

CERTIFICATE OF SURVEY
RETRACEMENT SURVEY OF C.O.E. LIBBY DAM-LAKE
KOOCANUSA CADASTRAL
TRACT 5700

A PORTION OF THE NORTHWEST QUARTER, SOUTHWEST QUARTER,
SECTION 1, TOWNSHIP 37 NORTH, RANGE 28 WEST, P.M., MT.,
USDA FS KOOTENAI NATIONAL FOREST - YOUNG DODGE
CONTRACT NO. AG-82B1-D-09-0009
LINCOLN COUNTY, MONTANA
AUGUST - NOVEMBER 2009

PURPOSE OF SURVEY

THE PURPOSE OF THIS SURVEY IS TO RETRACE AND MARK A PORTION OF THE BOUNDARIES
BETWEEN PUBLIC AND PRIVATE LAND OF AN EXISTING RECORD PARCEL, CAUSING NO DIVISION OF LAND
(SECTION 76-3-404 MCA).

BASIS OF BEARINGS

BEARING DATUM IS UNIVERSAL TRANSVERSE MERCATOR (UTM), ZONE 11 NORTH,
NAD83, DERIVED FROM GPS STATIC OBSERVATIONS USING TRIMBLE 4000 AND
4700SSI DUAL FREQUENCY RECEIVERS.
COORDINATE DATUM HAS A COMBINED STATE PLANE AND SEA LEVEL FACTOR
(CAF) OF 1.00030878 DIRECTLY APPLIED TO UTM, ZONE 11 NORTH, NAD83
COORDINATE DATUM IN ORDER TO REPRESENT ACTUAL GROUND DISTANCES.
GEODETIC NORTH FROM UTM IS AN ANGULAR ROTATION OF 1°21'51" TO THE RIGHT
AT THE ARMY CORPS OF ENGINEERS MONUMENT 5700/2.

HISTORY OF SURVEY

1894, Original G.L.O. Survey by F. Sizer and A. Jaqueth.
1968, Remonumentation by Corps of Engineers (C.O.E.).
1972, Libby Dam - Lake Koocanusa Cadastral by C.O.E., Sheet 36 of 37.

FOREST SUPERVISOR'S CERTIFICATE

THIS SURVEY WAS MADE AT MY REQUEST FOR NATIONAL FOREST MANAGEMENT
PURPOSES. DATE 2/16/10

Carrie Winston
FOREST SUPERVISOR

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR IN THE STATE OF MONTANA, THAT THE SURVEY
SHOWN ON THIS CERTIFICATE OF SURVEY HAS BEEN PREPARED IN CONFORMANCE WITH MONTANA CODE
ANNOTATED (SECTIONS 76-3-101 THROUGH 76-3-614) AND THE LINCOLN COUNTY REGULATIONS ADOPTED
PURSUANT THERETO.



LINCOLN COUNTY EXAMINING LAND SURVEYOR'S CERTIFICATION

EXAMINED THIS 23rd DAY OF February, 2010, A.D.

Ronald A. Pearson, PLS 9008LS

CERTIFICATE OF CLERK AND RECORDER

STATE OF MONTANA, COUNTY OF LINCOLN,
FILED THIS 25th DAY OF Feb, 2010, A.D., AT 1:30 O'CLOCK P.M.

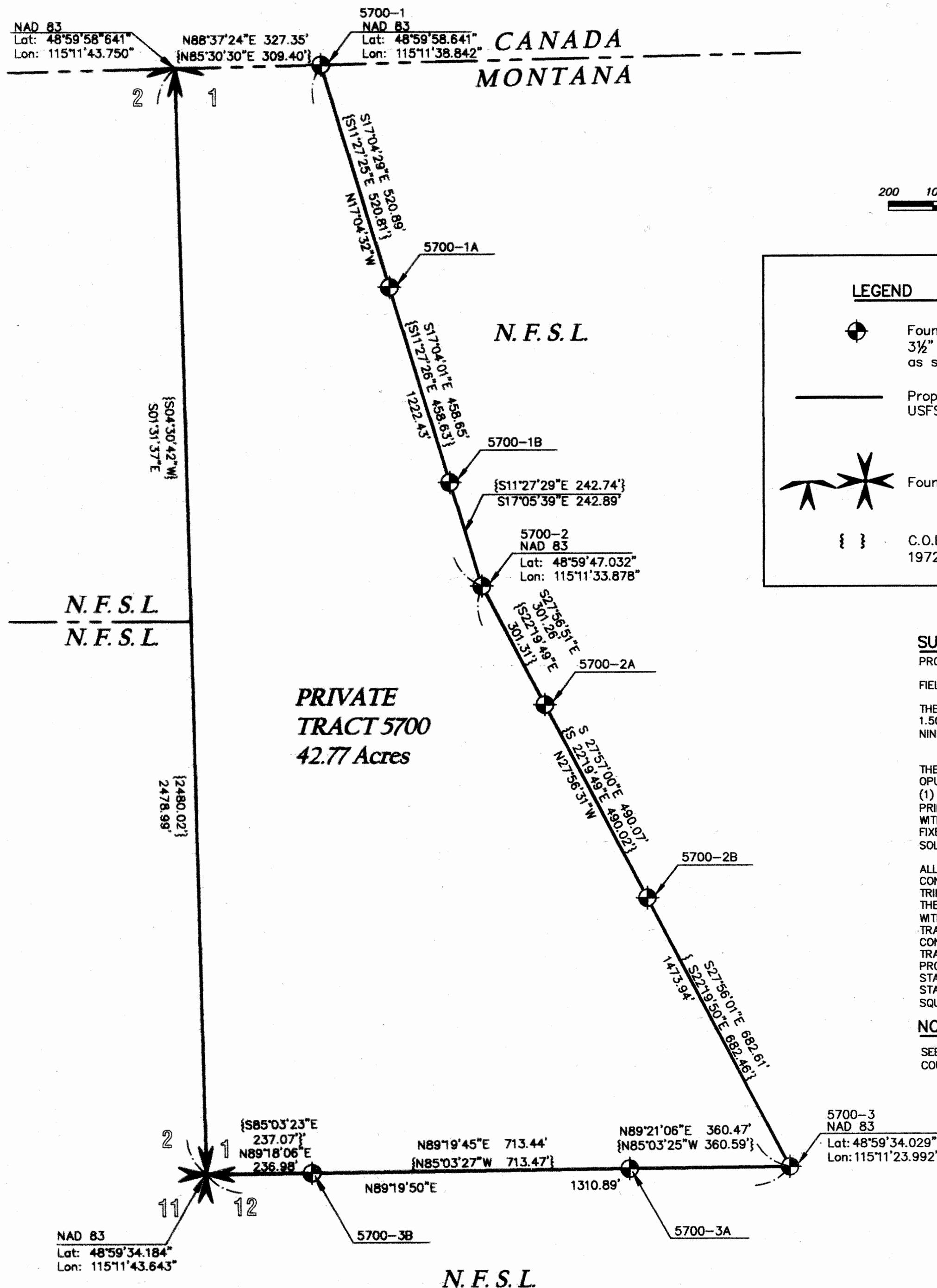
Tommy D. Lawler
COUNTY CLERK RECORDER

Jeannie Dennis
DEPUTY

DOCUMENT NO. 224449

CERTIFICATE OF SURVEY NO. 3993

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|------------------------|---------|----------|-------|--|--------------------|
| 1/4 | SECTION | TOWNSHIP | RANGE | CERTIFICATE OF SURVEY FOR K.N.F. - YOUNG DODGE | |
| 1 | 1 | 37 N | 28 W | GLAHE & ASSOCIATES PROFESSIONAL LAND SURVEYORS 303 Church Street Sandpoint, Idaho 83864 | |
| Project No. 09-046 KNP | | | | File Name: 09046 ROS | Plot Date: 2/11/10 |
| Scale: 1" = 200' | | | | Checked By: LAG | Drawn By: TRP |
| Date: OCT. 2009 | | | | Sheet: 1 of 1 | |



LEGEND

- Found, Army Corps of Engineers monument, a 3 1/2" Brass Cap marked with corner identification as shown.
- Property Boundary, Marked and Posted to USFS, Region One Standards
- Found, 2 1/2 ins. C.O.E. Brass Cap Monuments
- C.O.E. Libby Dam-Lake Koocanusa Cadastral 1972 (Sht 36 of 37)

SURVEY NARRATIVE-METHOD OF SURVEY

PROJECT: YOUNG DODGE CADASTRAL SURVEY

FIELD WORK PERFORMED FROM SEPTEMBER, 2009 TO OCTOBER, 2009.

THE SURVEY CONSISTED OF: FOUR CONTROLLING CORNERS TO BE TIED;
1.50 MILES OF PROPERTY LINE TO POST.
NINE (9) CORNER POSITIONS REQUIRING MAINTENANCE.

THE PROJECT GPS CONTROL COORDINATES WERE ESTABLISHED BY NGS
OPUS SOLUTIONS FROM THREE DIFFERENT BASE POINTS:
(1) DG9747 MTFV FLAT HEAD COMMUNI CORN ARP (2) DE6594 PRDS
PRIDDIS CORN ARP (3) DK4103 PLS6 POLSON 6 CORN ARP;
WITH OCCUPATION TIMES OF MORE THAN 6 HOURS, HOLDING ONE
FIXED POSITION AND USING THE OTHERS AS A CHECK. BOTH
SOLUTIONS YIELDED LESS THAN 0.012 (M) OF ERROR.

ALL CONTROLLING CORNERS WERE EITHER DIRECTLY OCCUPIED OR
CONVENTIONALLY TIED FROM GPS POSITIONS ESTABLISHED UTILIZING
TRIMBLE 4000 AND 4700SSI SERIES DUAL FREQUENCY RECEIVERS.
THE GPS VECTORS WERE ADJUSTED BY SIMULTANEOUS LEAST SQUARES
WITH "TRIMBLE GEOMATICS OFFICE" SOFTWARE.
TRAVERSES ALONG PROPERTY LINES WERE PERFORMED
CONVENTIONALLY WITH TOTAL STATIONS BETWEEN GPS POINTS. ALL
TRAVERSES WERE CLOSED BY STANDARD METHODS. TRAVERSES ALONG
PROPERTY LINES WERE PERFORMED CONVENTIONALLY WITH TOTAL
STATIONS BETWEEN GPS POINTS. ALL TRAVERSES WERE CLOSED BY
STANDARD METHODS AND ADJUSTED BY SIMULTANEOUS LEAST
SQUARES TO 95% CONFIDENCE WITH "NETWORKS" SOFTWARE.

NOTE

SEE CERTIFIED CORNER RECORDATION FORMS ON FILE WITH THE LINCOLN
COUNTY, CLERK AND RECORDER'S OFFICE.