

NOZZLE SCHEDULE															
NO.	SERVICE	SIZE	FLANGE		PIPE	REPAD	PROJ.	WELD DTL.	WELD SIZE						
			TYPE	SCH.					THK.	G.D.	O.S.	I.S.	DRAWING	a	b
N1	GAS INLET	24"	150#	RF WH	STD.	3/8"	32"	ELEV.	-	-	-	3/8"	3/8"	-	-
N2	GAS OUTLET	24"	150#	RF WH	STD.	3/8"	32"	ELEV.	-	-	-	3/8"	3/8"	-	-
N3	DRAIN OUTLET	2"	150#	RF WH	160	-	-	ELEV.	-	-	-	1/4"	1/4"	-	-
N4	SPRAY NOZZLE INSERT	6"	150#	RF WH	80	1/4"	11"	ELEV.	-	-	-	1/4"	1/4"	-	-
N4A	SPRAY NOZZLE INSERT (1304)	1"	150#	RF WH	40S	-	-	DIL.	DIL.	DIL.	X	1/4"	-	1/4"	-
N5	WASHING WATER INLET	6"	150#	RF WH	80	1/4"	11"	ELEV.	-	-	-	1/4"	1/4"	-	-
N5A	WASHING WATER INLET (1304)	1"	150#	RF WH	40S	-	-	DIL.	DIL.	DIL.	X	1/4"	-	1/4"	-
N6	DRAIN PIPE (1304)	3"	150#	RF WH	40S	-	-	ELEV.	ELEV.	X	X	1/4"	-	1/4"	-
M	MANWAY W/ DAWT	20"	150#	RF WH W/ BLIND	STD.	3/8"	25"	ELEV.	-	-	-	1/4"	1/4"	-	-
P1	DIFFERENTIAL PRESSURE TRANSMITTER	1/2"	150#	RF LWN	-	-	-	ELEV.	-	-	-	1/4"	-	-	-
P2	DIFFERENTIAL PRESSURE TRANSMITTER	1/2"	150#	RF LWN	-	-	-	ELEV.	-	-	-	1/4"	-	-	-
SG1	SIGHT GLASS (OPPOSITE TO SG2)	4"	150#	RF WH W/ MOOLE L FLG.	80	1/4"	9"	ELEV.	-	-	-	1/4"	1/4"	-	-
SG2	SIGHT GLASS (OPPOSITE TO SG1)	4"	150#	RF WH W/ MOOLE L FLG.	80	1/4"	9"	ELEV.	-	-	-	1/4"	1/4"	-	-

SPECIFICATIONS	
DESIGN CONDITIONS:	(INT.) 25 PSIG AT 200 F (EXT.) 15 PSIG AT 200 F
MDMT:	-10 F AT 147 PSIG
OPER. CONDITIONS:	MAP (NEW & COLD) 147 PSIG @ 200 F
MAMP (CORR. COND.):	8" W.O. PSIG AT 112 F
CORROSION ALLOWANCE:	1/8"
CONTENTS, S.G.:	1.0
CODE:	ASME SECT. VIII DIV. 2 (1) 2010 EXCEPT APPENDIX A
STRESS RELIEF:	N/A
MATERIALS OF CONSTRUCTION:	
SHELL:	SA-516 GR. 70
HEADS:	SA-516 GR. 70
CLADDING LINING / WEAR PL:	N/A
NOZZLES:	SA-106 GR. B / SA-312 1304
REINF. PLATE:	SA-516 GR. 70
STRUCTURAL:	SA-36
FLANGES:	SA-106 / SA-182 F04
GASKETING:	VALVE VESCO CR EQUAL
BOLTING:	SA-193-B7 / SA-193-B1
INSULATION:	-
WELDING PROCESS:	
SEE STANDARD JOINT & WELD MAP DRAWING NO. 517.3	
FABRICATION NOTES:	
1. FLANGE BOLT HOLES SHALL STRADDLE PRINCIPAL CENTERLINES OF THE VESSEL UNLESS NOTED OTHERWISE.	
2. DRILL & TAP ONE (1) 1/4" NPT TELL-TALE HOLE IN EACH REINFORCING PAD UNLESS NOTED OTHERWISE. INSTALL REINFORCING PAD WITH THE TELL-TALE HOLE AT THE LOWEST POINT RESPECTIVE TO ITS LOCATION ON THE VESSEL.	
TESTING:	
1. APPLY 15 PSIG AIR PRESSURE THROUGH THE TELL-TALE HOLE OF EACH REINFORCING PAD. APPLY LEAK DETECTION SOLUTION TO ALL ATTACHMENT WELDS & CHECK FOR LEAKS INSIDE & OUTSIDE THE VESSEL AT EACH ATTACHMENT WELD.	
2. FILL THE VESSEL COMPLETELY WITH WATER & VENT ALL ENTRAPPED AIR. APPLY PRESSURE AT THE REQUIRED TEST PRESSURE.	
3. REQUIRED SHIP HYDROSTATIC TEST PRESSURE: 192 PSI	
4. REQUIRED YIELD HYDROSTATIC TEST PRESSURE: 147 PSI	
5. HOLD TEST PRESSURE FOR ONE (1) HOUR MINIMUM.	
SURFACE PREPARATION:	
INSIDE:	THOROUGHLY CLEAN TO REMOVE ALL OXID. WELD SCALE, WELD SPATTER, DIRT & LOOSE LUSK ITEMS.
OUTSIDE:	BLAST PER SSPC-SP10
PAINTING:	
INSIDE:	NONE
OUTSIDE:	PRIME WITH ONE COAT OF CARBOLINE C711 @ 2-3 MILS D.F.T.
SHIPPING PREPARATIONS:	
1. VESSEL SHALL BE DRIED AND THOROUGHLY CLEANED PRIOR TO CLOSING OF NOZZLES.	
2. APPLY RUST PREVENTATIVE COATING TO ALL CARBON STEEL MACHINE FINISHED FLANGE SURFACES NOT PROVIDED WITH BLIND FLANGES, AND TO THREADS OF CARBON STEEL STUDS AND NUTS.	
3. FLANGED OPENINGS NOT PROVIDED WITH BUNDS SHALL BE ENCLOSED USING PLASTIC PROTECTIVE COVERS. THREADED OPENINGS SHALL BE PLUGGED WITH PLASTIC OR METALLIC FIBES.	
4. FILL TELL-TALE HOLES WITH GREASE AFTER TESTING IS COMPLETED.	
5. VESSEL IS SUBJECT TO INTERNAL INSPECTION BEFORE SHIPMENT.	
6. ONE (1) SETS OF SPARE GASKETS AND TWO (2) STUDS W/ (2) NUTS EACH SHALL BE PROVIDED FOR EACH NOZZLE W/ BLIND.	
TWO (2) SETS OF SPARE GASKETS AND FOUR (4) STUDS W/ (2) NUTS EA. SHALL BE PROVIDED FOR MANWAY W/ BLIND. SPARE GASKETS ARE TO BE SEPARATELY BOXED, LABELED WITH THE EQUIPMENT TAG NUMBER AND PURCHASE ORDER NUMBER, AND SHIPPED WITH THE EQUIPMENT.	
WEIGHTS:	
SHIPPING WT:	4318 LBS.
TEST WT:	12418 LBS.
OPER. WT.(NEW):	5534 LBS.
GENERAL NOTES:	
1. PRESSURE RELIEFING DEVICES SHALL BE FURNISHED AND INSTALLED BY OTHERS.	
2. ASME SECTION VIII, PARA. UG-110(b)(5) IS APPLICABLE: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
3. VESSEL MATERIALS EXEMPT FROM IMPACT TESTING: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
EXCEPTION IS ALLOWED PER PARA. UG-20	

DWG. NO.	REFERENCES
5575-1 (SHT. 2)	MISC. & NOZZLE DETAILS
5575-1 (SHT. 3)	STD. JOINT DTL. & WELD MAP

NO.	REVISIONS	BY	DATE
1	ADDED MODEL B FLANGE SIGHT GLASS FOR NOZZ. SG1 & SG2.	TROY	4/9/13
2	REV. SHIPPING PREPARATIONS NOTE #6. DELETED ANGLE SUPT. BELOW SEAL PL.	WM	4/16/13
3	ADDED NATL. BD NO, SERIAL NO & AS BUILD STAMP		
4	REV. BAFFLE @ N1.	TROY	5/7/13

NO.	REVISIONS	BY	DATE
1	REV. TAG NUMBER IN INFO BOX. ADDED GASKET INFORMATION. SET ELEVATION FOR NOZZ. N3 & N6.	N.B.C.	2-10-2013
2	ADDED BOTTOM SECTION VIEW, SUPPORT LUGS, GROUND LUGS, TAILING LUG, BAFFLE, HORIZ. WELD SEAMS, NOZZLE FOR N4 & NOZZLE ELEVATIONS, REVISED LOCATIONS OF N.P.B. SIZE & OUTSIDE PROJECTIONS OF M, N4 & N5, SURFACE PREPARATION & PAINTING.	N.B.C.	2-8-2013
3	ADDED ANGLE SUPT. BELOW SEAL PLATE	TROY	3/1/13

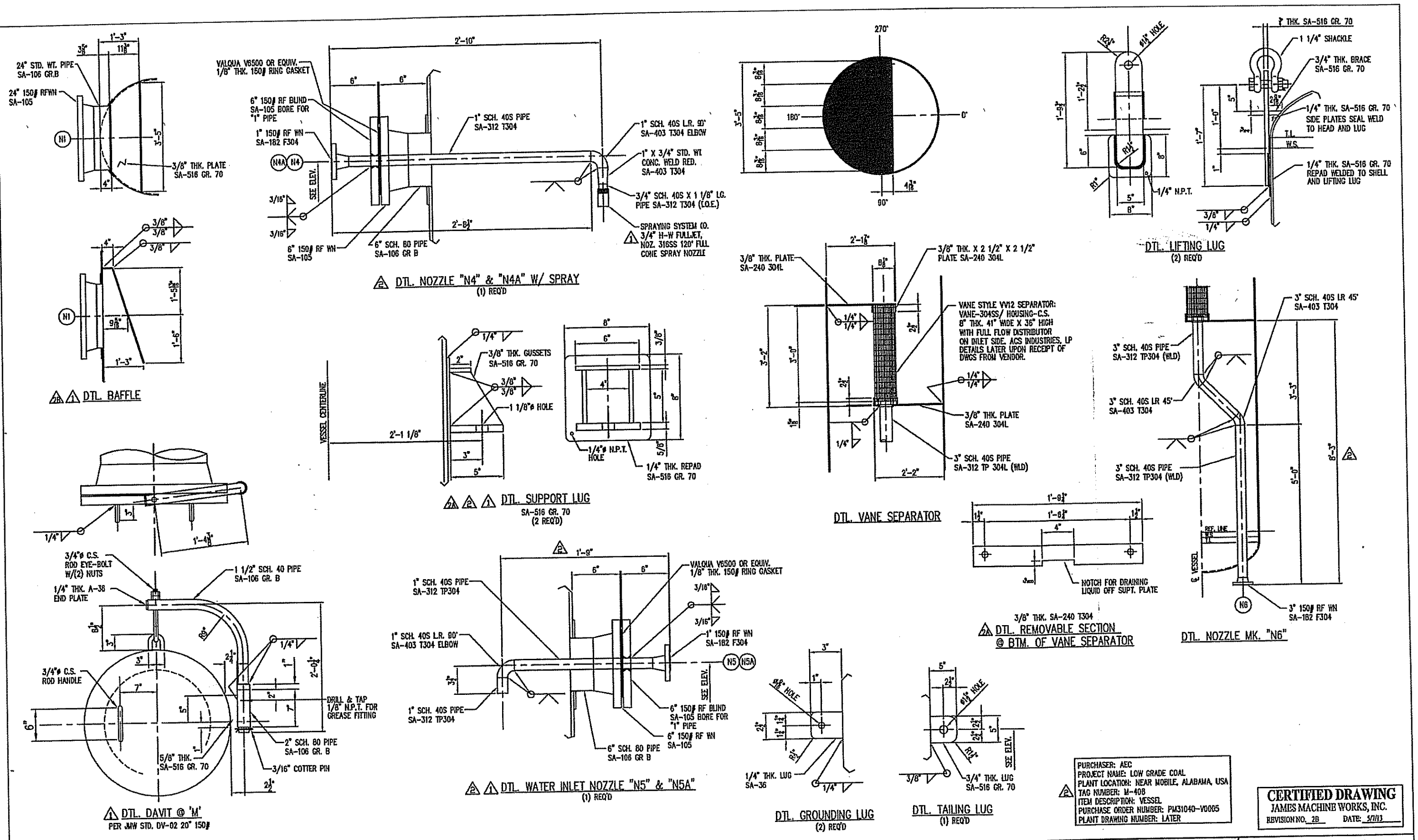
PURCHASER: AEC
 PROJECT NAME: LOW GRADE COAL
 PLANT LOCATION: NEAR MOBILE, ALABAMA, USA
 TAG NUMBER: M-408
 ITEM DESCRIPTION: VESSEL
 PURCHASE ORDER NUMBER: PH31040-V0005
 PLANT DRAWING NUMBER: LATER

NATL. BD# 3284
 CERTIFIED BY
 JAMES MACHINE WORKS, INC.
 U W RT-3
 MAMP 147 PSI AT 200 F
 MAEP: 15 PSI AT 200 F
 MSL DESIGN METAL TEMP. -10 F AT 147 PSI
 MANUFACTURER'S SERIAL NO. 7854
 YEAR BUILT 2013
 PURCHASE ORDER NO. PH31040-V0005
 ITEM NO. M-408 EMPTY WT. 4318 LBS.

CERTIFIED DRAWING
 JAMES MACHINE WORKS, INC.
 REVISION NO. 2C DATE: 5/7/13

AMERICAN ECO COAL
 MOBILE, AL
 FINISHER 1 DRAIN SEPARATOR
 P.O. NO: PH31040-V0005 ITEM NO: M-408

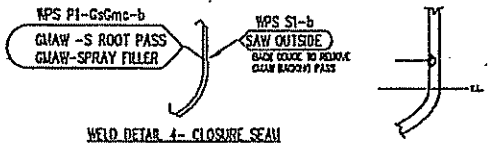
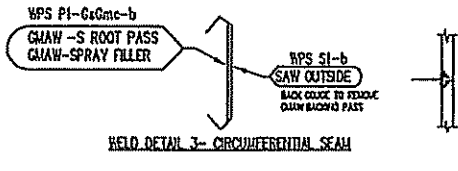
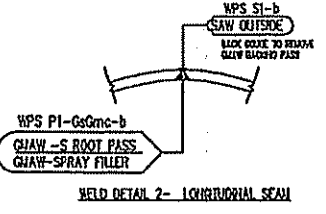
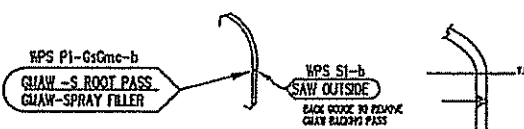
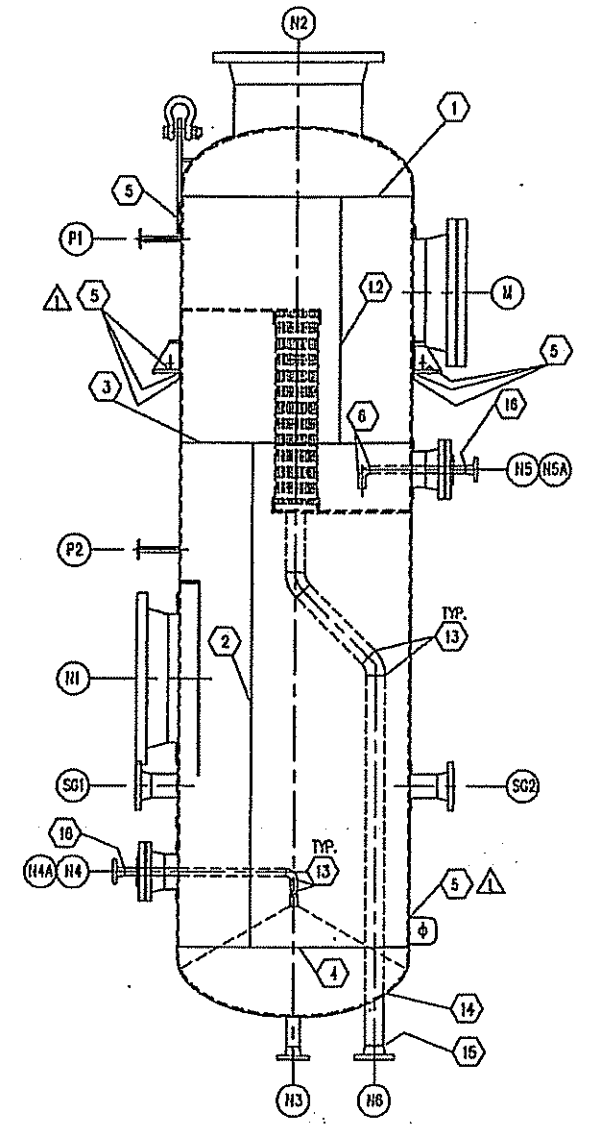
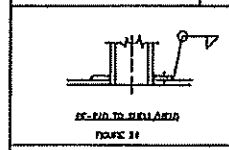
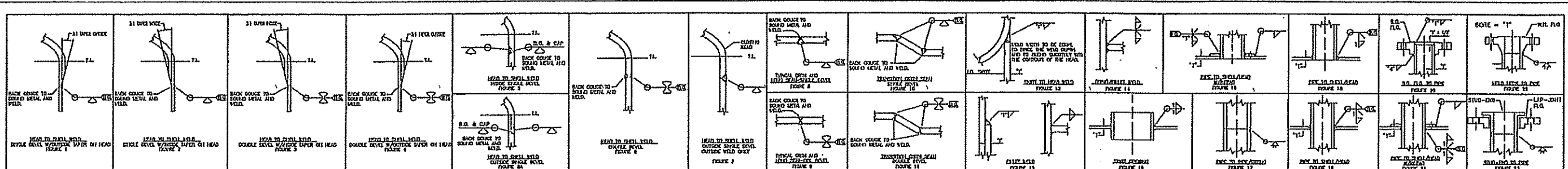
JAMES MACHINE WORKS, INC.
 MONROE - LOUISIANA
 REV. DRAWING NUMBER 5575-1
 SHEET NUMBER 1



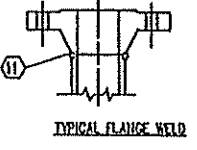
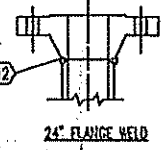
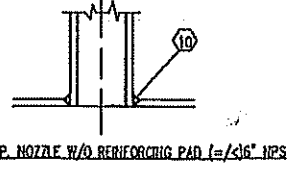
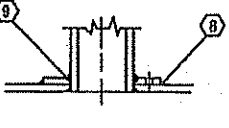
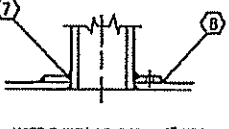
PURCHASER: AEC
 PROJECT NAME: LOW GRADE COAL
 PLANT LOCATION: NEAR MOBILE, ALABAMA, USA
 TAG NUMBER: M-408
 ITEM DESCRIPTION: VESSEL
 PURCHASE ORDER NUMBER: PM31040-V0005
 PLANT DRAWING NUMBER: LATER

CERTIFIED DRAWING
 JAMES MACHINE WORKS, INC.
 REVISION NO. 2B DATE: 5/7/13

NO.	REVISIONS	BY	DATE	NO.	REVISIONS	BY	DATE	NO.	REVISIONS	BY	DATE	SCALE: 3/4"=1'-0"	DATE	AMERICAN ECO COAL MOBILE, AL	JAMES MACHINE WORKS, INC. MONROE - LOUISIANA
1	ADDED DIMENSION @ DTL. SUPPORT LUG. ADDED DTL. REMOVABLE SECTION @ BTM. OF VANE SEPARATOR.	TROY	4/9/13	2	REVISED NOZ. 6 ELEV & PIPE LENGTH. REV. TAG. NUMBER IN INFO BOX. SET OVERALL LENGTH FOR N5A. REV. SUPT. LUG DETAIL.	NBC	2-19-2013	3	ADDED DAVIT @ "M", DETAILS FOR SUPPORT LUGS, Baffle, REVISED NOZZLE DETAILS FOR N4 & N5 & REMOVED LEG DETAIL.	NBC	2-8-2013	DRAWN: W. MURPHY 11-26-12 CHECKED: D.H. 12-7-12 APP'D: APP'D: JOB NO. 5575-1			
2	ADDED AS BUILD STAMP	WM	4/16/13	3	REV. SUPT. LUG DETAIL.	WM	2-25-2013								
3	REV. Baffle @ NI.	TROY	5/7/13												



WELDING NOTES	WELD I.D. NUMBER	JOINT/WELD DETL. FIGURE NUMBER	WELDING PROCEDURE	ALTERNATE WELDING PROCEDURE
<p>1) JOINT PREPARATION FOR WELDING MAY BE PERFORMED BY WELDING OPERATOR, THERMAL CUTTING OR CONVENTIONAL METHOD. EXCESSIVELY DEEP OR SHARP PERFORATIONS IN JOINT EDGES SHALL BE REMOVED BY WELDING OR BY GRINDING. JOINT EDGES SHALL BE CRACK AND LAMINATION FREE PRIOR TO WELDING.</p> <p>2) PRIOR TO WELDING ALL OIL, GREASE, DIRT, RUST, AND EXCESSIVELY THICK OR LOOSE SCALE SHALL BE REMOVED FROM THE SURFACES OF THE JOINT AND ADJACENT BASE METAL. WELDERS ARE HIGH FROM THE EDGE OF THE JOINT. OIL AND GREASE SHALL NOT BE REMOVED BY HEATING WITH A TORCH.</p> <p>3) PREHEAT MATERIAL TO 550 DEGREES F. PRIOR TO WELDING.</p> <p>4) ALL BUTT JOINTS WHICH ARE ACCESSIBLE FROM BOTH SIDES SHALL BE BACK GOUGED OR GROVED TO SOLID METAL AFTER WELDING THE FIRST SIDE AND THEN BACK WELDING THE REVERSE SIDE.</p> <p>5) REMOVE OR CLEAN THOROUGHLY ALL TACK WELDS BEFORE PROCEEDING WITH THE FINAL WELD.</p> <p>6) MAXIMUM WELD DEPOSIT PER PASS SHALL BE 3/8" DEPTH FOR SUBMERGED ARC WELDING.</p> <p>7) PLUG ALL WELDED OPENINGS WITH SOLID STEEL PLUGS BEFORE WELDING. COAT THREADS BEFORE INSTALLING PLUGS WITH GREASE OR OTHER SUITABLE COMPATIBLE OILS. THREADS AFTER WELDING.</p>	1	WELD DETAIL 1	P1-GsGmc-b (INSIDE) / S1-b (OUTSIDE)	
	2	WELD DETAIL 2	P1-GsGmc-b (INSIDE) / S1-b (OUTSIDE)	
	3	WELD DETAIL 3	P1-GsGmc-b (INSIDE) / S1-b (OUTSIDE)	
	4	WELD DETAIL 4	P1-GsGmc-b (INSIDE) / S1-b (OUTSIDE)	
	5	FIGURE 13	P1-GsGmc-b	
	6	FIGURE 17	T1-a	
	7	FIGURE 18	P1-GsGmc-b	
	8	FIGURE 24	P1-GsGmc-b	
	9	FIGURE 10	M1-b	
	10	FIGURE 10	M1-b	
	11	FIGURE 22	P1-GsGmc-b	
	12	FIGURE 22	GSI-b-4	
	13	FIGURE 17	TB-a	
	14	FIGURE 19	M1-b-b-2	
	15	FIGURE 22	PB-Gp-b(308)	
	16	FIGURE 22	TB-a	



PURCHASER: AEC
 PROJECT NAME: LOW GRADE COAL
 PLANT LOCATION: NEAR MOBILE, ALABAMA, USA
 TAG NUMBER: V-408
 ITEM DESCRIPTION: VESSEL
 PURCHASE ORDER NUMBER: PM31040-V0005
 PLANT DRAWING NUMBER: LATER

FOR SECOND APPROVAL
 REVISION NO. 1 DATE: 2-12-2013
 JAMES MACHINE WORKS, INC.

REV.	REVISIONS	BY	DATE	SCALE 3/4"=1'-0"	DATE	AMERICAN ECO COAL MOBILE, AL		JAMES MACHINE WORKS, INC. MONROE - LOUISIANA	
Δ	ADDED WELDS FOR LUGS	NBC	2-8-13	DRAWN W MURPHY	11-26-12	STD. JOINT DETL. & WELD MAP		REV. DRAWING NUMBER: 5575-1	
				CHECKED T. THOMAS	12-10-12				
				APP'D					
				APP'D		JOB NO. 5575-1		P.O. NO: PM31040-V0005	
						ITEM NO: M-408		SHEET NUMBER: 3	