

# Petroleum Exploration (Pvt.) Limited

## WELLHEAD & X-MASS TREE FOR AYUB-I WELL

| S. No    | Description   | Unit | Qty |
|----------|---|------|-----|
|          | <b>Casing Head Housing, Tubing Head Spool, X-Mass Tree And Accessories</b>  |      |     |
| <b>I</b> | <b>Section A + Accessories [CASING HEAD HOUSING] (API 6A 5K, MC: "BB", Temperature "PU", PSL-I, PRI)</b>  |      |     |
|          | <b>Casing Head Housing:</b>   |      |     |
| 1.1      | Top Connection: 13-5/8"-5K Flange ; Bottom Connection: 13-3/8" SOW ; C/W 2 Side Outlets Size: 2" LP Threaded Box; With Lock Down Screws & VR Plug | No   | 1   |
| 1.2      | <b>Ring Gasket:</b> 13-5/8"-5K ; Size: BX-160   | No   | 2   |
| 1.3      | <b>Stud Assembly:</b> Complete with two nuts for 13-5/8" Flange ; Size: 1-5/8" x 12 3/4"  | No   | 18  |
| 1.4      | <b>Gate Valve:</b> For Side Outlets: Size 2 1/16"-5K ; Type: 2" LP Threaded Box   | No   | 2   |
| 1.5      | <b>Nipples:</b> 2" LP Pin x Pin, 6" Long  | No   | 2   |
| 1.6      | <b>Bull Plugs:</b> 2" LP Threaded, Pin X 1/2" NPT ; Pressure Rating: 5000 psi   | No   | 2   |
| 1.7      | <b>Needle Valve:</b> 1/2" NPT ; Connection: M x F ; Pressure Rating: 5000 psi   | No   | 2   |
| 1.8      | <b>Pressure Gauge:</b> Range 0-5000 psi ; Connection: 1/2" Male ; Connection Size: 4 1/2" OD  | No   | 2   |
| 1.9      | <b>Wear Bushing:</b> Size 13-5/8" NOM   | No   | 1   |
| 1.10     | <b>Tool, Combination, Running &amp; Retrieving:</b> 13-5/8" NOM   | No   | 1   |
| 1.11     | <b>Replacement Seal for Wear Bushing:</b> 13-5/8" NOM   | No   | 1   |
| 1.12     | <b>Replacement Seal for Combination Test Tool:</b> 13-5/8" NOM  | No   | 1   |
| 1.13     | <b>Casing Hanger:</b> 13-5/8" x 9-5/8" ; Type Slip & Seal ; C/W Allen Wrench  | No   | 1   |

| 2    | Section B + Accessories [Tubing Head Spool] (API 6A 10K, MC: "CC", Temperature "PU", PSL-2, PR-2)   |    |    |
|------|---|----|----|
| 2.1  | <b>Tubing Head Spool:</b><br>Top Connection: 11"-10K Flange ; Bottom Connection 13-5/8"-5K Flange ; C/W 2 Side Outlets Size: 2 1/16"<br>Studded w/ VR Plug. (Internal Profile of Tubing head spool: To accomodate Mandrel type Tubing hanger of 11"<br>Nominal size at the top and at bottom having prep to accommodate neck part of 9-5/8" casing Stub with P-seals)           | No | 1  |
| 2.2  | <b>Ring Gasket:</b> 11"-10K ; Size: RX-54   | No | 2  |
| 2.3  | <b>Stud Assembly:</b> Complete with two nuts for 11" Flange ; Size: 1 7/8" x 14-1/2"  | No | 16 |
| 2.4  | <b>Gate Valve:</b> Side Outlets: Size 2 1/16"-10K ; Flanged End   | No | 2  |
| 2.5  | <b>Ring Gasket:</b> 2 1/16" - 10K Flange ; Size: RX-24  | No | 4  |
| 2.6  | <b>Companion Flange:</b> Size 2 1/16"-10K x 2" LP Threaded  | No | 2  |
| 2.7  | <b>Stud &amp; Bolts:</b> 2 1/16"-10K  | No | 18 |
| 2.8  | <b>Bull Plugs:</b> 2" LP Threaded ; Pressure Rating: 10000 psi  | No | 2  |
| 2.9  | <b>Needle Valve:</b> 1/2" NPT ; Connection: M x F ; Pressure Rating: 10000 psi ; Angled   | No | 2  |
| 2.10 | <b>Wear Bushing:</b> Size 11" NOM   | No | 1  |
| 2.11 | <b>Tool, Combination, Running &amp; Retrieving:</b> 11" NOM   | No | 1  |
| 2.12 | <b>Replacement Seal for Wear Bushing:</b> 11" NOM   | No | 1  |
| 2.13 | <b>Replacement Seal for Combination Test Tool:</b> 11" NOM  | No | 1  |
| 2.14 | Hand Pump and Grease Injection Gun  | No | 1  |
| 3    | Section C + Accessories [Tubing Hanger, Tubing Head Adapter & X-mas Tree] (API 6A 10K, MC: "FF", Temperature  |    |    |
| 3.1  | <b>Tubing Hanger Assembly:</b> 11" Nominal to be seated in 11"-5K with 3" NOM BPV, Lift Threads, 3-1/2" 9.2<br>ppf Gas Tight Premium Connection Box, Suspension Thread 3-1/2" 9.2 ppf Gas Tight Premium Threads<br>Connection Box, Complete with body and hanger neck seals with 1/4" Continuous Control Line ports.,<br>Material class should be compatible for CO2 envirement | No | 1  |
| 3.2  | <b>Redress Kit:</b> for 11" Nominal Tubing Hanger Assembly, Body and Neck seals   | No | 1  |
| 3.3  | <b>Tubing Head Adapter/Bonnet Assembly:</b> 11"- 10K x 3-1/8" 10K studded top. C/W Prep for 1/4"<br>Continuous control line port. Prepared to accommodate the extended neck of tubing hanger with 1/4" C.L exit<br>Block, complete with studs & bolts.  | No | 1  |
| 3.4  | <b>Ring Gasket:</b> 11" - 10K Flange: Size RX-54  | No | 2  |
| 3.5  | <b>Manual Gate Valves:</b> X-mas Tree: 3 1/8" 10K Flanged Ends  | No | 4  |

|     |   |     |    |
|-----|---|-----|----|
| 3.6 | <b>Surface Safety Valve:</b> 3 1/8" 10K Flanged Ends ; Reverse Acting Prep for Pneumatic Actuator ; Diaphragm Pneumatic Actuator C/W Bonnet Assy For 3-1/8" 10K Reverse Acting Gate Valve. Actuator Requires 100 psi To open Valve at Full Differential | No  | 1  |
| 3.7 | Manual Override for Surface Safety Valve  | No  | 1  |
| 3.8 | <b>Cross Assembly:</b> 3 1/8" 10K All Sides ; Studded All Sides   | No  | 1  |
| 3.9 | <b>Stud Assembly:</b> complete with two nuts for 3 1/8" 10K Flanges ; Size 1 1/8" x 8-1/2"  | No  | 48 |
| 3.1 | <b>Companion Flange:</b> 3 1/8" Flange with 1/2" NPT Port   | No  | 2  |
| 3.1 | <b>Instrument Flange:</b> 3 1/18" Flange ; Qty 2: 1/2" NPT Port ; Qty 1: 3/4" Thermowell  | No  | 2  |
| 3.1 | <b>Needle Valve:</b> 1/2" NPT ; Connection: M x F ; Pressure Rating: 10000 psi  | No  | 3  |
| 3.1 | <b>Pressure Gauge:</b> Range 0-10000 psi ; Connection: 1/2" Male ; Dial Size: 4 1/2" OD   | No  | 4  |
| 3.1 | <b>Pressure Gauge:</b> Range 0-10000 psi ; Connection: 1/4" Male ; Dial Size: 3" OD   | No  | 2  |
| 3.2 | <b>Tree Cap:</b> 3 1/8" Flange with 1/2" NPT Port w/ Hammer Union Connection  | No  | 1  |
| 3.2 | <b>Ring Gasket:</b> 3 1/8" - 10K Flange: Size RX35  | No  | 18 |
| 3.2 | <b>Weld Neck Flange:</b> 3 1/8" 10K Flanged Ends ; Min ID 4" NOM Weld Prep  | No  | 2  |
| 3.2 | <b>Adjustable Choke Assembly:</b> 3 1/8" 10K Flanged Ends ; 2" NOM  | No  | 1  |
| 3.2 | Spare Kit For Repair Of Adjustable Choke Including Needle For Above Choke   | No  | 2  |
| 3.2 | <b>Fixed Choke Assembly:</b> 3 1/8" 10K Flanged Ends ; 2" NOM   | No  | 1  |
| 3.2 | <b>Additional Choke Beans:</b> 16/64", 20/64", 24/64", 28/64", 32/64", 36/64", 40/64", 44/64", 48/64", 52/64", 56/64", 64/64", 72/64", 96/64" Along With Choke Bean Wrench  | Set | 1  |
| 3.2 | <b>Back Pressure Valve:</b> Type H ; 3" NOM   | No  | 1  |
| 3.2 | <b>Two Way Check Valve:</b> Type H ; 3" NOM   | No  | 1  |
| 3.2 | Spare Kits for BPV & TWCV   | No  | 3  |
| 3.3 | BPV Running & Retrieving Tool   | No  | 2  |