

A SURVEY IN TOWNSHIP 5 NORTH, RANGE 34 EAST, W.M.

NARRATIVE OF SURVEY

This survey was performed at the request of EURUS ENERGY AMERICA CORPORATION. The purpose of the survey was to identify and monument the boundaries of the northeast quarter of section 8 as shown.

This township was originally surveyed in 1865 by GLO deputy surveyors Odell and Lewis. Their work in the northwest corner of this township had errors which were first noted when their work in T6N, R33E, was rejected by the GLO. In the subsequent survey in T6N, R33E, in 1874, deputy surveyor Nicholas Walden reported that the closing distance of the west township line for T5N, R34E was only 56.69 chains instead of the 80 chains reported by Odell and Lewis.

The effect of the errors in their work has been documented by seven different surveys in this area performed between 1899 and 1919. The difficulties generated by their measurement errors have been compounded by the fact that their monumentation consisted entirely of cotton wood posts. As reported by then County Surveyor John Kimbrell in 1906, many of these posts had been replaced with fence posts by early settlers and others had been lost to fire.

John Kimbrell performed two surveys of Section 6. In his second survey the south line of Section 6 was based on a monument at the southeast corner by George Winkles and an unmarked stake "dug up" by one of the area settlers. This stake was more than 8 chains west of the township line. The result of accepting these corners was that Section 6 would be nearly record dimension, and the Odell and Lewis error would be placed in Section 7 instead of Section 6. This is contrary to the report by US deputy surveyor Walden and, as I have found Mr. Walden's work to be very credible in T6N, R33E, and since his survey was the closest in time to the original Odell and Lewis work when the wooden monuments should still have been visible, I have held his record as controlling in Section 6.

To establish the boundary of the northeast quarter of Section 8 it was necessary to retrace enough of the early surveys to verify the found monuments and the record fence corners. It should be noted that the fence corners along the south side of Section 8 and the south 1/4 corner of Section 7 were sworn to under oath by settler A. B. McEwen in survey R5. I held all of the monuments as shown. I located the southwest corner of Section 8 based on the nearest fence evidence east and west of the existing north-south fence. The resulting location is in good agreement with Kimbrell's record distance of 149.59 chains south of the north township line. To locate the west 1/4 corner and the northwest corner of Section 8, I held the existing north-south fence location as controlling the line location and proportioned the northing locations based on the 1865 GLO record. I proportioned the southwest corner of Section 6 based on the 1874 GLO record of Mr. Walden. The east-west fence through the center of Sections 7, 8, and 9 has reportedly been moved several times to accommodate stock watering. None of the surveys of Section 8 called for it as being near the 1/4 corner.

The location of the BPA transmission line as shown is based on the actual pole locations. In reviewing the BPA mile maps it is apparent that they did not verify the existence of any of the monuments shown and accepted parcel evidence as to the fence corners that they did hold. An additional 50 feet of right of way was granted to the BPA in 1999 and was to be centered on the existing right of way and lie 25 feet on each side of it.

The northwest corner of this township was established as common to all four townships. John Kimbrell reestablished this corner by three way proportion in survey R5 and set a stone monument. I found and held that monument in my survey R12. This stone was approximately 100 feet south of the existing fence and 20 feet east of a north-south fence and shows no evidence of having been used as the corner by the landowners. Since the time of my earlier survey I have surveyed several sections in T6N, R33E and have found Mr. Walden's work very reliable. The corner location used by the existing possessory fences is in good agreement with Mr. Walden's record of the township corner location so I have held that position as the township corner for this survey. I set a new monument and stamped the cap at Kimbrell's position W.C..

This survey was performed using a LIECA System 300 RTK GPS. All corners were tied with at least one redundant measurement.

SURVEY LEGEND

DEED RECORDS

D1	BOOK 160	PAGE 150
D2	BOOK 160	PAGE 162
D3	BOOK 160	PAGE 220
D4	BOOK 160	PAGE 221
D5	BOOK 328	PAGE 527
D6	BOOK 328	PAGE 528
D7	REEL 1	PAGE 951
D8	REEL 192	PAGE 1050
D9	REEL 214	PAGE 1590
D10	REEL 229	PAGE 803
D11	REEL 229	PAGE 809
D12	REEL 229	PAGE 815
D13	REEL 333	PAGE 726
D14	REEL 334	PAGE 714
D15	REEL 343	PAGE 303
D16	REEL 400	PAGE 418

- ★ FOUND THE MONUMENT AS NOTED ON RECORD SURVEY. SEE CORNER NOTES.
- SET BRASS CAP AT FOUND MONUMENT FROM RECORD SURVEY. SEE FILED CORNER CERTIFICATE.
- SET A BRASS CAP AT THE COMPUTED POINT. SEE THE FILED CORNER CERTIFICATE.
- ⊗ EVIDENCE OF CORNER POSITION. NO MONUMENT SET.
- ⊗ COMPUTED POINT SEARCHED. NO MONUMENT SET.
- SET A 1" x 24" IRON REBAR WITH A 2" ALUMINUM CAP STAMPED WTS AND 56295L9
- FENCE CORNER HELD BY BPA AS THE 1/4TH CORNER ON BPA MILE MAPS
- X— FENCE LINES
- - - - - RIGHT OF WAY LINE
- - - - - PLOW BERMS
- ▭ PROJECT AREA

- R1 GLO CONTRACT No. 110 DATED FEBRUARY 7, 1865 BY ODELL & LEWIS
- R2 GLO CONTRACT No. 209 DATED JULY 6, 1874 BY NICHOLAS O. WALDEN
- R3 RECORD OF PRIVATE SURVEYS BOOK 1, PAGE 400 KIMBRELL, MARCH, 1899
- R4 RECORD OF PRIVATE SURVEYS BOOK 1, PAGE 465 MACOMBER, MAY 1903
- R5 RECORD OF PRIVATE SURVEYS BOOK 2, PAGE 36 KIMBRELL, JUNE 1906
- R6 RECORD OF PRIVATE SURVEYS BOOK 2, PAGE 252 KIMBRELL, MARCH 1914
- R7 RECORD OF PRIVATE SURVEYS BOOK 2, PAGE 275 BRADLEY, OCTOBER 1915
- R8 RECORD OF PRIVATE SURVEYS BOOK 2, PAGE 310 PERRY, APRIL 1919
- R9 CS# 0-783-C, HARRIS
- R10 CORNER CERT 91-18-B, WELLS
- R11 CS# 01-031-C, TOMKINS
- R12 CS# 03-021-C, S. HADDOCK
- R13 ROAD NOTES FOR COUNTY RD. No. 284 ARNOLD, MAY 1887
- R14 ROAD NOTES FOR COUNTY RD. No. 717 KIMBRELL, JUNE 1911
- R15 NPR RIGHT OF WAY MAP ON FILE IN THE ASSESSORS OFFICE.

BASIS OF BEARINGS

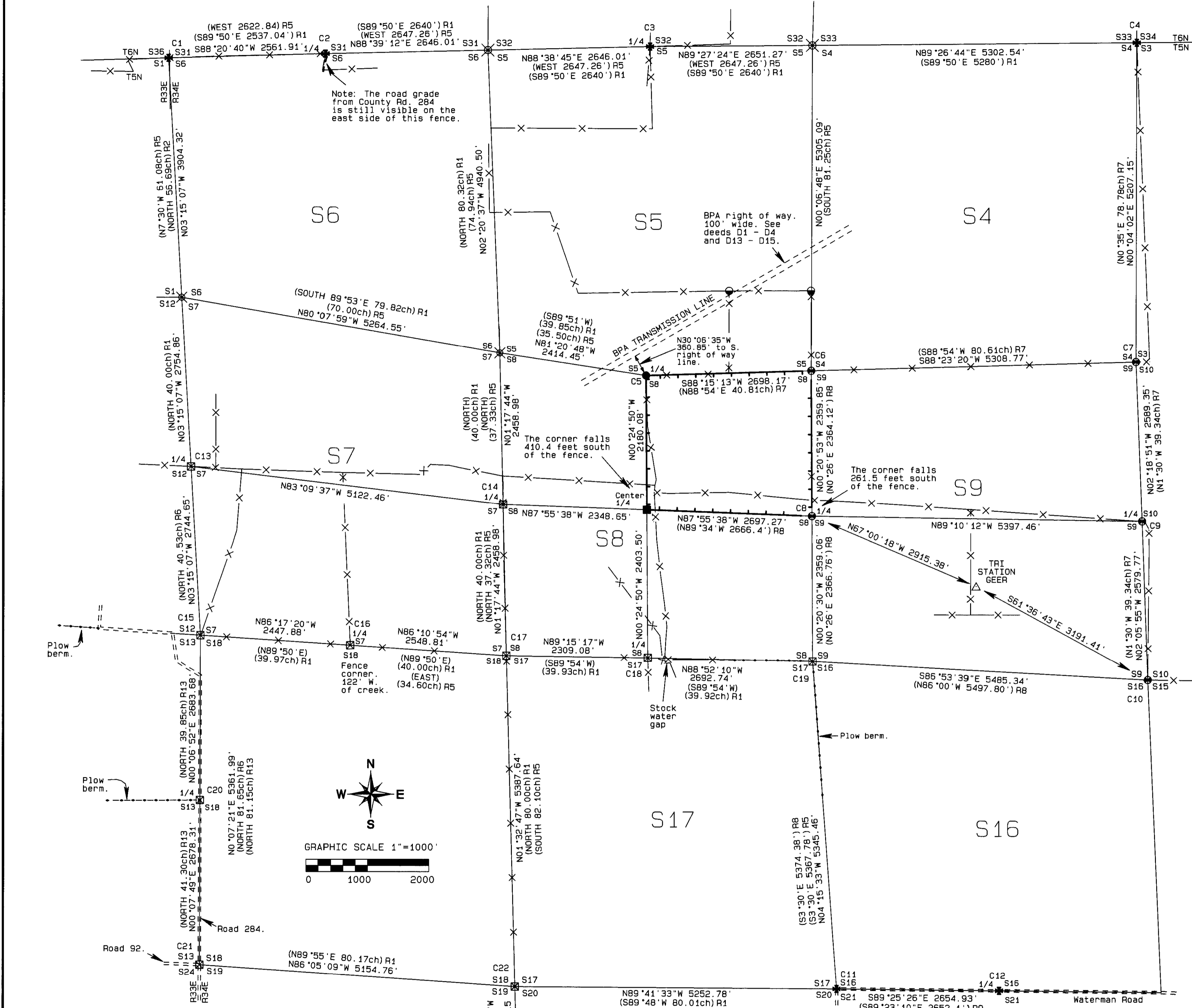
Bearings are based on GPS observations rotated 1°20'56" clockwise to true bearings.

REGISTERED PROFESSIONAL LAND SURVEYOR
 Stephen K. Haddock
 OREGON
 JULY 9, 2001
 STEPHEN K. HADDOCK
 56295L9
 RENEWS 6-30-05

RECEIVED BY
 Umatilla County Surveyor
 Date: 10-03
 Rec'd By: KE
 No.: 03-313-C

BOUNDARY SURVEY FOR
 EURUS ENERGY AMERICA CORPORATION
 LOCATION: SECTIONS 4-9 & 16-18, T5N, R34E, W.M. UMATILLA COUNTY, OREGON.

PROJECT No. 02-04.3 DATE: MARCH 2003
 MONUMENTS SET: MARCH 13 & 14, 2003.
 WITNESS TREE SURVEYING
 Stephen K. Haddock, PLS
 P.O. Box 6
 Pilot Rock, Oregon 97868
 (541) 443-2922



FOUND CORNER MONUMENTS

- C1 I found the brass cap I set at the stone proportioned by Kimbrell but held the fence corner to the north. See the narrative.
- C2 I held the brass cap I set under survey R12.
- C3 I held the brass cap I set under survey R12.
- C4 I held the brass cap set by Paul Tomkins under survey R11.
- C5 I held the fence corner used by Bradley in R7 which he called the "undisputed" corner. The position fits measurements from Kimbrell's R5, where he found the original stake.
- C6 I held the stone Perry said was set by Winkles and was used by Bradley in R7. It agrees with the distances from Kimbrell in R5.
- C7 The stone set by Bradley in R7 has been moved. I computed this corner location based on Bradley's tie to the fence corner to the East.
- C8 I found a basalt stone with an "x" in a mound of stone with a decayed stake set by Perry in survey R8.
- C9 I found the basalt stone set by Bradley under survey R7 plainly marked "X" on top and 1/4 on the south face.
- C10 I found a basalt stone with an "x" set by Macomber under survey R4.
- C11 I found the brass cap set by Wells, R10. A 3/4" iron pipe bears N83°44'57"E, 143.72'.
- C12 I found the railroad iron set by Harris under survey R9.

EVIDENCE OF CORNER

- C13 I held the Township line and the east-west fence. The position agrees with survey R5.
- C14 I held the fence for easting and proportioned the northing.
- C15 I held the fence corner. It is in line with the county road and agrees well with R13.
- C16 This fence corner was sworn to by A. B. McEwen in 1906 and matches the calls from R5.
- C17 This fence corner was sworn to by A. B. McEwen in 1906. See survey R5.
- C18 This fence corner was also sworn to by A. B. McEwen. The fence here is highly decayed but may still be found. It is the only corner in the area which fits the location of the center quarter set by Perry.
- C19 This corner is at the intersection of a plow berm from the south and a berm and an old fence line to the west. It agrees very well with the record from R5 and R8.
- C20 I held the intersection of the county road and a plow berm to the west.
- C21 I held the intersection of the county roads as per the notes the calls from R5 and R2.
- C22 I held the old north-south fence and record distance from the railroad grade as shown on the NPR right of way map.