


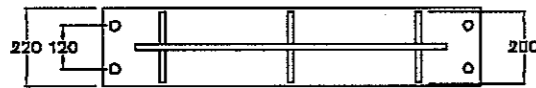
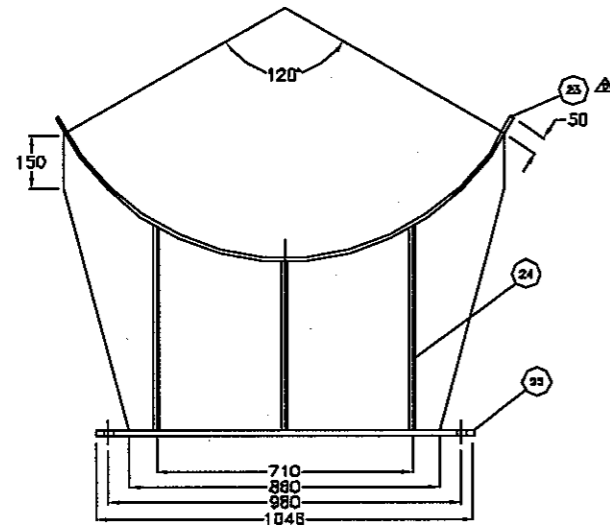


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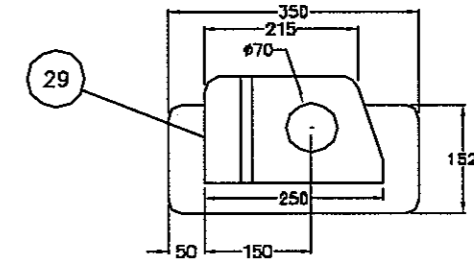
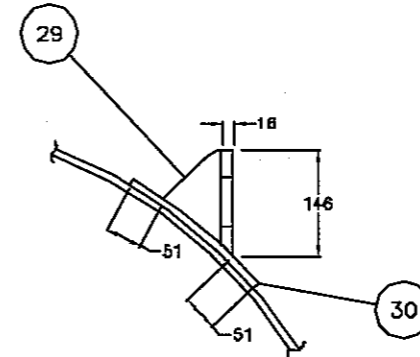
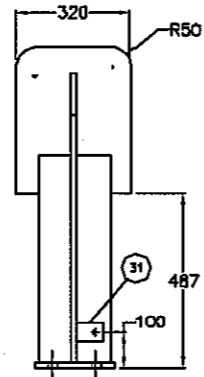
1526 - 10th Avenue S.W. - Calgary, Alberta T3C 0J5
 Telephone (403) 244-0751 Fax (403) 245-5808
 E-Mail: zazula@zazula.com

   <p>Canadian Natural <small>Canadian Natural Energy Services Ltd. Member of the Canadian Natural Energy Services Group</small> horizon <small>Canadian Natural Energy Services Ltd. Member of the Canadian Natural Energy Services Group</small> TECHNIP ITALY S.p.A.</p>	<p>VENDOR DOCUMENT REVIEW</p> <p><input type="checkbox"/> 1 REVISE AND RESUBMIT</p> <p><input type="checkbox"/> 2 TO BE ISSUED AS FINAL PROVIDED COMMENTS ARE INCORPORATED</p> <p><input checked="" type="checkbox"/> 3 NO COMMENT - FINAL ISSUE</p>
<p>PROJ.: CNRL HOSP - PRIMARY UPGRADING CLIENT: CNRL - CANADA</p>	<p><input type="checkbox"/> 4 FOR INFORMATION ONLY (INTERNAL USE)</p>
<p>MATERIAL REQUISITION No.</p> <p>2213 00 MR 4 0 4 6 0 1</p>	
<p>ITEM: Ammonia Storage Tank 31-D-31</p>	
<p>SR Doc. CODE: A1103</p>	
<p>U.O.: TECHNIP ITALY S.p.A. DATE: 12/4/06 BY: <i>[Signature]</i></p>	

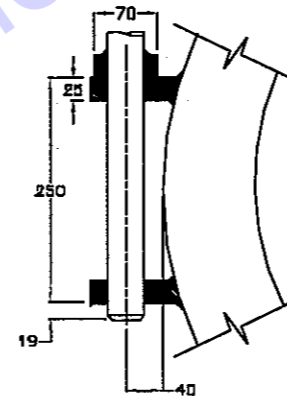
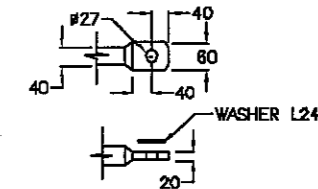
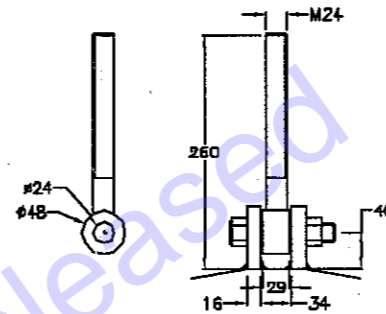
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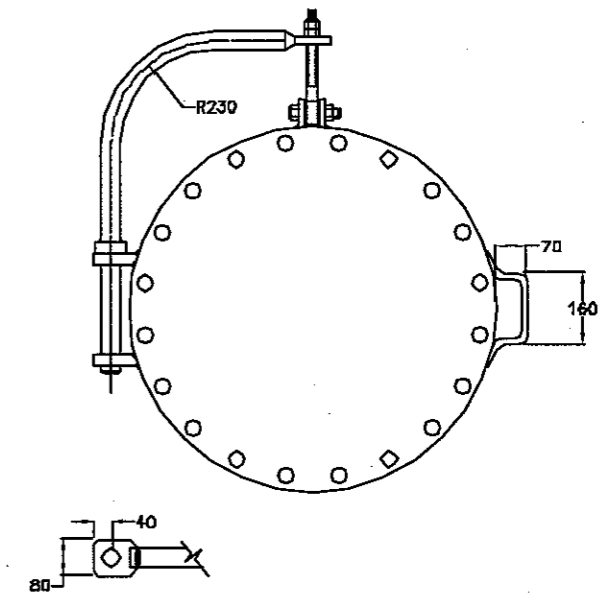
SADDLE DETAILS



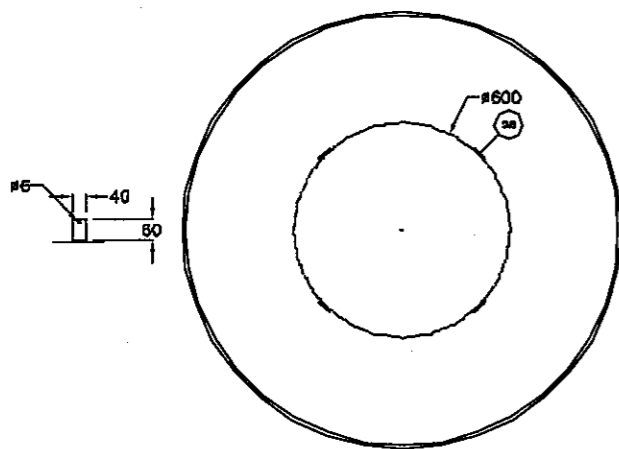
LIFTING LUG DETAILS
SCALE 1:10



SCALE 1:8



MANWAY DETAILS
SCALE 1:16



INSULATION SUPPORT DETAILS
ONLY FOR HEADS


NO	DATE	REVISIONS	BY	APP	ENGINEERING RECORD	DATE
A	10/14/05	FOR APPROVAL AND COMMENT	AK	SM	DRAWN	AK
B	12/13/05	REVISED AS PER CLIENT	AK	SM	CHECKED	AK
C	04/18/06	REVISED AS PER CLIENT			APP	
D	04/27/06	REVISED AS PER CLIENT				

ZAZULA PROCESS EQUIPMENT LTD.
1800 - 46 AVE SW
CALGARY, ALBERTA T2C 0A0

PROJECT CNRL HOSP PRIMARY UPGRADING
1372 ID x 2000 S/S AMMONIA SOLUTION TANK
SH 2 OF 3

SCALE	JOB NO	DWG NO	REV
1:20	SM05-7960	05-7960-23	D

142




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CALGARY, ALBERTA

MAWP PSI AT °F
 kPa °C

MDMT °F AT PSI
 °C kPa

SERIAL NO. YEAR BUILT

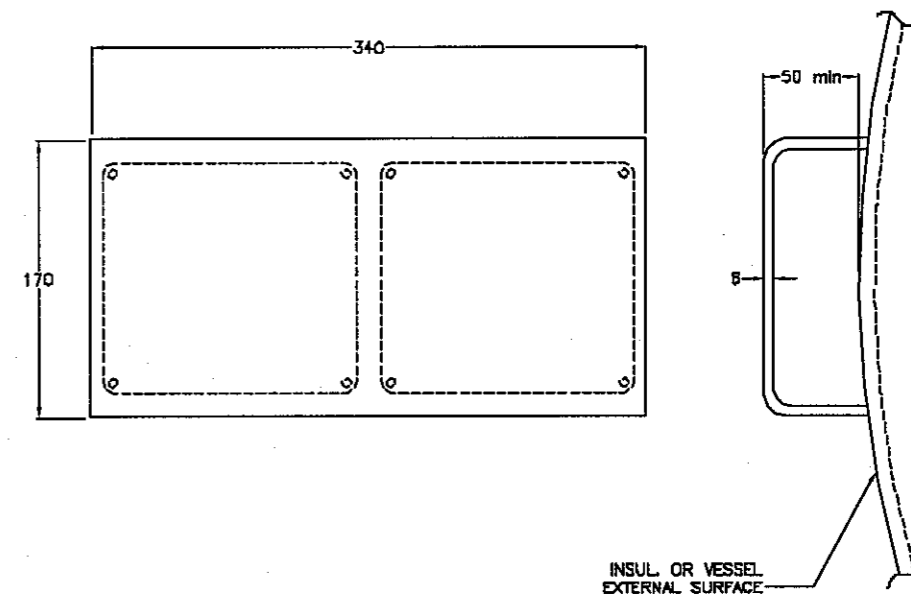
CRN.

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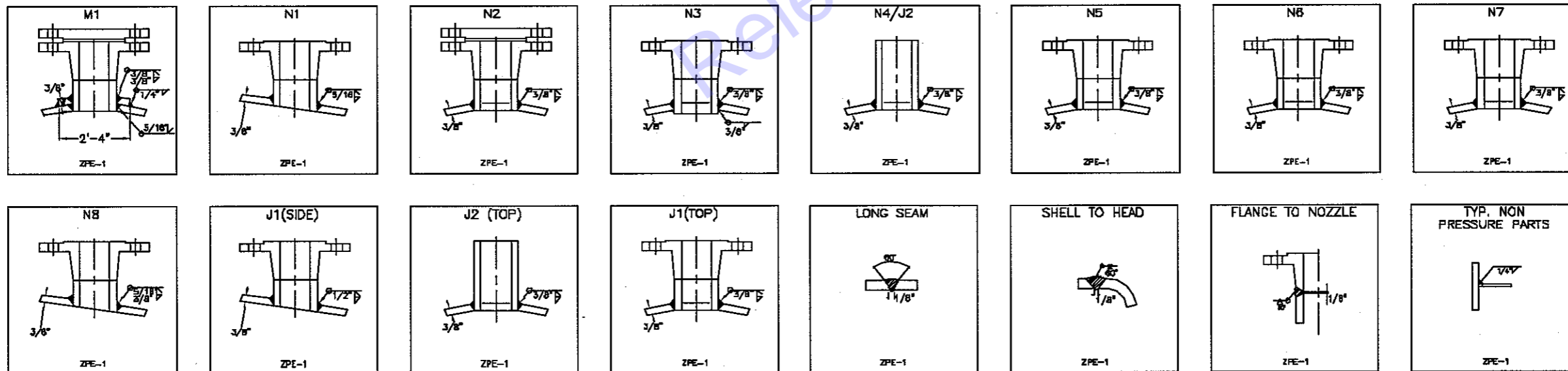
CERTIFIED BY:

BUILT FOR	CANADIAN NATURAL RESOURCES LTD.	
DESIGN BY	ZAZULA PROCESS EQUIPMENT LTD.	
CONTRACTOR	TECHNIP ITALY	
ITEM	31-D-31	MFR.S SERIAL No 05-7960-23
SERVICE	AMMONIA SOLUTION	
DESIGN TEMPERAT.	80	°C
DESIGN PRESSURE	350	KPa(g)
MAWP	1104.5	KPa(g)
MDMT	-29	°C
SHOP TEST PRESSURE	1423.6	KPa(g)
FIELD TEST PRESSURE		KPa(g)
HEAT TREATMENT TEMP.		°C
RADIOGRAPHY		
FLUID CONTENTS		
CORROSION ALLOW.	3	mm
SHELL BASE MET. THK.	9.525	mm
HEAD BASE MET. THK.	9.525	mm
TOTAL WEIGHT EMPTY	1712	Kg
AS REG. No.		
CRN No		
RULES/CODE	ASME SECTION VIII DIV.1 2004	



△ NAMEPLATE

△ NAMEPLATE BRACKET



△△ WELDING MAP

NO	DATE	REVISIONS	BY	APP	ENGINEERING RECORD	DATE
A	02/14/05	FOR APPROVAL AND COMMENT	AK	ON	DRAWN	02/14/05
B	12/12/00	REVISED AS PER CLIENT	AK	ON	CHECKED	
C	03/08/00	REVISED AS PER CLIENT			APP	
D	03/27/01	REVISED AS PER CLIENT				

ZAZULA PROCESS EQUIPMENT LTD.
1905 - 19 AVE SW
 CALGARY, ALBERTA, T2C 0W7

PROJECT CNRL HOSP PRIMARY UPGRADING
 1372 ID x 2000 S/S AMMONIA SOLUTION TANK
 SH 3 OF 3

SCALE	JOB NO	DWG NO	REV
NTS	SM05-7960	05-7960-23	D