



APPLICATION FOR PERMIT TO DRILL HORIZONTAL WELL - FORM 1H

INDUSTRIAL COMMISSION OF NORTH DAKOTA
OIL AND GAS DIVISION
600 EAST BOULEVARD DEPT 405
BISMARCK, ND 58505-0840
SFN 54269 (04-2008)

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

PLEASE SUBMIT THE ORIGINAL AND ONE COPY.

Type of Work	Type of Well	Approximate Date Work Will Start	Confidential Status
Operator			Telephone Number
Address		City	State Zip Code
<input type="checkbox"/> Notice has been provided to the owner of any permanently occupied dwelling within 1,320 feet.		<input type="checkbox"/> This well is not located within five hundred feet of an occupied dwelling.	

WELL INFORMATION (If more than one lateral proposed, enter data for additional laterals on page 2)

Well Name				Well Number			
Surface Footages F L F L		Qtr-Qtr	Section	Township N	Range W	County	
Longstring Casing Point Footages F L F L		Qtr-Qtr	Section	Township N	Range W	County	
Longstring Casing Point Coordinates From Well Head From WH From WH		Azimuth °	Longstring Total Depth Feet MD Feet TVD				
Bottom Hole Footages From Nearest Section Line F L F L		Qtr-Qtr	Section	Township N	Range W	County	
Bottom Hole Coordinates From Well Head From WH From WH		KOP Lateral 1 Feet MD	Azimuth Lateral 1 °	Estimated Total Depth Lateral 1 Feet MD Feet TVD			
Latitude of Well Head ° ' "		Longitude of Well Head ° ' "		NAD Reference	Description of (Subject to NDIC Approval)		
Ground Elevation Feet Above S.L.		Acres in Spacing/Drilling Unit		Spacing/Drilling Unit Setback Requirement		Industrial Commission Order	
North Line of Spacing/Drilling Unit Feet		South Line of Spacing/Drilling Unit Feet		East Line of Spacing/Drilling Unit Feet		West Line of Spacing/Drilling Unit Feet	
Objective Horizons						Pierre Shale Top	
Proposed Surface Casing	Size -	Weight Lb./Ft.	Depth Feet	Cement Volume Sacks	NOTE: Surface hole must be drilled with fresh water and surface casing must be cemented back to surface.		
Proposed Longstring Casing	Size -	Weight(s) Lb./Ft.	Longstring Total Depth Feet MD Feet TVD		Cement Volume Sacks	Cement Top Feet	Top Dakota Sand Feet
Base of Last Salt (If Applicable) Feet		NOTE: Intermediate or longstring casing string must be cemented above the top Dakota Group Sand.					
Proposed Logs							
Drilling Mud Type (Vertical Hole - Below Surface Casing)				Drilling Mud Type (Lateral)			
Survey Type in Vertical Portion of Well Every 100 Feet		Survey Frequency: Build Section Feet		Survey Frequency: Lateral Feet		MWD Contractor	

COMMENTS, ADDITIONAL INFORMATION, AND/OR LIST OF ATTACHMENTS

NOTE: A Gamma Ray log must be run to ground surface and a CBL must be run on intermediate or longstring casing string if set.

Surveys are required at least every 30 feet in the build section and every 90 feet in the lateral section of a horizontal well. Measurement inaccuracies are not considered when determining compliance with the spacing/drilling unit boundary setback requirement except in the following scenarios: 1) When the angle between the well bore and the respective boundary is 10 degrees or less; or 2) If industry standard methods and equipment are not utilized. Consult the applicable field order for exceptions.

If measurement inaccuracies are required to be considered, a 2° MWD measurement inaccuracy will be applied to the horizontal portion of the well bore. This measurement inaccuracy is applied to the well bore from KOP to TD.

Lateral 2

KOP Lateral 2 Feet MD	Azimuth Lateral 2 °	Estimated Total Depth Lateral 2 Feet MD Feet TVD		KOP Coordinates From Well Head From WH From WH	
Formation Entry Point Coordinates From Well Head From WH From WH		Bottom Hole Coordinates From Well Head From WH From WH			
KOP Footages From Nearest Section Line F L F L		Qtr-Qtr	Section	Township N	Range W County
Bottom Hole Footages From Nearest Section Line F L F L		Qtr-Qtr	Section	Township N	Range W County

Lateral 3

KOP Lateral 3 Feet MD	Azimuth Lateral 3 °	Estimated Total Depth Lateral 3 Feet MD Feet TVD		KOP Coordinates From Well Head From WH From WH	
Formation Entry Point Coordinates From Well Head From WH From WH		Bottom Hole Coordinates From Well Head From WH From WH			
KOP Footages From Nearest Section Line F L F L		Qtr-Qtr	Section	Township N	Range W County
Bottom Hole Footages From Nearest Section Line F L F L		Qtr-Qtr	Section	Township N	Range W County

Lateral 4

KOP Lateral 4 Feet MD	Azimuth Lateral 4 °	Estimated Total Depth Lateral 4 Feet MD Feet TVD		KOP Coordinates From Well Head From WH From WH	
Formation Entry Point Coordinates From Well Head From WH From WH		Bottom Hole Coordinates From Well Head From WH From WH			
KOP Footages From Nearest Section Line F L F L		Qtr-Qtr	Section	Township N	Range W County
Bottom Hole Footages From Nearest Section Line F L F L		Qtr-Qtr	Section	Township N	Range W County

Lateral 5

KOP Lateral 5 Feet MD	Azimuth Lateral 5 °	Estimated Total Depth Lateral 5 Feet MD Feet TVD		KOP Coordinates From Well Head From WH From WH	
Formation Entry Point Coordinates From Well Head From WH From WH		Bottom Hole Coordinates From Well Head From WH From WH			
KOP Footages From Nearest Section Line F L F L		Qtr-Qtr	Section	Township N	Range W County
Bottom Hole Footages From Nearest Section Line F L F L		Qtr-Qtr	Section	Township N	Range W County

I hereby swear or affirm the information provided is true, complete and correct as determined from all available records.			Date
Signature	Printed Name	Title	
Email Address			
Witness Signature	Witness Printed Name	Witness Title	

FOR STATE USE ONLY

Permit and File Number	API Number 33 - -
Field	
Pool	Permit Type

FOR STATE USE ONLY

Date Approved
By
Title