

WELL LOCATION CERTIFICATE: NRC 12-8

SECTION 8, TOWNSHIP 1 NORTH, RANGE 67 WEST, 6TH P.M.

NW SEC. 8
2½" ALUM. CAP
LS 28656

S 89°47'44" E 2623.09'

S 89°47'32" E 2634.28'

NE SEC. 8
¾" ALUM. CAP
LS 33642

N ¼ SEC. 8
¾" ALUM. CAP
LS 33642

NOTES:

THIS IS A DIRECTIONAL WELL
BH LOCATION TO BE 2130' FSL & 510' FWL
BH LOCATION PROVIDED BY CLIENT.
LAND SURFACE USE-OPEN FIELD
TWINNING PROPOSED WELL NRC 14-8
TO BE 16' N
PROPOSED WELL NRC 14-8 TO BE
1596' FSL & 932' FWL
EXISTING WELL ROCKY MOUNTAIN
FUEL CO #1 IS 69' NE
SEE ATTACHED MAP FOR ADDITIONAL
IMPROVEMENTS WITHIN 400'.

S 00°27'46" E 2639.38'

N 00°13'52" W 2642.16'

W ¼ SEC. 8
2½" ALUM. CAP
LS 28286

E ¼ SEC. 8
¾" ALUM. CAP
LS 33642

(BASIS OF BEARINGS) SEE NOTE 3
N 00°14'09" W 2642.79'

BH- 2130' FSL
510' FWL

ROCKY MOUNTAIN
FUEL CO #1

NRC 14-8

NRC 12-8

SURFACE LOCATION

GROUND ELEVATION= 5024'
NAD83
LATITUDE= 40.062711°
LONGITUDE= 104.920608°

BOTTOM HOLE LOCATION

NAD83
LATITUDE= 40.064232°
LONGITUDE= 104.922109°

PDOP= 2.20

GPS OPERATOR: TRAVIS KRAICH

S 00°27'57" E 2639.49'

SW SEC. 8
¾" ALUM. CAP
LS 38100

N 89°51'36" W 2638.92'

N 89°51'51" W 2639.68'

S ¼ SEC. 8
2½" ALUM. CAP
LS 13482

SE SEC. 8
¾" ALUM. CAP
LS 10855

WELL NRC 12-8 TO BE LOCATED 1580' FSL AND 932' FWL, SECTION 8, T1N, R67W OF THE 6th P.M.

LEGEND

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



NOTES:

1. THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
2. ELEVATIONS SHOWN AT THE WELL HEAD, AS WELL AS HORIZONTAL CONTROL, ARE BASED ON GPS-RTK VALUES DERIVED FROM DOING 2-HOUR STATIC GPS SESSIONS AND REDUCTIONS USING O.P.U.S. SOLUTIONS.
VERTICAL = NAVD88; HORIZONTAL = NAD83/92
3. THE BEARINGS SHOWN HEREON ARE BASED ON GPS OBSERVATIONS BETWEEN THE MONUMENTS SHOWN HEREON AS FOUND ON THE FIELD DATE BELOW.
4. DISTANCES SHOWN ARE AT GROUND LEVEL, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED AT A PERPENDICULAR TO SECTION LINES.

I, JERRY F. HARCEK JR., 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 **NRC 12-8**. 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.

JERRY F. HARCEK JR., PLS 34997
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
FOR AND ON BEHALF OF P.F.S., LLC

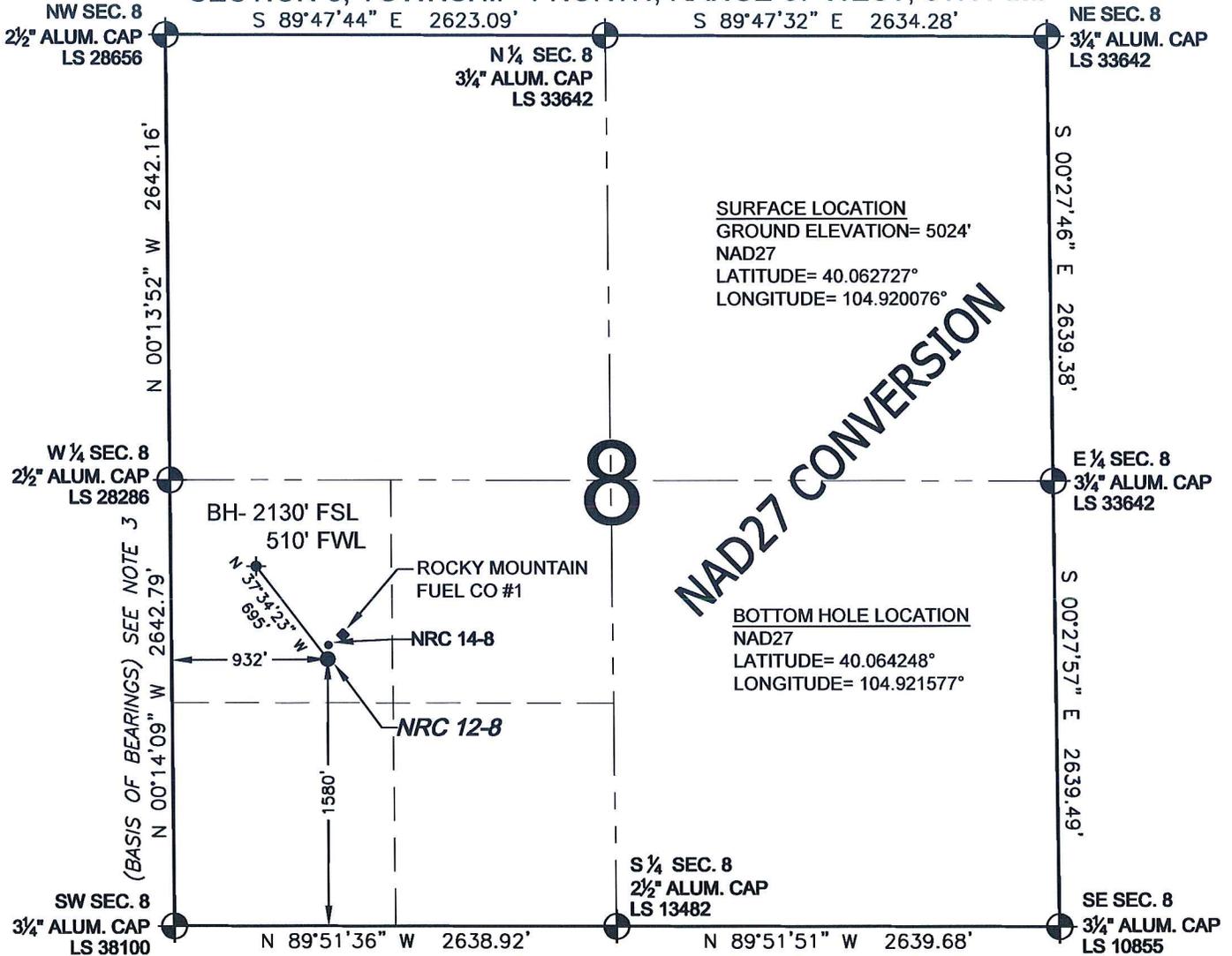


PREPARED BY:  PFS Petroleum Field Services, LLC 1801 W. 13th Ave. Denver, CO 80204	FIELD DATE: 12-09-09	WELL NAME: NRC 12-8
	DRAWING DATE: 12-11-09	SURFACE LOCATION: WELD COUNTY, COLORADO NW 1/4 SW 1/4, SEC. 8, T1N, R67W
BY: SMF		

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.

EXHIBIT: NAD27 CONVERSION

SECTION 8, TOWNSHIP 1 NORTH, RANGE 67 WEST, 6TH P.M.



WELL NRC 12-8 TO BE LOCATED 1580' FSL AND 932' FWL, SECTION 8, T1N, R67W OF THE 6th P.M.

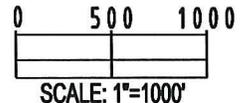
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- ⊕ (with dot) = BOTTOM HOLE
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NOTE: LATITUDE AND LONGITUDE SHOWN WERE CONVERTED FROM NAD83 USING CORPSCON 6.0 (PROGRAM). PFS DOES NOT WARRANT OR GUARANTEE THEIR ACCURACY.



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	DRAWING DATE: 12-11-09	SURFACE LOCATION: WELD COUNTY, COLORADO
	BY: SMF	NW 1/4 SW 1/4, SEC. 8, T1N, R67W

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