

*NOTE: PLEASE REFER ISOMETRIC DRAWING J45/110-16/ID-071
FOR PIPING ACTUAL LAYOUT

№	Anomaly ID	Distance from Section Start, mm	Ref. Weld	Anomaly Distance from Ref. Weld, mm		Anomaly Orientation			Anomaly Dimensions, mm		
				U/S	D/S	Rotations Direction	Distance from 12 o'clock, mm	hh:mm	Length, L	Width, W	Max Depth, d
1	D1-1	165	WJ1-1	-	165	Anticlockwise	200	8:59	270	450	3.4
2	D1-2	475	WJ1-2	125	-	Clockwise	400	6:01	250	75	4.2
3	D1-3	1,018	WJ1-4	72	-	Clockwise	50	0:45	565	250	2.9
4	D1-4	1,350	WJ1-5	230	-	Anticlockwise	220	8:41	700	220	1.3
5	D1-5	1,650	WJ1-5	-	70	Clockwise	35	0:31	300	510	3.4
6	D1-6	2,275	WJ1-6	-	375	Clockwise	108	1:37	850	645	2.5
7	D1-7	3,778	WJ1-7	952	-	Clockwise	115	1:43	1,945	655	1.8
8	D1-8	5,295	WJ1-8	-	25	Clockwise	140	2:06	410	230	1.3
9	D1-9	6,053	WJ1-9	-	233	Clockwise	110	1:39	1,005	120	2.3
10	D1-10	6,747	WJ1-10	-	127	Clockwise	300	4:30	367	350	5.2
11	D1-11	7,223	WJ1-10	-	603	Anticlockwise	110	10:20	485	420	2.7
12	D1-12	7,743	WJ1-11	277	-	Clockwise	30	0:27	615	510	1.0

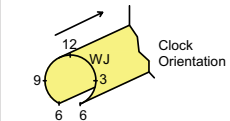
Legend:

WJ1-1 Circumferential Weld

D1-1 Anomaly ID

+ Center of Anomaly

Area of Anomaly



A0	ISSUE FOR SUBMISSION	SAM	KIO	IJA	05-10-2016
REV.	DESCRIPTION	BY	CHK	APPR.	DATE
NOTE : ALL DIMENSION IN MILLIMETERS (mm). THE DRAWING AND THE INFORMATION REVEALED BY IT IS CONFIDENTIAL. CONFIDENTIAL AND PROPRIETARY PROPERTY OF MRA INTERNATIONAL AND IT IS NOT TO BE DISCLOSED TO OTHERS WITHOUT WRITTEN PERMISSION. UNAUTHORIZED USE IS EXPRESSLY FORBIDDEN. ALL RIGHTS RESERVED.					
PROJECT TITLE:					
PROVISION OF HYBRID ACOUSTIC TECHNOLOGY SYSTEM (HATs) INSPECTION FOR CARBON STEEL PIPING AT BINTULU CRUDE OIL TERMINAL (BCOT), BINTULU, SARAWAK					
PROJECT OWNER:					
PETRONAS CARIGALI SDN BHD - SARAWAK OPERATION (GAS)					
CONTRACTOR:					
MRA INTERNATIONAL SDN BHD					
JOBSITE: PCSB SKO - BCOT		CANDIDATE: 10"-FW-632-1101 Scheme 1			
SCALE/ SIZE: N.T.S		DRAWING TITLE: ANOMALY MAPPING FOR PIPE 10"-FW-632-1101 Scheme 1			
DATE : 05-10-2016		DRAWN : SAM		CHECKED : KIO	
				APPROVED : IJA	
DWG. NO. : J45/110-16/DM-49-1		FILENAME : J45 CARBON STEEL PIPINGS		REF. DWG. NO.	
				SHT. NO. 1 of 2	
				REV A0	