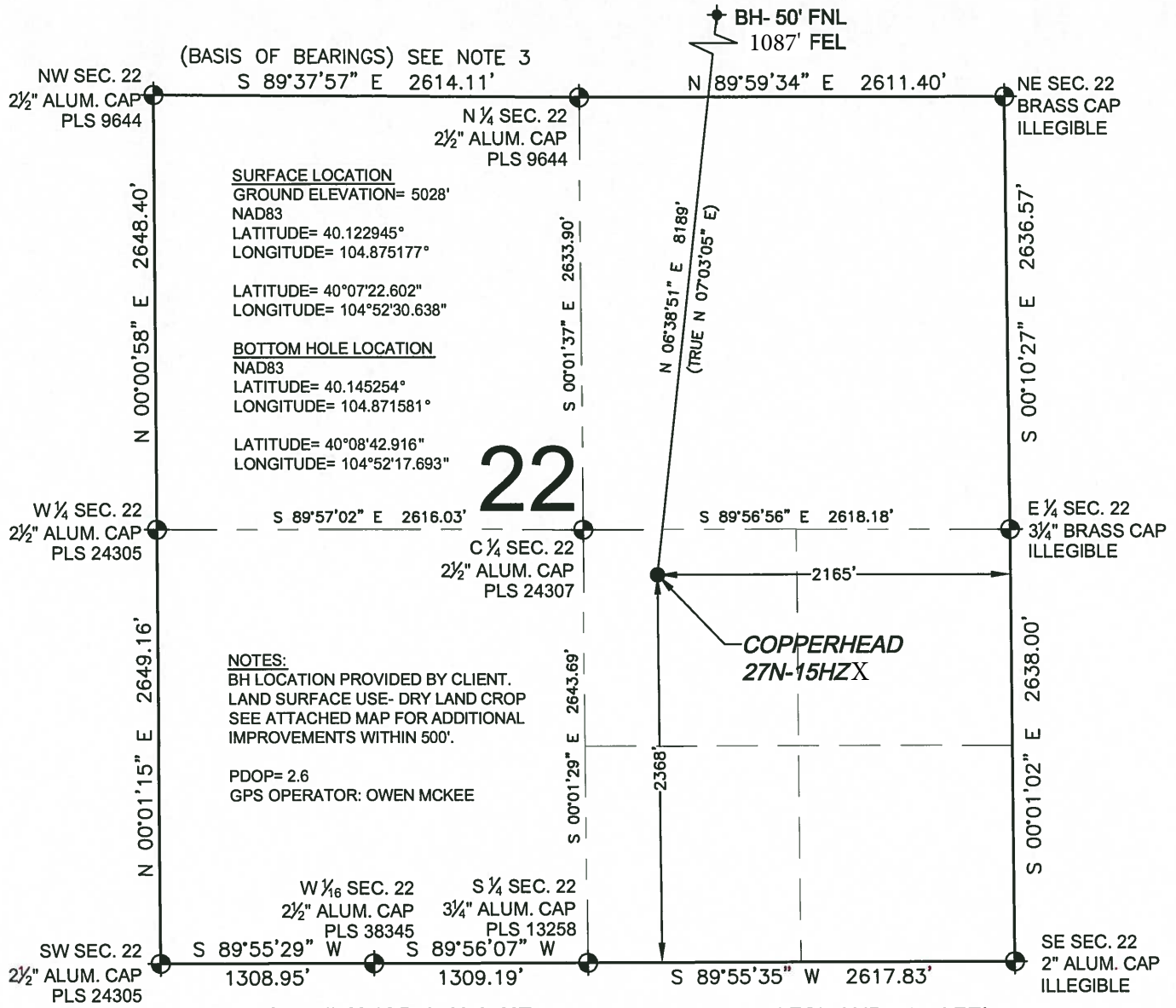


WELL LOCATION CERTIFICATE: COPPERHEAD 27N-15HZ X

SECTION 22, TOWNSHIP 2 NORTH, RANGE 67 WEST, 6TH P.M.



SURFACE LOCATION
GROUND ELEVATION= 5028'
NAD83
LATITUDE= 40.122945°
LONGITUDE= 104.875177°

LATITUDE= 40°07'22.602"
LONGITUDE= 104°52'30.638"

BOTTOM HOLE LOCATION
NAD83
LATITUDE= 40.145254°
LONGITUDE= 104.871581°

LATITUDE= 40°08'42.916"
LONGITUDE= 104°52'17.693"

NOTES:
BH LOCATION PROVIDED BY CLIENT.
LAND SURFACE USE- DRY LAND CROP
SEE ATTACHED MAP FOR ADDITIONAL
IMPROVEMENTS WITHIN 500'.

PDOP= 2.6
GPS OPERATOR: OWEN MCKEE

WELL COPPERHEAD 27N-15HZ TO BE LOCATED 2368' FSL AND 2165' FEL

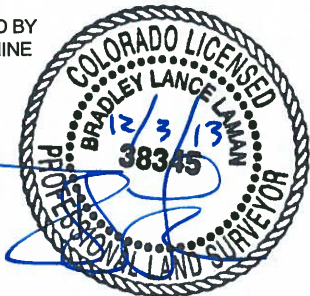
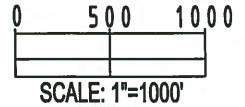
LEGEND

- ⊕ = EXISTING MONUMENT
- ⬤ = PROPOSED WELL
- BH = BOTTOM HOLE
- ⬥ = BOTTOM HOLE
- ◆ = EXISTING WELL

- NOTES:**
- THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
 - HORIZONTAL POSITIONS AND ORTHOMETRIC ELEVATIONS SHOWN AT THE WELL HEAD, ARE BASED ON GPS-RTK POSITIONS DERIVED FROM MINIMUM 2-HOUR STATIC OBSERVATIONS CORRECTED BY THE NATIONAL GEODETIC SURVEY ONLINE POSITIONING USER SERVICE, O.P.U.S. DATUM: HORIZONTAL = NAD83/2011, VERTICAL = NAVD88
 - THE BASIS OF BEARINGS ARE STATE PLANE COORDINATE SYSTEM GRID BEARINGS SHOWN HEREON BETWEEN THE DESCRIBED MONUMENTS SHOWN HEREON.
 - GRID DISTANCES ARE SHOWN, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED PERPENDICULAR TO SECTION LINES.

I, BRADLEY L. LAMAN, 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. THIS CERTIFICATE DOES NOT REPRESENT A LAND SURVEY PLAT OR IMPROVEMENT SURVEY PLAT AS DEFINED BY C.R.S. 38-51-102 AND CANNOT BE RELIED UPON TO DETERMINE OWNERSHIP.

BRADLEY L. LAMAN, PLS 38345
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
FOR AND ON BEHALF OF P.F.S., LLC



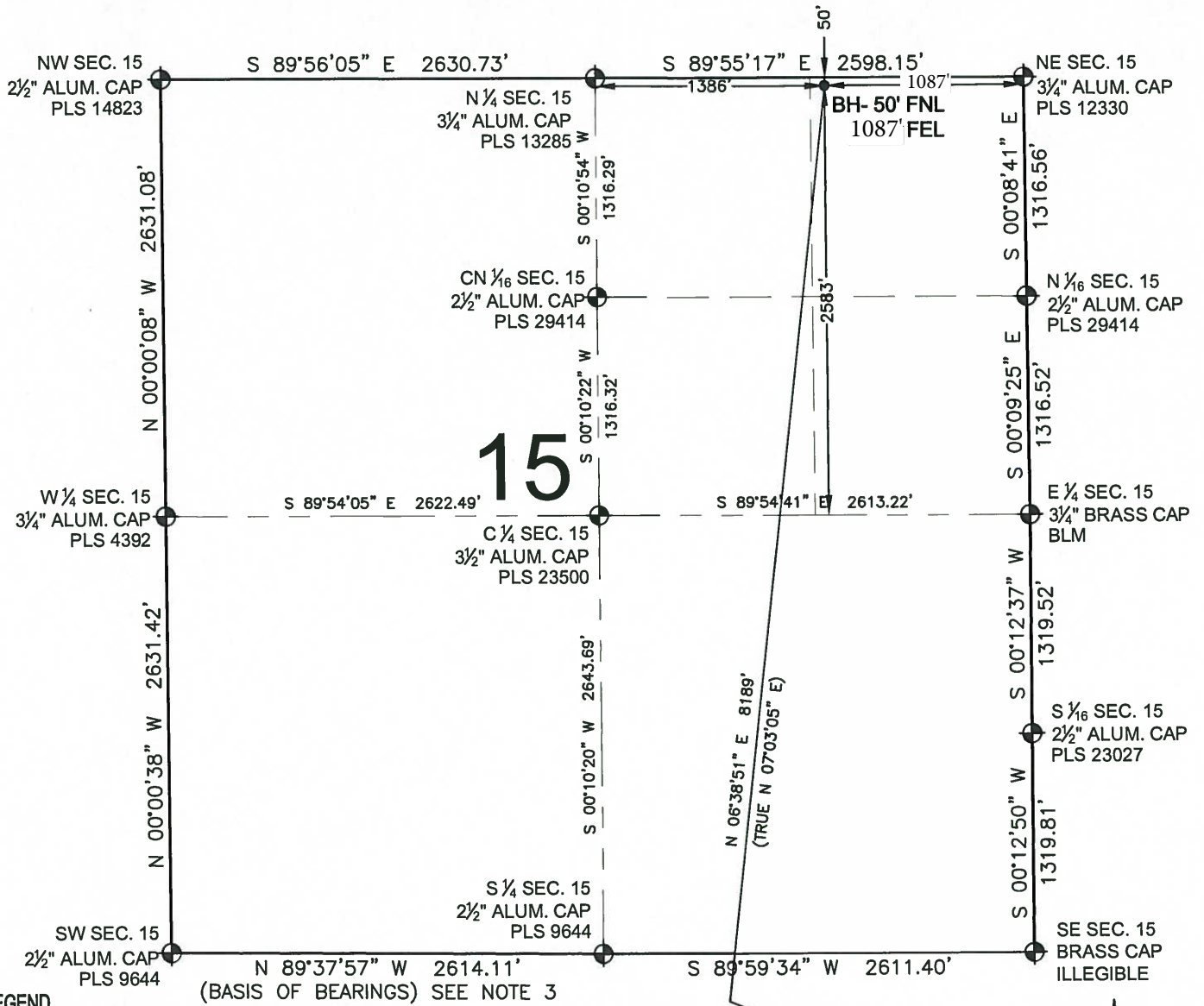
SHEET 1 OF 2

PREPARED BY: Petroleum Field Services, LLC 7536 Hilltop Circle Denver, CO 80221	FIELD DATE: 11-18-13	SURFACE LOCATION: NW 1/4, SE 1/4, SEC. 22, T2N, R67W, 6TH P.M.
	DRAWING DATE: 11-21-13	WELD COUNTY, COLORADO
BY: KAD	CHECKED: SNC	

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.

WELL LOCATION CERTIFICATE: COPPERHEAD 27N-15HZX

SECTION 15, TOWNSHIP 2 NORTH, RANGE 67 WEST, 6TH P.M.



BRADLEY L. LAMAN, PLS 38345
 COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
 FOR AND ON BEHALF OF P.F.S., LLC

SHEET 2 OF 2

PREPARED BY: Petroleum Field Services, LLC. 7535 Hilltop Circle Denver, CO 80221	FIELD DATE: 11-18-13	SURFACE LOCATION: NW 1/4, SE 1/4, SEC. 22, T2N, R67W, 6TH P.M. WELD COUNTY, COLORADO
	DRAWING DATE: 11-21-13	
	BY: KAD CHECKED: SNC	

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.