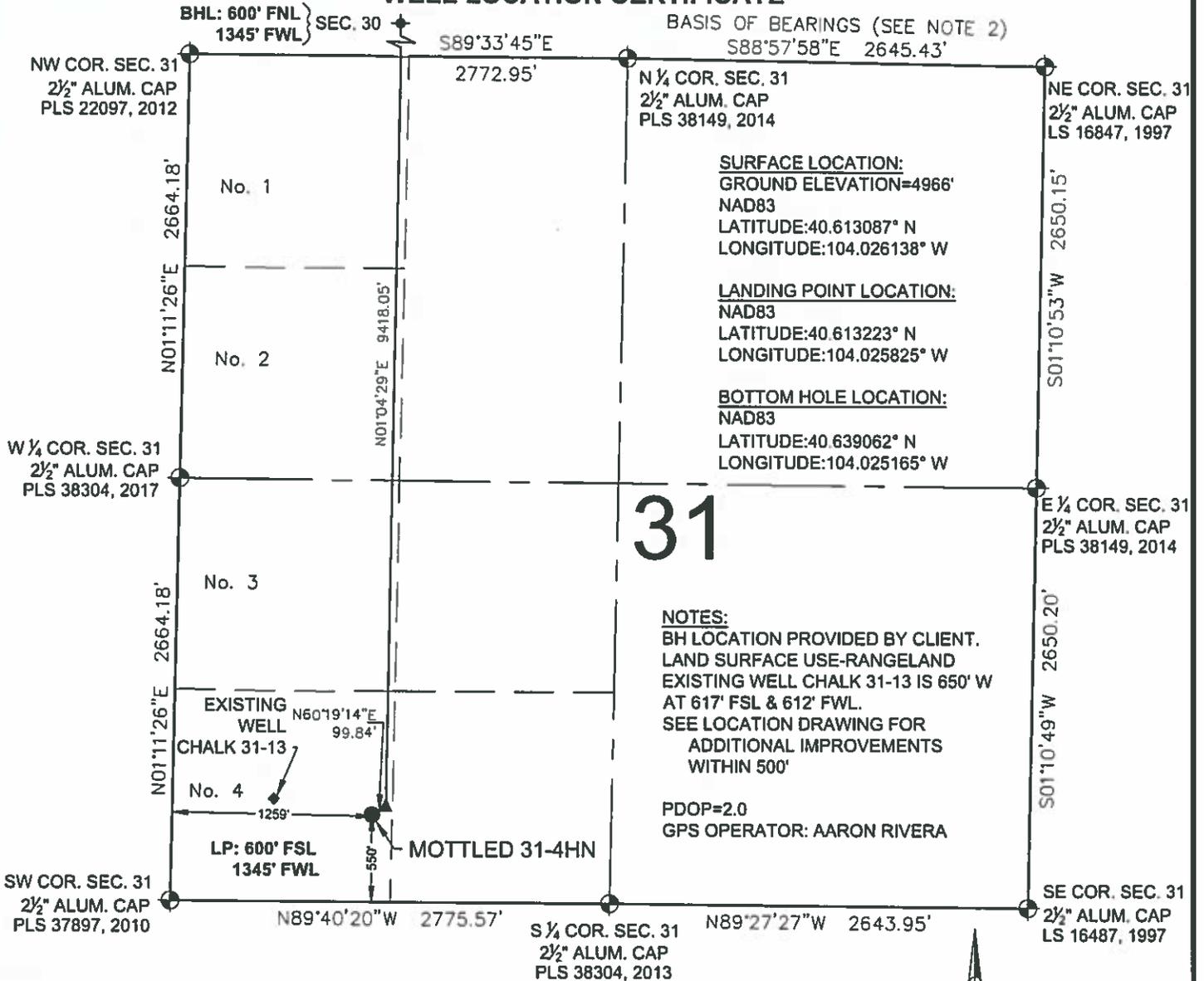


# MOTTLED 31-4HN WELL LOCATION CERTIFICATE



**SURFACE LOCATION:**  
GROUND ELEVATION=4966'  
NAD83  
LATITUDE:40.613087° N  
LONGITUDE:104.026138° W

**LANDING POINT LOCATION:**  
NAD83  
LATITUDE:40.613223° N  
LONGITUDE:104.025825° W

**BOTTOM HOLE LOCATION:**  
NAD83  
LATITUDE:40.639062° N  
LONGITUDE:104.025165° W

**NOTES:**  
BH LOCATION PROVIDED BY CLIENT.  
LAND SURFACE USE-RANGLAND  
EXISTING WELL CHALK 31-13 IS 650' W  
AT 617' FSL & 612' FWL.  
SEE LOCATION DRAWING FOR  
ADDITIONAL IMPROVEMENTS  
WITHIN 500'

PDOP=2.0  
GPS OPERATOR: AARON RIVERA

**LEGEND**

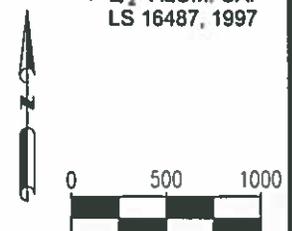
- ⊕ = EXISTING MONUMENT      ⊕ = BOTTOM HOLE
- = CALCULATED POSITION    ▲ = LANDING POINT
- = PROPOSED WELL        LP = LANDING POINT
- ◆ = EXISTING WELL        BHL = BOTTOM HOLE LOCATION

**NOTES:**

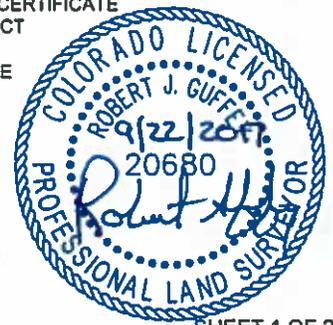
1. THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
2. BEARINGS ARE BASED ON THE ASSUMPTION THAT THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 31, BEARS S89°57'58"E BETWEEN THE MONUMENTS SHOWN HEREON
3. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE GROUND VALUES 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 40.855085°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.
4. FIELD VERIFICATION OF MONUMENTS COMPLETED WITHIN 1 YEAR OF SIGNATURE DATE.

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.

**WELL MOTTLED 31-4HN TO BE  
LOCATED 550' FSL & 1259' FWL**



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.

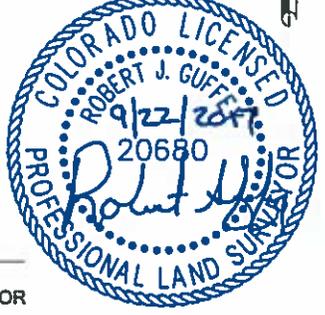
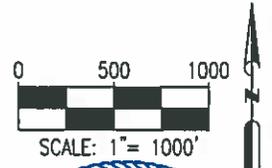
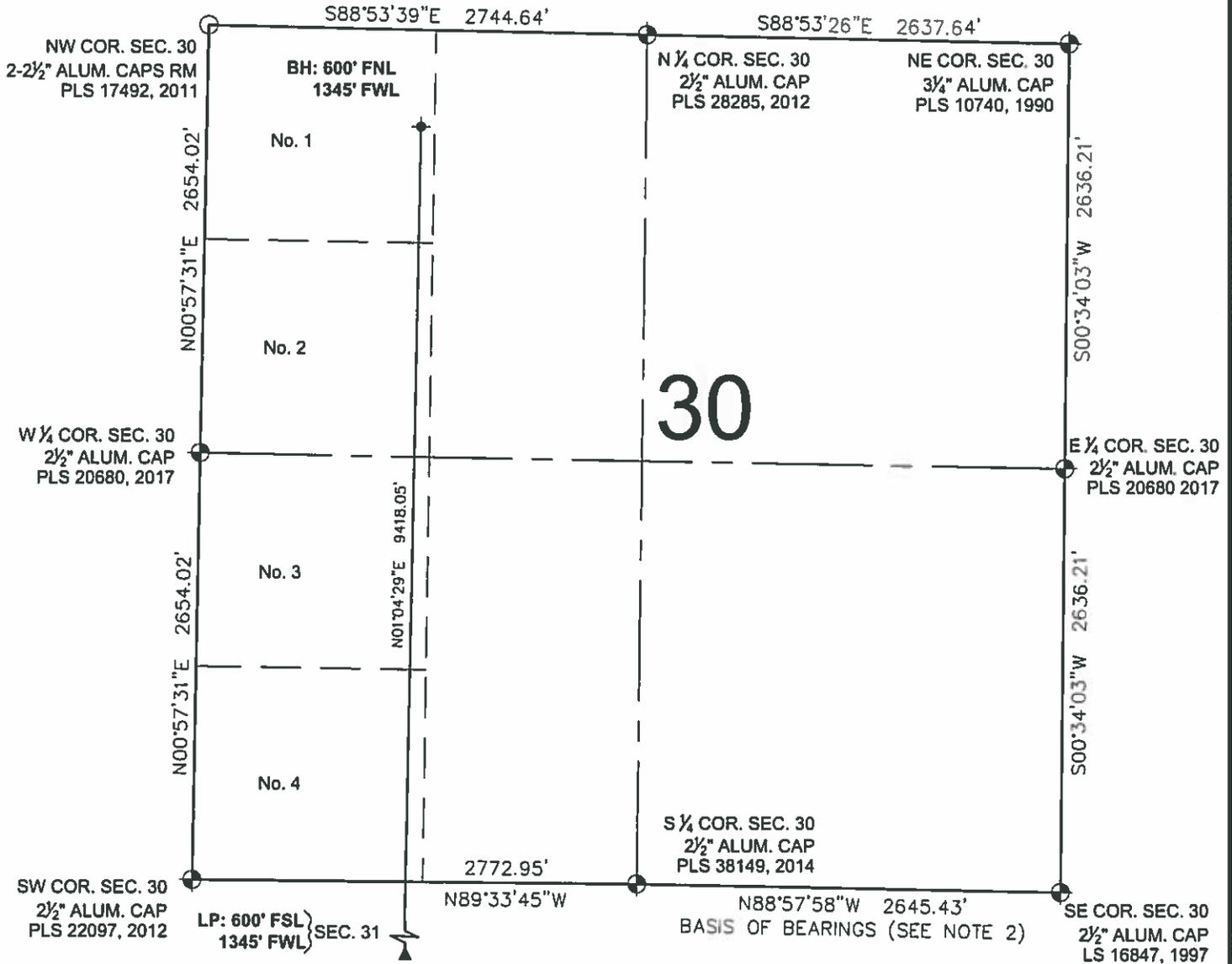


ROBERT J. GUFFEY, PLS 20680  
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR  
FOR AND ON BEHALF OF P.F.S., LLC

SHEET 1 OF 2

<p><b>ASCENT</b> GEOMATICS SOLUTIONS</p>	FIELD DATE: 09-15-17	WELL NAME: MOTTLED 31-4HN	PREPARED FOR <p><b>MALLARD</b> EXPLORATION</p>
	DRAWING DATE: 09-21-17	SURFACE LOCATION: LOT 4 SEC. 31 T8N, R59W, 6TH P.M. WELD COUNTY, COLORADO	
BY: MJE	CHECKED: CSG		

# MOTTLED 31-4HN 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

<p style="font-size: 8px;">7535 Hilltop Circle Denver, CO 80221 (303) 928-7128 www.ascentgeomatics.com</p>	FIELD DATE: 09-15-17	WELL NAME: MOTTLED 31-4HN	PREPARED FOR <p style="font-weight: bold; font-size: 10px;">MALLARD EXPLORATION</p>
	DRAWING DATE: 09-21-17	SURFACE LOCATION: LOT 4 SEC. 31 T8N, R59W, 6TH P.M. WELD COUNTY, COLORADO	
BY: MJE	CHECKED: CSG		