# **Product Report**





Pictures may not show every (all) optional feature (s) on actual bit

# 17 1/2" T51APC

# **Design Features of this bit**

# **Precision Logarithmic Roller Bearing**

Precision ground, premium logarithmic rollers with fully encapsulated ball bearing retention and silver plated thrustwasher. Delivers maximum bearing life in large diameter bits.

#### **Texturized Radial Seal - HNBR**

The radial seal geometry designed for large diameter roller bearing bits. A texturized pattern at the seal interface captures lubricant reducing torque and heat generation extending seal life.

## Silver-Plated Thrustwasher

A floating silver-plated stellite washer located between lug and cutter thrust bearing surfaces provides reduced operating temperatures and more consistent bearing performance.

# MudPick II® Hydraulics

Patented nozzle design directing a sweeping fluid flow directly into the cutting path at the formation failure zone. The most aggressive hydraulic arrangement to maximize cleaning and ROP

# GageGuard™

Additional row of protruding inserts located between gauge row teeth providing superior gauge protection.

# MatchFit™ Insert Retention.

Patented process that captures entire insert shank, improving insert retention especially with large diameter inserts.

#### **General Data**

IADC Code 515M **Bearing Type** Roller

Seal Type RADIAL-TEXTURIZED-HNBR

Journal Angle 33° Cone Skew 3°

# **Cutting Structure**

Gauge Row Inserts

Count

Shape Flat Top Chisel Formed Gage

Main Row Inserts

Shape Flat Top Chisel

**Total Count** 182

API Pin Size (ins) 7.625" Maximum 40000 make-up Torque

(ft-lbs)

Shipping Weight 625

(lbs)

D **Nozzle Code Center Jet** Bit Length (ins) 15.390

# **Recommended Operating Parameters**

Weight on Bit Range

Max (klbs) Min (klbs) 15 Max (tonne) 32 Min (tonne) 7 **Rotary Speed** 

(RPM)

450 - 60

### **Additional Information**

Min Annular Area 85.30

(in²)

Bit Breaker

151862

In some applications this bit is run successfully beyond these parameters. Contact your NOV Downhole Representative fo recommended operating parameters in your application. NOV Downhole reserves the right to revise these specifications, based on advances and improvements in technology

This report is valid for 30 days from 16-May-2012