

# SHULL FED 31-32-10HN WELL LOCATION CERTIFICATE

N ¼ COR. SEC. 31  
2 ½" ALUM. CAP  
PLS 38452, 2016

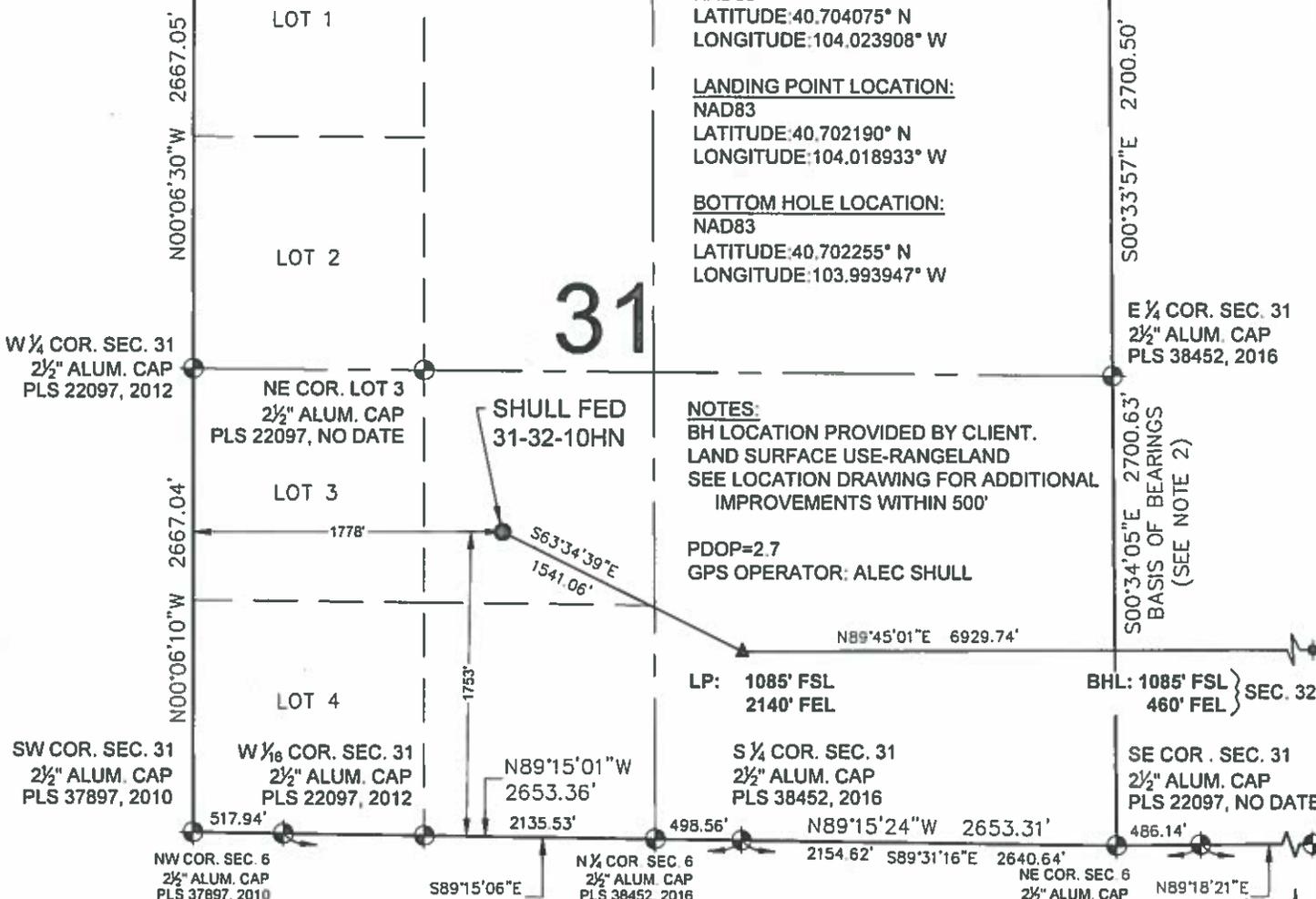
NW COR. SEC. 31  
2 ½" ALUM. CAP  
PLS 38452, 2016

NE COR. SEC. 31  
2 ½" ALUM. CAP  
PLS 17492, 2010

SURFACE LOCATION:  
GROUND ELEVATION=4880'  
NAD83  
LATITUDE:40.704075° N  
LONGITUDE:104.023908° W

LANDING POINT LOCATION:  
NAD83  
LATITUDE:40.702190° N  
LONGITUDE:104.018933° W

BOTTOM HOLE LOCATION:  
NAD83  
LATITUDE:40.702255° N  
LONGITUDE:103.993947° W



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

PDOP=2.7  
GPS OPERATOR: ALEC SHULL

LP: 1085' FSL  
2140' FEL } SEC. 32  
BHL: 1085' FSL  
460' FEL }

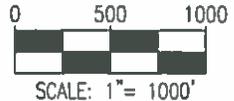
S ¼ COR. SEC. 31  
2 ½" ALUM. CAP  
PLS 38452, 2016

SE COR. SEC. 31  
2 ½" ALUM. CAP  
PLS 22097, NO DATE

**LEGEND**

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

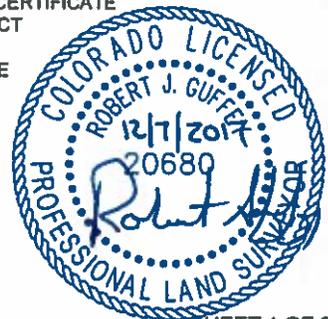
**WELL SHULL FED 31-32-10HN TO BE  
LOCATED 1753' FSL & 1778' FWL**



**NOTES**

1. THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
2. BEARINGS ARE BASED ON THE ASSUMPTION THAT THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 31, BEARS  $S00^{\circ}34'05''E$  BETWEEN THE MONUMENTS SHOWN HEREON
3. 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  $40.655085^{\circ}N$ , A CENTRAL MERIDIAN LONGITUDE OF  $104.086861^{\circ}W$ , AND A SCALE FACTOR ON THE CENTRAL MERIDIAN OF 1.000232 (EXACT). THE LDP BASIS OF BEARINGS IS GEODETIC NORTH.
4. FIELD VERIFICATION OF MONUMENTS COMPLETED WITHIN 1 YEAR OF SIGNATURE DATE.

I, ROBERT J. GUFFEY, 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.

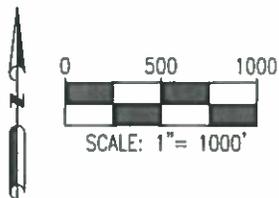
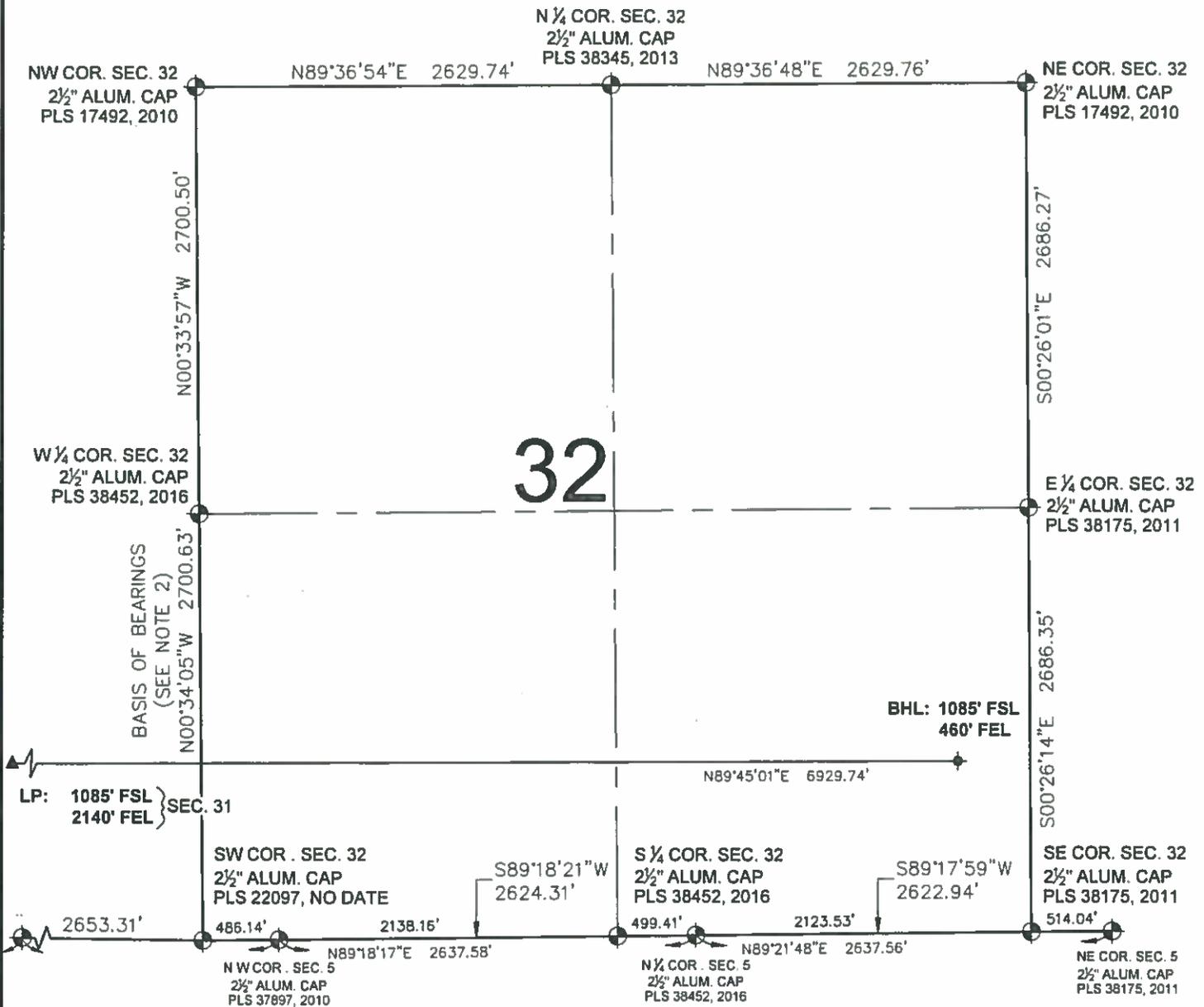


ROBERT J. GUFFEY, PLS 20680  
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR  
FOR AND ON BEHALF OF P.F.S., LLC

SHEET 1 OF 2

<p>7535 Hilltop Circle Denver, CO 80221 (303) 928-7128 www.ascentgeomatics.com</p>	FIELD DATE: <b>02-24-16</b>	WELL NAME: <b>SHULL FED 31-32-10HN</b>	PREPARED FOR:
	DRAWING DATE: <b>12-04-17</b>	SURFACE LOCATION: <b>NE 1/4 SW 1/4 SEC. 31 T9N, R59W, 6TH P.M.</b>	
BY: <b>MJE</b>	CHECKED: <b>SMF</b>	<b>WELD COUNTY, COLORADO</b>	

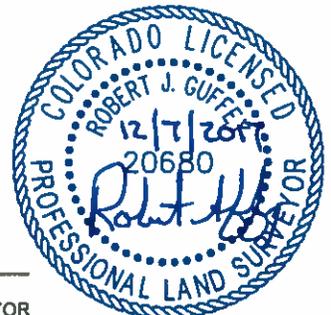
# SHULL FED 31-32-10HN WELL LOCATION CERTIFICATE



### LEGEND

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

ROBERT J. GUFFEY, PLS 20680  
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR  
FOR AND ON BEHALF OF P.F.S., LLC



SHEET 2 OF 2

 <small>7535 Hilltop Circle Denver, CO 80221 (303) 926-7128 www.ascentgeomatics.com</small>	FIELD DATE: <b>02-24-16</b>	WELL NAME: <b>SHULL FED 31-32-10HN</b>	PREPARED FOR:  <b>MALLARD EXPLORATION</b>
	DRAWING DATE: <b>12-04-17</b>	SURFACE LOCATION: <b>NE 1/4 SW 1/4 SEC. 31 T9N, R59W, 6TH P.M. WELD COUNTY, COLORADO</b>	
BY: <b>MJE</b>	CHECKED: <b>SMF</b>		