UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Original

FIELD NOTES

OF THE

DEPENDENT RESURVEY

OF

PORTIONS OF THE EAST AND NORTH BOUNDARIES

OF

TOWNSHIP 18 SOUTH, RANGE 59 EAST,
OF THE MOUNT DIABLO MERIDIAN,
IN THE STATE OF NEVADA

#### EXECUTED BY

Steven E. Dagitz, Cadastral Surveyor Brock R. Clifford, Cadastral Surveyor

Under Special Instructions dated July 16, 2009,
and approved July 16, 2009,
which provided for the surveys included under Group No. 881,
and Assignment Instructions dated July 21 2009.

Survey commenced July 21, 2009
Survey completed January 19, 2011

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TOWNSHIP 18 SOUTH, RANGE 59 EAST, MOUNT DIABLO MERIDIAN, NEVADA

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#### TOWNSHIP 18 SOUTH, RANGE 59 EAST, MOUNT DIABLO MERIDIAN, NEVADA

#### CHAINS

The following field notes are those of the dependent resurvey of portions of the east and north boundaries of Township 18 South, Range 59 East, Mount Diablo Meridian, Nevada.

The south boundary was surveyed by U.S. Deputy Surveyor J.M. Brunt in 1881 under Contract No. 127. The north, east and west boundaries and the subdivisional lines were surveyed by U.S. Deputy Surveyor E.A. Carter in 1881 under Contract No. 128. A portion of the south boundary was dependently resurveyed by Cartographic Survey Aid P.K. Russell in 1956 under Group No. 362. Portions of the south and east boundaries and subdivisional lines were dependently resurveyed by Cadastral Surveyor J.A. Mack in 1984 under Group No. 612. A portion of the south boundary was dependently resurveyed by Cadastral Surveyor R.E. Williams in 1991 under Group No. 698.

Before restoring the corners, the lines of the original surveys were retraced and a diligent search made for any evidence of the original corners and other calls of the original field note record.

The rules of proportionate measurement were applied in order to ascertain the position of lost corners, after completing the necessary retracements to connect with identified corner locations. In order to simplify the record, the true line notes only are supplied herewith, which refer to the completed survey.

The survey was executed in accordance with the specifications set forth in the Manual of Surveying Instructions, 1973, and the Special Instructions for Group No. 881, dated July 16, 2009.

Measurements were made with Trimble R8-2 and 5800 Global Positioning System (GPS) receivers using the real-time kinematic method (RTK) and refer to the true meridian based on geodetic methods. The mean bearings of the lines and horizontal equivalents of ground distances only are entered in the field notes.

The NAD 83 (CORS 96) geographic position of the cor. of secs. 19, 24, 25 and 30, on the E. bdy. of the Tp., determined from GPS static observations processed by the National Geodetic Survey, Online Positioning User Service (OPUS), utilizing Continuously Operating Reference Stations (CORS) TROPICANA CORS ARP, CARLTON SQUARE 2 CORS ARP and BERMUDA CORS ARP, in 2009, and carried forward by RTK observations is as follows:

Latitude: 36°21'57.692" N. Longitude: 115°18'52.374" W.

The 1974 mean magnetic declination is  $15^{\circ}$  E., as shown on U.S.G.S. 7 1/2 minute quadrangle map "CORN CREEK SPRINGS, NEV." dated 1974.

CHAINS	Reestablishment of a Portion of the Survey Executed by U.S. Deputy Surveyor E.A. Carter in 1881
	Beginning at the cor. of secs. 19, 24, 25 and 30, monumented with an iron post, 2 1/2 ins. diam., firmly set flush with the ground, with brass cap mkd. as described in the field notes of the dependent resurvey executed under Group No. 612.
	N. 0°23'30" E., bet. secs. 19 and 24.
	Ascend gentle SW slope, with scattered Joshua trees, yucca and other various cacti.
18.70	Center of wash, 6.5 chs. wide, course S. 50° E.
40.726	The 1/4 sec. cor. of secs. 19 and 24, reestablished by Rita M. Lumos, Nevada Professional Land Surveyor No. 5094, monumented with an aluminum cap, 3 1/4 ins. diam., firmly set in concrete flush with the ground, with top mkd. CITY OF LAS VEGAS T18S 1/4 19 24 2004 R59E R60E PLS 5094 as recorded in Clark County, Nevada, File 135, Page 67 of Surveys. This is accepted as a careful and faithful reestablishment of the position of the original corner.
	N. 0°23'30" E., beginning new measurement.
13.00	Center of wash, 2.5 chs. wide, course S. 10° W.
40.726	The cor. of secs. 13, 18, 19 and 24, reestablished by Rita M. Lumos, Nevada Professional Land Surveyor No. 5094, monumented with an aluminum cap, 3 1/4 ins. diam., firmly set in concrete flush with the ground, with top mkd. CITY OF LAS VEGAS T18S 13 18 19 24 R59E R60E 2004 PLS 5094 as recorded in Clark County, Nevada, File 135, Page 67 of Surveys. This is accepted as a careful and faithful reestablishment of the position of the original corner.
	N. 0°23'30" E., bet. secs. 13 and 18.
	Ascend gentle SW slope, with scattered Joshua trees, yucca and other various cacti.
40.728	The 1/4 sec. cor. of secs. 13 and 18, perpetuated by Rita M. Lumos, Nevada Professional Land Surveyor No. 5094, monumented with an aluminum cap, 3 1/4 ins. diam., firmly set in concrete flush with the ground, with top mkd. CITY OF LAS VEGAS T18S 1/4 13 18 R59E R60E PLS 5094 2003, and in a scattered mound of stone, with a limestone, 20x16x10 ins., lying alongside, mkd. with illegible chisel marks, as recorded in Clark County, Nevada, File 135, Page 67 of Surveys.

	1. 10 5., N. 55 E., 100N1 BINDED HENDIN, NEWYOR				
CHAINS	N. 0°15'50" E., beginning new measurement.				
41.097	The cor. of secs. 7, 12, 13 and 18, monumented with a limestone, 18x14x8 ins., firmly set in a mound of stone, 4 ft. base, 1 ft. high, mkd. with 2 notches on N. edge and 4 notches on S. edge.				
	At the corner point				
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, over a plastic-encased magnet, and in a mound of stone, 3 ft. base, to top, with brass cap mkd.  T18S  R59E R60E  S12 S 7				
	S13 S18				
	2009				
	Bury the mkd. stone alongside the stainless steel post.				
	N. 0°09'40" E., bet. secs. 7 and 12.				
	Ascend gentle SW slope, with scattered Joshua trees, yucca and other various cacti.				
41.106	The 1/4 sec. cor. of secs. 7 and 12, perpetuated by person(s unknown, monumented with a 20D spike, set flush with the ground, in a small collar of stone, with a limestone, 18x16x ins., laying on top of the spike, dimly mkd. 1/4 on one face				
	At the corner point				
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, over a plastic-encased magnet, and in a collar of stone, with brass cap mkd.				
	T18S R59E R60E 1/4 S12 S 7				
	2009				
	Bury the spike and mkd. stone alongside the stainless steel post.				

CHAINS	N. 0°10'00" E., beginning new measurement.				
40.933	The cor. of secs. 1, 6, 7 and 12, monumented with a limestone, 18x12x10 ins., firmly set in an embedded mound of stone, 4 ft. base, 1 ft. high, mkd. with 1 notch on N. edge and 5 notches of S. edge.				
	At the corner point				
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 18 ins. in the ground, over a plastic-encased magnet, and in a mound of stone, 4 ft. base, to top, with brass cap mkd.				
	T18S R59E R60E S 1 S 6				
	S12 S 7				
	2009				
	Bury the mkd. stone alongside the stainless steel post.				
	N. 0°21'20" E., bet. secs. 1 and 6.				
	Ascend gentle SW slope, with scattered Joshua trees, yucca and other various cacti.				
40.798	The 1/4 sec. cor. of secs. 1 and 6, monumented with a sandstone, 16x9x4 ins., loosely set in an embedded mound of stone, 4 ft. base, 1 ft. high, mkd. 1/4 on the W. face.				
	At the corner point				
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 18 ins. in the ground, over a plastic-encased magnet, and in a mound of stone, 4 ft. base, to top, with brass cap mkd.				
	T18S R59E R60E 1/4 S 1 S 6				
	2009				
	Bury the mkd. stone alongside the stainless steel post.				
	N. 0°14'40" E., beginning new measurement.				
40.876	The cor. of Tps. 17 and 18 S., Rs. 59 and 60 E., monumented with a limestone, 15x10x5 ins., firmly set in a mound of stone, 10 ft. base, 3 ft. high, mkd. with 6 notches on the N., S., E. and W. edges.				
I					

CHAINS

At the corner point

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 18 ins. in the ground, over a plastic-encased magnet, and in a mound of stone, 10 ft. base, to top, with brass cap mkd.

T17S R59E R60E S36 S31 S 1 S 6 T18S

2009

Bury the mkd. stone alongside the stainless steel post.

DEPENDENT RESURVEY OF A PORTION OF THE NORTH BOUNDARY, T. 18 S., R. 59 E., MOUNT DIABLO MERIDIAN, NEVADA

Reestablishment of a Portion of the Survey Executed by U.S. Deputy Surveyor E.A. Carter in 1881

From the cor. of Tps. 17 and 18 S., Rs. 59 and 60 E., hereinbefore described.

S. 89°46'50" W., bet. secs. 1 and 36.

Gradually descend SW slope, with scattered yucca, Joshua trees and various other cacti.

41.616

The 1/4 sec. cor. of secs. 1 and 36, perpetuated by person(s) unknown, monumented with a spike, 5 ins. long, firmly set flush with the ground, with a limestone, 12x10x5 ins., lying loose alongside the spike, plainly mkd. 1/4 on one face.

At the corner point

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, over a plastic-encased magnet, with brass cap mkd.

2009

	1. 10 S., R. 39 E., MOONT DIABLO MERIDIAN, NEVADA			
CHAINS	Bury the spike and mkd. stone alongside the stainless steel post.			
	N. 89°34'40" W., beginning new measurement.			
39.967	The cor. of secs. 1, 2, 35 and 36, monumented with a limestone, 20x11x5 ins., firmly set in a mound of stone, 3 ft. base, 1 ft. high, mkd. with 1 notch on E. edge and 5 notches on W. edge.			
	At the corner point			
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 18 ins. in the ground, over a plastic-encased magnet, and in a mound of stone, 3 ft. base, to top, with brass cap mkd.			
	T17S R59E S35 S36			
į	S 2 S 1 T18S			
	2009			
	Bury the mkd. stone alongside the stainless steel post.			
	Cor. is located on N. edge of a trail road, bears E. and W.			
	N. 89°34'30" W., bet. secs. 2 and 35.			
	Gradually descend SW slope, with scattered yucca, creosote and various other cacti.			
40.688	The 1/4 sec. cor. of secs. 2 and 35, monumented with a sandstone, 18x8x8 ins., firmly set in an embedded mound of stone, 4 ft. base, 1 ft. high, mkd. 1/4 on N. face.			
	At the corner point			
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 22 ins. in the ground, over a plastic-encased magnet, with brass cap mkd.			
	T17S R59E			
	S35 1/4 ——			
	S 2			
	T18S			
	2009			

CHAINS	Bury the mkd. stone alongside the stainless steel post.					
	Cor. is located on N. side of a trail road, bears E. and W.					
	N. 89°40'10" W., beginning new measurement.					
40.830	The cor. of secs. 2, 3, 34 and 35, monumented with a granite stone, 18x12x4 ins., loosely set in a mound of stone, 3 ft. base, 1 ft. high, mkd. with 4 notches on W. edge and 2 notches on E. edge.					
	At the corner point					
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 20 ins. in the ground, over a plastic-encased magnet, and in a mound of stone, 3 ft. base, to top, with brass cap mkd.					
	T17S R59E S34 S35					
	S 3 S 2 T18S					
	2009					
	Bury the mkd. stone alongside the stainless steel post.					
	Cor. is located on N. side of a trail road, bears E. and W.					
	N. 89°27'10" W., bet. secs. 3 and 34.					
	Gradually descend W slope, with scattered creosote and various other cacti.					
40.752	The 1/4 sec. cor. of secs. 3 and 34, perpetuated by person(s) unknown, monumented with a hub, 2x2 ins. square, 6 ins. long, firmly set in an embedded mound of stone, 3 ft. base, 6 ins. high, with a granite stone, 12x9x5 ins., lying alongside, dimly mkd. 1/4 on one face.					
	At the corner point					
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, over a plastic-encased magnet, and in a mound of stone, 3 ft. base, to top, with brass cap mkd.					

	T. 18 S., R. 59 E., MOUNT DIABLO MERIDIAN, NEVADA				
CHAINS	T17S R59E S34 1/4 — S 3 T18S				
	2009				
	Bury the hub and mkd. stone alongside the stainless steel post.				
	Cor. is located on N. side of a trail road, bears E. and W. and S. of a fence, bears E. and W.				
	N. 89°24'20" W., beginning new measurement.				
40.597	Point for the cor. of secs. 3, 4, 33 and 34, determined by the method of irregular boundary adjustment, based on the information contained in the U.S. Fish and Wildlife Service field books of their 1978 resurvey of the north boundary of the township; there is no remaining evidence of the original corner.				
	Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 24 ins. in the ground, over a plastic-encased magnet, and in a mound of broken concrete, 3 ft. base, to top, with brass cap mkd.				
	T17S R59E S33   S34				
	S 4 S 3 T18S				
	2009				
	N. 89°42'00" W., bet. secs. 4 and 33.				
	Over nearly level land, with scattered creosote and various other cacti.				
40.072	The 1/4 sec. cor. of secs. 4 and 33, perpetuated by David Frederic Causey, Nevada Professional Land Surveyor No. 1811, monumented with an iron pipe, 1 in. diam., firmly set, projecting 2 ins. above the ground, as recorded in Clark County, Nevada, File 1, Page 62 of Parcel Maps. This is accepted as a careful and faithful perpetuation of the position of the original corner.				
	At the corner point				

CHAINS

Set a stainless steel post, 28 ins. long, 2 1/2 ins. diam., 26 ins. in the ground, over a plastic-encased magnet, and in a mound of stone, 3 ft. base, to top, with brass cap mkd.

2011

Deposit the iron pipe inside the stainless steel post

From this point, a position established by Russell Avery, Nevada Professional Land Surveyor No. 2002 and Linda L. Miller Nevada Professional Land Surveyor No. 10843, monumented with an iron pipe, 2 ins. diam., firmly set flush with the ground, with brass cap mkd. AVERY-MILLER T17S R59E 1/4 S33 S4 T18S 2002 PLS 2002-10843, as recorded in Clark County, Nevada, File 123, Page 64 of Surveys, bears S. 20°00'10" E., 0.022 chs. dist. The position of the iron post set by Mr. Causey is accepted as being located in its original location substantiated by surrounding measurements, the position of the iron pipe set by Russell Avery and Linda Miller cannot be substantiated and is not utilized during the course of this survey.

N. 89°44'50" W., beginning new measurement.

14.983

From this point, a position determined by Richard L. Hafen, Nevada Professional Land Surveyor No. 4428, monumented with a rebar, 5/8 in. diam., firmly set flush with the ground, with an aluminum cap mkd. RL HAFEN PLS 4428, as recorded in Clark County, Nevada, File 130, Page 97 of Surveys, bears NORTH, 0.004 chs. dist. This position was determined utilizing improper control at the cor. of secs. 4, 5, 32 and 33, on the N. bdy. of the Tp., consisting of evidence deposited alongside the original location as shown on said File 123, Page 64 of Surveys, and is not utilized during the course of this survey.

19.977

From this point, a position determined by person(s) unknown, monumented with an iron pipe, 1 in. diam., firmly set flush with the ground, in a fence, bearing E. and W., bears NORTH, 0.006 chs. dist. This position cannot be reconciled with proper procedures and is not utilized during the course of this survey.

39.954

The cor. of secs. 4, 5, 32 and 33, perpetuated by Russell Avery, Nevada professional Land Surveyor No. 2002 and Linda L. Miller, Nevada Professional Land Surveyor No. 10843, monumented with an iron pipe, 2 1/2 ins. diam., firmly set, projecting 6 ins. above the ground, with brass cap mkd. AVERY-MILLER T17S R59E S32 S33 S5 S4 T18S 2002 PLS 2002-10843, as recorded in

DEPENDENT RESURVEY OF A PORTION OF THE NORTH BOUNDARY.

	DEPENDENT RESURVEY OF A PORTION OF THE NORTH BOUNDARY, T. 18 S., R. 59 E., MOUNT DIABLO MERIDIAN, NEVADA
CHAINS	Clark County, Nevada, Map File 123, Page 23 of Surveys. This is accepted as a careful and faithful perpetuation of the position of the original corner.
	GENERAL DESCRIPTION
	The area resurveyed is situated northwest of Las Vegas, along the southerly boundary of the Desert National Wildlife Refuge. The land is nearly level to gently rolling. The elevation ranges from about 2,800 to 3,300 ft. above sea level. The soil is sandy and gravelly throughout the township. The vegetation consist of creosote, shadscale and cacti.
	Access into the area is provided by many desert trail roads.
	No mineral formations of consequence were noted during the survey.

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

#### FIELD ASSISTANTS

Joseph J. Johnson

Student Trainee (Land Surveyor)

Michael C. Lambeth

Surveying Technician

#### CERTIFICATE OF SURVEY

We, Steven E. Dagitz and Brock R. Clifford, Cadastral Surveyors, HEREBY CERTIFY upon honor that, in pursuance of Special Instructions bearing date of the 16th day of July, 2009, we have dependently resurveyed portions of the east and north boundaries of Township 18 South, Range 59 East, of the Mount Diablo Meridian, in the State of Nevada, which are represented in the foregoing field notes as having been executed by us and under our direction; and that said survey has been made in strict conformity with said special instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, and in specific manner described in the foregoing field notes.

January	21,	2011	_
(Date)			

/For Steven E. Dagitz (Cadastral Surveyor)

January	19,	2011	
 (Date)	,		_

Broch M. CMM (Cadastral Surveyor)

CERTIFICATE OF APPROVAL

BUREAU OF LAND MANAGEMENT Reno, Nevada

The foregoing field notes of dependent resurvey of portions of the east and north boundaries of Township 18 South, Range 59 East, Mount Diablo Meridian, Nevada, executed by Steven E. Dagitz and Brock R. Clifford, Cadastral Surveyors, having been critically examined and found correct, are hereby approved.

January 21, 2011 (Date)

(Chief Cadastral Surveyor, Nevada)

# I CERTIFY That the foregoing transcript of the field notes of the above described surveys in T. 18 S., R. 59 E., Mount Diablo Meridian, Nevada, is a true copy of the original field notes. (Date) (Chief Cadastral Surveyor, Nevada)