MILL'S QUALITY CERTIFICATE

SeAH SeAH Steel Corp.
(주)세아제강

HEAD OFFICE ; BONGNAE-DONG 1GA, JUNG-GU, SEOUL, KOREA
POHANG PLANT ; 14-1, JANGHEUNG-DONG, NAM-GU, POHANG

증명서번호 / CERTIFICATE NO. : E200704-0086-001171(5001422)
제 품 명 / COMMODITY : E.R.W STEEL PIPE
제 품 규 격 / SPECIFICATION : API 5LB PSL1/ASTM A53B(2005)

발 급 일 자 / DATE OF ISSUE : 2007.03.30
계 약 서 번 호 / L/C No. (P/O No.) : 47LI-B82946-TLJY(1103049204)
수 요 가 / CUSTOMER : DUFERCO SA
주 문 자 / SHIPPER : SEAH STEEL CORPORATION

NO.	HEAT NO. (BATCH NO.)	관 단 TYPE *1	주 문 치 수 ORDER SIZE	수 량 QUANTITY 본 수 PCS	총 길 이 TOTAL LENGTH	중량(M/T) WEIGHT	비 고 REMARK
33	5-34945 (SIH1241010)	BBE	20 " X 0.250 " X 6.120 M	48	293.760 M	23.254	* DESCRIPTIION OF GOODS : 1,408.552MT (+/- 10 PCT) CARBON STEEL PIPES WELDED / ASTM A53 B
34	SP71759 (SIH2011090)	BBE	16 " X 0.250 " X 6.120 M	123	752.760 M	47.522	* STEEL GRADE : ASTM A53 B
35	SP72392 (SIH2012070)	BBE	16 " X 0.312 " X 6.120 M	10	61.200 M	4.751	
36	SP72394 (SIH2012090)	BBE	16 " X 0.312 " X 6.120 M	96	587.520 M	45.609	

NO.	HEAT NO (BATCH NO.)	HYDROSTATIC TEST 10 Sec. psi	RESULT	N·D·T U *2	VISUAL & DIMENSION	FLATTENING	SHOCK	COMPRESSION	RESIDUAL MAGNETISM GAUSS	BENDING *3	DRIFT	CRUSH	FLARING	FLANGE	REVERSE FLATTENING	ZINC COATING TEST WEIGHT OF ZINC COAT-ING	균일성 C.S *4	알칼리 ALK *5	DESIG *6	C	Si	Mn	P	S	CU	NI	CR	MO	V	CEQ *7	DIR *9	TENSILE STRENGTH psi	YIELD STRENGTH psi	E.L % *10	IMPACT TEST (℃) ENE-RGY Joule	SHEAR AREA %	HARD-NESS TEST	HEAT TREAT MENT SN *11	PROTECTIVE COATING & LINING THICK-NESS	P.H
																				2			3		2	2	2	2	3												
기준 SPEC									30										MAX	26		120	30	30	40	40	40	15	80												
																			MIN												60000	35000							
33	5-34945 (SIH1241010)	530	G	G	G	G			G										H	15	18	44	15	3															
																			P	15	17	44	13	3	1	1	1	1	1		T	70120	52050	43				G		
																			P	15	19	44	13	1	1	1	1	1	2		W	69410								
34	SP71759 (SIH2011090)	660	G	G	G	G			G										H	15	1	68	12	9															
																			P	14	TR	68	13	8	TR	1	1	TR	1		T	66420	46790	38				G		
																			P	15	TR	69	10	10	1	1	1	TR	TR		W	68130								
35	SP72392 (SIH2012070)	820	G	G	G	G			G										H	17	TR	79	10	7															
																			P	17	TR	80	10	7	1	1	1	TR	TR		T	72820	47930	36				G		
																			P	16	TR	78	11	7	1	1	1	TR	TR		W	74530								
36	SP72394 (SIH2012090)	820	G	G	G	G			G										H	18	1	79	8	5															
																			P	18	2	80	8	5	TR	1	1	TR	1		T	75090	46930	34				G		
																			P	19	1	80	7	5	TR	1	1	1	1		W	72966								

COPY

NOTE *1 ~ *12 : Refer To The Attached Section Designation

OTHER

Surveyor :

- WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE AND TESTED IN ACCORDANCE WITH ABOVE SPECIFICATION AND THE RESULTS OF ALL TEST ARE ACCEPTABLE.
- THE USE OF THE MATERIAL OUTSIDE THE SPECIFICATIONS INDICATED ON THIS CERTIFICATE MAY CAUSE SAFETY AND/OR MONETARY PROBLEMS. FURTHERMORE, ANY ORGANIZATION OR PERSON(S) WHO DELIBERATELY MODIFIES THE CERTIFICATE WILL BE PROSECUTED FOR FORGING AN OFFICIAL DOCUMENT (ACCORDING TO THE PROVISIONS OF THE CRIMINAL CODE 231)

Manager of Q.M Dept.

J.E. KIM