WILLIAM R. WELLS

RENEWS 6/30/10

CK. BY: WRW

TOWNSHIP 6 NORTH, RANGE 36 EAST, W.M.,

UMATILLA COUNTY, OREGON.

NARRATIVE:

THE PURPOSE OF THIS SURVEY WAS TO RECOVER OR REESTABLISH CERTAIN SECTION AND ONE-QUARTER SECTION CORNERS IN SECTIONS 13 THROUGH 36, TON., R36E., W.M. THE WORK WAS AUTHORIZED BY THE UMATILLA COUNTY SURVEYOR AND BOARD OF COUNTY COMMISSIONERS AND FUNDED BY THE PUBLIC LAND CORNER MONUMENT FUND.

ORIGINAL GLO SURVEYS IN THE PROJECT AREA WERE MADE BEGINNING IN 1864, WITH THE STATE LINE BOUNDARY. NEARLY ALL CORNERS WERE MONUMENTED WITH WOOD POSTS, WITH CHARRED STAKES, TRENCHES ETC..

LATER RETRACEMENT AND REESTABLISHMENT SURVEYS MADE BY EARLY COUNTY SURVEYORS, IN BOTH OREGON AND WASHINGTON, USED STONES TO MARK OR REMONUMENT ORIGINAL CORNERS WHEN AVAILABLE.

IN MAKING THIS SURVEY WE UTILIZED UMATILLA COUNTY'S RECTIFIED COLOR IMAGERY, ON THE OREGON STATE PLANE COORDINATE SYSTEM, TO IDENTIFY POTENTIAL CORNER SEARCH AREAS BASED ON FIELD LINES, ROADS, ETC.. DETAILED SEARCH AREAS WERE IDENTIFIED USING A TRIMBLE PATHFINDER PRO-XR BEACON CORRECTED G.P.S. RECEIVER. WE CONSULTED UMATILLA COUNTY AND WALLA WALLA COUNTY ROAD NOTES IN THE AREA FOR TIES TO ORIGINAL CORNERS. WE ALSO CONSIDERED CORNER TIES SHOWN ON RAILROAD RIGHT-OF-WAY AND TRACK MAPS AND POWER TRANSMISSION LINE MAPS. WE RESEARCHED RECORD SURVEYS FOUND IN THE UMATILLA COUNTY SURVEYOR'S OFFICE AND THOSE OF RECORD IN THE WALLA WALLA COUNTY PUBLIC WORKS AND AUDITOR'S OFFICES. WE ALSO UTILIZED 1956 AERIAL PHOTOGRAPHY FLOWN BY THE USDA FARM SERVICE AGENCY, AND FOUND THOSE PHOTOS A VALUABLE RESOURCE, ESPECIALLY IN AREAS WHERE FIELD LINES AND FIELD CONFIGURATIONS HAVE CHANGED.

THE PROJECT AREA IS EXTENSIVELY FARMED. WE UTILIZED OLD FIELD LINES, FIELD BERMS AND OTHER INDICATIONS OF POSSESSION AND OCCUPATION TO THE EXTENT POSSIBLE IN REESTABLISHING CORNERS. IN MANY AREAS, PARTICULARLY AT ONE-QUARTER SECTION CORNER LOCATIONS. THERE ARE NO OCCUPATION FEATURES AND SINGLE PROPORTIONATE MEASUREMENT WAS USED TO REESTABLISH LOST CORNER POSITIONS.

LAND CORNER RECORD FORMS, FILED CONCURRENTLY WITH THIS SURVEY. SHOULD BE CONSULTED FOR SPECIFIC INFORMATION ON EACH CORNER RECOVERED OR REESTABLISHED. ON THE RECORD OF SURVEY MAP AND LAND CORNER RECORDS, WE REPORTED ONLY THOSE RECORDS PERTINENT TO RECOVERY OR REESTABLISHMENT OF THE CORNERS. IN FARMED AREAS, WE BURIED MOST CORNER MONUMENTS BELOW THE SURFACE OF THE GROUND, TO AVOID DESTRUCTION.

IT APPEARS MOST OF THE EXISTING CORNER MONUMENTS, (THOSE EXISTING BEFORE OUR SURVEY) HAD BEEN MAINTAINED AND OR REMONUMENTED UNDER COUNTY SURVEY NO. 03-023-C. SURVEY NO. 03-023-C INDICATES LAND CORNER RECORDS WERE RECORDED WITH THE SURVEY. THE SUBJECT-LAND CORNER RECORDS HAVE APPARENTLY BEEN LOST AND WERE NOT FOUND IN UMATILLA COUNTY SURVEY OFFICE RECORDS. WE DID NOT "MAINTAIN" ANY OF THE CORNERS REPORTED ON SURVEY NO. 03-023-C.

FOR THE STATE LINE BETWEEN OREGON AND WASHINGTON, WE HELD MONUMENTS AS SHOWN ON SHEET 1 OF 2. REESTABLISHED CLOSING CORNER MONUMENTS ON THE STATE LINE WERE ESTABLISHED ON THE PARALLEL OF LATITUDE BETWEEN CONTROLLING CORNERS. CORNERS REESTABLISHED ON THE SOUTH LINE OF THE TOWNSHIP WERE SET ON THE PARALLEL OF BETWEEN CONTROLLING CORNERS, (SEE LAND CORNER RECORDS). ON THE STATE LINE, WE SEARCHED AND/OR RECOVERED STATE LINE MILE AND ONE-HALF MILE MONUMENTS FROM MILEPOST 29.0 THROUGH MILEPOST 35.5. SHEET 1 OF 2 SHOWS THE MONUMENTS RECOVERED. I HELD THE BRASS CAP MONUMENT FOR THE WEST 1/16TH OF SECTION 18 WASHINGTON, AS THE MOST EASTERLY FOUND POINT ON THE STATE LINE FOR THIS PROJECT. FROM THIS 1/16TH CORNER, FENCE AND FIELD LINES EXTEND EASTERLY. THIS 1/16TH CORNER MONUMENT HAS BEEN HELD AS A POINT ON THE STATE LINE IN ALL RECENT RECORD SURVEYS IN BOTH OREGON AND WASHINGTON.

BEARINGS AND DISTANCES REPORTED ON SHEET 1 OF 2 ARE MEAN GROUND DISTANCES AND TRUE BEARINGS, SCALED AND ROTATED AT THE NORTHEAST CORNER OF SECTION 28. SEE SHEET 1 OF 2 FOR ROTATION AND SCALE FACTOR.

THE CONTROLLING STATIONS HELD FOR THIS SURVEY WERE WALAIR2. PID SA1923 AND COTTONWOOD, PID SA1925. NAD 83/91 COORDINATES IN INTERNATIONAL FEET WERE USED. THE HORIZONTAL COORDINATE FOR WALAIR2 WAS HELD AT NORTH = 890620.33, EAST = 8764712.11. STATION COTTONWOOD IS A NGS THIRD ORDER STATION, BUT THE WALLA WALLA COUNTY PUBLIC WORKS DEPARTMENT HAD MORE PRECISE COORDINATES ON IT, WHICH WE HELD. THE HORIZONTAL COORDINATE FOR COTTONWOOD WAS HELD AT NORTH = 858827.14, EAST = 8772120.87. WE ESTABLISHED PROJECT CONTROL POINTS, RAN A GPS TRAVERSE OVER PROJECT CONTROL POINTS AND MADE A LEAST SQUARES ADJUSTMENT, HOLDING WALAIR 2 AND COTTONWOOD. MEASUREMENTS AND COORDINATES REPORTED ON THIS SURVEY ARE REFERENCED TO THE ADJUSTED CONTROL TRAVERSE.

MEASUREMENTS TO CONTROLLING CORNERS AND CORNER SETS WERE MADE WITH A TRIMBLE 5700 GEODETIC G.P.S. SYSTEM OPERATED IN STATIC AND REAL TIME KINEMATIC MODES, FROM ADJUSTED PROJECT CONTROL POINTS. CONTROL CORNERS TIED AND CORNER POSITIONS ESTABLISHED BY REAL TIME KINEMATIC METHODS WERE VERIFIED BY REDUNDANT OBSERVATIONS. SOME CORNER AREAS WERE OBSTRUCTED BY CANYONS OR VEGETATION. CORNERS IN THESE AREAS WERE SET OR TIED USING A LEICA TCR 803, THREE SECOND TOTAL STATION, BY MAKING SHORT MEASUREMENTS FROM CONTROL POINTS ESTABLISHED BY G.P.S. METHODS. CORNER ACCESSORIES WERE MEASURED WITH A STEEL TAPE AND COMPASS.

WE NOTED LOCAL MAGNETIC ATTRACTION WHEN OBSERVING CORNER ACCESSORIES IN SEVERAL AREAS, PARTICULARLY ON THE EAST SIDE OF THE

HISTORY OF SURVEYS:

THE BOUNDARY LINE BETWEEN OREGON AND WASHINGTON WAS SURVEYED BY DANIEL MAJORS, ASTRONOMER AND SURVEYOR IN 1864. MILE POST AND 1/2 MILE POSTS WERE ESTABLISHED ALONG THE STATE LINE BOUNDARY.

TOWNSHIP 6 NORTH, RANGE 36 EAST, W.M., IN WASHINGTON WAS SURVEYED BY DANIEL MAJORS UNDER CONTRACT NO. 72, DATED MAY 5TH, 1863. CORNERS FOR SECTIONS 13 THROUGH 17, ABUTTING THE STATE LINE, ARE COMMON WITH STATE LINE MILE POST MARKERS. THE SOUTHWEST CORNER OF SECTION 18 IS LOCATED ONE CHAIN WEST BY RECORD, (66 FEET) FROM THE STATE LINE 29 MILE POST.

THE WEST, EAST AND SOUTH LINES OF TOWNSHIP 6 NORTH, RANGE 36 EAST, W.M., OREGON WERE SURVEYED BY ODELL AND LEWIS UNDER CONTRACT NO. 110, DATED FEBRUARY 7, 1865. TOWNSHIP 6 NORTH, RANGE 36 EAST, W.M., OREGON, WAS SUBDIVIDED BY ODELL AND LEWIS UNDER CONTRACT NO. 110, DATED FEBRUARY 7, 1865. SECTION CORNERS ABUTTING THE STATE LINE ARE CLOSING CORNERS, CLOSING ON THE STATE LINE. ONE-QUARTER SECTION CORNERS ALONG THE STATE LINE WERE NOT ORIGINALLY ESTABLISHED.

TOWNSHIP 6 NORTH RANGE 37 EAST, W.M., WAS SUBDIVIDED BY GEORGE WILLIAMS UNDER CONTRACT NO. 176 DATED JULY 20, 1876.

PRIVATE AND PUBLIC WORKS SURVEYS AND ROAD SURVEYS HAVE BEEN MADE ALONG THE STATE LINE ON THE WASHINGTON SIDE. SURVEYS IN WASHINGTON ARE RECORDED IN THE WALLA WALLA COUNTY AUDITOR'S OFFICE OR AT THE WALLA WALLA COUNTY PUBLIC WORKS OFFICE.

IN OREGON, OLDER SURVEYS MADE ALONG THE STATE LINE AND IN TOWNSHIP 6 NORTH, RANGE 36 EAST, W.M., ARE FOUND IN RECORD OF PRIVATE SURVEYS. BOOKS 1 AND 2, IN THE UMATILLA COUNTY SURVEYORS OFFICE. MORE RECENT PRIVATE SURVEYS ARE FOUND IN THE OFFICE OF THE UMATILLA COUNTY SURVEYOR.

NOTES FOR ROAD SURVEYS IN OREGON ARE FOUND IN THE UMATILLA COUNTY ROAD DEPARTMENT FILES.

COORDINATE TABLE FOR CORNERS TIED BUT NOT REPORTED ON LAND CORNER RECORDS FILED WITH THIS RECORD OF SURVEY:

	NER DESIGNATION	NORTHING	EASTING
J-1	NWCOR.SEC.18 OR	858086 . 45	8742927.37
N-1	SWCOR.SEC.18 WA	858113.28	8743932.66
	M.P. 29.0	858114.27	8743997.87
	M.P. 30.0 M.P. 31.5	858236.05	8749371.61
	M.P. 31.5	858448.55	8757306.27
J-13	NECOR.SEC.16 OR	858488.13	8758860.85
J-17	NECOR.SEC.15 OR	858639.70	8764163.99
	M.P. 33.0	858671.69	8765278.57
J-21	NECOR.SEC.14 OR	858776.08	8769485.31
	M.P. 34.0	858800.20	8770564.56
J-23±	BRASS CAP MONUMENT	858834.75	8772111.12
N-2	W1/16COR.SEC.18 WA	858983.81	8777236.69
L-17	W1/4 COR.SEC.14	857835.22	8764177.41
N-1	SWCOR.SEC.18	854644.26	8743021.44
N-5	SWCOR.SEC.17	854722.79	8748190.94
N-9	SWCOR.SEC.16	854809.39	8753582.18
N-17	SWCOR.SEC.14	855197.63	8764221.14
P-1	W1/4 COR.SEC.19	851988.34	8743092.86
P-17	W1/4 COR.SEC.23	852558.69	8764289.09
R-1	SWCOR.SEC.19	849332.42	8743164.29
R-3	S1/4 COR.SEC.19	849398.88	8745793.55
R-5	SWCOR.SEC.20	849458.65	8748442.48
R-7	S1/4 COR.SEC.20	849525.65	8751092.87
R-9	SWCOR.SEC.21	849592.38	8753743.27
R-13	SWCOR.SEC.22	849701.79	8759049.73
R-17	SWCOR.SEC.23	849919.66	8764356.90
R-21	SWCOR.SEC.24	849994.06	8769678.45
R-25	SECOR.SEC.24	850252.33	8775025.38
T-1	W1/4 COR.SEC.30	846676.50	8743235.71
T-5	W1/4 COR.SEC.29	846789.12	8748548.16
<u>V-1</u>	SWCOR.SEC30	844031.73	8743313.65
V-3	S1/4 COR.SEC.30	844077.51	8746095.25
V-5	SWCOR.SEC.29	844119.57	8748653.85
V-9	SWCOR.SEC.28	844355.38	8754015.91
V-11	S1/4 COR.SEC.28	844500.53	8756713.04
V-13	SWCOR.SEC.27	844433.64	8759369.72
V-15	S1/4 COR.SEC.27	844581.79	8762021.23
V - 17	SWCOR.SEC.26	844727.92	8764636.51
X-1	W1/4 COR.SEC.31	841368.88	8743383.19
<u>Z-1</u>	SWCOR.SEC.31	838707.42	8743457.79
<u>Z-9</u>	SWCOR.SEC.33	838978.68	8754089.46
Z-13	SWCOR.SEC.34	839156.36	8759346.07

RECEIVED BY Umanilla County Surveyor Shard wy XK 30. 09-10-C

PROFESSIONAL LAND SURVEYOR

Will. R. Wells OREGON

JULY 22, 1977 DATE: 07/08 WILLIAM R. WELLS CK. BY: wrw RENEWS 6/30/10

WELLS SURVEYING 2602 N.E. RIVERSIDE PLACE P.O. BOX 1696 PENDLETON, OREGON PHONE: (541) 276-6362 DR. BY: JMW

PROJECT: SURVEY FOR:

UMATILLA COUNTY

LOCATED IN SECTIONS 13 THROUGH 36. TOWNSHIP 6 NORTH RANGE 36 EAST, W.M. UMATILLA COUNTY, OREGON.