

WELL LOCATION CERTIFICATE: POWERS 26N-27HZ

SECTION 22, TOWNSHIP 2 NORTH, RANGE 65 WEST, 6TH P.M.

NW COR. SEC. 22
2 1/2" ALUM. CAP
PLS 28656, 1993

N 89°32'15" E 2646.93'

N 1/4 COR. SEC. 22
2" ALUM. CAP
PLS 25937, 1999

N 89°33'00" E 2646.35'

NE COR. SEC. 22
2" ALUM. CAP
PLS 25937, 1999
HEEL- 60' FNL
148' FEL

SURFACE LOCATION
GROUND ELEVATION= 4895'
NAD83 STATE PLANE CO N
LATITUDE= 40.130530°
LONGITUDE= 104.644865°

LATITUDE= 40°07'49.907"
LONGITUDE= 104°38'41.516"

HEEL LOCATION
WGS84 UTM 13N
LATITUDE= 40.131211°
LONGITUDE= 104.641171°

LATITUDE= 40°07'52.358"
LONGITUDE= 104°38'28.215"

BOTTOM HOLE LOCATION
NAD83 STATE PLANE CO N
LATITUDE= 40.115896°
LONGITUDE= 104.641106°

LATITUDE= 40°06'57.226"
LONGITUDE= 104°38'27.982"

NOTES:
BH LOCATION PROVIDED BY CLIENT.
SEE ATTACHED MAP FOR ADDITIONAL
IMPROVEMENTS WITHIN 500'.

PDOP= 3.0
GPS OPERATOR: BART PFEIFER

S 1/4 COR. SEC. 22
3/4" BRASS CAP
PLS 26595, 2000

C 1/4 COR. SEC. 22
2 1/2" ALUM. CAP
PLS 38345, 2013

N 89°17'24" E 2645.37'

W 1/4 COR. SEC. 22
3/4" BRASS CAP
PLS 26595, 2000

N 00°47'32" W 2667.45'

N 00°47'47" W 2666.22'

SW COR. SEC. 22
3/4" BRASS CAP
PLS 26595, 2000

S 88°46'58" W 2643.74'
(BASIS OF BEARINGS) SEE NOTE 2

S 89°19'31" W 2605.09'

BH-350' FNL
112' FEL

30' W.C. TO
SE COR. SEC. 22
2 1/2" ALUM. CAP
PLS 38175 (NTS)

SE COR. SEC. 22
CALC'D FROM W.C.

LEGEND

- = EXISTING MONUMENT ♦ = BOTTOM HOLE
● = PROPOSED WELL ▲ = HEEL LOCATION
BH = BOTTOM HOLE ○ = CALCULATED POSITION

NOTES:

- THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
- BEARINGS ARE BASED ON THE ASSUMPTION THAT THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 22, BEARS S88°46'58"W BETWEEN THE MONUMENTS DESCRIBED HEREON.
- GRID DISTANCES ARE SHOWN, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED PERPENDICULAR TO SECTION LINES. TO GET GROUND DISTANCES MULTIPLY THE SHOWN DISTANCE BY 1.000272228.
- ALL LINES SHOWN THAT ARE WITHOUT DIMENSION SHOULD BE CONSIDERED SCALED AND ONLY REPRESENT A GRAPHICAL DEPICTION OF THE APPROXIMATE LOCATION OF SAID LINE.
- FIELD VERIFICATION OF MONUMENTS COMPLETED ON MARCH 5, 2015. WELL STAKING COMPLETED ON OCTOBER 14, 2014.

SHEET 1 OF 2

PREPARED BY:



FIELD DATE:

10-14-14

DRAWING DATE:

04-02-15

BY:

SMF

CHECKED:

TJN

SURFACE LOCATION:

NE 1/4 NE 1/4,

SEC. 22, T2N, R65W, 6TH P.M.

WELD COUNTY, COLORADO

I, JACOB S. FRISCH, 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.

JACOB S. FRISCH, PLS 38149

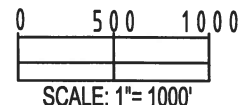
DATE: 04-07-15

JOB NO: B14.APC.0538

FOR AND ON BEHALF OF PFS, LLC



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.



SECTION 27, TOWNSHIP 2 NORTH, RANGE 65 WEST, 6TH P.M.

S 00°44'27" E 5579'
(TRUE S 00°11'09" E)

 = EXISTING MONUMENT  = BOTTOM HOLE
 = PROPOSED WELL  = HEEL LOCATION
 BH = BOTTOM HOLE  = CALCULATED POSITION

NOTES:

1. THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
2. BEARINGS ARE BASED ON THE ASSUMPTION THAT THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 22, BEARS S88°46'58"W BETWEEN THE MONUMENTS DESCRIBED HEREON.
3. GRID DISTANCES ARE SHOWN, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED PERPENDICULAR TO SECTION LINES. TO GET GROUND DISTANCES MULTIPLY THE SHOWN DISTANCE BY 1.000272228.
4. ALL LINES SHOWN THAT ARE WITHOUT DIMENSION SHOULD BE CONSIDERED SCALED AND ONLY REPRESENT A GRAPHICAL DEPICTION OF THE APPROXIMATE LOCATION OF SAID LINE.
5. FIELD VERIFICATION OF MONUMENTS COMPLETED ON MARCH 5, 2015. WELL STAKING COMPLETED ON OCTOBER 14, 2014.

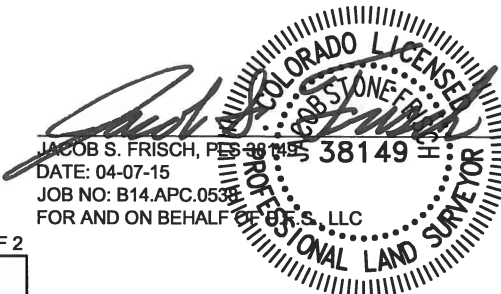
SHEET 2 OF 2

PREPARED BY:

PFS  **ic**
Petroleum Field Services, LLC
7535 Hilltop Circle
Denver, CO 80221

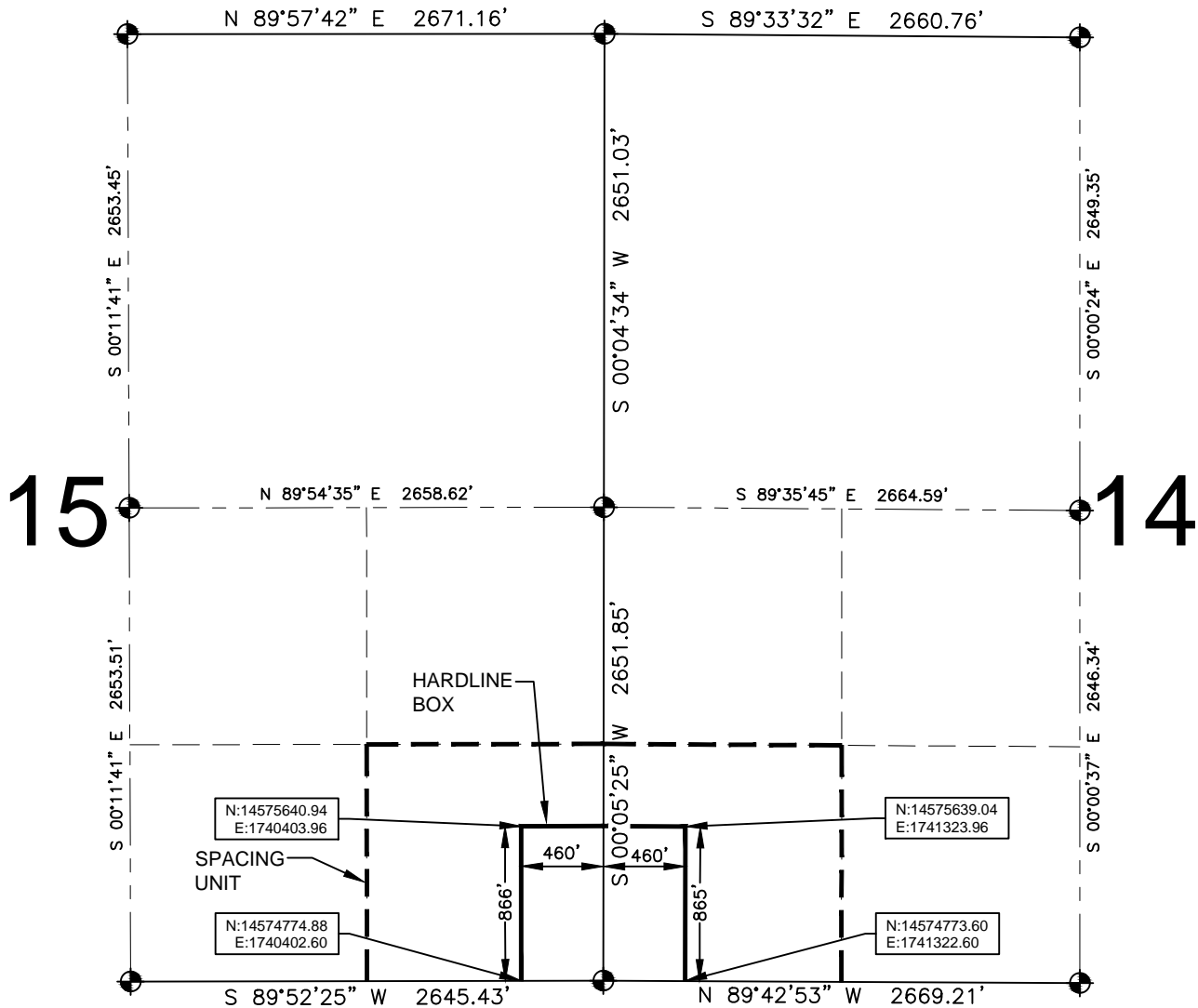
FIELD DATE: 10-14-14	SURFACE LOCATION: NE 1/4 NE 1/4, SEC. 22, T2N, R65W, 6TH P.M. WELD COUNTY, COLORADO
DRAWING DATE: 04-02-15	
BY: SME	CHECKED: TIN

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.



POWERS 26N-27HZ

SECTION 15, TOWNSHIP 2 NORTH, RANGE 65 WEST, 6TH P.M.



LEGEND

- = EXISTING MONUMENT
- = PROPOSED HEEL
- = CALCULATED POSITION
- = BOTTOM HOLE
- BH = BOTTOM HOLE

HEEL LOCATION

WGS84 UTM 13N
 LATITUDE= 40.131211°
 LONGITUDE= 104.641171°

LATITUDE= 40°07'52.358"
 LONGITUDE= 104°38'28.215"

BOTTOM HOLE LOCATION

NAD83 STATE PLANE CO N
 LATITUDE= 40.115896°
 LONGITUDE= 104.641106°

LATITUDE= 40°06'57.226"
 LONGITUDE= 104°38'27.982"

QRT/QRT SECTIONS WITHIN PATH OF THE HARDLINE

SESE, SEC. 15
 SWSW, SEC. 14

AVAILABLE FOOTAGE

7022'

NOTES:

- THIS DOCUMENT IS NOT A LAND SURVEY PLAT OR IMPROVEMENT SURVEY PLAT. THIS DOCUMENT DOES NOT REFLECT A FIELD SURVEY. SECTION BREAKDOWN, MONUMENTATION AND HORIZONTAL POSITIONS SHOWN ARE BASED ON THE HEEL AND BOTTOM HOLE LOCATION PROVIDED BY ANADARKO PETROLEUM CORPORATION.
- COORDINATES ARE PROVIDED IN WGS84, UTM ZONE 13N.