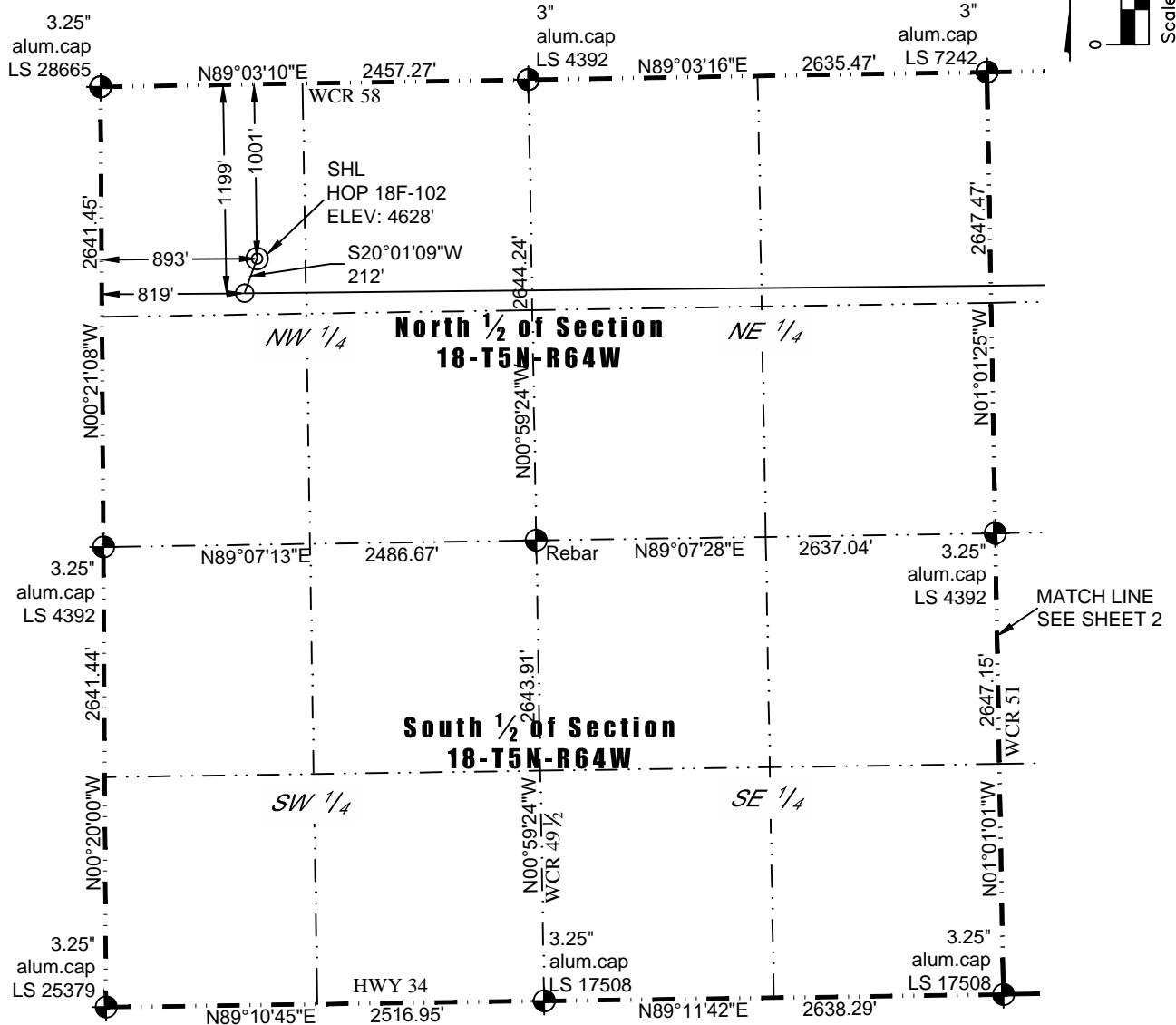




# WELL LOCATION CERTIFICATE

THIS MAP DOES NOT REPRESENT A BOUNDARY SURVEY

Washburn Land Surveying  
www.WashburnSurveying.com  
970-232-9645



In accordance with a request from Barney Hammond of PDC Energy, Inc., Washburn Land Surveying, LLC has determined the location of the **HOP 18F-102** well site to be SHL: 1001' FNL and 893' FWL, (BHL: 1265' FNL and 500' FEL), as measured at ninety (90) degrees from the section lines of Sections 18 and 17, Township 5 North, Range 64 West of the 6th Principal Meridian, Weld County Colorado.

<b>Proposed Surface Hole Data:</b>	<b>Proposed Entry Point Data:</b>	<b>Proposed Bottom Hole Data:</b>
Latitude: N 40.403617°	Latitude: N 40.403071°	Latitude: N 40.403070°
Longitude: W 104.598612°	Longitude: W 104.598880°	Longitude: W 104.566255°
PDOP: 2.2		

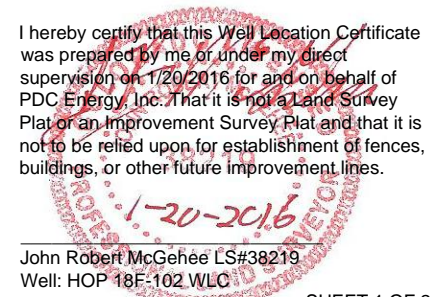
**LEGEND**

- - Found Survey Monument
- ⊙ - Calculated Dimension
- ⊙ - Surface Hole Location (SHL)
- - Entry Point Location (EPL)
- × - Bottom Hole Location (BHL)

**Nearest Cultural Items:**  
 Building: 424' NE  
 Building Unit: 631' NE  
 Above Ground Utility: 274' E  
 Public Road: 988' N

Property Line: 278' E  
 Railroad: +5280'  
 High Occupancy Building Unit: +5280'  
 Designated Outside Activity Area: +5280'

I hereby certify that this Well Location Certificate was prepared by me or under my direct supervision on 1/20/2016 for and on behalf of PDC Energy, Inc. That it is not a Land Survey Plat or an Improvement Survey Plat and that it is not to be relied upon for establishment of fences, buildings, or other future improvement lines.



John Robert McGehee LS#38219  
Well: HOP 18F-102 WLC

- Notes:
- 1) Bearings and distances based on NAD 83 Colorado North State Plane Coordinate, using RTK GPS observations taken 9/30/15 by operator Jason Dahlman.
  - 2) Conversion factor to ground (1.0002571888).
  - 3) Elevations based on NAVD 88 GPS heights and Geoid 2009 corrections.
  - 4) See Location Drawing for visible improvements within 500 feet of Pad Site.
  - 5) The surface use is a cultivated field.

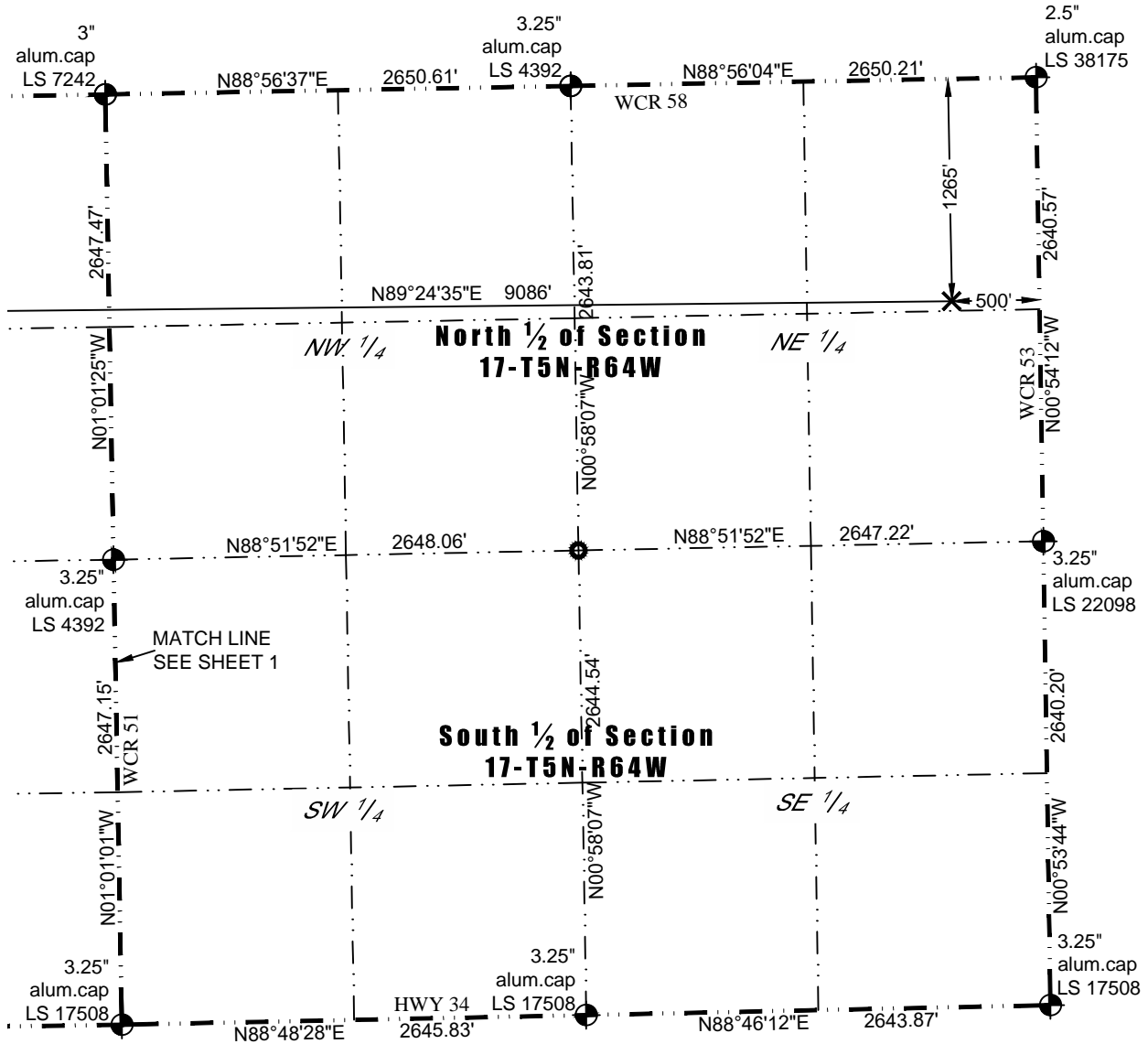
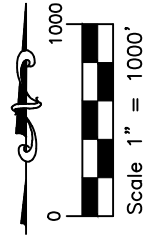
**NOTICE:** According to Colorado law you must commence any legal action based upon any defect in this W.L.C. within three years after you first discover such defect. In no event may any action based upon any defect in this W.L.C. be commenced more than ten years from this said date of the certification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



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 970-232-9645

# WELL LOCATION CERTIFICATE

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**LEGEND**

- ◆ - Found Survey Monument
- - Calculated Dimension
- ⊙ - Surface Hole Location (SHL)
- - Entry Point Location (EPL)
- ⊗ - Bottom Hole Location (BHL)