APPLICATION FOR PERMIT TO DRILL - FORM 1H SFN 54269

- 1. All applications for permit to drill must be e-filed, except in extenuating circumstances. Operators must file an ePermit authorization form, and email to apd@nd.gov. The Bismarck office will then issue a user-ID and password to access the online Form 1 or Form 1H.
- 2. Please refer to Section 43-02-03-16 of the North Dakota Administrative Code (NDAC) regarding an application for permit to drill.
- 3. Well-site preparation other than surveying and staking is forbidden prior to approval of an application for permit to drill.
- 4. Verbal approval may be given for site preparation by the Director in extenuating circumstances although no drilling activity shall commence until the application is approved.
- The application for permit to drill shall be accompanied by a bond pursuant to Section 43-02-03-15 NDAC or the applicant must have previously filed such bond with the Commission, otherwise the application is incomplete.
- 6. Any incomplete application for permit to drill received by the Commission has no standing and shall not be deemed filed until it is completed.
- 7. The application for a permit to drill a well shall be accompanied by an accurate plat certified by a registered surveyor showing the location of the proposed well with reference to the nearest lines of a governmental section and referenced to true north. Also, the application must include an accurate pad layout which indicates cut & fill, and the proposed cuttings pit location. In addition, a production pad facilities layout plat is required.
- 8. The application for permit to drill a directional or horizontal well shall be accompanied by an accurate plat certified by a registered surveyor showing the internal dimensions of the spacing or drilling unit.
- 9. The application for permit to drill shall be accompanied by a drilling prognosis which shall include the following: the proposed total depth (including measured depth if appropriate) to which the well will be drilled, the estimated depth to the top of important geological markers, the estimated depth to the top of objective horizons, the proposed mud program, the proposed casing program including size and weight, the proposed depth at which each casing string is to be set, the proposed amount of cement to be used, the estimated top of cement and a proposed directional plot & plan.
- 10. A Gamma Ray Log must be run to ground level, a CBL run on the intermediate or production casing and open hole logs are required (unless waived by the director).
- 11. Surveys are required at least every 30 feet in the build section (or while deviating the well bore) and 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 except in the following scenarios: a) When the angle between the well bore and the respective boundary is 10 degrees or less; or b) if industry standard methods and equipment are not utilized. Consult the applicable field orders for exceptions.
- 12. The application for permit to drill shall be accompanied by the general completion technique.
- The application for permit to drill shall comply with NDIC-PP (Permit Policy) 1.01, 1.02, 1.03, 1.04, 1.05, 1.06, 2.01, 2.02, 2.03 and 2.04. Also, the application shall include confirmation that a legal street address was requested per NDAC 43-02-03-16.
- 14. The application for permit to drill shall be accompanied by a permit fee of one hundred dollars.
- 15. The approved application for permit to drill shall terminate and be of no further force and effect unless a well is drilling, or has been drilled, below surface casing on the first anniversary of the date of issuance or renewal.



APPLICATION FOR PERMIT TO DRILL HORIZONTAL WELL - FORM 1H

DEPARTMENT OF MINERAL RESOURCES OIL AND GAS DIVISION 600 EAST BOULEVARD DEPT 474 BISMARCK, ND 58505-0614 SFN 54269 (12-2016)

PLEASE READ INSTRUCTIONS BEFORE FILLING OUT FORM.

Type of Work	Туј	be of Well				Approximate	e Date Dirt Wor	k Will Start	/ill Start Confidential Status			
Operator					Telephon	Telephone Number						
Address			City			State	Zip Code					
Name of Surface Owner	or Tenant				I							
Address				City			State	Zip Code				
Notice has b dwelling with	permanently oc	This well is not located within five hundred feet of a occupied dwelling.										
		an one lateral pr	roposed, enter	data for	addition		-					
Well Name	•	Well Number										
Surface Footages F	-			Section	T	Township Range		County				
Longstring Casing Point I F	gstring Casing Point Footages			Section	Т	ownship N	Range W	County				
Longstring Casing Point Coordinates From Well Head Azimuth Longstring Total Depth From WH From WH •												
Bottom Hole Footages From Nearest Section Line Qtr-Qtr F L F L					Township Range N W			County				
Bottom Hole Coordinates From Well Head KOP Lateral 1 From WH From WH Feet MD						Azimuth Lateral 1 Estimated Total Depth Lateral 1 • Feet MD Feet TVD						
Latitude of Well Head • •	Longit "	ude of Well Head	NAD	Referenc	æ C	Description of	(Subj	ect to NDIC A	Approval)			
Ground Elevation Feet Above S.L	Acres in Space	cing/Drilling Unit	Spacing/Drilling Feet NL		ack Req eet SL	uirement Feet EL	Feet W		Commission Order			
North Line of Spacing/Dri	South Line of Spa		it E	ast Line	of Spacing/Dri	Iling Unit Feet	West Line of	West Line of Spacing/Drilling Unit Feet				
Objective Horizons		 					Pierre Shale	Pierre Shale Top				
Proposed Siz Surface Casing	e - "	Weight D Lb./Ft.	epth Ce Feet	ement Vo S			e hole must be asing must be		fresh water ack to surface.			
Proposed Siz Longstring Casing	e - "	Weight(s) Longstring Total Dep Lb./Ft. Feet MD				Feet TVD	Cement Volum Sacks		Fop Top Dakota Sand Feet Feet			
Base of Last Salt (If Appl	icable) Feet	NOTE: Intermed	g string	must be cem	ented above tl	he top Dakot	a Group Sand.					
Proposed Logs												
Drilling Mud Type (Vertica	al Hole - Below	Surface Casing)		D	rilling Mu	id Type (Later	al)					
Survey Type in Vertical P	Survey Fre	Survey Frequency: Build Section Feet			Frequency: L	ateral Feet	MWD Contra	MWD Contractor				
COMMENTS, ADDITI	ONAL INFOR	MATION, AND	OR LIST OF A	ATTACH	IMENTS	3						

Lateral 2													
KOP Lateral 2	Azimuth Latera	I 2 Estim	ated T	otal Depth Late	ral 2			KOP Coordinates From Well Head					
Feet MD	0		Feet MD				et TVD		From WH F			From WH	
Formation Entry Point Coordinates From Well Head				Bottom Hole Coordinates From Well Head				ad					
From WH From WH				From WH					From V	/H			
KOP Footages From Nearest Section Line				Qtr-Qtr	Section	ection Township		С	Range		Coun	ty	
FL FL			L					Ν		W			
Bottom Hole Footages From Nearest Section Line				Qtr-Qtr	Section		Township	С	Range		Coun	ty	
F	L	F	L					Ν		W			
Lateral 3													
KOP Lateral 3	Azimuth Latera	13 Estim	ated T	otal Depth Late	ral 3			KOI	OP Coordinates From W			ell Head	
Feet MD	0			Feet MD Feet TVD					From WH Fro				From WH
Formation Entry Point C	oordinates From	n Well Head		Bottom Hole Coordinates From Well Head									
From	WH	From	WH	From WH					From WH				
KOP Footages From Ne	arest Section Li	ne		Qtr-Qtr	Section		Township	С	Range		Coun	ty	
F	L	F	L					Ν		W			
Bottom Hole Footages F	From Nearest Se	ection Line		Qtr-Qtr	Section		Township	C	Range		Coun	ty	
F	L	F	L					Ν		W			
Lateral 4													
KOP Lateral 4	Azimuth Latera	14 Estim	ated T	otal Depth Late	ral 4			KOI	P Coordin	ates F	rom We	ell Head	
Feet MD	0			Feet MD		Fe	et TVD			F	rom Wl	4	From WH
Formation Entry Point C	oordinates From	n Well Head		Bottom Hole Co	oordinates	s Fron	n Well Hea	ad					
From	WH	From	WH		From	WH			From V	/H			
KOP Footages From Ne	arest Section Li	ne		Qtr-Qtr	Section		Township	C	Range		Coun	ty	
F	L	F	L					Ν		W			
Bottom Hole Footages F	rom Nearest Se	ection Line		Qtr-Qtr	Section Township			С	Range		County		
F	L	F	L					Ν		W			
Lateral 5													
KOP Lateral 5	Azimuth Latera	I 5 Estim	Estimated Total Depth Lateral 5					KOI	OP Coordinates From Well Head				
Feet MD	0			Feet MD		Fe	et TVD		From WH F				From WH
Formation Entry Point C	oordinates From	n Well Head		Bottom Hole Coordinates From Well Head				ad					
From	WH	From	WH	From WH					From V	/H			
KOP Footages From Nearest Section Line				Qtr-Qtr Section			Township		Range		County		
F L F			L			1		Ν					
Bottom Hole Footages From Nearest Section Line				Qtr-Qtr Section			Township		Range		Coun	ty	
F	L	F	L					Ν		W			
												Date	-
I hereby swear or affirm	the information	provided is t	rue, co	omplete and cor	rect as de	termi	ned from a	all av	vailable re	cords.		Duio	
Signature Printe				d Name				-	Title				
olghatare			1 11110						i ido				
Email Address													
Millionen Oinnetune				as Drinted Name				1	Withooo Title				
Witness Signature Witn			vvitne	ess Printed Name				ľ	Witness Title				
						FOR STATE USE ONLY							
FOR STATE USE ONLY Permit and File Number API Number				Date App									
33 -				-									
Field				Ву									
Pool Permit Type				Title			Title						
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