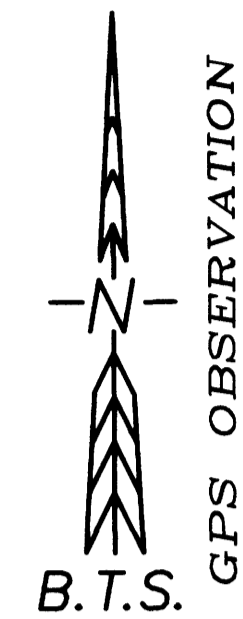


NARRATIVE:

THE PURPOSE OF THIS SURVEY IS TO SUBDIVIDE SECTION 26, T.31S., R.3W., W.M., MONUMENT THE 1/4 S27/S26, N 1/16 S27/S26, S 1/16 S27/S26, C 1/4, CS 1/16, CW 1/16 AND NW 1/16 CORNERS AND POST ROSEBURG RESOURCES CO. BOUNDARY LINES AS SHOWN ON THE FACE OF THE PLAT. THE NORTHWEST SECTION CORNER, SOUTHWEST SECTION CORNER, SOUTH 1/4 CORNER, NORTH 1/4 CORNER AND EAST 1/4 CORNER WERE FOUND AS RESTORED IN THEIR ORIGINAL POSITIONS. THE WEST LINE OF SECTION 26 WAS RESURVEYED IN 1960 BY ROBERT THOMPSON IN A SURVEY FILED AS M 31-28. UNDER M 31-28, THOMPSON RETRACED THE WEST LINE AND THEN SET THE WEST 1/4 CORNER AND N 1/16 CORNER AT PROPORTIONATE DISTANCE. THE WEST 1/4 CORNER WAS THEN RE-MONUMENTED FOR THE USFS IN 1979 CORNER RENEWAL BY GLENN S. BAUGHMAN FILED AS CS 58/176-16. UNDER A RETRACEMENT OF THE WEST LINE OF SECTION 26, I CLOSELY MATCH THOMPSON'S DISTANCE BETWEEN THE SW AND NW CORNERS OF SECTION 26 BUT FIND THAT THOMPSON MONUMENTED THE WEST 1/4 CORNER APPROXIMATELY 31 FEET NORTH OF THE TRUE PROPORTIONATE POSITION. THE NORTH 1/16 CORNER IS LOST WITH THE MONUMENT AND ACCESSORIES BEING DESTROYED BY A 80'-100' WIDE LANDSLIDE.

BECAUSE FEDERAL LAND IS INVOLVED, I REQUESTED AN OPINION FROM THE OREGON STATE OFFICE OF USBLM CADASTRAL SURVEY ON THE ACCEPTANCE OR REJECTION OF THE THOMPSON 1/4 CORNER MONUMENT RELATIVE TO THE 31 FOOT BLUNDER IN MONUMENTATION. THE USBLM RESPONSE BY MARY J. HARTEL, CHIEF CADASTRAL SURVEYOR OF OREGON, SETS FORTH NINE SPECIFIC GUIDELINES IN ANALYZING SURVEY EVIDENCE RELATIVE TO THE ACCEPTANCE OR REJECTION OF THE 1/4 CORNER AND IS RECORDED WITH THIS SURVEY. THE HARTEL LETTER WAS ISSUED PRIOR TO ANY SURVEYING OF THE INTERIOR LINES OF SECTION 26. USBLM GUIDELINE 4 STATES: "HOW LONG HAS THE CORNER BEEN IN PLACE AND HAS IT BEEN RELIED UPON BY LOCAL LANDOWNERS TO MARK THEIR BOUNDARIES?" ALTHOUGH THE CORNER HAS BEEN IN PLACE FOR 50 YEARS, I HAVE CONCLUDED THAT PRIVATE LANDOWNERS SPECIFICALLY HAVE NOT RELIED ON THE CORNER POSITION TO MARK THEIR BOUNDARIES. WE FOUND CONSIDERABLE TIMBER CUTTING EVIDENCE ALONG THE INTERIOR LINES MATCHING THE POSTED LINES AND ALSO WE FOUND LOCATION TAGS DATED 1959 OR 1960 BY THOMPSON OR JOHN MARKHAM WITH COURSES TO APPROXIMATE CORNERS THAT CLOSELY MATCH THE MONUMENTED POSITIONS OF THE NW 1/16, CW 1/16, C 1/4, CS 1/16 AND S 1/16 S27/S26 CORNERS. IF EITHER SURVEYOR HAD RELIED ON THE M 31-28 MONUMENTED 1/4 CORNER, THE INTERIOR LINES WOULD HAVE BEEN MARKED FROM APPROXIMATELY 7 FEET TO 22 FEET NORTH OF THE LINES MARKED AND THE CORNERS MONUMENTED UNDER THIS SURVEY. I CONCLUDED THAT EITHER THOMPSON OR MARKHAM HAD SUBDIVIDED THE SECTION BUT DID NOT FILE THE SURVEY AND HAD MARKED THE BOUNDARY LINES BASED ON THE TRUE PROPORTIONATE POSITION OF THE WEST 1/4 CORNER AND NOT ON THE M 31-28 MONUMENTED POSITION OF THE CORNER. THEREFORE, THE BLUNDER IN MONUMENTING THE WEST 1/4 CORNER WAS ISOLATED TO THAT CORNER ONLY AND THAT CORNER WAS NOT USED IN LOCATING THE NORTH AND SOUTH 1/16 CORNERS ON THE WEST LINE OF SECTION 26 OR THE INTERIOR CORNERS AND LINES OF SECTION 26. THEREFORE, I CHOSE TO REMONUMENT THE 1/4 CORNER IN ITS TRUE PROPORTIONATE POSITION CONSISTENT WITH THE GUIDELINES SET FORTH IN THE HARTEL LETTER. USING THESE CORNER POSITIONS, THE SOUTHWEST 1/4 OF SECTION 26 WAS SUBDIVIDED AS PER THE MANUAL OF SURVEYING INSTRUCTIONS, 2009 AND THE LAWS OF THE STATE OF OREGON.

**RECORD OF SURVEY
HATCHET QUARRY CADASTRAL SURVEY
LOCATED IN
SECTION 26, T31S, R3W, W.M.
DOUGLAS COUNTY, OREGON**



CORNER DESCRIPTIONS:

ALL NEW BEARING TREES HAVE DOUBLE BLAZED FACES WITH A BRASS WASHER STAMPED "PLS 1941" NAILED INTO THE LOWER BLAZE. BEARINGS ARE TAKEN TO THE CENTER OF THE TREE AT THE ROOT CROWN AND DISTANCES ARE MEASURED TO A NAIL IN THE ROOT CROWN AT THE SIDE AND CENTER OF THE TREE WITH A TOTAL STATION. ALL BEARING TREES HAVE A 6" RED BAND PAINTED AROUND THE TREE AND THE BLAZED FACE PAINTED RED AND BEARING TREE SIGNS NAILED TO THE TREE. ALL NEW 5/8" x 30" IRON ROD REFERENCE MONUMENTS HAVE A PLASTIC CAP STAMPED "BTS ENG-SURV".

1. 1/4 S23/S26 PLSS ID. NO. 540300
LAT: 42°51'24.510545"N. LONG: 123°01'22.599017"W.
FOUND: A 1 1/4" IRON POST BY G. QUIBELL, DCSO DEPUTY SURVEYOR IN 1981, PER C.S. FILE NO. 61/19, FIRMLY SET, PROJECTING 6" ABOVE THE GROUND WITH A 2 1/2" BRASS CAP STAMPED:

DOUGLAS COUNTY SURVEYOR
T31S
1 S23
4 S26
R3W
1981

FROM WHICH THE ORIGINAL BEARING TREES BY W. BUSHEY IN 1893:
A 24" W.FIR BEARS N.46°W., 14.5 FEET WITH NO MARKS VISIBLE ON AN OPEN FACE. (REC. N.46°W., 14.2 FEET)
A 14" YEW BEARS S.53°E., 5.5 FEET WITH A HEALED BLAZE. (REC. 5.6 FEET)
AND BEARING TREES BY G. QUIBELL IN 1981:
A 23" D.FIR BEARS S.55°W., 12.3 FEET WITH A HEALED BLAZE. (REC. S.52°W., 12.9 FEET)
A 12" D.FIR BEARS N.6°W., 2.4 FEET WITH A HEALED BLAZE. (REC. N.6°E., 2.7 FEET)
THE ORIGINAL 20"x12"x6" STONE IS BURIED 6" SOUTH OF BCIP.

2. S22/S23/S26/S27 PLSS ID. NO. 500300
LAT: 42°51'24.255322"N. LONG: 123°01'57.679249"W.
FOUND: A 1 1/4" IRON POST BY J. POWELL, DCSO DEPUTY SURVEYOR, IN 1966, PER C.S. FILE NO. 52/63, FIRMLY SET, PROJECTING 12" ABOVE THE GROUND WITH A 2 1/2" BRASS CAP STAMPED:

COUNTY SURVEYOR'S OFFICE
T31S R3W
S22/S23
S27/S26
1966

FROM WHICH AN ORIGINAL BEARING TREES BY W. BUSHEY IN 1893:
A 24" LIVE OAK BEARS S.42°E., 21.8 FEET WITH A HEALED BLAZE.
AND BEARING TREES BY J. POWELL IN 1966:
A 25" LAUREL BEARS N.13°W., 3.7 FEET WITH SCRIBE MARKS VISIBLE.
A ROOT HOLE BEARS S.85°E., 25.4 FEET THE ROTTED REMAINS OF A 12" LAUREL ALONGSIDE.
AND NEW BEARING TREES:
A 11" D.FIR BEARS N.84 3/4°E., 23.2 FEET SCRIBED "T31S R3W S23 BT"
A 8" LIVE OAK BEARS S.36°W., 28.5 FEET SCRIBED "T31S R3W S27 BT"

3. N 1/16 S27/S26 PLSS ID. NO. 500260
LAT: 42°51'11.074375"N. LONG: 123°01'57.673362"W.
THE 3/4" IRON PIPE AND BEARING TREES BY R. THOMPSON IN 1960 PER M 31-28 IS LOST, BEING DESTROYED BY A LANDSLIDE.
SET: A 5/8" x 30" IRON ROD, 28" IN THE GROUND WITH A 2 1/2" ALUMINUM CAP STAMPED:

ROSEBURG RESOURCES COMPANY
T31S R3W
N 1/16
S27/S26
2010
PLS1941

FROM WHICH NEW BEARING TREES:
A 11" D.FIR BEARS N.89°W., 50.1 FEET SCRIBED "N 1/16 S27 BT"
A 8" D.FIR BEARS N.59 1/4°E., 37.6 FEET SCRIBED "N 1/16 S26 BT"

4. NW 1/16 S26 PLSS ID. NO. 520260
LAT: 42°51'11.198596"N. LONG: 123°01'40.054471"W.
SET: A 5/8" x 30" IRON ROD, 28" IN THE GROUND WITH A 2 1/2" ALUMINUM CAP STAMPED:

ROSEBURG RESOURCES COMPANY
T31S R3W
NW 1/16
S26
2010
PLS1941

FROM WHICH NEW BEARING TREES:
A 6" D.FIR BEARS S.66°E., 22.1 FEET SCRIBED "NW 1/16 S26 BT"
A 8" D.FIR BEARS S.60 1/2°W., 25.0 FEET SCRIBED "NW 1/16 S26 BT"

5. 1/4 S26/S25 PLSS ID. NO. 600240
LAT: 42°50'58.371613"N. LONG: 123°00'46.738768"W.
FOUND: A 1 1/4" IRON POST BY J. POWELL, DCSO DEPUTY SURVEYOR IN 1966, PER C.S. FILE NO. 52/63, FIRMLY SET, PROJECTING 15" ABOVE THE GROUND WITH A 2 1/2" BRASS CAP STAMPED:

COUNTY SURVEYOR'S OFFICE
T31S R3W
1/4 S26/S25
1966

FROM WHICH AN ORIGINAL BEARING TREE BY W. BUSHEY IN 1893:
A 16" D.FIR STOB, 12 FT. TALL, BEARS S.12 3/4°E., 12.2 FEET WITH A HEALED BLAZE. (REC. S.12 1/2°E., 12.5 FEET)
AND BEARING TREES BY J. POWELL IN 1966:
A 34" D.FIR BEARS S.32 1/2°W., 5.8 FEET WITH A HEALED BLAZE. (REC. S.31°W., 6.2 FEET) CORRECTED 5/4/2015
A ROOT HOLE WITH AN UNPROOTED 16" HEMLOCK ALONGSIDE BEARS N.40°E., 23.0 FEET.
AND A NEW BEARING TREE:
A 9" HEMLOCK BEARS N.84 3/4°E., 32.9 FEET SCRIBED "1/4 S25 BT"

6. C 1/4 S26 PLSS ID. NO. 540240
LAT: 42°50'58.133576"N. LONG: 123°01'22.272123"W.
SET: A 5/8" x 30" IRON ROD, 12" IN THE GROUND TO SOLID ROCK AND BUILT A 30" DIAMETER STONE MOUND TO TOP OF MONUMENT WITH A 2 1/2" ALUMINUM CAP STAMPED:

ROSEBURG RESOURCES COMPANY
T31S R3W
C 1/4
S26
2010
PLS1941

FROM WHICH NEW BEARING TREES:
A 10" D.FIR BEARS S.17°W., 37.3 FEET SCRIBED "C 1/4 S26 BT"
A 11" D.FIR BEARS N.84 1/2°W., 12.0 FEET SCRIBED "C 1/4 S26 BT"
AND NEW REFERENCE MONUMENTS:
A 5/8" IRON ROD BEARS N.23°55'47"E., 18.39 FEET.
A 5/8" IRON ROD BEARS S.72°59'39"E., 38.82 FEET.

7. CW 1/16 S26 PLSS ID. NO. 520240
LAT: 42°50'58.013878"N. LONG: 123°01'39.969809"W.
SET: A 5/8" x 30" IRON ROD, 28" IN THE GROUND WITH A 2 1/2" ALUMINUM CAP STAMPED:

ROSEBURG RESOURCES COMPANY
T31S R3W
W 1/16
C-1/4
S26
2010
PLS1941

FROM WHICH NEW BEARING TREES:
A 7" HEMLOCK BEARS N.53°E., 13.6 FEET SCRIBED "CW 1/16 S26 BT"
A 15" HEMLOCK BEARS N.39 3/4°W., 41.7 FEET SCRIBED "CW 1/16 S26 BT"

8. 1/4 S27/S26 PLSS ID. NO. 500240
LAT: 42°50'57.893420"N. LONG: 123°01'57.667476"W.
FOUND: A 2 1/2" IRON POST BY G. BAUGHMAN, PLS 536 IN 1979, PER C.S. FILE NO. 58/176-16, FIRMLY SET, PROJECTING 12" ABOVE THE GROUND WITH A 3" BRASS CAP STAMPED:

T31S R3W
1/4
S26/S25
1976 PLS536

FROM WHICH BEARING TREE BY R. THOMPSON IN 1960 PER M31-28:
A 37" DOUBLE TRUNKED D.FIR BEARS N.64 3/4°E., 18.4 FEET WITH A HEALED BLAZE.
A 21" D.FIR BEARS S.33 1/4°W., 14.2 FEET WITH A HEALED BLAZE.

SET: I REFERENCE THE POSITION AND THEN REMOVE THE 2 1/2" IRON POST AND SET THE 1" IRON PIPE BY R. THOMPSON PER M 31-28 AT THE REFERENCED POSITION. THEN, AT THE TRUE PROPORTIONATE POSITION, I RESET THE 2 1/2" x 32" IRON POST, 26" IN THE GROUND AND ADDED "RESET 2010 PLS 1941" TO THE BRASS CAP STAMPING.

FROM WHICH NEW BEARING TREES:
A 9" D.FIR BEARS N.31 1/2°E., 44.2 FEET. SCRIBED "1/4 S26 BT"
A 16" D.FIR BEARS N.83 3/4°W., 13.0 FEET. SCRIBED "1/4 S27 BT"
AND A REFERENCE MONUMENT BY R. THOMPSON PER M 31-28 :
A 1" IRON PIPE BEARS N.0°4'13"E., 30.75 FEET.
AND A NEW REFERENCE MONUMENT:
A 5/8" IRON ROD BEARS N.78°44'43"E., 22.99 FEET.
A 5/8" IRON ROD BEARS S.13°50'46"W., 29.95 FEET.

9. S 1/16 S27/S26 PLSS ID. NO. 500220
LAT: 42°50'44.712455"N. LONG: 123°01'57.661590"W.
SET: A 5/8" x 30" IRON ROD, 28" IN THE GROUND WITH A 2 1/2" ALUMINUM CAP STAMPED:

ROSEBURG RESOURCES COMPANY
T31S R3W
S 1/16
S27/S26
2010
PLS1941

FROM WHICH NEW BEARING TREES:
A 8" W.FIR BEARS S.28°E., 16.6 FEET SCRIBED "S 1/16 S26 BT"
A 7" W.FIR BEARS S.46 1/4°W., 15.4 FEET SCRIBED "N 1/16 S27 BT"

10. CS 1/16 S12 PLSS ID. NO. 540220
LAT: 42°50'44.873786"N. LONG: 123°01'22.107820"W.
SET: A 5/8" x 30" IRON ROD, 28" IN THE GROUND WITH A 2 1/2" ALUMINUM CAP STAMPED:

ROSEBURG RESOURCES COMPANY
T31S R3W
S 1/16 S26
2010
PLS1941

FROM WHICH NEW BEARING TREES:
A 8" W.FIR BEARS N.4 1/2°E., 19.1 FEET SCRIBED "CS 1/16 S26 BT"
A 7" W.FIR BEARS S.89°E., 15.0 FEET SCRIBED "CS 1/16 S26 BT"

11. 1/4 S26/S35 PLSS ID. NO. 540200
LAT: 42°50'31.613988"N. LONG: 123°01'21.943538"W.
FOUND DCSO BCIP AND ACCESSORIES PER PLSS 540200

12. S26/S27/S34/S35 PLSS ID. NO. 500200
LAT: 42°50'31.531483"N. LONG: 123°01'57.655705"W.
FOUND DCSO BCIP AND ACCESSORIES PER PLSS 500200.

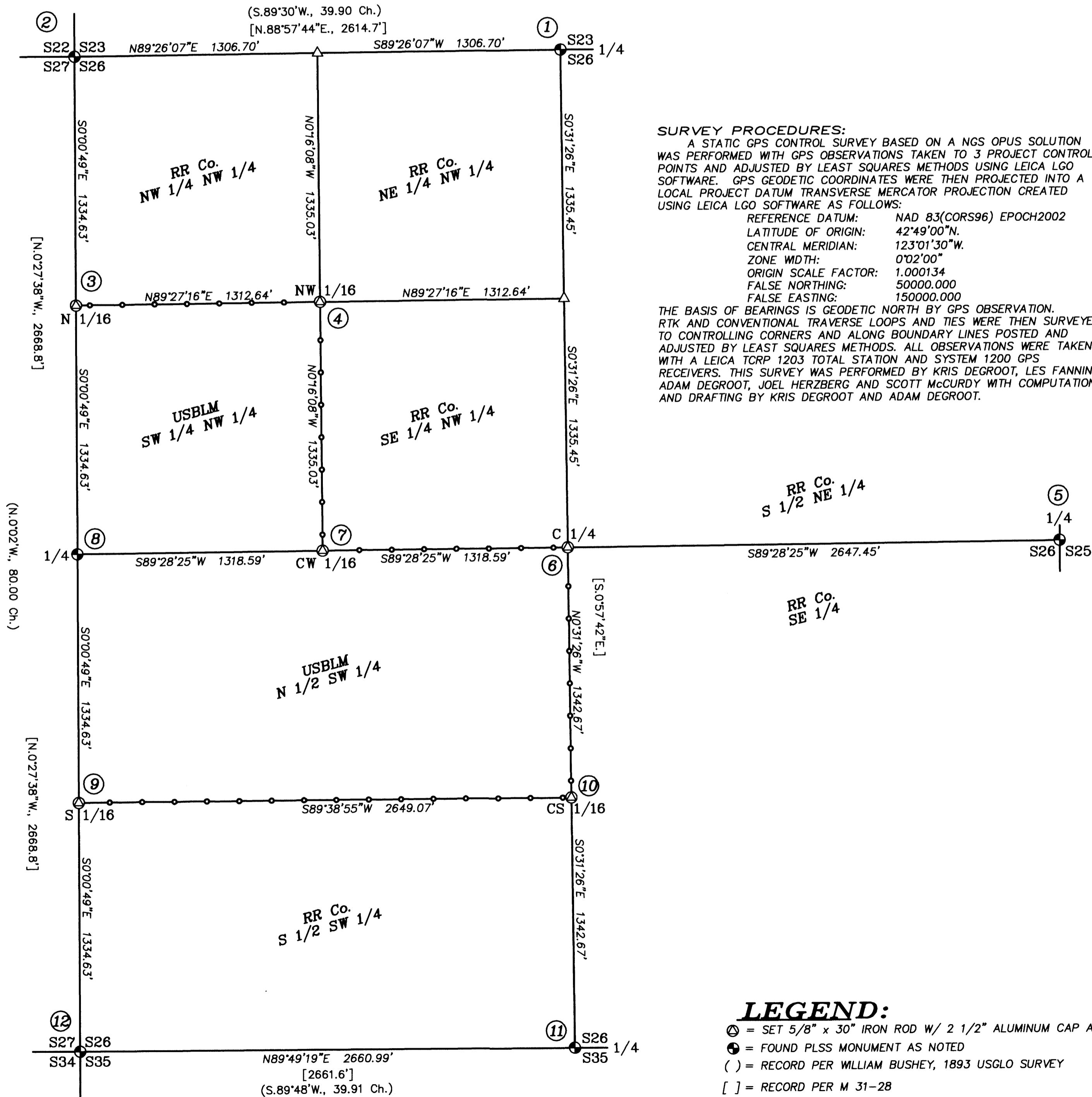
SURVEY PROCEDURES:
A STATIC GPS CONTROL SURVEY BASED ON A NGS OPUS SOLUTION WAS PERFORMED WITH GPS OBSERVATIONS TAKEN TO 3 PROJECT CONTROL POINTS AND ADJUSTED BY LEAST SQUARES METHODS USING LEICA LGO SOFTWARE. GPS GEODETIC COORDINATES WERE THEN PROJECTED INTO A LOCAL PROJECT DATUM TRANSVERSE MERCATOR PROJECTION CREATED USING LEICA LGO SOFTWARE AS FOLLOWS:

REFERENCE DATUM: NAD 83(CORS96) EPOCH2002
LATITUDE OF ORIGIN: 42°49'00"N.
CENTRAL MERIDIAN: 123°01'30"W.
ZONE WIDTH: 0°02'00"
ORIGIN SCALE FACTOR: 1.000134
FALSE NORTING: 50000.000
FALSE EASTING: 150000.000

THE BASIS OF BEARINGS IS GEODETIC NORTH BY GPS OBSERVATION. RTK AND CONVENTIONAL TRAVERSE LOOPS AND TIES WERE THEN SURVEYED TO CONTROLLING CORNERS AND ALONG BOUNDARY LINES POSTED AND ADJUSTED BY LEAST SQUARES METHODS. ALL OBSERVATIONS WERE TAKEN WITH A LEICA TCPR 1203 TOTAL STATION AND SYSTEM 1200 GPS RECEIVERS. THIS SURVEY WAS PERFORMED BY KRIS DEGROOT, LES FANNING, ADAM DEGROOT, JOEL HERZBERG AND SCOTT MCCURDY WITH COMPUTATIONS AND DRAFTING BY KRIS DEGROOT AND ADAM DEGROOT.

LEGEND:

- ⊙ = SET 5/8" x 30" IRON ROD W/ 2 1/2" ALUMINUM CAP AS NOTED.
- ⊙ = FOUND PLSS MONUMENT AS NOTED
- () = RECORD PER WILLIAM BUSHEY, 1893 USGLO SURVEY
- [] = RECORD PER M 31-28
- = PROPERTY LINES BLAZED, PAINTED & POSTED WITH 5 1/2" STEEL POSTS.



FILED
Date: 5/5/2016 By: JC
This survey consists of:
Map: M157-24
Narrative:
Corner Rpt: C.S. 05/10-5
DOUGLAS COUNTY SURVEYOR

REGISTERED PROFESSIONAL LAND SURVEYOR
Kristian O. Degroot
OREGON JULY 17, 1981
KRISTIAN O. DEGROOT 1921
RENEWAL DATE: 12-31-2011

BTS ENGINEERING & SURVEYING, INC.
431 S.E. MAIN ST., ROSEBURG, OR 97470
PHONE (541) 673-0966 FAX (541) 673-0105

SCALE: 1" = 400'
DATE: May 3, 2010
FOR: Roseburg Resources Co. P.O. Box 1088 Roseburg, OR 97470
JOB #: 10-006
FILE: RR 10-006.dwg
SHEET 1 OF 1