4585, in 1988, and filed as Record of Survey 8-RS-103 with the Sierra County Clerk.

Certain sec. cors. and portions of MS's 2527, 3235 and 4215 were resurveyed by Fred W. Cook, LS 3966, in 2002, and filed as Record of Survey 11-RS-58 thru 59 with the Sierra County Clerk.

Procedure:

Reestablishment of lost cor. of secs. 13, 14, 23 and 24:

The original corner position falls within an area that has been heavily mined. The entire terrain has been removed and the corner is determined lost. Charles W. Hendel (original MS 133) notes state: from Pioneer 8 [post at boulder] N44°54'W, 31.55 chs (2082.3') to Pioneer 9 [a pine stump], thence N40°19'W, 0.45 chs (29.7') to Pioneer 10 [post in rock mound mdk. SE Cor. Homestead Co.]

D.C. Hall (GLO original township subdivision) notes state: North, between Secs. 23 and 24... at 74.04 chs. "A post, the S.E. corner of the Homestead Claim bears N44° 54' W., 1.34 chs. distant. Note: To ascertain the location of the Highland Mary claim: From the S.E. corner of the Homestead Claim, I run S. 44° 54' E., 31.55 chs. to the S.W. corner of the Homestead claim...". [Back on sec. line] At 80.00 chs. set a pine post... for corner to secs. 13, 14, 23 and 24.

Albert H. Devoe (2-RS-75 Plumas County, 2-RS-16 Sierra County) calculates the position for the cor. of secs. 13, 14, 23 and 24 based on one (1) point control from Pioneer 8. Devoe holds the Hall (GLO) record distance between Pioneer 8 and 10 [GLO called SW Homestead and SE Homestead, respectively] as correct. Devoe subtracts the Hall record of Pioneer 10 lying 1.34 chs. NWly of section line, and holds the remainder distance to Pioneer 8 to position said section corner. Devoe does not remonument or witness said sec. cor. position.

James W. Edwards (6-RS-3 and 4 Sierra County) recovered Pioneer 8 and calls N. 44°59'37" W., 2082.82' to recovered Pioneer 9, thence N. 40°19'00" W., 29.7' to recovered Pioneer 10. Edwards map shows Pioneer 8 and 10 being remonumented.

The current survey finds original evidence of Pioneer 8, 9 and 10, and the spatial relationship between said points are in practical agreement with Edwards survey. I find it certain Hall never ran the line between Pioneer 8 to 10 [GLO called SW Homestead and SE Homestead, respectively] as described in GLO field notes. Hall returns calls that perfectly match MS 133 calls for line Pioneer 8 to 9. The current survey, and the Edwards survey, confirm the true distance between Pioneer's 8, 9 and 10 harmonious with original record, making the Hall record short by approximately 29'. The Hall error is propagated into the Devoe survey by the method chosen to calculate the position of said sec. cor.

The current survey calculates the cor. of secs. 13, 14, 23 and 24 by one (1) point control from the recovered Pioneer 10 original position remonumented by Edwards. I have no reason to question the Hall tie to the SE Homestead (Pioneer 10) corner, due to SE Homestead proximity to the sec. line common to secs. 23 and 24, and accurate description of corner. This solution provides the best available evidence for the original position of the sec. cor. The nearby location of Pioneer 10 to the sec. cor. provides a superior solution to a standard method of ties to distant cadastral corners over rugged terrain. This method improves the harmonious relation to corners on the east and south boundary of sec. 14 compared to the unmonumented positions of Devoe's calculated positions.

The current survey calculates, but does not set the true point which falls in a heavily mined area, the quarter-section cor. of secs. 13 and 14 by one (1) point control from the Reference Monument set by Langer (1988). See corner description for additional information.

Sec. 14 subdivision cors.:

The current survey subdivides and monuments sec. 14 by standard methods utilizing the herein reestablished southeast sec. cor. position. This survey accepts the CW1/16 and CS1/16 positions monumented by Devoe. Said 1/16 cors. have been in the ground for over forty (40) years and are referenced by other surveys. The CW1/16 is SEly 6.7' from a properly calculated position, and the CS1/16 is SEly 15.2' from a properly calculated position. I do not use said Devoe 1/16 cors. to control further subdivision of section lines, the C1/4 was determined by running straight lines between opposite corresponding quarter-section corners.

I have extensively discussed, and researched, the lost sec. cor. and subdivision of section as described above with BLM Cadastral Surveyors, Forest Land Surveyors, and other professional colleagues.

The E-W1/64 of secs. 11 and 14 was found 2.6' Nly of a properly calculated position. I accept the position as monumented and for alignment of the W1/16 cor. of secs. 11 and 14. I calculate the W1/16 cor. at proper proportionate position in departure.

Cor. 2, Challenge Placer Mine, MS 4215:

This corner was set at the true point of intersection on the senior MS 3235 line and the junior MS 4215 line. Six ancient mounds of stone, not of record, were recovered along the senior MS 3235 line, all less than 0.5' distant from the true line.

State Creek (County Line) is shown hereon for informational purposes only, reflect no claim as to legal status, and, except where tied by survey when crossing a posted line, was digitized from a U.S.G.S. Quadrangle.

Basis of Bearing

The Basis of Bearing is the True Meridian and was derived from GPS observations. Local Plane Coordinates were calculated on a false meridian, and zero convergence angle, at the corner of secs. 11, 12, 13 and 14, T21N, R9E, MDM, CA, and converted to ground bearing and distances with a project scale factor of 1.0002301349. Additionally, State Plane Coordinates (CCS83 Zone 1) were calculated and shown hereon for informational purposes.

REFERENCE MATERIAL

Deed References:

Sierra County - Volume 111, Page 218
Plumas County - Book 653, Page 71
Plumas County - Book 770, Page 345
Plumas County - Book 764, Page 789
Plumas County - 2001-01578
Plumas County - 2005-0005932

County Surveys:

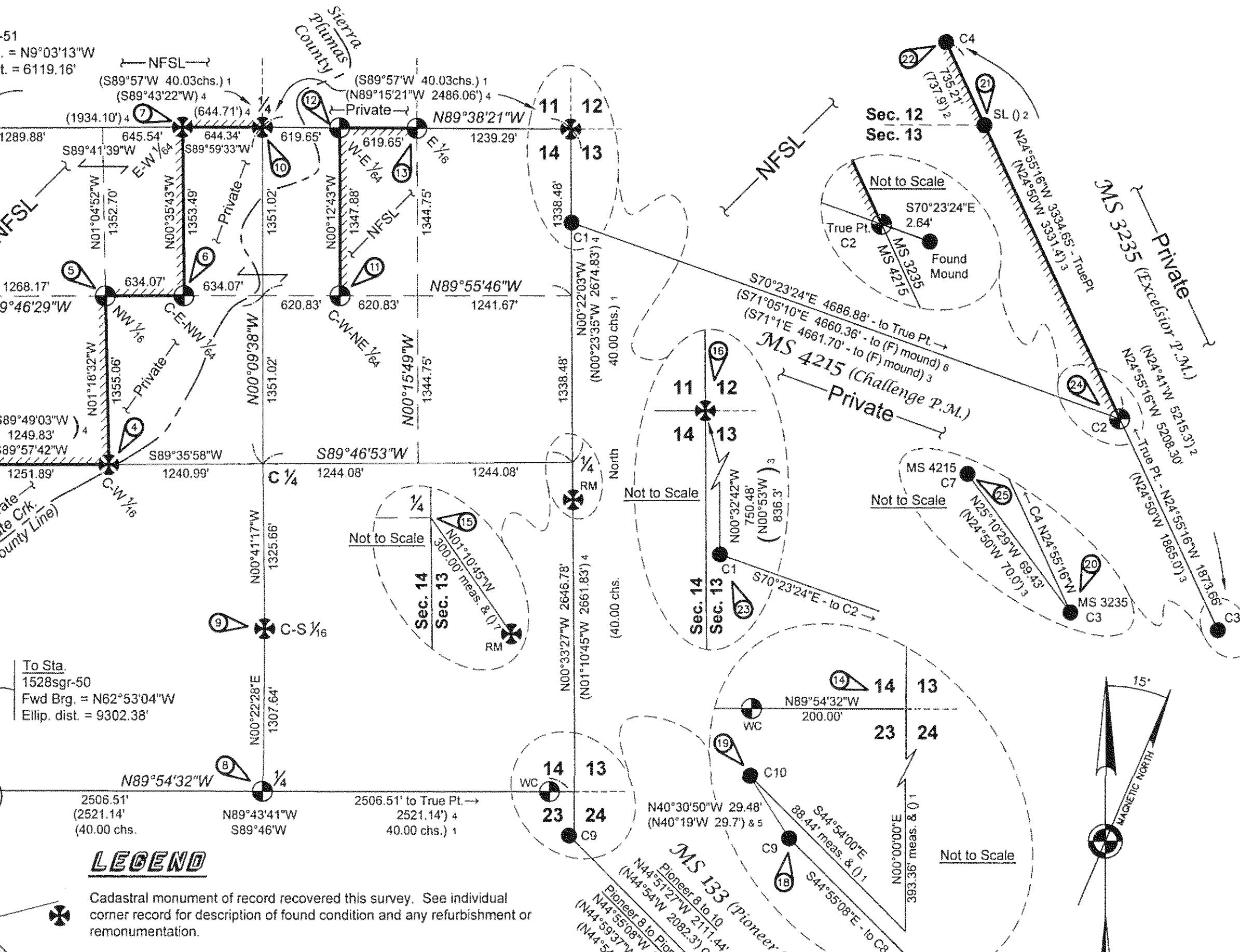
Sierra County 2-RS-16 (1962) / Plumas County 2-RS-75
Sierra County 6-RS-1 (1979)
Sierra County 6-RS-2 thru 6 (1979)
Sierra County 6-RS-21 (1979)
Sierra County 8-RS-103 (1988)
Plumas County 11-RS-79 (1999)
Sierra County 11-RS-58 and 59 (2002)

Other Material:

- GLO Field Notes and Plat of Contract surveyed by Arthur W. Keddie, dated August 23, 1869, approved March 21, 1871.
- GLO Field Notes and Plat of Contract surveyed by Arthur W. Keddie, dated August 12, 1870, approved July 20, 1872.
- GLO Field Notes and Plat of Contract surveyed by D.C. Hall, dated July 5, 1881, approved March 13, 1883.
- GLO MS 133, surveyed by Charles W. Hendel, approved May 1, 1873.
- GLO MS 434, surveyed by Charles W. Hendel, approved April 3, 1874.
- GLO MS 3235, surveyed by L.D. Davis, approved March 5, 1894.
- GLO MS 4215, surveyed by Henry B. Budd, approved October 13, 1905.
- BLM Master Title Plats (MTPs) and Historical Indices.
- Monument Records filed with the Plumas and Sierra County Surveyors.
- Corner cards supplied by the Plumas National Forest.
- No Title Report was supplied or utilized in support of this survey.

NOTES

(See NOTES on Sheet 3)



LEGEND

Cadastral monument of record recovered this survey. See individual corner record for description of found condition and any refurbishment or remonumentation.

Positioned in compliance with the BLM Manual of Survey Instructions, 1973 at proportionate positions and intersection points. Set a 3/4" diam. alum. cap on 3/4" diam. by 30" long alum. drive rod, with magnet in 9 ins. long break-away base, or a 3/4" diam. alum. cap on 2 1/2" diam. by 30" long alum. post with clear DEEP-1 magnet at base. See individual corner record for complete description.

Typical Cap Markings on remonumentations and new monuments (Not to Scale)

() Mineral Survey corner found, and any remonumentation, as described.

() Record informational calls from MS 133 surveyed by Charles W. Hendel, approved May 1, 1873.

() Record informational calls from GLO Contract surveyed by D.C. Hall, dated July 5, 1881, approved March 13, 1883.

() Record informational calls from MS 3235 surveyed by L.D. Davis, approved March 5, 1894.

() Record informational calls from MS 4215 surveyed by Henry B. Budd, approved October 13, 1905.

() Record informational calls from County Survey; Sierra 2-RS-16 and Plumas 2-RS-75 (1962).

() Record informational calls from Sierra County Survey 6-RS-2 (1979).

() Record informational calls from Sierra County Survey 6-RS-21 (1979).

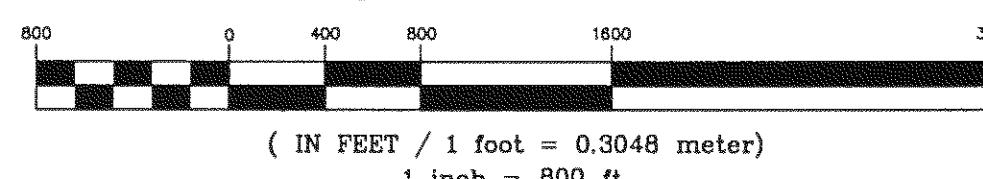
() Record informational calls from Sierra County Survey 8-RS-103 (1988).

Survey line Posted - USFS signs (//// NFSL side) and Blazed.

Wallowa Associates GPS control point.

Reference to descriptions of corners shown hereon are on sheets 3 to 5.

GRAPHIC SCALE



Sugar Cadastral Survey Plumas National Forest

LOCATED WITHIN
Sections 12, 13 and 14,
Township 21 North, Range 9 East,
Mount Diablo Meridian, Sierra & Plumas Counties, California

Wallowa Associates

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SCALE	SHEET No.	DATE OF SURVEY
1" = 800'	2 of 5	Beginning: October, 2006
		Ending: July, 2007
DRAWN BY RCW DATE 9/07	CHECKED RCW	PROJECT No. WA G401-02/1528