

# WELL LOCATION CERTIFICATE: HOWARD 9C-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  
510' 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

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

N 89°35'46" E 2643.69'

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

N 89°35'32" E 2656.14'

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

### SURFACE LOCATION

GROUND ELEVATION= 5057'

NAD83

LATITUDE= 40.007998°

LONGITUDE= 104.910214°

LATITUDE= 40°00'28.793"

LONGITUDE= 104°54'36.769"

### BOTTOM HOLE LOCATION

NAD83

LATITUDE= 40.020821°

LONGITUDE= 104.906731°

LATITUDE= 40°01'14.956"

LONGITUDE= 104°54'24.233"

## 32

N 11°24'43" E 4772'  
(TRUE N 11°47'44" E)

(BASIS OF BEARINGS) SEE NOTE 3

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

WELL HOWARD 9C-29HZ TO BE LOCATED 2491' FNL AND 1501' FEL

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

### LEGEND



= EXISTING MONUMENT



= BOTTOM HOLE

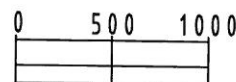


= PROPOSED WELL



= EXISTING WELL

BH = BOTTOM HOLE



SCALE: 1"=1000'

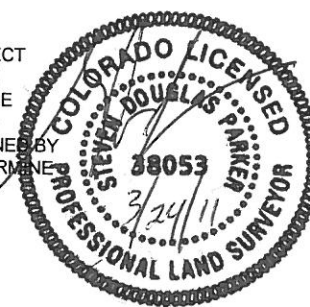


### NOTES:

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

FIELD DATE:  
03-17-11  
DRAWING DATE:  
03-24-11  
BY:  
SMF

SURFACE LOCATION:  
SW 1/4 NE 1/4,  
SEC. 32, T1N, R67W  
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.