

# POWELL 5-64 15-16-1CHZ WELL LOCATION CERTIFICATE

NW COR. SEC. 15  
3/4" ALUM. CAP  
PLS 2279, 1979

N 1/4 COR. SEC. 15  
2 1/2" ALUM. CAP  
PLS 22573, 1991

NE COR. SEC. 15  
2 1/2" ALUM. CAP  
PLS 28285, 2012

BHL: 990' FNL }  
100' FWL } SEC. 16

LP: 990' FNL  
600' FEL

**NOTES:**  
BH LOCATION PROVIDED BY CLIENT.  
LAND SURFACE USE-RANGELAND  
SEE LOCATION DRAWING FOR ADDITIONAL  
IMPROVEMENTS WITHIN 500'

PDOP=1.5  
GPS OPERATOR: CHARLIE SCOTT

# 15

W 1/4 COR. SEC. 15  
2 1/2" ALUM. CAP  
PLS 22573, 1991

**SURFACE LOCATION:**  
GROUND ELEVATION=5937'  
NAD83  
LATITUDE:39.614970°  
LONGITUDE:104.530989°

**LANDING POINT LOCATION:**  
NAD83  
LATITUDE:39.620115°  
LONGITUDE:104.531428°

**BOTTOM HOLE LOCATION:**  
NAD83  
LATITUDE:39.620506°  
LONGITUDE:104.566240°

S 1/4 COR. SEC. 15  
2 1/2" ALUM. CAP  
PLS 22573, 1991

C 1/4 COR. SEC. 15  
2 1/2" ALUM. CAP  
PLS 22573, 1991

POWELL 5-64 15-16-1CHZ

E 1/4 COR. SEC. 15  
2 1/2" BRASS CAP  
RLS 434, NO DATE

SE COR. SEC. 15  
2 1/2" BRASS CAP  
RLS 434, NO DATE

SW COR. SEC. 15  
2 1/2" ALUM. CAP  
PLS 22573, 1991

BASIS OF BEARINGS (SEE NOTE 2)  
N01°13'04"E 2657.54'

N01°12'55"E 2657.78'

S88°54'16"E 2619.76'

S88°54'11"E 2620.18'

N89°10'04"W 9810.60'

N88°59'03"W 2622.69'

N88°58'37"W 2622.68'

S01°05'54"W 2650.75'

S01°05'32"W 2650.14'

S01°09'08"W 2654.13'

S01°09'15"W 2653.89'

N03°47'15"W 1878.89'

N89°03'49"W 2625.65'

N89°03'31"W 2625.55'

**LEGEND**

- ⊕ = EXISTING MONUMENT      ⊕ = BOTTOM HOLE
- = CALCULATED POSITION    ▲ = LANDING POINT
- = PROPOSED WELL        LP = LANDING POINT
- ◆ = EXISTING WELL        BHL = BOTTOM HOLE LOCATION

**WELL POWELL 5-64 15-16-1CHZ TO BE  
LOCATED 2440' FSL & 440' FEL**



- 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 WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 15, BEARS N01°13'04"E BETWEEN THE MONUMENTS SHOWN HEREON.
  - ALL DISTANCES AND BEARINGS SHOWN HEREON ARE GROUND VALUES AS GPS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED PERPENDICULAR TO SECTION LINES. THIS LOW DISTORTION PROJECTION (LDP) IS BASED ON THE NORTH AMERICAN DATUM OF 1983, U.S. SURVEY FOOT WITH A LATITUDE ORIGIN OF 39.608492°, A CENTRAL MERIDIAN LONGITUDE OF -104.548224° AND A SCALE FACTOR ON THE CENTRAL MERIDIAN OF 1.000281 (EXACT). THE LDP BASIS OF BEARINGS IS GEODETIC NORTH.
  - FIELD VERIFICATION OF MONUMENTS COMPLETED WITHIN 1 YEAR OF SIGNATURE DATE.

I, BRIAN C. RITZ, A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO DO HEREBY CERTIFY TO **HIGHLANDS NATURAL RESOURCES, CORPORATION**, 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.

BRIAN C. RITZ, PLS 38452  
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR  
FOR AND ON BEHALF OF P.F.S., LLC

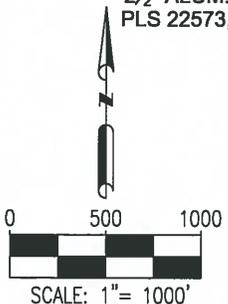
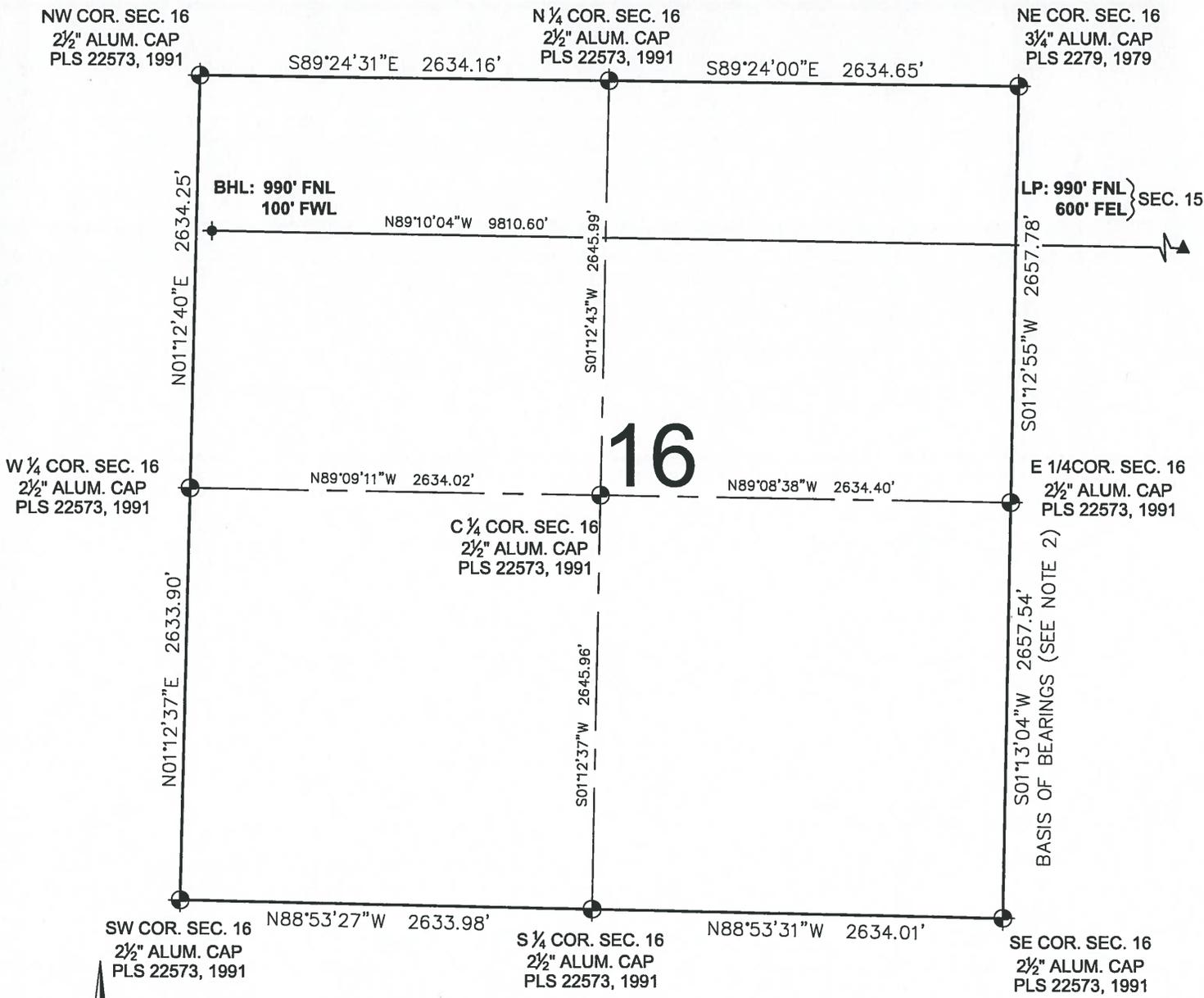


NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THIS SAID DATE OF THIS CERTIFICATION SHOWN HEREON.

SHEET 1 OF 2

 7535 Hilltop Circle Denver, CO 80221 (303) 928-7128 www.ascentgeomatics.com	FIELD DATE: <b>11-17-16</b>	WELL NAME: <b>POWELL 5-64 15-16-1CHZ</b>	PREPARED FOR:  HIGHLANDS NATURAL RESOURCES
	DRAWING DATE: <b>04-10-17</b>	SURFACE LOCATION: <b>NE 1/4 SE 1/4 SEC. 15, T5S, R64W, 6TH P.M.                  ARAPAHOE COUNTY, COLORADO</b>	
BY: <b>CSG</b>	CHECKED BY: <b>MDC</b>		

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SHEET 2 OF 2

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