

June 22, 2026

RE: Directional Drilling Survey Guidelines & registration

This memo is to facilitate understanding by operators & directional drilling contractors of the NDIC, Department of Mineral Resources (DMR), Oil and Gas Division policies on filing & recording directional surveys, measurement inaccuracies, survey frequency requirements and “new” contractor certification. Also, please refer to NDAC 43-02-03-25 (Deviation Tests and Directional Surveys) for more information pertaining to our rule. *Information noted in red has been updated since the last revision dated **November 17, 2025**.

Recording & filing certified surveys:

1. All wells must be depicted exactly as they were drilled. We require that all original laterals and any sidetracks be kept separate, labeled as to what they depict (e.g.: leg 1, or leg-sidetrack 1, etc.), and filed in their entirety from the tie-in point to a projection to total measured depth of each leg or sidetrack.
2. When additional laterals and/or sidetracks are surveyed, the tie-in point should be listed as the first survey. Do not include any surveys prior to the tie-in as they are required to be filed with the previous lateral or sidetrack. The survey point used for the tie-in should be the last survey run immediately above the sidetrack depth.
3. All surveys must be submitted, and no surveys should be deleted at any time unless they are outside your company’s parameters for a “good survey” and cannot be corrected using an approved method.
4. Within 30 days of attaining total depth, all surveys, including the certification, must be submitted to the Commission as one Adobe (.pdf) document to: certsurvey@nd.gov
5. Surveys must always be corrected to True North and a notation made to that effect.
6. Note the magnetic declination & model (i.e.: wmm, hdgm) used to correct to True North.
7. Note the rig name & number and the rig floor elevation.
8. All magnetic correction programs designed to reduce the ellipse of uncertainty must be submitted and certified by the owner of the directional tools.
9. *An interpolated survey must be provided at the 7-inch casing point.*
10. **All certified surveys must be submitted referencing NAD 83 per NDAC 43-02-03-16 guidelines for submitting an "accurate plat".**

Surveying horizontal & directional well bores:

1. The KB (or rig floor elevation) of the rotary rig, with the ability to attain Total Depth, must be taken into consideration when filing the certified surveys to the state.
 - a. In re-entry operations, where there is a difference in rig KB elevations, the tie-in survey measured depth should be adjusted.
2. General Survey Guidelines:
 - a. Surface hole directional surveys are required at 100’ intervals on multi-well pads and the well bore may not be intentionally deviated.
 - b. Directional surveys are required in the vertical/tangent portions of the well bore at 100’ intervals if the well bore is deviated 3 degrees or less per 100’, with required 30’ intervals during sections with deviation over 3 degrees per 100’. A waiver to the 30’ survey interval may be obtained only if 45’ drill pipe is utilized.
 - c. Directional surveys are required in the horizontal portion of the well bore at least 30’ in the build section or during intentional course corrections and at least every 90’ in the lateral portion of the well bore while rotating. *A waiver to the 30’ survey interval may be obtained if 45’ drill pipe is utilized.

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3. The tie-in point is located at the surface casing shoe except in the following cases:
 - a. Tie-in to the surface if a MWD is run prior to running surface casing or a GYRO is run from ground level.
 - b. Tie-in at 30' below surface casing shoe if a continuous directional log is run (e.g. Schlumberger GPIT log).
 - c. Gyro surveys are required at 100' intervals on all cased hole re-entry operations (and if no previous surveys were taken).
 - d. Surface hole directional surveys are required at 100' intervals on multi-well pads and the well bore may not be intentionally deviated.
4. Proper magnetic spacing must be maintained in order to ensure azimuth accuracy; especially while drilling in the east-west direction.

Lastly, all owners of directional tools that intend to utilize the tools in a horizontal or directional well must register with the NDIC, DMR, Oil & Gas Division and supply the following information:

1. Contact information:
 - a. Company name
 - b. Contact person(s) title and phone number(s)
 - c. Mailing address.
2. Submittal of contractor tool info
 - a. Specification sheets on all directional tools which will be utilized in North Dakota.
 - b. An example certified survey certification cover page.
 - c. An example of a typical bottom hole assembly; indicating the amount of non-magnetic pipe-if applicable.
3. Contractors must register with the North Dakota Secretary of State.

Should you have any questions, feel free to call.

Sincerely,

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