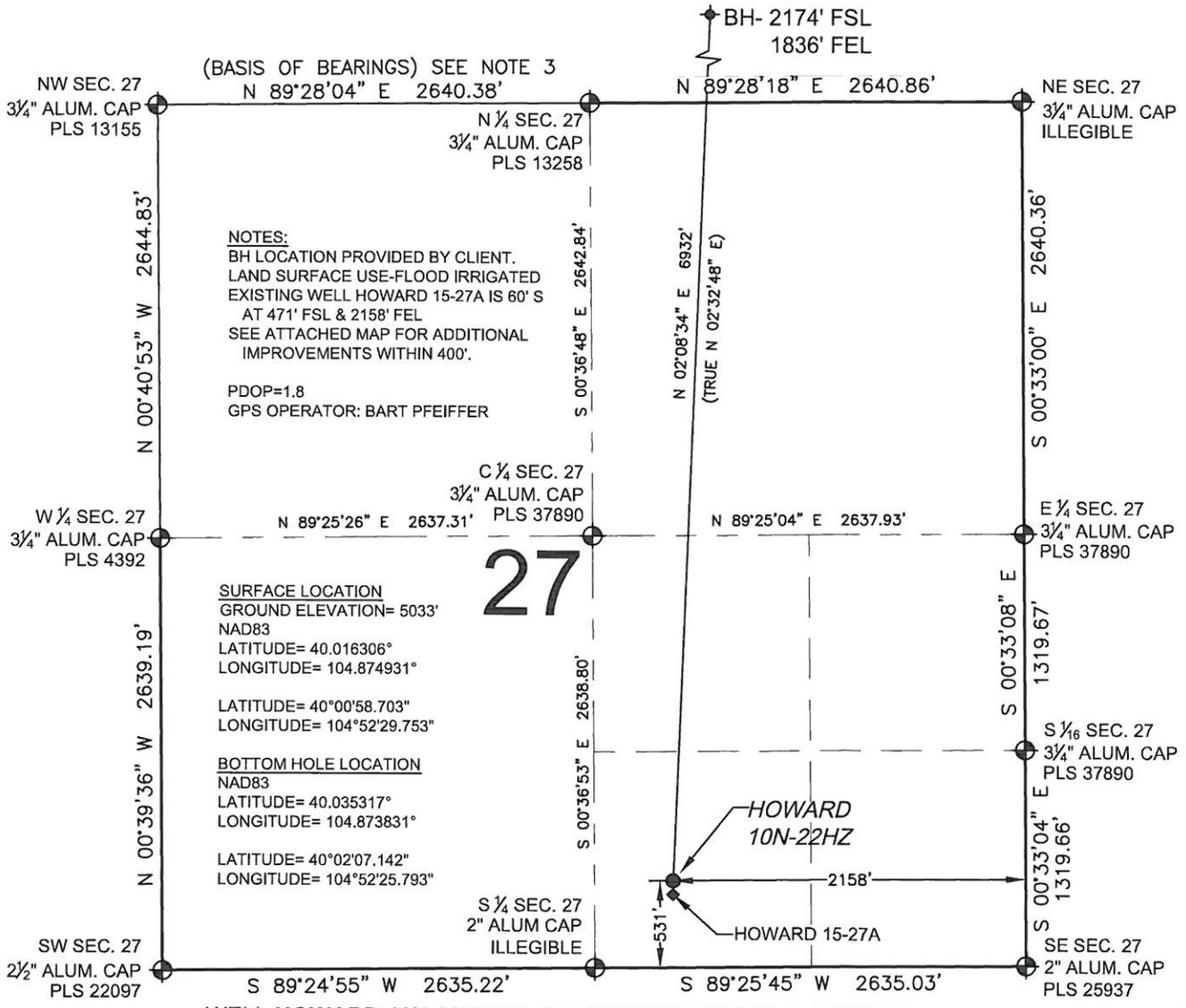


WELL LOCATION CERTIFICATE: HOWARD 10N-22HZ

SECTION 27, TOWNSHIP 1 NORTH, RANGE 67 WEST, 6TH P.M.



NOTES:
 BH LOCATION PROVIDED BY CLIENT.
 LAND SURFACE USE-FLOOD IRRIGATED
 EXISTING WELL HOWARD 15-27A IS 60' S
 AT 471' FSL & 2158' FEL
 SEE ATTACHED MAP FOR ADDITIONAL
 IMPROVEMENTS WITHIN 400'.
 PDOP=1.8
 GPS OPERATOR: BART PFEIFFER

SURFACE LOCATION
 GROUND ELEVATION= 5033'
 NAD83
 LATITUDE= 40.016306°
 LONGITUDE= 104.874931°
 LATITUDE= 40°00'58.703"
 LONGITUDE= 104°52'29.753"
BOTTOM HOLE LOCATION
 NAD83
 LATITUDE= 40.035317°
 LONGITUDE= 104.873831°
 LATITUDE= 40°02'07.142"
 LONGITUDE= 104°52'25.793"

27

WELL HOWARD 10N-22HZ TO BE LOCATED 531' FSL & 2158' FEL.

LEGEND

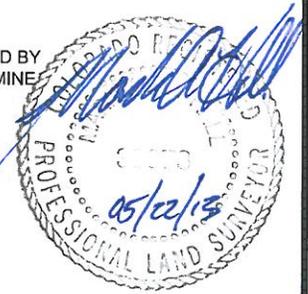
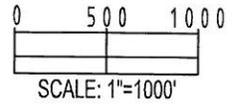
- ⊕ = EXISTING MONUMENT
- ⬥ = PROPOSED WELL
- ⬥ = BOTTOM HOLE
- ⬥ = EXISTING WELL
- BH = BOTTOM HOLE

NOTES:

1. THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
2. 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 = NAD83/2007, VERTICAL = NAVD88
3. THE BASIS OF BEARINGS ARE STATE PLANE COORDINATE SYSTEM GRID BEARINGS SHOWN HEREON BETWEEN THE DESCRIBED MONUMENTS SHOWN HEREON.
4. GRID DISTANCES ARE SHOWN, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED PERPENDICULAR TO SECTION LINES.

I, MARK A. HALL, 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.

MARK A. HALL, PLS 36073
 COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
 FOR AND ON BEHALF OF P.F.S., LLC



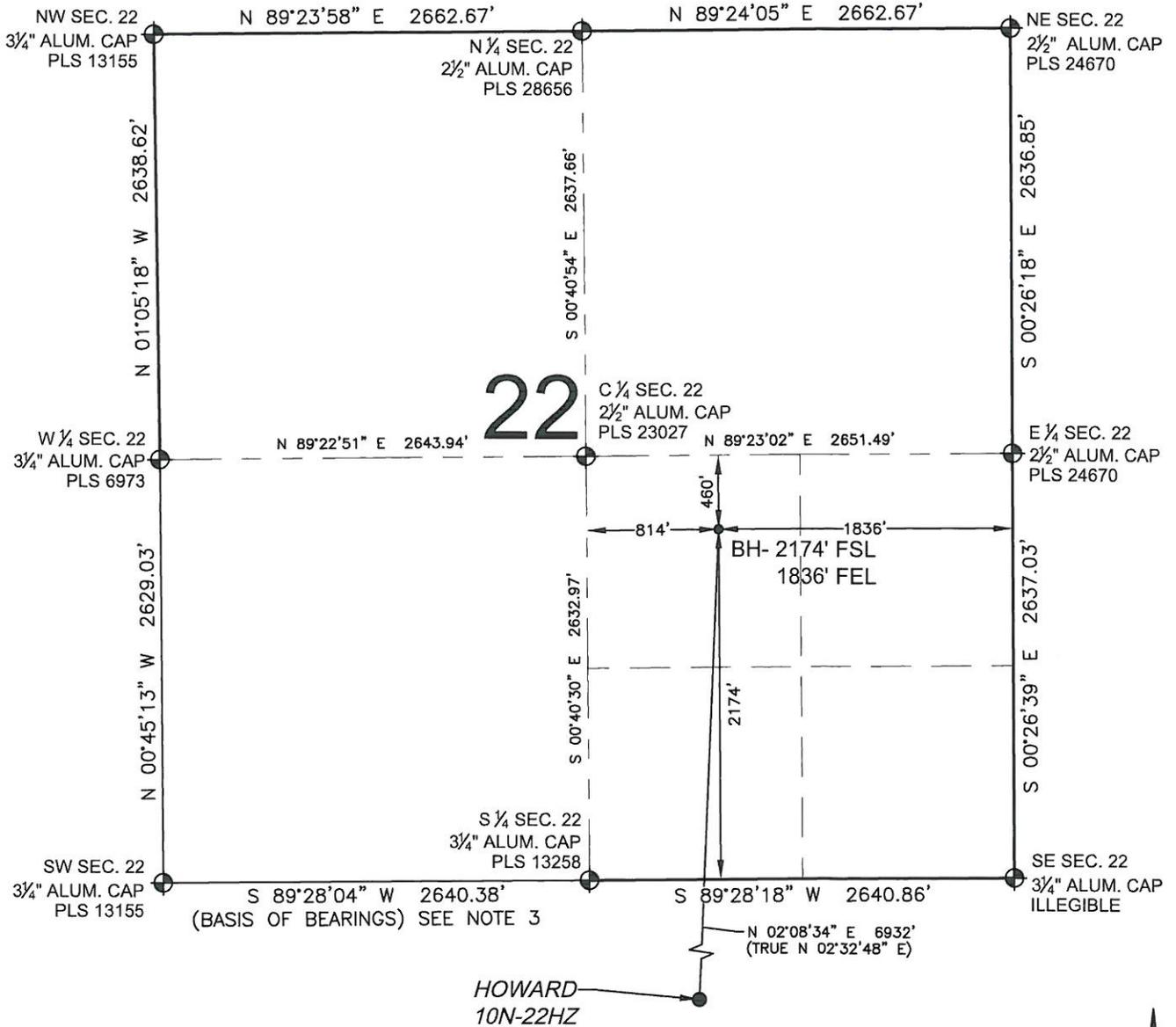
SHEET 1 OF 2

PREPARED BY Petroleum Field Services, LLC 1801 W. 13th Ave. Denver, CO 80204	FIELD DATE: 01-15-13	SURFACE LOCATION: SW 1/4 SE 1/4, SEC. 27, T1N, R67W, 6TH P.M.
	DRAWING DATE: 05-17-13	BY: CLM
WELD COUNTY, COLORADO		

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: HOWARD 10N-22HZ

SECTION 22, TOWNSHIP 1 NORTH, RANGE 67 WEST, 6TH P.M.

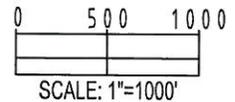


NOTES:

1. THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
2. 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 = NAD83/2007, VERTICAL = NAVD88
3. THE BASIS OF BEARINGS ARE STATE PLANE COORDINATE SYSTEM GRID BEARINGS SHOWN HEREON BETWEEN THE DESCRIBED MONUMENTS SHOWN HEREON.
4. GRID DISTANCES ARE SHOWN, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED PERPENDICULAR TO SECTION LINES.

LEGEND

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



MARK A. HALL, PLS 36073
 COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
 FOR AND ON BEHALF OF P.F.S., LLC

SHEET 2 OF 2

PREPARED BY: PFS Petroleum Field Services, LLC 1801 W. 13th Ave. Denver, CO 80204	FIELD DATE: 01-15-13 DRAWING DATE: 05-17-13 BY: CLM CHECKED: SMF	SURFACE LOCATION: SW ¼ SE ¼, SEC. 27, T1N, R67W, 6TH P.M. WELD COUNTY, COLORADO
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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.