

WELL LOCATION CERTIFICATE: SONIC STAR 1-12-8-60 PAD

SECTION 11, 12, & 1, TOWNSHIP 8 NORTH, RANGE 60 WEST, 6TH P.M.

SURFACE HOLE LOCATION

GROUND ELEV: 4877.23
 NAD 83
 LATITUDE: N40.670329°
 LONGITUDE: W104.048989°

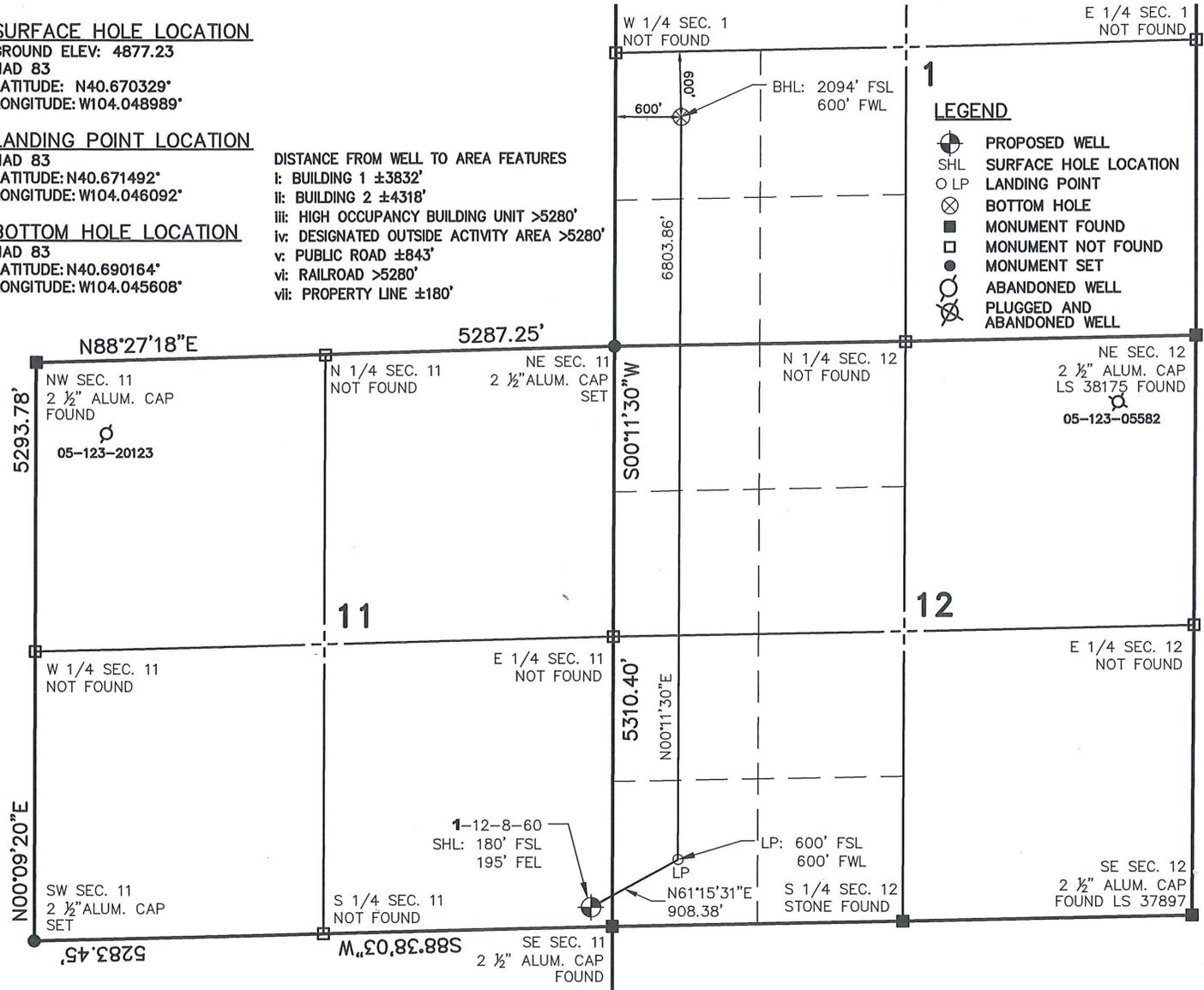
LANDING POINT LOCATION

NAD 83
 LATITUDE: N40.671492°
 LONGITUDE: W104.046092°

BOTTOM HOLE LOCATION

NAD 83
 LATITUDE: N40.690164°
 LONGITUDE: W104.045608°

DISTANCE FROM WELL TO AREA FEATURES
 i: BUILDING 1 ±3832'
 ii: BUILDING 2 ±4318'
 iii: HIGH OCCUPANCY BUILDING UNIT >5280'
 iv: DESIGNATED OUTSIDE ACTIVITY AREA >5280'
 v: PUBLIC ROAD ±843'
 vi: RAILROAD >5280'
 vii: PROPERTY LINE ±180'



NAD 83 SPCS Grid North
CO North Zone

GENERAL NOTES

- THIS FIELD SURVEY CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215.
- BEARINGS AND DISTANCE SHOWN HEREON ARE GRID AND BASED ON THE COLORADO STATE PLANE COORDINATE SYSTEM, NAD 83/2011 BETWEEN MONUMENTS AS LABELED HEREON AND ELEVATIONS SHOWN ARE NAVD 88, AS DERIVED BY GPS OBSERVATIONS.
- GRID DISTANCES ARE SHOWN, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED PERPENDICULAR TO SECTION LINES.
- SURFACE HOLE, LANDING POINT, & BOTTOM HOLE LOCATIONS WERE PROVIDED BY CLIENT.
- LAND SURFACE USE IS RANGELAND.
- SEE FORM 2A FOR VISIBLE IMPROVEMENTS WITHIN 500' OF WELL HEAD.
- DATE OF SURVEY: AUGUST 22, 2014
 INSTRUMENT OPERATOR: RAYMUND COOK; PDOP READING: 1.39

I, JAMES R. AIKEN II, A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO DO HEREBY CERTIFY TO **CARRIZO OIL & GAS, INC.**, 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.



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.

JAMES R. AIKEN II, PLS 0038386
 COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
 FOR AND ON BEHALF OF RETTEW

SONIC STAR 1-12-8-60 PAD
WELL LOCATION CERTIFICATE
CARRIZO NIOBRARA LLC

SE 1/4 SE 1/4, SEC. 11, T8N, R60W, 6TH P.M. WELD COUNTY, CO

RETTEW

RETTEW Associates, Inc.
 1535 Cole Boulevard
 Building 4, Suite 100
 Lakewood, CO 80401
 Phone (303) 800-4919

Engineers-Planners-Surveyors-Landscape Architects
Environmental Consultants

CARRIZO

SCALE: 1"=1500'

DRAWN BY: G.FLORES
 CHECKED BY: J.AIKEN
 DATE: 08/29/2014
 REVISED: _____
 PROJECT No: 083246002