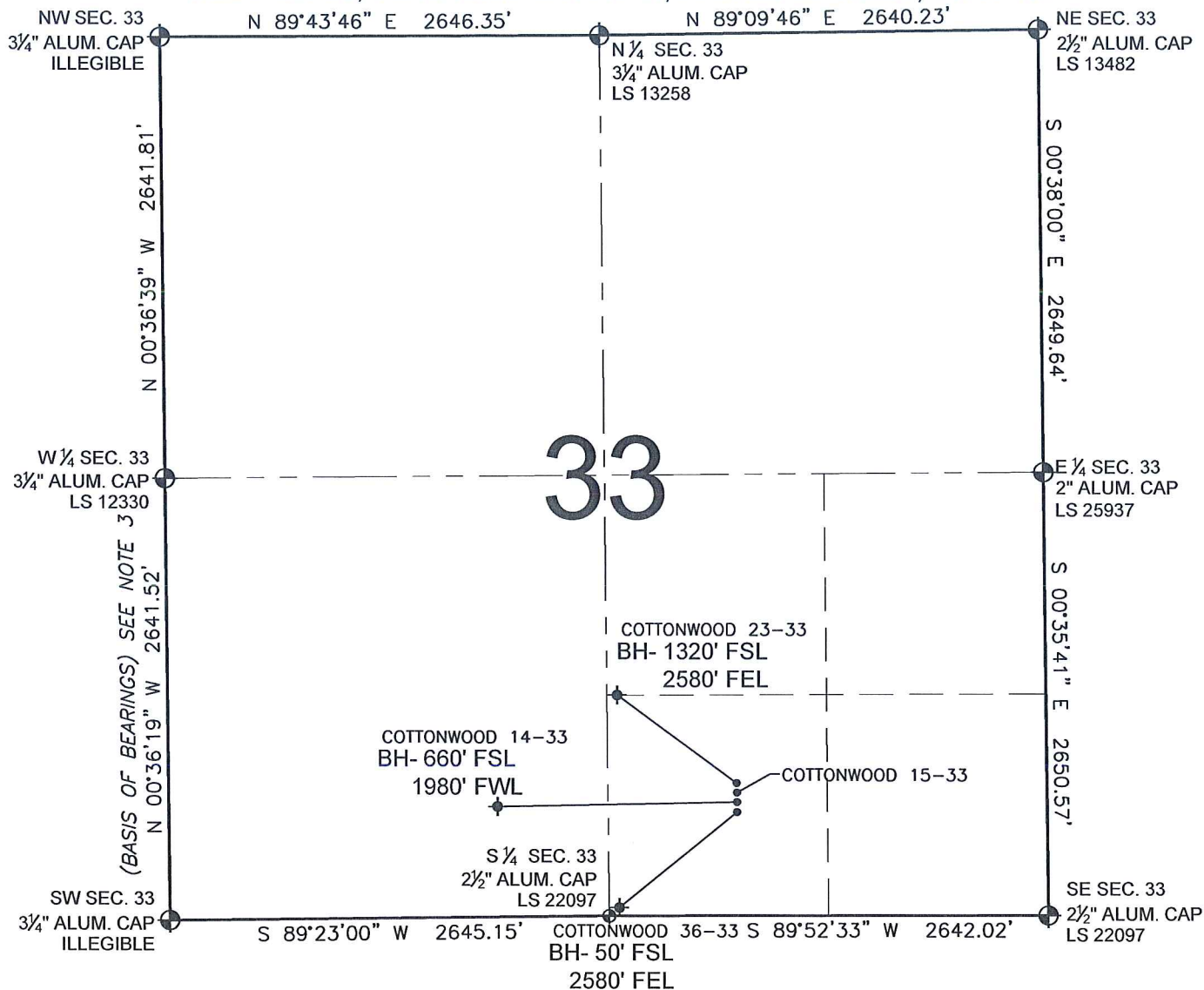


PAD DRAWING - COTTONWOOD 15-33 PAD

SECTION 33, TOWNSHIP 2 NORTH, RANGE 66 WEST, 6TH P.M.



NOTES:

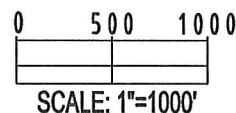
- THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
- ELEVATIONS SHOWN AT THE WELL HEAD, AS WELL AS HORIZONTAL CONTROL, ARE BASED ON GPS-RTK VALUES DERIVED FROM DOING 2-HOUR STATIC GPS SESSIONS AND REDUCTIONS USING O.P.U.S. SOLUTIONS.
VERTICAL = NAVD88; HORIZONTAL = NAD83/92
- THE BEARINGS SHOWN HEREON ARE BASED ON GPS OBSERVATIONS BETWEEN THE MONUMENTS SHOWN HEREON AS FOUND ON THE FIELD DATE BELOW.
- DISTANCES SHOWN ARE AT GROUND LEVEL, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED AT A PERPENDICULAR TO SECTION LINES.

LEGEND

- = EXISTING MONUMENT
 = BOTTOM HOLE
 BH= BOTTOM HOLE
 = PROPOSED WELL
 = EXISTING WELL

NOTES:

COTTONWOOD 36-33 TO BE AT 705' FSL, 1865' FEL.
 BOTTOM HOLE AT 50' FSL & 2580' FEL.
 COTTONWOOD 14-33 TO BE AT 721' FSL, 1865' FEL.
 BOTTOM HOLE AT 660' FSL & 1980' FWL.
 COTTONWOOD 15-33 TO BE AT 737' FSL, 1865' FEL.
 COTTONWOOD 23-33 TO BE AT 753' FSL, 1865' FEL.
 BOTTOM HOLE AT 1320' FSL & 2580' FEL.



REVISIONS

INITIAL	DATE
SMF	02-08-10

PREPARED BY:

PFS

Petroleum Field Services, LLC
1801 W. 13th Ave.
Denver, CO 80204



KERR-MCGEE OIL & GAS ONSHORE LP

FIELD DATE:
01-15-10

DRAWING DATE:
01-20-10

BY:
SMF

PAD NAME:
COTTONWOOD 15-33 PAD

SURFACE LOCATION:
WELD COUNTY, COLORADO
SW 1/4 SE 1/4, SEC. 33, T2N, R66W