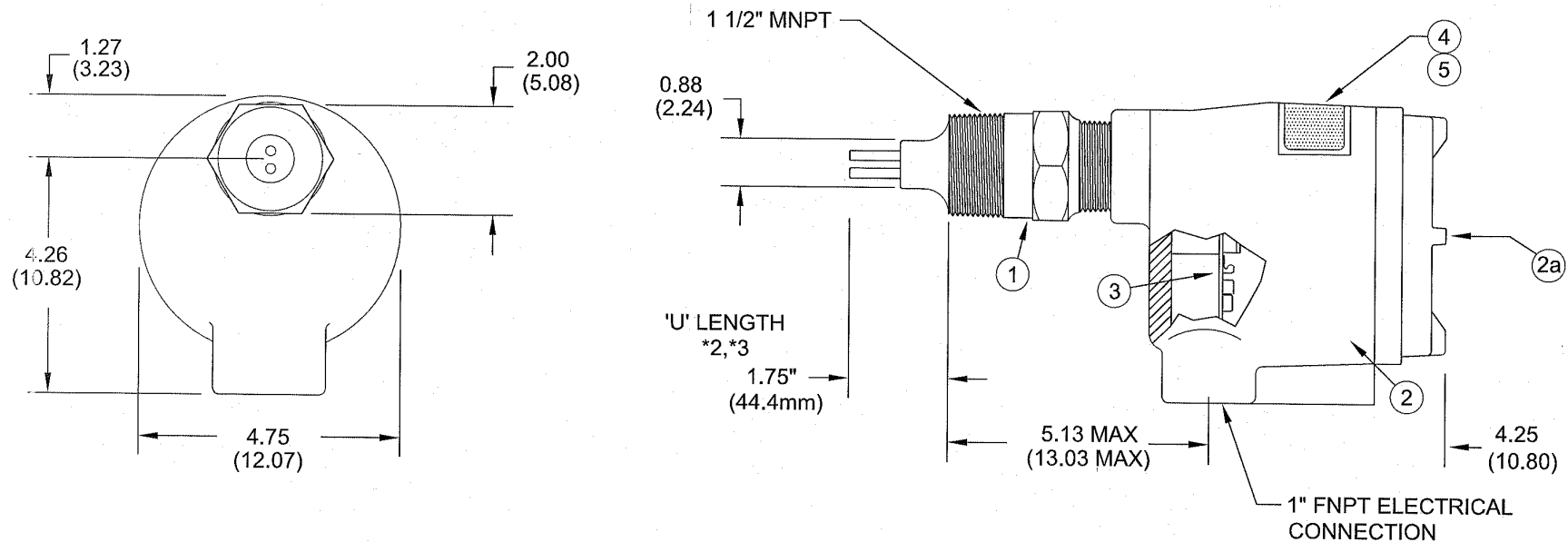




KEYSTONE XL OIL PIPELINE
PO NUMBER: 25472-101-POA-JF00-W0001
FOR TAGS SEE PAGES 3 & 4 OF THIS DOCUMENT
FOR REVIEW 11-08-10

NOTES:

1. Standard wetted material: 316L SS, all-welded
- *2. Standard 'U' lengths available: 1.2", 2", 3", 4" and 6"
- *3. Custom 'U' length: 1.75"

25472-101-V1A-JF00-W0002
Supplier Document Status
CODE: 1

Code 1 = Work may proceed.
Code 1a = Work may proceed, submit certified print.
Code 2 = Revise and resubmit. Work may proceed subject to resolution of indicated comments.
Code 3 = Revise and resubmit. Work may not proceed.
Code 4 = Review not required. Work may proceed.

Permission to proceed does not constitute acceptance or approval of design details, calculations, analyses, test methods, or materials developed or selected by the Supplier and does not relieve the Supplier from full compliance with contractual obligations.

Responsible Engineer - **Moghadam_Atekeh**
Date Issued - **11/18/2010**
Supplier Requirement Category -
Equipment No. - **121-HRDBP-B2-FT-1025**

APPROVALS		DATE		KAYDEN® INSTRUMENTS	
DRN	TDH	09JUNE2010			
CHKD	CHARUK	09JUNE2010			
APP	KUYPERS	09JUNE2010			
All dimensions are shown in inches with cm shown in brackets				TITLE CLASSIC 810 Series 1 1/2" MNPT; 1.75" 'U' Local Electronics Mounting Drawing	
TOLERANCES ARE:					
DECIMALS		ANGLES			
.X ± 0.1 .XX ± 0.02 .XXX ± 0.007		±0.5°			
		SIZE A3	DWG NO.	D15-810-RAG0018-1	
SCALE NTS			SHEET 1 OF 4		

Project Name: KEYSTONE XL Oil Pipeline

Order Number: 25472-101-POA-JF00-W0001

Line No	Description	Instrument ID
1.00	Mainline Pump #3 OUTBOARD Seal Leak Detection Flow Transmitter	121-HRDBP-B3-FT-1035
2.00	Mainline Pump #3 INBOARD Seal Leak Detection Flow Transmitter	121-HRDBP-B3-FT-1036
3.00	Mainline Pump #2 OUTBOARD Seal Leak Detection Flow Transmitter	121-HRDBP-B2-FT-1025
4.00	Mainline Pump #2 INBOARD Seal Leak Detection Flow Transmitter	121-HRDBP-B2-FT-1026
5.00	Mainline Pump #4 OUTBOARD Seal Leak Detection Flow Transmitter	121-HRDBP-B4-FT-1045
6.00	Mainline Pump #4 INBOARD Seal Leak Detection Flow Transmitter	121-HRDBP-B4-FT-1046
7.00	Mainline Pump #5 OUTBOARD Seal Leak Detection Flow Transmitter	121-HRDBP-B5-FT-1055
8.00	Mainline Pump #5 INBOARD Seal Leak Detection Flow Transmitter	121-HRDBP-B5-FT-1056
9.00	Mainline Pump #1 OUTBOARD Seal Leak Detection Flow Transmitter	122-LKSDE-B1-FT-1015
10.00	Mainline Pump #1 INBOARD Seal Leak Detection Flow Transmitter	122-LKSDE-B1-FT-1016
11.00	Mainline Pump #2 OUTBOARD Seal Leak Detection Flow Transmitter	122-LKSDE-B2-FT-1025
12.00	Mainline Pump #2 INBOARD Seal Leak Detection Flow Transmitter	122-LKSDE-B2-FT-1026
13.00	Mainline Pump #3 OUTBOARD Seal Leak Detection Flow Transmitter	122-LKSDE-B3-FT-1035
14.00	Mainline Pump #3 INBOARD Seal Leak Detection Flow Transmitter	122-LKSDE-B3-FT-1036
27.00	Mainline Pump #1 OUTBOARD Seal Leak Detection Flow Transmitter	125-BDLSS-B1-FT-1015
28.00	Mainline Pump #1 INBOARD Seal Leak Detection Flow Transmitter	125-BDLSS-B1-FT-1016
29.00	Mainline Pump #2 OUTBOARD Seal Leak Detection Flow Transmitter	125-BDLSS-B2-FT-1025
30.00	Mainline Pump #2 INBOARD Seal Leak Detection Flow Transmitter	125-BDLSS-B2-FT-1026
31.00	Mainline Pump #3 OUTBOARD Seal Leak Detection Flow Transmitter	125-BDLSS-B3-FT-1035
32.00	Mainline Pump #3 INBOARD Seal Leak Detection Flow Transmitter	125-BDLSS-B3-FT-1036
15.00	Mainline Pump #1 OUTBOARD Seal Leak Detection Flow Transmitter	123-MTRSP-B1-FT-1015
16.00	Mainline Pump #1 INBOARD Seal Leak Detection Flow Transmitter	123-MTRSP-B1-FT-1016
17.00	Mainline Pump #2 OUTBOARD Seal Leak Detection Flow Transmitter	123-MTRSP-B2-FT-1025
18.00	Mainline Pump #2 INBOARD Seal Leak Detection Flow Transmitter	123-MTRSP-B2-FT-1026
19.00	Mainline Pump #3 OUTBOARD Seal Leak Detection Flow Transmitter	123-MTRSP-B3-FT-1035
20.00	Mainline Pump #3 INBOARD Seal Leak Detection Flow Transmitter	123-MTRSP-B3-FT-1036
21.00	Mainline Pump #1 OUTBOARD Seal Leak Detection Flow Transmitter	124-OYENS-B1-FT-1015
22.00	Mainline Pump #1 INBOARD Seal Leak Detection Flow Transmitter	124-OYENS-B1-FT-1016
23.00	Mainline Pump #2 OUTBOARD Seal Leak Detection Flow Transmitter	124-OYENS-B2-FT-1025
24.00	Mainline Pump #2 INBOARD Seal Leak Detection Flow Transmitter	124-OYENS-B2-FT-1026
25.00	Mainline Pump #3 OUTBOARD Seal Leak Detection Flow Transmitter	124-OYENS-B3-FT-1035
26.00	Mainline Pump #3 INBOARD Seal Leak Detection Flow Transmitter	124-OYENS-B3-FT-1036
27.00	Mainline Pump #1 OUTBOARD Seal Leak Detection Flow Transmitter	125-BDLSS-B1-FT-1015
28.00	Mainline Pump #1 INBOARD Seal Leak Detection Flow Transmitter	125-BDLSS-B1-FT-1016
29.00	Mainline Pump #2 OUTBOARD Seal Leak Detection Flow Transmitter	125-BDLSS-B2-FT-1025
30.00	Mainline Pump #2 INBOARD Seal Leak Detection Flow Transmitter	125-BDLSS-B2-FT-1026
31.00	Mainline Pump #3 OUTBOARD Seal Leak Detection Flow Transmitter	125-BDLSS-B3-FT-1035
32.00	Mainline Pump #3 INBOARD Seal Leak Detection Flow Transmitter	125-BDLSS-B3-FT-1036
33.00	Mainline Pump #1 OUTBOARD Seal Leak Detection Flow Transmitter	126-FXVLY-B1-FT-1015
34.00	Mainline Pump #1 INBOARD Seal Leak Detection Flow Transmitter	126-FXVLY-B1-FT-1016
35.00	Mainline Pump #2 OUTBOARD Seal Leak Detection Flow Transmitter	126-FXVLY-B2-FT-1025
36.00	Mainline Pump #2 INBOARD Seal Leak Detection Flow Transmitter	126-FXVLY-B2-FT-1026
37.00	Mainline Pump #3 OUTBOARD Seal Leak Detection Flow Transmitter	126-FXVLY-B3-FT-1035
38.00	Mainline Pump #3 INBOARD Seal Leak Detection Flow Transmitter	126-FXVLY-B3-FT-1036
39.00	Mainline Pump #1 OUTBOARD Seal Leak Detection Flow Transmitter	127-PIAPT-B1-FT-1015
40.00	Mainline Pump #1 INBOARD Seal Leak Detection Flow Transmitter	127-PIAPT-B1-FT-1016
41.00	Mainline Pump #2 OUTBOARD Seal Leak Detection Flow Transmitter	127-PIAPT-B2-FT-1025
42.00	Mainline Pump #2 INBOARD Seal Leak Detection Flow Transmitter	127-PIAPT-B2-FT-1026
43.00	Mainline Pump #3 OUTBOARD Seal Leak Detection Flow Transmitter	127-PIAPT-B3-FT-1035
44.00	Mainline Pump #3 INBOARD Seal Leak Detection Flow Transmitter	127-PIAPT-B3-FT-1036
45.00	Mainline Pump #1 OUTBOARD Seal Leak Detection Flow Transmitter	128-GRSSY-B1-FT-1015
46.00	Mainline Pump #1 INBOARD Seal Leak Detection Flow Transmitter	128-GRSSY-B1-FT-1016
47.00	Mainline Pump #2 OUTBOARD Seal Leak Detection Flow Transmitter	128-GRSSY-B2-FT-1025
48.00	Mainline Pump #2 INBOARD Seal Leak Detection Flow Transmitter	128-GRSSY-B2-FT-1026
49.00	Mainline Pump #3 OUTBOARD Seal Leak Detection Flow Transmitter	128-GRSSY-B3-FT-1035
50.00	Mainline Pump #3 INBOARD Seal Leak Detection Flow Transmitter	128-GRSSY-B3-FT-1036
33.00	Mainline Pump #1 OUTBOARD Seal Leak Detection Flow Transmitter	126-FXVLY-B1-FT-1015
34.00	Mainline Pump #1 INBOARD Seal Leak Detection Flow Transmitter	126-FXVLY-B1-FT-1016
35.00	Mainline Pump #2 OUTBOARD Seal Leak Detection Flow Transmitter	126-FXVLY-B2-FT-1025
36.00	Mainline Pump #2 INBOARD Seal Leak Detection Flow Transmitter	126-FXVLY-B2-FT-1026
37.00	Mainline Pump #3 OUTBOARD Seal Leak Detection Flow Transmitter	126-FXVLY-B3-FT-1035
38.00	Mainline Pump #3 INBOARD Seal Leak Detection Flow Transmitter	126-FXVLY-B3-FT-1036

39.00	Mainline Pump #1 OUTBOARD Seal Leak Detection Flow Transmitter	127-PIAPT-B1-FT-1015
40.00	Mainline Pump #1 INBOARD Seal Leak Detection Flow Transmitter	127-PIAPT-B1-FT-1016
41.00	Mainline Pump #2 OUTBOARD Seal Leak Detection Flow Transmitter	127-PIAPT-B2-FT-1025
42.00	Mainline Pump #2 INBOARD Seal Leak Detection Flow Transmitter	127-PIAPT-B2-FT-1026
43.00	Mainline Pump #3 OUTBOARD Seal Leak Detection Flow Transmitter	127-PIAPT-B3-FT-1035
44.00	Mainline Pump #3 INBOARD Seal Leak Detection Flow Transmitter	127-PIAPT-B3-FT-1036
45.00	Mainline Pump #1 OUTBOARD Seal Leak Detection Flow Transmitter	128-GRSSY-B1-FT-1015
46.00	Mainline Pump #1 INBOARD Seal Leak Detection Flow Transmitter	128-GRSSY-B1-FT-1016
47.00	Mainline Pump #2 OUTBOARD Seal Leak Detection Flow Transmitter	128-GRSSY-B2-FT-1025
48.00	Mainline Pump #2 INBOARD Seal Leak Detection Flow Transmitter	128-GRSSY-B2-FT-1026
49.00	Mainline Pump #3 OUTBOARD Seal Leak Detection Flow Transmitter	128-GRSSY-B3-FT-1035
50.00	Mainline Pump #3 INBOARD Seal Leak Detection Flow Transmitter	128-GRSSY-B3-FT-1036