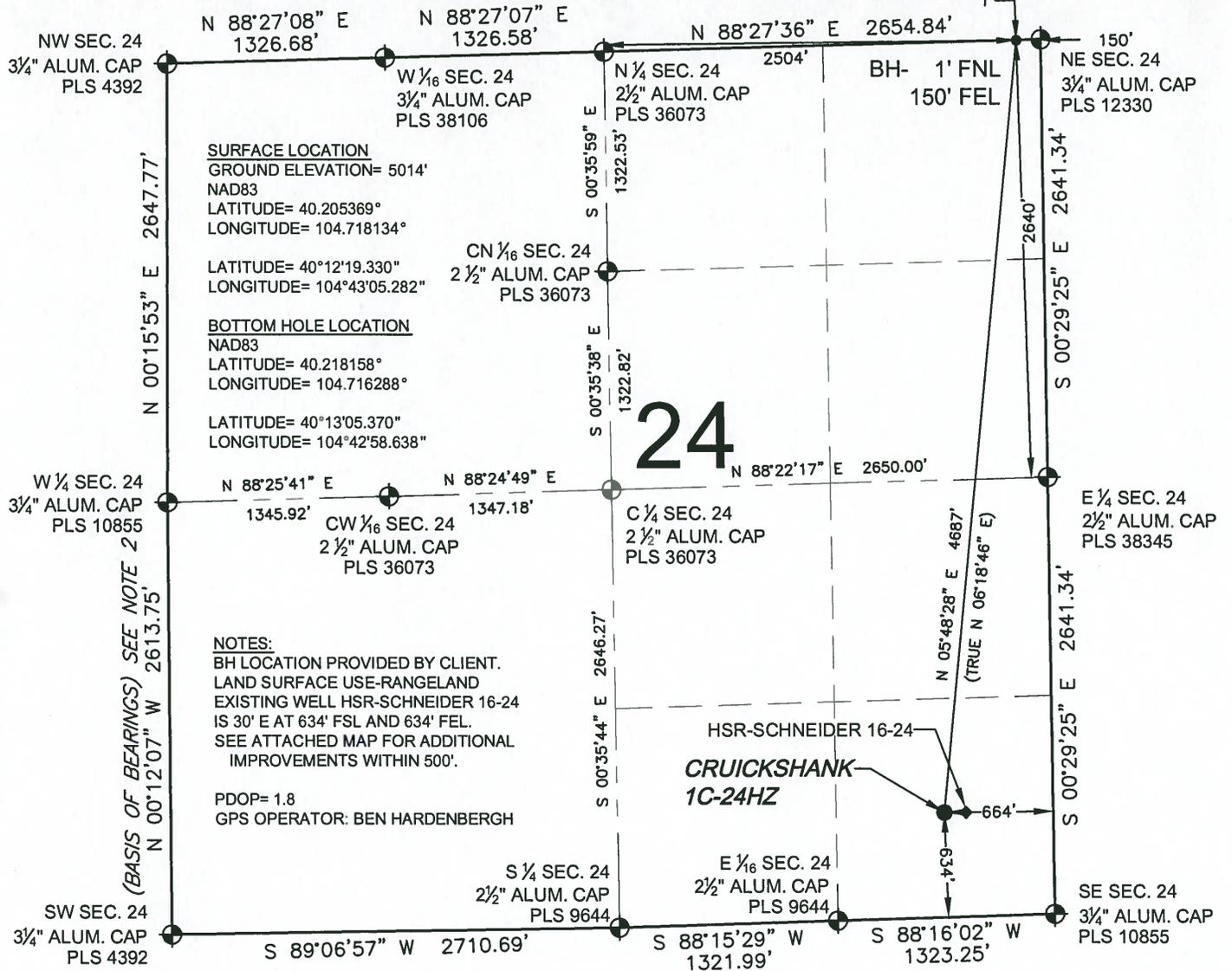


WELL LOCATION CERTIFICATE: CRUICKSHANK 1C-24HZ

SECTION 24, TOWNSHIP 3 NORTH, RANGE 66 WEST, 6TH P.M.



WELL CRUICKSHANK 1C-24HZ TO BE LOCATED 634' FSL AND 664' FEL

LEGEND

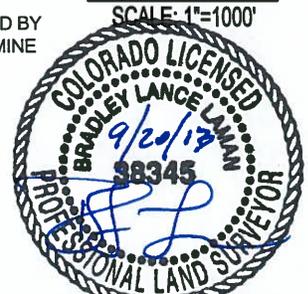
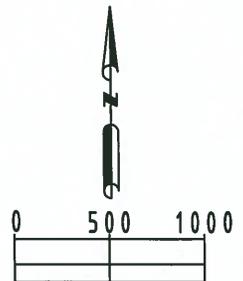
- ⊕ = EXISTING MONUMENT
- ⊙ = PROPOSED WELL
- ⊕ = BOTTOM HOLE
- ⊙ = EXISTING WELL
- BH = BOTTOM HOLE

NOTES:

- THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
- BEARINGS AND DISTANCES SHOWN HEREON ARE GRID AND BASED ON THE COLORADO STATE PLANE COORDINATE SYSTEM, NAD 83/2011 BETWEEN MONUMENTS AS LABELED HEREON AND ELEVATIONS SHOWN ARE NAVD 88, AS DERIVED BY GPS OBSERVATIONS.
- 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

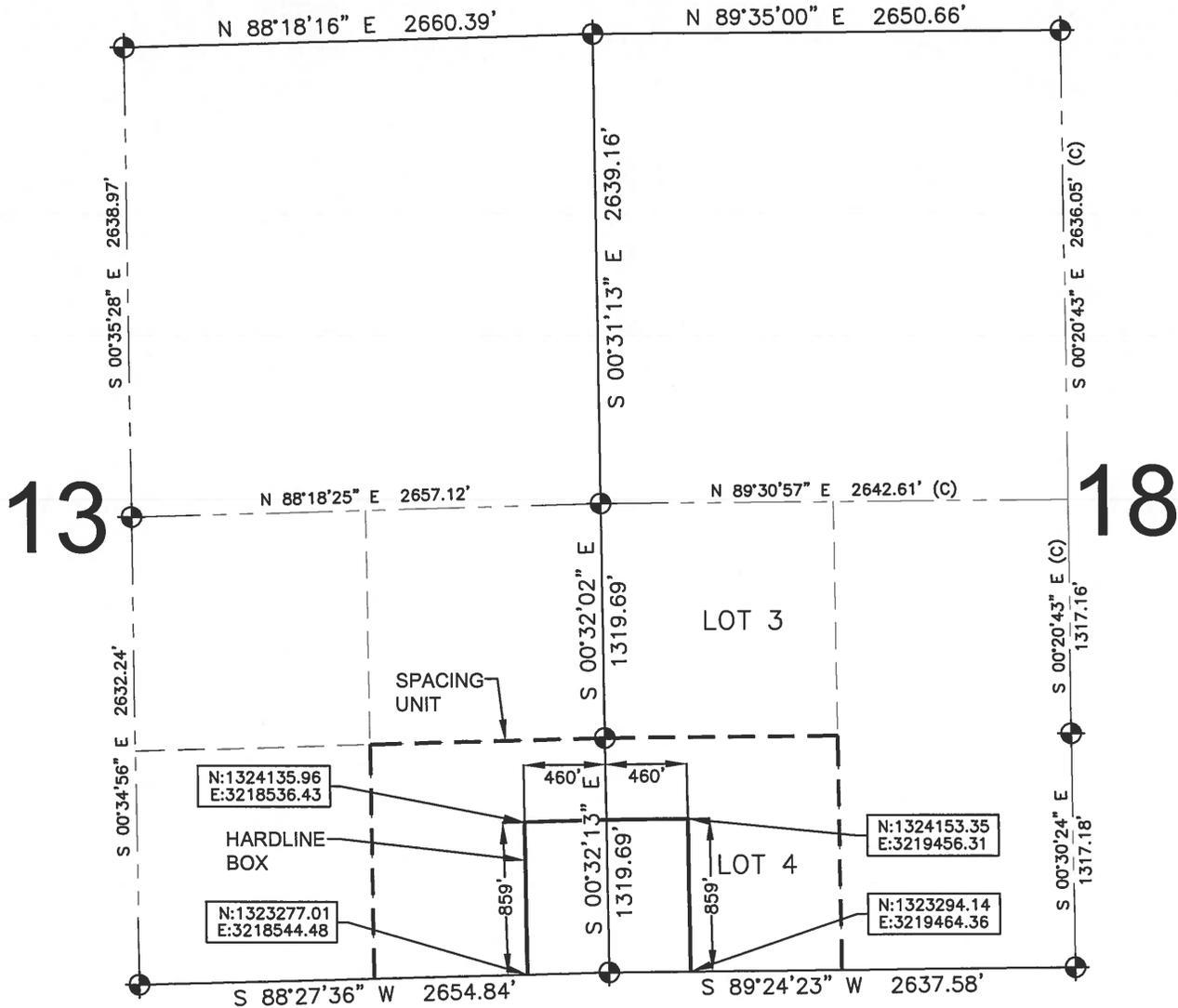


PREPARED BY:  Petroleum Field Services, LLC 1801 W. 13th Ave. Denver, CO 80204	FIELD DATE: 08-22-12	SURFACE LOCATION: SE 1/4 SE 1/4, SEC. 24, T3N, R66W, 6TH P.M. WELD COUNTY, COLORADO
	DRAWING DATE: 09-16-13	BY: JAH CHECKED: CPO

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.

HARDLINE EXHIBIT: CRUICKSHANK 1C-24HZ

SECTION 13, TOWNSHIP 3 NORTH, RANGE 66 WEST, 6TH P.M.



LEGEND

- ⊕ = EXISTING MONUMENT ⊕ = BOTTOM HOLE
- = PROPOSED HEEL BH = BOTTOM HOLE

HEEL LOCATION

NAD83
 LATITUDE= 40.202670°
 LONGITUDE= 104.716292°

 LATITUDE= 40°12'09.611"
 LONGITUDE= 104°42'58.652"

QRT/QRT SECTIONS WITHIN PATH OF THE HARDLINE.

SESE, SEC. 13
 LOT 4, SW 1/4, SEC. 18, T3N, R66W

BOTTOM HOLE LOCATION

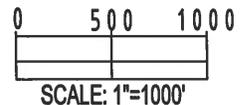
NAD83
 LATITUDE= 40.218158°
 LONGITUDE= 104.716288°

 LATITUDE= 40°13'05.370"
 LONGITUDE= 104°42'58.638"

AVAILABLE FOOTAGE

6998'

NOTES:
 1. 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



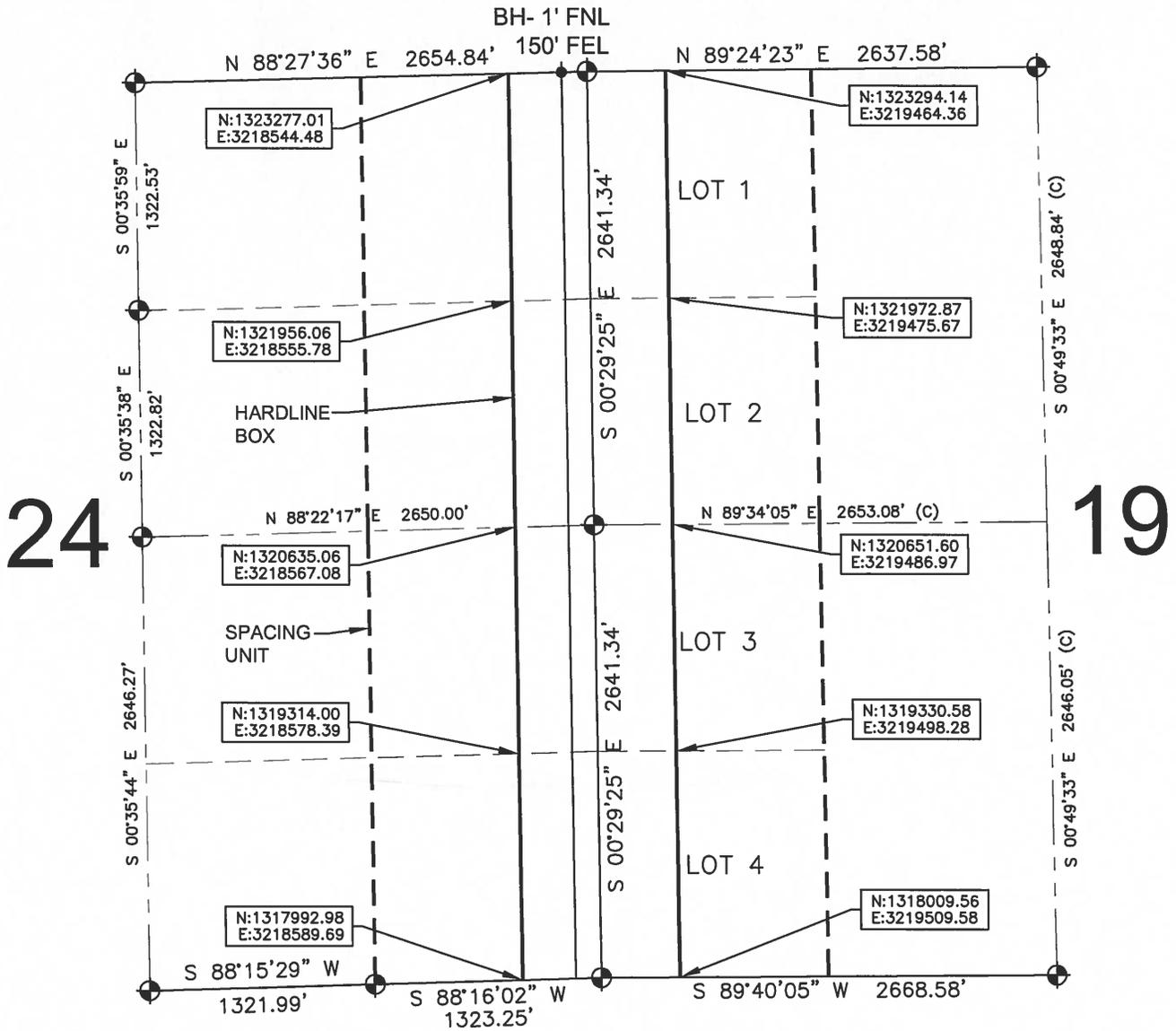
SHEET 1 OF 3



DRAWING DATE: 02-24-14		HEEL LOCATION: NE 1/4 NE 1/4, SEC. 25, T3N, R66W, 6TH P.M.	
BY: SMF	CHECKED: DRF	WELD COUNTY, COLORADO	

HARDLINE EXHIBIT: CRUICKSHANK 1C-24HZ

SECTION 24, TOWNSHIP 3 NORTH, RANGE 66 WEST, 6TH P.M.



LEGEND

- ⊕ = EXISTING MONUMENT ⊕ = BOTTOM HOLE
- = PROPOSED HEEL BH = BOTTOM HOLE

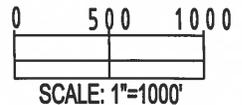
QRT/QRT SECTIONS WITHIN PATH OF THE HARDLINE.

- NENE, SEC. 24
- SENE, SEC. 24
- NESE, SEC. 24
- SESE, SEC. 24

NOTES:

1. 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

- LOT 1, NW 1/4, SEC. 19, T3N, R65W
- LOT 2, NW 1/4, SEC. 19, T3N, R65W
- LOT 3, SW 1/4, SEC. 19, T3N, R65W
- LOT 4, SW 1/4, SEC. 19, T3N, R65W



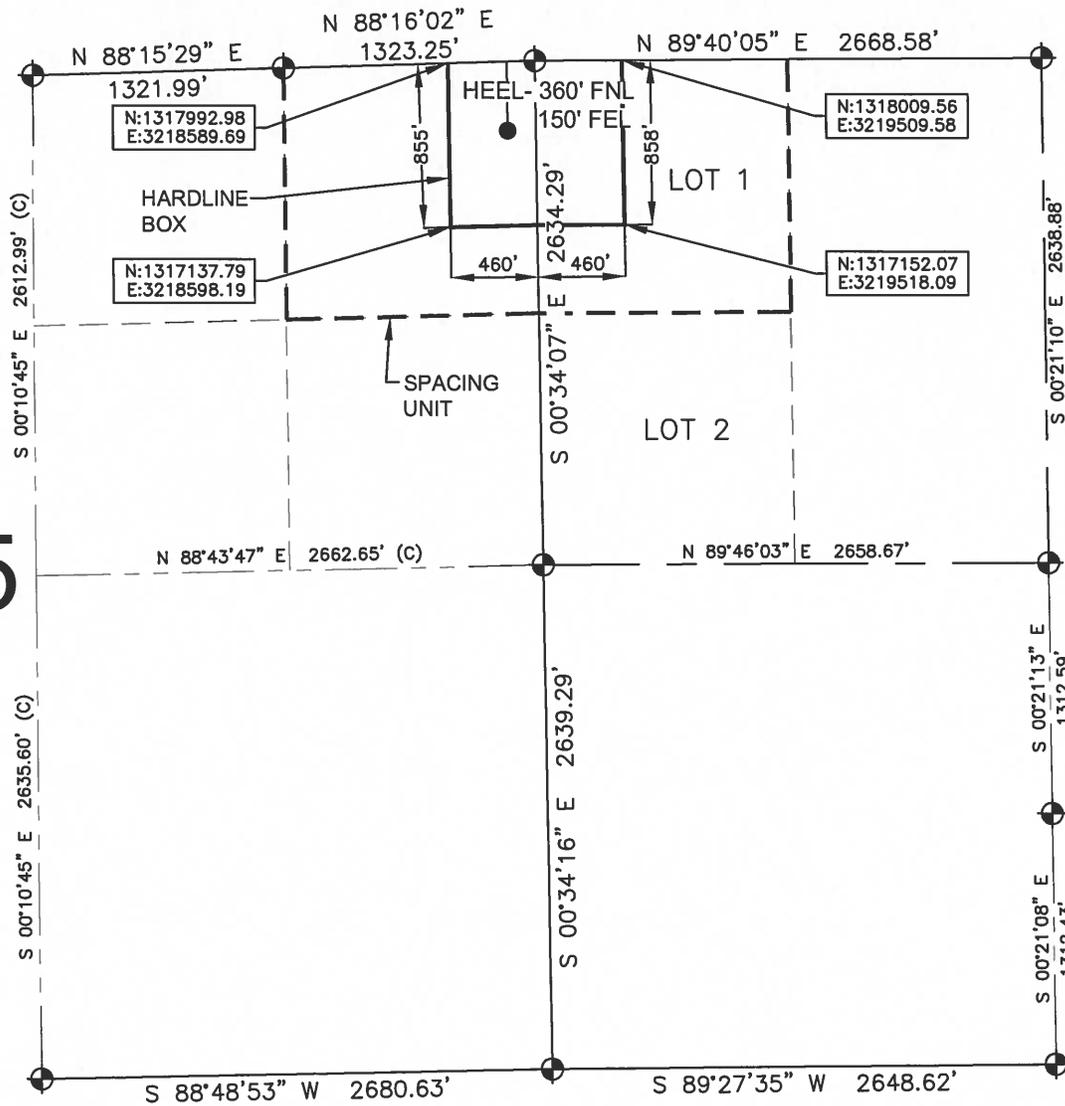
SHEET 2 OF 3



DRAWING DATE: 02-24-14		HEEL LOCATION: NE 1/4 NE 1/4, SEC. 25, T3N, R66W, 6TH P.M.	
BY: SMF	CHECKED: DRF	WELD COUNTY, COLORADO	

HARDLINE EXHIBIT: CRUICKSHANK 1C-24HZ

SECTION 25, TOWNSHIP 3 NORTH, RANGE 66 WEST, 6TH P.M.



25

30

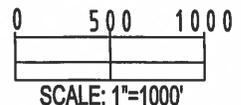
LEGEND

- ⊕ = EXISTING MONUMENT
- ⊙ = PROPOSED HEEL
- ⊖ = BOTTOM HOLE
- BH = BOTTOM HOLE

QRT/QRT SECTIONS WITHIN PATH OF THE HARDLINE.

NENE, SEC. 25
LOT 1, NW 1/4, SEC. 30, T3N, R66W

- 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



SHEET 3 OF 3



DRAWING DATE: 02-24-14		HEEL LOCATION: NE 1/4 NE 1/4, SEC. 25, T3N, R66W, 6TH P.M.	
BY: SMF	CHECKED: DRF	WELD COUNTY, COLORADO	