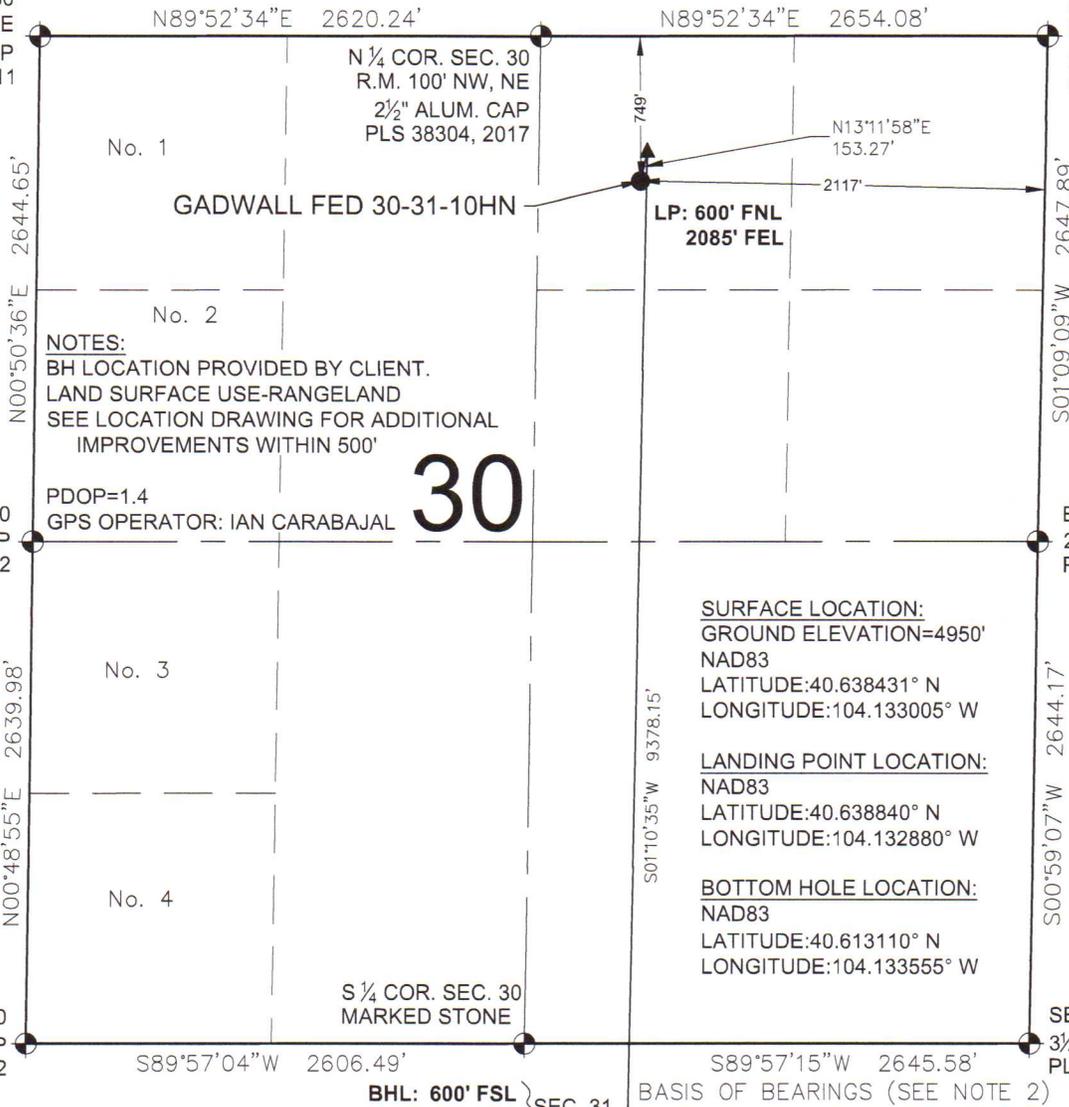


GADWALL FED 30-31-10HN WELL LOCATION CERTIFICATE

NW COR. SEC. 30
R.M. 80' NW, NE
2½" ALUM. CAP
CO 17492, 2011

NE COR. SEC. 30
R.M. 100' NW, NE
2½" ALUM. CAP
CO 17492, 2011

N ¼ COR. SEC. 30
R.M. 100' NW, NE
2½" ALUM. CAP
PLS 38304, 2017



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

PDOP=1.4
GPS OPERATOR: IAN CARABAJAL

LP: 600' FNL
2085' FEL

SURFACE LOCATION:
GROUND ELEVATION=4950'
NAD83
LATITUDE:40.638431° N
LONGITUDE:104.133005° W

LANDING POINT LOCATION:
NAD83
LATITUDE:40.638840° N
LONGITUDE:104.132880° W

BOTTOM HOLE LOCATION:
NAD83
LATITUDE:40.613110° N
LONGITUDE:104.133555° W

S ¼ COR. SEC. 30
MARKED STONE

W ¼ COR. SEC. 30
¾" ALUM. CAP
LS 7242, 2002

E ¼ COR. SEC. 30
¾" ALUM. CAP
PLS 17492, 2011

SW COR. SEC. 30
¾" ALUM. CAP
LS 7242, 2002

SE COR. SEC. 30
¾" ALUM. CAP
PLS 38304, 2017

BHL: 600' FSL
2085' FEL

BASIS OF BEARINGS (SEE NOTE 2)

LEGEND

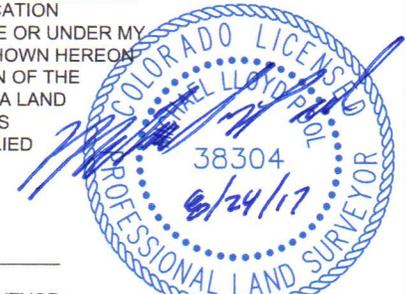
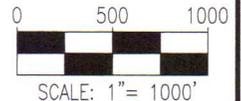
- = EXISTING MONUMENT ◆ = BOTTOM HOLE
- = CALCULATED POSITION ▲ = LANDING POINT
- = PROPOSED WELL LP = LANDING POINT
- ◆ = EXISTING WELL BHL = BOTTOM HOLE LOCATION

**WELL GADWALL FED 30-31-10HN TO
BE LOCATED 749' FNL & 2117' 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 SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 30, BEARS S89°57'15"W 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 40.655085°N, A CENTRAL MERIDIAN LONGITUDE OF 104.086861°W, AND A SCALE FACTOR ON THE CENTRAL MERIDIAN OF 1.000232 (EXACT). THE LDP BASIS OF BEARINGS IS GEODETIC NORTH.
 - FIELD VERIFICATION OF MONUMENTS COMPLETED WITHIN 1 YEAR OF SIGNATURE DATE.

I, MICHAEL L. POOL, A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO DO HEREBY CERTIFY TO **MALLARD EXPLORATION**, 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.

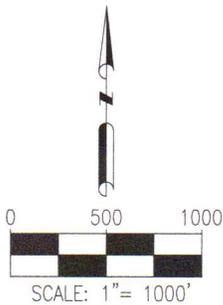
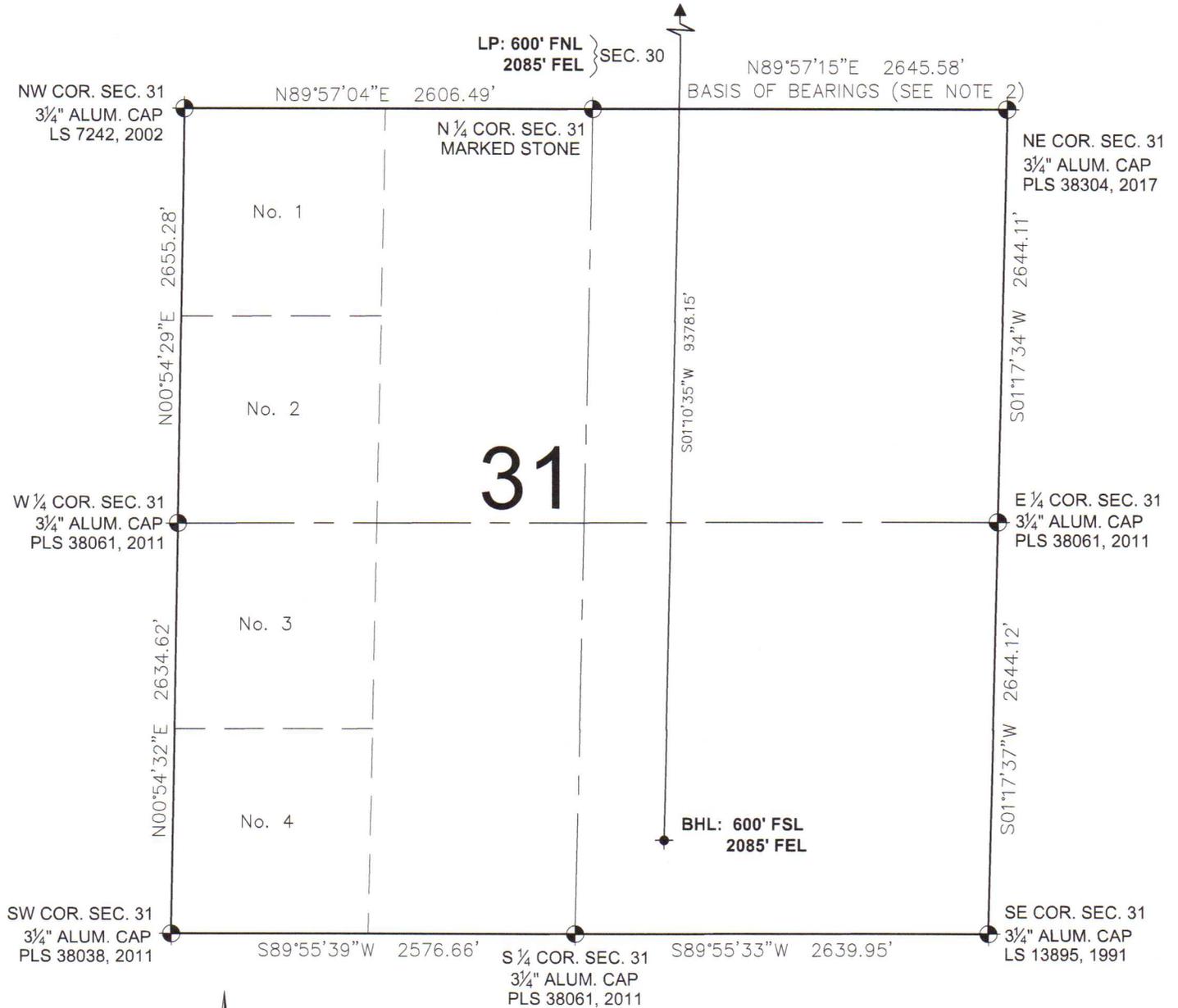
MICHAEL L. POOL, PLS 38304
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
FOR AND ON BEHALF OF P.F.S., LLC



SHEET 1 OF 2

<p>7535 Hilltop Circle Denver, CO 80221 (303) 928-7128 www.ascentgeomatics.com</p>	FIELD DATE: 08-10-17	WELL NAME: GADWALL FED 30-31-10HN	PREPARED FOR:
	DRAWING DATE: 08-23-17	SURFACE LOCATION: NW 1/4 NE 1/4 SEC. 30 T8N, R60W, 6TH P.M.	<p>MALLARD EXPLORATION</p>
BY: SMF	CHECKED: MJW	WELD COUNTY, COLORADO	

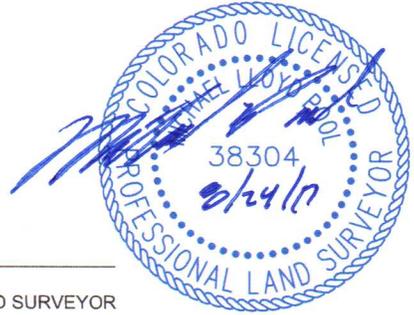
GADWALL FED 30-31-10HN WELL LOCATION CERTIFICATE



LEGEND

- ⊙ = EXISTING MONUMENT
- = CALCULATED POSITION
- = PROPOSED WELL
- ◆ = EXISTING WELL
- ◆ = BOTTOM HOLE
- ▲ = LANDING POINT
- LP = LANDING POINT
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MICHAEL L. POOL, PLS 38304
 COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
 FOR AND ON BEHALF OF P.F.S., LLC



SHEET 2 OF 2

<p style="font-size: 8px;">7535 Hilltop Circle Denver, CO 80221 (303) 928-7128 www.ascentgeomatics.com</p>	FIELD DATE: 08-10-17	WELL NAME: GADWALL FED 30-31-10HN	PREPARED FOR:
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BY: SMF	CHECKED: MJW		