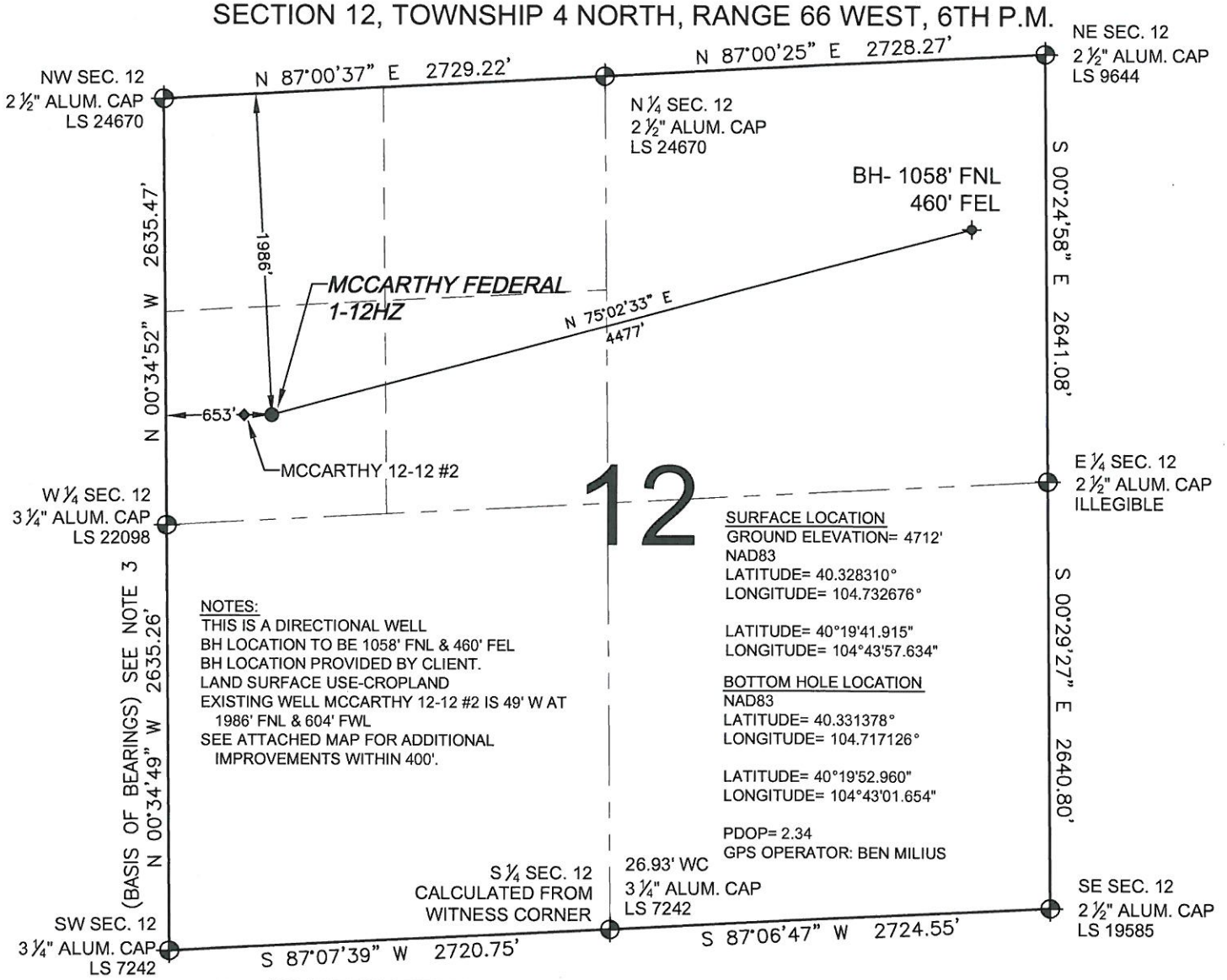
WELL LOCATION CERTIFICATE: MCCARTHY FEDERAL 1-12HZ

SECTION 12, TOWNSHIP 4 NORTH, RANGE 66 WEST, 6TH P.M.



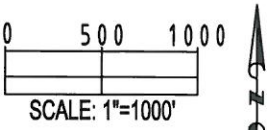
WELL **MCCARTHY FEDERAL 1-12HZ** TO BE LOCATED 1986' FNL AND 653' FWL

LEGEND

- ⊕ = EXISTING MONUMENT
- ✦ = BOTTOM HOLE
- ● = PROPOSED WELL
- ◆ = EXISTING WELL
- BH = BOTTOM HOLE

NOTES:

1. THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
2. 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
3. THE BEARINGS SHOWN HEREON ARE BASED ON GPS OBSERVATIONS BETWEEN THE MONUMENTS SHOWN HEREON AS FOUND ON THE FIELD DATE BELOW.
4. DISTANCES SHOWN ARE AT GROUND LEVEL, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED AT A PERPENDICULAR TO SECTION LINES.



I, ALAN WARNER, A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO DO HEREBY CERTIFY TO **KERR-MCGEE OIL & GAS ONSHORE LP**, THAT THE SURVEY AND WELL LOCATION CERTIFICATE SHOWN HEREON WERE DONE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THE DRAWING SHOWN HEREON ACCURATELY DEPICTS THE PROPOSED LOCATION OF THE WELL.

ALAN WARNER, PLS 28668
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
FOR AND ON BEHALF OF P.F.S., LLC

PURSUANT TO COLORADO STATE BOARD OF LICENSURE FOR ARCHITECTS, PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS' BOARD RULE 6.2.2, THIS CERTIFICATION IS BASED UPON THE PROFESSIONAL LAND SURVEYOR'S KNOWLEDGE, INFORMATION AND BELIEF; IS IN ACCORDANCE WITH APPLICABLE STANDARDS OF PRACTICE AND IS NOT A GUARANTY OR WARRANTY, EITHER EXPRESSED OR IMPLIED.

NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THIS SAID DATE OF THIS CERTIFICATION SHOWN HEREON.

PREPARED BY:	FIELD DATE:	WELL NAME:
PFS Petroleum Field Services, LLC 1801 W. 13th Ave. Denver, CO 80204	08-23-10	MCCARTHY FEDERAL 1-12HZ
	DRAWING DATE: 12-02-10	SURFACE LOCATION: WELD COUNTY, COLORADO
	BY: SMF	SW 1/4 NW 1/4, SEC. 12, T4N, R66W