

# SECTION 16, TOWNSHIP 2 NORTH, RANGE 65 WEST, 6TH P.M.

The map shows Section 16 with various corner locations and bearings. Key features include:

- Section 16:** A large square area with bearings and distances around the perimeter.
- Well Location:** Marked with a circle and labeled "COOK 27N-16HZ SURFACE LOCATION".
- Heel Location:** Marked with a circle and labeled "HEEL LOCATION 102' FSL 1206' FEL".
- Bottom Hole Location:** Marked with a circle and labeled "BOTTOM HOLE LOCATION".
- Corners:** Various corner locations are marked with circles and labeled, such as "NW COR SEC 16", "NE COR SEC 16", "SW COR SEC 16", and "SE COR SEC 16".
- Bearings and Distances:** Numerous bearings (e.g., N 89°21'50" E, S 00°26'16" E) and distances (e.g., 2625.87', 2661.46') are provided for the section boundaries and well location.

**SURVEYOR'S CERTIFICATION:**  
I, hereby certify to KERR-McGEE OIL & GAS ONSHORE L.P., that this Well Location Certificate was prepared under my direct supervision and that the drawing accurately depicts the proposed location of the well.

Mark A. Hall, PLS #36073  
FOR AND ON BEHALF OF ACKLAM, INC.  
195 Telluride Street Suite 7  
Brighton CO 80601

**EQUATION:**  
MAGNETIC AZIMUTH=GRID AZIMUTH-08°23'24"  
GEODETIC AZIMUTH=GRID AZIMUTH+00°32'22"

## NOTES:

- Found Section Corner
- Calculated Section Corner
- Basis of Elevations: NAVD88 (GEOID12).
- Basis of Bearings: Colorado coordinate system 1983 north zone ("GRID").
- Basis of Distances: GRID; Combined Factor=0.999728637
- GPS Operator: M.W. PDOP < 3.0
- See attachments for existing improvements within 500 feet of the well pad.
- Well footages are measured at right angles to the section lines.
- The Bottom Hole Location bears N 05°16'21" E 4645.00' from the Surface Location.

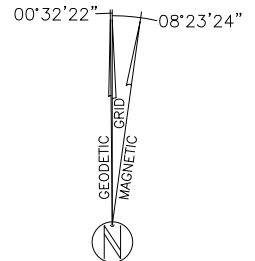
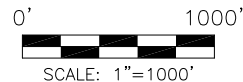
**NOTICE:** According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

<b>PREPARED FOR:</b>  <b>Kerr-McGee Oil &amp; Gas Onshore L.P.</b> 1099 18th Street Denver, Colorado 80202		<b>WELL LOCATION CERTIFICATE</b>  <b>COOK 27N-16HZ</b> SURFACE 493' FSL 817' FEL SEC. 16 GROUND ELEVATION=4877.0'  HEEL 102' FSL 1206' FEL SEC. 16 BOTTOM 181' FNL 1180' FEL SEC. 16	
<b>Acklam, Inc.</b>		SE1/4 SE1/4 SECTION 16, T2N, R65W, 6TH PM WELD COUNTY, COLORADO	
DATE SURVEYED: 12/15/2014			
DATE DRAFTED: 03/06/2015			
DRAFTED BY: PAV	CHK BY: MAH		
JOB No. 14506	REVISED: 4/23/2015		

SHEET 1 OF 1



I, hereby certify to KERR-McGEE OIL & GAS  
ONSHORE L.P., that this Well Location  
Certificate was prepared under my direct  
supervision and that the drawing accurately  
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EQUATION:  
MAGNETIC AZIMUTH=GRID AZIMUTH-08°23'24"  
GEODETIC AZIMUTH=GRID AZIMUTH+00°32'22"

NOTES:

1.  Found Section Corner
2.  Calculated Section Corner
3. Basis of Elevations: NAVD88 (GEOID12).
4. Basis of Bearings: Colorado coordinate system 1983 north zone ('GRID').
5. Basis of Distances: GRID; Combined Factor=0.999728637
6. GPS Operator: M.W. PDOP < 3.0
7. See attachments for existing improvements within 500 feet of the well pad.
8. Well footages are measured at right angles to the section lines.
9. The Bottom Hole Location bears N 05°16'21" E 4645.00' from the Surface Location.

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*SHEET 1 OF 1*

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

*Acklam, Inc.*

DATE SURVEYED: 12/15/2014

DATE DRAFTED: 03/06/2015

DRAFTED BY: PAV	CHK BY: MAH
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JOB No. 14506

REVISÉ: 4/23/2015

# WELL LOCATION CERTIFICATE

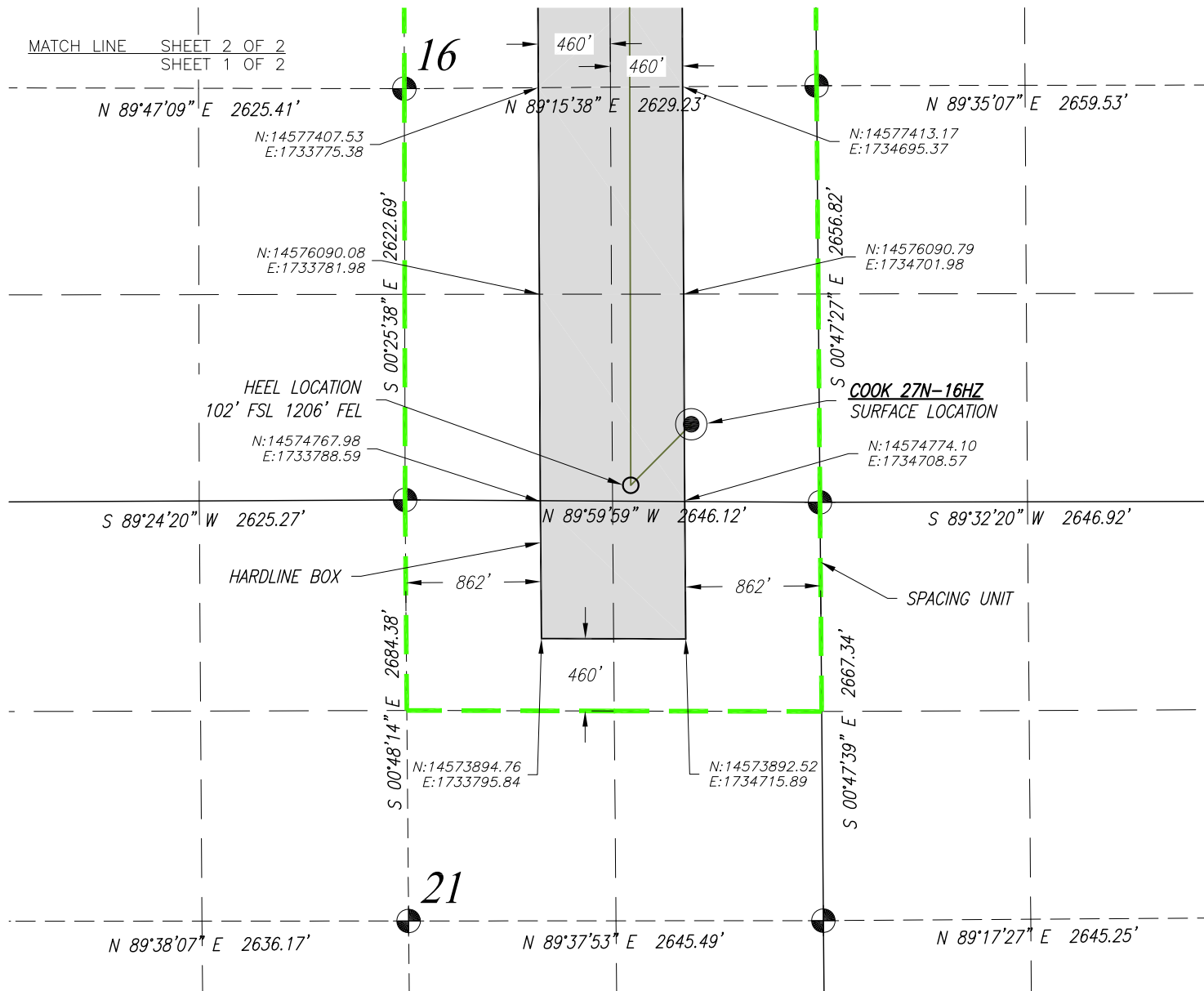
COOK 27N-16HZ

SURFACE 493' FSL 817' FEL SEC. 16  
GROUND ELEVATION=4877.0'

HEEL	102' FSL	1206' FEL	SEC. 16
BOTTOM	181' FNL	1180' FEL	SEC. 16

SE1/4 SE1/4  
SECTION 16, T2N, R65W, 6TH PM  
WELD COUNTY, COLORADO

# TOWNSHIP 2 NORTH, RANGE 65 WEST, 6TH P.M.



## HEEL LOCATION

N: 14,574,872.35'  
E: 1,734,364.65'

LATITUDE= 40.131709°  
LONGITUDE= -104.663886°

LATITUDE= 40°07'54.154"  
LONGITUDE= -104°39'49.990"

## BOTTOM HOLE LOCATION

N: 14,579,887.30'  
E: 1,734,349.93'

LATITUDE= 40.145481°  
LONGITUDE= -104.663871°

LATITUDE= 40°08'43.732"  
LONGITUDE= -104°39'49.936"

## NOTES:

1. Found Section Corner
2. Calculated Section Corner
3. Basis of Bearings: Colorado coordinate system 1983 north zone ('GRID')
4. Basis of Distances: GRID; Combined Factor=0.999728637
5. Basis of coordinates: UTM ZONE 13 NAD 83

PREPARED FOR:

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

**Acklam, Inc.**

DATE SURVEYED: 12/15/2014

DATE DRAFTED: 04/14/2015

DRAFTED BY: FWM CHK BY: MAH

JOB No. 14506 REVISED: 4/24/2015

## SPACING UNIT EXHIBIT

### COOK 27N-16HZ

SURFACE 493' FSL 817' FEL SEC. 16  
GROUND ELEVATION=4877.0'

HEEL 102' FSL 1206' FEL SEC. 16  
BOTTOM 181' FNL 1180' FEL SEC. 16

SE1/4 SE1/4  
SECTION 16, T2N, R65W, 6TH PM  
WELD COUNTY, COLORADO

0' 1000'  
SCALE: 1"=1000'



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SHEET 1 OF 2