

# UltraVibe

UltraVibe is the Black Diamond anti-friction drilling system which enhances drilling efficiency and wellbore quality with options to configure as a Flow-Activated or Ball-Activated tool. The dual goal of improving weight transfer and reducing friction enables maximum control of the drilling process in even the longest laterals.

Our revolutionary valve assembly, precisely engineered to orchestrate highly effective cyclical pressure fluctuations, generates axial vibrations strategically optimized to elevate drilling efficiency.

## Features and Benefits

### Effective Weight Transfer

- Enhanced WOB control
- Extended bit life
- Reduced risk of differential sticking
- Reduced wellbore tortuosity
- Improved toolface control

### Increased ROP

- Reduced erratic reactive torque
- Reduced Stick-Slip
- Minimized frictional losses
- Improved directional control
- Reduction in key-seating
- Reduction in vertical hanging

### Reduced Drilling Costs

- Increased drilling efficiency
- Limited expenditure on downhole tool wear due to friction and compression

### Integrated Flex Subs

- Integrated uphole and downhole flex subs remove the need for cross-over subs

### Activation Set-Up Options

- System can be configured to be manually activated by ball drop when friction is needed to be reduced. Frequency of activation can be increased via a ball drop to match operational requirements.

#### Flow Activated

- Mud flow through the drill string activates the tool.

#### Ball Activated

- Initial Ball drop activates tool, pulses slower at lower frequency (50% of full frequency)
- Second Ball Drop switches pulses to full high frequency

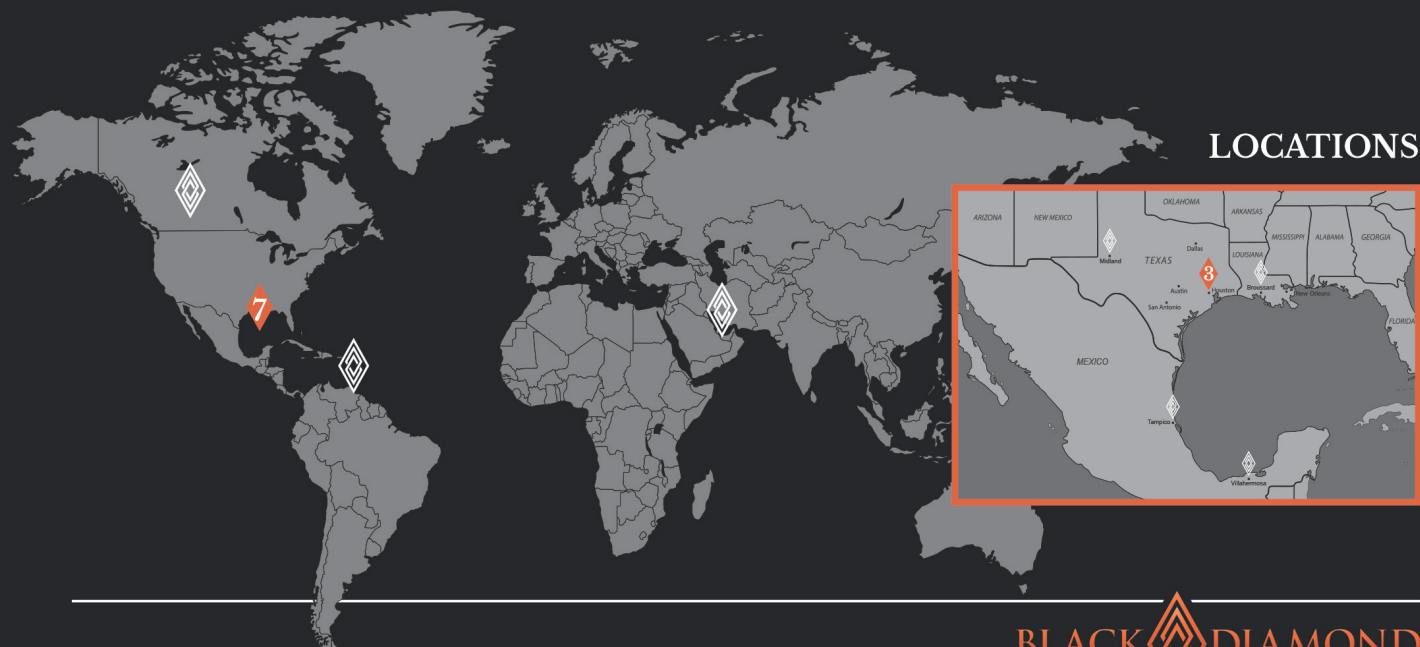
### Maximized Shock Force

- The UltraVibe system is capable of running multiple tools in a drill string. This setup requires all tools to be flow activated.
- High Pump open area in Shock Tool maximizes axial force output into drill string
- Housing connections engineered for improved fatigue resistance compared to traditional drilling tool connections.

## Technical Specifications

Nominal OD (in)	Length (ft)	Weight (lb)	Yield Strength		Make-up Torque (ft-lb)	Pump Open Area (in <sup>2</sup> )	Flow Range (gpm)	Operating Frequency (Hz)	Pressure Drop (psi)	Max. Temp. (°F)
			Torsional (ft-lb)	Tensile (lb)						
5 3/8	28.7	1,640	37,000	650,000	26,000	21.8	200-400	6-16	350-650	375
6 7/8	32.3	3,000	78,000	1,100,000	55,000	39.2	400-750	6-16	350-650	375





## LOCATIONS



## USA

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### BLACK DIAMOND CONROE

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### BLACK DIAMOND MWD

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### BLACK DIAMOND WEST TEXAS

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## CANADA

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## GUYANA

### BLACK DIAMOND GEORGETOWN

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East Bank Demerara  
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## MEXICO

### BLACK DIAMOND VILLAHERMOSA

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## MIDDLE EAST

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