

EPCM-1

Project No. : 10108

Project Name : SATELLITES FIELD DEVELOPMENT PHASE 2

Supplier Name: Integrated Flow Solutions

DeltaAfrik P.O./Contract No:	10108-1004	COMPANY Contract Number		10108	
Supplier Doc No:	VL-25057-01	Supplier Rev:	3	Doc Code(s):	C104
MPN Doc No:	NG00-CY-VLZZZ-0074393	MPN Rev:	E	Date	20-Nov-13

Tag Nos: NGBN-VPBJ999202, NG4A-VPBJ999202, NG5A-VPBJ999202, NG6A-VPBJ999202

Document Title: VALVE LIST

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	Rev. Description	Rev. Date	PROJECT INFORMATION												NOTE #	NOTE				
				Customer: DeltaAfrik Engineering Limited Customer PO: 10108-1004 End User: Project: Satellite Field Development Project-Phase 2 Equipment: IDOHO N, IBOT A, UFAN A, IFURE A Sump Pump Skids Skid Tag: NGBN-VPBJ999202, NG4A-VPBJ999202, NG5A-VPBJ999202, NG6A-VPBJ999202 IFS Job Number: 25057 IFS Document: VL-25057-01 Number:													Qty Shown 1 Qty Required 4				
3	JB/BM	Per Customer Comments	11/20/2013																		
2	BM	Per Customer Comments	10/17/2013																		
1	BM/JB/CA	Added Tag Numbers	5/29/2013																		
0	JB	For Construction	11/14/2012																		
A	BM/JB	For Approval	9/12/2012																		
VALVE LIST																					
Seq.	Qty.	ID Number	Datasheet No. (IFP)	Manual Valve Tag Number	Valve Type	Connections			Body Materials of Construction	Trim Materials of Construction	Seats/ Seals/ Packing	Manual Operator Type	Design Pressure (Max/Min) (PSIG)	Design Temp. (Min/Max) (Deg F)	Rated Pressure (PSIG)	Rated Temp. (Deg F)	Service	Reference P&ID IFS# / (Deltafrik P&ID#)	Manufacturer	Model Number	Comments
						Size (in)	Type	Class													
1	5	ABAA0(L)	NG00-DA-LTTDS-0065245-001_0	MV999202-01 MV616202-03 MV999202-04 MV999202-07 MV616202-04	Ball	2"	FLG,RF	150#	ASTM A105N	ASTM A182-F316	Reinforced Teflon Seat HNBR Seal 95% Pure Graphite Packing	Lever	285 / 253	(-20 to 100) / 225	285 / 253	(-20 to 100) / 225	Power Gas / Open Drain	P-25057-01 / (NGBN-CY-VDPID-0050388) P1-25057-01 / (NG4A-CY-VDPID-0050460) P2-25057-01 / (NG5A-CY-VDPID-0050434) P3-25057-01 / (NG6A-CY-VDPID-0050345)	Valbart	A-02-R-R-01-AS-R-H-L	API 6D Reduced Port Trunnion Mounted Fire Safe 607/6FA, Multi Piece B7/2HM Bolts with Coating per GP 29-02-13 ASME B16.5 Fine Grain Microstructure Closely Scrutinized
2	1	BBAA0(L)	NG00-DA-MTTDS-0065392_0		Ball	1"	FLG,RF	300#	ASTM A350 LF2 Cl.1	ASTM A182-F316	Reinforced Teflon Seat HNBR Seal 95% Pure Graphite Packing	Lever	285 / 253	(-20 to 100) / 225	285 / 253	(-20 to 100) / 225	Power Gas	P-25057-01 / (NGBN-CY-VDPID-0050388) P1-25057-01 / (NG4A-CY-VDPID-0050460) P2-25057-01 / (NG5A-CY-VDPID-0050434) P3-25057-01 / (NG6A-CY-VDPID-0050345)	OMB	F3-C-800-SF	API 6D Floating Ball Blow-out Proof stem Self Relieving Side entry Multi-piece Inconel X750 Spring A-193 B7 Bolts / A-194-2H nuts (Fluoropolymer coating per GP 29-02-13) Lockable (API 608) 95% Pure graphite gaskets
3	5	ABSA7(L)	NG00-DA-LTTDS-0065253-001_0		Double Block & Bleed	3/4"x3/4"	MSWxFNPT	150#	ASTM A350 LF2 Cl.1	ASTM A182-F316	PTFE Seat Graphite Seal Graphite Packing	Lever	285 / 253	(-20 to 100) / 225	285 / 253	(-20 to 100) / 225	Power Gas / Open Drain	P-25057-01 / (NGBN-CY-VDPID-0050388) P1-25057-01 / (NG4A-CY-VDPID-0050460) P2-25057-01 / (NG5A-CY-VDPID-0050434) P3-25057-01 / (NG6A-CY-VDPID-0050345)	Anderson Greenwood	P63VLS-062D-067B-AL-BD-BVL(2)-PV-ST-316T	ASME B16.34, 1/2" NPT Plugged Vent, Fire Safe API 607
4	2	YTAA5(L)	NG00-DA-MTTDS-0065272_0		Globe	3/4"	SW	800#	ASTM A105N	SS 316	HF/ Standard/ Flexible Graphite	Handle (Lockable)	740 / 670	(-20 to 100) / 225	1975 / 1750	(-20 to 100) / 300	Power Gas	P-25057-01 / (NGBN-CY-VDPID-0050388) P1-25057-01 / (NG4A-CY-VDPID-0050460) P2-25057-01 / (NG5A-CY-VDPID-0050434) P3-25057-01 / (NG6A-CY-VDPID-0050345)	OMB	830 : 8 : SW	API 602 ASME B16.10 Long Pattern Bolted Bonnet (Wing Guided, V Port OR Plug Type) T-Body OS&Y Reduced Port API Trim #8 A-193-B7 Bolts w/ A-194-2H nuts with Coating per GP 29-02-13 MTR per EN 10204 3.1 for Body and cover AND 2.2 for Other parts
5	3	ABFA0(L)	NG00-DA-LTTDS-0062471-001_0	MV999202-02 MV999202-05 MV999202-08	Ball	2"	FLG,RF	150#	ASTM A105N	ASTM A182-F316	Reinforced Teflon Seat HNBR Seal Graphite Packing	Lever	285 / 253	(-20 to 100) / 225	285 / 253	(-20 to 100) / 225	Power Gas / Open Drain	P-25057-01 / (NGBN-CY-VDPID-0050388) P1-25057-01 / (NG4A-CY-VDPID-0050460) P2-25057-01 / (NG5A-CY-VDPID-0050434) P3-25057-01 / (NG6A-CY-VDPID-0050345)	Valbart	A-02-F-R-01-AS-R-H-L	API 6D Full Port Trunnion Mounted Fire Safe 6FA, Multi Piece B7/2HM Bolts with Coating ASME B16.5 Fine Grain Microstructure Closely Scrutinized
6	5	YBAA7(L)	NG00-DA-LTTDS-0062459-001_0		Ball	3/4"	SWxSE	2000# WOG	ASTM A105N	316SS	RPTFE/ PTFE/ 95% Pure Graphite	Lever	285 / 253	(-20 to 100) / 225	2000 / 1300	(-20 to 100) / 225	Power Gas / Open Drain	P-25057-01 / (NGBN-CY-VDPID-0050388) P1-25057-01 / (NG4A-CY-VDPID-0050460) P2-25057-01 / (NG5A-CY-VDPID-0050434) P3-25057-01 / (NG6A-CY-VDPID-0050345)	Nutron	T3R07TS20BZ	ASME B16.34, Reduced Port, Fire Safe 607 Seal Welded
7	2	ACAA0	NG00-DA-LTTDS-0065250-001_0	FSV991206-01 FSV991206-02	Check	2"	FLG,RF	150#	ASTM A105N	API Trim No 8	Hard Face Seat	-	285 / 253	(-20 to 100) / 225	285 / 253	(-20 to 100) / 225	Open Drain	P-25057-01 / (NGBN-CY-VDPID-0050388) P1-25057-01 / (NG4A-CY-VDPID-0050460) P2-25057-01 / (NG5A-CY-VDPID-0050434) P3-25057-01 / (NG6A-CY-VDPID-0050345)	SWI	2.00 ADB-11AB-RA1A	API 602 Swing Check ASME B16.5 Bolted Cover Bolting ASTM A193-B7/ASTM A194-2H with Coating per GP 29-02-13 Fine Grain Microstructure Closely Scrutinized
8	3	V-01	-	-	Gauge Valve	3/4"x1/2"(3)	MNPTxFNPT	6000#	ASTM A479-316	316 SS	Metal Seat Grafoil Packing	Handle	2220 / 2011	(-20 to 100) / 225	6000	230	Instrument	P-25057-01 / (NGBN-CY-VDPID-0050388) P1-25057-01 / (NG4A-CY-VDPID-0050460) P2-25057-01 / (NG5A-CY-VDPID-0050434) P3-25057-01 / (NG6A-CY-VDPID-0050345)	AGCO	M5HIS-46	3/4" MNPT x (3)1/2" FNPT Gauge Valve For Pressure Instruments
9	3	V-02	-	-	Needle Valve	1/2"x1/2"	MNPTxFNPT	6000#	316 SS	316 SS	Delrin Teflon Packing	Handle	2220 / 2011	(-20 to 100) / 225	6000	230	Instrument	P-25057-01 / (NGBN-CY-VDPID-0050388) P1-25057-01 / (NG4A-CY-VDPID-0050460) P2-25057-01 / (NG5A-CY-VDPID-0050434) P3-25057-01 / (NG6A-CY-VDPID-0050345)	AGCO	H1VDS-44Q	1/2" MNPT x 1/2" FNPT Hand Valve For Pressure Instruments
10	1	3W	-	-	3 Way Manifold	1/2" (4)	FNPT	6000#	ASTM A479-316	316 SS	316 SS (Integral) Teflon Packing	Handle	2220 / 2011	(-20 to 100) / 225	6000	230	Instrument	P-25057-01 / (NGBN-CY-VDPID-0050388) P1-25057-01 / (NG4A-CY-VDPID-0050460) P2-25057-01 / (NG5A-CY-VDPID-0050434) P3-25057-01 / (NG6A-CY-VDPID-0050345)	AGCO	M1HIS-4	3-Way Manifold For Pressure Differential Indicator
11	1	SDV-966205-01	NG5A-DA-ITTDS-CD30236	SDV-966205-01	Ball	2"	FLG,RF	150#	ASTM A105N	Ball: ASTM A182-F316 (Tungstene Carbide Overlay) Stem: ASTM A182-F51 (Tungstene Carbide Overlay) Trunnion: ASTM A182-F316	Metal Seat: SS316 (Tungstene Carbide Overlay) HNBR (AED) Seals HNBR (AED) O-Rings 95% Pure Graphite Packing	Bare Stem	285 / 253	(-20 to 100) / 225	285 / 253	(-20 to 100) / 225	Power Gas / Open Drain	P-25057-01 / (NGBN-CY-VDPID-0050388) P1-25057-01 / (NG4A-CY-VDPID-0050460) P2-25057-01 / (NG5A-CY-VDPID-0050434) P3-25057-01 / (NG6A-CY-VDPID-0050345)	Valbart	Valbart Trunnion Ball Valve	API 6D, Reduced Port, Trunnion Mounted, Fire Safe 607/6FA Lockable Handle, Bolting ASTM A193-B7/ASTM A194-2H, Multi Piece, ASME B16.5 Bare Stem for Shut Down Valve Fine Grain Practice (Closely Scrutinized) Seat Pockets & stem sealing areas with CRA (Including Liq. Pen and Mag. Particle) MTR's per EN 10204 3.1 for Body & cover MTR's per EN 10204 2.2 for other parts Leak Test per API 6D including low pressure gas seal leak test, NDE/PMI tests included
12	1	LV-966205-02	NG5A-DA-ITTDS-CD30235	LV-966205-02	Ball	2"	FLG,RF	150#	ASTM A105N	Ball: ASTM A182-F316 (Tungstene Carbide Overlay) Stem: ASTM A182-F51 (Tungstene Carbide Overlay) Trunnion: ASTM A182-F316	Metal Seat: SS316 (Tungstene Carbide Overlay) HNBR (AED) Seals HNBR (AED) O-Rings 95% Pure Graphite Packing	Bare Stem	285 / 253	(-20 to 100) / 225	285 / 253	(-20 to 100) / 225	Power Gas / Open Drain	P-25057-01 / (NGBN-CY-VDPID-0050388) P1-25057-01 / (NG4A-CY-VDPID-0050460) P2-25057-01 / (NG5A-CY-VDPID-0050434) P3-25057-01 / (NG6A-CY-VDPID-0050345)	Valbart	Valbart Trunnion Ball Valve	API 6D, Reduced Port, Trunnion Mounted, Fire Safe 607/6FA Lockable Handle, Bolting ASTM A193-B7/ASTM A194-2H, Multi Piece, ASME B16.5 Bare Stem for Shut Down Valve Fine Grain Practice (Closely Scrutinized) Seat Pockets & stem sealing areas with CRA (Including Liq. Pen and Mag. Particle) MTR's per EN 10204 3.1 for Body & cover MTR's per EN 10204 2.2 for other parts Leak Test per API 6D including low pressure gas seal leak test, NDE/PMI tests included