

WELL LOCATION CERTIFICATE: HOWARD 10C-29HZ

SECTION 32, TOWNSHIP 1 NORTH, RANGE 67 WEST, 6TH P.M.

NE SEC. 29
FOUND
#6 REBAR

W 1/4 SEC. 29
3/4" ALUM. CAP
ILLEGIBLE

N 00°37'40" W 2634.76'

29

BH- 2180' FSL
2130' FEL

NOTES:
BH LOCATION PROVIDED BY CLIENT.
LAND SURFACE USE-IMPROVED PASTURE
SEE ATTACHED MAP FOR ADDITIONAL
IMPROVEMENTS WITHIN 400'.

PDOP= 2.2
GPS OPERATOR: OWEN MCKEE

S 00°43'59" E 5274.46'

NW SEC. 32
2 1/2" ALUM. CAP
LS 22097

N 89°35'46" E 2643.69'

N 89°35'32" E 2656.14'

NE SEC. 32
3/4" ALUM. CAP
LS 10377

N 1/4 SEC. 32
3/4" ALUM. CAP
LS 13258

SURFACE LOCATION
GROUND ELEVATION= 5057'
NAD83
LATITUDE= 40.007998°
LONGITUDE= 104.910385°

LATITUDE= 40°00'28.793"
LONGITUDE= 104°54'37.386"

BOTTOM HOLE LOCATION
NAD83
LATITUDE= 40.020819°
LONGITUDE= 104.912516°

LATITUDE= 40°01'14.949"
LONGITUDE= 104°54'45.057"

32

(TRUE N 07°16'56" W)

2491'

HOWARD
10C-29HZ

1549'

(BASIS OF BEARINGS) SEE NOTE 3
S 00°25'37" E 2638.72'

E 1/4 SEC. 32
2 1/2" ALUM. CAP
LS 12374

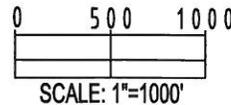
WELL HOWARD 10C-29HZ TO BE LOCATED 2491' FNL AND 1549' FEL

N 00°39'16" W 5278.76'

SW SEC. 32
2 1/2" ALUM. CAP
ILLEGIBLE

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 THE MONUMENTS SHOWN HEREON.
4. GRID DISTANCES ARE SHOWN, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED PERPENDICULAR TO SECTION LINES.

I, STEVEN D. PARKER, 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.



STEVEN D. PARKER, PLS 38053
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
FOR AND ON BEHALF OF P.F.S., LLC

PREPARED BY:  Petroleum Field Services, LLC 1801 W. 13th Ave. Denver, CO 80204	FIELD DATE: 03-17-11	SURFACE LOCATION: SW 1/4 NE 1/4, SEC. 32, T1N, R67W WELD COUNTY, COLORADO
	DRAWING DATE: 03-24-11	BY: SMF

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.