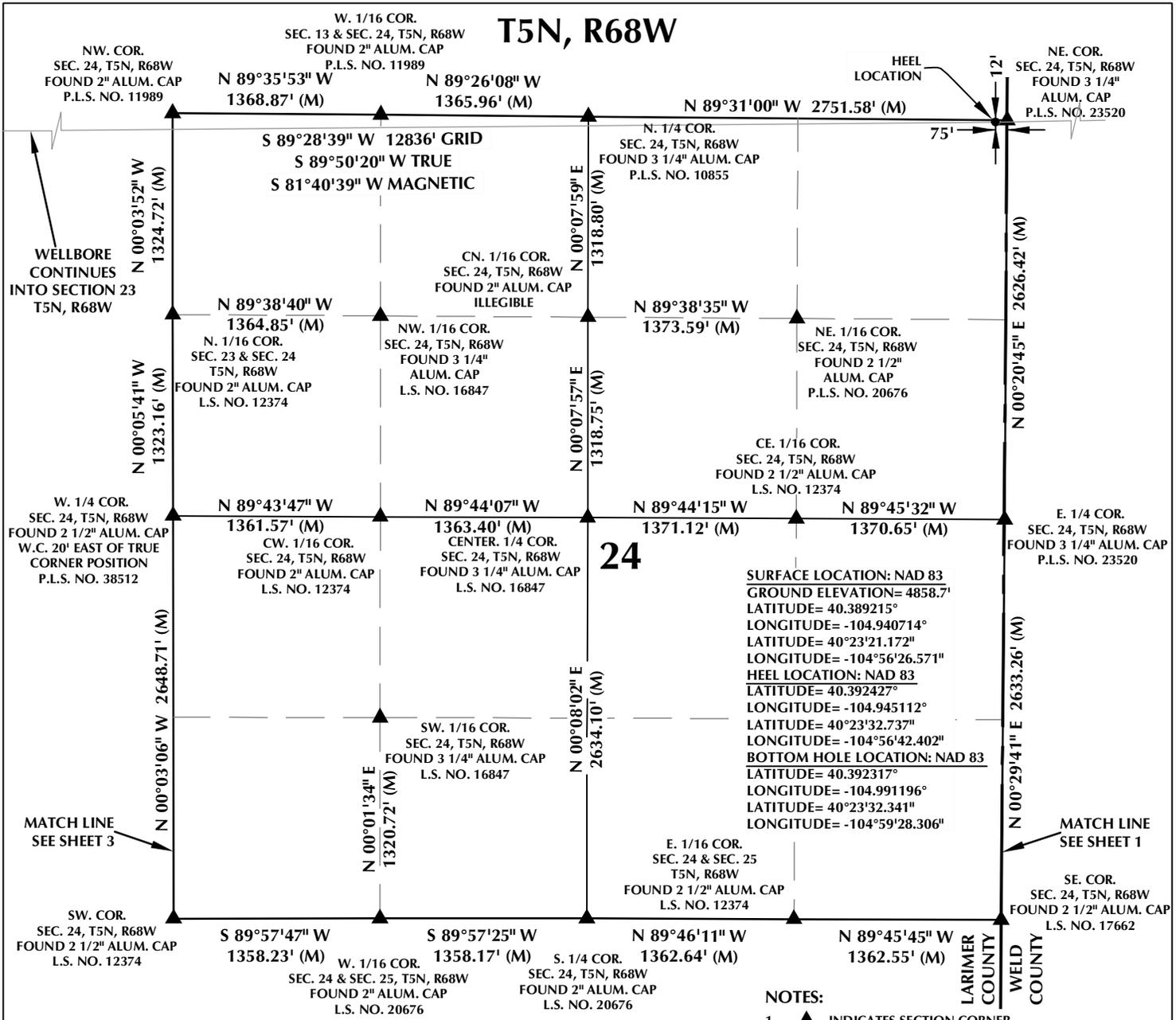




# T5N, R68W



## CERTIFICATE OF SURVEYOR:

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATE DOES NOT REPRESENT A LAND SURVEY PLAT OR IMPROVEMENT SURVEY PLAT AS DEFINED BY C.R.S. 19-51-302 AND CANNOT BE RELIED UPON TO DETERMINE OWNERSHIP.

*Randall K. French*  
38512  
PROFESSIONAL LAND SURVEYOR  
4/26/19

NOTICE: ACCORDING TO COLORADO STATE LAW YOU MUST COMMENCE 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 THE DATE ON THE CERTIFICATION SHOWN HEREON.

## WELL PAD - CUMMINGS 18-19HZ

CUMMINGS 19-1HZ  
WELL LOCATION CERTIFICATE  
1175' FNL & 1164' FWL LOT 2 (NWNW) (SURFACE)  
LOCATED IN SECTION 19, T5N, R67W, 6TH P.M.  
WELD COUNTY, COLORADO  
12' FNL & 75' FEL NENE (HEEL)  
LOCATED IN SECTION 24, T5N, R68W, 6TH P.M.  
93' FNL & 2146' FEL NWNE (BOTTOM)  
LOCATED IN SECTION 22, T5N, R68W, 6TH P.M.  
LARIMER COUNTY, COLORADO

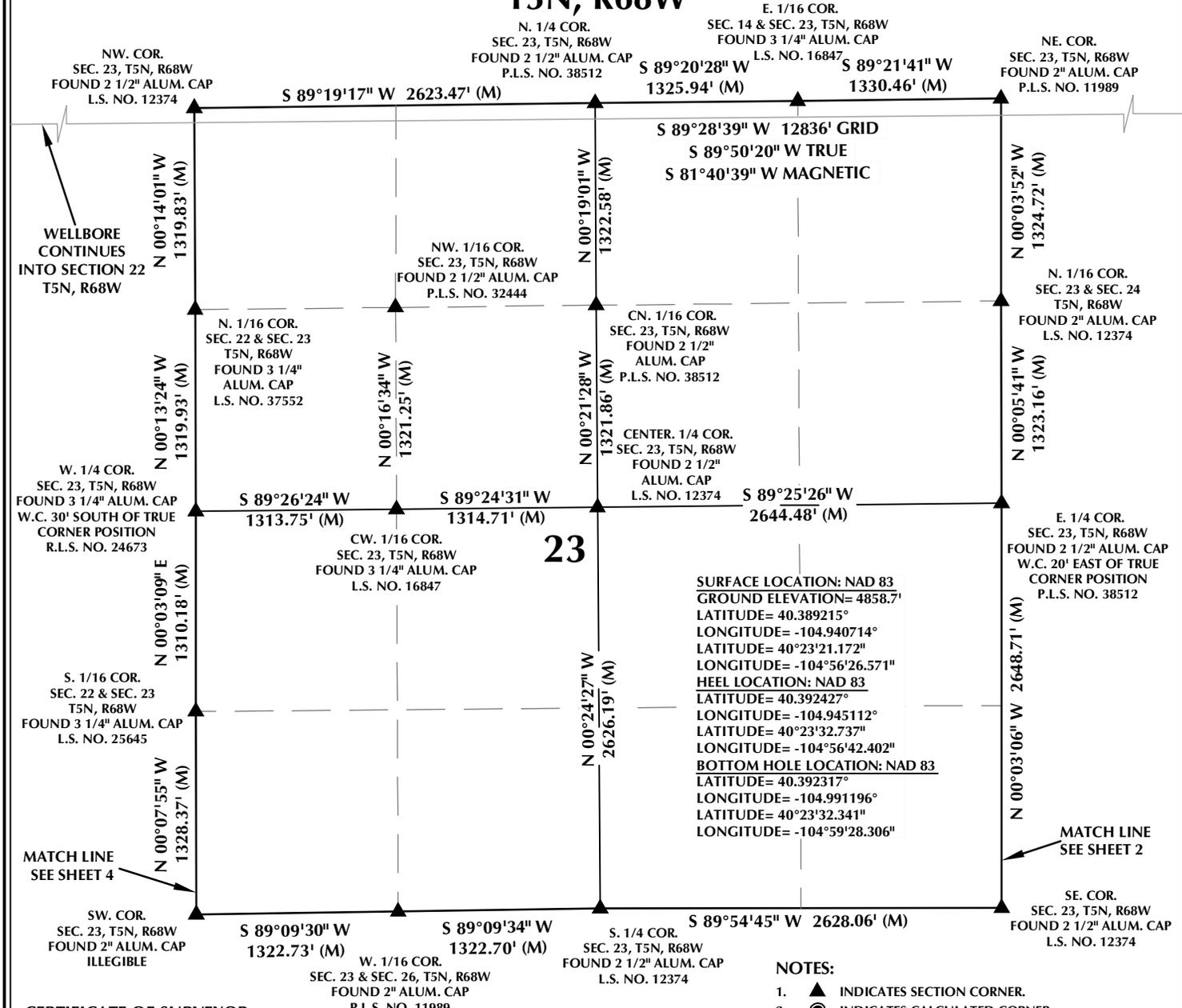
**Kerr-McGee Oil & Gas Onshore L.P.**  
1099 18th Street  
Denver, Colorado 80202



**CONSULTING, LLC**  
SHERIDAN OFFICE  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609  
LOVELAND OFFICE  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331

DRAFTED BY: LMO	CHECKED BY: RKF	SHEET NO:
DATE DRAFTED: 4/26/19	DATE SURVEYED: 3/20/19	2
REVISED:	FILE NAME: 18-159	2 OF 4

# T5N, R68W



**SURFACE LOCATION: NAD 83**  
 GROUND ELEVATION= 4858.7'  
 LATITUDE= 40.389215°  
 LONGITUDE= -104.940714°  
**HEEL LOCATION: NAD 83**  
 LATITUDE= 40.392427°  
 LONGITUDE= -104.945112°  
**BOTTOM HOLE LOCATION: NAD 83**  
 LATITUDE= 40.392317°  
 LONGITUDE= -104.991196°

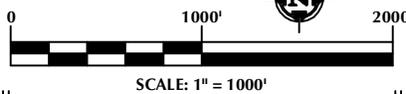
### CERTIFICATE OF SURVEYOR:

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATE DOES NOT REPRESENT A LAND SURVEY PLAT OR IMPROVEMENT SURVEY PLAT AS DEFINED BY C.R.S. 19-51-302 AND CANNOT BE RELIED UPON TO DETERMINE OWNERSHIP.

*Randall K. French*  
 RANDALL K. FRENCH  
 PROFESSIONAL LAND SURVEYOR  
 COLORADO REGISTRATION NUMBER: 38512  
 4/26/19

**NOTICE:**  
 ACCORDING TO COLORADO STATE LAW YOU MUST COMMENCE 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 THE DATE ON THE CERTIFICATION SHOWN HEREON.

**NOTE:**  
 MAGNETIC NORTH IS CURRENT AS OF 3/20/2019. MAGNETIC NORTH CHANGES WEST 0°06' PER YEAR.



### NOTES:

- ▲ INDICATES SECTION CORNER.
- INDICATES CALCULATED CORNER.
- DRAWING LATITUDE AND LONGITUDE COORDINATES ARE NAD 83 (2011) (EPOCH:2010).
- ELEVATION BASED ON NAVD88 (GEOID12B).
- BASIS OF BEARING DERIVED FROM COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE.
- ALL MEASURED DISTANCES ARE GRID.
- COMBINED SCALE FACTOR: .99972932 CALCULATED FROM THE NW. CORNER OF SECTION 19, T5N, R67W.
- OPERATOR: TRAVIS HOLLAND / PDOP = 1.5.
- SEE ADDENDUM TO WELL LOCATION CERTIFICATE FOR EXISTING IMPROVEMENTS WITHIN 500' OF THE WELL PAD.
- WELL FOOTAGES ARE MEASURED AT RIGHT ANGLES TO THE SECTION LINES.
- THE BOTTOM OF HOLE BEARS S89°28'39"W, 12836' FROM THE HEEL LOCATION.

### WELL PAD - CUMMINGS 18-19HZ

**CUMMINGS 19-1HZ**  
 WELL LOCATION CERTIFICATE  
 1175' FNL & 1164' FWL LOT 2 (NWNW) (SURFACE)  
 LOCATED IN SECTION 19, T5N, R67W, 6TH P.M.  
 WELD COUNTY, COLORADO  
 12' FNL & 75' FEL NENE (HEEL)  
 LOCATED IN SECTION 24, T5N, R68W, 6TH P.M.  
 93' FNL & 2146' FEL NWN (BOTTOM)  
 LOCATED IN SECTION 22, T5N, R68W, 6TH P.M.  
 LARIMER COUNTY, COLORADO

**Kerr-McGee Oil & Gas Onshore L.P.**  
 1099 18th Street  
 Denver, Colorado 80202



### CONSULTING, LLC

**SHERIDAN OFFICE**  
 1095 Saberton Avenue  
 Sheridan, Wyoming 82801  
 Phone 307-674-0609

**LOVELAND OFFICE**  
 6706 North Franklin Avenue  
 Loveland, Colorado 80538  
 Phone 970-776-4331

DRAFTED BY: LMO	CHECKED BY: RKF	SHEET NO: <b>3</b> 3 OF 4
DATE DRAFTED: 4/26/19	DATE SURVEYED: 3/20/19	
REVISED:	FILE NAME: 18-159	

# T5N, R68W

N. 1/4 COR.  
SEC. 22, T5N, R68W  
FOUND 3 1/4" ALUM. CAP  
L.S. NO. 16847

NE. COR.  
SEC. 22, T5N, R68W  
FOUND 2 1/2" ALUM. CAP  
L.S. NO. 12374

NW. COR.  
SEC. 22, T5N, R68W  
SET 2 1/2" ALUM. CAP  
W.C. 450' EAST OF  
TRUE CORNER POSITION  
P.L.S. NO. 38512

BOTTOM OF HOLE:  
93' FNL & 2146' FEL

S 89°28'39" W 12836' GRID  
S 89°50'20" W TRUE  
S 81°40'39" W MAGNETIC

N 00°03'52" E  
2636.88' (M)

N 00°14'01" W  
1319.83' (M)

N. 1/16 COR.  
SEC. 22 & SEC. 23  
T5N, R68W  
FOUND 3 1/4" ALUM. CAP  
L.S. NO. 37552

N 00°13'24" W  
1319.93' (M)

E. 1/4 COR.  
SEC. 22, T5N, R68W  
FOUND 3 1/4" ALUM. CAP  
W.C. 30' SOUTH OF TRUE  
CORNER POSITION  
R.L.S. NO. 24673

CENTER. 1/4 COR.  
SEC. 22, T5N, R68W  
FOUND 3 1/4" ALUM. CAP  
L.S. NO. 16847

## 22

W. 1/4 COR.  
SEC. 22, T5N, R68W  
FOUND 2 1/2" ALUM. CAP  
L.S. NO. 12374

S 89°31'09" W  
2645.95' (M)

S 89°31'10" W  
2639.71' (M)

SURFACE LOCATION: NAD 83  
GROUND ELEVATION= 4858.7'  
LATITUDE= 40.389215°  
LONGITUDE= -104.940714°  
LATITUDE= 40°23'21.172"  
LONGITUDE= -104°56'26.571"  
HEEL LOCATION: NAD 83  
LATITUDE= 40.392427°  
LONGITUDE= -104.945112°  
LATITUDE= 40°23'32.737"  
LONGITUDE= -104°56'42.402"  
BOTTOM HOLE LOCATION: NAD 83  
LATITUDE= 40.392317°  
LONGITUDE= -104.991196°  
LATITUDE= 40°23'32.341"  
LONGITUDE= -104°59'28.306"

SE. 1/16 COR.  
SEC. 22, T5N, R68W  
FOUND 3 1/4" ALUM. CAP  
L.S. NO. 34995

N 00°03'42" E  
2625.21' (M)

S. 1/16 COR.  
SEC. 22 & SEC. 23  
T5N, R68W  
FOUND 3 1/4" ALUM. CAP  
L.S. NO. 25645

N 00°03'09" E  
1310.18' (M)

E. 1/16 COR.  
SEC. 22 & SEC. 27  
T5N, R68W  
FOUND 3 1/4" ALUM. CAP  
L.S. NO. 34995

N 00°17'40" W  
1322.42' (M)

SE. COR.  
SEC. 22, T5N, R68W  
FOUND 2" ALUM. CAP  
ILLEGIBLE

N 00°07'55" W  
1328.37' (M)

S 89°20'07" W 2642.69' (C)

S. 1/4 COR.  
SEC. 22, T5N, R68W  
FOUND 2" ALUM. CAP  
L.S. NO. 12374

S 89°48'55" W  
1343.33' (M)

S 89°48'11" W  
1300.99' (M)

### NOTES:

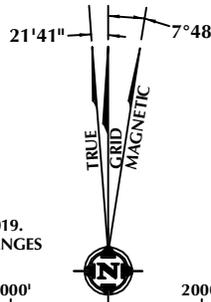
- ▲ INDICATES SECTION CORNER.
- INDICATES CALCULATED CORNER.
- DRAWING LATITUDE AND LONGITUDE COORDINATES ARE NAD 83 (2011) (EPOCH:2010).
- ELEVATION BASED ON NAVD88 (GEOID12B).
- BASIS OF BEARING DERIVED FROM COLORADO COORDINATE SYSTEM OF 1983 NORTH ZONE.
- ALL MEASURED DISTANCES ARE GRID.  
COMBINED SCALE FACTOR: .99972932 CALCULATED FROM THE NW. CORNER OF SECTION 19, T5N, R67W.  
OPERATOR: TRAVIS HOLLAND / PDOP = 1.5.
- SEE ADDENDUM TO WELL LOCATION CERTIFICATE FOR EXISTING IMPROVEMENTS WITHIN 500' OF THE WELL PAD.
- WELL FOOTAGES ARE MEASURED AT RIGHT ANGLES TO THE SECTION LINES.
- THE BOTTOM OF HOLE BEARS S89°28'39"W, 12836' FROM THE HEEL LOCATION.

### CERTIFICATE OF SURVEYOR:

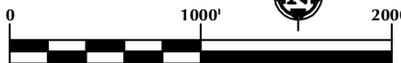
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND TO THE SAME OR TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATE DOES NOT REPRESENT A LAND SURVEY PLAT OR IMPROVEMENT SURVEY PLAT AS DEFINED BY C.R.S. 19-51-302 AND CANNOT BE RELIED UPON TO DETERMINE OWNERSHIP.

*Randall K. French*  
38512  
PROFESSIONAL LAND SURVEYOR  
4/26/19  
RANDALL K. FRENCH  
PROFESSIONAL LAND SURVEYOR  
COLORADO REGISTRATION NUMBER: 38512

NOTICE:  
ACCORDING TO COLORADO STATE LAW YOU MUST COMMENCE 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 THE DATE ON THE CERTIFICATION SHOWN HEREON.



NOTE:  
MAGNETIC NORTH IS  
CURRENT AS OF 3/20/2019.  
MAGNETIC NORTH CHANGES  
WEST 0°06' PER YEAR.



SCALE: 1" = 1000'

### WELL PAD - CUMMINGS 18-19HZ

CUMMINGS 19-1HZ  
WELL LOCATION CERTIFICATE  
1175' FNL & 1164' FWL LOT 2 (NWNW) (SURFACE)  
LOCATED IN SECTION 19, T5N, R67W, 6TH P.M.  
WELD COUNTY, COLORADO  
12' FNL & 75' FEL NENE (HEEL)  
LOCATED IN SECTION 24, T5N, R68W, 6TH P.M.  
93' FNL & 2146' FEL NWNE (BOTTOM)  
LOCATED IN SECTION 22, T5N, R68W, 6TH P.M.  
LARIMER COUNTY, COLORADO

**Kerr-McGee Oil &  
Gas Onshore L.P.**  
1099 18th Street  
Denver, Colorado 80202



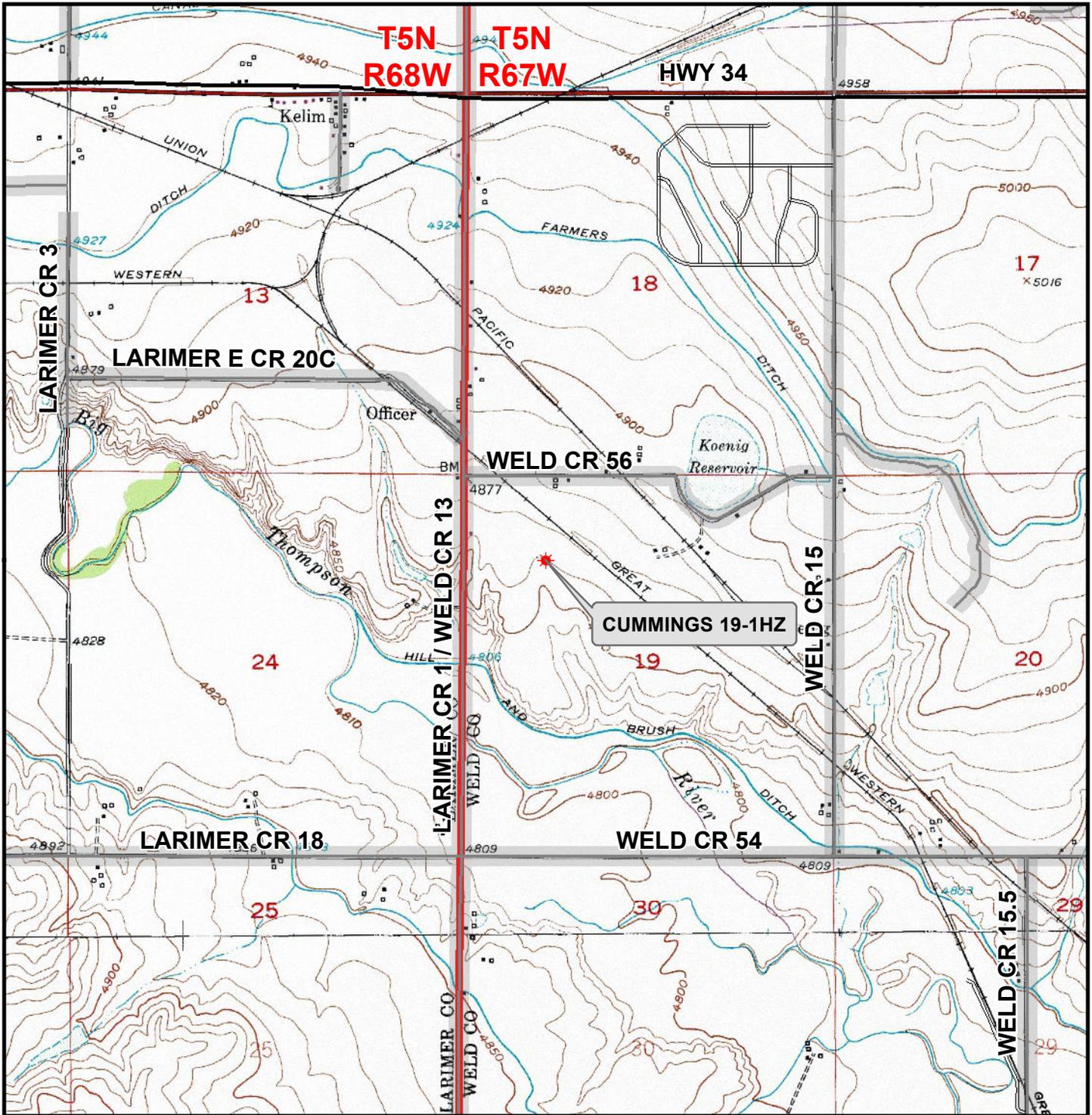
### CONSULTING, LLC

SHERIDAN OFFICE  
1095 Saberton Avenue  
Sheridan, Wyoming 82801  
Phone 307-674-0609

LOVELAND OFFICE  
6706 North Franklin Avenue  
Loveland, Colorado 80538  
Phone 970-776-4331

DRAFTED BY: LMO	CHECKED BY: RKF	SHEET NO: <b>4</b> 4 OF 4
DATE DRAFTED: 4/26/19	DATE SURVEYED: 3/20/19	
REVISED:	FILE NAME: 18-159	

K:\ANADARKO\2018\2018\_159\_CUMMINGS\_T5N\_R67W\_SEC\_19\GISMaps\_ABO\CUMMINGS\_18-19HZ\CUMMINGS\_19-1HZ.mxd 3/21/2019 1:54:10 PM



**Legend**

- Well - Proposed
- Road - Primitive - Existing
- Road - County - Existing
- Road - Improved - Existing
- Road - Highway - Existing

**WELL PAD - CUMMINGS 18-19HZ**  
**GENERAL LOCATION MAP**  
**CUMMINGS 19-1HZ**  
**LOCATED IN SECTION 19**  
**T5N, R67W, 6th P.M.**  
**WELD COUNTY, COLORADO**

**Kerr-McGee Oil & Gas Onshore L.P.**  
 1099 18th Street  
 Denver, Colorado 80202



**CONSULTING, LLC**  
 SHERIDAN OFFICE: 1095 Saberton Avenue, Sheridan, Wyoming 82801, Phone 307-674-0609  
 LOVELAND OFFICE: 6706 North Franklin Avenue, Loveland, Colorado 80538, Phone 970-776-4331

SCALE: 1" = 2,000ft	NAD83 CO-Nft
DRAWN: DP	DATE: 21 Mar 2019
REVISED:	DATE:

