Eleet Cryogenics, Inc.

Invoice

Please remit payment to:

11132 Industrial Parkway NW
Bolivar, Ohio 44612
330-874-4009
FAX: 874-4370

660 Conroe Park North Drive
Conroe, Texas 77303
800-820-3004
Fax: 936-856-0432

BILL TO:	SHIP TO:
Airgas USA, LLC Merchant Gas Division PO Box 6610 Radnor, PA 19087	Airgas USA, LLC Conroe Storage Yard 600 Conroe Park North Drive Conroe, TX 77303

Job Number	Manufacturer	Serial Number	N/B Number	Vacuum
210744W	MVE	660	4585	4.1

Date	Invoice Number	Purchase Order Number	Customer Number	Net Terms
7/30/2023	JC21312	3000701834	AIRGAS	Net 30

Description

Tank rehab–rehab 900 gallon tank, TC# 47127
Material-- $10,960.00
Labor-- $11,109.00

Subtotal	$22,069.00
Freight	$0.00
Tax	$0.00
Pay This Amount:	$22,069.00

Atmospheric Vessel Traveler

Work Order / Job Number:	210744W	**Manufacturer:**	MVE
Vessel Received From:	n/a	**Serial Number:**	660
Address:	n/a	**National Board:**	4585
	n/a n/a n/a	**Size:**	1500G
Date Received:	7/20/2021	**Model**	Vertical
Product Service:	n/a	**Year Built:**	1981
Customer SN:	n/a	**MAWP**	250
Customer TC:	47127		
Vacuum Work = ORANGE		**Tank Strippers = BLUE**	
Pipers = GREEN		**Inspection, QC & Operations = BLACK**	

Purge & Vacuum

		Circle One			Performed By:	Date:
1	Initial Vacuum Reading	Microns= 60.9			GP	6-7-23
2	Purge Vessel With Nitrogen <0.2ppm O2	(Y)	N	N/A	GP	6-7
3	O2/H2 Levles Safe O2 < 20.9% / Explosive < 5%	(Y)	N	N/A	GP	6-7
4	Preliminary Mass Spectrometer	(Y)	N	N/A	GP	6-7
	BKG:	1.0X10-8			GP	6-8
	Inner:	1.0X10-8			GP	6-8
	Outer:	.2X10-8			Chad	6-9
5	Inner Vessel Repair Required	Y	(N)	N/A	GP	6-8
6	Inner Vessel Repair Complete	Y	N	(N/A)	GP	6-8
7	NOTES:					
8	Check Insulation System SI: ✓ Perlite:___	(Y)	N	N/A	GP	6-7
9	Perlite Added Bags: SM:___ LRG:___	Y	N	(N/A)	GP	6-7
10	Install New Vacuum Valve Type: Weir Size: 1"	(Y)	N	N/A	GP	6-8
11	Install New 1/8" HOKE Thermocouple Valve	(Y)	N	N/A	GP	6-8
12	Install New Thermocouple Tube DV6: ✓ 2A:___	(Y)	N	N/A	GP	6-8
13	Install New Lift Plate Assembly	Y	N	(N/A)	GP	6-8
14	Install New Dual O-Ring	(Y)	N	N/A	GP	6-8
15	Install SS Safety Chain EXISTING: Int:___ Ext: ✓	Y	N	(N/A)	GP	6-8
16	Install vacuum Pump to Restore Vacuum	(Y)	N	N/A	GP	6-8
	Day 1= 4.8 Microns @ X psig					
	Day 2= 5.1 Microns @ X psig					
	Day 3= 5.1 Microns @ X psig					
	Day 4= 5.5 Microns @ X psig					
	Day 5= 5.9 Microns @ X psig					
17	Heat Inner Vessel	Y	(N)	N/A	Chad	6-9
18	Helium Leak Check Outer Vessel	(Y)	N	N/A	Chad	6-9
19	Outer Vessel Repair Required?	Y	(N)	N/A	Chad	6-9
20	Outer Vessel Repair Complete	Y	N	(N/A)	Chad	6-9
21	NOTES:					
22	Final Mass Spectrometer	BKG: .2X10-8			Result: Pass	

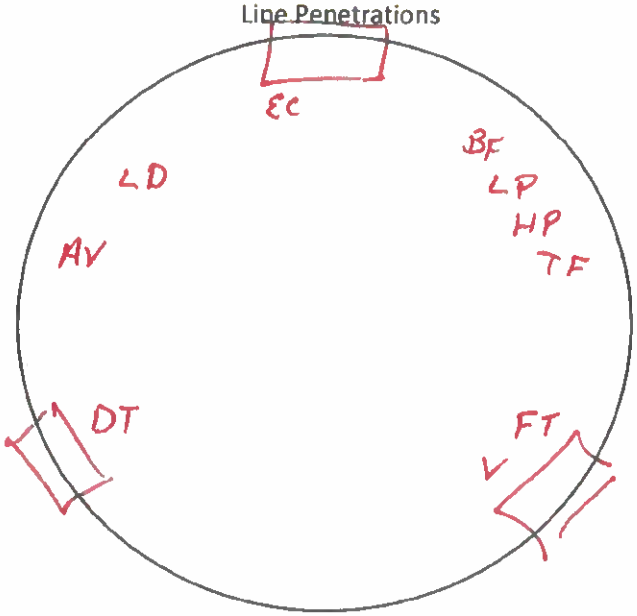
Tank Strippers & Bracketry

Line Penetrations, Foot Print and Fill Connection Identifications

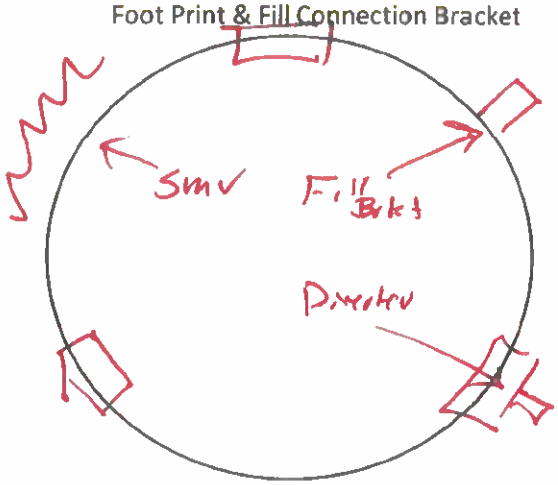
		Cirlce One			Performed By:	Date:
1	Line Penetrations Identified	(Y)	N	N/A	JT	6-14-23
2	Line Penetrations Verified	(Y)	N	N/A	*	6-14-23
3	Penetrations Permanenetly Marked	(Y)	N	N/A	JT	6-15-23
4	Sketched Line Penetration Locations	(Y)	N	N/A		6-14-23
5	Sketched Tank Foot Print	(Y)	N	N/A		6-14-23
6	Sketched Fill Connection Bracket Location	(Y)	N	N/A		6-14-23

NOTE: Views are looking at lower head while resting on Shipping Legs

Line Penetrations



Foot Print & Fill Connection Bracket



Manufacture: MVE

Size: 1500G

Year: 1981

Reviewed By:

NOTE: Linde/ALAC/MTG are to have ALL Penetrations Permanently Marked with Stamp or DieGrinder

7	Strip Tank of all piping	(Y)	N	N/A	JT	6-14-23
8	Remove Side Mount Vaporizer	(Y)	N	N/A	JT	6-14-23
9	Re-Using Side Mount Vaporizer	(Y)	N	N/A	JT	6-14-23
10	Remove Pressure Building Coil	(Y)	N	N/A	JT	6-14-23
11	Re-Using Pressure Building Coil	Y	(N)	N/A	JT	6-14-23
12	S/N Stamped / Permanently Attached / NB# & MAWP	(Y)	N	N/A	JT	6-19-23
13	Remove Data Tag and store	(Y)	N	N/A	JT	6-19-23
14	All lift lugs, ladders, ladder rings 100% Welded	(Y)	N	N/A	JT	6-X-23
15	New ALL Stainless Steel Brackets Added	(Y)	N	N/A	JT	6-20-23
16	New Foot Pads Added Size: 15 X 18 X 1	(Y)	N	N/A	JT	6-16-23
17	Prepare for Sand Blast	(Y)	N	N/A		6-22-23

	PreBlast-PrePaint Check Sheet	Circle One			100% Welded
1	Old brackets are removed, ground and sanded smooth	Y	N	N/A	
2	Holes from Data Tag & Ground Lugs are ground and sanded	Y	N	N/A	
3	Brackets straight and level with tank	Y	N	N/A	
4	Added Fill Connection Bracket	Y	N	N/A	
5	Added Liquid Level Gauge Bracket	Y	N	N/A	
6	Added Liquid Level Isolation Valve Bracket (LINDE ONLY)	Y	N	N/A	NOT REQUIRED
7	Added Diverter Valve Bracket	Y	N	N/A	
8	Added PB Coil Brackets (8" Min. Clearance ALAC)	Y	N	N/A	
9	Added PB Regulator Bracket	Y	N	N/A	
10	Added Vaporizer Bracket	Y	N	N/A	
11	Added Data Tag Bracket	Y	N	N/A	
12	Hole is drilled in Evacuation Valve Handle and Plug	Y	N	N/A	
13	ALL brackets edges have been ground round and smooth	Y	N	N/A	
14	Added Shipping Legs, (Max width 102" on >3000 gal	Y	N	N/A	
15	Line Penetrations Permanently Marked(Linde,ALAC,MTG)	Y	N	N/A	
16	Added Grounding Lug (3/8"x 1" SS Bolt)	Y	N	N/A	
17	Mounting Holes in Footpads	Y	N	N/A	
18	Base Skid with mounting holes in each corner	Y	N	N/A	NO SKID
19	Base Plates 1625 or <, 1" Min or match thickness (ALAC, Linde	Y	N	N/A	
20	Released to Sand Blast & Paint	Y	N	N/A	
	Quality Control Manager/Authorized Alternate Signature:				
	Follow Up Required:	Y	N		

	Sand Blast & Paint	Circle One			Performed By:	Date:
1	Blast to Bare Metal	Y	N	N/A		6-22-23
2	Prime and Paint Vessel	Y	N	N/A		6-26-23
3	DFT Paint Check Mills Low: 3.5 High: 7.5					7-11-23
	Quality Control Manager/Authorized Alternate Signature:					
	Follow Up Required:	Y	N			

	Cosmetics	Circle One			Performed By:	Date:
1	Paint Valve Handles Per Customer Specs	Y	N	N/A		7-11
2	Stencil MAWP / NB# / TC# / SN# (As Required)	Y	N	N/A		7-21
3	Install Tank Schematic Decal	Y	N	N/A	RRG	7-14
4	Install Corportate Decal	Y	N	N/A	RRG	7-14
5	Install Product and NFPA Decals	Y	N	N/A	RRG	7-14

Piping and Component Repair/Replacement

	Plumbing Assembly	Assembly, By:	Assembly By:	O2 Cleaning and Inspection Accept Circle One			By:	Pressure By:
1	Bottom Fill	CF	CF	(Y)	N	N/A	CF	CF
2	Top Fill	CF	CF	(Y)	N	N/A	CF	CF
3	PB Vapor	CF	CF	(Y)	N	N/A	CF	CF
4	Full Tricock	CF	CF	(Y)	N	N/A	CF	CF
5	Gas Use	CF	CF	(Y)	N	N/A	CF	CF
6	Liquid Draw	CF	CF	(Y)	N	N/A	CF	CF
7	Aux. Vapor	CF	CF	(Y)	N	N/A	CF	CF
8	Aux. Liquid	N/A	N/A	Y	N	(N/A)	N/A	N/A
9	Vent	CF	CF	(Y)	N	N/A	CF	CF
10	PB Liquid	CF	CF	(Y)	N	N/A	CF	CF
11	PB Coil	CF	CF	(Y)	N	N/A	CF	CF
12	Vaporizer	CF	CF	(Y)	N	N/A	CF	CF
13	Safety Tree	CF	CF	(Y)	N	N/A	CF	CF
14	In_line Check in Liquid Draw Line (tanks W/O Dip Tube)			(Y)	N	N/A	CF	CF
21	Weld Safety Cable Ring on CGA Fill Cap			Y	N	(N/A)	N/A	N/A
22	Install ALL Valve Tags			(Y)	N	N/A	CF	CF
16	Burst Disks:	Rating#1 353	PSIG 72 Deg-F	Lot Number:			103734-1-8	CF
	Burst Disks:	Rating#2 353	PSIG 72 Deg-F	Lot Number:			103734-1-8	CF
17	ASME Stamp on (UD) on Disks (Y) / N		Manufacturer: OSECO				MNFA: .44	Sq.In. 2.in
18	Tank Safeties:	Set Pressure #1: 250 PSIG		Date Code : 09E22			SCFM:	451
	Tank Safeties:	Set Pressure #2: 250 PSIG		Date Code : 09E22			SCFM:	451
19	Line Safeties:	Rego / (Generant) / 350		Date Code : E23			PSIG:	350
	Line Safeties:	Rego / (Generant) / 450		Date Code : A23			PSIG:	450
15	Coil Type:	(Star Fin)	Larkin	Side Mount			None	
20	Liquid Level	(Barton)	Midwest	SN# : 59634				

Piping Final Inspection

		Circle One			Performed By:	Date:
23	Inspect All Valves/Regulators/Reliefs	(Y)	N	N/A	CF	7-10
24	Verify Tank SRV's are Equal to MAWP	(Y)	N	N/A	CF	7-10
25	Verify Tank BD's are rated 1.5 X's MAWP (+0%, -10%, of MAWP)	(Y)	N	N/A	CF	7-10
26	Verify Line SRV/Thermal valves are installed per customer	(Y)	N	N/A	CF	7-10
27	Verify All Lines Flow Freely (No Blockages)	(Y)	N	N/A	CF	7-10
28	Piping Pressure Tested with N2 at 90-95% MAWP	(Y)	N	N/A	CF	7-10
29	Attach Eleet Rehab Tag	(Y)	N	N/A	CF	710
30	Piping Complete, Release to Cold Shock	(Y)	N			

Pipe Welder/Authorized Alternate Signature: Cody Flowers DATE: 7-10-23

Tank Over Pressurization Data Sheet

for Rehab Shops

Job Number:	210744W	**Manufacturer:**	MVE
Serial Number:	n/a	**Size:**	1500G
Nationa Board:	4585	**Year Manufactured:**	1981
Tank Code	47127	**MAWP**	250
Customer:	Airgas	**MAWP Decal**	
PSIG Gauge: 4" 0 - 400 PSIG		**Vertical Tank:**	(Y) / N
		Horizontal Tank:	Y / (N)

Fill Connection Characteristics

Ground Mount	(Flange)	Horseshoe	Strap	Bracket

Liquid Level Gauge

(Barton)	Midwest	SN#: 59634

Bottom Fill Characteristics

Bottom Fill Line Size from fill connection:	(1")	1-1/2"	2"
Bottom Fill Valve Manufacturer:	(Rego)	Bestobell	Herose
Bottom Fill Valve Type:	(Globe)	Gate	Ball
Bottom Fill Valve Size + WOG	(1")	1-1/2"	2"
Bottom Fill Penetration Size:	(1")	1-1/2"	2"

Fill Line Check Valve Characteristics

Fill Line Check Valve Manufacturer:	(Rego)	Bestobule	Herose
Fill Line Check Valve Type:	Swing	(In-Line T)	Lift
Fill Line Check Valve Size:	(1")	1-1/2"	2"

Vent Line Characteristics

Total Vent Line Length from Shell to Diverter / Rupture Disc			40"	"Inches
Total Line Length from Diverter Valve to Rupture Disc			6"	"Inches
Vent Line Size	(1")	1-1/2"	2"	
Vent Line Size Exiting Tank	(1")	1-1/2"	2"	

Rupture Disc - Relief Valve - Diverter Valve Characteristics

Rupture Disc Size:	(3/4")	1"	1-1/2"	
Rupture Disc Manufacturer:	Rego	(Oseco)	BS&B	
Rupture Disc Type:	(O.T.U)			
Quantity of Rupture Disc:	1	(2)		
Diverter Valve Size:	1"	(1-1/2")	2"	
Diverter Valve Manufacturer:	(Rego)	Besstobell	Herose	TBV
Diverter Valve Type:	(Ball)			
Diverter Valve Model Number	# DR6112			
Releif Valve Size:	(3/4" x 1")			
Quantity of Relief Valves:	1	(2)		

Pipe Welder/Authorized Alternate Signature: Cody Loewen Date: 7-10-23

Final Assembly Inspection

*	Line SRV/Thermal Valves are installed per. Customer specifications.	Main Tank SRV's are equally rated to the vessels MAWP 250 @ 225	Burst Disc @ 1.5 x's vessel MAWP (+0%, -10%, of MAWP) 353
	Initial:	Intial:	Intial:

Plant Manager/Authorized Alternate Signature: _____ Date: _____

Pre Cold Shock Inspection

			Circle One			Performed By:	Date:
1	Warm Vacuum Retention Complete:		Y	N	N/A		7-11
2	Vacuum Leader Released for Cold Shock:		Y	N	N/A		7-11
3	Pipe Welder Released for Cold Shock:		Y	N	N/A		7-11
4	Dew Point Check <-60, <-77 Medical:	Temp: -94 F	P	F			7-11
5	Total Hydrocarbons Test	THC: 0.0 ppm	P	F			7-11
6	Conduct Particulate Test, Number of Samples:	3	P	F			7-11
7	Odor Test		P	F			7-11
8	Tank Passed Pre-Cold Shock Inspection:		Y	N			

Quality Manager/Authorized Alternate Signature: _____ Date: 7-11-23

Final Inspection

		Circle One			Performed By:	Date:
1	Cold Shock (1/3 Capacity or 1000 gal.)	Y	N	N/A		7-12
2	Cold Vacuum Retention Test	Y	N	N/A		7-12
3	Day 1= 3.9 Microns @ 150 psig. Ambient Temp 81					7-13
4	Day 2= 4.8 Microns @ 150 psig. Ambient Temp 92					7-14
5	Day 3= 3.9 Microns @ 160 psig. Ambient Temp 79					7-17
6	Cold Test Completed Satisfactory	Y	N	N/A		7-17
7	Top / Bottom Fill Valves Confirmed	Y	N	N/A		7-17
8	Piping Leak Test After Cold Vacuum Test	Y	N	N/A		7-17
9	Appropriate Decals Affixed to the Vessel	Y	N	N/A		7-21
10	Drain Vessel to 20 psi of Gas Pressure	Y	N	N/A		7-21
11	Obtain Photos of the Vessel, affix Purge Tag.	Y	N	N/A		7-21
12	Final Inspection Completed	Y	N	N/A		7-21

Warm Vacuum Reading: 5.9 Microns Date: 7-11	Cold Shock Date : 7-12-23
Cold Vacuum Reading: 3.9 Microns Date: 7-17	Amount of Nitrogen Used: 300
Vaporizer Securely Attached Y / N	Yard I.D. Tag Visible: Y / N

Quality Manager/Authorized Alternate Signature: _____ Date: 7-21-23