BLM-027

Land Surveyor Report

Final Determination by the Certified DOI Land Surveyor:

LSR 2019-24 Diamond Valley, Tps. 22 and 23 N., R. 54 E., Mount Diablo Meridian, Nevada.

This review is based upon an internal request from Sarah Peterson, Hydrologist. The following determination has been made by the DOI Land Surveyor or Certified Federal Surveyor: (Check one)

	The land description is acceptable for the stated purpose, see comments below.		
	The land description has potential problems as noted below; however, the risk appears minor and the action within the stated purpose should not be affected.		
X	The [land description / land surveys] has/have potential problems and should not be used for the stated purpose. The following errors and/or concerns as noted below need to be corrected/addressed before this/these [land description / land surveys] should be used.		
	A field investigation is recommended. (See cost/time estimate below)		

Summary:

Large discrepancies are apparent between the approximate pre-survey land descriptions listed on the water rights documents and the 1939 survey. The land descriptions cited within the above mentioned water rights maps and permits are for lands that are unsurveyed or were unsurveyed at the time of the water rights surveys. For T. 22 N., R. 54 E., the plat approved January 19, 1939 and accepted April 13, 1939 is the original survey that created the sections and aliquot descriptions and should be the source for referencing the public land survey system.

There are apparent similarities between some physical features listed on the water rights surveys and the 1939 survey. The ties on the water rights surveys should be used with caution as there are no corner descriptions listed and may include inconsistencies. Names of springs and canyons should also be used with caution.

This review and analysis was limited to an office evaluation of Federal Public Land Survey records and provides a comparison to various water rights maps and topography features. The U.S.G.S. Christina Peak Quadrangle Nevada 7.5 Minute Series, Provisional Edition 1990 topographic map was used for reference.

History of Federal surveys:

T. 23 N., R. 54 E.:

U.S. Deputy Surveyors E.L. Bridges and J.H. Eaton surveyed the west boundary, a portion of the south boundary, a portion of the north boundary and a portion of the subdivisional lines of T. 23 N., R. 54 E., under Contract No. 88, in 1879. Protraction Diagram No. 162 for T. 23 N., Rs. 54 and 55 E. was approved January 13, 1964. Cadastral Surveyor J.R. Munson dependently resurveyed the west boundary, a portion of the north boundary and a portion of the subdivisional lines of T. 23 N., R. 54 E. under Group No. 504, in 1973.

T. 22 N., R. 54 E.:

Cadastral Engineer C.S. Swanholm and Surveyor R.C. Yundt, dependently resurveyed a portion of the south boundary of T. 23 N., R. 54 E.; dependently resurveyed the west boundary, surveyed the south and east boundaries, a portion of the north boundary and subdivisional lines of T. 22 N., R. 54 E., under Group No. 174, in 1936-1937.

Water Rights Maps and Permits:

Filing Serial No. 01900 claims a diversion dam and ditch for irrigation of 1.35 acres and stock watering in Three Mile Canyon within the SW1/4 SW1/4 section 25, T. 23 N., R. 54 E. The document claims the land is patented. Map 01900 and 01901, completed June 25, 1929 by Water Right Surveyor L.A. Harris, depicts a tie from a purported corner of sections 26, 27, 34 and 35, T. 23 N., R. 54 E., of N.86°00'E., 6,370 feet distance to Maggini Spring within Three Mile Canyon. Three Mile Canyon is shown in sections 25, 26 and 35, T. 23 N., R. 54 E. All of section 25 is unsurveyed. The Master Title Plat indicates unsurveyed section 25 is public lands. Eureka County Assessor parcel ID 707003 also indicates the Bureau of Land Management as the owner. Additionally, Map 01900 and 01901 also depicts a tie of S.60°15'E., 7,750 feet distance from a purported corner of sections 2, 3, 34 and 35 to a trough near Valentine Walters Spring in Walthers Canyon and within the unsurveyed NE1/4 SW1/4 section 1, T. 22 N., R. 54 E. Walthers Canyon is shown within sections 1 and 2. There is no found purported corner descriptions of said corners shown by Harris.

Proof No. V01137 (Amended) claims a diversion dam, natural channels and ditches within the SW1/4 SE1/4 of section 27, T. 23 N., R. 54 E., at a point from which the S 1/4 corner of section 27 bears S.37°58'02"W., 1,724.17 feet distance. Map V01137 surveyed in March 2017 by Water Right Surveyor R.E. Morley, depicts the said tie from the 1973 BLM brass cap to the Point of Diversion on the protracted E-W center line of the SE1/4. The Master Title Plat shows said line as being the boundary between Federal land, and Patent No. 848300 and HE Patent 133. Eureka County Assessor parcel ID 707003 also indicates this is a boundary between Federal and private lands.

Serial No. 3018 claims diversion ditches from Potato Spring within a description of unsurveyed lands approximately in the NW1/4 NW1/4 section 1 and NE1/4 NE1/4 section 2, T. 22 N., R. 54 E. The Map 3018 surveyed by H.C. Wedekind, completed on May 25, 1914, depicts a tie to a purported position for the corner of sections 2, 3, 34 and 35 to the Point of Diversion of S.78°30°E., 90.40 chains distance (5966.4 feet). Additionally, the document depicts a tie of S.81°30°E., 127 chains distance (8,382 feet) to Potato Spring. The document also depicts a cabin, 3 acres of alfalfa and a new ditch within Potato Creek Canyon. There is no found corner

description of said purported corner shown by Wedekind. Potato Creek Canyon is shown in sections 1 and 2.

Serial No. 7868 claims diversion troughs and reservoir from Potato Spring No. 2 within unsurveyed SW1/4 NE1/4 section 1, T. 22 N., R. 54 E. for stock watering. Map 7868 (3018-7868-7869-7870) surveyed by Water Right Surveyor L.A. Harris, completed July 29, 1926, depicts the same tie as Map 3018 to a point of diversion. Near the point of diversions is a spring labeled Potato Spring and easterly is another spring labeled Potato Spring No. 2. This map depicts a house, stable, dam, ditches, Potato Spring and 5.269 acres of native grass pasture enclosed by a wire fence. There is no found corner description of said purported corner shown by Harris.

Serial No. 7549 claims diversion pipeline, two troughs and a reservoir from Maggini Spring No. 2 within a corrected description of the NW1/4 SW1/4 of section 12, T. 22 N., R. 54 E. The Map 7548-7549 surveyed on October 4, 1927 by Water Right Surveyor L.A. Harris, depicts a tie from the purported corner of sections 2, 3, 34 and 35 to Maggini Springs No. 2 (#7549) of S.39°15'E., 10,265 feet distance. There is no found corner description of said purported corner listed by Harris. Additionally, said map depicts a tie from the same corner to Monroe Spring No. 2 (#7548) of S. 35°48'E., 17,744 feet distance. Map 7548-7549 depicts Maggini Spring No. 2 in Sheep Canyon and Monroe Spring No. 2 in Monroe Canyon.

The map entitled, Cultural Map Springs in Sheep and Monroe Canyon, completed July 12, 1918, by W.P. Wright, depicts Walters Canyon mostly within section 35, T. 23 N., R. 54 E. Sheep Canyon is depicted in sections 12, 13 and 14, T. 22 N., R. 54 E. for files 5251 and 5160. Monroe Canyon is depicted in sections 13, 24 and 23, T. 22 N., R. 54 E. for files 5159 and 5250.

Filing Serial No. 01327 claims 8 diversion dams from Monroe Spring situated in the NE1/4 SW1/4 section 13, T. 22 N., R. 54 E. Map 01327 surveyed by H.C. Wedekind completed on June 5, 1914 shows a tie from the purported corner of sections 2, 3, 34 and 35, on the south boundary of T. 22 N., R. 54 E. of N. 21°45'E., 297 chains distance (19,602 feet) to Monroe Spring. Monroe Canyon is depicted in sections 13 and 14.

Analysis:

The U.S.G.S. topographic map shows numerous found corner symbols for section corners for T. 22 N., R. 54 E.

The old water rights maps lack found corner descriptions controlling the tie lines. The presurveyed protracted section lines depicted on the old water rights maps are not the same as the section lines as originally surveyed in 1936-1937.

The 1939 subdivisional notes intersect a main draw draining west at 40.20 chains distance on the line between sections 23 and 24. The 1939 survey of the east boundary of section 24 intersects a draw, draining west with small seeps appearing at intervals in the bed of this draw at 13.80 chains distance. The U.S.G.S. topographic map shows this as Monroe Canyon with no spring symbols.

The 1939 subdivisional notes intersect a main draw draining west at 49.50 chains distance on the line between sections 13 and 14. The 1939 survey of the east boundary of section 13 intersects a creek coursing southwest to a draw draining west, at 42.30 chains distance. The U.S.G.S. topographic map shows and labels this draw as Sheep Canyon with no spring symbols.

The 1939 subdivisional notes intersect a main draw draining west at 56.80 chains, 3 strand wire fence at 57.70 chains, SE. corner of ruins of an old stone cabin at 58.80 chains and another 3 strand wire fence at 68.66 chains on the line between sections 11 and 12. The 1939 survey of the east boundary of section 12 intersects a main draw draining southwest, at 58.90 chains distance. The U.S.G.S. topographic map shows and labels this draw with the ruins as Homestead Canyon with two no-named spring symbols.

The 1939 subdivisional notes tie to a galvanized iron watering trough at the head of a spring in section 1, intersects a main draw draining west at 47.66 chains (from north boundary), and old wood road bearing east to a water trough at 47.66 chains (from north boundary). The 1939 survey of the east boundary of section 1 intersects a draw draining west, at 68.00 chains distance and a dry creek channel coursing southwest at 70.30 chains distance. The U.S.G.S. topographic map shows and labels this draw Walters Canyon with one spring labeled Potato Spring.

The 1939 field note General Description states the following relative statements:

"Many of the deep draws heading in the main ridge or divide near the east boundary have intermittent seeps or small springs during the late spring months or early summer and serve as watering places for the cattle and horses which use the range. One such spring has been developed by the erecting of a watering trough in the SE1/4 of the NW1/4 of sec. 1."

"There were no settlers in the township at time of survey, although a fenced area, along with a cabin and a corral, are situated in sections 11 and 12 in the bottom of the large draw. During normal seasons, water flows down this draw from its source near the east boundary to the above field. It does not appear to be of sufficient quality for irrigation purposes."

This report correctly represents the records and documents evaluated by me or under my direct supervision in conformance with the requirements of the Department of the Interior *Standards for Federal Lands Boundary Evidence*, of the parcel(s) of land identified.

Name: DOI Land Surveyor, or Certified Federal Surveyor	Office, Title and Contact Information:	Date:
Brandon K. Shace	Cadastral Surveyor, Nevada State Office (775) 861-6551 bgrace@blm.gov	2/21/19

This report correctly represents the records and documents evaluated under my direction and control and in conformance with the requirements of the Department of the Interior *Standards for Federal Lands Boundary Evidence*, of the parcel(s) of land identified.

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	Name: Certified DOI Land Surveyor	Contact Information:	Date:

Mululo Hamming	Chief Cadastral Surveyor for Nevada 1340 Financial Blvd. Reno, Nevada 89502	2/21/19					
Michael O. Harmening	(775) 861-6490						
Authorized Officer: I concur with the above recommendation(s) and: Additional funding is not required. Funding for the recommended action(s) is authorized in the amount of \$ Cost code: Funding for the recommended action(s) will be provided at a later date. I do not accept the above recommendation(s) for the following reason(s):							
Comment:							
Authorized Officer Name:	Office, Title and Contact Information:	Date:					
arang in	State Lead for Sun, waker Air,	2/21/19					
This report is to be retained in the official case file.							

Attachments: None.