

# WELL LOCATION CERTIFICATE: NRC 16-9

SECTION 9, TOWNSHIP 1 NORTH, RANGE 67 WEST, 6TH P.M.

NW SEC. 9  
3/4" ALUM. CAP  
LS 33642

N 89°31'11" E 2634.24'

N 89°31'22" E 2632.37'

NE SEC. 9  
2" ALUM. CAP  
LS 25937

N 1/4 SEC. 9  
3/4" ALUM. CAP  
LS 33642

N 00°27'46" W 2639.38'

**NOTES:**  
THIS IS A DIRECTIONAL WELL  
BH LOCATION TO BE 660' FSL & 660' FEL  
BH LOCATION PROVIDED BY CLIENT.  
LAND SURFACE USE-OPEN FIELD  
TWINNING PROPOSED WELL NRC 39-9  
TO BE 16' N  
PROPOSED WELL NRC 39-9 TO BE  
1103' FSL & 1502' FEL  
EXISTING WELL ROCKY MOUNTAIN FUEL CO  
F #3 IS 57' SW  
SEE ATTACHED MAP FOR ADDITIONAL  
IMPROVEMENTS WITHIN 400'.

S 00°19'40" E 2642.89'

W 1/4 SEC. 9  
3/4" ALUM. CAP  
LS 33642

(BASIS OF BEARINGS) SEE NOTE 3  
N 00°27'57" W 2639.49'

**SURFACE LOCATION**  
GROUND ELEVATION= 5025'  
NAD83  
LATITUDE= 40.061251°  
LONGITUDE= 104.891678°

**BOTTOM HOLE LOCATION**  
NAD83  
LATITUDE= 40.060081°  
LONGITUDE= 104.888676°

PDOP= 1.92  
GPS OPERATOR: TRAVIS KRAICH

ROCKY MOUNTAIN  
FUEL CO F #3

NRC 39-9

NRC 16-9

BH- 660' FSL  
660' FEL

E 1/4 SEC. 9  
2" ALUM. CAP  
LS 25937

S 00°20'23" E 2642.91'

SW SEC. 9  
3/4" ALUM. CAP  
LS 10855

S 89°35'49" W 2627.35'

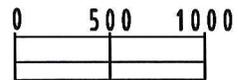
S 89°35'45" W 2627.21'

SE SEC. 9  
2" ALUM. CAP  
LS 25937

WELL NRC 16-9 TO BE LOCATED 1086' FSL AND 1501' FEL, SECTION 9, T1N, R67W OF THE 6th P.M.

## LEGEND

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



SCALE: 1"=1000'



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 16-9**. 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



## NOTES:

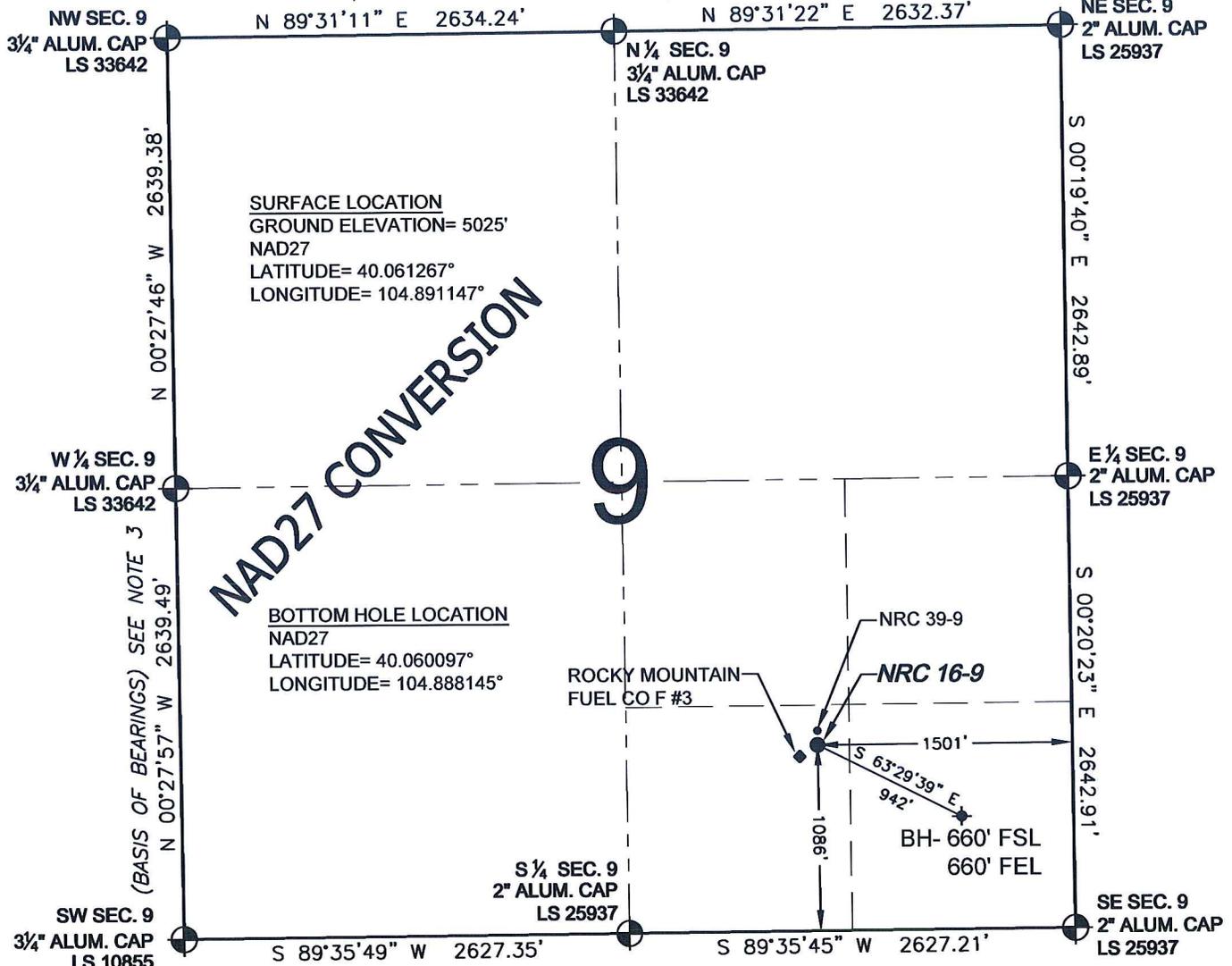
1. THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
2. ELEVATIONS SHOWN AT THE WELL HEAD, AS WELL AS HORIZONTAL CONTROL, ARE BASED ON GPS-RTK VALUES DERIVED FROM DOING 2-HOUR STATIC GPS SESSIONS AND REDUCTIONS USING O.P.U.S. SOLUTIONS.  
VERTICAL = 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.

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.

PREPARED BY:	FIELD DATE:	WELL NAME:
	12-11-09	NRC 16-9
	DRAWING DATE:	SURFACE LOCATION:
	12-14-09	WELD COUNTY, COLORADO
	BY:	SW 1/4 SE 1/4, SEC. 9, T1N, R67W
	SMF	

# EXHIBIT: NAD27 CONVERSION

SECTION 9, TOWNSHIP 1 NORTH, RANGE 67 WEST, 6TH P.M.



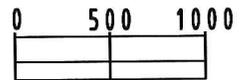
**NOTES:**

- THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215 (PDOP VALUE IS LESS THAN 6.0, LATITUDE AND LONGITUDE ARE ACCURATE TO 5 DECIMAL PLACES, AND GPS OBSERVATIONS ARE DIFFERENTIAL AND DONE BY QUALIFIED PERSONNEL.)
- 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
- THE BEARINGS SHOWN HEREON ARE BASED ON GPS OBSERVATIONS BETWEEN THE MONUMENTS SHOWN HEREON AS FOUND ON THE FIELD DATE BELOW.
- DISTANCES SHOWN ARE AT GROUND LEVEL, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED AT A PERPENDICULAR TO SECTION LINES.

**LEGEND**

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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.



SCALE: 1"=1000'

PREPARED BY:  Petroleum Field Services, LLC 1801 W. 13th Ave. Denver, CO 80204	FIELD DATE: 12-11-09	WELL NAME: NRC 16-9
	DRAWING DATE: 12-14-09	SURFACE LOCATION: WELD COUNTY, COLORADO SW 1/4 SE 1/4, SEC. 9, 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.