

NARRATIVE

THE PURPOSE OF THIS SURVEY WAS TO SURVEY, MONUMENT, POST AND SIGN A "CONGRESSIONALLY DESIGNATED BOUNDARY" INTENDING TO FOLLOW THE "MONUMENT ROCK WILDERNESS BOUNDARY", AS SHOWN HEREON IN ACCORDANCE WITH CONTRACT NUMBER 53-04M3-5-0038, DATED JUNE 28, 1995. THIS SURVEY WAS PERFORMED FOR THE WALLOWA-WHITMAN NATIONAL FOREST OFFICE IN BAKER CITY, OREGON. THE PROJECT IS LOCATED IN SECTIONS 11, 12, 13, 14, 15, 22, 23, AND 24 OF TOWNSHIP 14 SOUTH, RANGE 35 1/2 EAST AND SECTIONS 7, 8, 16, 17, AND 18 OF TOWNSHIP 14 SOUTH, RANGE 36 EAST, WILLAMETTE MERIDIAN, BAKER COUNTY, OREGON.

THE CONTROL POINTS FOR THIS PROJECT WERE ESTABLISHED BY GPS METHODS, UTILIZING SIX TRIMBLE 4000SE, SINGLE FREQUENCY, 12 CHANNEL GPS RECEIVERS. THE FINAL GPS COORDINATES ARE SHOWN ON COUNTY SURVEY 14-36-34 AS FILED WITH THE BAKER COUNTY SURVEYOR'S OFFICE.

THE TIE LINES SHOWN HEREON ARE FROM GPS CONTROL POINTS TO THE TRUE BOUNDARY ANGLE POINT POSITION, NOT TO THE ANGLE POINT WITNESS CORNERS.

THE BASIS OF BEARING FOR THIS SURVEY WAS A SERIES OF SOLAR OBSERVATIONS, TAKEN AT EACH GPS CONTROL STATION, COMPUTED BY THE HOUR-ANGLE METHOD AND REDUCED TO GRID NORTH. THE MAGNETIC DECLINATION WAS NOT DETERMINED. ALL BEARINGS AND DISTANCES SHOWN HEREON ARE OREGON STATE PLANE-NORTH ZONE, EXCEPTING BEARING TREE TIES.

ALL BEARING TREE TIES REPORTED HEREON ARE TRUE BEARINGS AND DISTANCES FROM MONUMENT TO THE CENTER OF BEARING TREES.

THE WILDERNESS BOUNDARY SURVEY WAS PERFORMED USING A TOPCON 3B TOTAL STATION INSTRUMENT ALONG WITH A HEWLETT PACKARD 48SX CALCULATOR WITH TRIPOD DATA SYSTEMS 48 (V 4.0 SX) DATA COLLECTION SOFTWARE.

THE WILDERNESS BOUNDARY SURVEY CONSISTED OF NUMEROUS CLOSED TRAVERSES RUN ALONGSIDE THE CONGRESSIONALLY DESIGNATED BOUNDARY. THE BOUNDARY'S METES AND BOUNDS DESCRIPTION IS IDENTIFIED BY BOTH TOPOGRAPHIC FEATURES AND ELEVATIONS. ELEVATION CONTROL WAS BASED UPON KNOWN NGS MONUMENTS IN THE VICINITY AND TIED IN THE GPS CONTROL SURVEY AS SHOWN ON COUNTY SURVEY 14-36-34. ONE GLO CORNER WAS INCLUDED IN THE DESCRIPTION, AP 1541, WHICH IS THE SOUTHEAST CORNER OF SECTION 12, TOWNSHIP 14 SOUTH RANGE 35 1/2 EAST. THE ORIGINAL BASALT STONE AND REMAINS OF ONE BEARING TREE WERE FOUND AND USED TO REESTABLISH THIS CORNER.

THE ANGLE POINTS MARKED BY THIS SURVEY WERE MONUMENTED WITH ALUMINUM PIPE MONUMENTS AND BRASS CAPS AS NOTED AND SHOWN HEREON AND REFERENCED AND POSTED TO USFS SPECIFICATIONS. THE WILDERNESS BOUNDARY LINE WAS POSTED AS PER THE REQUEST OF THE COR WITH USFS WILDERNESS BOUNDARY SIGNS, NUMBER 27-60, NAILED TO TREES OR RIVETED TO 6 FOOT ALUMINUM "T" CHANNEL POSTS ALONG THE CONGRESSIONALLY DESIGNATED BOUNDARY AT NOMINAL 200 FOOT INTERVALS.

ALL MONUMENTS ESTABLISHED DURING THIS PROJECT WERE SET BETWEEN JULY AND SEPTEMBER, 1995.

A COPY OF ALL FIELD NOTES MADE ON THIS PROJECT WAS SUBMITTED AS A PORTION OF THE PROJECT REPORT TO THE CONTRACT OFFICER REPRESENTATIVE WITH THE WALLOWA-WHITMAN NATIONAL FOREST.

THE CONGRESSIONALLY DESIGNATED BOUNDARY OF THE MONUMENT ROCK WILDERNESS AREA WAS DETERMINED ACCORDING TO THE METES AND BOUNDS DESCRIPTION SUPPLIED BY THE USFS. THE ANGLE POINT POSITIONS WERE DETERMINED AS FOLLOWS:

AP 1346 - HELD A HIGH POINT ON A RIDGE BEING THE BOUNDARY COMMON TO MALHEUR AND WALLOWA-WHITMAN NATIONAL FOREST, AT ELEVATION 7040 FEET.

AP 1346 - HELD TO THE RIDGE LINE, WHICH IS SAID FORESTS' COMMON BOUNDARY.
AP 1354 TO

AP 1354 - HELD TO A POINT ON SAID RIDGE WHICH GRAPHICALLY FITS THE PLOTTED POSITION RELATIVE TO THE LOCATION OF USFS ROAD IDENTIFIED AS 2652272 AND 2652274 IN OFFICIAL LEGAL DESCRIPTION.

AP 1354 - HELD A LINE BETWEEN AP 1354 AND AP 1357.
AP 1357 TO

AP 1357 - HELD A POINT 50 FEET EASTERLY OF AND PERPENDICULAR TO THE CENTERLINE OF SAID USFS ROAD 2652272 AND 2652274, AND IT'S GRAPHICAL RELATIONSHIP TO AP 1354.

AP 1357 - HELD A LINE 50 FEET NORTHEASTERLY OF AND PERPENDICULAR TO THE CENTERLINE OF SAID USFS ROAD 2652272 AND 2652274.
AP 1398 TO

AP 1398 - HELD A POINT 50 FEET NORTHERLY OF AND PERPENDICULAR TO THE CENTERLINE OF USFS ROAD 2652272 AND 2652274 AT ELEVATION 6800 FEET.

AP 1398 - HELD TO A BEARING OF S 85° W.
AP 1401 TO

AP 1401 - HELD A POINT AT ELEVATION 6840 FEET AT A BEARING OF S 85°W FROM AP 1398.

AP 1401 - HELD TO CONTOUR AT ELEVATION 6840 FEET.
AP 1411 TO

AP 1411 - HELD A POINT AT ELEVATION 6840 AT THE SUMMATION OF RECORD DESCRIPTION DISTANCE ALONG CONTOUR 6840 FEET FROM AP 1401.

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AP 1411 TO HELD A LINE AT RECORD BEARING AND DISTANCE.
AP 1414 TO

AP 1414 - HELD A POINT 100 FEET EASTERLY OF AND PERPENDICULAR TO THE CENTERLINE OF USFS ROAD 2652 AT IT'S INTERSECTION WITH THE RECORD DESCRIPTION BEARING FROM AP 1413 AS CALCULATED.

AP 1414 - HELD A LINE 100 FEET EASTERLY OF AND PERPENDICULAR TO THE CENTERLINE OF USFS ROAD 2652.
AP 1435 TO

AP 1435 - HELD A POINT ON THE DIVIDE RIDGE BETWEEN THE SOUTH FORK OF THE BURNT RIVER AND LOOKOUT CREEK AND 100 FEET NORTHEASTERLY OF AND PERPENDICULAR TO THE CENTERLINE OF USFS ROAD 2652.

AP 1435 - HELD A LINE ON THE DIVIDE RIDGE BETWEEN THE SOUTH FORK OF THE BURNT RIVER AND LOOKOUT CREEK.
AP 1451 TO

AP 1451 - HELD A HIGH POINT ON THE DIVIDE RIDGE BETWEEN THE SOUTH FORK OF THE BURNT RIVER AND LOOKOUT CREEK AT AN ELEVATION OF 6902 FEET.

AP 1451 - HELD A LINE ON THE DIVIDE RIDGE BETWEEN THE SOUTH FORK OF THE BURNT RIVER AND LOOKOUT CREEK.
AP 1461 TO

AP 1461 - HELD A POINT ON THE DIVIDE RIDGE BETWEEN THE SOUTH FORK OF THE BURNT RIVER AND LOOKOUT CREEK AT AN ELEVATION OF 6860 FEET. (WE DETERMINED THAT THE ELEVATION OF 6960 AS CALLED FOR IN THE METES AND BOUNDS DESCRIPTION FOR AP 1461 WAS AN OBVIOUS TYPOGRAPHICAL ERROR. IT IS NOT PHYSICALLY POSSIBLE TO REACH THE 6960 ELEVATION ALONG THIS RIDGE.)

AP 1461 - HELD TO A GRANT BOUNDARY SOLUTION.
AP 1478 TO

AP 1478 - HELD TO A POINT ON A PROMINENT SPUR RIDGE AT AN ELEVATION OF 6400 FEET.

AP 1478 - HELD TO LINE AP 1478 TO AP 1482.
AP 1482 TO

AP 1482 - HELD A POINT IN LOOKOUT CREEK AT IT'S INTERSECTION WITH AN UNNAMED TRIBUTARY.

AP 1482 - DESCENDED ALONG THE THREAD OF LOOKOUT CREEK.
AP 1506 TO

AP 1506 - HELD A POINT IN THE CENTER OF LOOKOUT CREEK AT AN ELEVATION OF 5600 FEET.

AP 1506 - HELD TO CONTOUR AT ELEVATION 5600 FEET.
AP 1538 TO

AP 1538 - HELD A POINT AT ELEVATION 5600 FEET AT THE SUMMATION OF RECORD DESCRIPTION DISTANCE ALONG CONTOUR 5600 FEET.

AP 1538 - HELD TO GRANT BOUNDARY SOLUTION.
AP 1541 TO

AP 1541 - HELD THE RECOVERED POSITION OF THE SOUTHEAST CORNER OF SECTION 12 T14S R35 1/2E.

AP 1541 - HELD TO GRANT BOUNDARY SOLUTION.
AP 1552 TO

AP 1552 - HELD A POINT ON A MINOR SPUR RIDGE AT ELEVATION 6000 FEET.

AP 1552 - HELD TO CONTOUR AT ELEVATION 6000 FEET.
AP 1571 TO

AP 1571 - HELD A POINT IN THE CENTER OF THE WESTERLY UNNAMED TRIBUTARY OF BEAR CREEK AT ELEVATION 6000 FEET.

AP 1571 - DESCENDED ALONG THE THREAD OF THE WESTERLY UNNAMED TRIBUTARY OF BEAR CREEK.
AP 1583 TO

AP 1583 - HELD A POINT IN THE CENTER OF THE WESTERLY UNNAMED TRIBUTARY OF BEAR CREEK AT AN ELEVATION OF 5480 FEET.

AP 1583 - HELD TO GRANT BOUNDARY SOLUTION.
AP 1591 TO

AP 1591 - HELD A POINT IN THE CENTER OF BEAR CREEK AT AN ELEVATION OF 5400 FEET.

AP 1591 - HELD TO GRANT BOUNDARY SOLUTION.
AP 1600 TO

AP 1600 - HELD A POINT IN THE CENTER OF THE EASTERLY UNNAMED TRIBUTARY OF BEAR CREEK AT AN ELEVATION OF 5440 FEET.

NARRATIVE

AP 1600 TO ASCENDED ALONG THE THREAD OF THE EASTERLY UNNAMED TRIBUTARY OF BEAR CREEK.
AP 1613 TO

AP 1613 - HELD A POINT IN THE CENTER OF THE EASTERLY UNNAMED TRIBUTARY OF BEAR CREEK AT AN ELEVATION OF 5800 FEET.

AP 1613 - HELD TO GRANT BOUNDARY SOLUTION.
AP 1617 TO

AP 1617 - HELD A POINT ON A DIVIDE RIDGE BETWEEN BEAR CREEK AND STEVENS CREEK AT AN APPROXIMATE ELEVATION OF 6320 FEET.

AP 1617 - HELD TO GRANT BOUNDARY SOLUTION.
AP 1621 TO

AP 1621 - HELD A POINT IN THE CENTER OF THE WESTERLY UNNAMED TRIBUTARY OF STEVENS CREEK AT AN ELEVATION OF 5960 FEET.

AP 1621 - DESCENDED ALONG THE THREAD OF THE WESTERLY UNNAMED TRIBUTARY OF STEVENS CREEK.
AP 1630 TO

AP 1630 - HELD A POINT AT THE INTERSECTION OF THE WESTERLY UNNAMED TRIBUTARY OF STEVENS CREEK AND STEVENS CREEK.

AP 1630 - ASCENDED ALONG THE THREAD OF STEVENS CREEK.
AP 1635 TO

AP 1635 - HELD A POINT IN THE CENTER OF STEVENS CREEK AT AN ELEVATION OF 5800 FEET.

AP 1635 - HELD TO CONTOUR AT ELEVATION 5800 FEET.
AP 1641 TO

AP 1641 - HELD A POINT AT ELEVATION 5800 FEET AT THE SUMMATION OF RECORD DESCRIPTION DISTANCE ALONG CONTOUR ELEVATION 5800 FEET FROM AP 1635.

AP 1641 - HELD RECORD BEARING AND DISTANCE TO AP 1644, INTERSECTED AP 1645 TO LINE AT RECORD DISTANCE WITH ELEVATION 5720 FEET.

AP 1645 - HELD A POINT AT ELEVATION 5720 FEET AND RECORD DESCRIPTION DISTANCE FROM AP 1644.

AP 1645 - HELD TO CONTOUR AT ELEVATION 5720 FEET.
AP 1652 TO

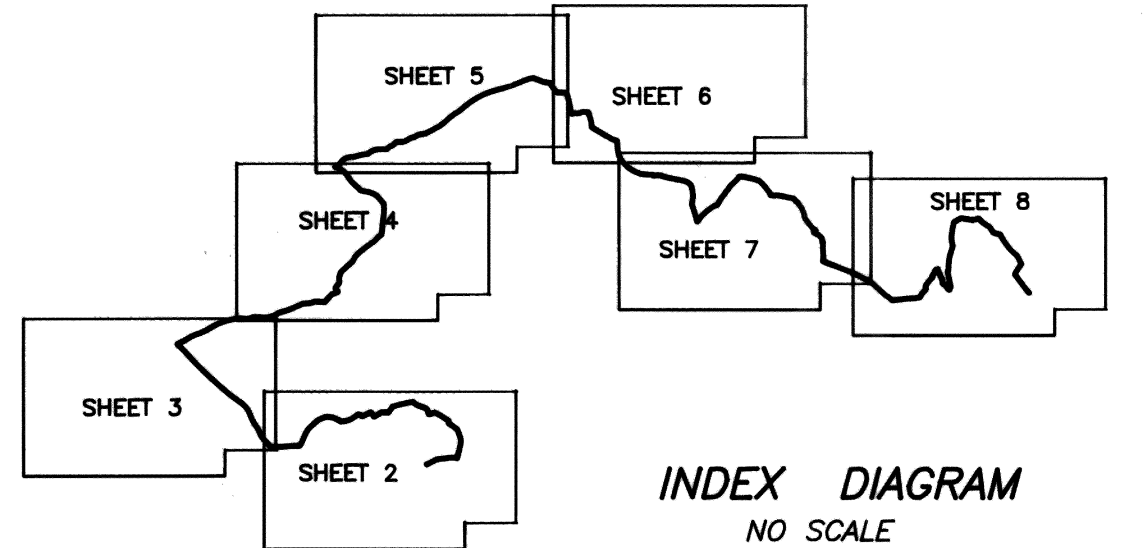
AP 1652 - HELD A POINT IN THE CONFLUENCE OF TWO MINOR DRAWS AT AN ELEVATION OF 5720 FEET.

AP 1652 - ASCENDED SPUR RIDGE BETWEEN TWO MINOR DRAWS.
AP 1659 TO

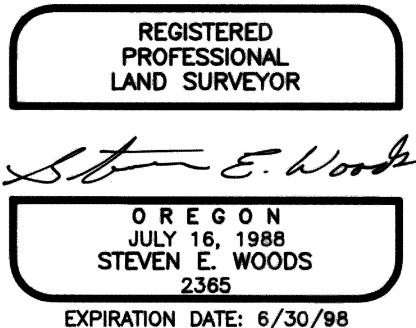
AP 1659 - HELD A POINT ON SPUR RIDGE AT AN ELEVATION OF 6040 FEET.

AP 1659 - HELD TO CONTOUR AT ELEVATION 6040 FEET.
AP 1664 TO

AP 1664 - HELD A POINT IN MINOR DRAW AT AN ELEVATION OF 6040 FEET.



INDEX DIAGRAM
NO SCALE



I STEVEN E. WOODS, REGISTERED LAND SURVEYOR IN THE STATE OF OREGON HEREBY CERTIFY THAT I HAVE SURVEYED THE BOUNDARY AS SHOWN HEREON AT THE REQUEST OF THE USDA FOREST SERVICE.

Signature: Steven E. Woods, Date: 7-25-97

EXAMINED AND ACCEPTED FOR THE US FOREST SERVICE THIS 31 DAY OF July, 1997.

Signature: Roger O. Green, COR

I CERTIFY THAT THIS SURVEY WAS PERFORMED AT THE REQUEST OF THE WALLOWA-WHITMAN NATIONAL FOREST SUPERVISOR.

Signature: William R. Hart, Date: 7/31/97

MONUMENT ROCK WILDERNESS BOUNDARY

CONTRACT NO. 53-04M3-5-0038

SKINNER & ASSOCIATES, INC.		MAP OF	
LAND SURVEYING and U.S. MINERAL SURVEYS		RECORD OF SURVEY	
EXPLORATION SURVEY SERVICES		PREPARED FOR	
PROPERTY BOUNDARY SURVEYS 321 HOLLY STREET JUNCTION CITY, OR (541) 998-2453		U.S. FOREST SERVICE WALLOWA-WHITMAN N.F.	
PATENT MINERAL SURVEYS		LOCATED IN	
DATE: 5/10/96		TWPS 14 S RANGES 35 1/2 & 36 E WM, BAKER COUNTY, OREGON	
DRAWN BY: PA		CHECKED BY: SEK	
		SHEET NO: 1 of 8	