

Petroleum Exploration (Pvt.) Limited

WELLHEAD & X-MASS TREE FOR BADAR-3 WELL

S. No	Description	Unit	Quantity Required
Casing Head Housing, Tubing Head Spool, X-Mass Tree And Accessories			
1	Section A + Accessories [CASING HEAD HOUSING] (API 6A 5K, MC: "CC", Temperature "PU", PSL-1, PR1)		
	Casing Head Housing		
1.1	Top Connection: 11"-5K Flange; Bottom Connection: 9 5/8" SOW ; C/W 2 Side Outlets Size: 2" LP Threaded Box; With Lock Down Screws & VR Plug	No	1
1.2	Ring Gasket: 11"-5K ; Size: RX-54	No	2
1.3	Stud Assembly: Complete with two nuts for 11" Flange ; Size: 1 7/8" x 14 1/2"	No	16
1.4	Gate Valve: For Side Outlets: Size 2 1/16"-5K ; Type: 2" LP Threaded Box	No	2
1.5	Nipples: 2" LP Pin x Pin, 6" Long	No	2
1.6	Bull Plugs: 2" LP Threaded, Pin X 1/2" NPT ; Pressure Rating: 5000 psi	No	2
1.7	Needle Valve: 1/2" NPT ; Connection: M x F ; Pressure Rating: 5000 psi	No	2
1.8	Pressure Gauge: Range 0-5000 psi ; Connection: 1/2" Male ; Connection Size: 4 1/2" OD	No	2
1.9	Wear Bushing: Size 11" NOM	No	1
1.10	Tool, Combination, Running & Retrieving: 11" NOM	No	1
1.11	Replacement Seal for Wear Bushing: 11" NOM	No	1
1.12	Replacement Seal for Combination Test Tool: 11" NOM	No	1
1.13	Casing Hanger: 11" x 7"; Type Slip & Seal ; C/W Allen Wrench (For Hanging 7" Casing inside 9 5/8")	No	1
2	Section B + Accessories [Tubing Head Spool] (API 6A 5K, MC: "CC", Temperature "PU", PSL-2, PR-2)		
	Tubing Head Spool		
2.1	Top Connection: 11"-5K ; Bottom Connection 11"-5K ; C/W 2 Side Outlets Size: 2 1/16" Studded w/ VR Plug. (Internal Profile of Tubing head spool: To accomodate Mandrel type Tubing hanger of 11" Nominal size at the top and at bottom having prep to accommodate neck part of 7")	No	1
2.2	Ring Gasket: 11"-5K ; Size: RX-54	No	2

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2.3	Stud Assembly: Complete with two nuts for 11" Flange ; Size: 1 7/8" x 14 1/2"	No	16
2.4	Gate Valve: Side Outlets: Size 2 1/16"-5K ; Flanged End	No	2
2.5	Ring Gasket: 2 1/16" - 5K Flange ; Size: RX-24	No	4
2.6	Companion Flange: Size 2 1/16"-5K x 2" LP Threaded	No	2
2.7	Stud & Bolts: 2 1/16"-5K	No	16
2.8	Bull Plugs: 2" LP Threaded ; Pressure Rating: 5000 psi	No	2
2.9	Needle Valve: 1/2" NPT ; Connection: M x F ; Pressure Rating: 5000 psi ; Angled	No	2
2.10	Hand Pump and Grease Injection Gun	No	1
3	Section C + Accessories [Tubing Hanger, Tubing Head Adapter & X-mass Tree] (API 6A 5K, MC: "FF 1.5", Temperature "PU", PSL-2, PR2)		
3.1	Tubing Hanger Assembly: 11" Nominal to be seated in 11"-5K casing spool with 4-1/2" NOM BPV threads, 4-1/2" 12.6 ppf Gas Tight Premium connection lift & suspension Box threads. Complete with body and hanger neck seals with 1/4" Continuous Control Line ports.	No	1
3.3	Tubing Head Adapter/Bonnet Assembly: 11"- 5K x 4-1/16" 5K studded top. C/W Prep for 1/4" Continuous control line port. Prepared to accommodate the extended neck of tubing hanger with 1/4" C.L exit Block, complete with studs & bolts.	No	1
3.5	Manual Gate Valves: X-mas Tree: 4 1/16" 5K Flanged Ends	No	4
3.6	Surface Safety Valve: 4-1/16" 5K Flanged Ends ; Reverse Acting Prep for Pneumatic Actuator ; Diaphragm Pneumatic Actuator C/W Bonnet Assy For 4-1/16" 5K 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	Cross Assembly: 4-1/16" 5K All Sides ; Studded All Sides	No	1
3.9	Stud Assembly: complete with two nuts for 4-1/16" 5K Flanges ; Size 1-1/4" x 8 1/2"	No	56
3.10	Blind Flange: 4-1/16" Flange with 1/2" NPT Port	No	2

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3.11	Instrument Flange: 4-1/16" Flange ; Qty 2: 1/2" NPT Port ; Qty 1: 3/4" Thermowell	No	2
3.12	Thermowell for Instrument Flange	No	1
3.13	Needle Valve: 1/2" NPT ; Connection: M x F ; Pressure Rating: 5000 psi	No	3
3.14	Pressure Gauge: Range 0-5000 psi ; Connection: 1/2" Male ; Dial Size: 4 1/2" OD	No	4
3.15	Pressure Gauge: Range 0-5000 psi ; Connection: 1/4" Male ; Dial Size: 3" OD	No	2
3.16	Tree Cap: 4-1/16" Flange with 1/2" NPT Port w/ Hammer Union Connection	No	1
3.17	Ring Gasket: 4-1/16" - 5K Flange: Size RX-39	No	18
3.18	Weld Neck Flange: 4-1/16" 5K Flanged Ends ; Min ID 3" NOM Weld Prep	No	2
3.19	Adjustable Choke Assembly: 4-1/16" 5K Flanged Ends ; 3" NOM	No	1
3.20	Spare Kit For Repair Of Adjustable Choke Including Needle For Above Choke	No	2
3.21	Fixed Choke Assembly: 4-1/16" 5K Flanged Ends ; 3" NOM	No	1
3.22	Additional Choke Beans: 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
3.23	Back Pressure Valve: Type H ; 4" NOM	No	1
3.24	Two Way Check Valve: Type H ; 4" NOM	No	1
3.25	Spare Kits for BPV & TWCV	No	3
3.26	BPV Running & Retrieving Tool	No	2
3.27	Spanner Tool Kit, Compatible w/Range of the bolt sizes of X-mass Tree and Well Head Assy	No	1