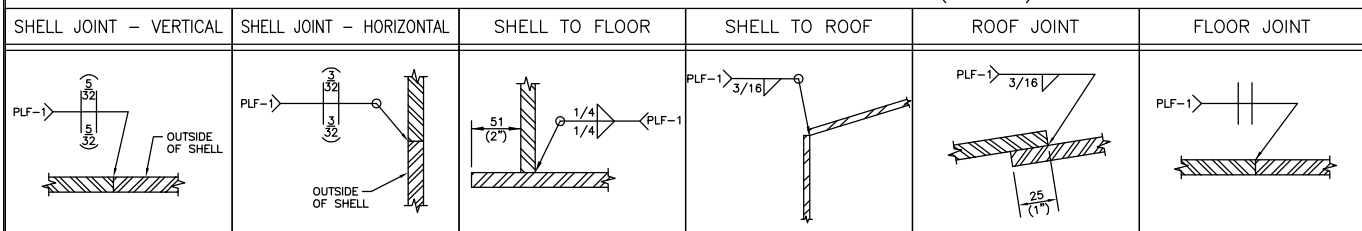


FOREMOST STANDARD TANK WELD DETAILS (N.T.S.)



CUSTOMER SPECIFICATIONS

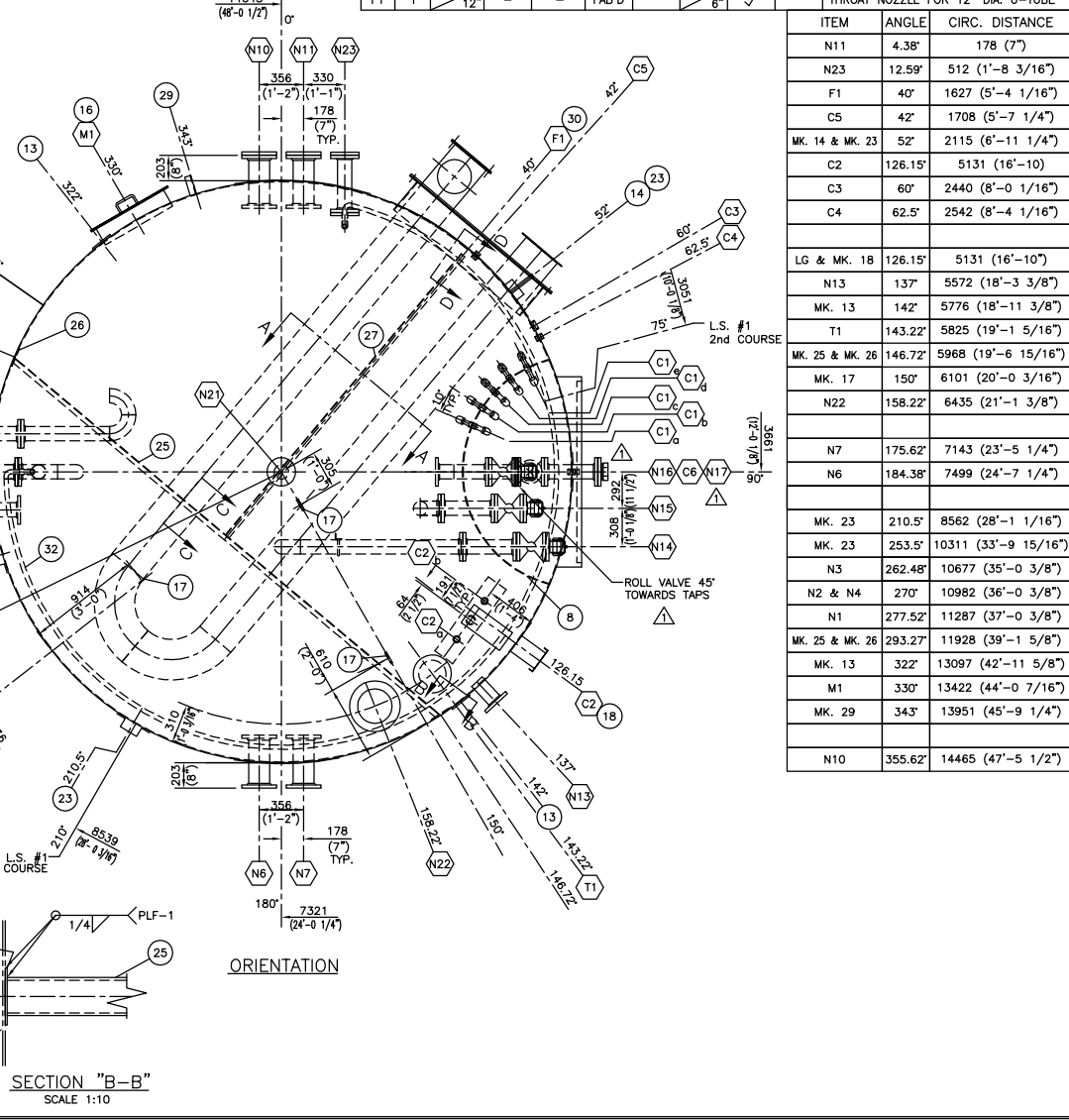
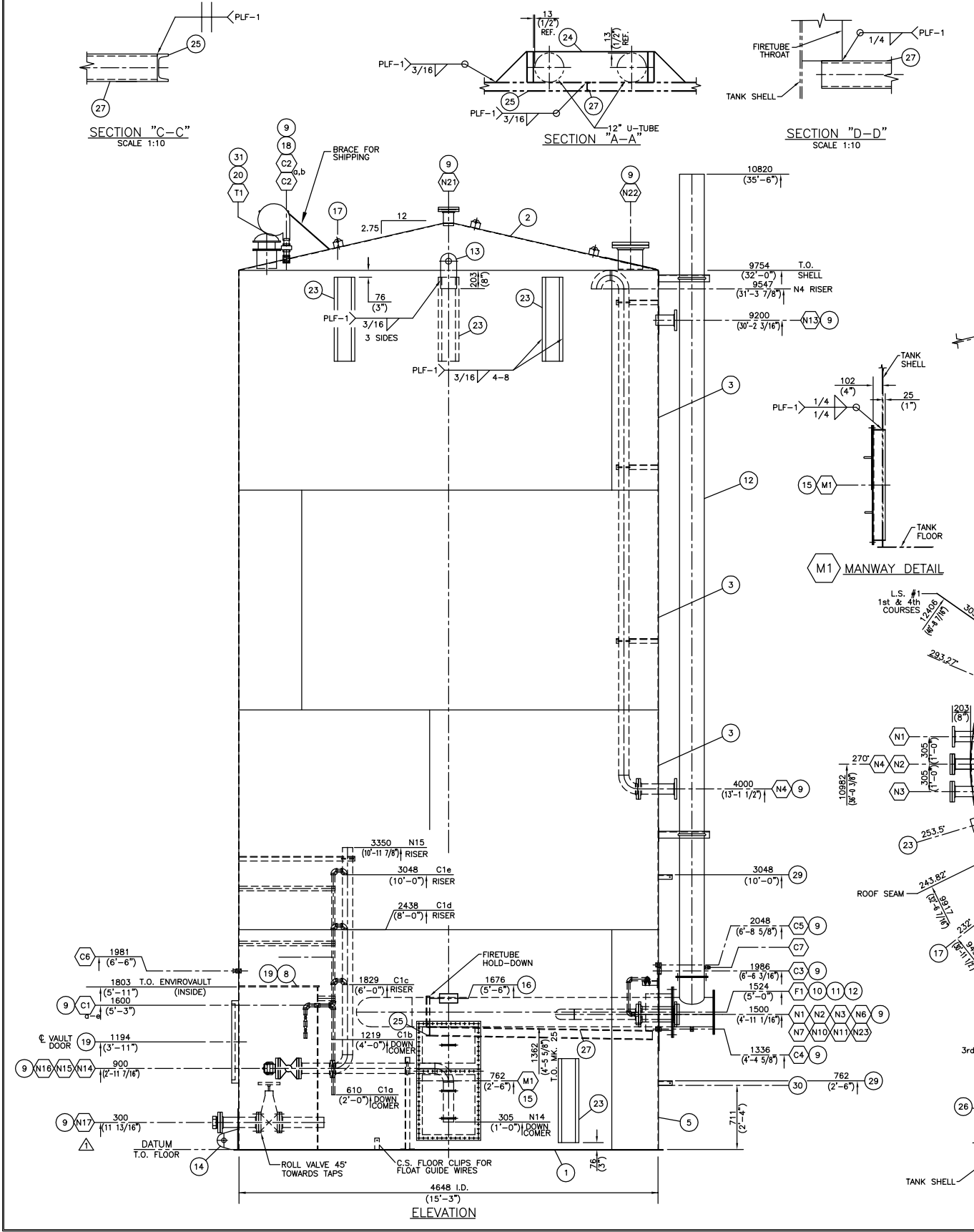
DESIGN CODE: API-650 (MODIFIED)  
 SERIAL NO: 06-061642-1 TO 8  
 DESIGN PRESSURE: 6.9 kPa (16.0 oz/in) / 0.4 oz. VAC.  
 DESIGN TEMPERATURE: -13°C (8.6°F) TO 93°C (200°F)  
 OPERATING TEMPERATURE:  
 SERVICE: OIL, WATER, GAS (SOUR)  
 OPERATING LEVEL:  
 CORROSION ALLOWANCE: NIL  
 OTHER:

FINISHING

EXTERNAL: NONE  
 INTERNAL: NONE  
 TESTING: AIR SOAP TEST TO 16 oz. SPOT RADIOGRAPHY  
 INSULATION: APPLY 51(2") SPRAY HIGH TEMP. URETHANE FOAM INSULATION C/W BLACK ELASTOMERIC SEALER TO SHELL & ROOF.

NOZZLE SCHEDULE		DESCRIPTION										
MK	NO	SIZE	SCH	RATE	TYPE	PROJECTION INT.	EXT.	REPAD YES	NO			
N1	1	114"	4"	STD	CLASS 150	RFSO	215	223	8 3/16	8 1/16	✓	PRODUCED EMULSION INLET C/W INTERNAL PIPE
N2	1	114"	4"	STD	CLASS 150	RFSO	215	203	8 7/16	8 1/4"	✓	FUEL GAS PRE-HEAT INLET C/W HUB BLIND
N3	1	114"	4"	STD	CLASS 150	RFSO	215	223	8 7/16	8 1/16	✓	SPARE C/W BLIND
N4	1	114"	4"	STD	CLASS 150	RFSO	215	203	8 7/16	8 1/4"	✓	GAS VENT C/W FRP INTERNAL RISER & GOOSENECK
N6	1	168"	6"	STD	CLASS 150	RFSO	208	210	8 3/16	8 1/4"	✓	OVERFLOW C/W INTERNAL FLANGE
N7	1	168"	6"	STD	CLASS 150	RFSO	208	210	8 3/16	8 1/4"	✓	OVERFLOW C/W INTERNAL FLANGE
N10	1	168"	6"	STD	CLASS 150	RFSO	208	210	8 3/16	8 1/4"	✓	SPARE C/W BLIND
N11	1	168"	6"	STD	CLASS 150	RFSO	208	210	8 3/16	8 1/4"	✓	SPARE C/W BLIND
N13	1	114"	4"	STD	CLASS 150	RFSO	25	203	8 7/16	8 1/4"	✓	LSHH-KAYDEN TYPE
N14	1	114"	4"	STD	CLASS 150	RFSO	215	203	8 7/16	8 1/4"	✓	WATER OUTLET C/W EXTENDED DOWNCOMER (INSIDE ENVIRO-VAULT)
N15	1	114"	4"	STD	CLASS 150	RFSO	215	203	8 7/16	8 1/4"	✓	EMULSION OUTLET C/W RISER (INSIDE ENVIRO-VAULT)
N16	1	114"	4"	STD	CLASS 150	RFSO	215	203	8 7/16	8 1/4"	✓	FUTURE SKIMMER CONNECTION (INSIDE ENVIRO-VAULT)
N17	1	114"	4"	XS	CLASS 150	RFSO	67	419	11 1/2"	11 1/2"	✓	STINGER CONNECTION C/W GATE VALVE (INSIDE ENVIRO-VAULT)
N21	1	114"	4"	STD	CLASS 150	RFSO	25	152	6"	6"	✓	VENT C/W BLIND
N22	1	273"	10"	STD	CLASS 150	RFSO	25	203	8 7/16	8 1/4"	✓	LSHH-DIRECT DATA TYPE C/W BLIND
N23	1	114"	4"	STD	CLASS 150	RFSO	190	259	16 3/16"	16 3/16"	✓	FUEL GAS OUTLET C/W HUB BLIND
C1 a	1	25"	1"	-	3000#	FULL CPLG	-	-	-	-	✓	SAMPLE CONNECTION C/W DOWNCOMER, BALL VALVES (ONE SPRING LOADED) (IN VAULT WALL)
C1 b	1	25"	1"	-	3000#	FULL CPLG	-	-	-	-	✓	SAMPLE CONNECTION C/W DOWNCOMER, BALL VALVES (ONE SPRING LOADED) (IN VAULT WALL)
C1 c	1	25"	1"	-	3000#	FULL CPLG	-	-	-	-	✓	SAMPLE CONNECTION C/W RISER, BALL VALVES (ONE SPRING LOADED) (IN VAULT WALL)
C1 d	1	25"	1"	-	3000#	FULL CPLG	-	-	-	-	✓	SAMPLE CONNECTION C/W RISER, BALL VALVES (ONE SPRING LOADED) (IN VAULT WALL)
C1 e	1	25"	1"	-	3000#	FULL CPLG	-	-	-	-	✓	SAMPLE CONNECTION C/W RISER, BALL VALVES (ONE SPRING LOADED) (IN VAULT WALL)
C2 1	1	51"	2"	-	3000#	FULL CPLG	-	-	-	-	✓	LEVEL GAUGE (HAWKEYE - REDTAIL)
C2 2	1	32"	1 1/4"	-	3000#	FULL CPLG	-	-	-	-	✓	FLOAT GUIDE WIRES
C3 1	1	51"	2"	-	3000#	HALF CPLG	6	1/4"	AS SHOWN	✓	LLSD	
C4 1	1	25"	1"	-	3000#	FULL CPLG	-	-	-	-	✓	TEMPERATURE INDICATOR
C5 1	1	25"	1"	-	3000#	FULL CPLG	-	-	-	-	✓	TEMPERATURE CONTROLLER
C6 1	1	25"	1"	-	3000#	FULL CPLG	-	-	-	-	✓	FLOATING SUCTION LUBRICATION CONNECTION C/W PLUG
C7 1	1	19	3/4"	-	3000#	FULL CPLG	-	-	-	-	✓	FIRETUBE PERFORMANCE MONITOR C/W PLUG WDG-061642-B104 REF. DWG.
T1	1	219	8"	LW	-	FAB'D	25	152	6"	6"	✓	THIEF HATCH NOZZLE (MARSH HAWK)
M1	1	2x4	-	-	-	FAB'D	-	-	-	-	✓	SHELL MANWAY C/W 60/40 SPLIT COVER
F1	1	324	12"	-	-	FAB'D	-	-	-	-	✓	THROAT NOZZLE FOR 12" DIA. U-TUBE

MATERIAL LIST						
MK	QTY	PART NO.	DESCRIPTION	REF. DWG.	MATERIAL	WT
1	2	2425	FLOOR HALF: PLATE 1/4" THK. x 15'-7 1/2" DIA.	-	G40.21-44W	1958
2	6996		ROOF HALF: PLATE 3/16" THK. x 15'-9 1/8" FLAT DIA.	-	G40.21-44W	1496
3	2939		SHELL: PLATE 3/16" THK. x 8'-0" x 47'-11 1/2" LG.	-	G40.21-44W	8814
4						
5	1	2959	SHELL: PLATE 1/4" THK. x 8'-0" x 47'-11 1/16" LG.	-	G40.21-44W	3917
6						
7						
8	1	-	ENVIRO-VAULT WALL/ROOF FOR 6' x 6' VAULT	A103	-	348
9	1	-	NOZZLE DETAILS	D102	-	2026
10	1	-	BURNER RUN	-	-	22
11	1	-	BURNER (BY OTHERS)	-	-	90
12	1	-	FIRETUBE REMOVABLE U-TUBE 12" SCH STD. 750,000 BTU/HR. C/W THROAT AND STACK	B104	-	2563
13	2	4273	LIFTING LUG	-	-	15
14	1	4276	TAILING LUG C/W REPAD	-	-	5
15	1	1221	SHELL MANWAY 2'-0" x 4'-0" C/W 1/4" SPLIT COVER	B112	-	239
16	1	1478	NAMEPLATE BRACKET C/W NAMEPLATE	-	-	5
17	3	2533	TANK ROOF SAFETY HARNESS LUG	-	-	3
18	1	-	HAWKEYE REDTAIL LEVEL INDICATOR ASSY C/W GAUGE HEAD, METRIC BOARD, PVC FLOOR GUIDE WIRES, FLOOR CLIPS, CABLE TIGHTENERS & MISC. HARDWARE	B105	-	75
19	1	16763	ENVIRO-VAULT DOOR DETAIL (6' x 6' STYLE)	C108	-	73
20	1	2769	THIEF HATCH NOZZLE 8"	-	-	25
21						
22						
23	5	1494	TANK HAULING PAD	-	-	120
24	1	6993	FIRETUBE HOLD-DOWN FOR 12" U-TUBE	-	-	8
25	1	2151	CHANNEL C4 x 5.4# x 14'-6 5/8" LG.	-	G40.21-44W	78
26	2	5948	REPAD PLATE 1/4" THK. x 6" DIA.	-	G40.21-44W	2
27	1	2151	CHANNEL C4 x 5.4# x 9'-7 11/16" LG.	-	G40.21-44W	51
28						
29	2	-	PIPE SUPPORT	B106	-	5
30	1	11058	BURNER CONTROL BOX	-	-	-
31	1	19192	MARSH HAWK THIEF HATCH 8" API SET @ 16oz PRESS./0.4oz VAC. STD. SEAL	-	(SOUR SERVICE)	25
32	1		GAS PRE-HEAT LINE DETAILS	C107	-	161
33						
34						
35						
			INSULATION		1000	
			SUBTOTAL		23124	
			x 1.06		24511	
			TOTAL (lbs.)		24511	



NOTES:

- ALL DIMENSIONS ARE IN S.I. AND IMPERIAL UNITS. DIMENSIONS IN BRACKETS ARE IMPERIAL HARD CONVERSIONS FOR SHOP REFERENCE ONLY.
- ALL FLANGE RATINGS TO BE ASME B16.5 - 2013.
- DRILL 1/4" TELLTALE HOLE IN REINFORCING PADS, & ADD 1/4" HALF CPLG & NIPPLE TO EXTEND BEYOND INSULATION.
- FLANGE AND BOLT HOLES TO STRADDLE PRINCIPAL CENTERLINES OF TANK.
- ALL NOZZLE PROJECTIONS GIVEN ARE ALONG THE NOZZLE CENTERLINE.
- TANK INSPECTION LEVEL 2.
- TANK FABRICATOR IS NOT RESPONSIBLE FOR ENVIRO-VAULT DESIGN, BUT ARE RESPONSIBLE FOR ITS INTEGRATION INTO THE TANK. THE ENTIRE TANK, INCLUDING THE ENVIRO-VAULT, IS TO MEET THE DESIGN PRESSURE/VACUUM CONDITIONS SPECIFIED ABOVE.
- MINIMUM OF 23" FLUID LEVEL MUST BE MAINTAINED TO OFFSET PRESSURE.
- GAUGEBOARD TO HAVE A STENCIL THAT READS "LOW LEVEL" ABOVE THE BURNER.
- MARK HIGH LEVEL AT 40 mt.

NO.	DATE (d/m/y)	REVISIONS	BY	APPD
23/11/17		AS-BUILT, UPDATED WEIGHTS	GLB	JK
24/05/17		ADDED N17 & PRT NO. FOR MK#31 AND CHANGED NO. REQ'D	RR	JK
20/03/17		ISSUED FOR CONSTRUCTION	RR	BS

NO. DATE (d/m/y) REVISIONS BY APPD

THIS DRAWING IS THE PROPERTY OF FOREMOST UNIVERSAL LP AND IS TO BE USED ONLY IN CONJUNCTION WITH PERFORMANCE OF WORK BY FOREMOST UNIVERSAL LP. REPRODUCTION OR USE IN WHOLE OR IN PART FOR ANY OTHER PURPOSE IS EXPRESSLY FORBIDDEN.

# FOREMOST

CLIENT: PennWest ENERGY  
GL CODE: 335.1600

DWG TITLE: 1000 BBL SALES TANK GENERAL ARRANGEMENT

NO. REQ'D	VOLUME	SIZE	WO NO.	LEG NO.
8	160 CU. METERS (1000 Bbl) NOM.	4648mm I.D. x 9754mm HIGH (15'-3" I.D. x 32'-0" HIGH)	06-061642	

SCALE: 1:30  
DWG NO.: W06-061642-D101  
SHEET NO.: 1 of 1

DATE (d/m/y): 18/03/17  
CHKD: R. RANASINGHE  
RTK: 23/11/17  
APPD: JK  
JK: 23/11/17

PROJECTS: W06-061642; W06-061642-D101