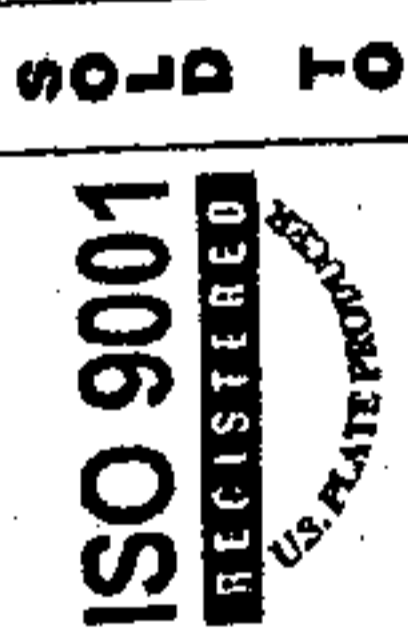


**REPORT OF CHEMICAL/PHYSICAL TESTS**

**EVRAZ** EVRAZ INC. NA  
 Evraz Oregon Steel 14400 N. Rivergate Blvd., Portland, Oregon 97203



CERTIFICATE NO.	DATE	PAGE
1892195	Nov 14, 2023	1
MILL ORDER NO.	DATE	
392829		
CUSTOMER ORDER NO.		
16107		
JOB/REQ. NO.		
SHIPPING NO.	DATE	
1892195	11/14/2023	
CARRIER		
UNION PACIFIC		
CAR/TRUCK NO.		
SSWB8183		

THIS MATERIAL HAS BEEN MANUFACTURED, TESTED AND FOUND TO MEET THE SPECIFICATIONS AND PURCHASE ORDER REQUIREMENTS  
 HSLA STRUCTURAL QUALITY PLATE ASTM A572-21E1 GRADE 50 ASME SA572 GRADE 50 2023  
 ASTM A709-21 GRADE 50 AASHTO M270-23 GRADE 345(50). KILLED FINE GRAIN  
 PRACTICE. INSPECTION CERTIFICATE 3.1 EN10204.

**PHYSICAL PROPERTIES**

ITEM	DESCRIPTION	HEAT NO.	SLAB	YIELD PSIX 100	TENSILE PSIX 100	% ELONG 8" 2"	% RA	HARDNESS BHN	BEND TEST	IMPACTS
2	0.5000 X 96.000ME X 240.000									
	6 PCS 19602 LBS	ER0670		665	745	47				
	6 PCS 19602 LBS	ER0679		685	775	47				
	6 PCS 19602 LBS	ER0921		670	750	57				
	6 PCS 19602 LBS	ER1004		635	745	36				
	6 PCS 19602 LBS	ER1005		705	780	45				
	6 PCS 19602 LBS	ER1007		685	790	43				
	6 PCS 19602 LBS	ER1005		665	795	43				
	6 PCS 19602 LBS	ER1007		690	780	43				

**CHEMICAL ANALYSIS**

HEAT NO.	C	Mn	P	S	SI	Cu	Ni	V	Co	Al	Cr	Mo	Ti	B	N	Ca	CE
ER0670	.05	1.26	.019	.005	.24	.39	.12	.003	.036	.038	.17	.03	.022		.0088		
ER0679	.04	1.26	.011	.002	.24	.35	.15	.003	.037	.029	.11	.04	.024		.0069		
ER0921	.06	1.27	.011	.005	.25	.25	.12	.003	.038	.031	.18	.03	.020		.0076		
ER1004	.05	1.30	.012	.002	.24	.33	.14	.004	.036	.032	.19	.04	.021		.0083		
ER1005	.06	1.23	.012	.002	.24	.25	.18	.004	.038	.030	.19	.06	.019		.0058		
ER1007	.06	1.25	.015	.004	.23	.32	.13	.004	.037	.039	.15	.04	.023		.0076		

HEATS INDICATED WITH (#) WERE MELTED & MANUFACTURED IN THE USA. HEATS INDICATED WITH (C) WERE FOLDED IN THE USA.

By \_\_\_\_\_ Quality Systems Coordinator **QC Approved**