

EPCM-1

Project No. : 10108

Project Name : SATELLITES FIELD DEVELOPMENT PHASE 2

Supplier Name: Integrated Flow Solutions

DeltaAfrik P.O./Contract No:	10108-1001	COMPANY Contract Number		10108	
Supplier Doc No:	EL-25046-01	Supplier Rev:	2	Doc Code(s):	C104
MPN Doc No:	NG4A-CY-VLZZZ-0030871	MPN Rev:	D	Date	11 Dec 2013

Tag Nos: NG4A-VMAK966201

Document Title: EQUIPMENT LIST- IBOT A

Status Code	Description	Reviewer Name: Sign + Print + Date
1	Reviewed and Accepted as Final & Certified Manufacture may proceed	
2	Reviewed with Minor Comments and accepted as marked Manufacture may Proceed. Revise and Resubmit.	
3	Reviewed with Major Comments and Returned. Manufacture may not proceed. Revise and address comments and resubmit.	
4	Not Accepted. Rework to address comments and resubmit. Manufacture may not proceed.	
5	For Information Only Review not Required. Manufacture may Proceed.	

**Authorisation to proceed does not relieve Supplier / Contractor / Sub-Contractor of its
responsibility or liability under the terms of the Purchase Order / Contract.**

Rev.	By	CHECK BY	Rev. Description	Rev. Date	PROJECT INFORMATION										Num.	NOTE				
					Customer: DeltaAfrik Engineering Limited Customer PO: 10108-1001 End User: Project: Satellite fields development project - phase 2										1	Qty 1 Shown Qty 1 Required				
2	CA	LA	APPROVED FOR CONSTRUCTION	12/11/2013	Equipment: IBOT 'A' WHP Instrument And Power Gas Skid															
1	CA	LA	APPROVED FOR CONSTRUCTION	12/21/2012	Skid Tag: NG4A-VMAK966201															
0	KC	LA	APPROVED FOR CONSTRUCTION	9/18/2012	IFS Job Number: 25046															
A	KC	LA	ISSUED FOR APPROVAL	7/6/2012	IFS Document Number: EL-25046-01 Client Document Number: NG4A-CY-VLZZZ-30871															
EQUIPMENT LIST																				
Seq.	Qty.	Tag Number	Item Type	Connections			Design Pressure (Psig)	Design Temp. (°F)	Operating Pressure (Psig)	Operating Temperature (°F)	Description	Service	Reference P&ID	Reference Datasheet No.	Manufacturer	Model Number	Dry Weight (Kg)	Operating Weight (Kg)	Comments	
				(Inch)	Type	Class														
1	1	NG4A-MBF966201	Power Gas Scrubber Vessel	3" Gas Outlet (N2) 2" Liquid Outlet (N3) 2" Drain (N4) 2" Spare (N5) 2" Pressure Gauge (K1) 2" Level Switch LSHH (K2A/K2B) 2" Level Controller (K3A/K3B) 2" Level Gauge (K4A/K4B) 2" DPI (K5A/K5B) 2" Level Switch LSL (K6A/K6B)	WNRF WNRF WNRF WNRF WNRF WNRF WNRF WNRF WNRF WNRF	150# 150# 150# 150# 150# 150# 150# 150# 150# 150#	245	225	140	118	Flow Rate: 3 MMSCFD Dimensions: 26" OD X 102" S/F Material of Construction Head/Shell: SA-516-70 / SA-106 Gr. B C.A: 0.125" Design Code: ASME Sec. VIII Div. 1, Code Stamped	Power Gas Scrubber	P-25046-01 (NG4A-CY-VDPID-0050422)	NG4A-DA-PTTDS-CD30098 Rev. 0 & NG4A-DA-MTTDS-CD30004 Rev. 0	IFS	N/A	927.14	1314	Top cover fitted with davit MTR per EN10204 3.1	
2	1	N/A	Mesh	N/A	N/A	N/A	245	225	140	118	Tex-Mesh Mist Eliminator Designed to handle 3.0 MMSCFD Vapour @ 135 psig, 118 °F Material of construction: 316 SS Mesh & SS Top & Bottom grids Mist Collection Efficiency: 99.9% @ droplet diameter more than 10 micron Dimensions: 25 1/4" OD X 6" mesh, 8" overall height. Single piece coiled construction (4) Latch Keys	Power Gas Scrubber	P-25046-01 (NG4A-CY-VDPID-0050422)	NG4A-DA-PTTDS-CD30098 Rev. 0 & NG4A-DA-MTTDS-CD30004 Rev. 0	Amitsco	7CA/3BA	7	8	MTR per EN10204 3.1	
3	1	NG4A-MAK965201	Instrument Gas Filter Separator Vessel	2" Feed Inlet (N1) 2" Gas Outlet (N2) 2" Liquid Outlet upper Section (N3) 2" Liquid Outlet Lower Section (N4) 2" Vent Upper Section (N5) 2" Vent Lower Section (N6) 2" Drain (N7) 2" Pipe Buffer Volume Drain Inlet (N8) 2" Upper Level Gauge (K1A/K1B) 2" Lower Level Gauge & LSHH (K2A/K2B) 2" DPI (K3A/K3B) 2" Pressure Gauge (K4)	WNRF WNRF WNRF WNRF WNRF WNRF WNRF WNRF WNRF WNRF WNRF WNRF	150# 150# 150# 150# 150# 150# 150# 150# 150# 150# 150# 150#	245	225	135	118	Vapour Flow Rate: 0.4 MMSCFD Dimensions: 18" OD X 98" S/S Material of Construction Head/Shell: SA-516-70 / SA-106 Gr. B C.A: 0.125" Design Code: ASME Sec. VIII Div. 1 code Stamped	Instrument Gas Filter Separator	P-25046-02 (NG4A-CY-VDPID-0050423)	NG4A-DA-PTTDS-CD30099 Rev. 0 & NG4A-DA-MTTDS-CD30005 Rev. 0	IFS	N/A	447.7	537	Quick Opening Type closure on top. MTR per EN10204 3.1	
4	3	N/A	Coalescing Filter Element	N/A	N/A	N/A	245	225	135	118	APEX® Patented* Vapor/LiquidCoalescer Designed to handle 0.4 MMSCFD @ 135 psig, 118 °F Efficiency: 99.97% @ 0.1 to 0.6 µm Vessel ID: 17.25" No. of Elements: 3 Element Dimension : 3.75" ODX 30" Nominal Length Flow Direction: Inside to Outside Riser: Seamless SA-106 Extension Nuts: 316 Stainless Steel Other Components : Centre core and Endscape: Corrosion Resistance CS Seals: Viton O Rings Media:UniForm Plus Media composed of Inorganic microfibers bonded together with proprietary binders.	Instrument Gas Filter Separator	P-25046-02 (NG4A-CY-VDPID-0050423)	NG4A-DA-PTTDS-CD30099 Rev. 0 & NG4A-DA-MTTDS-CD30005 Rev. 0	Porous Media	IFSA3803V	48	60	MTR per EN10204 3.1 With removal tool	
5	1	N/A	Quick Opening Closure	18"	Quick Opening	150#	245	225	235	118	Yale Fig 500 Closure,(4) 18" ANSI 150,Vertical Hinge Design Code: ASME Sect. VIII, DIV. 1 Code Stamp Design Pressure: 245 PSIG Design Temperature: -20 TO 225 DEG F Corrosion Allow: .125" CS Pav,Buna N O-Ring,CAP: SA516-70N,Hub: SA350LF2 CL1 Closure Bore 17.376 with weld bevel thickness to mate with Vessel ID 17.376 X WT .312	Instrument Gas Filter Separator	P-25046-02 (NG4A-CY-VDPID-0050423)	YALE FIG 500 CLOSURE	Yale	Yale Fig 500 Closure	186	186	MTR per EN10204 3.1 1-Hr Hydrotet	