



DETAIL 1:5

BILL OF MATERIAL							
Pipe							
Num	Length	Size	Sch.	Description	Material	S/F	
1	10.5m	26"	XS	PIPE BEND 90° 3D EFW ASME B36.10	API 5L Gr. B (PSL2)	S	
Flanges							
Num	Qty	Size	Rating	Sch.	Description	Material	S/F
2	1	26"	CL 150	XS	WN RF ASME B16.47 SERIES A	A105N	S
Supports							
Num	Qty	Size	Description		Material	S/F	
3	1	26"	SHOE S4 100 HIGH (CS) AS PER 074-0000-220-000-026 01		S4-A-2-26	S	
4	1	24"	U1-L-24 AS PER 074-0000-220-000-290 01			S	
5	1	24"	DUMMY LEG SUPPORT SEE ADDITIONAL MATERIALS BELOW		API 5L Gr. B (PSL2)	S	
Pipe							
Num	Length	Size	Sch.	Description	Material	S/F	
5A	5.5m	24"	XS	BE SCH XS EFW ASME B36.10	API 5L Gr. B (PSL2)	S	
Flanges							
Num	Qty	Size	Rating	Sch.	Description	Material	S/F
5B	2	24"	CL 150	XS	WN RF ASME B16.5	A105N	S
Fittings							
Num	Qty	Size	Rating	Sch.	Description	Material	S/F
5C	1	24"	CL 150	XS	ROUND END CAP PLATE, 6mm THICK	CSA G40.21 TYPE 260W	S
Gaskets							
Num	Qty	Size	Rating	Description		Material	S/F
5D	1	24"	CL 150	RF SPWWD ASME B16.5, SS/GRAPHITE CSOR 1/8" THK		316LSS GRAPHITE FILLED	S
Bolts							
Num	Qty	Size	Description		Material	S/F	
5E	1 SETS	1 1/4" X 6 3/4"	STUD BOLT, THREADED FULL LENGTH CWI 2 HEAVY HEX NUTS A194 G2H		A193 GRB7	S	

SERVICE: BITUMEN FROTH	
PIPE SPEC: A61K	
CODE: ASME B31.3 ADDENDUM 2016 EDITION	
DESIGN PRESSURE: 1580 kPag	DESIGN TEMPERATURE: 93°C
PRESSURE TEST: 3000 kPag	MDMT: -29°C
PAINT: NONE	STRESS RELIEVE: NONE

SPECIALTY ITEM NUMBER	IOR ITEM NUMBER
SP-C3636	141-3015-47

P&ID: 074-2300-020-141-101 01
LINE #: 26-JF-141-3547-A61K-38H

- NOTES:
- ALL WELDING AND NDT SHALL BE IN ACCORDANCE WITH ASME B31.11 AND SPECIFICATIONS GP-29-03-02 & GP-29-03-02 SKP, KP03-74-050
 - ALL SHARP EDGES ARE TO BE REMOVED
 - BOLT HOLES TO STRADDLE CENTERLINE, UNLESS OTHERWISE NOTED.
 - CWI LINERS ON PIPING SHALL HAVE A 304.8mm LONG NON-CEMENTED FIELD REPLACEABLE INSERT AT LEADING EDGE OF THE SPOOL.
 - PIPE I.D. TOLERANCE AT INSERT SHALL BE ± 1.5 mm.
 - SPOOL LINEAR DIMENSION TOLERANCE SHALL BE -3mm TO 0mm.
 - SUPPLIER TO CONFIRM I.D. AND GAP DIMENSIONS.
 - CWI LINER AS PER SPEC KP 03-74-180.
 - PERMANENTLY TAGGED IDENTIFICATION WITH A STAINLESS STEEL NAME PLATE WITH FOLLOWING INFORMATION:
 - CWI THICKNESS
 - DIRECTION OF FLOW ARROW
 - PIPE MATERIAL TYPE AND GRADE
 - PIPE MATERIAL HEAT NUMBER
 - PURCHASE ORDER NUMBER
 - SPOOL SPECIALTY ITEM NUMBER
 - VENDOR REQUESTED IOR DRAWING NUMBER
 - MANUFACTURE'S NAME
 - PWHT AS REQUIRED. DUMMY WELD TO BE FULL PENETRATION WELD AND WELD SIZE (t) TO BE THE SAME AS DUMMY PIPE THICKNESS.
 - CWI LINER AT PIPE END SHALL HAVE PROTECTION.

STRESS ANALYZED
NO FIELD CHANGES PERMITTED WITHOUT
APPROVAL FROM STRESS ENGINEER
Signature:
Date: APR 06, 2018



IMPERIAL OIL RESOURCES

APPROVED FOR CONSTRUCTION	
DATE	REV.
PROJECT ENGINEERING	

KEARL PLANT 2 - EXTRACTION
SP-C3636 CWI LINED NPS 26 SPOOL
PIPING DETAILS

CONTRACTOR NAME	SCALE	IOR DRAWING NUMBER	REV.
WORLEYPARSONS CANADA SERVICES LTD	1:30	074-2300-080-141-010 01	0
CONTRACTOR DWG NUMBER			
XY.2017.70588			

NO.	DATE	REVISIONS	DRAWN	CHECK	DESIGN	APPR.	IOR DWG NO.	TITLE
0	18 04 05	ISSUED FOR PURCHASE (XY.2017.70588)	JH	DE	VP			
			DRAFTING		ENGINEERING			